

# Demographic Analysis Reports: Digital Access

Prepared for Penrith City Council



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# 1. Executive Summary

- ▣ Digital Access refers to how accessible and affordable access to digital services and resources is in Penrith City as well as how able Penrith City residents are to access, use and navigate these resources. This report is based on findings from the “2021 Australian Digital Inclusion Index” study.
- ▣ National trends show that digital inclusion is improving in Australia, the divide between metropolitan and regional areas is narrowing and the number of Australians who are excluded has declined but remains substantial. Access scores are increasing at the national level, but these improvements are not evenly shared by all Australians.
- ▣ Penrith City’s Australian Digital Inclusion Index (ADII) score in 2021 was 72, putting Penrith in the “Included” category. Penrith City’s score was higher than New South Wales’ (71.1). Penrith was the 27th highest ranked LGA in New South Wales (out of 144 LGAs), in terms of ADII score.
- ▣ Penrith City’s access score in 2021 was 72. The New South Wales State average was 70, as was the national score. Penrith was the 23rd highest ranked LGA in New South Wales, in terms of access score.
- ▣ Penrith City affordability score in 2021 was 93. The New South Wales average was 94 and the national average was 93.1. Penrith was the 55th highest ranked LGA in New South Wales in terms of affordability score.
- ▣ Penrith City’s digital ability score in 2021 was 65. The New South Wales average was 64, and the national average was 64.4. Penrith was the 27th highest ranked LGA in New South Wales in terms of digital ability.

## 2. Introduction

The “Digital Access” report is different to the other reports in this series. In the absence of internet connectivity-related questions in the 2021 Census, this report relies on a non-Census data source, the “Australian Digital Inclusion Index”, a resource created by Melbourne: RMIT, Swinburne University of Technology, and Telstra<sup>1</sup>, which uses survey data to measure digital inclusion across three dimensions of Access, Affordability and Digital Ability.

Geographically, the data is available at LGA level and is available for two years (2020 and 2021).

This report covers four domains of the Australian Digital Inclusion Index (ADII) for Penrith City, compares the results over time and benchmarks to New South Wales.

- ▣ **ADII Score**
- ▣ **Access Score**
- ▣ **Affordability Score and**
- ▣ **Digital Ability Score**

For more information, see <https://www.digitalinclusionindex.org.au>

### 2.1 National trends

The national Index score in 2021 is 71.1, up 3.6 points from the 2020 score of 67.5 [3]. This increase occurs across the country’s States and Territories, with the Australian Capital Territory rating highest of all, for an Index score of 77 (5.9 points higher than the 2021 national score, and 5 points higher than the 2020 ACT score of 72). In 2021, the least digitally included states are South Australia (69) and Tasmania (66) – although both registered improvements in the last year (up 6 and 3 points, respectively, since 2020).

<sup>1</sup>. Thomas, J., Barraket, J., Parkinson, S., Wilson, C., Holcombe-James, I., Kennedy, J., Mannell, K., Brydon, A. (2021). Australian Digital Inclusion Index: 2021. Melbourne: RMIT, Swinburne University of Technology, and Telstra.

The divide between metropolitan and regional areas is marked. In 2021, metropolitan areas recorded an average Index score of 72.9 (1.8 points higher than the national score). Regional areas, however, recorded an Index score of 67.4. This is 3.6 points less than the national score, and 5.5 points less than metropolitan Australia.

There is some indication this metro-regional gap may be narrowing, with Index scores in regional areas increasing at a higher rate (from 62.3 in 2020 to 67.4 in 2021) than those recorded for their metropolitan counterparts (from 70.1 to 72.9).

Key findings from the 2021 ADII survey show that:

- ▣ **Digital inclusion at the national level is improving**, from an average index score of 67.5 in 2020 to 71.1 in 2021.
- ▣ **The divide between metropolitan and regional areas has narrowed but remains marked.** Regional areas record an Index score in 2021 of 67.4. This is 5.5 points less than metropolitan Australia (72.9).
- ▣ **The number of Australians who are highly excluded has declined but remains substantial.** 11% of the Australian population is highly excluded, registering an Index score of 45 or below.
- ▣ **Access scores are increasing at the national level, but these improvements are not evenly shared by all Australians.** While the national Access score has increased from 69.4 in 2020 to 70 in 2021, mobile-only users, people over 75 years of age, people who did not complete secondary school, people who rent from a public housing authority, or fall into the lowest income quintile are being left behind.
- ▣ **Affordability remains central to closing the digital divide.** Based on the ADII Affordability measure, 14% of all Australians would need to pay more than 10% of their household income to gain quality, reliable connectivity.
- ▣ **Digital Ability has slightly improved**, with the national average increasing 0.8 points from 2020 to 64.4 in 2021.

For more key findings and next steps from the 2021 Australian Digital Inclusion Index, visit

<https://www.digitalinclusionindex.org.au/key-findings-and-next-steps/>

### 3. ADII in Penrith City

The ADII scores can be grouped into four categories along the continuum of digital exclusion to inclusion. The index threshold scores for the four groups are:

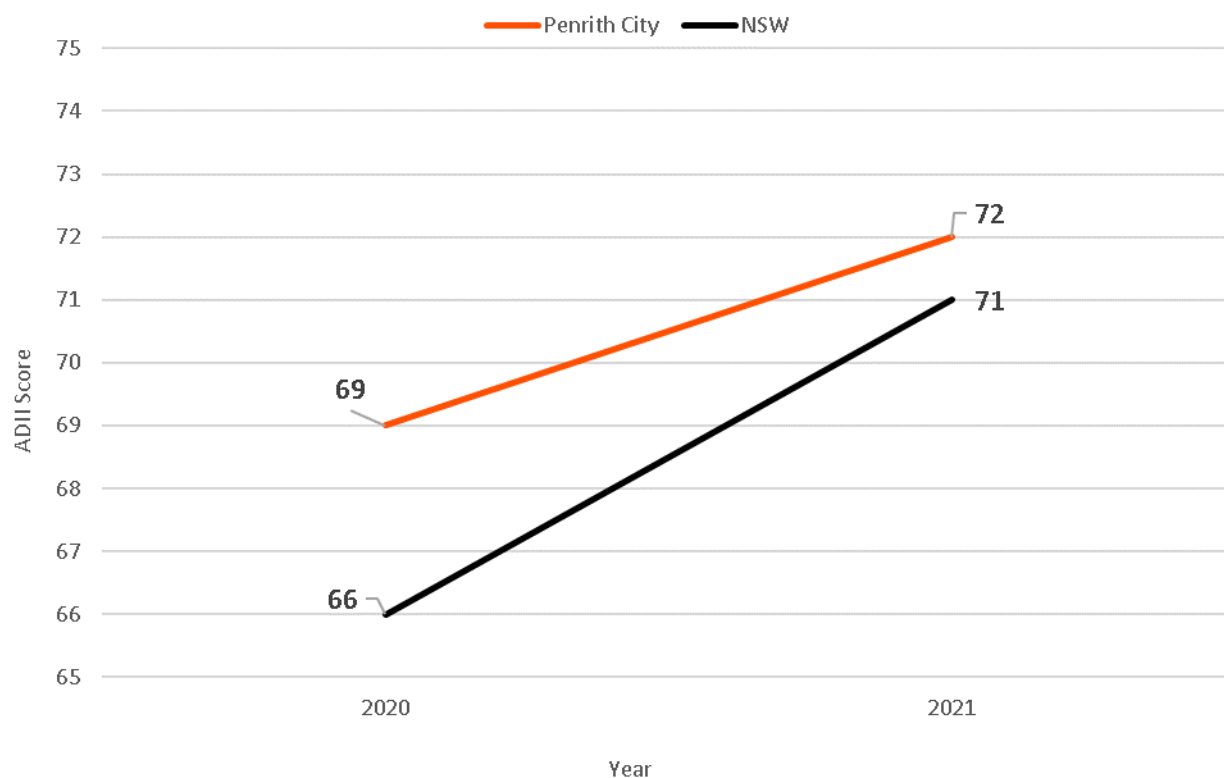
**Highly excluded** – *ADII score range of 45 or below*

**Excluded** – *ADII score range of 45 to 61*

**Included** – *ADII score range of 61 to 80*

**Highly included** – *ADII score range of 80 and above*

- Penrith City's Australian Digital Inclusion Index (ADII) score in 2021 was 72, putting Penrith City in the "Included" category. The New South Wales State average was 71 and the national score was 71.1
- Since 2020, Penrith City's index score improved by 3, from a score of 69. The New South Wales average improved by 5, from 66.
- Penrith was the 27<sup>th</sup> highest ranked LGA in New South Wales (out of 144 LGAs), in terms of ADII score.



#### The 2020-2021 ADII scores for Penrith City and New South Wales

Compared to neighbouring LGAs, Penrith City was tied with several LGAs for the highest ADII score. No neighbouring LGA had a higher ADII score and Fairfield had the lowest ADII score in 2021 (69.0). Fairfield also recorded the largest decrease between 2020 and 2021 (-2).

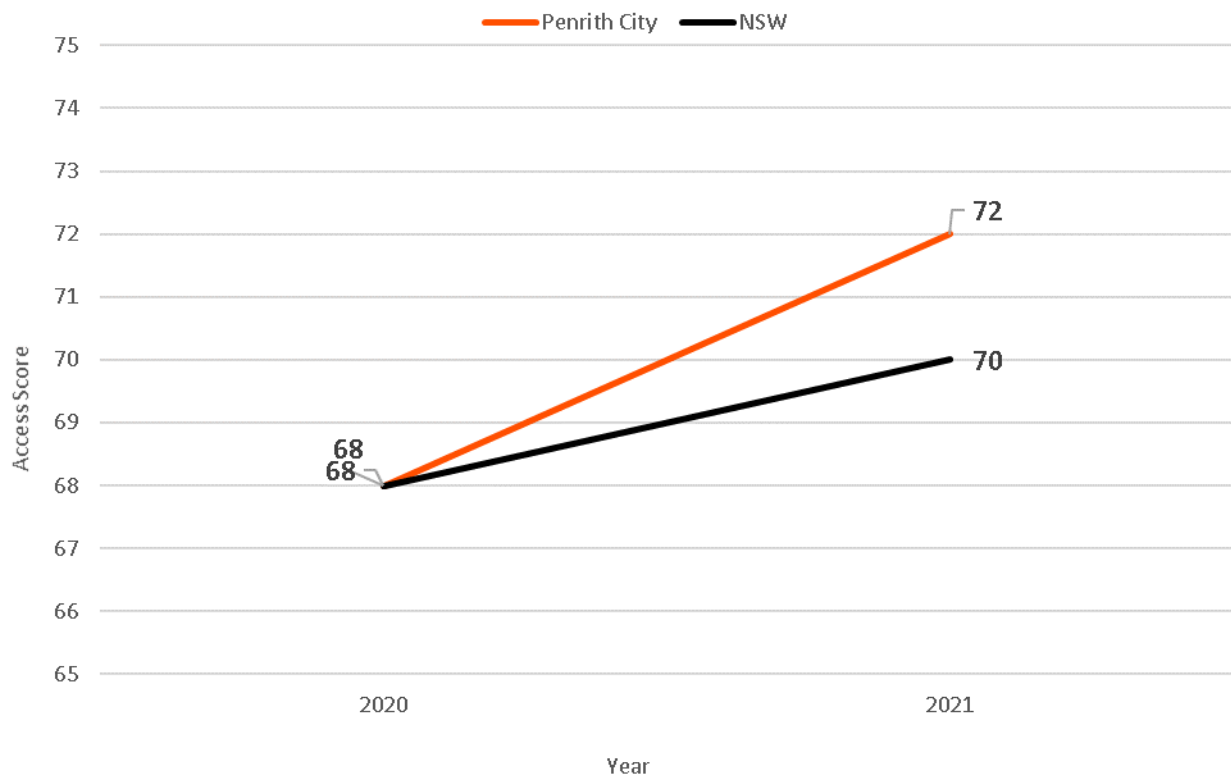
LGA	ADII Score 2021	Difference from ADII 2020
Penrith	72	+1
Blacktown	71	0
Blue Mountains	72	+1
Fairfield	69	-2
Hawkesbury	72	+1
Liverpool	70	-1
Wollondilly	72	+1

ADII scores for Penrith City and surrounding LGAs, 2020-21

## 4. Access score in Penrith City

The “Access score” is calculated via measurement of access, speed and data allowance, intensity and frequency of access, connection type and device used.

- ▣ Penrith City’s access score in 2021 was 72. The New South Wales State average was 70, as was the national score.
- ▣ Since 2020, Penrith City’s access score improved by 4, from a score of 68. The New South Wales average access score improved by 2, from 68.
- ▣ Penrith was the 23<sup>rd</sup> highest ranked LGA in New South Wales (out of 144 LGAs), in terms of access score.



### The 2020-2021 access scores for Penrith City and New South Wales

Compared to neighbouring LGAs, Penrith City was tied with several LGAs for the highest access score. No neighbouring LGA had a higher access score and Hawkesbury, Liverpool and Wollondilly had the lowest access scores in 2021 (70.0). No LGA recorded a decline in access score since 2020, but Hawkesbury, Liverpool and Wollondilly were the only ones which had no change/improvement since 2020.



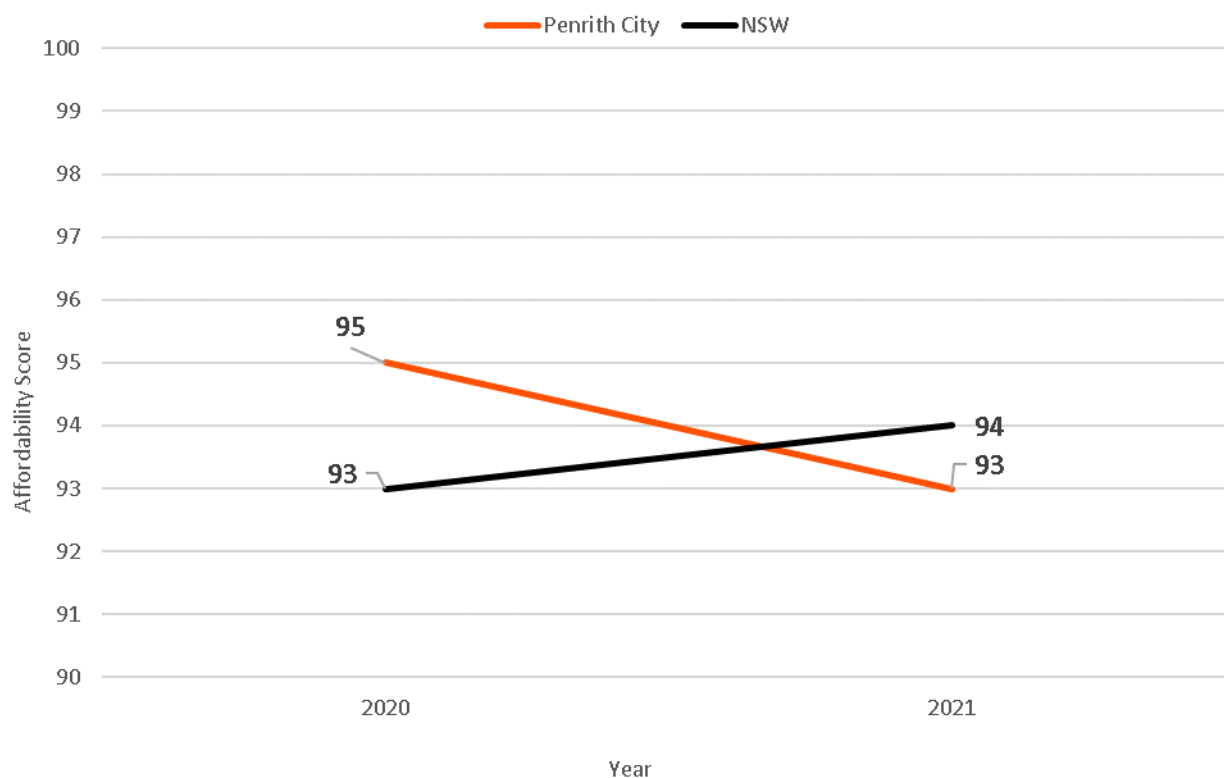
LGA	Access Score 2021	Difference from 2020
Penrith	72	+1
Blacktown	71	+1
Blue Mountains	72	+2
Fairfield	72	+2
Hawkesbury	70	0
Liverpool	70	0
Wollondilly	70	0

Access scores for Penrith City and surrounding LGAs, 2020-21

## 5. Affordability Score in Penrith City

The “Affordability score” explores the percentage of household income needed to gain quality and uninterrupted connectivity.

- ▣ Penrith City affordability score in 2021 was 93. The New South Wales average was 94 and the national average was 93.1.
- ▣ Since 2020, Penrith City’s affordability score declined by 2, from a score of 95. The New South Wales average affordability score improved by 1, from 93.
- ▣ Penrith was the 55<sup>th</sup> highest ranked LGA in New South Wales (out of 144 LGAs) in terms of affordability score.



#### The 2020-2021 affordability scores for Penrith City and New South Wales

Compared to neighbouring LGAs, Penrith City was tied for third place in terms of highest affordability scores. Hawkesbury had the highest score (95), followed by Wollondilly (94). On the other hand, Fairfield was lowest with a score of 89, followed by Liverpool (91).

Since 2020, only Hawkesbury's affordability score improved (+1), whereas others either saw no change or decline. Liverpool (-3) and Fairfield (-5) recorded the largest decreases in affordability score between 2020 and 2021.

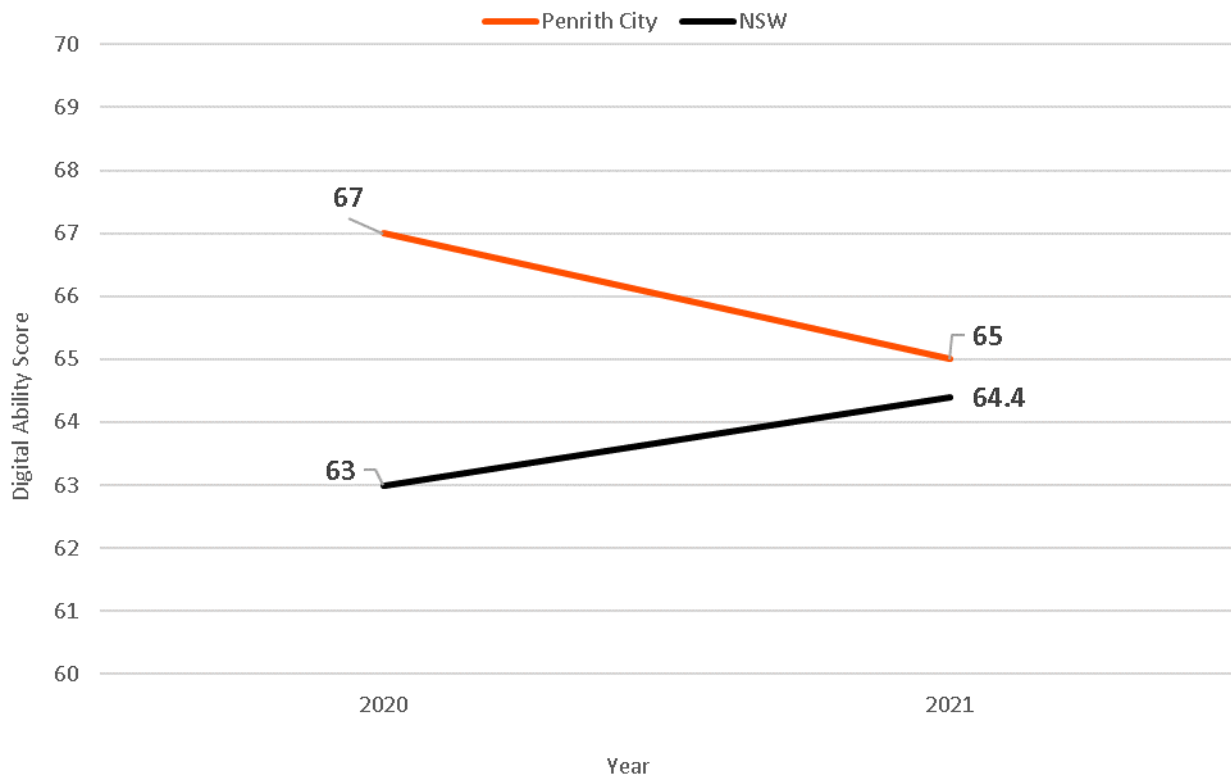
LGA	Affordability Score 2021	Difference from 2020
Penrith	93	-2
Blacktown	93	-1
Blue Mountains	93	-1
Fairfield	89	-5
Hawkesbury	95	+1
Liverpool	91	-3
Wollondilly	94	0

Affordability scores for Penrith City and surrounding LGAs, 2020-21

## 6. Digital Ability Score in Penrith City

The digital ability score examines digital proficiency, that is - people’s ability to use digital devices, access information via the internet, competency in completing selected digital tasks, etc. For more information, see page 12 of the 2021 Australian Digital Inclusion Index report ([https://h3e6r2c4.rocketcdn.me/wp-content/uploads/2021/10/ADII\\_2021\\_Summary-report\\_V1.pdf](https://h3e6r2c4.rocketcdn.me/wp-content/uploads/2021/10/ADII_2021_Summary-report_V1.pdf)).

- Penrith City’s digital ability score in 2021 was 65. The New South Wales average was 64, and the national average was 64.4.
- Since 2020, Penrith City’s digital ability score declined by 2, from a score of 67. The New South Wales average digital ability score increased by 1, from 63.
- Penrith was the 27<sup>th</sup> highest ranked LGA in New South Wales (out of 144 LGAs) in terms of digital ability.



The 2020-2021 digital ability scores for Penrith City and New South Wales

Compared to neighbouring LGAs, Penrith City was tied for the second highest digital ability score. Wollondilly had a higher digital ability score (66) and Hawkesbury had the same score as Penrith City (65). Fairfield had the lowest digital ability score (58), followed by Liverpool and Blacktown (both with 62).

Since 2020, Wollondilly's digital ability score improved by 2 (from 64) and Hawkesbury's by 1 (from 64). Fairfield recorded the largest decline in digital ability score since 2020 (-6), followed by Liverpool, Blacktown and Penrith City (all with -2 since 2020).

LGA	Digital Ability Score 2021	Difference from 2020
Penrith	65	-2
Blacktown	62	-2
Blue Mountains	64	0
Fairfield	58	-6
Hawkesbury	65	+1
Liverpool	62	-2
Wollondilly	66	+2

Digital ability scores for Penrith City and surrounding LGAs, 2020-21

## 7. Other Valuable ADII resources

### 7.1 ADII domain dashboards

The Australian Digital Inclusion Index has a lot of valuable information at national level. Each of the domains explored in this report can be broken down by demographic characteristic at national, metro or regional level. Unfortunately, that information is not available for LGAs.

These dashboards contain further insights into the national results for the ADII, access, affordability and digital ability scores. Results include comparisons between the national average and many different demographic and socioeconomic sub-groups

📄 **Total Index** - <https://www.digitalinclusionindex.org.au/dashboard/Total.aspx>

- ▣ **Access** - <https://www.digitalinclusionindex.org.au/dashboard/Access.aspx>
- ▣ **Affordability** - <https://www.digitalinclusionindex.org.au/dashboard/Affordability.aspx>
- ▣ **Digital Ability** - <https://www.digitalinclusionindex.org.au/dashboard/Digital.aspx>

## 7.2 How Australians are using the internet?

Another valuable dataset in the ADII is the “How Australians are using the internet?” dashboard, a powerful way to understand how internet use differs by age group, gender, income, education level, cultural difference, disability, household type, etc, at the national level.

- ▣ **How Australians are using the internet?**  
<https://www.digitalinclusionindex.org.au/dashboard/Life.aspx>

## 7.3 First Nations digital inclusion

People living in Australia’s 1,100 remote First Nations [1] communities are among the most digitally excluded Australians.

The Mapping The Digital Gap project is working with 8-10 communities over a four-year period (2021-2024) to:

- ▣ Generate a detailed account of the distribution of digital inclusion and the uses of digital services including news and media across 8-10 First Nations communities;
- ▣ Track changes in measures of digital inclusion for these communities over time; and
- ▣ Inform the development of appropriate local strategies for improving digital inclusion capabilities and services enabling informed decision-making in First Nations communities.

The research is currently in the first stage of data collection. Data and findings will be shared on this page - <https://www.digitalinclusionindex.org.au/first-nations/>

## 8. More reports in this series

Another access and wellbeing-related report is available in this series:

- ▾ Equity
- ▾ Social Disadvantage
- ▾ Health and disability

Other reports included in the Demographic Analysis report series are:

- ▾ Pre-school children
- ▾ Young people
- ▾ Older people
- ▾ Health and Disability
- ▾ Gender
- ▾ People from culturally and linguistically diverse backgrounds
- ▾ First Nations peoples
- ▾ Housing density
- ▾ Penrith City Local Government Area Demographic Summary

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