

# Changing Student Populations

## Where will your future students come from?

Making data-based decisions for the development of your school

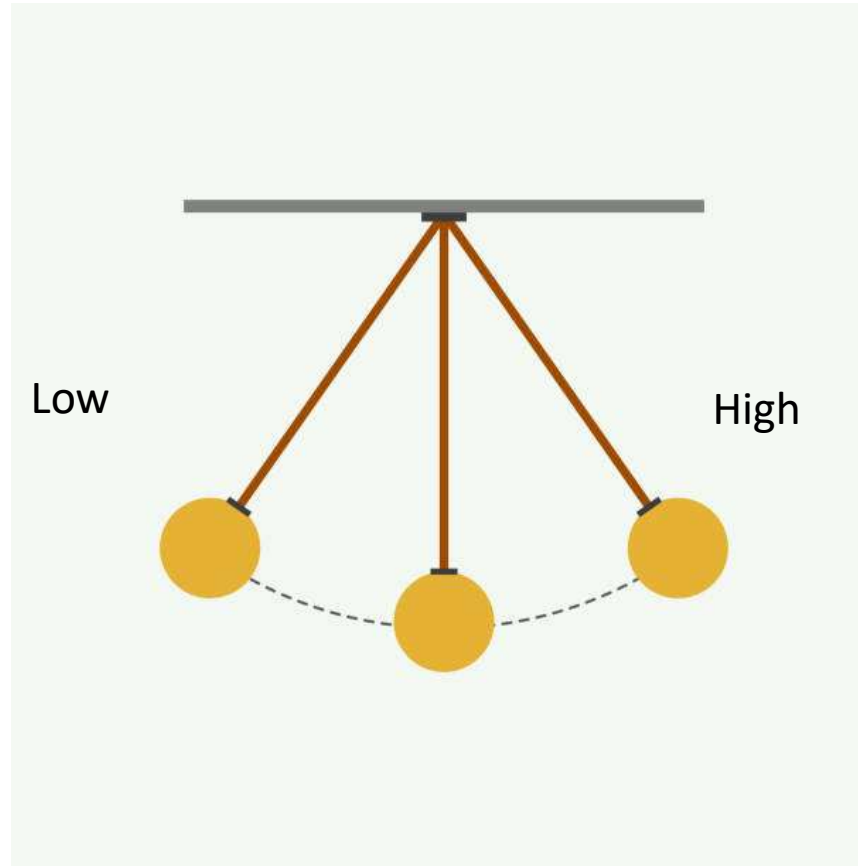


By Peter Buckingham  
Co-Founder and Managing Director  
**Spectrum Analysis Australia**

# Introduction

- Are you feeling there may be slightly less interest in enrolments at your school?
- How do you feel the pool of potential students is for your area?
- Do you think the pool is growing or shrinking?
- How would this effect your school's long-term plans?

# The Pendulum keeps moving



My view is we are currently in a phase of **higher** than long term averages for enrolments in Independent schools.

Maybe this is the new "norm"?

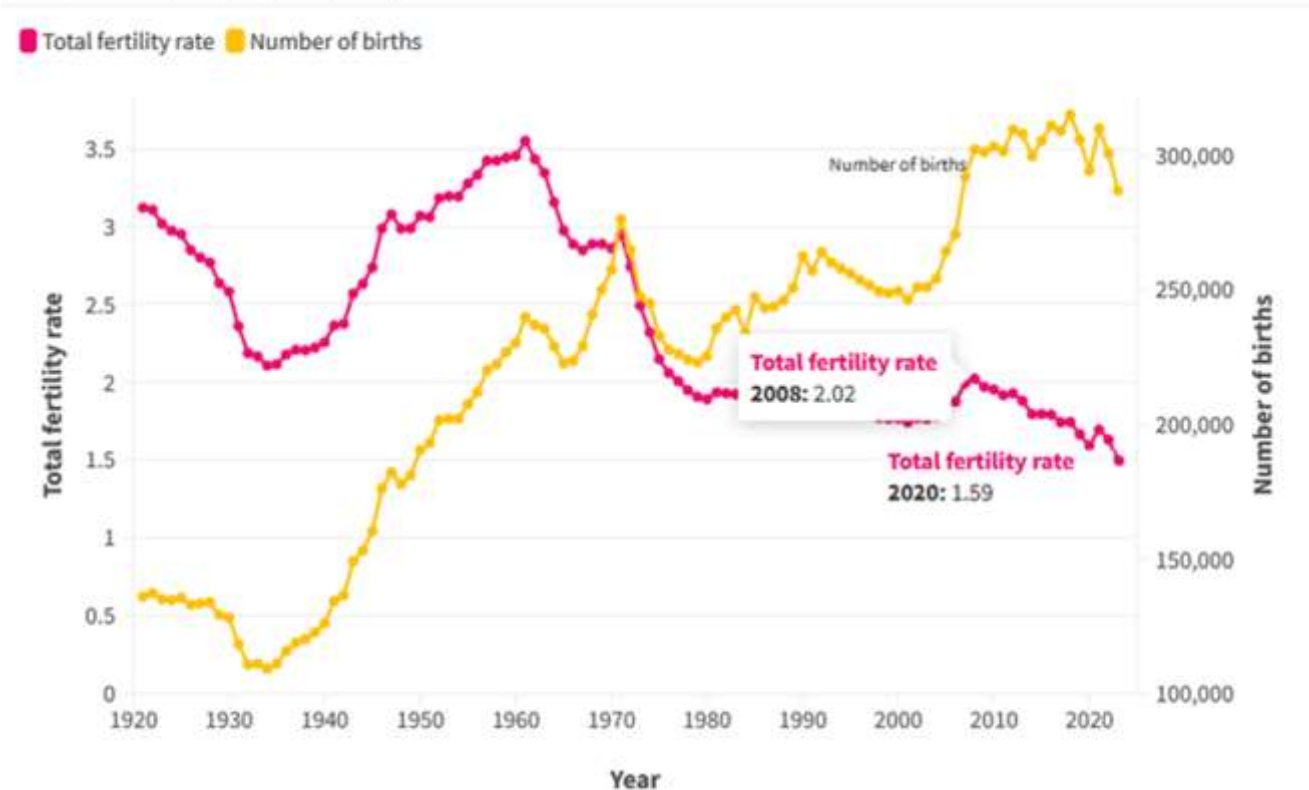
# Four major issues affecting the pendulum

- Births – numbers of children and which way this is heading over large areas
- Where they are living and the socio economics
- Appetite of the population to spend on education – affordability?
- Desire for single sex or co-ed schools

# Overview of Student Population Growth in Australia

- Australia is now feeling the results of the baby boom initiated by Peter Costello in 2004;
- The Baby boom peaked in 2008 where Total Fertility Rate (TFR) reached 2.02 children per set of parents;
- This means that a 17 year old student now was born in the peak of the baby boom;
- The TFR has dropped ever since, down to 1.5 in 2023. This is the lowest rate ever recorded. The previous lowest rate was 1.59 recorded during the COVID-19 pandemic in 2020;

Number of births and total fertility rate



Australian Pop 1960 – 10M, 1970 – 12.5M, 2020 - 25.6M

# Overseas migration

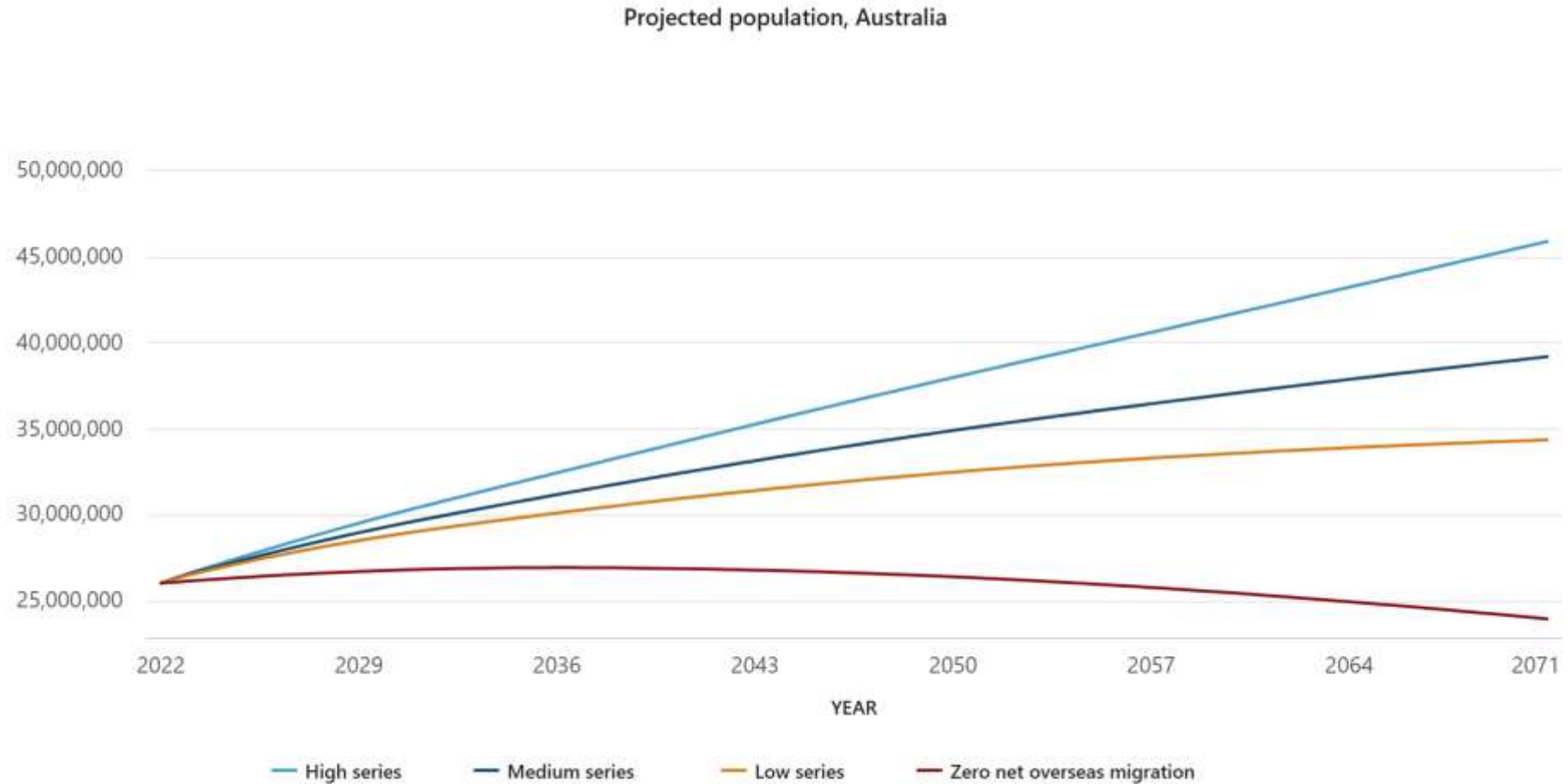
Overseas migration - Australia – calendar year

Calendar Year	Migrant arrivals	Migrant departures	Net overseas migration
2014	458,760	276,410	182,350
2015	473,250	286,520	186,730
2016	519,650	275,820	243,830
2017	531,370	289,710	241,660
2018	534,400	282,180	252,220
2019	607,870	360,250	247,620
2020	235,350	240,320	-4,970
2021	216,110	209,240	6,870
2022	653,430	220,280	433,150
2023	740,900	205,910	534,990

*Source: Australian Bureau of Statistics, Overseas Migration*

Australia's stated position in the 2023 Intergenerational Report is for a long-term net migration of **235,000 persons pa.**

# Long term Australian population forecast



Source: Australian Bureau of Statistics, Population Projections, Australia 2022 (base) - 2071

# Long term Australian population forecast

## Quotes from the ABS website

Australia's population in 2022 (26 million) is projected to reach between 34.3 and 45.9 million people by 2071

The current ten year average annual growth rate (1.4%) is projected to decline to between 0.2% and 0.9%

The median age (38.5 years) is projected to increase to between 43.8 and 47.6 years



# Statistical Areas - Australia wide

SA1's – 61,845

SA2's – 2,473

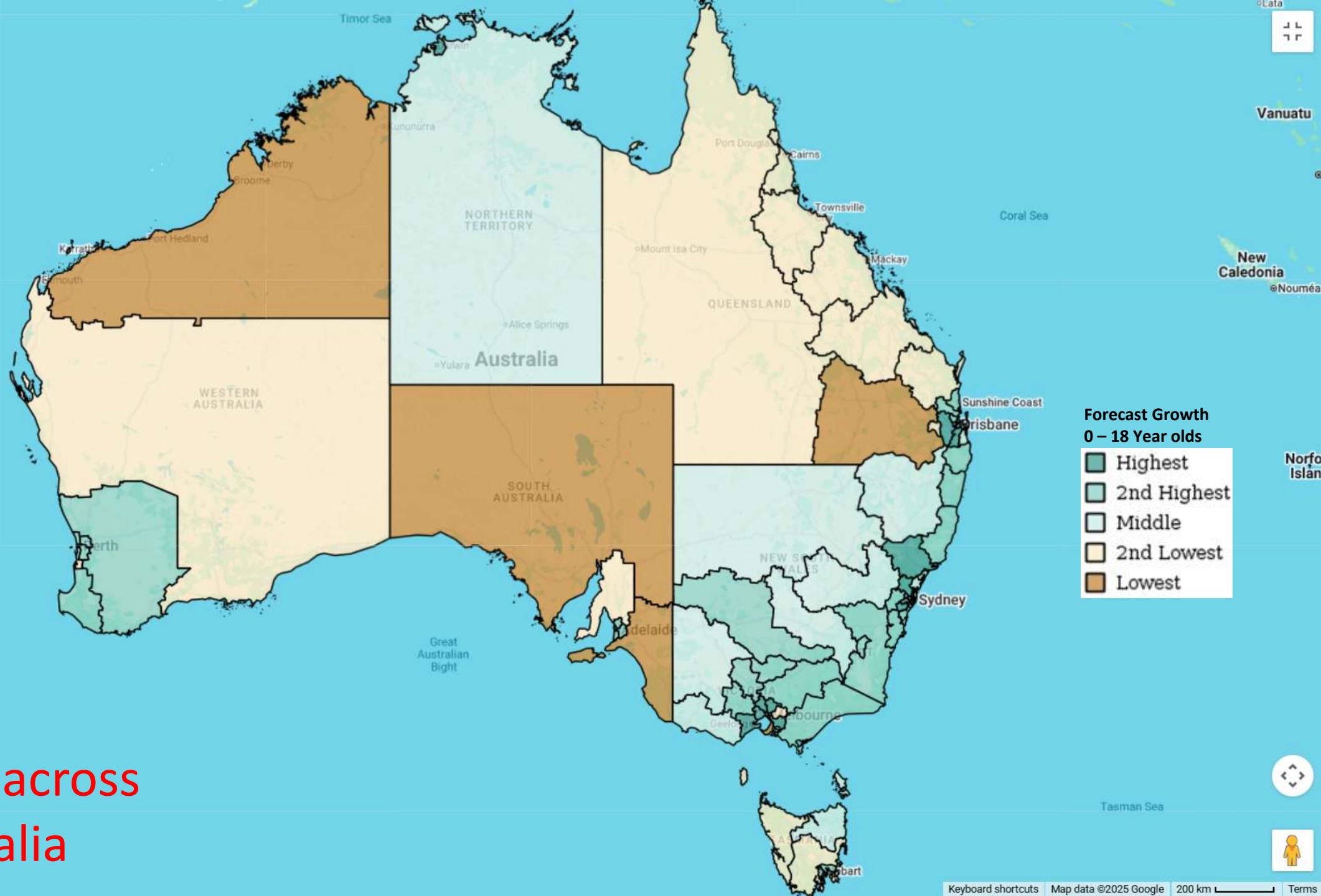
SA3's – 359

SA4's – 107

Suburbs – 15,760

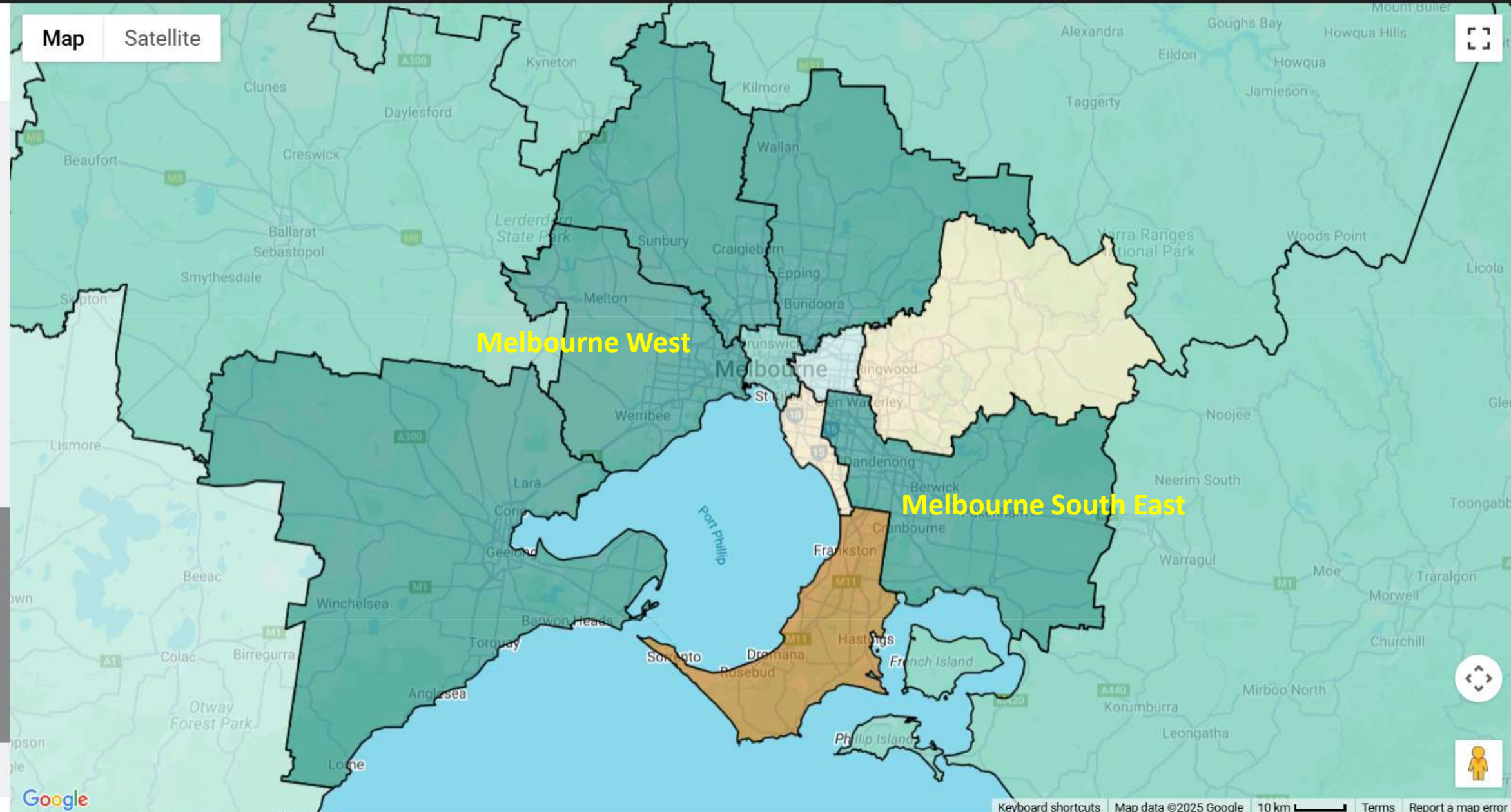
Postcodes – 3,137

States and Territories – 6 + 2



SA4's across  
Australia

Address Search...



# Population projections increase / decrease 2026 - 2032

Sa4 name	Total Population Increase	% Total Population Increase	Population Aged 5-18 Increase/Decrease	% Aged 5-18 Increase/Decrease
Melbourne - Inner (incl CBD)	71,912	10.1%	-27	0.0%
Melbourne - Inner East	22,165	5.5%	-3,460	-5.2%
Melbourne - Inner South	19,705	4.4%	-5,247	-7.0%
Melbourne - North East	69,510	11.5%	5,731	5.4%
Melbourne - North West	46,703	9.9%	3,753	4.2%
Melbourne - Outer East	7,674	1.4%	-5,647	-6.2%
Melbourne - South East	123,042	12.5%	11,595	6.3%
Melbourne - West	169,930	16.9%	24,506	12.5%
Mornington Peninsula	5,237	1.6%	-4,547	-8.8%
Metro	535,878		26,658	



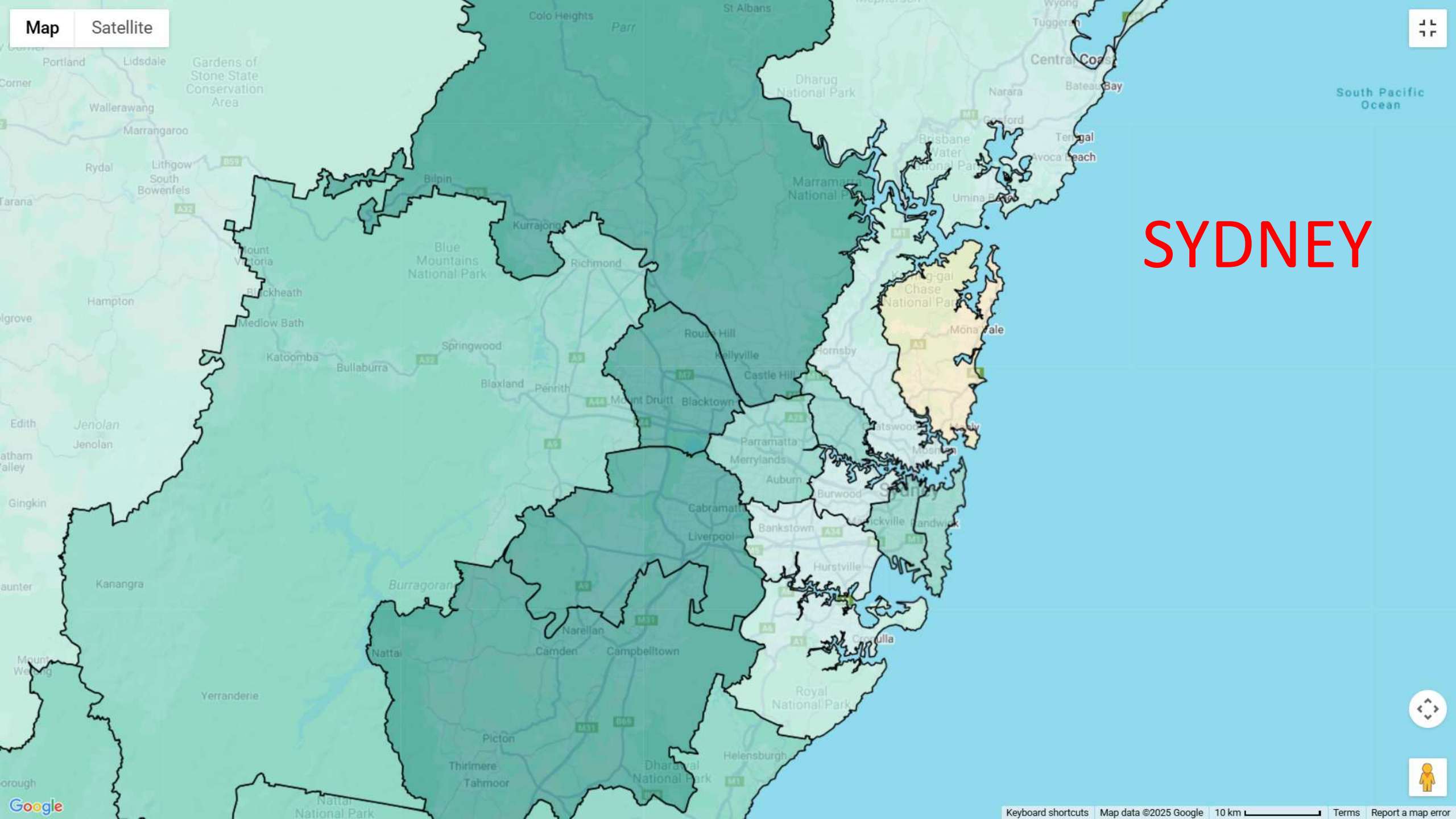
# Population projections increase / decrease 2026 - 2032

Sa4 name	Total Population Increase	% Total Population Increase	Population Aged 5-18 Increase/Decrease	% Aged 5-18 Increase/Decrease
Ballarat	20,217	10.9%	771	2.6%
Bendigo	19,397	10.9%	1,264	4.4%
Geelong	57,629	15.9%	5,030	8.8%
Hume	17,483	9.0%	715	2.3%
Latrobe - Gippsland	37,249	11.6%	2,940	5.9%
North West	7,516	4.8%	-205	-0.8%
Shepparton	10,917	7.7%	384	1.6%
Warrnambool and South West	5,405	4.2%	-643	-3.2%
Regional	175,813		10,256	

# Fertility Rates - 2024

Melbourne - Inner	0.79
Melbourne - Inner East	1.05
Melbourne - Inner South	1.3
Melbourne - Outer East	1.52
Melbourne - North East	1.57
Melbourne - South East	1.6
Melbourne - West	1.75
Mornington Peninsula	1.76
Melbourne - North West	1.82

Ballarat	1.72
Bendigo	1.76
Geelong	1.76
Hume	1.88
Latrobe - Gippsland	1.95
North West	2.02
Shepparton	2.04
Warrnambool and South West	1.95



SYDNEY



# Population projections increase / decrease 2026 - 2032

SA4 Name	Total Population Increase	% Total Population Increase	Population Aged 5-18 Increase / Decrease	Population Aged 5-18 Increase / Decrease
Sydney - City and Inner South	30,560	8.2%	1,347	4.3%
Sydney - Baulkham Hills and Hawkesbury	47,878	15.7%	7,331	11.3%
Sydney - Blacktown	51,979	11.5%	7,905	8.3%
Sydney - Eastern Suburbs	10,133	3.7%	-182	-0.5%
Sydney - Inner South West	28,220	4.4%	-1,242	-1.2%
Sydney - Inner West	17,271	5.3%	-540	-1.2%
Sydney - North Sydney and Hornsby	16,160	3.6%	-3,456	-4.4%
Sydney - Northern Beaches	3,182	1.2%	-3,409	-7.0%
Sydney - Outer South West	34,415	10.4%	4,328	6.4%
Sydney - Outer West and Blue Mountains	14,850	4.2%	-102	-0.2%
Sydney - Parramatta	44,706	8.3%	3,046	3.4%
Sydney - Ryde	21,014	9.3%	1,013	2.8%
Sydney - South West	70,685	13.2%	9,863	9.2%
Sydney - Sutherland	8,882	3.7%	-563	-1.3%
Central Coast	13,185	3.6%	-1,255	-2.1%
<b>Metro</b>	<b>413,120</b>	<b>7.3%</b>	<b>24,085</b>	<b>2.5%</b>



# Fertility Rates - 2024

Sydney - City and Inner South	0.84
Sydney - Ryde	1.07
Sydney - North Sydney and Hornsby	1.13
Sydney - Inner West	1.14
Sydney - Eastern Suburbs	1.17
Sydney - Parramatta	1.5
Sydney - Northern Beaches	1.51
Sydney - Baulkham Hills and Hawkesbury	1.53
Sydney - Inner South West	1.53
Sydney - Sutherland	1.7
Sydney - South West	1.71
Sydney - Blacktown	1.77
Sydney - Outer West and Blue Mountains	1.83
Sydney - Outer South West	1.94

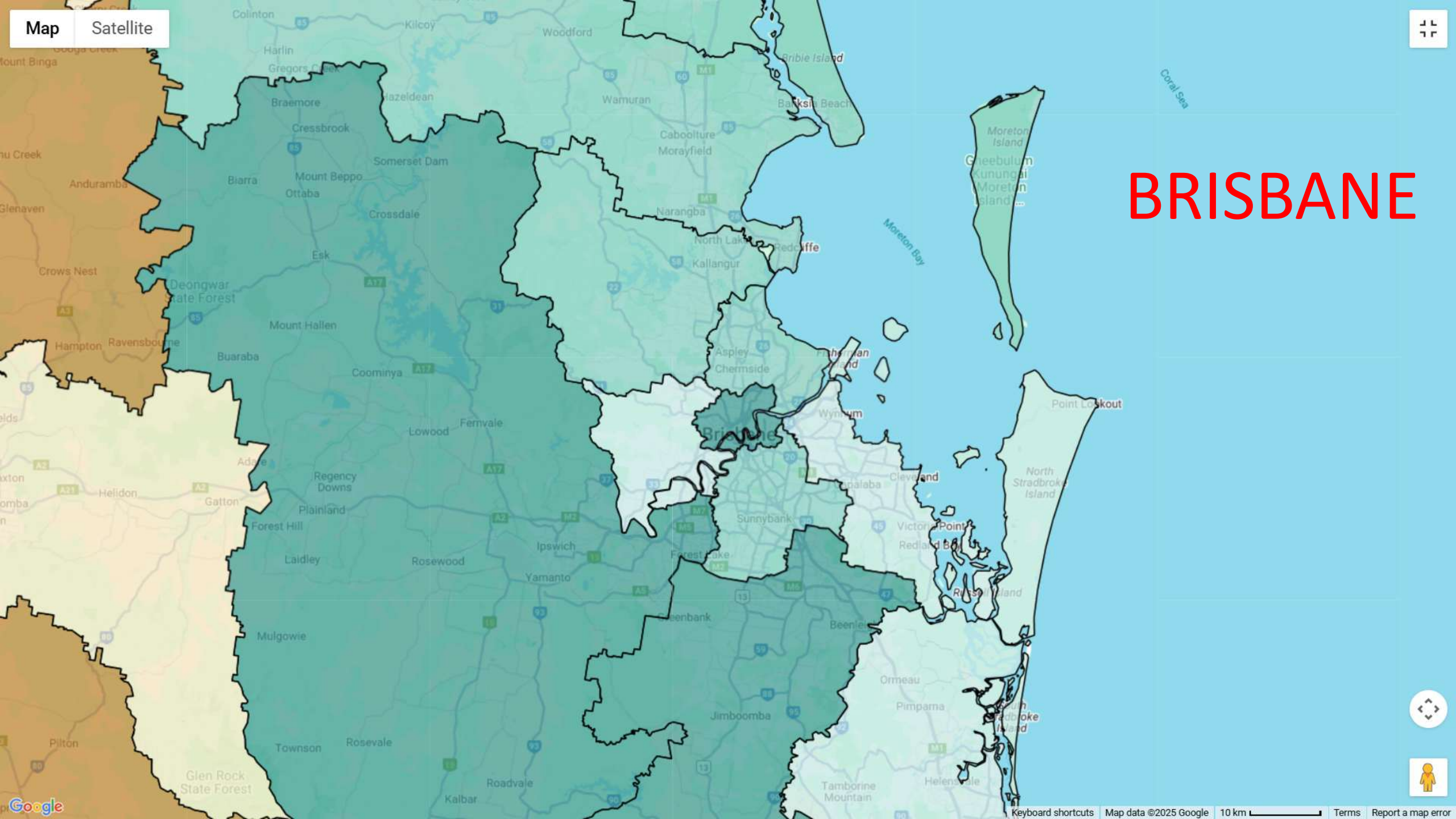
Newcastle and Lake Macquarie	1.6
Illawarra	1.67
Richmond - Tweed	1.83
Central Coast	1.87
Hunter Valley exc Newcastle	1.93
Southern Highlands and Shoalhaven	1.94
Coffs Harbour - Grafton	1.99
Capital Region	2.01
Mid North Coast	2.08
Murray	2.1
Riverina	2.1
Central West	2.12
New England and North West	2.13
Far West and Orana	2.4

Map

Satellite



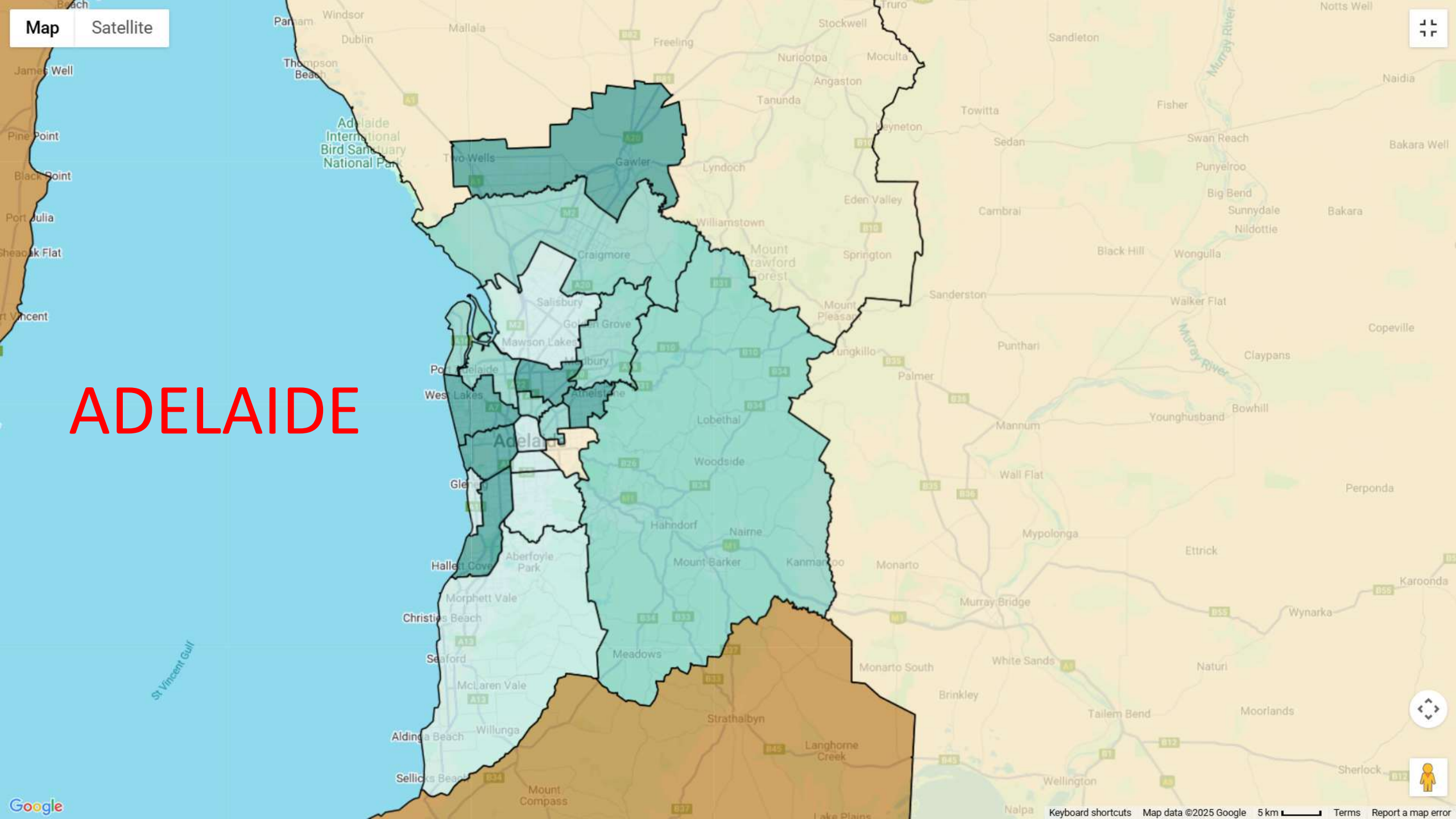
# BRISBANE



Map

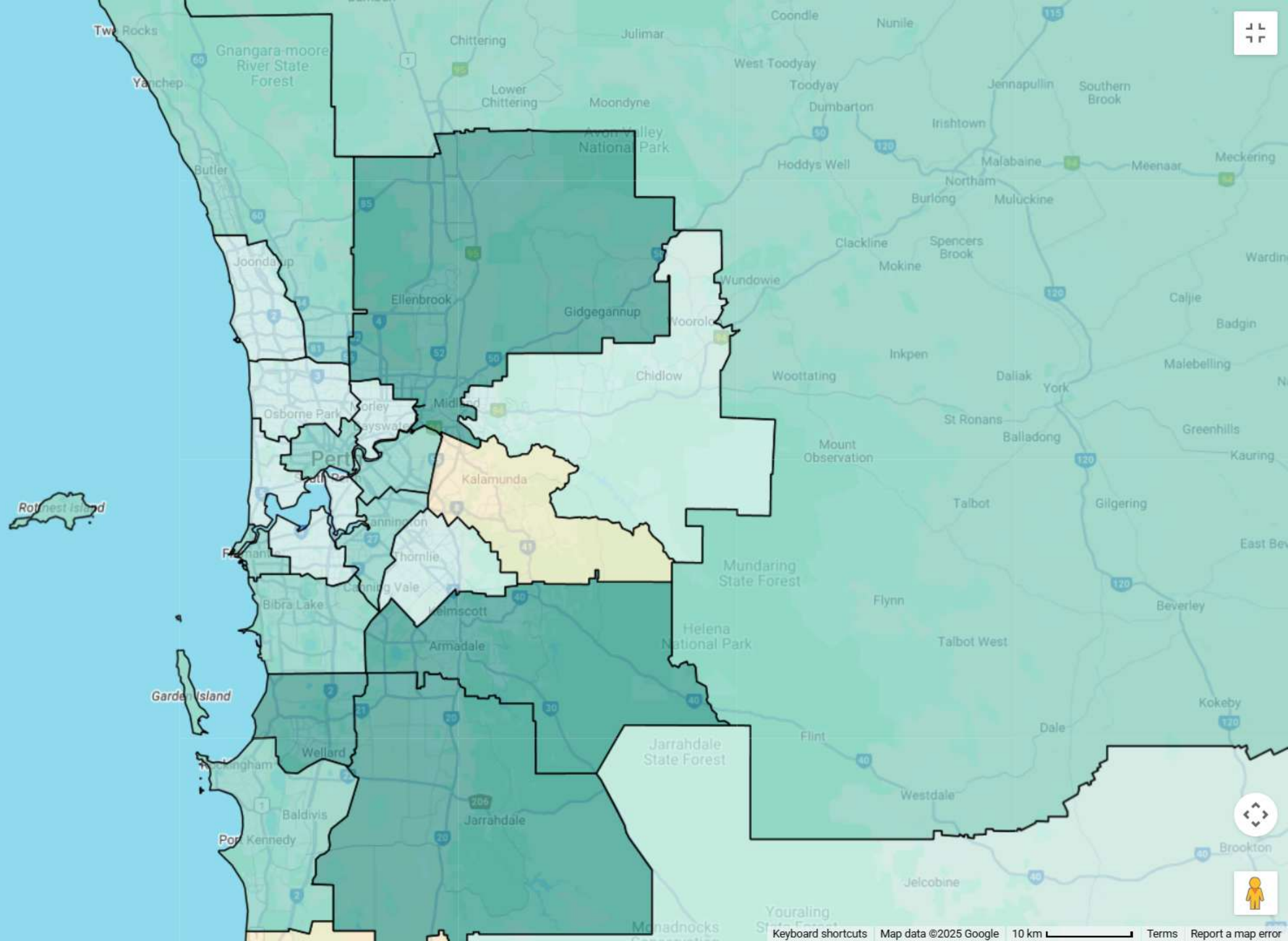
Satellite

ADELAIDE





# PERTH



Legend

Layers

Instructions

Single symbol

Demographics Data - Census 2021 (SA2)

Single symbol

Demographics Data - Census 2021 (SA3)

Single symbol

Students to Primary/Secondary School Change

Highest

2nd Highest

Middle

2nd Lowest

Lowest

Australian Catholic Diocese

Single symbol

Population growth

Highest

2nd Highest

Middle

2nd Lowest

Lowest

Population growth

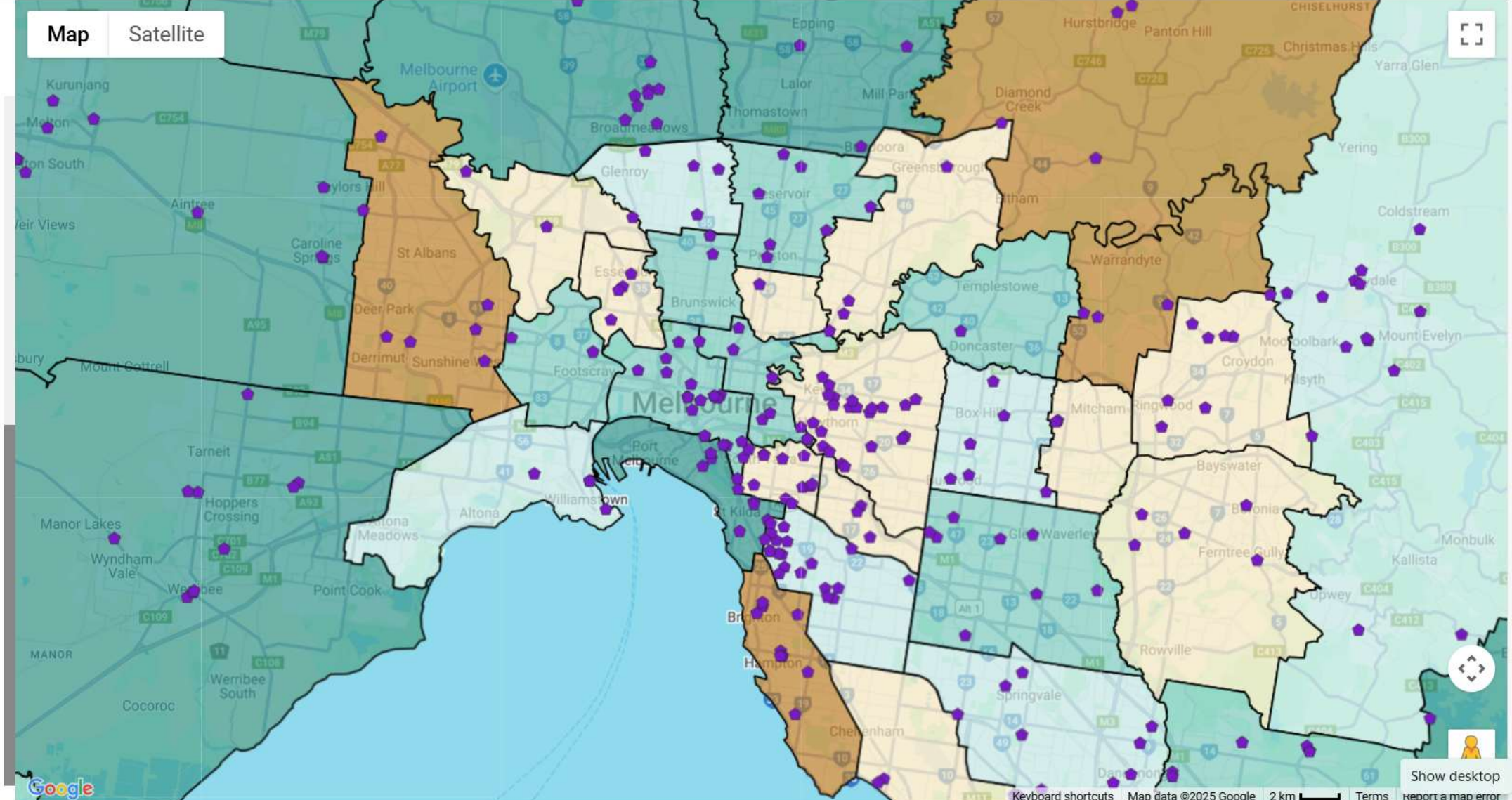
Highest

2nd Highest

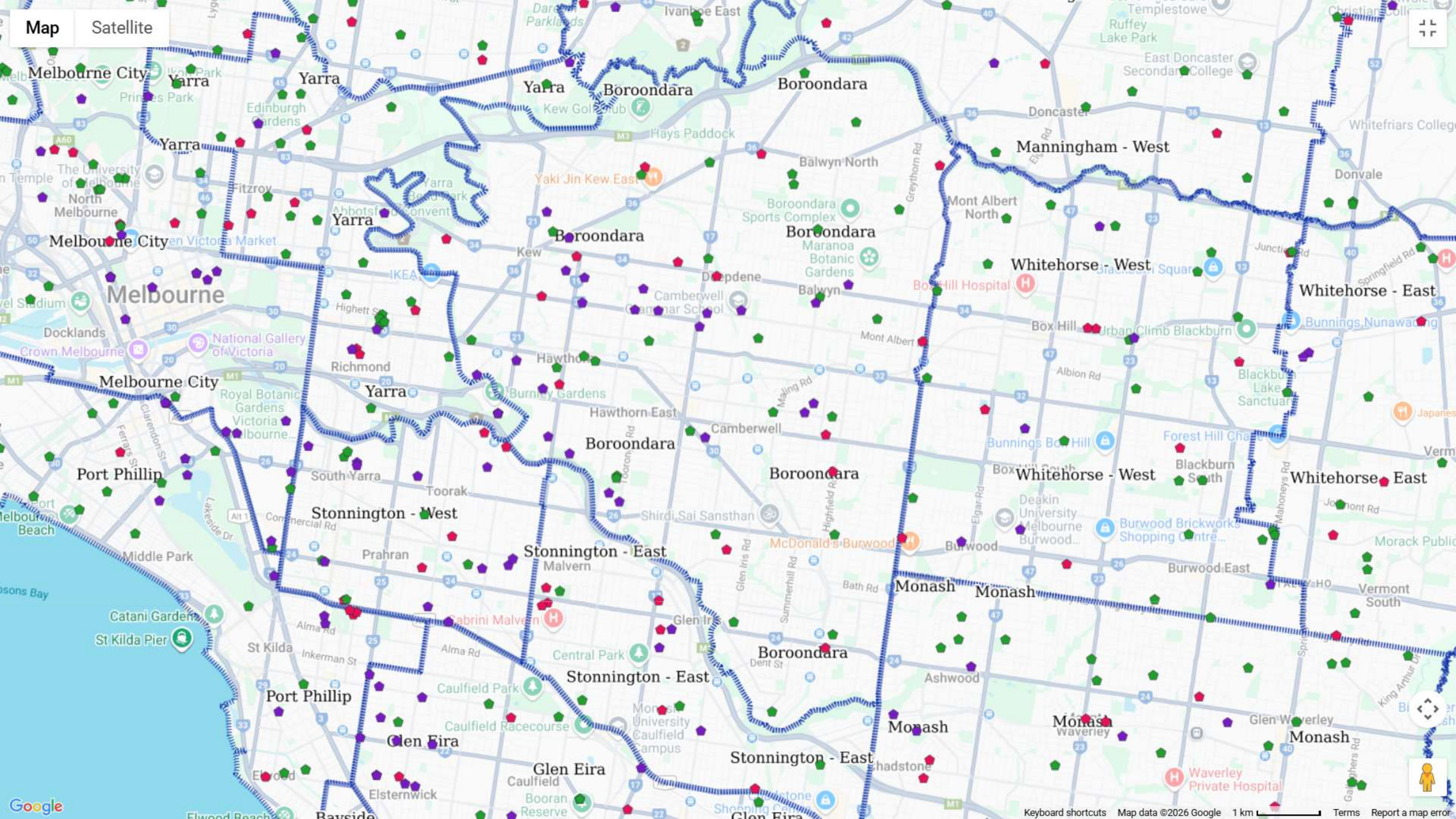
Middle

2nd Lowest

Lowest







Map Satellite





# City of Boroondara

- Census 2021 – Residents in the SA3 of Boroondara
- 6 – 18 year olds 28,081 children, (13 years representing P – 12)
- 27,072 were at Primary or Secondary school
- Independent Primary and Secondary 9,284
- Catholic Secondary 2,631
- Total 11,915
- Total in 2021 attending Independent schools or Catholic Secondary (ACARA). 16,756
- Net influx (2021) 4,841





Legend

Layers

Instructions

Single symbol

Demographics Data - Census 2021 (SA2)

Single symbol

Demographics Data - Census 2021 (SA3)

Single symbol

Students to Primary/Secondary School Change

Highest

2nd Highest

Middle

2nd Lowest

Lowest

Australian Catholic Diocese

Single symbol

Population growth

Highest

2nd Highest

Middle

2nd Lowest

Lowest

Population growth

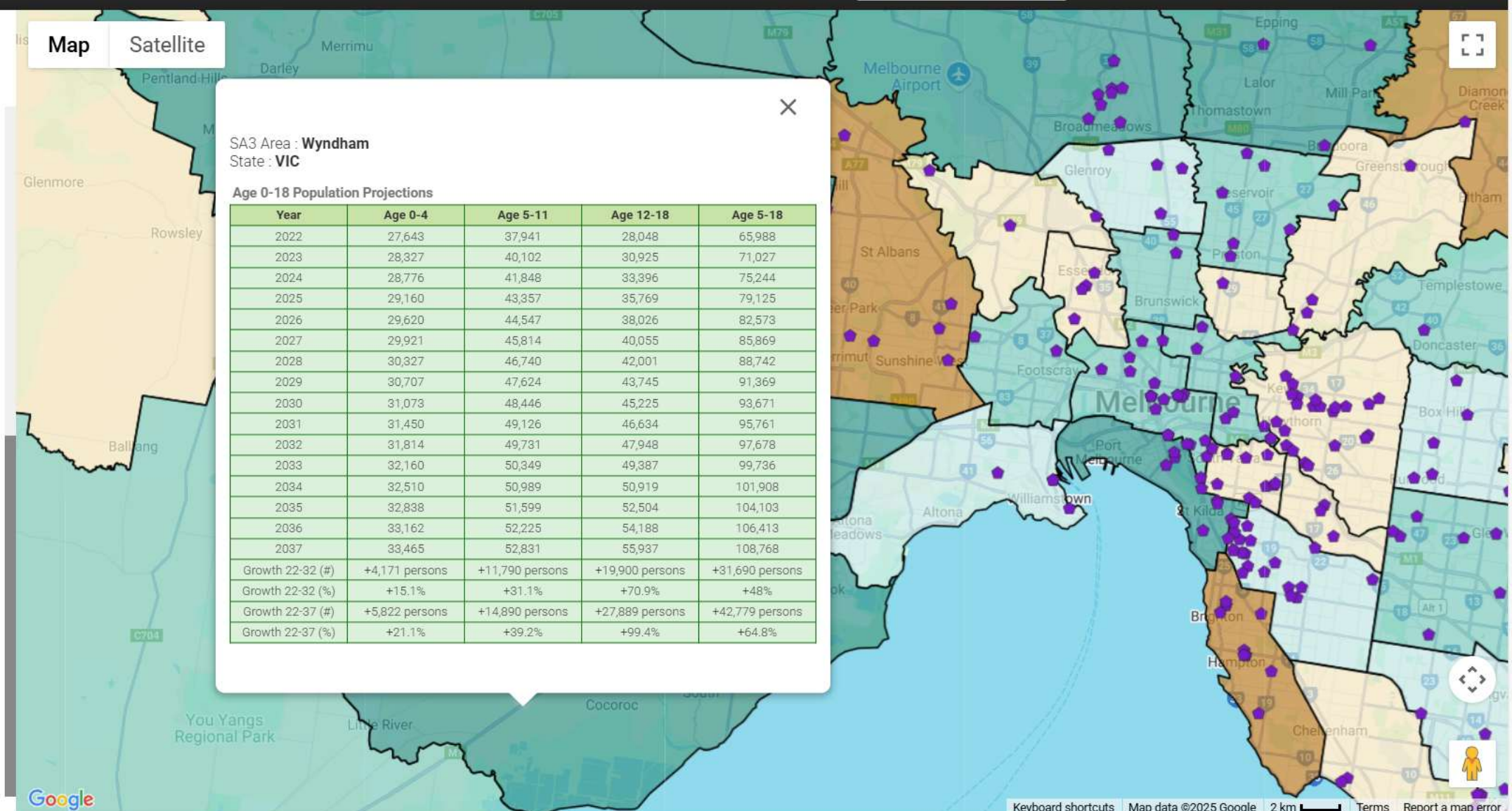
Highest

2nd Highest

Middle

2nd Lowest

Lowest



Map

Satellite

SA3 Area : **Pittwater**  
State : **NSW**

**Age 0-18 Population Projections**

Year	Age 0-4	Age 5-11	Age 12-18	Age 5-18
2022	3,036	5,634	6,189	11,823
2023	2,999	5,515	6,383	11,899
2024	2,929	5,415	6,427	11,841
2025	2,862	5,297	6,457	11,754
2026	2,758	5,227	6,452	11,679
2027	2,642	5,130	6,417	11,547
2028	2,547	5,050	6,330	11,380
2029	2,461	4,955	6,262	11,217
2030	2,383	4,864	6,140	11,004
2031	2,320	4,750	6,051	10,801
2032	2,267	4,610	5,961	10,571
2033	2,206	4,481	5,863	10,344
2034	2,146	4,348	5,760	10,108
2035	2,084	4,219	5,652	9,871
2036	2,022	4,089	5,540	9,630
2037	1,959	3,957	5,425	9,382
Growth 22-32 (#)	-769 persons	-1,024 persons	-229 persons	-1,253 persons
Growth 22-32 (%)	-25.3%	-18.2%	-3.7%	-10.6%
Growth 22-37 (#)	-1,077 persons	-1,677 persons	-764 persons	-2,441 persons
Growth 22-37 (%)	-35.5%	-29.8%	-12.3%	-20.6%

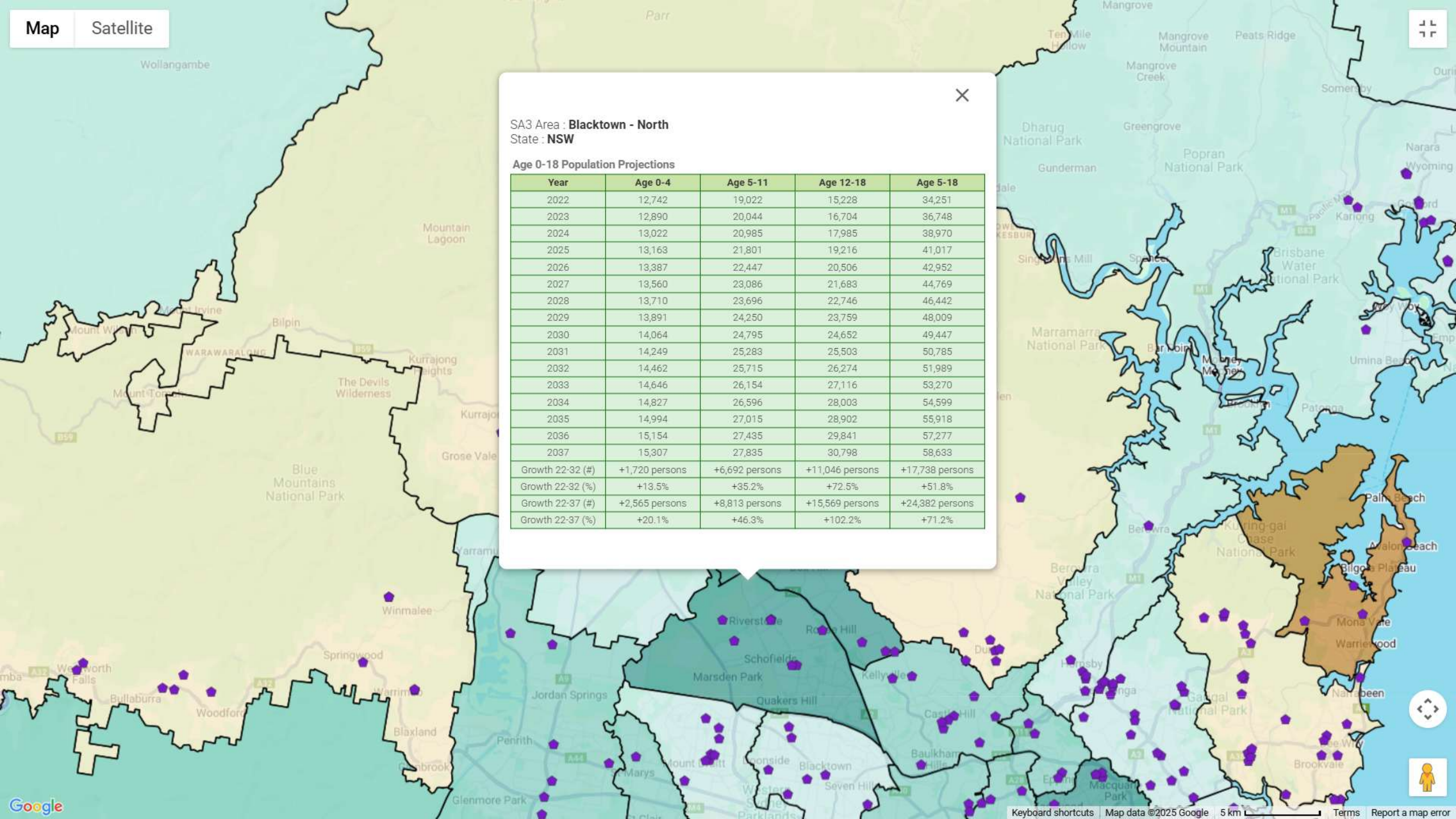


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SA3 Area : **Blacktown - North**  
State : **NSW**

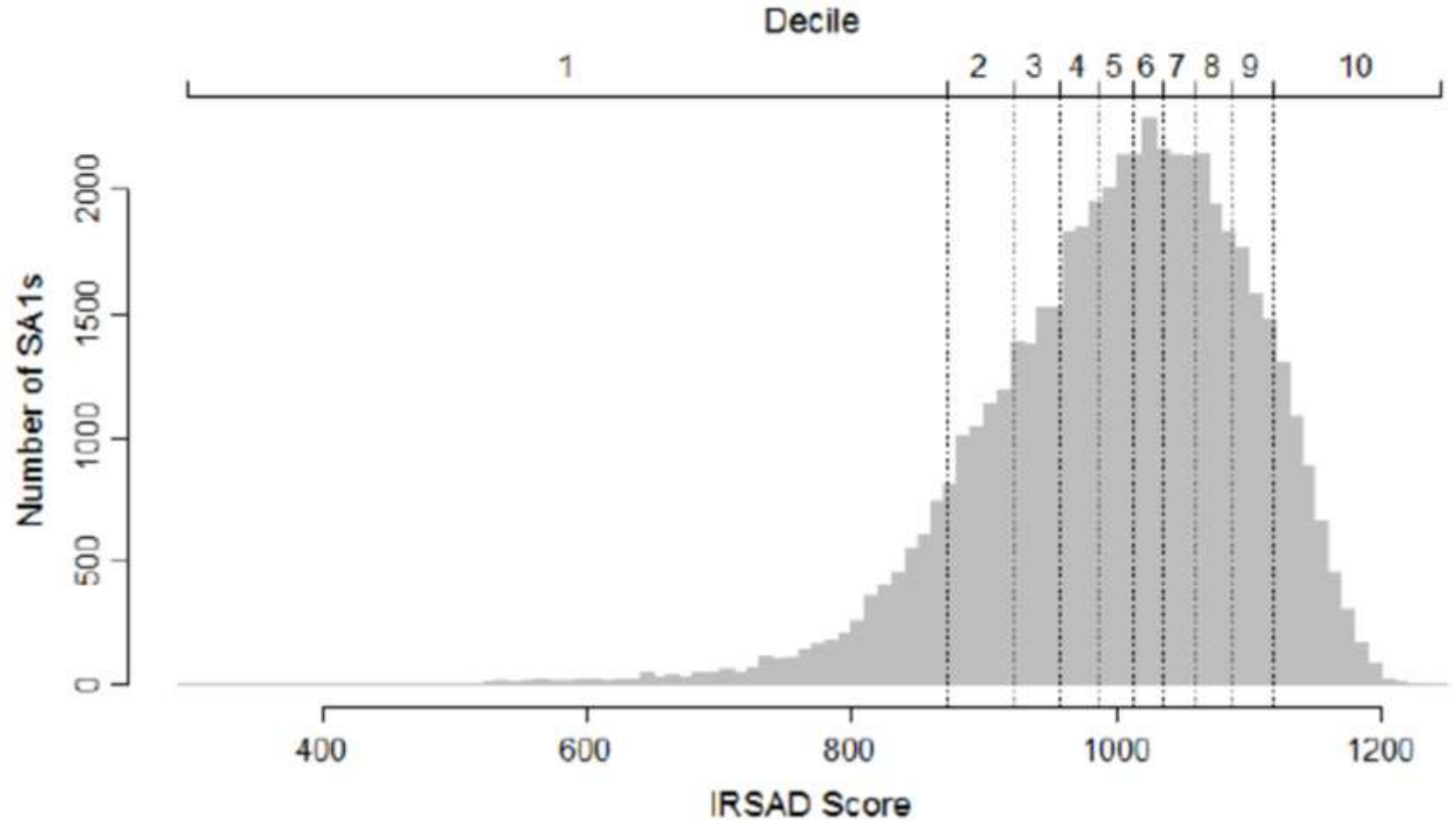
Age 0-18 Population Projections

Year	Age 0-4	Age 5-11	Age 12-18	Age 5-18
2022	12,742	19,022	15,228	34,251
2023	12,890	20,044	16,704	36,748
2024	13,022	20,985	17,985	38,970
2025	13,163	21,801	19,216	41,017
2026	13,387	22,447	20,506	42,952
2027	13,560	23,086	21,683	44,769
2028	13,710	23,696	22,746	46,442
2029	13,891	24,250	23,759	48,009
2030	14,064	24,795	24,652	49,447
2031	14,249	25,283	25,503	50,785
2032	14,462	25,715	26,274	51,989
2033	14,646	26,154	27,116	53,270
2034	14,827	26,596	28,003	54,599
2035	14,994	27,015	28,902	55,918
2036	15,154	27,435	29,841	57,277
2037	15,307	27,835	30,798	58,633
Growth 22-32 (#)	+1,720 persons	+6,692 persons	+11,046 persons	+17,738 persons
Growth 22-32 (%)	+13.5%	+35.2%	+72.5%	+51.8%
Growth 22-37 (#)	+2,565 persons	+8,813 persons	+15,569 persons	+24,382 persons
Growth 22-37 (%)	+20.1%	+46.3%	+102.2%	+71.2%



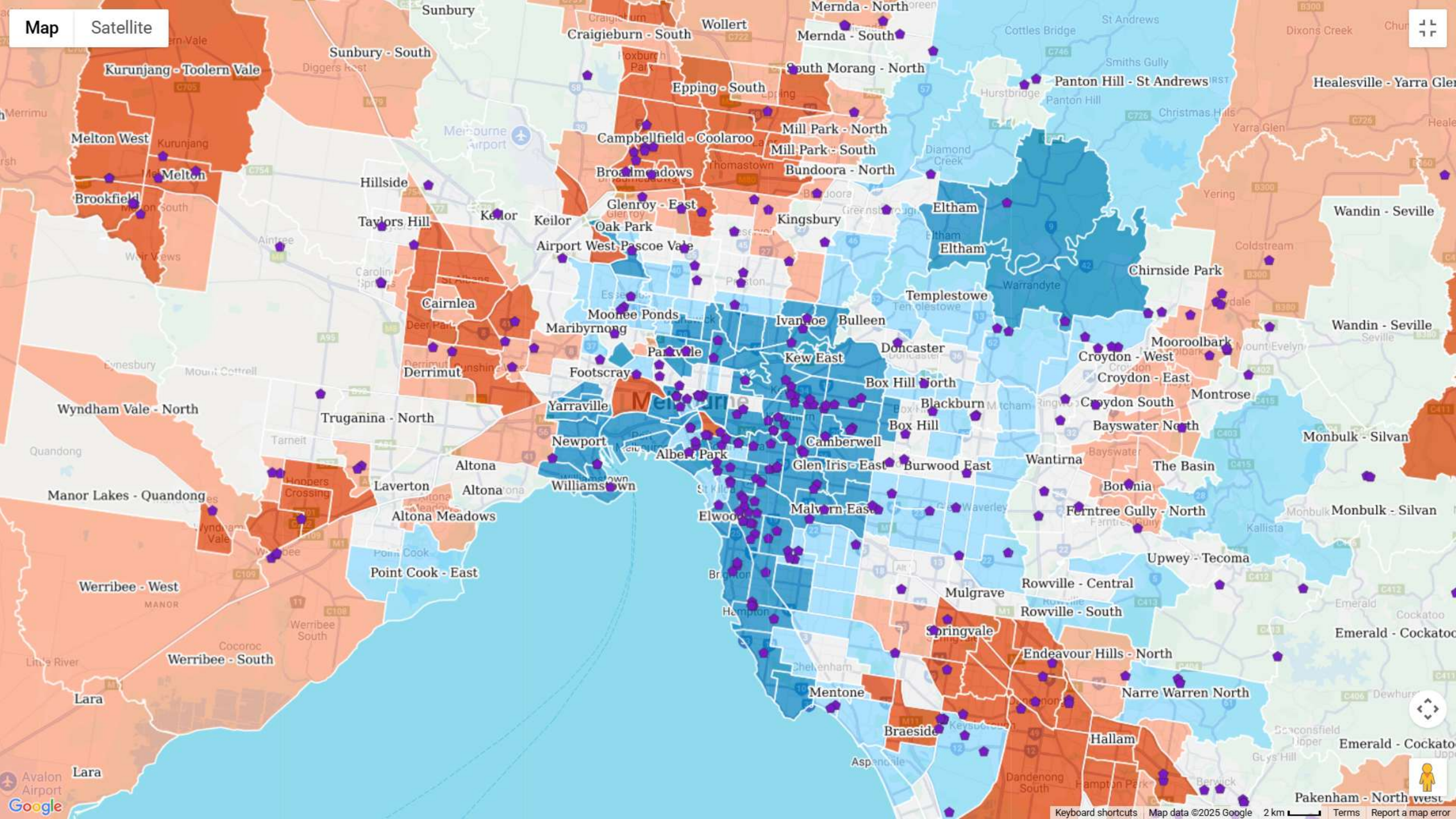
# SEIFA - Socio-Economic Index for Areas

- Highest
- 2nd Highest
- Middle
- 2nd Lowest
- Lowest

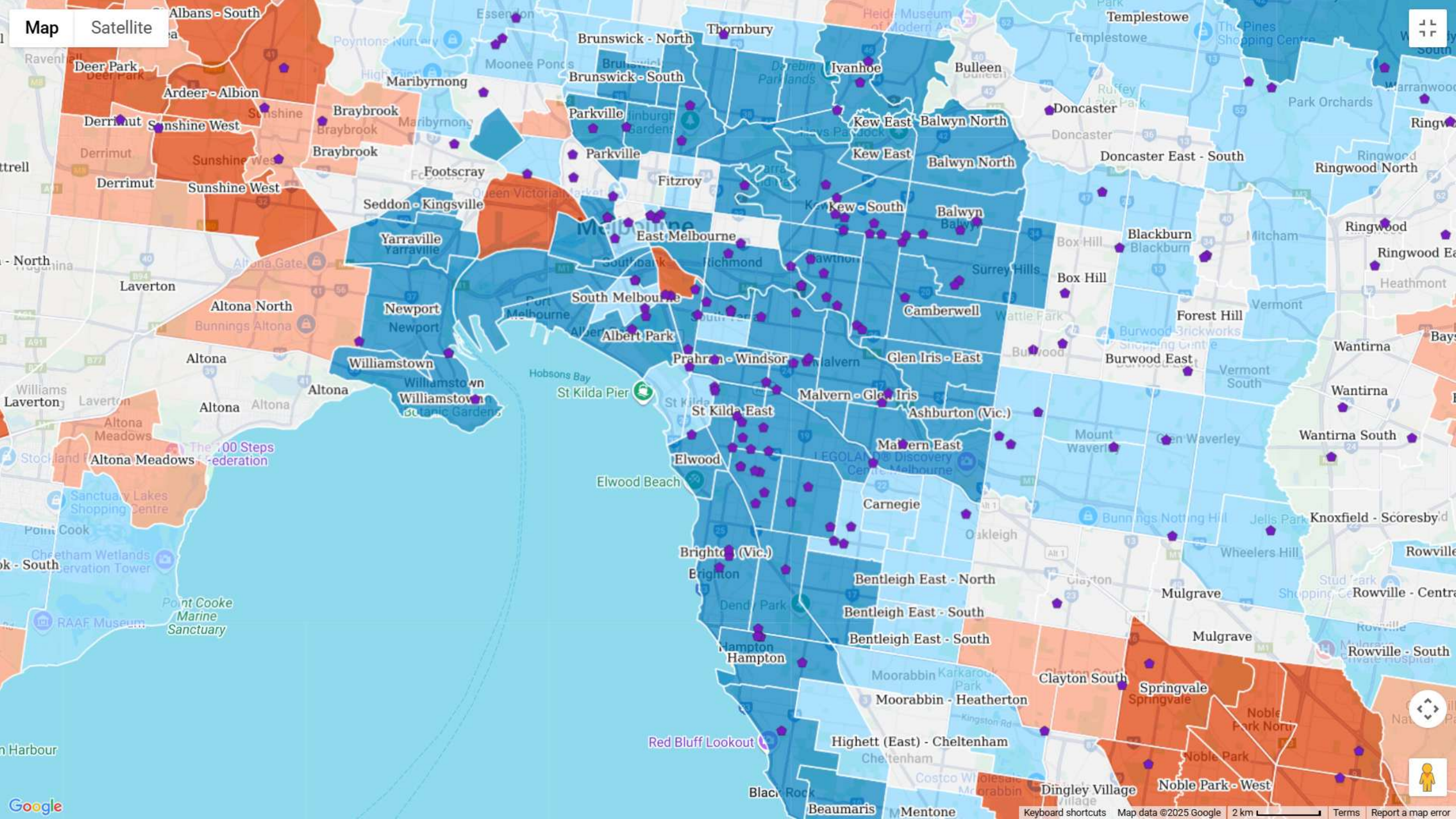




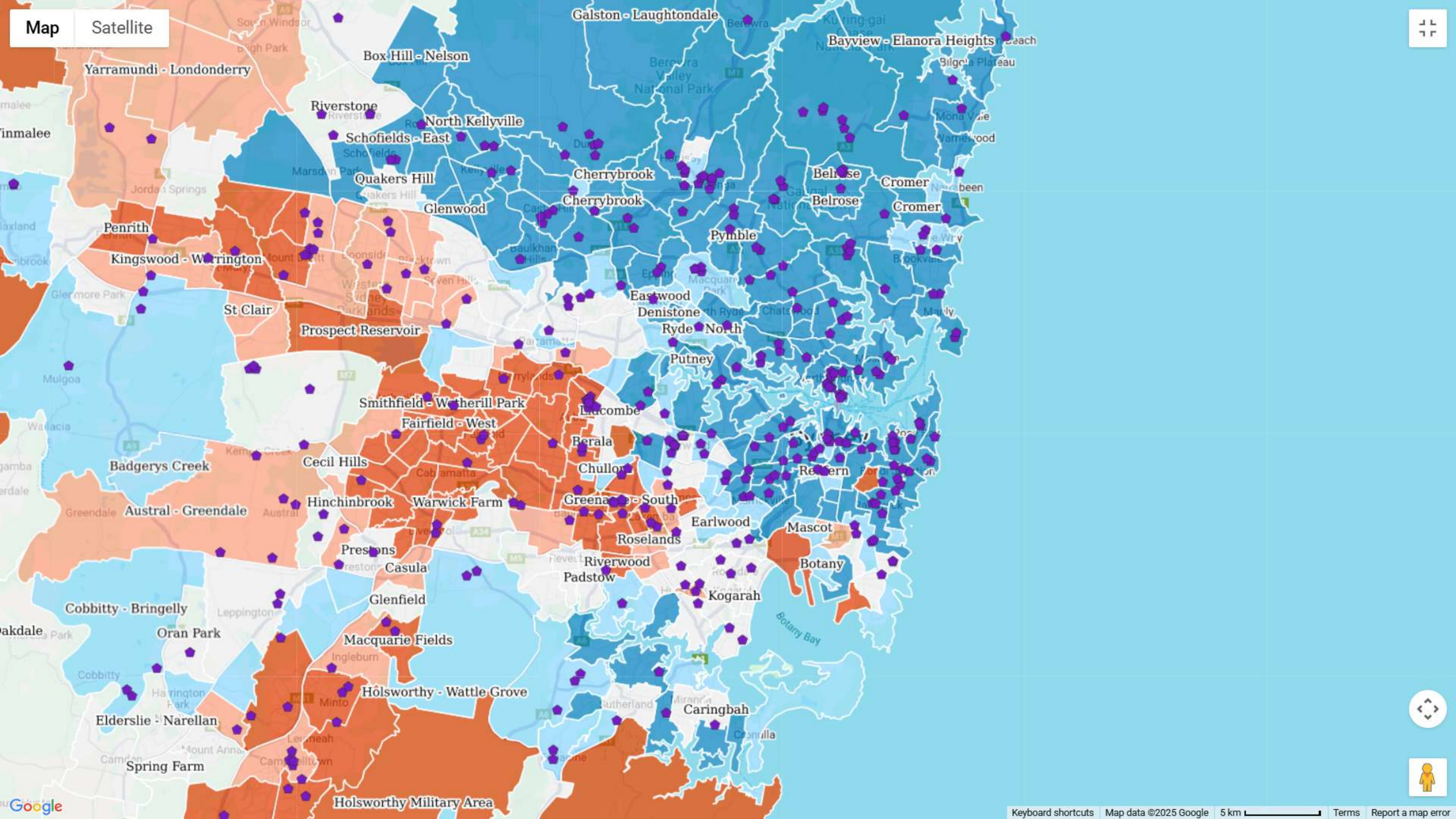
Map Satellite









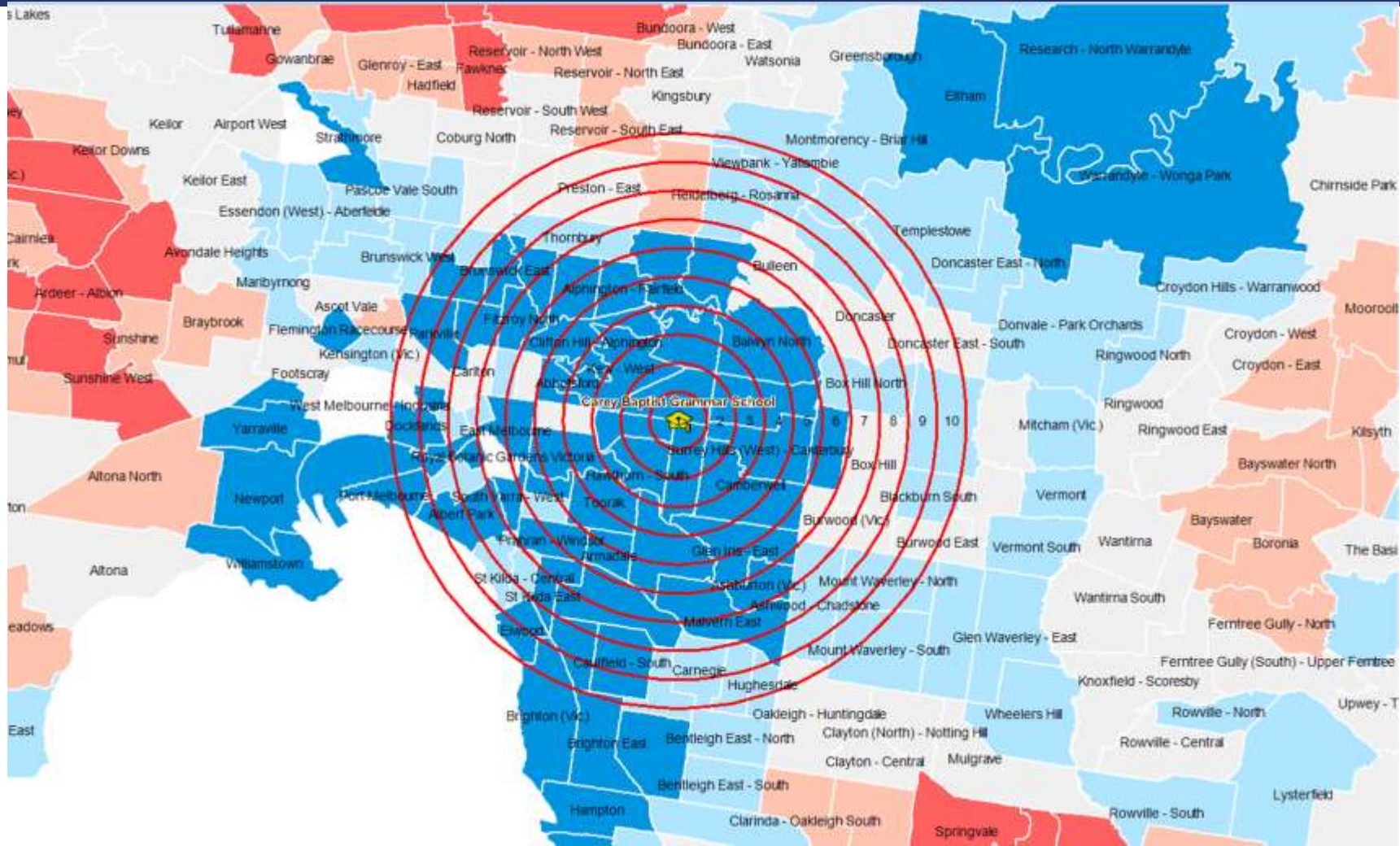








# What is our Trade Area? – Spectrum's research



# Research and sample sizes

- Inner – 13,000+ students across 16 campuses in Inner (high socio-economic area) of Melbourne
- Outer – 13,000+ students across also 16 campuses in the eastern and south eastern suburbs of Melbourne (including Mornington Peninsula)

# How far do our students come from?

.....Especially in higher socio-economic areas.

Research – Spectrum has undertaken using 16 campuses and over 13,000 students in the top 20% Socio-Economic areas of Inner Eastern suburbs of Melbourne.

0	1km	2km	3km	4km	5km	6km	7km	8km	9km	10km	> 10 km
	9.3%	23.8%	37.3%	50.2%	62.5%	71.4%	77.7%	82.0%	85.5%	88.1%	11.9%

Example – Imaginary school of 1,000 students

Distance from school	0 - 1km	1 - 2km	2 - 3km	3 - 4 km	4 - 5km	5 - 6km	6 - 7km	7 - 8km	8 - 9km	9 - 10km	10+ km	Total
Number of students	93	144	135	129	123	90	63	43	35	26	119	1,000
Area of ring	3.14	6.28	9.42	12.57	15.71	18.85	21.99	25.13	28.27	31.42		
Students / sq km	29.7	23.0	14.3	10.3	7.8	4.8	2.9	1.7	1.2	0.8	< .8	

# How far do our students come from?

Research – Spectrum has undertaken using 16 campuses and over 13,000 students in Middle and Outer Melbourne suburbs.

0	1km	2km	3km	4km	5km	6km	7km	8km	9km	10km	> 10 km
	7.7%	16.5%	27.6%	37.8%	47.3%	53.3%	58.9%	64.9%	71.3%	76.4%	23.6%

Example – Imaginary school of 1,000 students

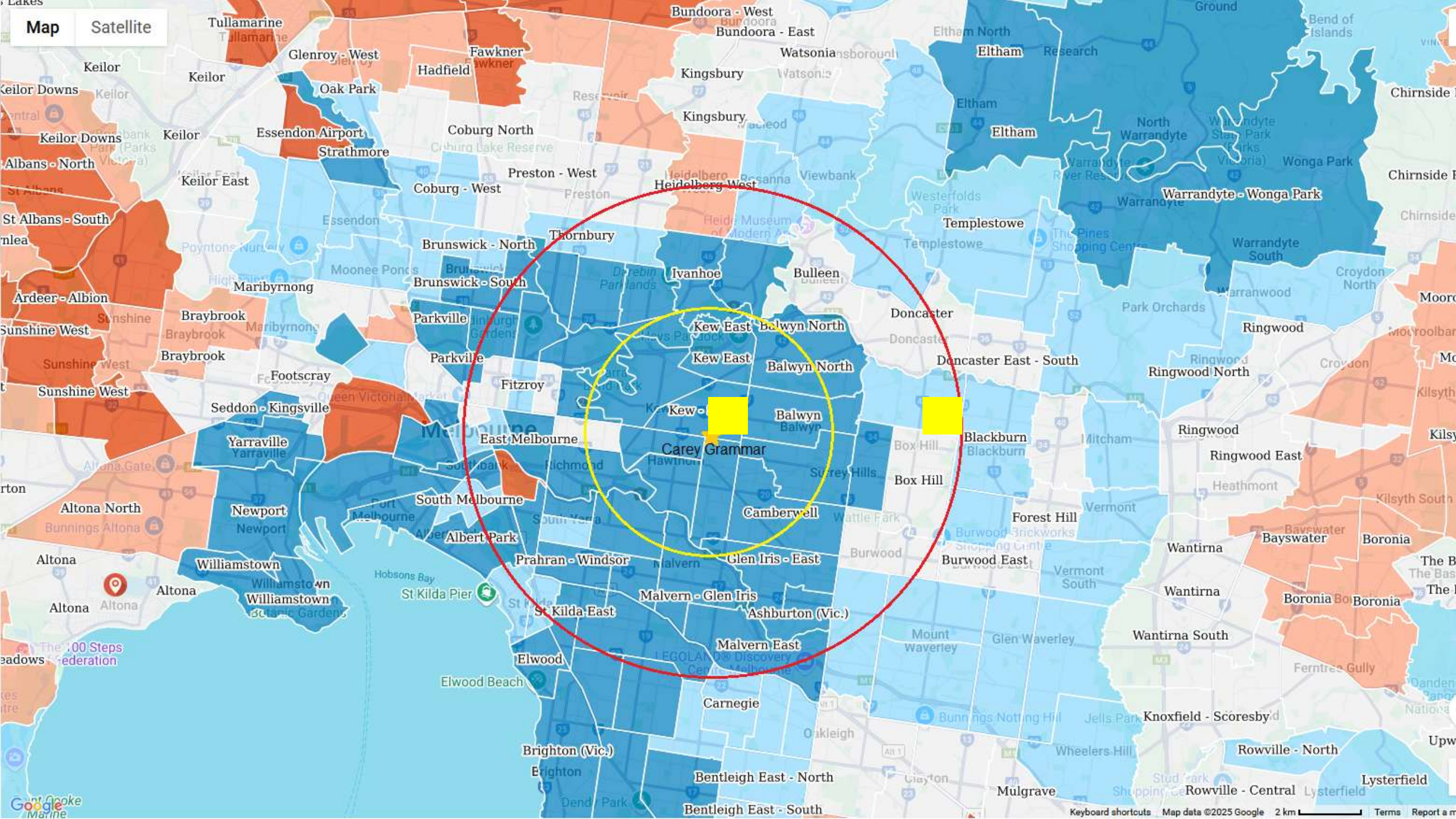
Distance from school	0 - 1km	1 - 2km	2 - 3km	3 - 4 km	4 - 5km	5 - 6km	6 - 7km	7 - 8km	8 - 9km	9 - 10km	10+ km	Total
Number of students	77	88	111	102	96	60	55	61	64	51	236	1,000
Area of ring	3.14	6.28	9.42	12.57	15.71	18.85	21.99	25.13	28.27	31.42		
Students / sq km	24.4	14.1	11.8	8.1	6.1	3.2	2.5	2.4	2.3	1.6	< 1.6	

# Conclusion – The Volcano theory



- Your highest concentration of students come from close to the school
- In 1,000 students, you could expect about 30 to come from 1 sq km very near the school
- You would expect about 1.7 students from a similar 1 sq km at around 7 – 8 kms from the school
- If digital marketing is done on suburbs, household numbers etc – spend the most money near your school





Map Satellite



# ACARA data

	2008	2008	2013	2013	2020	2020	2024	2024	2008-2024 Increase
Catholic	644,035	18.9%	695,711	19.1%	727,666	18.1%	768,352	18.5%	19.3%
Government	2,252,349	65.9%	2,375,811	65.3%	2,643,597	65.8%	2,632,284	63.5%	16.9%
Independent	519,578	15.2%	569,171	15.6%	647,214	16.1%	744,961	18.0%	43.4%
Grand Total	3,415,961	100.0%	3,640,692	100.0%	4,018,477	100.0%	4,145,597	100.0%	21.4%

# ACARA data

	2008	2013	2020	2024	2008-2024
Catholic	18.9%	19.1%	18.1%	18.5%	19.3%
Government	65.9%	65.3%	65.8%	63.5%	16.9%
Independent	15.2%	15.6%	16.1%	18.0%	43.4%
Grand Total	100.0%	100.0%	100.0%	100.0%	21.4%



# ACARA data

	AUSTRALIA								
	Full Time Equivalent Enrolments								
	2020	2021	2022	2023	2024	2020-2024	2021-2024	2022-2024	2023-2024
<b>Catholic</b>	<b>727,666</b>	<b>736,785</b>	<b>744,061</b>	<b>755,373</b>	<b>768,352</b>	<b>5.59%</b>	<b>4.28%</b>	<b>3.26%</b>	<b>1.72%</b>
Combined	110,878	117,674	123,947	130,875	139,354	25.68%	18.42%	12.43%	6.48%
Primary	354,970	354,818	354,710	356,362	359,949	1.40%	1.45%	1.48%	1.01%
Secondary	258,830	261,159	262,129	264,530	264,846	2.32%	1.41%	1.04%	0.12%
Special	2,989	3,133	3,275	3,606	4,202	40.59%	34.12%	28.28%	16.53%
<b>Government</b>	<b>2,643,597</b>	<b>2,637,137</b>	<b>2,619,520</b>	<b>2,627,224</b>	<b>2,632,284</b>	<b>-0.43%</b>	<b>-0.18%</b>	<b>0.49%</b>	<b>0.19%</b>
Combined	196,476	197,882	200,975	201,675	200,818	2.21%	1.48%	-0.08%	-0.43%
Primary	1,500,380	1,487,327	1,457,758	1,457,005	1,452,635	-3.18%	-2.33%	-0.35%	-0.30%
Secondary	913,442	918,295	925,728	932,326	941,153	3.03%	2.49%	1.67%	0.95%
Special	33,299	33,632	35,059	36,218	37,678	13.15%	12.03%	7.47%	4.03%
<b>Independent</b>	<b>647,214</b>	<b>669,203</b>	<b>690,734</b>	<b>716,848</b>	<b>744,961</b>	<b>15.10%</b>	<b>11.32%</b>	<b>7.85%</b>	<b>3.92%</b>
Combined	562,620	582,872	602,862	624,584	648,002	15.18%	11.17%	7.49%	3.75%
Primary	28,182	29,270	28,458	29,035	29,739	5.52%	1.60%	4.50%	2.42%
Secondary	42,816	43,591	44,722	46,451	47,937	11.96%	9.97%	7.19%	3.20%
Special	13,595	13,471	14,693	16,778	19,284	41.85%	43.15%	31.25%	14.94%
<b>Grand Total</b>	<b>4,018,477</b>	<b>4,043,125</b>	<b>4,054,315</b>	<b>4,099,444</b>	<b>4,145,597</b>	<b>3.16%</b>	<b>2.53%</b>	<b>2.25%</b>	<b>1.13%</b>

# How times have changed – Single sex vs Co-Ed

Calendar Year	2010
School Sector	Independent

Count of Total Enrolments			
State / Terr	Boys	Girls	Co-Ed
ACT	17.6%	5.9%	76.5%
NSW	9.0%	8.2%	82.9%
NT	0.0%	0.0%	100.0%
QLD	5.6%	6.2%	88.2%
SA	3.1%	9.3%	87.6%
TAS	3.1%	6.3%	90.6%
VIC	4.7%	8.0%	87.3%
WA	3.6%	5.7%	90.7%
Grand Total	6.1%	7.3%	86.6%

Calendar Year	2024
School Sector	Independent

Count of Total Enrolments			
State / Terr	Boys	Girls	Co-Ed
ACT	11.1%	5.6%	83.3%
NSW	6.1%	7.2%	86.7%
NT	0.0%	0.0%	100.0%
QLD	3.8%	4.7%	91.5%
SA	1.9%	4.7%	93.5%
TAS	2.9%	5.9%	91.2%
VIC	3.9%	7.8%	88.3%
WA	1.9%	5.7%	92.4%
Grand Total	4.2%	6.2%	89.6%

# How times have changed – Single Sex vs Co-Ed

## Melbourne experience

Back in the last century, (when I was at school) there were 20 APS and AGS schools, **all** exclusively boys' schools

- 12 of these schools have now become Co-Ed
- Carey, Penleigh & Essendon, Wesley, Caulfield, Ivanhoe, Yarra Valley, The Geelong College, Geelong Grammar, Assumption, Haileybury, Mentone & Peninsula
- 8 are still Boys schools – Camberwell, Scotch, Melbourne Grammar (small number of girls), St Kevins, Brighton, Trinity, Marcellin & Xavier



# How times have changed – Single sex vs Co-Ed

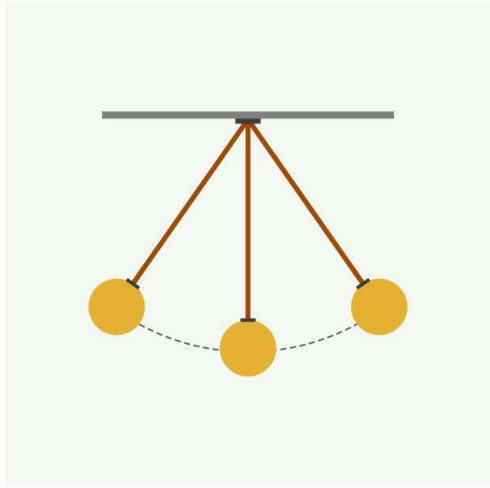
Year	Boys Schools	Co - Ed schools		
1970	20		0	
2024	8		12	
	Boys	Girls	Boys	Total
2008	10,363	9,175	14,352	23,527
2024	11,099	13,448	15,559	29,007
	7.10%	46.6%	8.4%	23.29%
Note - 1 school now has 4 Melbourne campuses and 4 schools have 2 campuses				

# Looking into the Future

- Interesting to see if the Independent schools will keep growing?
- Many are indicating they are "FULL"
- Does it suit the Government to let Non-Government schools take over more of the load? Already announced "Better and Fairer Schools Agreement (2025 – 2034)"
- Politically – does it suit Labor State Governments to apply payroll taxes? Think Vote loss with parents
- If the economy is declining, will this cause a move back to lower fees (Government schools)?

# Which way is the Pendulum moving?

## My View



- In high socio-economic areas with low fertility rate and unaffordable for migrants and young people, the student number will decrease
- Many schools will need to reach further out for students to maintain status quo
- In scenario planning, be prepared for decreasing student numbers at many Independent and Catholic Secondary schools



# Examples

Information we can use to make the right  
**business decisions.**

# Publicly available data to understand

- Socio Economic Index for Areas (SEIFA)
- ABS Census 2021
- ABS Census data related to type of school attended
- ABS Population Projections 2022 – 2032 by sex and age and extrapolated to 2037
- MySchools + ACARA data + ACECQA data (ELC's)

# Your Information

- 2021 & 2024 Students (and 2016 if available)
  - Name or ID number, address, feeder school, class year, use school buses?
- Future Enrolments
  - Name or ID number, address, feeder school (if known), year of admission and class year
- Alumni
  - we normally suggest latest available
- Bus Lines and Student Users



# Questions?



# Keep in touch



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# Mapping Demonstration

Imaginary Jells Park School on our website

<https://map.spectrumanalysis.com.au/mapserver/DemoJellsCollege/Map.html>