



QUEENSLAND 2019 ELECTORATE PROFILES

Dashboard application developed by the Regional Innovation Data Lab (RIDL)

FREQUENTLY ASKED QUESTIONS

What is the purpose of the application?

To provide users with an interactive and visual way to explore data at the Commonwealth electoral division (CED) level. This app has been designed for tablets, laptops and desktops.

Where are the data from?

All the data used in the application are open and publicly available. The data were gathered from several sources including the Australian Bureau of Statistics (ABS), the Australian Electoral Commission (AEC), the Australian Government Department of Jobs and Small Business, the Queensland Department of Social Services and the Queensland Government. Details on each visualisation and the related data are provided below.

Which electoral boundaries does the application use?

The map uses boundaries drawn for the 2019 election (redistributed in 2018), RIDL was granted permission to use these boundaries: <https://www.aec.gov.au/profiles/>

How was the app built?

The open source programming language R was used to process all the data and calculate the statistics and the application uses ggplot, plotly and leaflet to display the information visually with R Shiny and hosted on shinyapps.io.

The reproducible code and data for the app can be found here:

https://gitlab.com/r.chappell/2019_ElectionApp_RIDL

How do I use the app?

1. Select an electorate from the drop-down menu or click on the map – to find your electorate click on the red “look up your electorate” button.
2. Once an electorate is selected, the charts and tables will recalibrate.
3. To view various stats spatially on the map, select a option from the drop-down menu above the map.
4. Check out the top 10 seats to watch this election according to the experts (click button).
5. Discover how your MPs vote on issues that matter to you (click button).
6. Curious which parties your electorate has voted into power in the past? Check out the table below the map, for data dating back to 2004.

VISUALISATION DETAILS

- Age of population
- Highest level of schooling
- Weekly personal income
- Employment by industry/sector
- Self-employment
- Tenure type
- Dwelling structure
- Change of address (change in place of usual residence in the last 5 years)

The data used to create the visualisations listed above are from the 2016 ABS census. The data were originally aggregated at the Statistical Area 2 (SA2) level. ABS concordance files were used to calculate the proportion (ratio) of the individual SA2s which make up each of the CEDs according to the latest 2018 distribution.

Projected population

The data for projected population are from the Queensland Government. These data were also originally aggregated at the SA2 level.

Department of Social Services (DSS) payments 2018

The data from the DSS payment distribution are from the Queensland Department of Social Services Q2 June 2018. The DSS data is point in time data so numbers are based on the number of people receiving a specific payment at the time of data collection (30/06/2018).

Unemployment & participation rate

To calculate the unemployment and participation rate the following formulas were used:

$$\text{Unemployment rate} = \frac{\text{Total number of unemployed persons}}{\text{Total number of people in the labour force}} * 100$$

$$\text{Participation rate} = \frac{\text{Total number of employed persons}}{\text{Total number of persons of working age (15-65yrs)}} * 100$$

The data used for these calculations are from the Australian Bureau of Statistics, the Queensland Department of Jobs and Small Business and the Queensland Government. Data were originally aggregated at the SA2 level and Inferences were calculated for 2018 working age population based on 2016 percentages (ABS census) and projected population (Queensland Government).