

# **Property LOCATION Profile Report**

This report contains a wide range of location-specific environmental metrics, including elevation, slope, surface water flow directions, vegetation, climate-warming trends, demographics and housing. Such baseline data is important for applications in real estate, planning, emergency, insurance, etc. when making informed location decisions.

### **Property Address**

**Georeference Information:** 

**Location:** (longitude, latitude): 150.900679, -34.413500 Distance to Capital City (e.g. Parliament House, Canberra): 190.2 km

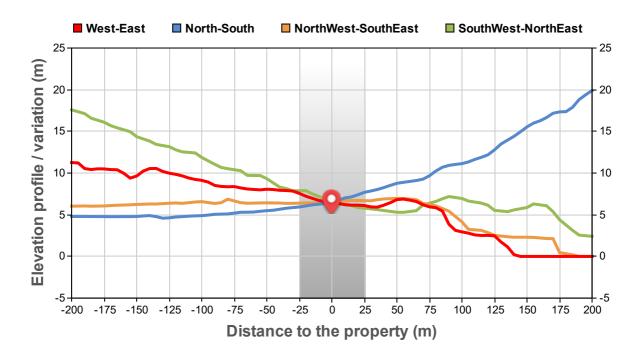


Report Creator: https://www.PropertyLocation.com.au (info@PropertyLocation.com.au) Report Date: Monday, August 26, 2019 Report Version: V4.30

### Overview: Location Imagery & Elevation Profiles

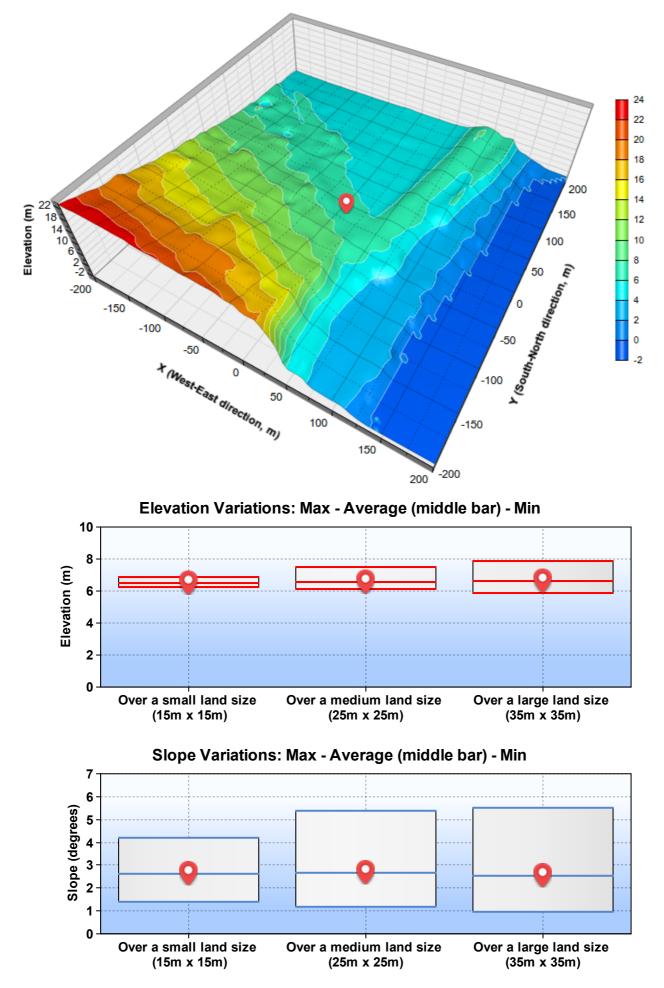


Links: This location in popular online mapping sites, e.g. Coogle Maps Bing Maps OpenStreetMap

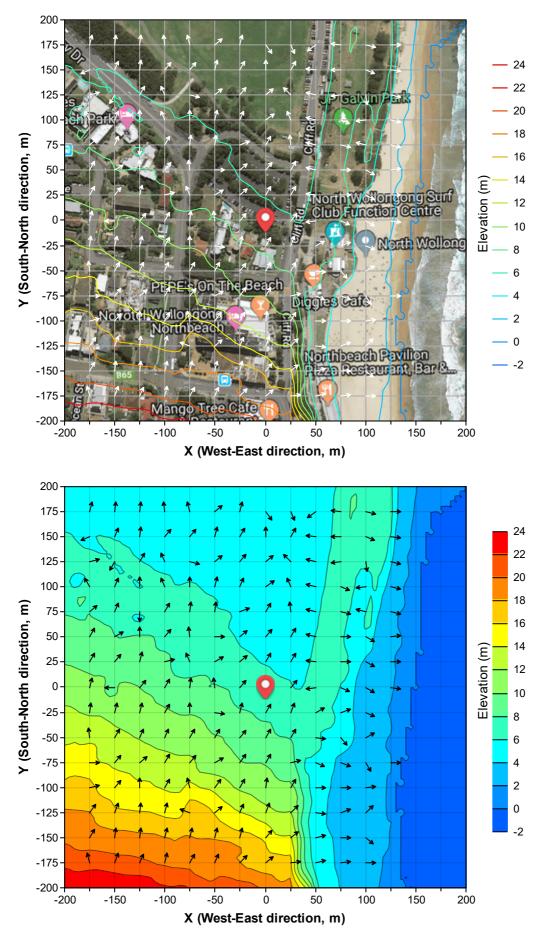


Site spot elevation: **6.4 m**; Slope: **2.6 degrees** (**Gently Sloping**, see **Note 1** for slope classification). Slope impacts site stability, surface water runoff and soil erosion.

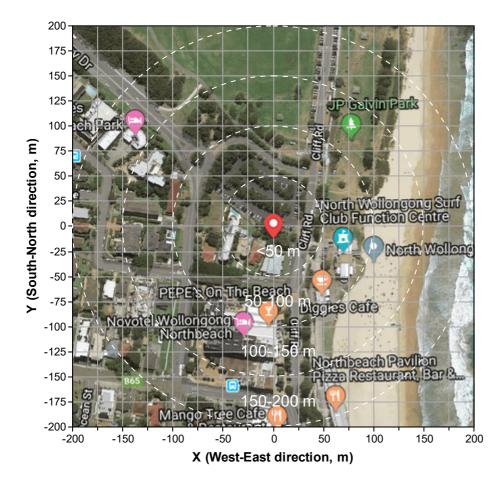
### Average Elevation & Slope Over Various Land Sizes



# Surface Water Flow Directions Related to Flash, Riverine, or Coastal Flooding



## Surrounding Bushland

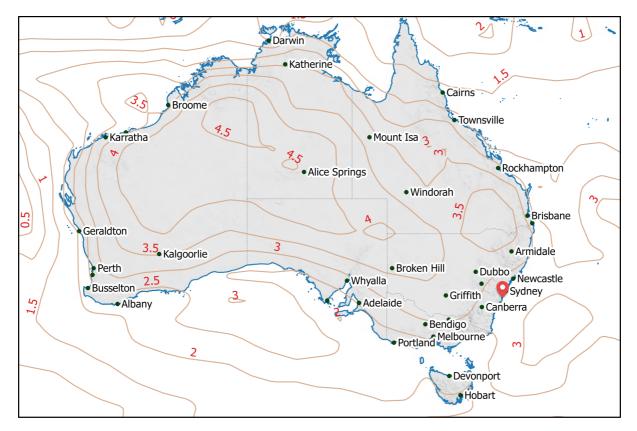


The distance from this location to nearby large bushland is more than 200 m.



# **Climate-Warming Trend for the Location**

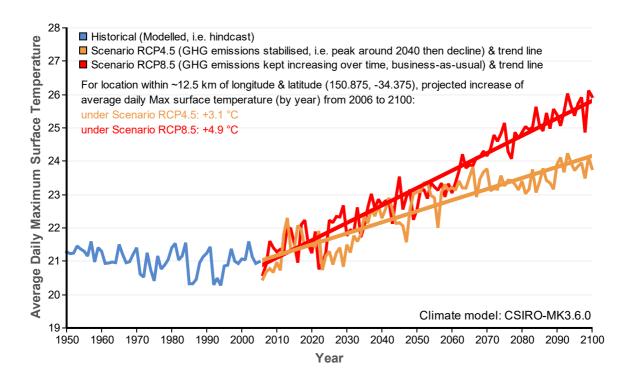
This part contains climate-warming projections for the location according to the new NASA climate dataset NEX-GDDP (2015), which is widely used for climate change impact studies and increasing public awareness / understanding of a warming climate. A rapidly warming climate has significant adverse impact on the occurrence (frequency, intensity and duration) of heatwaves, bushfires and droughts that are directly driven by high surface temperatures. Projected warming trends from the well-known global climate model, CSIRO-MK.3.6.0 (by CSIRO, Australia), under two greenhouse gas emissions scenarios are presented for the property location. Average daily max and min temperatures by year and by December (the first month of summer in Australia) are compared.



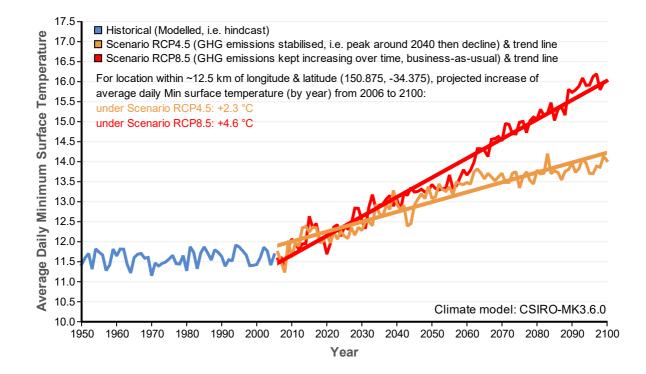
### **Overview: Projected Warming Trend for the Region**

The INCREASE of average daily maximum surface temperature (by year, in degrees Celsius) across Australia from 2000 (historical hindcast) to 2100 (projected), based on the CSIRO-MK3.6.0 climate model under a moderate greenhouse gas (GHG) emissions scenario known as Representative Concentration Pathway – RCP4.5. (Data source: NASA NEX-GDDP, 2015)

### **CSIRO-MK3.6.0:** Average Daily Max Temperature (by year)

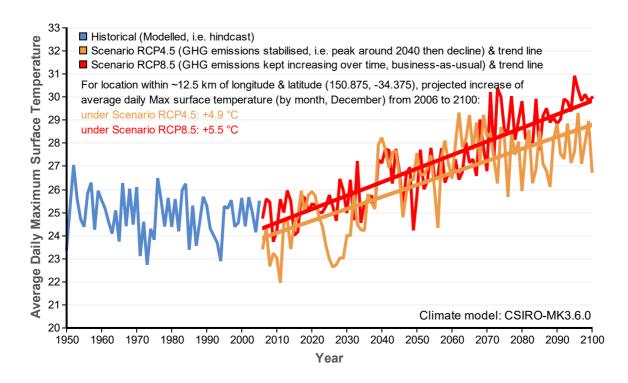


### **CSIRO-MK3.6.0:** Average Daily Min Temperature (by year)

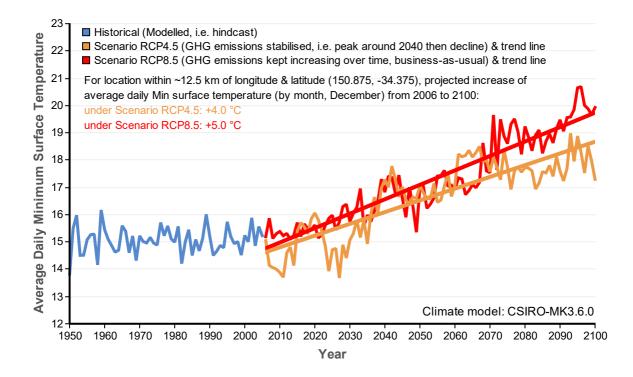


CSIRO-MK3.6.0 climate model is developed by CSIRO Marine and Atmospheric Research (Melbourne, Australia) in collaboration with the Queensland Climate Change Centre of Excellence (Brisbane, Australia).

### **CSIRO-MK3.6.0:** Average Daily Max Temperature (by December)



### CSIRO-MK3.6.0: Average Daily Min Temperature (by December)



CSIRO-MK3.6.0 climate model is developed by CSIRO Marine and Atmospheric Research (Melbourne, Australia) in collaboration with the Queensland Climate Change Centre of Excellence (Brisbane, Australia).

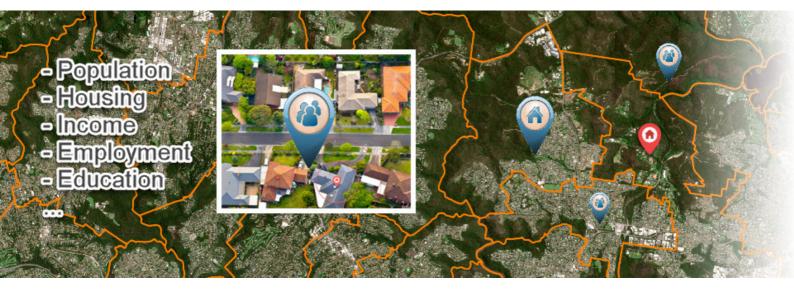


# **Population & Housing: Postcode Profile**

This part contains postcode-level data from Australian Bureau of Statistics (ABS) 2016 & 2011 Census of Population and Housing. Detailed postcode profiles and their changes on socioeconomic background, including demographics, housing, income, employment and education, are included. For some selected medians from the most recent 2016 census, the ranking across ALL national postcodes is made.

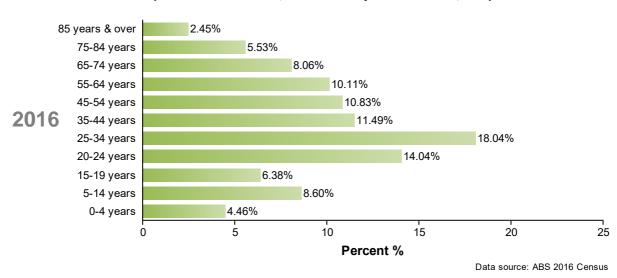
### **Postcode 2500: Selected Medians and Averages**

Median age of persons: 33 years (national median: 42) Median total personal income (\$/weekly): 555 (national rank: top 66.0 percentile) Median total family income (\$/weekly): 1,689 (national rank: top 36.2 percentile) Median total household income (\$/weekly): 1,239 (national rank: top 49.7 percentile) Median mortgage repayment (\$/monthly): 1,900 (national rank: top 26.3 percentile) Median rent (\$/weekly): 340 (national rank: top 26.4 percentile) Average number of persons per bedroom: 0.9 (national average: 0.8) Average household size (number of persons): 2.3 (national average: 2.5)



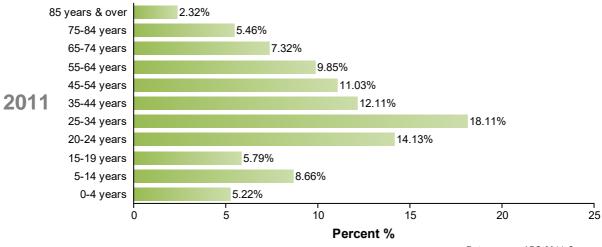
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### Demographics - Age Groups 2016 vs 2011



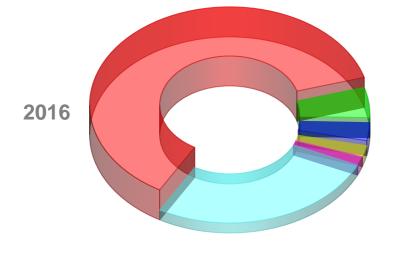
Population: Age Groups (Postcode: 2500; Count of persons: 40,510)

Population: Age Groups (Postcode: 2500; Count of persons: 37,082)



Data source: ABS 2011 Census

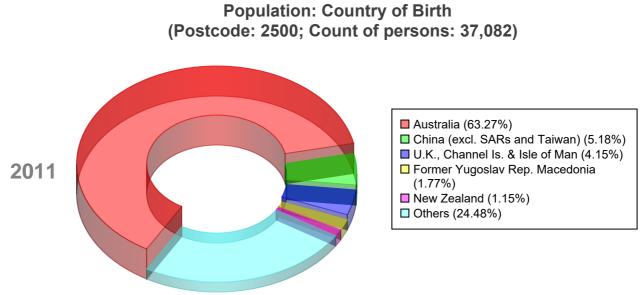
### Demographics - Country of Birth 2016 vs 2011



Population: Country of Birth (Postcode: 2500; Count of persons: 40,473)

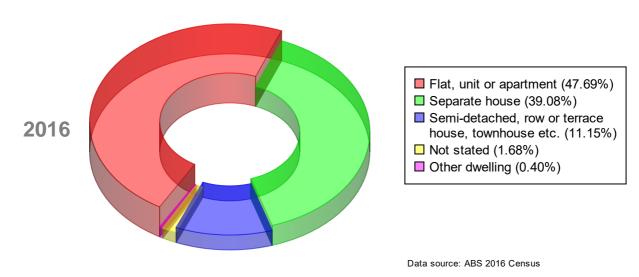


Data source: ABS 2016 Census Others: born elsewhere & country of birth not stated



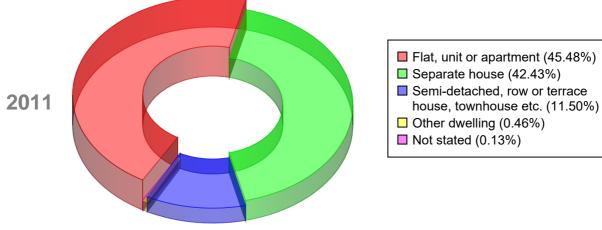
Data source: ABS 2011 Census Others: born elsewhere & country of birth not stated

### Housing - Dwelling Structure 2016 vs 2011



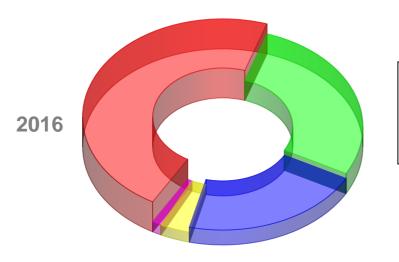
Housing: Dwelling Structure (Postcode: 2500; Count of occupied private dwellings: 15,661)



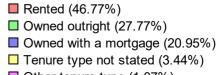


Data source: ABS 2011 Census

### Housing - Tenure Type and Landlord Type 2016 vs 2011



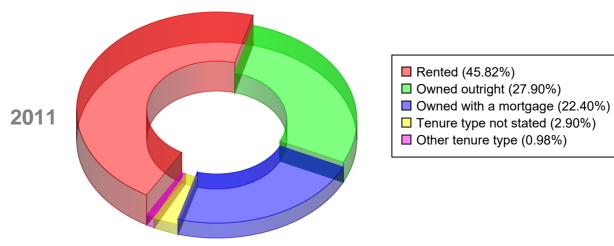
Housing: Tenure Type and Landlord Type (Postcode: 2500; Count of occupied private dwellings: 15,661)



Other tenure type (1.07%)

Data source: ABS 2016 Census

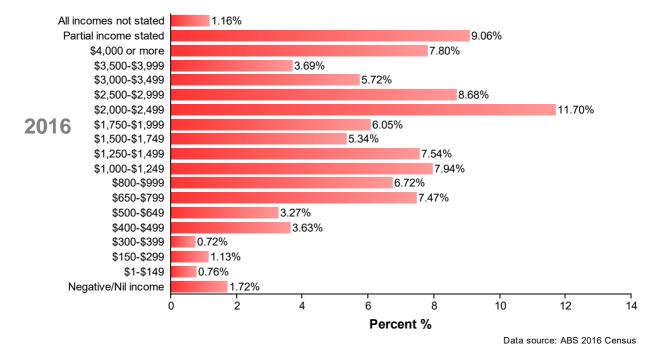
Housing: Tenure Type and Landlord Type (Postcode: 2500; Count of occupied private dwellings: 15,124)



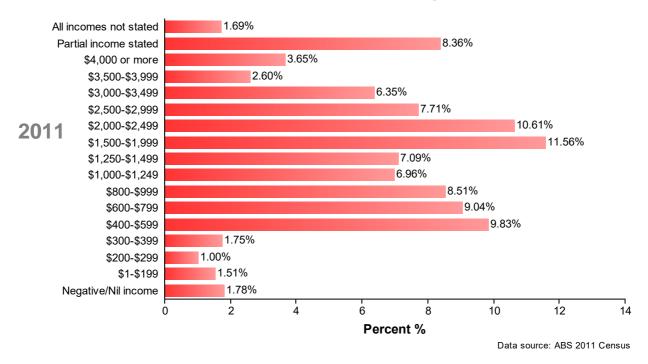
Data source: ABS 2011 Census

### Income - Total Family Income 2016 vs 2011

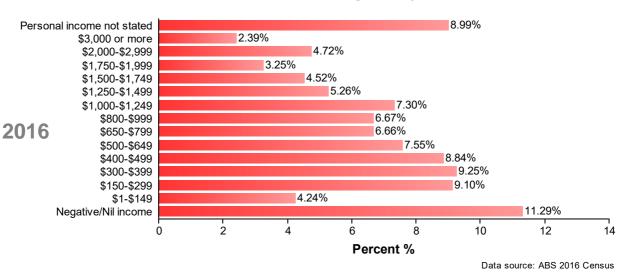
Total Family Income (weekly) (Postcode: 2500; Count of families in family households: 9,088)



Total Family Income (weekly) (Postcode: 2500; Count of families in family households: 8,692)

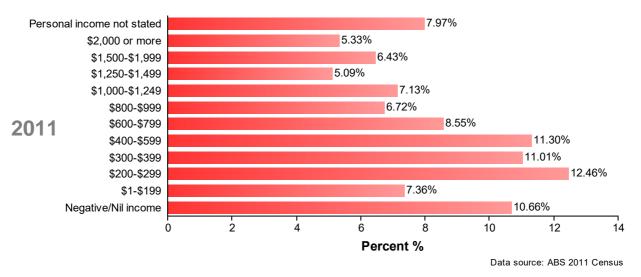


### Income - Total Personal Income 2016 vs 2011



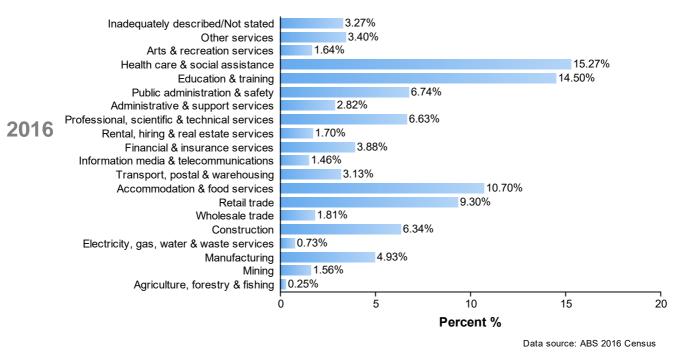
Total Personal Income (weekly) (Postcode: 2500; Count of persons aged 15 years and over: 35,226)

Total Personal Income (weekly) (Postcode: 2500; Count of persons aged 15 years and over: 31,939)



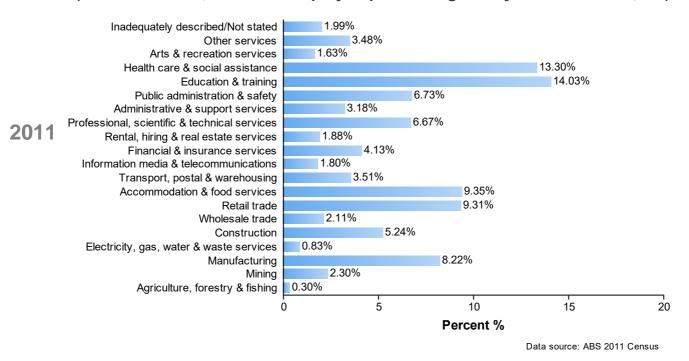
### Employment - Industry of Employment 2016 vs 2011

#### Industry of Employment (Postcode: 2500; Count of employed persons aged 15 years & over: 17,708)



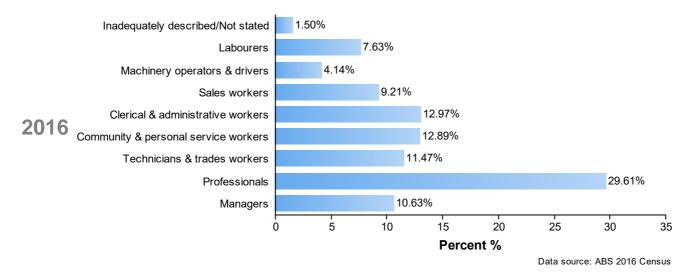
#### Industry of Employment

#### (Postcode: 2500; Count of employed persons aged 15 years & over: 16,141)

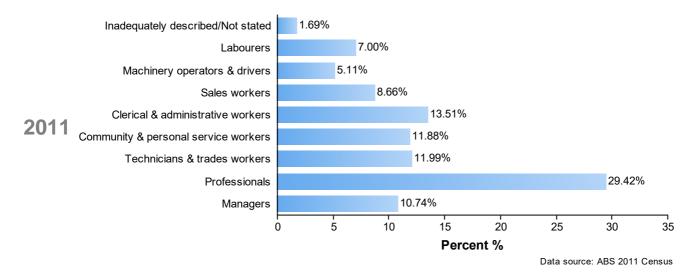


### Employment - Occupation 2016 vs 2011

Occupation (Postcode: 2500; Count of employed persons aged 15 years & over: 17,708)

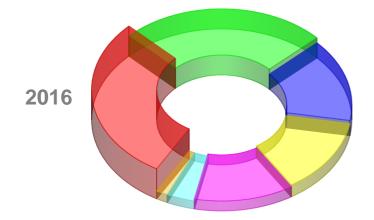


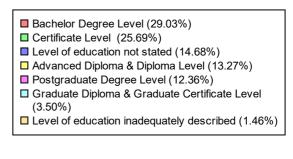
Occupation (Postcode: 2500; Count of employed persons aged 15 years & over: 16,141)



### Education - Level of Education 2016 vs 2011

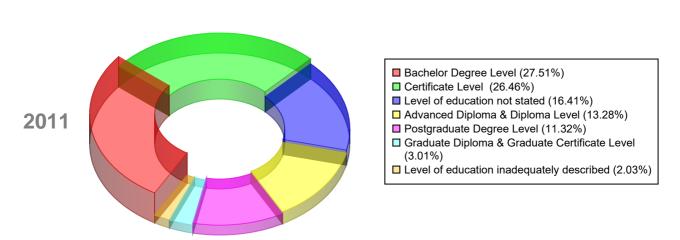
Level of Education (Postcode: 2500; Count of persons aged 15 years and over with a qualification: 22,455)





Data source: ABS 2016 Census

Level of Education (Postcode: 2500; Count of persons aged 15 years and over with a qualification: 19,555)



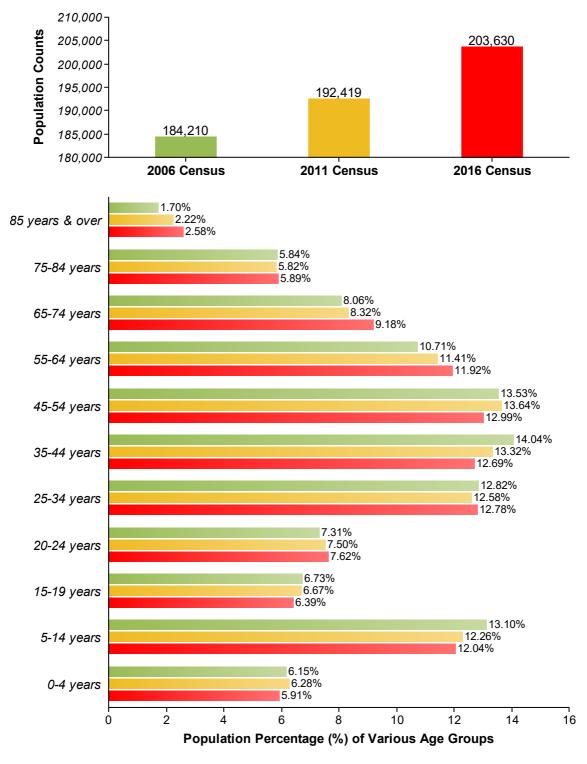
Data source: ABS 2011 Census

# **Time Series Profiles**



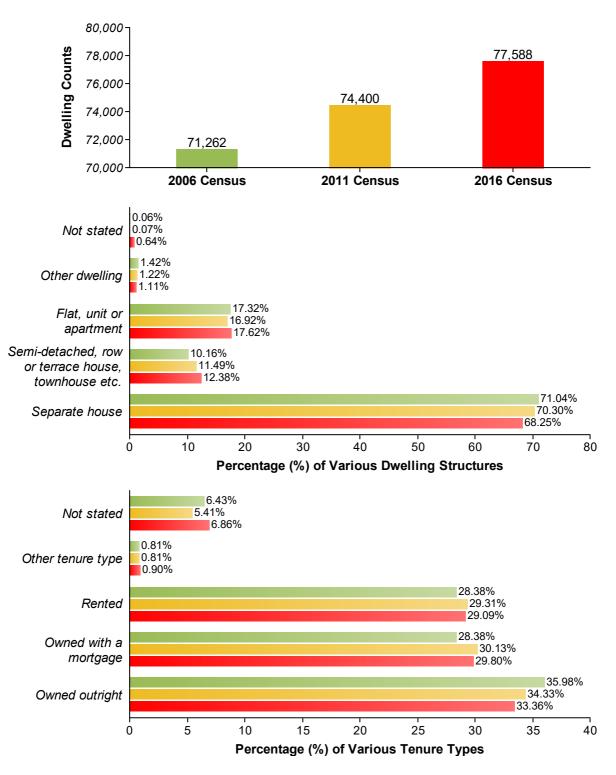
## At LGA Level: Population & Age Groups

LGA: Wollongong (C), New South Wales, Australia Population Counts and Age Groups



Data source: ABS 2016 Census, DataPacks 07/2017

### At LGA Level: Occupied Private Dwellings

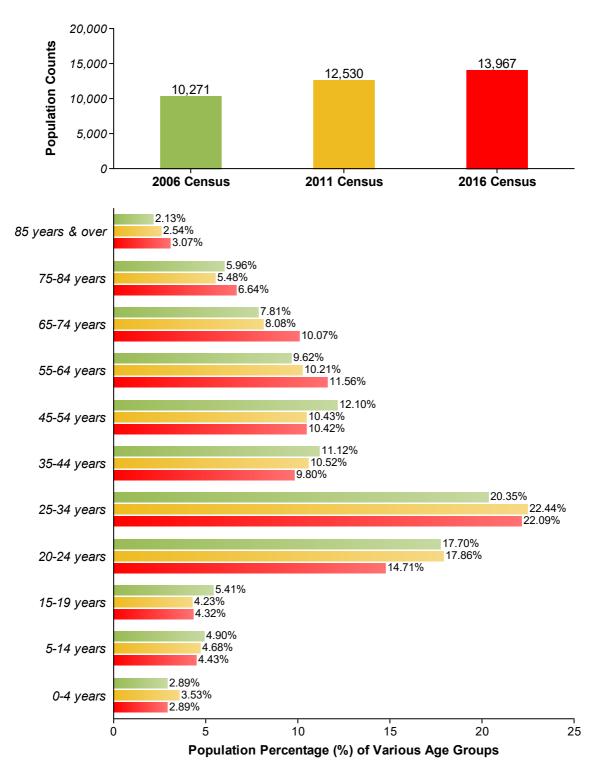


#### LGA: Wollongong (C), New South Wales, Australia Occupied Private Dwellings

Data source: ABS 2016 Census, DataPacks 07/2017

Local Government Area categories: Cities (C), Towns (T), Shires (S), Municipalities (M), Areas (A), Boroughs (B), District Councils (DC), Aboriginal Councils (AC), Regional Councils (R / RegC), Rural Cities (RC). According to ABS, data for the Censuses 2011 & 2006 were concorded to the LGA geographical boundaries of Census 2016.

### At SA Level 2: Population & Age Groups

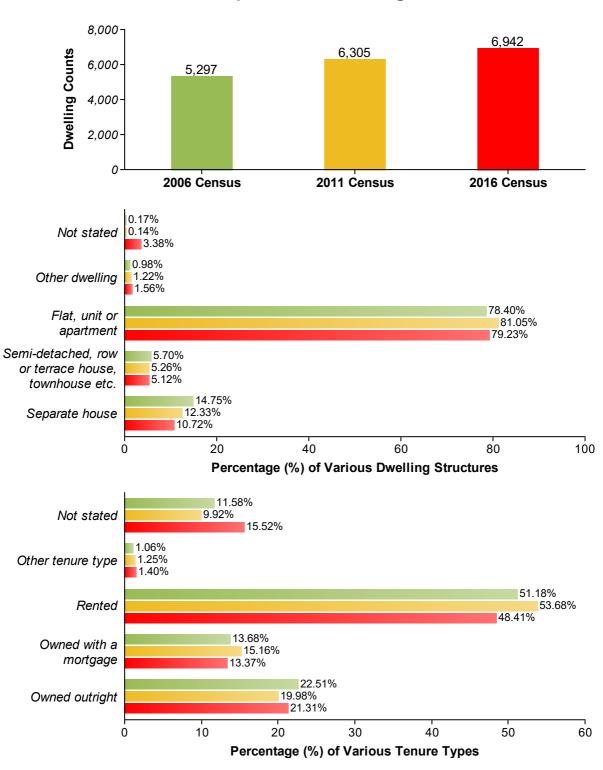


#### SA2: Wollongong - East, New South Wales, Australia Population Counts and Age Groups

Data source: ABS 2016 Census, DataPacks 07/2017

Statistical Area Level 2 (SA2) groups communities with similar social and economic characteristics. Within cities, SA2s often represent single suburbs (as shown by SA2 names). Nationally, the total number of SA2s units (~2,300) is close to that of postcodes (~2,600).

### At SA Level 2: Occupied Private Dwellings



#### SA2: Wollongong - East, New South Wales, Australia Occupied Private Dwellings

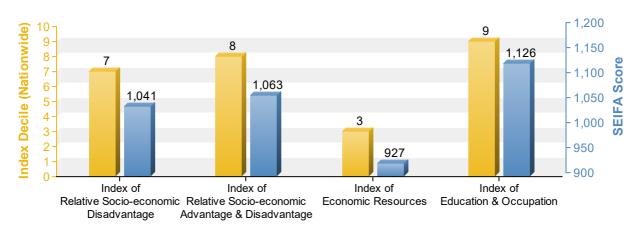
Data source: ABS 2016 Census, DataPacks 07/2017

# SEIFA 2016 across 5 Geographic Areas (SA1, SA2, Suburb, Postcode and LGA) with Varying Population Sizes

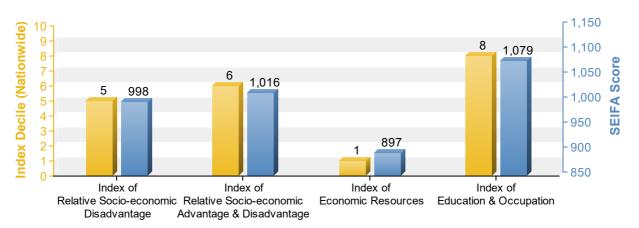
Socio-Economic Indexes for Areas (SEIFA), 2016



SA1: ID 1154833; Usual Resident Population: 502

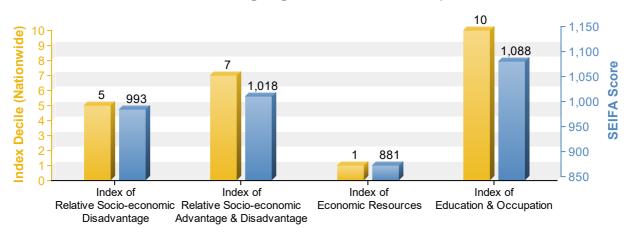






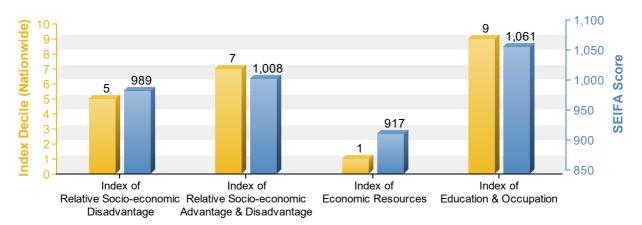
The Socio-Economic Indexes for Areas (SEIFA) is a modelled measure by integrating and summarising a wide range of social and economic attributes about the Australian population in an geographic area. SEIFA consists of four specific indexes each on slightly different aspects of the socio-economic condition: (1) the Index of Relative Socio-economic Disadvantage (IRSD); (2) the Index of Relative Socio-economic Advantage and Disadvantage (IRSAD); (3) the Index of Economic Resources (IER); and (4) the Index of Education and Occupation (IEO). An area with the highest decile (10, left y-axis) indicates the least disadvantaged, whereas an area with the lowest decile (1) the most disadvantaged (implying an area has relatively more people with low income, no qualifications or low skilled occupations). Corresponding SEIFA scores (right y-axis) are also shown; the mean for each index nationwide is 1,000. For more explanations, please follow ABS website.

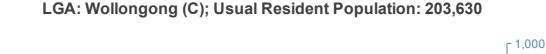
### SEIFA 2016 (Continued)

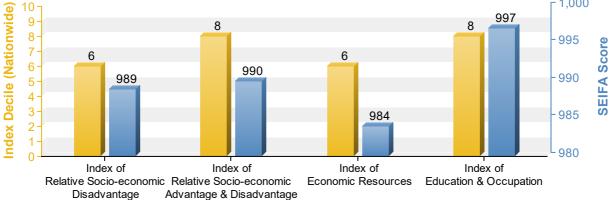


#### Suburb: North Wollongong; Usual Resident Population: 2,608









Data source: ABS 2016 Census, SEIFA 03/2018

#### Notes

1. Slope Classes: Nearly Level (slope <3%, or <1.72 degrees); Gently Sloping (3-8%, or 1.72-4.57 degrees); Moderately Sloping (8-15%, or 4.57-8.53 degrees); Strongly Sloping (15-25%, or 8.53-14.04 degrees); Steep (25-35%, or 14.04-19.29 degrees); Very Steep (>35%, or >19.29 degrees).

## **Acknowledgements of Data Sources**

This report contains analyses, maps and charts based on a range of data sources from Australian and international government agencies:

1. Elevation - Geoscience Australia, Digital Elevation Models from ELVIS Elevation Information System. DEM at 5m resolution was analysed.

2. Vegetation - Bushland classified by BigData Earth Pty Ltd using new Landsat-8 or Sentinel-2 imagery.

3. Population and Housing - Australian Bureau of Statistics (ABS) 2016 & 2011 Census, DataPacks.

4. G-NAF - Incorporates or developed using G-NAF ©PSMA Australia Limited licensed by the Commonwealth of Australia under the Open Geo-coded National Address File (G-NAF) End User Licence Agreement <u>link</u>.
5. Climate - Climate scenarios used were from the NEX-GDDP dataset, prepared by the Climate Analytics Group and NASA Ames Research Center using the NASA Earth Exchange, and distributed by the NASA Center for

Climate Simulation (NCCS).

6. Map - Hybrid basemap (imagery and roadmap) is accessed from Google Maps with API Key. ©2019 Google.
7. Satellite Imagery - Sentinel-2 imagery from the European Union Copernicus Sentinel Data and Service Information. The report contains modified Copernicus Sentinel data [2019].

8. Satellite Imagery - Landsat-8 imagery from the NASA and USGS Landsat Program.

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