

## Notes on WCGM 2022

Population growth has been occurring throughout the Waimakariri district, with the majority of it occurring in the towns of Rangiora, Kaiapoi, and Ravenswood/Woodend, and Pegasus.

[Stats NZ](#) has population statistics, including Population Estimates and Population and Household Projections.

### Growth Modelling

The Council has been maintaining a Growth Model (the WCGM 2022) to predict future residential and business development across the district. Growth modelling helps us plan to ensure there is sufficient infrastructure and zoned land in the right location at the right time.

Our Growth Model spatially identifies capacity by analysing a variety of data and making assumptions around the type of new development needed.

The following report by Formative outlines the assumptions and is available online [here](#).

### Growth Model Data inputs

The following data is used as an input into our Growth Model:

- [District Plan Zoning Layers and Building Envelope Rules](#)

As outlined in pg 22 of the Formative report (link above), WCGM 2022 has assessed plan-enabled capacity based on existing and proposed zoning. Reasonably feasible capacity was assessed on a parcel by parcel basis with a range of lot sizes between 300m<sup>2</sup>-500m<sup>2</sup> based on the particular characteristics of the site and the parcel itself.

- [Rating Shapefiles \(Land Value, Capital Value, Number of Dwellings, Typology, GFA, Dwelling Age\) \[ZIP, 2000 KB\]](#)

This shapefile shows the information associated with each rateable property assessed. This shapefile can be opened with ESRI ArcGIS, or the freely available QGIS software (<https://www.qgis.org/en/site/>).

- [Land Development Cost Assumptions \[PDF, 459 KB\]](#)
- [Build Development Cost Assumptions \[PDF, 2316 KB\]](#)

This dataset is consistent with the Selwyn District Council's residential land and build cost assumptions.

- Sales Data - Data can be obtained from QV
- [Stats NZ Population Estimates and Projection Assumptions \(See Stats NZ\)](#)

## Growth Model Assumptions

A summary of the assumptions made in our Growth Model are:

- The Site sizes that relate to what the District Plan enables (e.g. Plan-enabled) and what could be reasonably expected to be realized, which is based on recent subdivision consent and market expectations.
- The Profit margins for feasibility calculation
- The Population and household projection assumptions
- The Dwelling utilization
- What sites to include as developable urban land and property (e.g. not council owned)
- The Long-term changes in construction costs and house sales price

## Outputs

The following [spreadsheet \[PDF, 145 KB\]](#) and report contain the outputs of the model following the update in December 2023.