



EARLY YEARS EDUCATION
Geodemographic Modelling and Analysis

e-BOOK

Demographics and Mapping for Early Years Education Centres

Including Child Care Centres, Kindergartens,
Preschools and Early Learning Centres (ELCs)

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Investment strategies and ongoing operational decisions can be developed effectively if you know the facts and data of the Childcare or School you are operating. Expansion plans should be drawn on facts and data, not just personal opinions.

Quality demographics and mapping data, analysis and reporting can provide reliable information for the board and leadership team to make well-informed decisions.



As we know, there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns—the ones we don't know we don't know.



Donald Rumsfeld

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Most businesses normally have a strategic plan to guide their long term future.

A good quality strategic plan outlines the expectations of the childcare business or the school or college based on facts and data, not just opinions and thoughts.

This guide to Demographics and Mapping for Early Years Education Centres, including Childcare and Preschools provides information on some of the components of a strategic plan, and more specifically, the demographics, mapping, facts, data and educational statistics available to you.

1. Introduction to Demographics and Mapping

1.1 What is a Strategic Plan?

There are many versions of what comprises a Strategic Plan for your business, however for a Childcare group, or a school wanting to include a Preschool, this is what we believe should be created:

A strategic plan is a 3-4 page document that tells people what the business wants to achieve in the future and how it plans to get there.

The plan lets people know:

- 1. Why your business exists (its purpose)*
- 2. How staff and students are expected to behave (the values)*
- 3. What is different or special about your childcare or preschool business (the context)*
- 4. What you are going to focus on over the next four years to improve students' experience, and how your childcare or preschool is going to do this*
- 5. What actions you will undertake to implement your key improvement strategies and the milestones that will be used to identify progress in their implementation".*

The development of accurately informed marketing, enrolment, advancement and investment strategies for future short and long term financial and capital investments is paramount to the success of your childcare or preschool.

This guide provides information that is available for the Strategic Plan, and focuses on points 4 and 5 above to help you decide what you are going to focus on for the next four years, how you are going to do it and help you select what actions you will take and how will you identify progress.

The guide will highlight what information is available (initially for Australia); however much of what we have available from the [Australian Bureau of Statistics \(ABS\)](#) is also available in other markets we support including New Zealand, the USA and the United Kingdom.

Whilst most of the information is available in tabular form, we have extensive knowledge and experience bringing all of the information together in an Online Mapping System.

This allows your childcare or preschool, school or college to see your facts and data at a glance and give you the power to make your own assessments. This can include a tailored Online Mapping System which can include individual students being mapped to their home addresses, future students, plus all the relevant demographic layers for a childcare or preschool including potential student population forecasts and total population forecasts for areas, religion, information on what type of students attend and so much more.



An understanding of what is available can provide your leadership team and board the vital demographic information required to make informed decisions for the future of your childcare or preschool,.

1.2 What operational areas should we be addressing using demographics?

Most childcare centres (or childcare groups) or preschools attached to a school have individual people responsible for gaining new students and filling the enrolment funnel. Whatever their title is the responsibility for new student acquisition lies partly or wholly within their roles.

Five key questions to be addressed:

1. *Where do our current students come from?*
2. *Where are our future enrolments going to be coming from?*
3. *What areas show student growth around our childcare centres or our preschool?*
4. *Which of these areas have suitable Socio Economics to consider?*
5. *What are the parents doing that makes childcare or preschool necessary – normally associated with their work / life choices?*

Can your team confidently answer these questions?

If the answer is no, what tools do your team need?

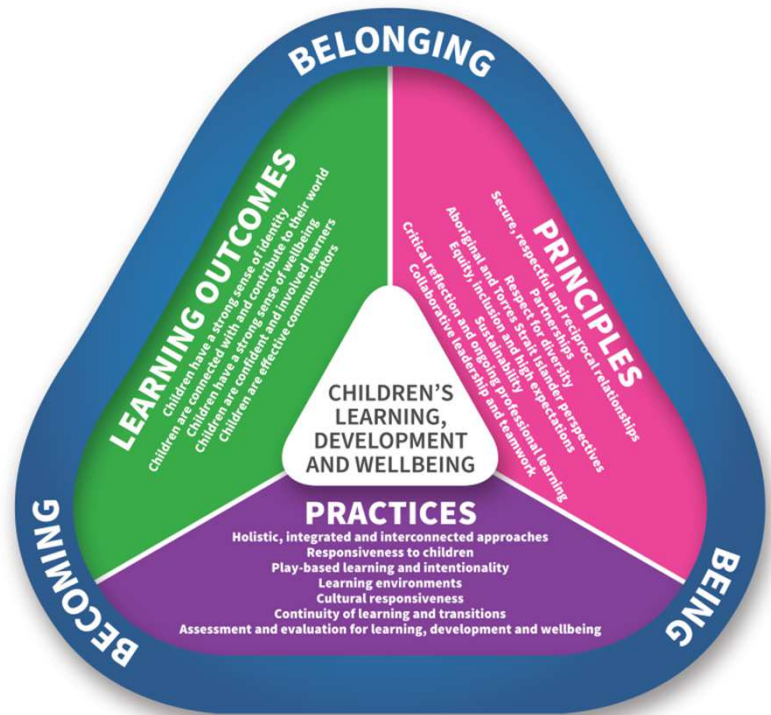


1.3 Major investment decisions

Childcare is in a very strong growth phase at present, and the Government subsidizing Preschool means demand is well exceeding supply in many areas. Large childcare groups and many established schools are currently in expansion mode, and will be considering new locations or a major investment in the current facilities or campus for a variety of reasons:

- Demand in an area for childcare and preschool is far exceeding what is currently available.
- Schools want to offer earlier education and use this as a funnel for future students through their school years.

Whatever opportunities are in front of you, by choice or by necessity, quality demographics can help make informed investment decisions.



ACECQA National Approved
Framework of the Early Years Learning

Which factors are important?

- Current potential student numbers available in the local area.
- Future student forecast numbers.
- Socio economics of the area and how that matches with fee expectations.
- Current and future competition in the area.
- Suitable land available for the expansion.

1.4 Strategic decisions for the future

The Australian Government's Preschool Reform Agreement has been running since 2022 and will go through until 2025. It includes funding that supports the delivery of 15 hours of preschool a week – 600 hours a year – for all children in the year before they start school.

Measuring demand for Early Education in your area

Like many businesses we can look at supply vs demand for any area. Most people rely on the touchy feely approach like "I heard of and they cannot get their child into daycare or an ELC".

On the other hand, we can use data to look at the number of places available, and the number of children in the area of the targeted age group.

In Australia, we have the ACECQA data (Australian Children's Education and Care Quality Authority) which produces data on every registered childcare centre in Australia. Think of this as the SUPPLY side of the equation.

There were 17,696 centres on the list in 2024, and for each centre we can see:

Name of the Preschool / ELC / Kindergarten

- What type of Preschool or Childcare service it is
- How many Approved places it has
- Overall Rating from ACECQA
- Contact details

On the DEMAND side we can see:

- How many children live in any area by age cohort
- What is the population forecast growth over the next 8 years and soon to be 13 years of each age group

We can also see from the 2021 Census how many and what % of the children live in an area where their parent's stated that they attend Preschool.

While different areas will have different ratios for Preschool attendance compared to the population, we can make some assumptions due to socio-economics and cost to attend.

We can use the ratios of children attending preschool from the Census compared to the number of children in the area who are aged 4 and 5 years old. We can also compare the number of children aged 0 - 5 years old to the number of Approved Childcare and Preschool place in an area.

Australia wide figures

Across Australia we can see some specific ratios that give us a guideline as to where the averages lie, and we can compare any area against these:

Factor	National numbers
a) Number children aged 0 – 5 (Census 2021)	1,745,704
b) Number Approved Childcare places (ACECQA)	1,169,673
c) Number children aged 4 & 5 years old (Census 2021)	608,592
d) Number children attending Preschool (Census 2021)	481,138
a)/b) Number of 0 – 5 year olds / Approved Childcare places	1.49
c)/d) Number 4 & 5 year olds / Number attending Preschool	1.26

High Growth areas

When we look at the demand in the high growth areas of Sydney and Melbourne, it is scary!

Areas like Cranbourne and Pakenham in Melbourne's South East, are exploding with young children, and the number of schools and childcare / preschools for these children are not keeping up.

Cranbourne West is in the SA3 of Casey - South which had a total population in Census 2021 of 227,905 people, of which 23,778 were aged 0 - 5 or 10.4% according to Census 2021.

Registered place / Total number of Preschoolers Ratio

Age 0-5 Population	
Age	Population
Age 0	3,844
Age 1	3,836
Age 2	3,818
Age 3	3,971
Age 4	4,042
Age 5	4,156
Total	23,778

Casey - South	
	#
Residential population	227,905

Preschool Population		
Data	Population	%
Preschool	6,318	2.77%

(Source: Census 2021)

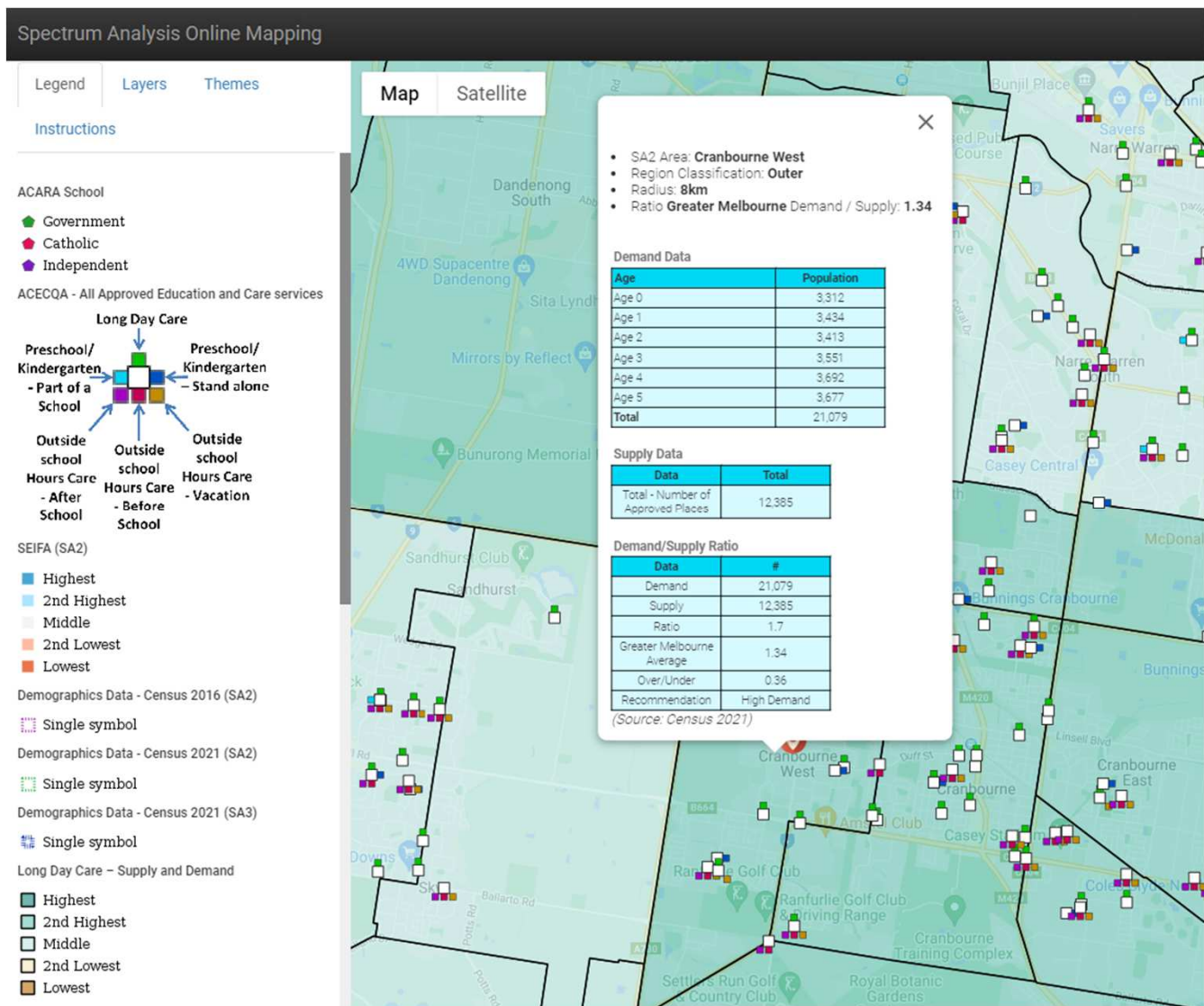
Population Projection	
Year	Age 0-4
2022	21,000
2032	28,116
Growth 22-32 (#)	+7,116 children
Growth 22-32 (%)	+33.9%

Childcare Data	
Data	Total
Long Day Care centres	84
Preschool / Kindergarten (Stand alone) centres	34
Preschool / Kindergarten (part of a school) centres	6
Total number of Approved Places	13,666

Data	#
Total number of Approved Places	13,666
Preschooler Pop	6,318
Ratio	2.2

When we look at the number of 4 & 5 year olds, we see 8,198 children and 6,318 went to pre-school or 77% which is slightly below the national average. The area is expected to increase in 0 – 5 year olds by 33.9% from 2022 to 2032.

If we look at the specific area of Cranbourne West we see as follows:



The summary of the area is that there is a shortage of local places for Total Childcare as the Approved places covers only 59% of the 0 – 5 year old population, where the Melbourne Average is 75%. How will that look with an additional 34% of children in the next 10 years?

What are your choices in setting your school up for the future?

If you already have a preschool attached to your school, your records should be able to track the number of students in your preschool who then go to Prep at your school. Is this working for you?

If you are not operating a preschool as part of your school, what data do you need to make a decision on the viability of providing a preschool in the future?

1. Understand the Supply and Demand for preschool education in your trade area
2. Understand the forecast growth of young children in your area, and what is required to keep up with demand
3. When looking at the supply (competitors), think how you would compare to them, and possibly the price points they are charging
4. Understand the investment that is required, and the income and expense for an ongoing, long-term position.

We can provide data for any area in Australia, and if you are considering opening a form of childcare, preschool or early years education, make sure you check out the numbers before making what will be a very large (and potentially profitable) investment. The best decisions are made with facts and data.

Hope is NOT a Strategy!

1.5 Understanding the Census

Australia (and New Zealand) are very fortunate because we have a Population Census conducted by the Australian Bureau of Statistics (ABS) every five years.

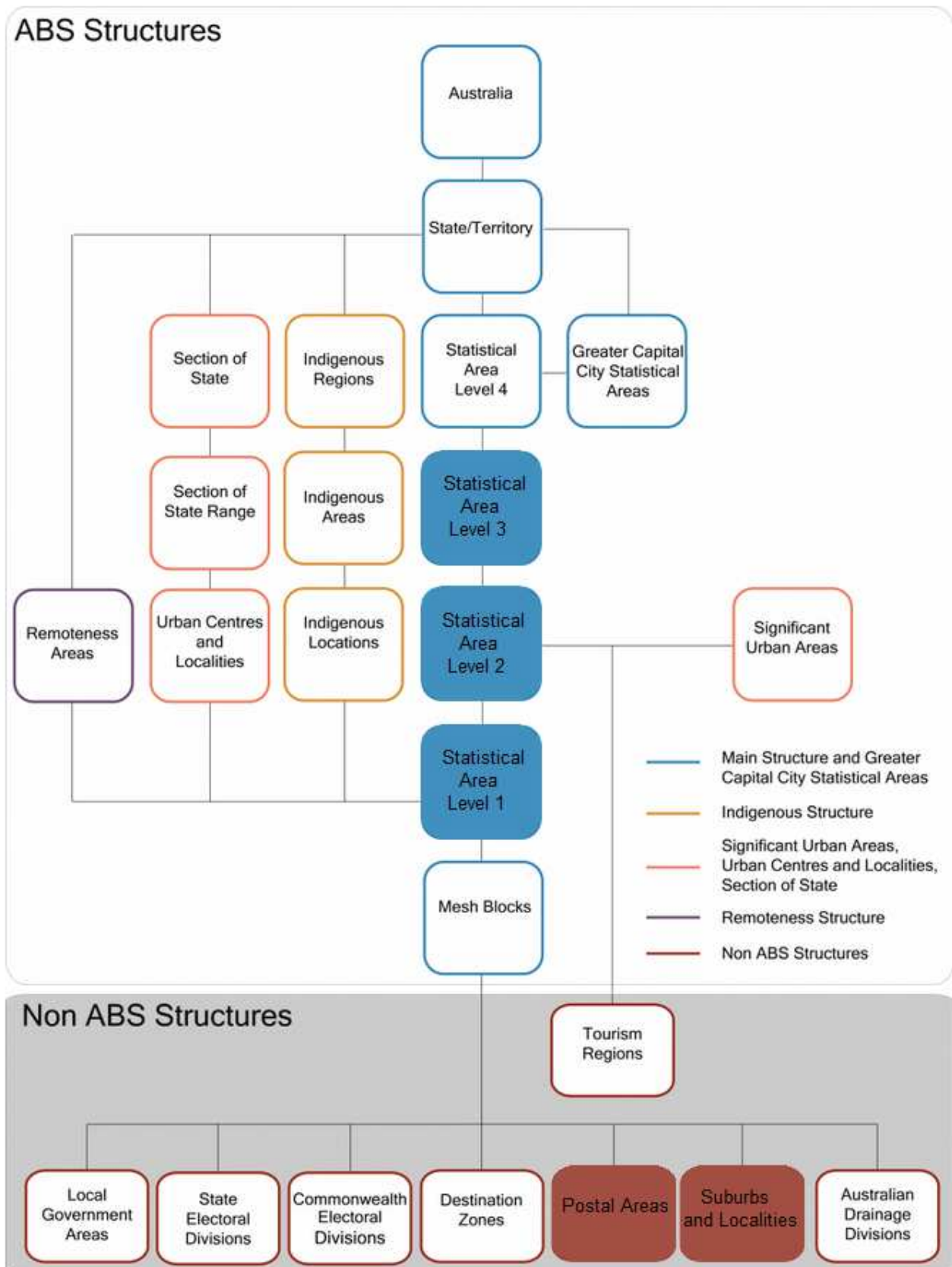
The Census costs around AUD \$400M and is normally seen as the largest regular peacetime spend undertaken in Australia.

It is planned well in advance to ensure that the answered questions provide the best data for understanding the current and future needs of the population. Forecasts are used to provide evidence for government spending decisions for new schools, hospitals, infrastructure etc.



The Census data is released over a two to three year period after the census night in August 2021. The Statistical Area 1 (SA1) level data is released around 10 months after Census night (usually June of the following year) and is used to prepare a detailed analysis for childcare, preschools, schools and colleges.

The Australian Statistical Geography Standard (ASGS) provides a framework of statistical areas used by the Australian Bureau of Statistics (ABS) and other organisations to enable the publication of statistics that are comparable and spatially integrated.





Australia uses a system of Statistical Areas as the geographies in which we release information as follows:

SA1's – 61,845 across Australia

SA2's – 2,473 across Australia

SA3's – 359 across Australia

By comparison we have the following geographies you may be more familiar with:

Suburbs – 15,760 approx.

Postcodes – 2,641



ABS data at SA2 level can be used for population growth forecasts and Department of Health and Department of Education data.

SA2s are designed to reflect functional areas that represent a community. They consider Suburb and Locality boundaries. SA2s often reflect one or more related suburbs.



Description from the ABS's website:

Statistical Areas Level 2 (SA2s) are designed to reflect functional areas that represent a community that interacts together socially and economically. They consider Suburb and Locality boundaries to improve the geographic coding of data to these areas and in major urban areas SA2s often reflect one or more related suburbs. The SA2 is the smallest area for the release of many ABS statistics, including the Estimated Resident Population (ERP), Health & Vitals and Building Approvals data. SA2s generally have a population range of 3,000 to 25,000 persons and have an average population of about 10,000 persons. SA2s are aggregations of whole SA1s.

Whilst census data is released at SA1 level, many of the datasets we use are only released at SA2 level, specifically the ABS dataset - Population projections (2017 – 2032).



1.6 Census data most relevant to childcare and preschools

The 2021 Census provides most of their data at SA1 level, which will then aggregate into SA2's.

The Census provides population by age and gender for each area. This can help childcare and preschools identify the number of childcare or preschool age children in any area.

The census also provides information on:

- Personal and Household income
- Ethnicity
- Religious Affiliations
- Marital Status
- Home Ownership
- Household Type
- Language spoken at home
- Birthplace
- Professions
- And more



Think of the census as a five yearly "stake in the ground" that can be used for comparisons against census data from other years.

The census asks families specific questions to identify if children are at:

- Pre School
- Primary School
- Secondary School

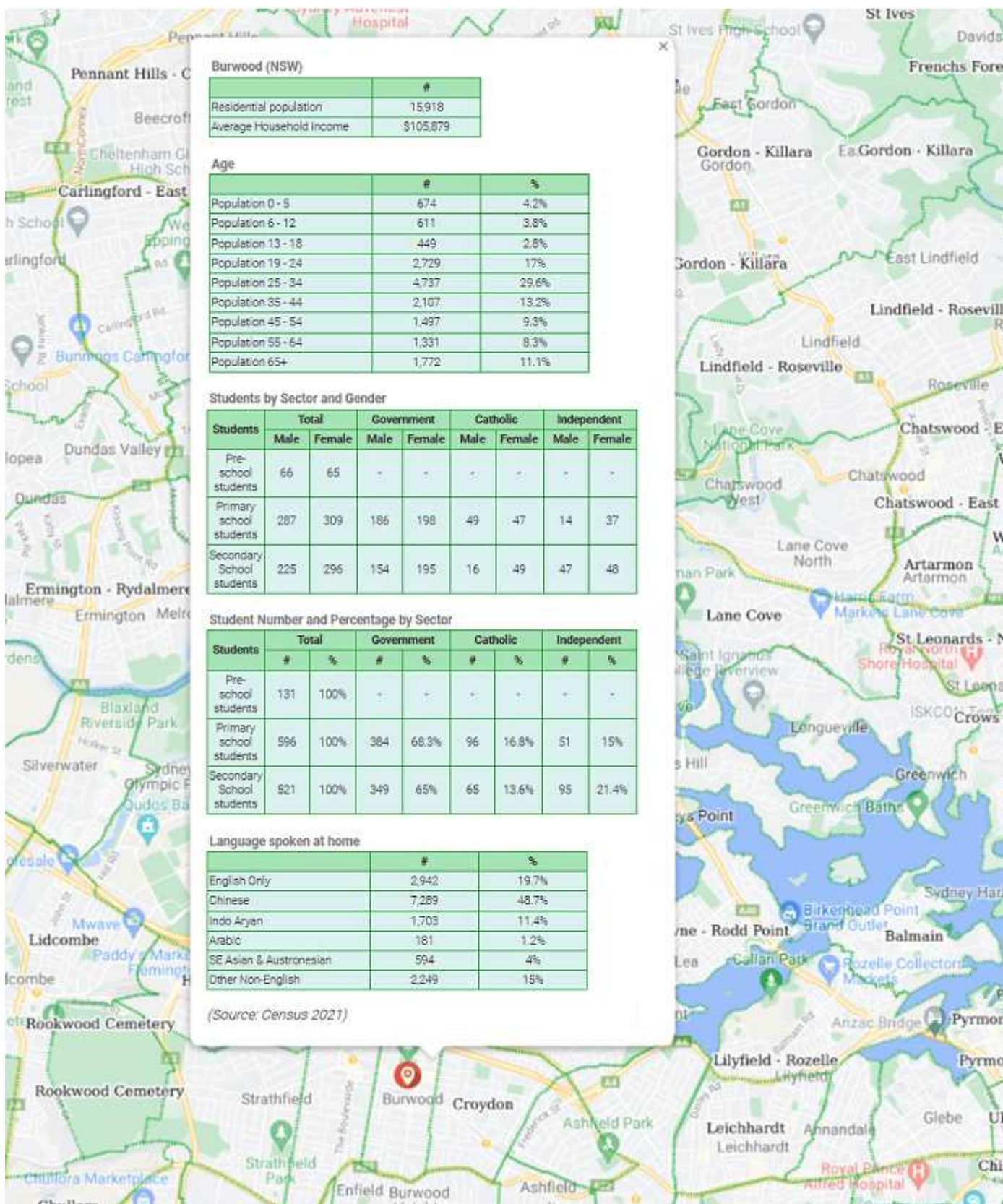
and if they attend a

- Government School
- Catholic School
- Independent School

The data can analyse any specific SA2 and see what type of Childcare, are attended and look at what has changed over a chosen time period including 2011, 2016 and 2021.



Sample SA2 Area Report for Burwood NSW based on ABS Data from 2021

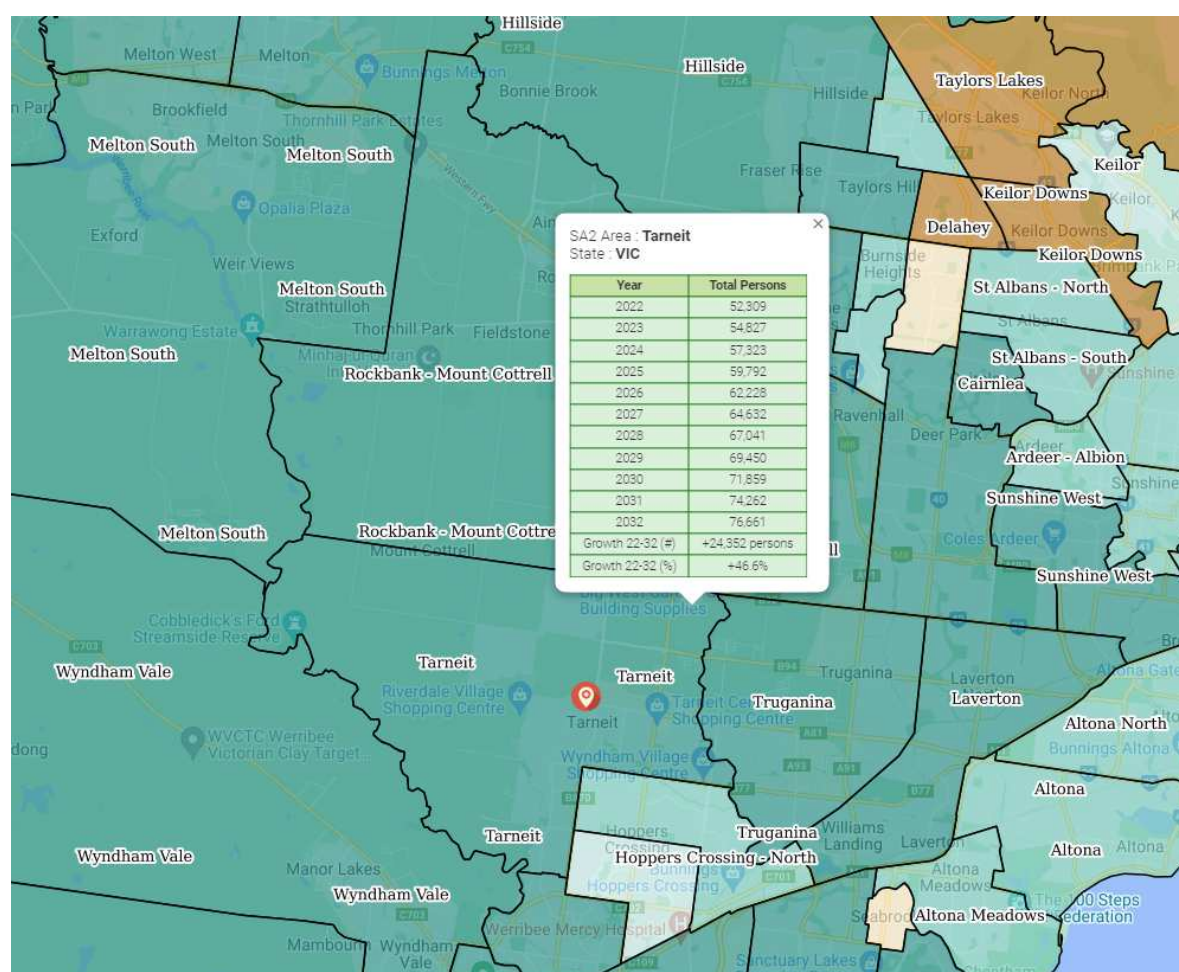


1.9 Population Forecasting (Update expected Oct 24)

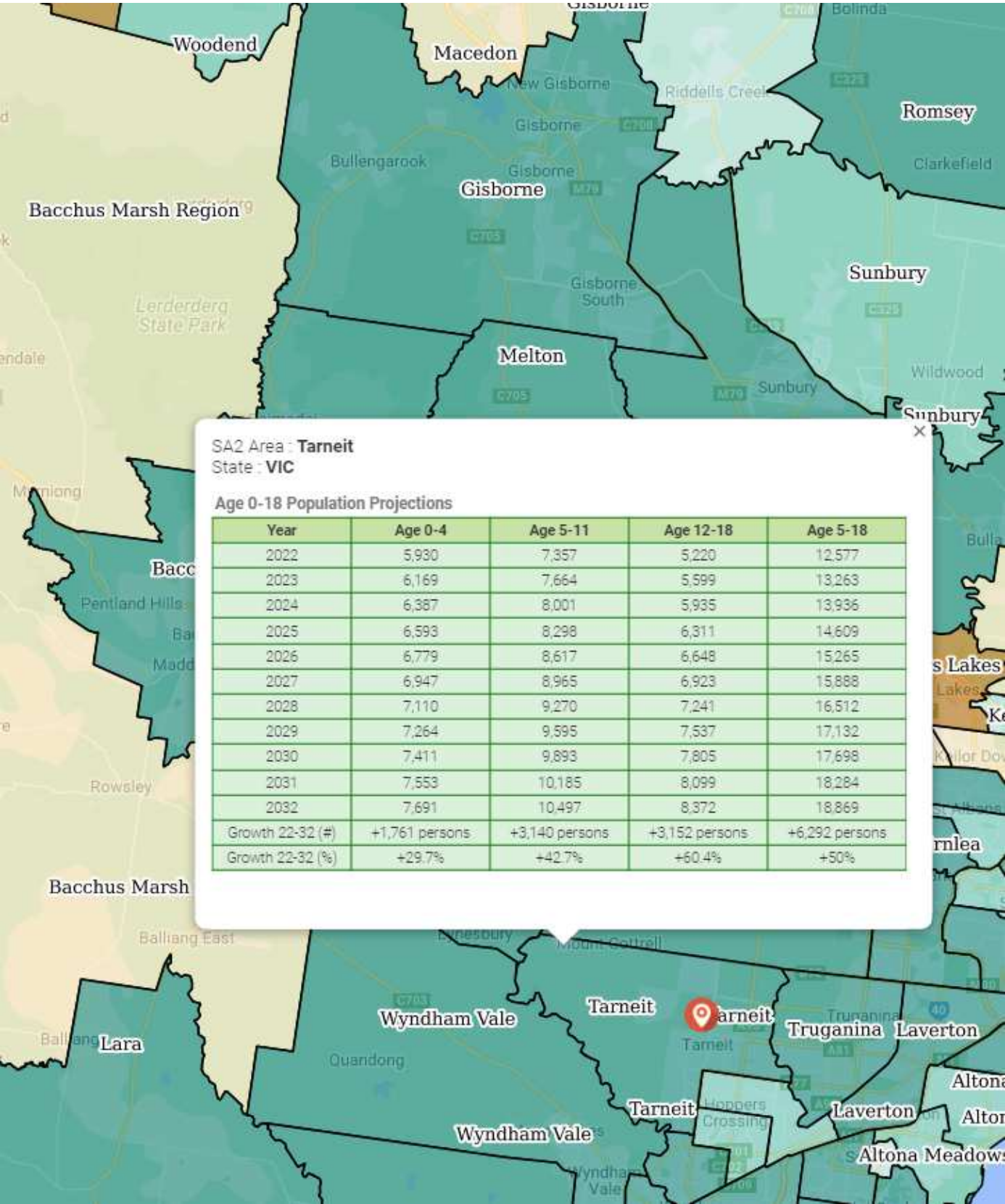
In October 2019, the ABS released new population growth forecasts from 2017 to 2032. This allows data analysis at any area level and the ability to identify the forecast number of people in age groups: 0 – 4, 5 – 9, 10 – 14, 15 – 19, 20 – 24 etc. by years.

By looking at Total Population Forecasts and the data of 5 – 19 year olds as typical of a school student age group, analysis will show if the area will have an increase or decrease in students over the time period.

The following examples look at Tarneit in the western suburbs of Melbourne, which has currently been identified as the biggest growth corridor anywhere in Australia.



Sample SA2 Area Report for Tarneit VIC
 based on ABS Data from 2021 – Forecast Student Numbers



Our Data Set shows the four age groups 0 – 4, 5 – 11, 12 – 18 and 5 - 18 as potential school students for the forecast years from 2024 to 2032. The potential Childcare and Preschool students are aged 0 – 4 as an indication of this stage of their life.

This could be disputed (and adjusted) for certain areas, especially with 5 and even 6 year olds (often in regional areas) not all attending school, but it does give a point for comparison.



The last two rows show how many more school students are expected to be in the area from 2024 – 2032, and what percentage increase this represents. In this case, an extra 6,292 persons and a 50% increase for the fourth age group (5 - 18).

The data and projections from the ABS begin in 2017.

1.7 Socio Economic Index For Areas (SEIFA)

The Socio Economics of an area (also known as the Socio Economic Status (SES) score), is provided by the ABS to show areas of advantage and less advantage.

The main product they produce is Socio Economic Index For Areas (SEIFA).

(<https://www.abs.gov.au/websitedbs/censushome.nsf/home/seifa>)

SEIFA offers four sets of scores and the one most commonly used is called the Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD).

The Index of Relative
Socio-Economic
Disadvantage (IRSD)

The Index of Education
and Occupation (IEO)

The Index of Relative
Socio-Economic
Advantage and
Disadvantage (IRSAD)

The Index of Economic
Resources (IER)

IRSAD summaries variables that indicate either relative advantage or disadvantage.

The index ranks areas on a continuum of areas from most disadvantaged areas to most advantaged areas.

An area with a high score on this index has a relatively high incidence of advantage.

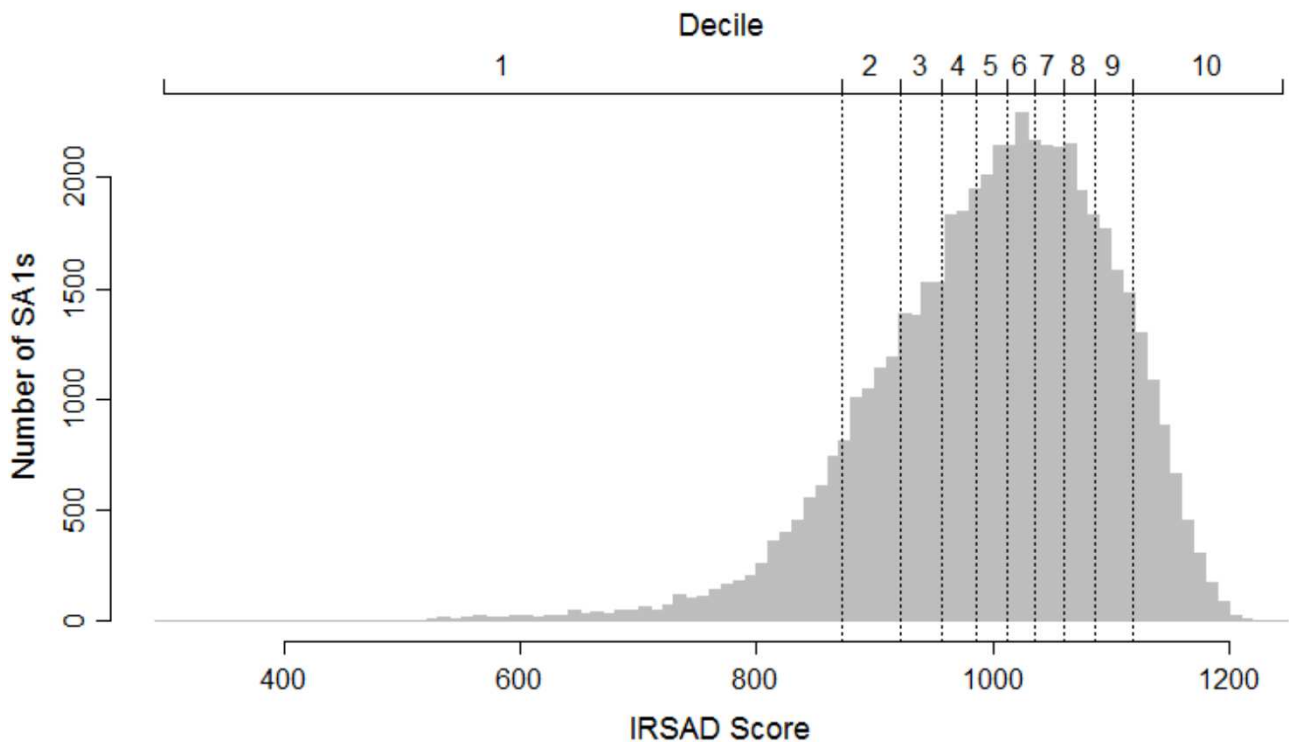
An area with a relatively low score on this index represents an incidence of disadvantage.

SEIFA indexes are available as different measures including a score, rank, decile and percentile.

A SEIFA score is created using information about people and households in a particular area. The score is standardised against a mean of 1000 with a standard deviation of 100.

This means that the average SEIFA score will be 1000 and the middle two-thirds of SEIFA scores will fall between 900 and 1100 (approximately).





Source: ABS, SEIFA Technical Paper

Deciles divide a distribution into ten equal groups. In the case of SEIFA, the distribution of scores is divided into ten equal groups. The lowest scoring 10% of areas are given a decile number of 1; the second-lowest 10% of areas are given a decile number of 2 and so on, up to the highest 10% of areas which are given a decile number of 10.

Areas with a SEIFA score below 1,000 would have higher levels of disadvantage. Areas with a score above 1,000 would have a higher level of advantage, and would be attributed to higher income, education, employment, etc.

In assessing where potential students may come from, SEIFA is a good indication of the ability of the families in the area to pay school fees.

If a school has higher fees, a knowledge of the SEIFA score for that area is very important.

1.8 SWOT Analysis

Within a Strategic Plan, one of the most reliable and practical tools to create a plan is the Strengths, Weakness, Opportunities and Threats (SWOT) Analysis process.

Strengths

Reputation, facilities, recent results and unique or valuable offerings.

Weaknesses

Items that are not on offer and any other issues from the recent past that may have a detrimental effect on the childcare or preschool in the future (legal, media etc).

Opportunities

Items that can provide an advantage if actioned. What will be happening with the student catchment population over the next 10 – 15 years? What long term planning is required for physical facilities and transport options? What will the student numbers be? What will the childcare or preschool need to teach the students?

Threats

What could affect the long term survival of the childcare or the preschool? Are new childcares planned for the local area? Is the school who may add a preschool managing its reputation or a legal matter? Is the main enrollment area losing numbers in the preschool student age range?

Many childcare groups, schools and colleges investment decisions are long term decisions requiring long lead times, especially if there is building and construction involved.

A Master Plan is required by most boards, especially if acquisitions or long term leases are involved, followed by major building projects.

Major decisions need planning and need to be verified with demographics and statistical analysis.





Understanding what demographics are available for providing evidence related to long term decisions for a childcare group, a kindergarten or a preschool is the first step.

The second step is visualising the data in an accessible way for all leaders, executives and board members.

An online mapping tool can allow authorised individuals easy access to the data and the ability to dynamically view a childcare areas' population changes and sources of future enrolments and indicative patronage as other demographic attributes based on the level of access.

2. Online Mapping for Childcare and Preschools

2.1 Data information available

Spectrum Analysis Australia works with many childcare groups and many schools and colleges both large and small, using sophisticated GIS tools to complete the analysis and reporting.

Several layers and point data items have been described in Section 1.

Strategic Plan decisions can incorporate additional layers of data.

A. ACECQA data

The ACECQA data has around 17,696 childcares, preschools (kindergartens and part of a school) and pre and after school and vocational services available.

This data plots the location and gives contact details including the number of approved places, and their ACECQA rating.

B. Australian Curriculum, Assessment and Reporting Authority (ACARA)

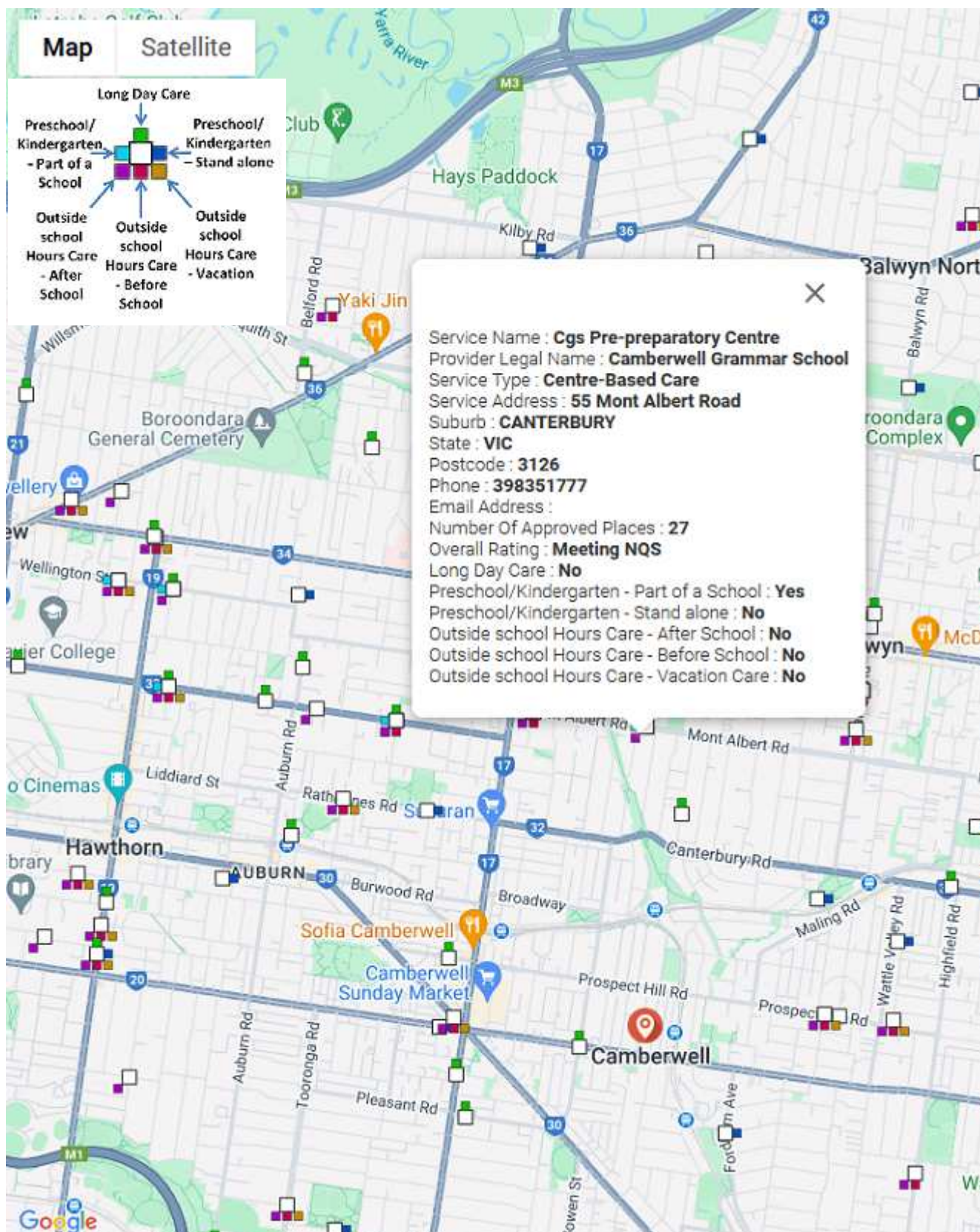
The ACARA data has around 10,735 Australian schools providing information to the government on an annual basis.

The schools are in listed three major categories:

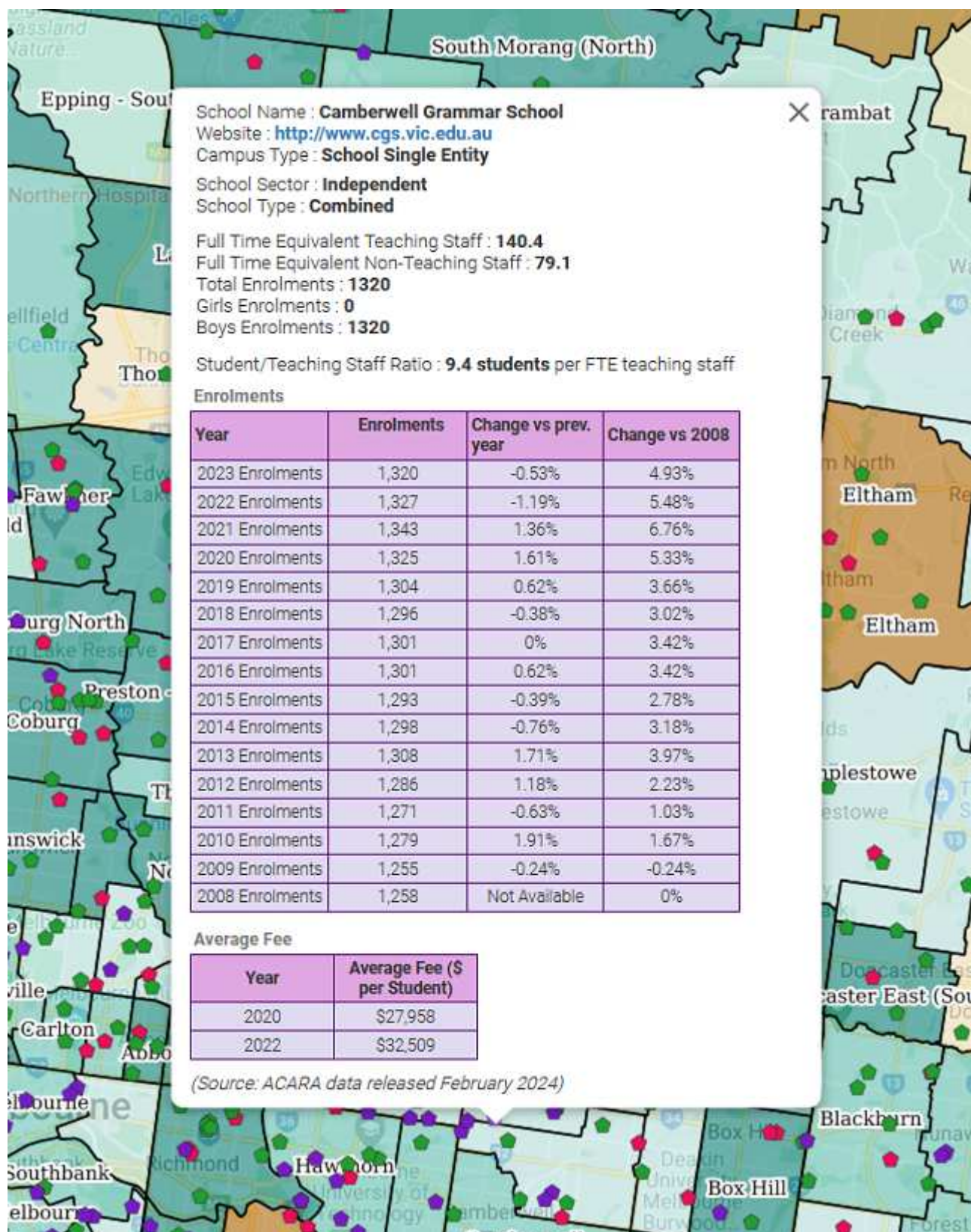
- Government Schools, Catholic Schools or Independent Schools

Each year every school provides information to ACARA and this data can be summarised and added to a layer of data to provide information about your school, college or a competitor.

Sample School Report for CGS Pre-preparatory Centre as part of
Camberwell Grammar School VIC
based on ACECQA Data as of June 2024



Sample School Report for Camberwell Grammar School VIC
based on ACARA Data 2023 released February 2024



C. Socio Economic Index For Areas (SEIFA) data at 4 levels

The SEIFA data is available at four levels and can be assigned to different layers that are 'best for purpose.' These include:

- Suburb
- SA1
- SA2
- SA3

D. School Data

The census also provides schools data as it asks families to identify if children are at:

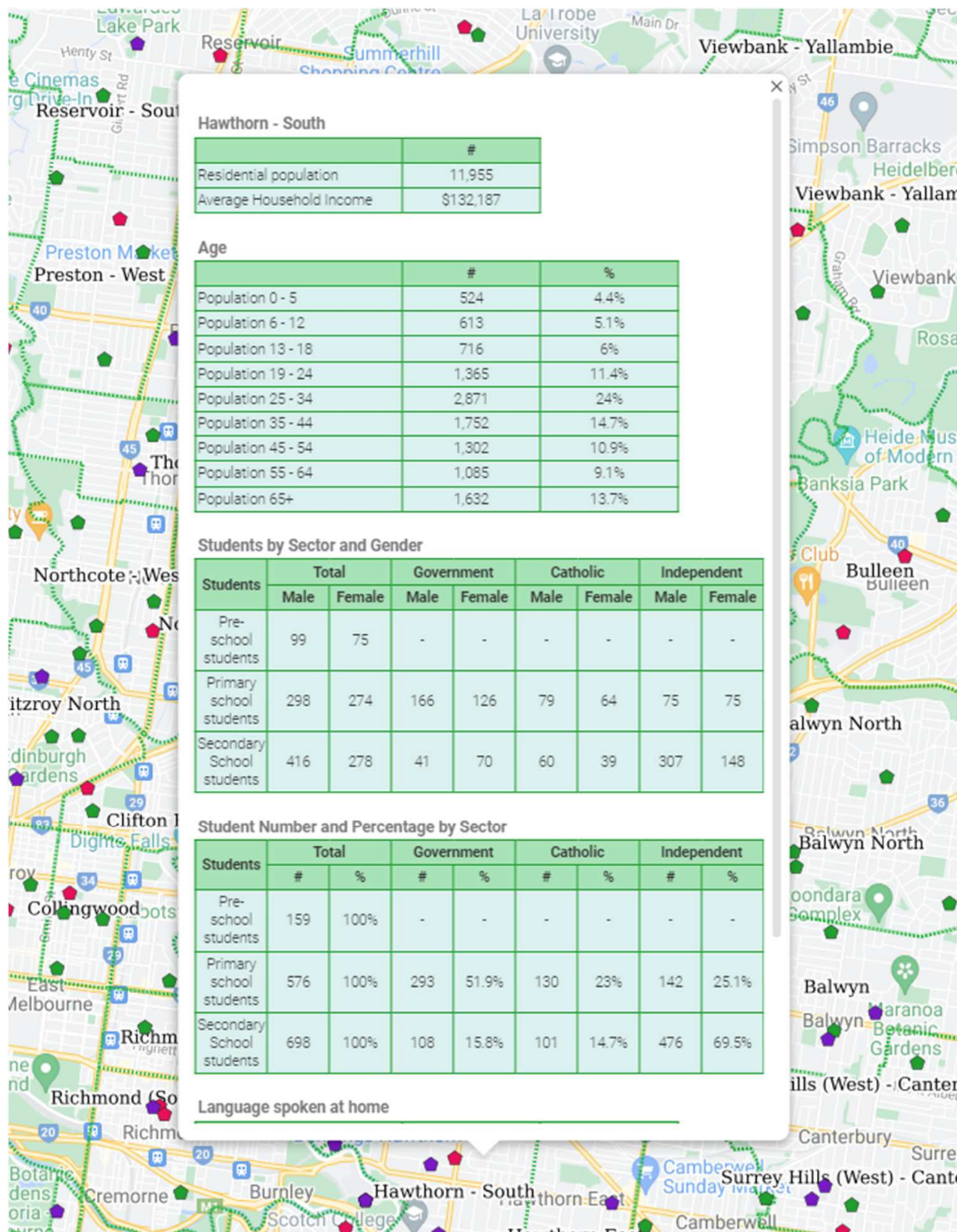
- **Preschool**
- Primary School
- Secondary School

and if they attend

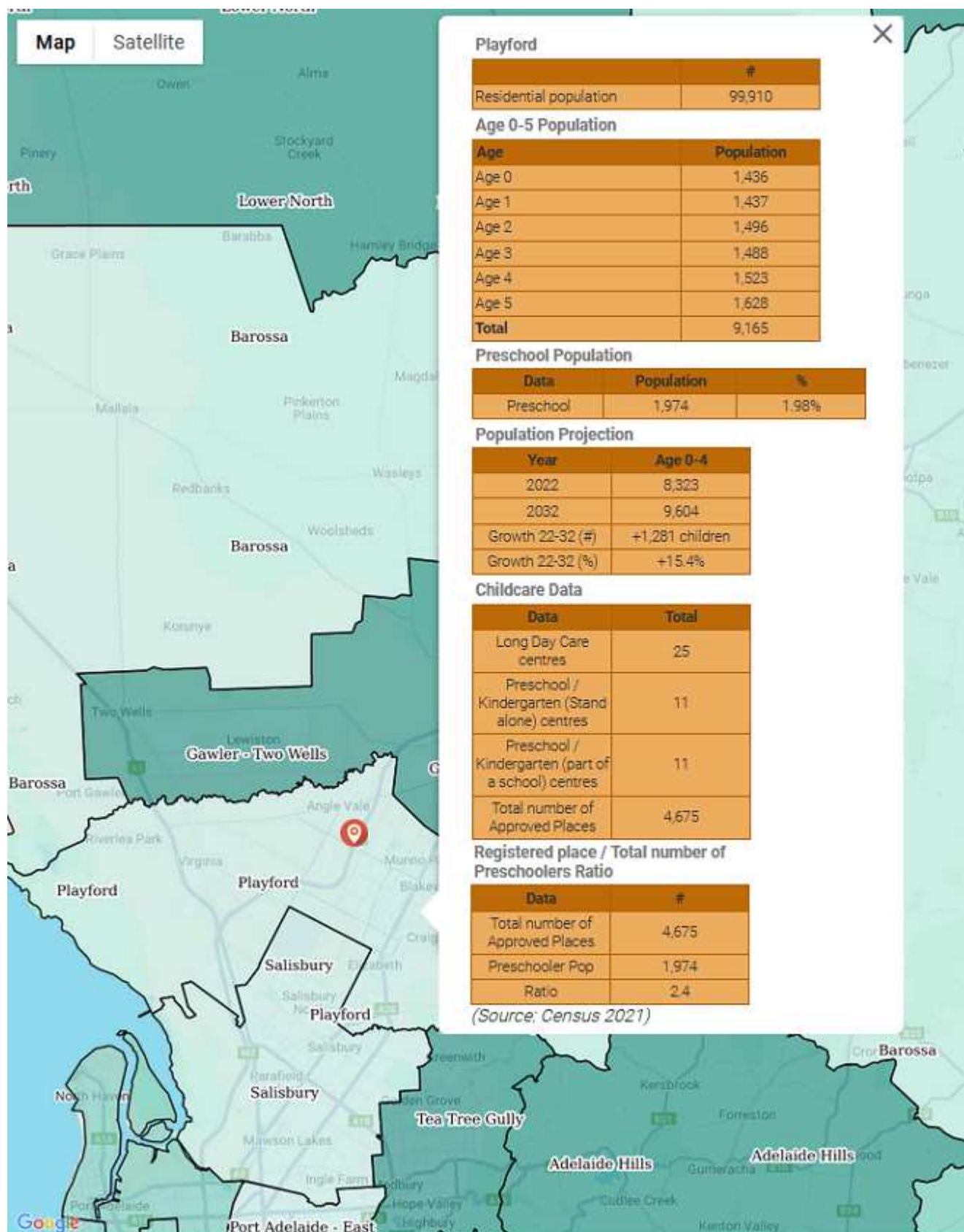
- Government School
- Catholic School
- Independent School

Analysis can be completed to look at any specific Suburb, SA2 or SA3 and see what type of schools are attended and what percentage of children attend each category of school.

Sample Suburb Report for Hawthorn - South VIC based on ABS Data from 2021



Sample SA3 Area Report for Playford SA based on ABS Census Data 2021



Sample SA3 Area Report for Playford SA based on ABS Census Data 2021





3. Conclusion

[Spectrum Analysis Australia](#) can offer childcare, kindergartens and preschools a variety of geodemographic modelling and analysis products to help you make well informed decisions.

The development of accurately informed marketing, enrolment, and investment strategies for future short and long term financial and capital investments is paramount to the success of any childcare centre, kindergartens and preschools.

Please visit the [Spectrum Analysis Australia](#) website for more information and scroll down to the Geo Mapping section to watch a [short video](#) to see how our online mapping tool works.



Peter Buckingham is the Managing Director of Spectrum Analysis Australia, a Melbourne based consultancy in demographics, mapping and analysis. Peter is both a CMC (Certified Management Consultant) and a Fellow of the Institute of Management Consultants (FIMC).

Established in 1996, Spectrum Analysis Australia has been providing facts, data, analysis and reports to clients across Australia and the world in multiple industries and sectors.

We know that a preschool, school, college or university's future depends on effective planning and decision-making. We work with all staff levels and help our education clients develop strategic plans and make effective decisions based on verifiable information, and we do it well. You need facts and data. You need expert analysis. You need to understand the risks and opportunities.

At Spectrum Analysis, our team of expert data scientists and analysts can help you:

- ensure that your decisions provide accountability and due diligence to the board and your school, college or university community
- improve your marketing, enrolments, and community development
- provide evidence-based suggestions
- secure evidence for multi-million dollar investments or grant applications
- understand your childcare or preschool's demographics
- answer your questions.

We can help you reflect on the past, understand the present and plan for the future. Contact us now and follow us on social media!

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