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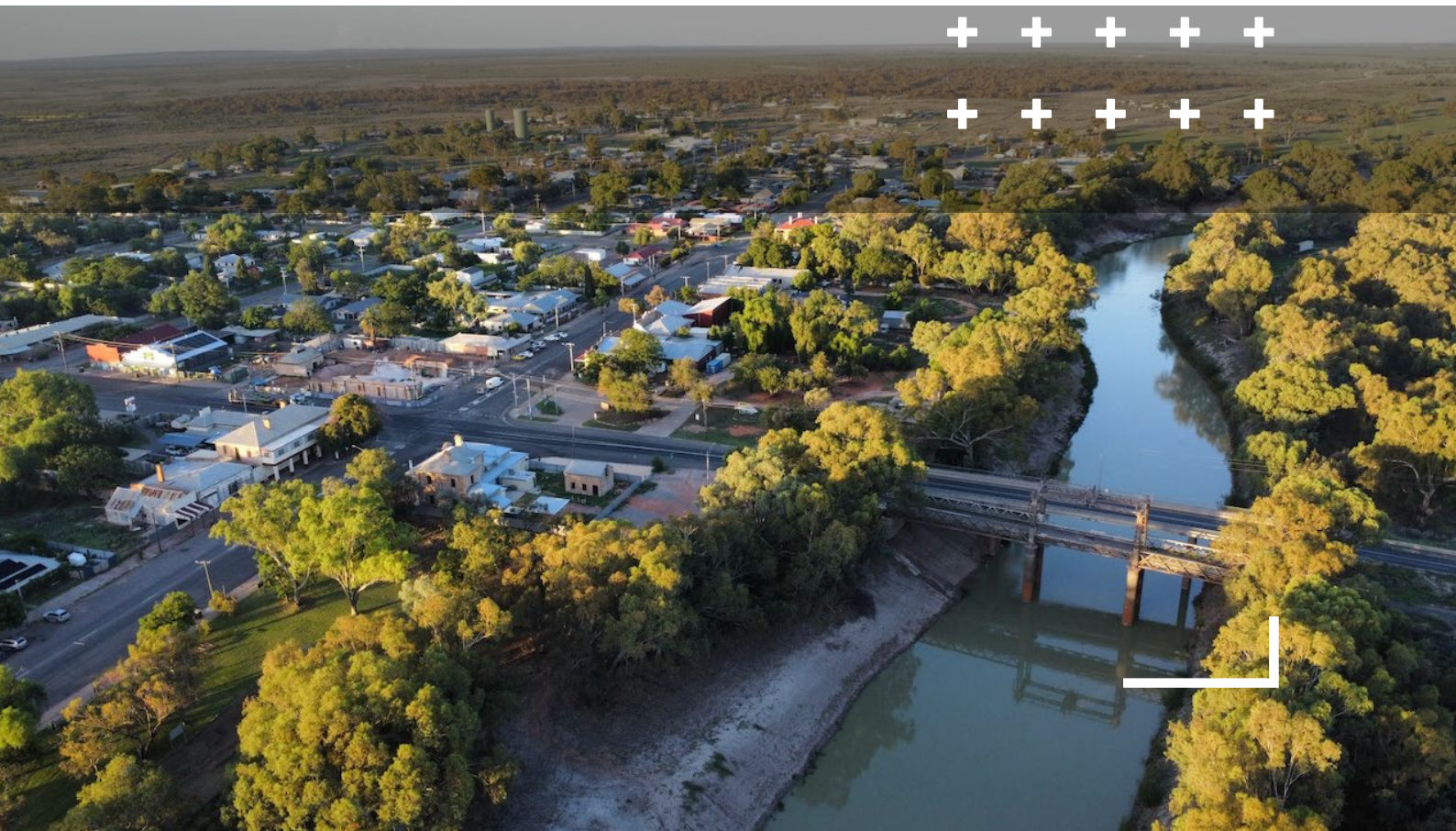


MAPPING THE DIGITAL GAP

Measuring Digital Inclusion and Media Use in Remote Aboriginal and Torres Strait Islander Communities

Wilcannia, NSW

2024 Community Update Report



Acknowledgement of Country

We respectfully acknowledge the Baarkandji people, the traditional owners for Wilcannia, and pay our respect to their Ancestors and Elders, past and present. We also acknowledge the Traditional Custodians and their Ancestors of the lands and waters across Australia where we work, live and undertake our research.

About the Mapping the Digital Gap research project

Mapping the Digital Gap is a 4-year research project working in partnership with local organisations in 12 remote First Nations communities, to generate a detailed account of digital inclusion and uses of digital services including news and media, track changes over time, and inform appropriate local strategies and services enabling informed decision making by remote Aboriginal and Torres Strait Islander people. It is a supplementary project to the Australian Digital Inclusion Index, coordinated within the RMIT University node of the Centre of Excellence for Automated Decision Making and Society in partnership with Telstra.

Contact

Assoc. Prof. Daniel Featherstone
Project Lead

E: mtdg@rmit.edu.au
M: 0437 798 076
W: mappingthedigitalgap.com.au



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Community research partner

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REDI.E Site Manager Wilcannia: Darrin Atkinson

REDI.E Chief Executive Officer: Peter Gibbs

Community co-researchers 2024

Monica Kerwin, Bobbi Harris, Shalarna Thorpe

Research participants and stakeholders

Thank you to all of the community residents and local agency staff who generously participated in the surveys and interviews, providing the personal experience to make this research meaningful. We conducted 146 surveys with First Nations community residents in 2024 (84 in 2023, 67 in 2022). During research visits from 2022 to 2024, we undertook interviews with community leaders, residents and the following stakeholder agencies:

- + Regional Enterprise Development Institute
- + Centrelink office (managed by REDI.E)
- + Central Darling Shire
- + Shire Services Depot staff
- + Wilcannia Central School
- + Wilcannia Local Aboriginal Land Council
- + Wilcannia Police Station
- + Maari Ma Health
- + Wilcannia River Radio
- + Safe House- Domestic Violence NSW
- + Cultural Solutions employment enterprise
- + Community Restorative Centre
- + Wings Youth Drop-in Centre
- + Emu Heart - cultural planning consultancy
- + National Parks and Wildlife Service
- + Family and Community Services
- + Wilcannia TAFE
- + Cooee Cafe

Wilcannia research trip dates

12-16 February 2024; 6-10 February 2023;
6-12 February 2022

RMIT University researchers

Dr Daniel Featherstone

Assoc Prof Sharon Parkinson

Leah Hawkins

Design: Leah Hawkins

Editing: Alison Barton

Photography: Daniel Featherstone

Cover: Wilcannia and Baarka (Darling River)

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Figure 1: Research team - left to right: Shalarna Thorpe, Daniel Featherstone, Bobbi Harris, Monica Kerwin, Leah Hawkins, Sharon Parkinson

01. EXECUTIVE SUMMARY

This report outlines updated findings from our third and final research visit to Wilcannia, situated on the banks of Baarka (Darling River) in western New South Wales. Located in Central Darling Shire, Wilcannia is about 200 km from Broken Hill, 260 km from Cobar, 500km from Dubbo and 970 km from Sydney. The traditional owners are the Baarkandji river people.

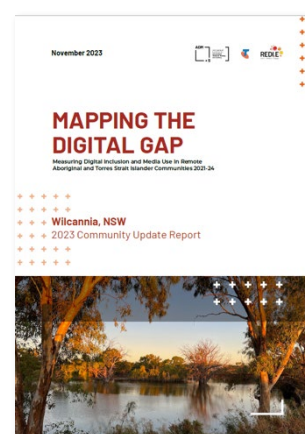
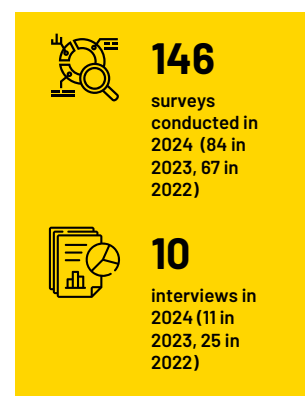
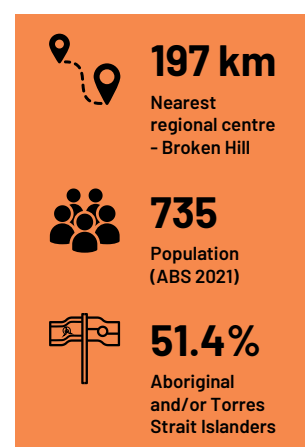
The population of the Central Darling Shire is approximately 2,000 people, with this population geographically dispersed over 53,000 square kilometres. The Shire includes the remote towns of Wilcannia (population 735, 51.4% Indigenous), Menindee (pop. 380, 42% Indigenous), Ivanhoe (pop. 261, 26% Indigenous), and White Cliffs (pop. 156, 3% Indigenous), hamlets Sunset Strip and Tilpa, and pastoral properties. Like many remote First Nations communities, Wilcannia has typically low household incomes, overcrowded housing, and faces significant digital inclusion barriers including limited affordable access to quality communications services.

Our first visit in February 2022, following the 2021 COVID-19 outbreak, identified substantial challenges for Wilcannia residents and service providers in terms of access to quality mobile and telecommunications and low levels of digital inclusion for First Nations residents compared with other Australians. Despite strong community advocacy, there was little change on our second visit in 2023.

During our third visit to Wilcannia from 12–16th February 2024, we again had very strong community engagement. Our sincere thanks to community research partner Regional Enterprise Development Institute (REDI.E), Team Leader Darrin Atkinson and co-researchers Monica Kerwin, Bobbi Harris and Shalarna Thorpe, for their collaboration and guidance in the research. Thanks to everyone who participated in the research, with an incredible 146 surveys with First Nations residents and 10 interviews with community leaders and local stakeholders.

Building on the [2022 Community Outcomes Report](#) and [2023 Update Report](#), this Update Report is to assist community agencies, leaders and residents to better understand the barriers to digital inclusion, develop local strategies to address these barriers, and support planning and partnerships with government and industry.

This report presents combined research findings from 2022 to 2024, outlining changes in First Nations digital inclusion over three years, updating communications and media services available in Wilcannia, and adding new findings and interview quotes to the analysis section. The Digital Inclusion Plan has been updated with progress to date, including current or planned activities.



Wilcannia at a glance

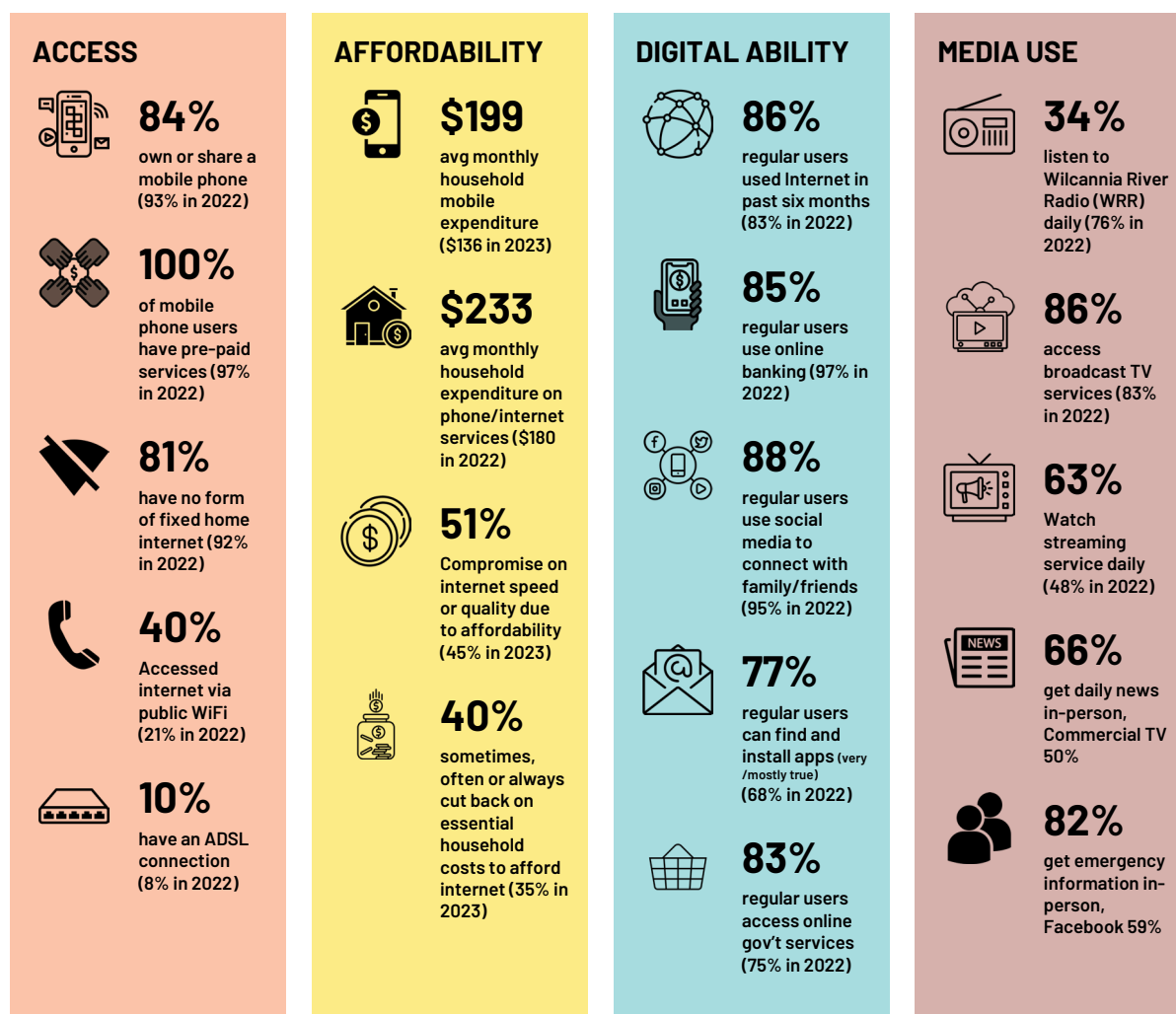
Distance	985 km	to nearest capital city (Sydney)
Dwellings (ABS 2021)	331	private dwellings
	2.8	people per ATSI household
Language (ABS 2021)	3.8%	% of people who speak an Aboriginal language
Income (ABS 2021)	\$442	median ATSI income



Figure 2: Entry sign into Wilcannia

Key survey findings

Below is a summary of weighted 2024 survey results, showing changes since 2022.



Full 2022-24 survey results are available in Appendix 1. An updated audit of demographics and communications and media services available in Wilcannia is provided in Appendix 2.

What is digital inclusion? How is it measured?

Digital inclusion refers to equitable and reliable access to and use of information and communication technologies for participation in social and economic life.

The Australian Digital Inclusion Index (ADII) is a biennial national survey that measures three dimensions of digital inclusion: Access, Affordability and Digital Ability. ADII scores range from 0 to 100. The higher the score, the greater level of digital inclusion. ADII scores are relative, enabling comparisons across demographic groups and geographic areas over time.

The Mapping the Digital Gap project uses an amended version of the ADII survey to collect digital inclusion data. This enables us to compare results for the participating remote communities, towns and homelands with the national results collected by the ADII, and to track changes in digital inclusion between and within these sites.

In 2021, Closing the Gap Outcome 17 was introduced to ensure First Nations people have *"access to information and services enabling participation in informed decision making regarding their own lives."* Target 17 includes a target of equal levels of digital inclusion for Aboriginal and Torres Strait Islander people by 2026.

Combined with ADII data collection, the Mapping the Digital Gap project is helping, for the first time, to track progress towards Target 17 for remote, regional and urban First Nations people.

DIGITAL INCLUSION



ACCESS

- > Reliable access to phone and internet
- > Access to IT devices and/or facilities
- > Access to trusted media, news and information



AFFORDABILITY

- > Affordable phone and internet services
- > Affordable devices



DIGITAL ABILITY

- > Ability to use digital devices, software and online services
- > Awareness of cybersafety, scams, and viruses

ADII First Nations data dashboard

The [First Nations dashboard](#) on the ADII website provides interactive charts and community-specific results from the ten research sites in 2022. The Mapping the Digital Gap [2023 Outcomes Report](#) provides summary findings across all sites. These will be updated in 2024 with 2023 survey results.

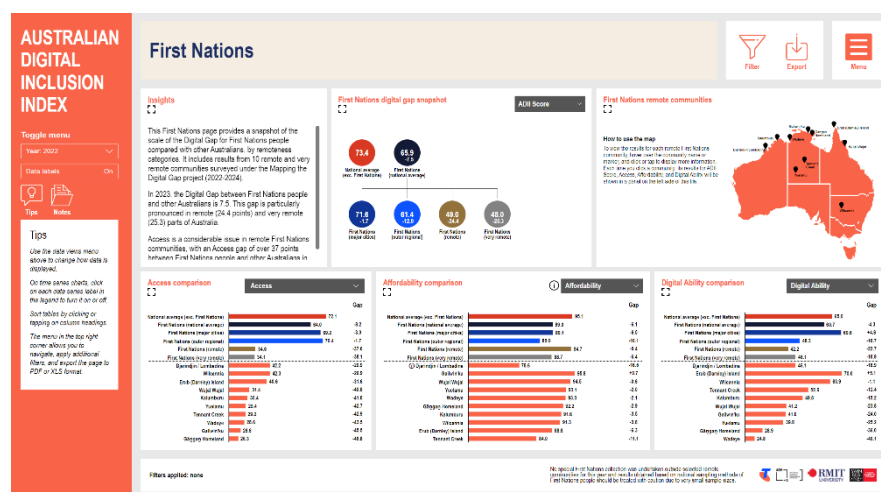


Figure 3: First Nations dashboard on ADII website: digitalinclusionindex.org.au/dashboard/firstnations.aspx



View dashboard
using the QR code:

ADII 2023 report findings

The 2023 ADII found a digital gap of 7.5 points for First Nations people compared with other Australians. This gap widened substantially for people living in remote (24.4) and very remote Australia (25.3), where contributing factors include limited access to digital infrastructure and services, high internet costs relative to income, climate, geography and cultural context.

Based on our 2022 survey results, the average Australian Digital Inclusion Index (ADII) score for Wilcannia was 59.6, a gap of 13.6 points below the national average for non-First Nations Australians (Figure 4).

The key element of this gap was in the Access score of 42.3, which was 29.7 points below the non-First Nations average, owing primarily to limited household internet access, patchy and slow mobile coverage in parts of town, and high reliance on mobile devices. The Index scores (see Figure 3) shows small gaps for Affordability (-3.7) and Digital Ability (-1.0). However these gaps vary widely for different demographic groups as outlined below.

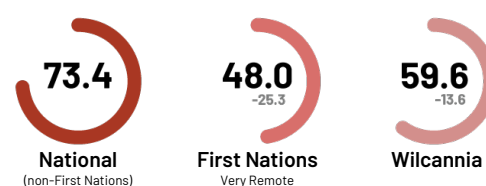


Figure 4: Wilcannia ADII scores compared to National Average (non-First Nations) and Very Remote First Nations scores, based on 2022 surveys.

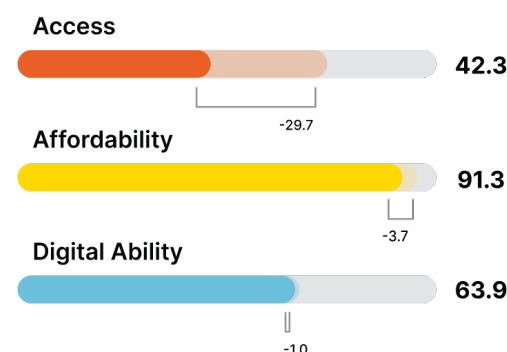


Figure 5: 2023 ADII scores for Wilcannia, with gap against national non-First Nations averages.

Demographic gaps in Wilcannia:

The 2022 survey results found significant gaps in digital inclusion for some demographic groups. These results demonstrate that targeted digital support activities would benefit these demographic groups in Wilcannia.

Gender gap

8.2

Women had lower average digital inclusion scores than men – 55.5 compared with 63.7. This gap was across all dimensions but was particularly high in the Affordability score (87.6 compared with 95.2) due to lower relative income levels.

Disability gap

14.1

People who live with disability had average digital inclusion scores of 48.5 compared to 62.6 for those without disability. The gap was primarily in the areas of Digital Ability (45.1 compared with 69.0) and Access (33.9 compared with 44.6).

Employment gap

14.8

The average digital inclusion score for unemployed people was 51.6 compared to 66.4 for those employed (full-time or part-time). The gap was across all areas – Digital Ability (54.0 compared with 73.2), Access (35.4 compared with 48.1) and Affordability (88.2 compared with 93.3).

Education gap

32.9

Those who did not complete secondary school had an average digital inclusion score of 40.0 compared to those who completed up to Year 10, who averaged 61.6. The biggest aspect of this gap was in Digital Ability (28.2 compared with 68.8) and Access (24.6 compared with 42.5).

Age gap

49.9

Those aged 55–64 had an average digital inclusion score of 45.1, with those aged 75+ averaging 21.6, compared with a score of 71.5 for those aged 18–34 years. The gap was most pronounced in the area of Digital Ability (34.6 for 55–64 / 0.0 for 75+ compared to 85.4 for 18–34 age group). There was also a big gap in Access scores for people aged 75+ (10.7 compared with 50.8) and affordability a key factor for the 55–64 age group (83.3 compared with 91.4).

02. INTRODUCTION

The Mapping the Digital Gap project has tracked changes in digital inclusion and media and communications use in Wilcannia over three years. This report provides an update from our third visit in February 2024, comparing the survey and interview results to our findings from the first visits in 2022 and 2023. It also tracks progress on the suggested strategies for a local Digital Inclusion Plan and updates the plan with newly identified strategies or activities.

2022 findings

During our first visit in 2022, we heard multiple reports that the mobile service was patchy and unreliable, congested in peak periods, with low penetration inside buildings. We heard the significant frustration from residents and service providers with the quality and reliability of mobile and fixed line (ADSL) services.

Most First Nations residents primarily use prepaid mobile services for voice and data use, with very few households having home internet connections. The high cost of pre-paid data resulted in affordability challenges, especially with increased use of streaming services, social media, gaming and other high-bandwidth applications during and post COVID-19 restrictions.

The ongoing transformation of government services to online delivery had increased the importance of affordable internet access and digital skills. Reduced face to face services and limited community access facilities meant that access to critical services, such as health, employment, welfare and finance, was increasingly user-pays. Vulnerable groups — including elderly, unemployed, those with disabilities or facing domestic violence — risked exclusion from the very services aimed at addressing these barriers.

The 2021 COVID-19 outbreak drew stark attention to Wilcannia's inadequate communications services. The influx of health and emergency service agencies led to a temporary Telstra Cell on Wheels mobile booster being installed. NBN also installed a Wi-Fi network to 91 houses to enable home schooling. These solutions were removed following the outbreak. A 4G small cell tower was installed near the hospital, however a community-wide solution is yet to be implemented.

The 2022 Community Outcomes Report outlined these key findings:

- + Residents are predominantly mobile, and predominantly prepaid
- + Very few households have home internet connections
- + Affordability is a significant concern
- + The 4G network is congested, unreliable and patchy
- + Access measures put in place during COVID-19 helped, but have not been retained
- + COVID-19 restrictions resulted in increased use of digital tech and online services
- + All community agencies spoke of need for improvements
- + Digital skills are limited by reliance on mobile devices
- + There is demand for community access computers, free Wi-Fi, and digital support
- + Cyber safety is a significant concern
- + High use of basic online services, but poor access to high-bandwidth applications
- + Local media is critical



Figure 6: 4G small cell tower near hospital

2023 findings

During our second visit to Wilcannia, we heard of recent upgrades to mobile services in Wilcannia, with some improvement in speed and coverage. There were plans for further Telstra upgrades to 5G during 2023. Residents acknowledged improvements in the quality of mobile coverage and penetration into houses, with some respondents saying they can now use their mobile phones inside the house.

However, for the most part, community sentiment had changed little since our 2022 visit. Residents and some service providers told us they were still waiting to get the quality of mobile and fixed internet services that they need. Mobile services remain patchy in some parts of town and, while improved, many homes and buildings still have poor signal penetration. There were numerous comments about reliability, following a four-day outage in the weeks prior to our visit. Some interviewees voiced ongoing frustration with service quality and reliability.

- + *"It's a right today to have access to internet. We're paying for it [so] at least give us quality service for our money." (Monica Kerwin, resident, 2023)*
- + *"We're living in Australia in 2023 and the [mobile] service and internet should be a lot better than what it is." (Anthony Schembri, REDI.E / Centrelink, 2023)*

Wilcannia residents argued that improved communications services are critical to social and economic development in the community, including reliable access to essential services.

ADSL services also remained highly congested and slow with regular dropouts, insufficient for most business or household needs. This led to a small increase in uptake of Sky Muster services as well as rapid adoption of Starlink low earth orbit satellite services by agencies and staff, but not by First Nations households.

NSW Government had provide \$5.5million funding under its Regional Digital Connectivity Project for two multi-carrier mobile towers in Wilcannia and Brewarrina, due for completion by late 2023. This aimed to promote competition and provide opportunities for multiple mobile providers, with hopes that Optus or TPG (Vodafone) would deliver services from the new tower.

- + *Unlike traditional models, the Mobile Active Neutral Host solution enables all mobile carriers to offer a service on the network, representing a significant step towards better mobile coverage, greater competition, and real choice for regional Australian communities. (OneWiFi Facebook post, 24/2/2023)*

2024 Update

We had very high participation with 146 surveys, most of the adult First Nations population. Residents clearly wanted their voice heard through the Mapping the Digital Gap research. The general feeling in the community was more positive than previous years, with the supermarket well stocked, construction of the \$9.5 million Baaka Cultural Centre underway, a weir and water supply upgrade being planned, and recent summer rains making the region green and plentiful with birds and wildlife.

During our visit, upgrades were underway to the Telstra 4G mobile service in preparation for the 3G switch-off, which was postponed to October 2024 due to the high number of 3G devices still in use. The Netallie Trig tower, 11km north of Wilcannia, had been upgraded to 5G, however only 4G was available in Wilcannia. The Telstra service has reportedly improved in Wilcannia since the 3G switch-off, with improved signal strength in town.

There had been some progress on locally managed media and communications services with a new public NBN Wi-Fi hotspot at the new REDI.E office (with plans to relocate the Centrelink agency there in

the coming months), community access laptops at the REDI.E office, and planned upgrades to the Wilcannia River Radio studio facilities.

There was significant increase in uptake of Starlink by agencies, staff and residents, with those using it positive about the speed and reliability, even during rain. We also heard a general eagerness to take advantage of new technologies, including low-earth satellite services.



“Communication [is] key in any community, especially Indigenous remote communities where we’ve got to bring ourselves up to date [and] take advantage of the new technology that’s available. [We need to] grab it with both hands [because it] helps to close that gap [and] provide the communication that’s needed.”

- Darrin Atkinson, Coordinator and Site Manager REDI.E, 2024

However, we heard frustration over the lack of tangible community benefit from the government investment in the newly installed ‘Mobile Active Neutral Host’ tower, with no mobile services hosted to date. Despite the intent of promoting multiple carriers, the tower was yet to provide any additional mobile services to Wilcannia. As of April 2025, we only know of plans for Pivotal to establish a mobile service on the OneWiFi tower, requiring a different SIM to other mobile services in the region. This trial of NSW Government’s ‘neutral host’ solution, planned for over 50 sites state-wide, is yet to demonstrate the intended coverage expansion and competition.

We heard of four major Telstra outages in the four months prior to our visit, lasting up to a day, caused by power or network outages. Further outages occurred over 2-3 weeks in October 2024, with storms causing power outages in Broken Hill, Wilcannia and the region, interrupting mobile and fixed line services and emergency call access. Residents are frustrated by the regularity of outages and lack of redundancy systems or backup power options.

There has been some improvement in digital inclusion in Wilcannia, with our 2024 survey finding 86% are regular internet users, up from 83% in 2022. Access to mobile and internet has increased, with improved public Wi-Fi use (up from 21% to 40%) and increased home broadband uptake (from 8% to 19%). While there is still primary reliance on pre-paid mobile services for voice and data access, the rate of mobile phone ownership has dropped from 93% to 84%, likely due to affordability challenges. With increased cost of living pressures and rising data use, average monthly household mobile and internet costs have gone up from \$180 in 2022 to \$233 in 2024. With 17% of respondents saying they always or often cut back on food or bills as a result, up from 8% in 2022, affordability is now a key barrier to digital inclusion in Wilcannia.

Most Wilcannia residents have a relatively high level of digital literacy and online safety awareness. However, some cohorts — elderly, people living with disability, those who did not complete high school, and unemployed remain more excluded. There is ongoing demand for more community access computers and digital mentor support.



Figure 7: Monica doing survey with Natika Clayton and Shalarna with Robert Clayton outside REDI.E office

Updates to Wilcannia digital inclusion plan

The digital inclusion plan in Section 5 has been updated with new strategies suggested by residents and agencies and a summary of progress on existing strategies from previous reports.

We acknowledge the challenges in implementing a local digital inclusion plan, especially in small communities where no agency has specific scope or capacity to lead communications and digital support programs. Communications tends to be seen as a state or federal government responsibility, with upgrade decisions and timeframes often determined by telecommunications services providers and funding programs. This project seeks to empower communities with a targeted strategy to address identified barriers or needs.

Wilcannia has a strong history of advocating for improved services. Ongoing advocacy by Central Darling Shire and REDI.E, along with calls by service providers and residents have resulted in several upgrades - the small cell mobile tower by the hospital, an NBN Wi-Fi hotspot, upgrades to and the funding for a neutral host mobile tower. However, the remarkable community engagement with the Mapping the Digital Gap project shows the ongoing need for better quality and more reliable and affordable communications and media services in Wilcannia.

We hope that this report supports ongoing planning and advocacy and helps address the ongoing challenges faced by Wilcannia residents and service providers.



Figure 8: Telstra 4G/5G Mobile tower at Netallie Trig, 11km west of Wilcannia

03. COMMUNICATIONS IN WILCANNIA

Existing telecommunications services



Mobile coverage

Mobile coverage to Wilcannia is currently provided from four towers:

- + MacCullochs Range, 46 km south-east of Wilcannia near the Barrier Highway, 4G/5G (ACMA Site ID 11185);
- + Netallie Trig, 11 km west of Wilcannia, 4G/5G (ACMA Site ID 132137);
- + a 4G small cell at the Telstra exchange (27 Cleaton St Wilcannia); and
- + a 4G small cell tower (10m) near hospital (1-7 Ross Street; installed November 2021 primarily to support health services).

See Figure 8 below for locations. While improved, the 4G signal remains weak in some parts of town, particularly the Mallee and town centre near the post office and police station.

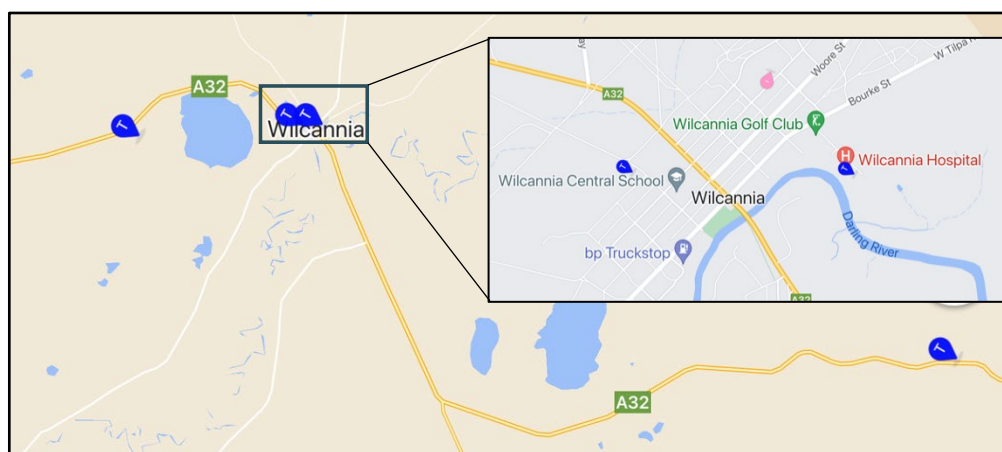


Figure 9: Location of mobile towers servicing Wilcannia (Source: Aus Phone Towers app)



Backhaul to community

There is Telstra fibre optic to the community.



Landlines

Landlines are available to most agencies and residences, however few First Nations residents surveyed have landline accounts. Central Darling Shire use only mobile and online communications.



Fibre to the premises

There are Telstra fibre connections to the Shire office, hospital, Wilcannia Central school and police station and possibly other facilities.



ADSL access

Some community agencies and residences still rely on ADSL via the copper network.



Public Phones

There are two public phones – one near the police station on Reid Street, and one in the Mission area. Despite being free to use, our survey results indicate low use of these public phones due to their location and primary use of mobile.



Low Earth Orbit (LEO) satellite services

Central Darling Shire have set up Starlink LEO satellite services at some facilities in Wilcannia (staff houses, caravan park). There is growing take-up of Starlink by non-Indigenous staff but no First Nations households to date.



NBN services

Wilcannia is designated as a satellite delivery zone under NBN planning. However, due to having 4G coverage, there has been low household take-up of Sky Muster services in the community, even by service providers.



Public Wi-Fi

There is free Wi-Fi available 24/7 at the Centrelink office in and Wings Drop-in Centre. An NBN public Wi-Fi hotspot is at the new REDI.E office (available 9am-9pm daily), with regular use.

Media services



Radio services:

- + Wilcannia River Radio 103.1FM
- + ABC radio (regional - Broken Hill) on FM and ABC national on AM
- + 2WEB FM (Bourke)
- + Vision Radio (Christian)



TV services

Wilcannia has digital TV broadcast covering the community (tower located behind Central Darling Shire workshop), providing 16 Freeview channels including NITV. ICTV is not available.



Newspaper

The Wilcannia News has changed from weekly to monthly but remains popular in the community. No other newspapers are available locally.



Figure 10: Mural in the main street of Wilcannia

04. KEY FINDINGS FROM DATA ANALYSIS

This section provides key findings from surveys and 10 interviews undertaken with community members and stakeholders in 2024, 11 in 2023 and 25 interviews in 2022.

See Appendix 1 for the full set of comparative survey results from 2022, 2023, and 2024, following data cleaning and weighting against ABS data. The results in this report may differ slightly from the 2022 and 2023 reports which provided raw survey results prior to weighting.

Communications access

Predominantly mobile, and predominantly prepaid

- + 84% of respondents own or share a mobile phone (down from 93% in 2022), with 96% of these being smartphones. Only 3% of households have fixed line telephones (same as 2022).
- + 97% of respondents with a mobile phone use pre-paid service (100% in 2022). Respondents cited low and unreliable income and risk of excess data costs for why they preferred prepaid services.
- + 76% of respondents are mobile only users for voice and internet use. This is compared to 10.5% of the Australian population in 2023 (Thomas et al., 2023).
- + Wilcannia has two public phones, however only 7% of respondents reported using the public phone in 2024 (down from 30% in 2022) despite phone calls being free.



Figure 11: Elder Gordon Evans using his mobile phone

The 4G mobile network has improved but is still described as unreliable and patchy

4G mobile remains the primary means of access to voice and data services for most First Nations residents in Wilcannia. During our visits in 2022 and 2023, we heard numerous reports from community residents of frustrations about limited or unreliable mobile reception with patchy coverage across town and poor signal penetration inside houses. While there had been some improvements to the mobile service, we still heard similar frustrations during our 2024.

In 2024, there were still references to the Cell on Wheels temporary mobile service that had been brought to Wilcannia during the 2021 COVID-19 outbreak to support the influx of emergency service providers.

- + *During COVID they brought a mobile service out here that gave the entire town good coverage. But once COVID [moved on] so did the service and we're back to ... slow internet, can't download anything, can't go into anything [and] you've got to sit in a certain [location] – and we shouldn't have to. (Monica Kerwin Bobbi Harris Shalarna Thorpe, Community Co-researchers, 2024)*

However, there had been recent upgrades to the 4G mobile services. We undertook some mobile speed tests around the community, which found that speeds have increased significantly since 2022. The strongest signals were near the 4G small cell towers at the hospital and at the Telstra exchange by the oval. Several interviewees reported improved signal penetration in the community.

- + *"It's very hit and miss, although there is a [small] cell at the hospital ... it's only 4G, but it does well. Compared to what we had five years ago, it definitely has improved services in that area." (Greg Hill, Central Darling Shire, 2024)*

However, there was still variability in the signal strength in different parts of the community, with low signal in the centre of town near the post office and in the Mallee, where people reported still having to go outside to make calls.

- + *"We're in the 21st century [and] still have not got proper mobile coverage. Our towers are too far out of town. If you come in the radius of that tower, you will get good service but if you don't, you're going to miss out." (Monica Kerwin, Bobbi Harris, and Shalarna Thorpe, Co-researchers, 2024)*
- + *"They have put towers in but I don't think they're actually within range. To be honest I don't even think they put any thought into where they were going to put it." (Robert Clayton, Wilcannia River Radio, 2024)*

We have heard repeated calls for expanded coverage within the town to address dead spots in coverage and improve penetration inside houses, with several interviewees urging that an additional tower was needed.

Some residents and agencies reported still having to go outside their buildings or to particular locations to get adequate mobile coverage, making some emergency and on-call services unreliable. Some households had installed mobile boosters to improve the reception, as well as agencies in older sandstone buildings.



Figure 12: The mobile signal is still weak near the centre of town and in residential areas

- + *"Our offices are sandstone buildings so we have to put up a signal booster [to get signal] inside the building." (Robert Clayton, as above, 2023)*

The 5G mobile service does not reach Wilcannia

During our 2024 visit, upgrades were underway to the Telstra 4G mobile service in preparation for the 3G switch-off (Note: This was postponed to October 2024 due to high number of 3G devices still in use).

The Netallie Trig tower had recently been upgraded to 5G, however in Wilcannia 11km from the tower only the 4G signal was showing up on phones. Similarly, there was no sign of the 5G reception in Wilcannia from the MacCullochs Range tower, 46 km south-east of Wilcannia.

- + *"We have got 5G out here now. But it's not actually in town yet. It's still about 5, 10 or 15kms out [that] you get 5G. As soon as you come into town, you're straight back to 4G. They have put [upgraded the towers to 5G but] that's still not reaching into town." (Robert Clayton, Wilcannia River Radio, 2024)*

OneWiFi tower funded to improve mobile competition but yet to deliver

Residents remain keen to have alternate mobile services available in Wilcannia to provide competition as well as ensure mobile access by tourists or visitors with non-Telstra phones.

- + *"Telstra don't have competition here. We used to have Optus but they left and now we've only got Telstra. We want other options." (Monica Kerwin, Wilcannia resident, 2023)*

With talk of new funding for a mobile service, Residents were hopeful that Optus was returning to town and would provide an alternative mobile service in Wilcannia.

- + *"Optus is [coming], which is good because we deserve to have [the] right to choose whatever suits our needs, [and] affordability as well." (Brendon Adams, Aboriginal Community Liaison Officer, 2024)*

However, the planned service was not actually an Optus tower as rumoured. In February 2023, NSW Government had announced that more than 800 homes and businesses in Brewarrina and Wilcannia would benefit from the NSW Government's \$5.5 million agreement with OneWiFi and Pivotal. The funding was to install two new mobile towers in Brewarrina and Wilcannia by late 2023 enabling multi-carrier 4G and 5G mobile services to an area of 1,350 square kilometres, a pilot for network infrastructure across regional NSW.¹

The new OneWiFi tower had been installed in Wilcannia by our 2024 visit, but there was no mobile service being provided at that time. While a Pivotal 4G/5G mobile service is planned for the tower, this was yet to be activated at time of writing this report (April 2025).

Moreover, Wilcannia residents are disappointed this investment had not delivered long-awaited improvements in Telstra coverage or an Optus service. The Pivotal services will require a new SIM which is not usable on other networks in the region, limiting its appeal to consumers.

Central Darling Shire has long urged competition by an alternate provider in regional NSW, however outlined the need for broad regional coverage to get uptake.

- + *"Until Optus or any other carrier gets a firm foothold into the region, it's not going to be patronised that well. But I suppose they have to start somewhere and start building up the services right across the whole far west." (Greg Hill, Central Darling Shire, 2024)*



Figure 13: The new OneWiFi neutral host tower in Wilcannia

NSW Government's 'neutral host' model, planned for over 50 sites across regional NSW, is intended to drive competition and expanded coverage. However, initial trials are yet to deliver the intended outcomes due to a lack of engagement by Mobile Network Operators with the model to date.

Demand for improved services across the Central Darling region

Central Darling Shire acknowledged the recent upgrades but said that more is needed to improve mobile services throughout the region, especially on connecting roads.

- + *"When you drive to Broken Hill, once you get out of Wilcannia, you've lost [signal] and you're not going to pick it up again until ... 10k's into Broken Hill. So if you break down on the side of the road in between, you're [in trouble]." (Greg Hill, Central Darling Shire, 2024)*

Others outlined the need for communications for safety and emergency response along outback roads.

¹ nsw.gov.au/departments-and-agencies/departments-of-regional-nsw/news-updates/mobile-boost-for-brewarrina-and-wilcannia#



"[If you] drive from here to Cobar, you break down, you've got no phone signal. You're stuffed unless [a] good Samaritan [pulls] over and gives you a hand ... We had an incident out here before Christmas, a very young fellow lost his life on a motorbike. Of course we've got no phone reception [so the] ambulance got there too late."

- Anthony Shoveller, Manager Cooee Café, 2023

Very few First Nations households have home internet connection

81% of survey respondents had no form of fixed internet in 2024, down from 92% in 2022. Of the 19% with household internet, 10% had an ADSL connection, 3% had a NBN Sky Muster satellite service and 3% had a Starlink satellite service (3% type not known).

While fixed household broadband uptake had increased by 11% since 2022, it is still relatively low at 19% compared with 88% of households nationally (ADII, 2023). The low uptake was due to several factors, including preference for individual mobile services, lack of pre-paid broadband options, a requisite for many low-income households, and low data allowances on existing ADSL and NBN Sky Muster plans to meet household needs.

ADSL services were described as slow and unreliable

Several agencies in Wilcannia are still reliant on copper-delivered ADSL services for internet access, which was described as more reliable indoors than 4G, however slow and unreliable.

- + "I don't know what the problem is because two [or three] houses up the road, it's reasonable according to a person who lives there. But here it just drops out, won't connect ... it can be appalling. Some days [it is working], other days when I really need to be online, it can cause a lot of problems." (Jennifer Thwaites, Wilcannia Local Aboriginal Land Council, 2024)
- + "The hardest part [of my job is] trying to work on the computers [because the ADSL] is very slow ... that's a big problem I have." (Anthony Schembri, REDI.E/Centrelink, 2023)

However, since the Centrelink agency relocated to the new REDI.E office in early 2025, we heard the ADSL service has improved. This may be due to improved internal network cabling, which can be a cause of issues in older buildings. We also heard that ADSL services have been upgraded to meet increased demand.

As outlined above, 10% of those surveyed in 2024 had ADSL broadband services at home. In 2022 and 2023 we heard numerous accounts of ADSL services not meeting household needs.

- + "You've got families, there's four or five in the house ... Dad's on the internet, Mum's on [and the kids also] want to get on it ... 'Dad can you get off the internet because I need to [do homework].' " (Anthony Schembri, as above)
- + "[At] my daughter's house, she's got one of them smart TVs ... I can't go on my phone while the kids are on the TV and my husband is on his phone, that's three gadgets open." (Monica Kerwin, Wilcannia resident, 2023)

While Wilcannia is currently zoned by NBN as Sky Muster delivery, however there are plans for transition of regional towns in NSW to NBN fixed wireless over the coming years under the NSW Government Gig State funding program.² The timeline for this transition for Wilcannia is not publicly available but is likely to be in the next 2-3 years.

There is rapid uptake of Starlink satellite services but low First Nation household use

During our 2024 visit, we found a significant increase in the uptake of Starlink Low Earth Orbit (LEO) satellite services by local agencies, as well as staff from the Shire, police, school, clinic and local businesses. Starlink offers advantages over existing services in Wilcannia of being high-speed, low latency and unlimited data.

Central Darling Shire installed Starlink in staff houses in 2023, with positive feedback.

- ✦ *"[We've put] Starlink on staff accommodation [and] the Caravan Park [to provide access for] our staff and the tenants or occupancies we get in the Caravan Park ... What I'm hearing is very good. A lot better than Sky Muster ... easy to install and the quality [and] download speed, upload speeds are very good." (Greg Hill, CEO, Central Darling Shire, 2023)*

Maari Ma Health staff described a significant improvement in the quality of videoconferencing and access to online systems since changing over to Starlink in early 2024. The Wilcannia Café now utilises Starlink for its consistent service and dependability in diverse weather situations, fulfilling business and customer requirements.

- ✦ *"We went straight to Starlink because we know that it works out in regional areas. [It] never goes out, not even if it's pouring down rain. The customers that come in to use the internet, they've got Wi-Fi here, the television runs on Wi-Fi, the till runs on Wi-Fi, the EFTPOS runs on Wi-Fi, everything and anything that you need." (Shona Cook, Wilcannia Café, 2024)*



Figure 14: Starlink dishes are becoming more common

However, we heard of only two First Nations households with a Starlink service in 2024, with the cost of a Starlink service described as prohibitive at \$139/month plus up-front equipment costs.

- ✦ *"Mainly all the Shire crew [and] workers, they've got Starlink at their homes. But not too many locals have got it due to how expensive it is. [We paid] \$300 for the hardware, but usually it's about \$500, \$600 just for the hardware. Then another \$139 a month." (Robert Clayton, Wilcannia River Radio, 2024)*

Those residents who were using Starlink described dramatically improved speed and reliability.

- ✦ *"Now that we've got Starlink I can send massive files within two minutes ... It's that fast and that much more reliable. We've tested it even in the storms, it still worked really good ... My wife and kids just love it. But if there was a cheaper way where we could still get the same speeds, we'd definitely look at that." (Robert Clayton, WRR, 2024)*

The high monthly cost of Starlink is inadvertently increasing the local digital divide by providing a high quality service to those who can afford it, leaving low-income households with limited options of pre-paid

² <https://www.itnews.com.au/news/nsw-gov-targets-sky-muster-satellite-users-with-100m-gig-state-upgrade-577493>

mobile or ADSL service with low speeds and high data rates. To help address this inequity, there was a suggestion of a trial using Starlink services networked to clusters of residential housing, with a cost-sharing arrangement.

- + “[Maybe a Starlink service could be shared to a] group of flats [or houses] and they just charge for the usage for people that are using it.” (Anthony Schembri, REDI.E / Centrelink, 2023)

In late 2023, NBN introduced the Sky Muster Plus Premium service, providing speeds up to 100 Mbps and unlimited download, for about \$99 per month. This is more affordable than Starlink, however latency may still be an issue for gaming and some cloud-based services. We found a lack of awareness of the new product, even among existing Sky Muster customers, with a need for better promotion by retail service providers.

Mobile and power outages have a significant impact, with greater resilience needed

With primary reliance on mobile services by First Nations residents, outages create safety risks with lack of access to contacting emergency services if needed.

While there were less reports of mobile outages in 2024 than previous years, we heard reports of power outages affecting fixed internet and mobile services. The power supply for Wilcannia, along with other small communities such as Menindee, comes via power lines from Broken Hill, with no backup power generation in Wilcannia.

- + “A couple of them were lightning strikes but [the] power outages ... usually come from the Broken Hill direction out this way. We did have one that lasted over 24 hours since I’ve been here where we had no telecommunications.” (Elizabeth Durose, Maari Ma Health, 2024)

In January 2023, lightning strike damage to a power pole resulted in a community-wide power outage for 2–3 days. As well as having no mobile and communications services, households had no cooling or fridges, with food having to be thrown out.

- + “We need to fix up the problem of electricity. You can have broadband but if you don’t have power, you don’t have anything.” (Monica Kerwin, Wilcannia, 2023)

Following our visit, there were media reports of ongoing power outages in Broken Hill, Wilcannia and other sites in the region for about two weeks following a severe storm which damaged high voltage powerlines on 17th October.³ This also led to disruptions to mobile and fixed line services in Wilcannia, including emergency calls⁴. With communications services dependent on reliable power supply, this event highlighted the need for communications resilience in the region, including longer life batteries and redundancy systems to ensure continuity of communications during times of power outages or natural disasters.



Figure 15: Storm clouds near Wilcannia

³ <https://www.centraldarwin.nsw.gov.au/News-articles/Latest-information-on-Power-Outage>

⁴ <https://arr.news/2024/11/06/power-outage-the-premier-chris-minns-came-and-listened-and-the-minister-for-energy-penny-sharpe/>

Access to IT devices, Wi-Fi or shared facilities

Public Wi-Fi access has increased since 2022

There is basic public Wi-Fi available in Wilcannia. A free full-time Wi-Fi service has been available from the Centrelink office for about five years. The Wings Drop-in Centre, run by Maari Ma health, has also provided public access Wi-Fi for for about five years, however this was described as very slow due to running off ADSL connectivity shared with the office network. There were plans for the internet service to be upgraded (possibly to Starlink) to improve Wi-Fi speed and to separate public access from the workplace network.

Prior to our 2023 visit, NBN had recently installed a public Wi-Fi hotspot at the newly refurbished REDI.E office in Reid Street under its Strengthening Telecommunications Against Natural Disasters (STAND) program (available 9am-9pm daily). This hotspot was being well used, with young people regularly gathering in the adjacent park to access the free Wi-Fi. However, there were concerns raised that public Wi-Fi access is only available outside.



Figure 16: Public Wi-Fi at REDI.E office

- + *"Wi-Fi is on. But you have to sit outside in 43 degrees to use it." (Jenelle King, Wilcannia Safe House, 2023)*
- + *"No one wants to come down and sit in the hot park all day trying to get access to internet to send emails or catch up with family online and that. It makes it a bit hard." (Robert Clayton, Wilcannia Site Manager, REDI.E, 2023)*

Some other agencies share Wi-Fi after hours, however elders expressed concern about young people being on streets late at night to access Wi-Fi. The 9.00pm switch-off of the REDI.E hotspot is intended to ensure young people do not stay up late and it does not affect school attendance.

There was a suggestion of Wi-Fi hotspots on light poles close to residential areas.

- + *"[In Newcastle, NSW], they actually have free Wi-Fi poles, like street lights, up and down the streets so you can sit under them. They have charging ports where you can charge your phone and sit there and use the free Wi-Fi ... Most people come and sit down at the corner for free Wi-Fi to use their phones but if they had poles like they have in Newcastle [with] a bright streetlight where they feel safe, they can probably sit there with their phone and connect with family." (Monica Kerwin, Bobbi Harris, and Shalarna Thorpe, Community Co-researchers, 2024)*

The Shire acknowledged the need for free Wi-Fi services to be provided in the Mallee and Mission residential areas where mobile services are very patchy and limited.



"[We need] free Wi-Fi for our community especially [where] the social housing is, the Mallee and the Mission in those areas, because it's just affordability, [if they don't have mobile credit] they can still do the basic services, Centrelink and all those types of things. If kids can do schoolwork, do research and that type of stuff, that's important."

- Greg Hill, CEO, Central Darling Shire, 2023

In the 2024 Budget, the Australian Government allocated \$40million towards community-wide Wi-Fi in First Nations communities. The first round of \$20million resulted in NBN installing community-wide Wi-Fi

networks in 23 remote communities. The remaining \$20million is being distributed through a competitive First Nations Community Wi-Fi Program⁵, with initial applications due by March 2025.

There are still limited community access computer facilities

There is very low household computer ownership in Wilcannia, with only 24% of survey respondents saying they used a laptop or computer for internet access in 2024.

- ✦ *"The majority of people don't have an iPad [or] computer at home ... The schools may give them to the kids [but] older people don't have them so they're doing everything on their phones. [The screens] are small [and] you can't always get access to what you need." (Elizabeth Durose, Registered Nurse-Clinical Manager, Maari Ma Health, 2024)*

With no library in Wilcannia, there are very few public access computers. The main point of access in Wilcannia is the Centrelink agency (operated by REDI.E) which has two computers in the foyer. While these are primarily intended for use for Centrelink and MyGov services, they can also be used for banking or other purposes. In addition, REDI.E had purchased three laptops for community use in 2024.

- ✦ *"We've just got three new laptops [for] the general public to use. [It] gives them standard internet access [to] browse the internet, whether it's shopping or whatever. [These can be used] in the conference room [if] they need a bit more privacy." (Darrin Atkins, REDI.E, 2024)*

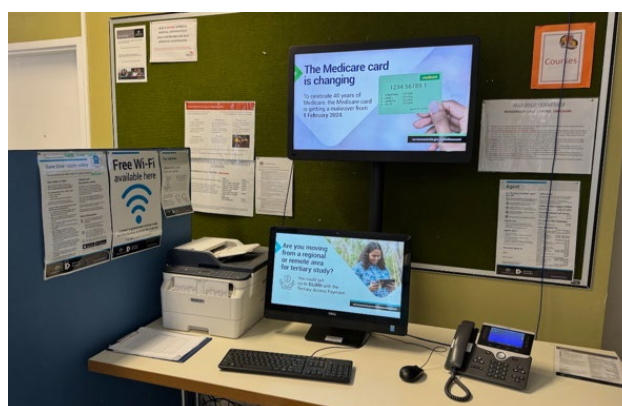


Figure 17: Community access computer and Wi-Fi at Centrelink agency

The Wings Drop-in Centre had also got three second-hand computers for youth and community access. However, we still heard demand for more community access computers in other locations, with some suggesting that the Shire should provide a digital library facility.

- ✦ *I think a community hub with computer access would be really helpful because ... I often get [requests] to use my laptop [to] create pamphlets for funerals [or] applying for things, writing letters. People don't have the technology at home. Because we don't have a public library, [a] little computer hub within one of the organisations would be really beneficial [and could be a space for study or videoconferencing]."* (Sarah Donnelly, Wilcannia resident, 2023)

We have heard plans to provide more public access computers. REDI.E have allocated a dedicated space for access computers in their newly refurbished offices in Reid Street where the Centrelink office will be relocated. Other internet access spaces had been raised over the years but had not yet come to fruition.

⁵ <https://www.grants.gov.au/Go/Show?GoUuid=6737aae4-73cf-4bd2-b6d9-18ab814afd54>

Service delivery and use of online services

Local agencies spoke of need for reliable connectivity to use online communications

Unreliable ADSL fixed line services undercut the benefits of digital technologies such as remote engagement in meetings, accessing services, home schooling, work, and business. Being 200km from the regional centre of Broken Hill, all agencies in the community spoke of the need for improved communications for work purposes, employment opportunities, business development, tourism, use by visiting agencies, entertainment and other daily use.

The main government facilities have Telstra fibre installed to the premises (Shire, police, hospital, school), which provides a fast and reliable, albeit costly, business-grade service. However, those smaller agencies still reliant on ADSL or Sky Muster services raised ongoing issues of speed and reliability impacting their day-to-day business operations, including videoconferencing, file transfer, telehealth and connecting to remote servers or cloud-based databases.

While the Telstra fibre optic backhaul is reportedly in the process of being upgraded in 2025 (Source: REDI.E Site Manager, April 2025), the limitation on capacity is most likely within the local exchange and copper network.

By 2024, several agencies previously on ADSL or Sky Muster services had shifted to Starlink as a primary broadband service, providing an affordable high-speed, low latency service that could be used by multiple users for all day to day operations.



Figure 18: The fibre optic network from Broken Hill is reportedly being upgraded in 2025

Residents' use of online services

Residents' use of internet banking and online services such as Centrelink and MyGov has increased over the three years. Our 2024 survey found that 83% of respondents access government services online in the last 6 months compared with 75% in 2022. However, levels of internet banking had decreased from 97% in 2022 to 85% in 2024⁶.

While some residents are still reliant on support services such as the REDI.E Centrelink agency, demand for support has reduced since 2022.

- + "[Most people are] pretty good at [using Centrelink online and MyGov] now and starting to do it on their own. But when they have trouble [we] sit with them [to help them with] their MyGov." (Anthony Schembri, REDI.E / Centrelink, 2023)

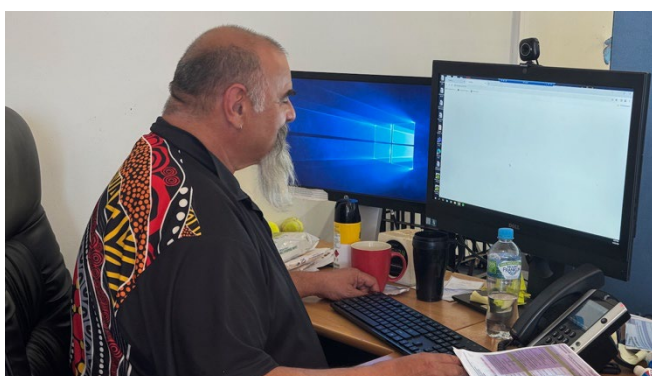


Figure 19: Employment Services Officer Anthony Schembri at work in the Centrelink agency

⁶ Note: the 2022 figure may have been inaccurate due to some people including ATM or EFTPOS use.

Centrelink agency staff also assist clients to set up email addresses or source identification certificates needed to set up online services.

- ✦ “[We help] get them an email and make sure they've got their birth certificates [or] ID ... Medicare, license if you've got one ... all that stuff [you need to] open MyGov.”
(Anthony Schembri, as above)

The Centrelink agency also holds identification records on behalf of clients, such as birth certificate copies, tax file numbers and other documents, in case people lose them.

Limited English literacy can also be an obstacle to using online services and forms. Maari Ma Health staff often help clients with low literacy to complete online forms for NDIS, Centrelink or other support services.



Figure 20: The Wilcannia Post office provides NSW government services

- ✦ “There's a fair few people that probably can't read and write particularly well [so we] do a [lot] of that work to help people out. [And] the Centrelink agent would do a lot of that [support] as well.” (Jason Gowin, Registered Nurse, Maari Ma Health, 2023)

The post office is now operating as a Service NSW agency again, providing licensing and other State government services. This function was previously provided by a roving Service NSW bus, which visits small regional towns across NSW without a full-time service centre.

Health services are using telehealth and MyHealth records, but challenges remain

Most patient records are now held on online database systems. However, different health agencies use different systems, with ongoing challenges in sharing of patient information between the mainstream health services and the Aboriginal community-controlled health organisation Maari Ma Health. The shift to a single MyHealth records system has improved access to patient records, but challenges remain.

- ✦ “The Flying Doctor comes out three days a week [but] now that we're in separate buildings, we get no feedback on what happened with our patients [unless we] ask for it ourselves. We get discharge summaries from hospitals [but] the information trickles through. Having MyHealth record has helped. [For] example, we had a patient come through who [was] transferred to a tertiary hospital in a capital city. He'd been back a week and we hadn't been sent his discharge summaries [but] we were able to [get them from] MyHealth record.” (Elizabeth Durose, Clinical Manager, Maari Ma Health, 2024)

The MyHealth record system was initially set up as an opt-in system, which apparently had low sign-up by First Nations patients. This was later revised to an opt-out model.

- ✦ “Now that it's more of an opt out system I think that's much better. As long as the doctors and [hospital staff ensure] the information is being uploaded and that they have the correct permissions from the people to upload what needs to be there.” (Elizabeth Durose, as above, 2024)

Maari Ma Health arranges regular visits by specialists including podiatrists, optometrists, endocrinologists, dentists and so on. However, telehealth is being increasingly used to reduce the need for specialists to travel to remote communities or towns. Yet some clients find telehealth confronting, especially if they do not have an existing relationship with the specialist.



Figure 21: The New Maari Ma Health facility next door to Wilcannia Hospital, opened in 2023

- + *"A psychiatrist [who] has been coming around here for years [does a lot of telehealth consults] and people are comfortable to do that. [Most people won't do telehealth] with a person that they don't know. And [a specialist] sitting in a tertiary hospital in Sydney, [will struggle] to understand the context of that person's life [in] Wilcannia, [so we] have health workers with that person [to help] advocate or describe the situation a bit better." (Jason Gowin, Registered Nurse, Maari Ma Health, 2023)*

Maari Ma Health staff said that improved design of tele-health facilities, with input from First Nations clients, would improve usage.

- + *"We are a long way from having a broad-base community understanding of telemedicine [and] telehealth [and] comfort with it. [We need to] get the end-users involved in the development and [design]. I get an older person from this community in their 70s or 80s coming in to see a doctor on a screen but, they haven't had their glasses fixed or they can't hear properly. [We need] better surround sound [and] good size screens. [A computer] in the doctor's rooms [would help] the patient sit beside the doctor or nurse and they're actually close in so they can see properly." (Elizabeth Durose, Registered Nurse-Clinical Manager, Maari Ma Health, 2024)*

An elderly person living in the aged care facility told us he would prefer to use tele-health from home, with staff support, rather than having to go to the clinic.

Reliable internet and mobile services are critical for health service delivery, but this wasn't the case at the Wilcannia hospital prior to COVID and the 4G tower being installed in 2021.

- + *"One good thing about COVID was that we ended up with really good internet coverage here, because this hospital used to be [in] a dead spot, [it] was always dropping out ... If you got a phone call on your mobile in this building, you'd have to walk out on the street [to find] a spot where your phone works. Which is pretty shameful for a hospital. [Now] it seems a whole lot better." (Jason Gowin, as above)*

Communicating with clients without mobiles can be a challenge

Service providers use a range of communications technology for engaging with First Nations clients and stakeholders, including mobile, email, text and Facebook, depending on the client's means of access.

Contacting clients can be difficult if the client doesn't have a consistent phone number, can't afford credit, or has limited digital literacy. This can impact on providers' ability to deliver care.

- + *"To contact the patients [for] an appointment [is] still done by a handwritten note in an envelope delivered to the house ... because a lot of the people either don't have a mobile phone that we can SMS, or they don't have funds on their phone [or] they've*

given their phone to someone else or lost their phone. They don't tend to port their [number] when they get a new phone; they just get the new phone with a new SIM and [number]." (Elizabeth Durose, Registered Nurse-Clinical Manager, Maari Ma Health, 2024)

- ✦ *"Another issue is that people's phones are all sketchy and so that's also a barrier for people getting good follow-up care. [If they] end up in hospital [and need follow-up] and that's their phone number on record ... the hospital will say 'we tried ringing that person three times and there was no answer so we gave up'." (Jason Gowin, Registered Nurse, Maari Ma Health, 2023)*

There can also be privacy issues in contacting clients when phones are shared by couples or between family members.

- ✦ *"If I ring [up I] often don't get the person [I rang, so] I don't tend to leave messages on people's phones. [So we don't send a message] to say that your sexual health check is due [because] somebody else is probably going to see it." (Jason Gowin, as above)*

Online learning is used extensively by the school but with mixed experience

During COVID-19 restrictions in 2021, schools had to quickly pivot to online schooling. Like many remote schools, Wilcannia Central School (WCS) struggled due to limited home internet or computers, along with low digital literacy. As outlined in our 2022 report, teachers hand-delivered workbooks, broadcast lessons on radio and tried hard to keep students engaged.

- ✦ *"[With] COVID hitting, they were doing home schooling as well. So ... the parents can get online and the students can get on devices and stuff. [The students] do work online and [you need] to have data for that to work for your kids ... especially being out here." (Monica Kerwin, Bobbi Harris, and Shalarna Thorpe, Community Co-researchers, 2024)*

Fortunately, WCS has reliable broadband via a fibre optic connection and was already quite experienced in online learning delivery. WCS is part of the Wilvandee Access Program with Ivanhoe and Merindee schools, which uses 'ICT for Connected Learning Spaces' to deliver Year 11 and 12 subjects.

- ✦ *"Students [are] able to choose subjects that they want to have. [These subjects are delivered by teachers spread across] the three schools ... Our Year 11 and 12 students were already using that sort of video conferencing style of class before COVID interrupted it and we had to move to technology." (Sarah Donnelly, Wilcannia resident, 2023)*

Former Year 12 students said they found online learning got easier over time.

- ✦ *"At first it was a little frustrating because you are not face to face with the teacher and having to go through the video conference was a struggle for me. [We sometimes had a] communication barrier [with some teachers with strong accents but] others were really good. I just kind of toughed it up and got through it." (Katelyn Whyman, Wilcannia resident, co-researcher, 2023)*

Lack of local technical support increases cost and repair times

Several interviewees raised the challenge of getting technical or IT support in Wilcannia.

- ✦ *"Demand for IT skills [is] a big issue ... There's no one here in any of our towns who has got an IT background [and] we don't even employ IT specialists here anymore."*

We've gone to all remote services ... Basically everyone's self-taught how to repair things." (Greg Hill, CEO, Central Darling Shire, 2023)

With no local technicians, there are high costs and time delays for technicians coming from Broken Hill or Dubbo. There was discussion around training up local people to provide first-in technical and IT support.

- + *"We've got trouble with our internet and phonelines [but the techs are busy so we've waited] two weeks now and it still hasn't gotten done ... If we could train [local people to be IT techs] that would be so much better, and have all of the [tools and spares] they need here." (Robert Clayton, Wilcannia Site Manager, REDI.E, 2023)*

Technicians often don't turn up when scheduled, causing frustration. Residents also described challenges in communicating with service providers or technicians remotely, which can deter customers from seeking support.

- + *"We spend a long time on the phone [to internet providers but] sometimes there is a communication breakdown [because technicians speak] almost another language [so] people just shut down [and] don't want to deal with it ... It's a shame they don't have an Aboriginal worker that could [help address that] communication breakdown." (Sarah Donnelly, Wilcannia resident, 2023)*



Figure 22: Technician doing maintenance on the Telstra fixed line network

There was a call for IT technical training to develop skills of local technicians.

- + *"[We need] more community training [to] train people up to be IT specialists. [Instead of IT workers] coming in from everywhere, [they should] train our people up ... There's nobody here qualified. [And the] technology's moving [so they need to] follow it up." (Monica Kerwin, Bobbi Harris, and Shalarna Thorpe, Community Co-researchers, 2024)*

Access to media and news services

Local media and information channels

Effective modes of communication are critical to ensure residents are aware of local news or activities. Several organisations use Facebook to communicate their activities, as it is a primary means of communication for many residents. These include REDI.E, Central Darling Shire, Wilcannia Central School and Maari Ma Health. However, some interviewees referred to high levels of misinformation spread via social media.

Other local channels used for sharing relevant and up-to-date news and information in Wilcannia include Wilcannia River Radio and the now-monthly newspaper Wilcannia News.

Wilcannia River Radio provides locally relevant and trusted news and information

Many participants highlighted how Wilcannia River Radio provides locally relevant and trusted news and information services.

- + *"It's the only radio station we listen to here. And they [really] partner with local organisations. I can drop down there if I need to say something and ... jump on air, have a chat." (Sarah Donnelly, Wilcannia, 2022)*

Local businesses also use Wilcannia River Radio to promote their services locally.

- + *"We use the radio station a fair bit [to promote the café and] hairdresser that comes up once a month." (Anthony Shoveller, Manager, Cooee Café, 2023)*

Wilcannia River Radio played an important role during the COVID-19 outbreak in 2021 with up-to-date information from local health agencies, delivery of home schooling lessons via radio (due to lack of home internet access), and to counter misinformation spread over social media.

- + *"We did a lot of stuff through home learning and we've had teachers going there every day doing story time, delivering stories. You know, it was our way of thinking about what people who did have home learning [but no] internet connectivity ... how we could do that over the radio because we didn't have the other. And then, in the same way, using that newspaper, that old school media of being able to put photos in there and show what was going on." (Sarah Donnelly, Wilcannia, 2022)*

Wilcannia River Radio is expanding its coverage and programming, with training in radio broadcasting, digital photography, video production, social media and news gathering.

- + *"We're going to be working with schools doing work-based traineeships with some of the kids. Because we want to get them not just into radio but into media itself, where it's not just broadcasting on radio and playing music and getting information ... but also photography, content-making and anything that people want to get into. [Beyond being] a radio station where it's playing music and broadcasting online ... we want to open it up to where the kids can get into whatever they want to get into." (Robert Clayton, Wilcannia River Radio, 2024)*



Figure 23: Robert Clayton broadcasting on Wilcannia River Radio station, 2024

The new Baaka Cultural Centre will promote local arts, culture and archiving

Construction is nearing completion on the new \$9.5 million Baaka Cultural Centre, with a planned launch by mid 2025. According to the Baaka website:⁷

"The purpose of the centre is to preserve and raise awareness of the rich culture and traditions of the Barkintji people of the middle and lower Darling. It will be a keeping place for Barkintji artefacts and their oral history. A place for past, present and emerging artists to create and display their works. It will include a 'language nest' with the intent to preserve the local dialect which is over 60,000 years old. Stories from our elders will also be recorded and further engage the youth in their culture."

⁷ <https://www.baaka.org.au/>

The Cultural Centre provides an opportunity to present locally produced media content and archives showcasing Baarkandji language, culture and oral histories from elders. We heard calls for more training and support for young people to produce content and be involved in the Centre's daily operations and curation.

- + *[We want to] start giving [young people an] opportunity to express themselves within the community. It's not just about young guys creating content. We want to give them that voice [as our youth]. That's where the Baaka Centre [can] give them the confidence [to help run] things and [have] their say within it, not just displaying their artwork." (Robert Clayton, Wilcannia River Radio, 2024)*



Figure 24: Baaka Cultural Centre frontage (artist image)
(Source: <https://kaunitzyeung.com/project/baaka-cultural-centre>)

There are also plans by Central Darling Shire for increasing cultural tourism with interactive displays highlighting sites of cultural and historical significance in the town.

Affordability

Affordability is a growing barrier to digital inclusion in Wilcannia

With most residents on low incomes, the affordability of internet access and digital devices are a serious concern. In 2024, 17% of survey respondents said they often or always cut back on essential household costs to afford internet, compared with 8% in 2023, within a further 23% sometimes cutting back. 51% of respondents said they compromise on speed and or quality to prioritise affordability, up from 45% in 2023.

As outlined in the 2023 Wilcannia Update Report, the ADII Affordability scores based on our 2022 surveys found specific demographic groups have relatively low scores for Affordability. These include elderly, with those in the 55–64 year age group scoring 83.3 points compared with 91.4 for 18–34 age group, women (87.6 compared with 95.2 for men) and unemployed people (88.2 compared with 93.3 for employed). Special attention needs to be given to these groups to avoid the compounding factor of affordability with lower levels of internet access and digital ability, potentially increasing the local digital divide.

Interviewees on low income said they had to be selective of applications to manage data costs.

- + *"At the moment all I can afford is \$30 [each fortnight] because I'm on a Carer's [pension. I don't use many apps because] of how much data [they use] so I can't stay on the internet on my phone." (Monica Kerwin, Wilcannia resident, 2023)*

The lack of options for more affordable internet services was raised by some residents.

- + *"[There are] telecommunication services in Broken Hill that offer you all these great deals [but those options are not available in] Wilcannia and the smaller regional towns ... Low income earners [like me can't] afford a thousand dollar booster on their roof [or a post-paid] service." (Rossi Morris, Wilcannia resident, 2023)*

Increased demand for data adds to household expenses

Over three visits, we heard about high costs of pre-paid mobile data impacting on people's ability to access online services, use streaming services, undertake home schooling, and conduct business or work needs.

By 2024, the cost of a typical Telstra prepaid recharge had increased from \$30 to \$35, with the data allowance increasing from 10GB to 15GB. This resulted in increased average household expenditure on pre-paid mobile from \$136 in 2023 to \$198 in 2024 (no data for 2022). The price increased again in July 2024 to \$39.

With increased data usage for media streaming services, gaming, or other data-hungry applications, and multiple family members using devices, household costs for data can add up quickly.

- + *"There is a lot of streaming of movies now [especially] during summer when it's hot, and you can't get out and do anything. [And] a lot of people stream music ... More and more now with technology, everything's streamed. So you have to have that connectivity to access those services."* (Greg Hill, CEO, Central Darling Shire, 2023)

Our co-researchers reflected that many survey respondents expressed concern over rising pre-paid data costs.⁸

- + *"Heaps of people have been saying the cost of the data [is a major problem]. It's gone up but their data's still not enough and they've had to stop other things like shopping or bills just so they can afford data out here ... We have a lot of sick people [here] and they need that connection [for] health services and stuff."* (Monica Kerwin, Bobbi Harris and Shalarna Thorpe, Community Co-researchers, 2024)

However, we found that very few First Nations residents have post-paid mobile or home internet, with the closest Telstra shop to purchase a plan in Broken Hill. There is limited awareness about the difference in data costs between pre-paid and post-paid services, or that post-paid plans are now month-by-month with no excess data fees (speed slows down once cap reached).

Centrelink agency staff said that if clients were to set up a post-paid mobile or internet service, they could arrange for payments to be deducted from their Centrelink payments.

- + *"Getting the money taken out of their payments, like \$30 a fortnight, they wouldn't miss it. And they're paying for something that they need. [We could help arrange regular bill] payment."* (Anthony Schembri, REDIE / Centrelink, 2023)

Cost of mobile phone replacement is leading to higher levels of device sharing

Post Office staff reported that many customers replace their phones multiple times a year, due to phone or screen damage, theft or giving away to family members. Some residents we spoke to had replaced their mobile phone three to four times in the last year.

- + *"A lot of these mob ... can't afford a phone let alone constantly ... doing recharges. It's dear enough to live here ... Trying to survive and stay in contact with people is a struggle for a lot of families, [especially] if you got five children and they all got [a mobile phone]."* (Monica Kerwin Bobbi Harris Shalarna Thorpe, Community Co-researcher, 2024)

⁸ Most residents paid approximately \$3/GB on \$30 prepaid cards compared with under \$1/GB for most post-paid services. Telstra pre-paid data rate were changed in July 2023 to \$35 for 15GB.

The cost of mobile devices at the Wilcannia Post Office in 2023 starts at \$59 (Telstra Lite 3) for a basic voice-only phone, with smart phones ranging from \$109 (Telstra Smart 4) up to \$379 (Vivo 5G). The post office sells about 10–12 phones a week, with popular models being Telstra smart phones (\$150–\$200 range), and young people preferring Oppo or Samsung phones at about \$300–\$350.

However, the cost of phone replacement is being weighed against other household expenses with increased cost of living. Our survey has found the average number of devices has decreased from 3.4 per household in 2022 to 2.6 in 2024. This suggests that rather than replacement of individual devices, there is a higher level of device sharing within families.

Digital Ability

Digital ability levels

With services increasingly moving online, digital literacy is becoming a necessary life skill. Our 2022 surveys found relatively high levels of digital ability in Wilcannia, with average ADII digital ability score of 63.9 compared to the average 45.7 across all remote communities visited.

However, there are specific demographic groups that had significantly lower digital skills, particularly the elderly (34.6 for 55–64 age group, 0 for 75+), those who did not complete Year 10 at high school (28.2), those living with a disability (45.1), and unemployed people (54.0). These groups would benefit from targeted digital support.

Over the three years, our survey has found the level of digital ability has remained relatively high in Wilcannia compared with other remote First Nations communities. In 2024, we found an aggregate score of 20.1 out of 30 across the 6 types of skills – basic, advanced, information navigation, social communications, creative and smart technology use. This has increased slightly from 19.2 in 2022, but remains the second highest of the 12 sites visited.

There is generally good familiarity with use of online services. In 2024, most respondents were able to download and open a file (78% said 'very true' or 'mostly true'), find and install apps (78%), complete online forms (74%), use an internet browser (75%), set secure passwords (88%), connect to a Wi-Fi network (89%), and send and receive emails (78%).

However, most people are using mobile devices as their primary means of internet access, with 92% in 2024 using a mobile phone compared to 24% who also use a laptop at home and 15% who use a computer. Being mobile-only limits keyboard skills and familiarity with many computer-based applications needed for work and schooling, such as using office software.

While most survey participants have good skills in using social media, entertainment apps and online services, support is often needed by some cohorts when undertaking tasks such as accessing MyGov, doing online banking or completing a form. These are particularly elderly people, people living with disability, and those with limited education levels or written English literacy. While some basic support in the use of online services is provided at Centrelink, the post office and other agencies, there are currently limited options for general digital skills training.

Service providers reported being asked by elders for help with setting up or using online services, including mobile phone activation or adding recharge vouchers.

- + “[We help] two or three regulars [with online processes, mostly] the elders in town, {to} pay for the voucher, print it out, get the little code, type in the [numbers], and then they’re done.” (Charles Vu, Wilcannia Post Office, 2023)

Young people, who typically have high levels of digital ability, often support elders to use devices and online services.

- + *"The younger generation helps the elders in completing forms online because the elders do not have [the] capacity [to] do that ... Once again the costings and understanding [of] the internet is really something that you [need]." (Brendon Adams, Aboriginal Community Liaison Officer, 2024)*

Workforce digital training is a specific priority

With many jobs now requiring a level of digital ability to undertake common workplace activities, REDI.E have identified the need for workforce digital skills training.

- + *"A lot of stuff now is done online ... It's always scan onto your computer, then email. [Knowing] how to upload a document onto Microsoft or Google, Gmail, or anything like that, you still need to learn how to open it, attach it. [We're working] on bridging the gap with that side of it." (Robert Clayton, Wilcannia Site Manager, REDI.E, 2023)*

Centrelink staff encourage clients to do digital skills training to help in applying for jobs. The TAFE NSW campus provides basic digital training as part of vocational education courses.

- + *"They do have that digital training [as] part of the other courses. Depends on what courses they want to do and what they want to get into ... They'll get a laptop each if they have to do face-to-face [training]." (Shirley Williams, REDI.E / Centrelink, 2023)*



Figure 25: Wilcannia TAFE College

While some TAFE training is delivered online, face to face training has proven to be more effective.

- + *"[TAFE does some online training but] mainly the [trainers] come out [here. Online learning] could be hard for them because they haven't got the computer basic skills. ... They really like to work with people face-to-face." (Shirley Williams, as above)*

REDI.E had plans to set up a computer access and training room in their new office space.

- + *"We do want to set up an area [in the new REDI.E building] where we can have a few computers [and offer] free online training. [REDI staff will show people] how to write up a document, [do] layouts [or] creating a spreadsheet ... basic stuff like that can get them that one step further to the job that they want." (Robert Clayton, Wilcannia Site Manager, REDI.E, 2023)*

Social media is a key form of communications, but cyber safety is a concern

There is high use of social media platforms by Wilcannia residents, including Facebook, TikTok, and Instagram. Our 2024 survey found that 88% of respondents use social media to keep in touch with family or friends and 75% to meet new friends or reconnect with old friends online.

- + *"Social media is very big out here. It keeps everyone in the loop and connected." (Monica Kerwin, Wilcannia resident, 2023)*

However, our survey found a decline in use of social media to keep in touch with family and friends, from 95% in 2022 to 88% in 2024. Many people described stopping using Facebook due to negative online content, misinformation and potential conflict caused by social media posts. Racist and abusive online content has increased since COVID-19 and the Referendum.

- + *"During the COVID [lockdown] when everyone was locked in their homes, we tried to encourage people to stay off of Facebook [and] social medias [to avoid] constantly looking at the negative and then people start posting up stuff ... bullying people and stuff like that." (Robert Clayton, Wilcannia Site Manager, REDI.E, 2023)*

We also heard concerns about online scams, personal data protection and cyber-safety issues associated with social media use.

- + *"Cyber criminals are just keeping up to date and ahead on a lot of things. We do have [software and systems to block them] but some of these things [require] someone [local with technical] knowledge." (Darrin Atkinson, Co-Ordinator and Site Manager REDI.E, 2024)*

Wilcannia River Radio broadcasts messages about current scams and cyber-safety issues.

- + *"We do put out awareness of [scams and cyber-safety out on radio]. If you get a message [and] you don't know who sent it and it's got a link to it, don't touch it ... stuff like that, we've got ads and awareness of [online scams and] bullying." (Robert Clayton, Wilcannia Site Manager, REDI.E, 2023)*

As a result, our 2024 survey found that online security and cyber-safety awareness was reasonably high. Most respondents know how to set privacy settings (76%), check if information is trustworthy (77%), decide what personal information to share online (79%), add or remove friends or followers on social media (79%).

There is demand for digital mentors to provide IT support and awareness

The preferred model for digital training and support is for one-on-one support with a digital mentor as needed rather than doing workshops. Peer learning occurs within families, particularly by young people and those with digital skills helping others to use phones and online services. However, there were calls for funded digital mentors to provide ongoing support.

- + *"They teach our children certain things in school, [but there is] nothing to keep [the rest of us] updated with the way technology is changing. Unless somebody is connected to it and knows all about it then they will teach you." (Wilcannia Monica, Kerwin Bobbi Harris, and Shalarna Thorpe, Community Co-Researchers, 2024)*



"[We need] someone on hand here in this community that can give [help] elderly people [learn] to use the internet, because I know a lot of the elder people would not have that knowledge. [We need] someone [in Wilcannia] instead of going to Broken Hill."

- Anthony Wiltshire, Wilcannia, 2022



Figure 26: Common apps on phones

05. CONSIDERATIONS FOR LOCAL DIGITAL INCLUSION PLAN

A local Digital Inclusion Plan would enable a coordinated approach to addressing some of the challenges outlined in this report. It provides a useful tool for planning, advocacy and fundraising to improve communications services and digital inclusion in Wilcannia.

The proposed Digital Inclusion Plan below has been updated based on community input in 2023 and any progress to date, including current or planned activities. Strategies outlined are suggestions only and are not intended to be prescriptive, nor are they listed in order of priority.

Identified Issue	Possible Actions	Potential Stakeholders	Progress / Next Steps
Access			
Lack of public access IT facilities and support (currently two computers in Centrelink office for government / banking use only)	Establish an Internet Access facility with online computers, printers, scanner, videoconferencing, and a support / digital mentor role	- REDI.E - Wings Drop-in Centre (Maari Ma Health) - Post Office	REDI.E purchased three laptops for community access in new facility (April 2025) but no specific access space Wings Drop-in Centre provide computers for youth use Post Office to set up access computer
Limited public Wi-Fi access to enable affordable online service access for residents, as well as use by visiting agencies and tourists.	Establish free Public Wi-Fi in central locations (e.g. near shop). Establish Wi-Fi hotspots in residential areas (Mallee, Mission) (Notes: Existing public Wi-Fi at REDI.E / Centrelink and Wings Drop-in Centre)	- REDI.E - Wings Drop-in Centre - NBN - Central Darling Shire - Telstra - Baaka Cultural Centre	NBN Wi-Fi hotspot installed at new REDI.E office (under STAND program⁹) in 2023. Telstra planning to upgrade public phones to Wi-Fi hotspots Seek funding for Wi-Fi hotspots in residential areas Provide Wi-Fi access at shop and in new Baaka Cultural Centre
Patchy 4G coverage in centre of town Demand for booster/s to address low signal zones in town centre and residential areas	Advocate to Telstra and NSW Gov't for upgrades to 4G/5G coverage and/or boosters Apply for Mobile Black Spots program funding for expanded road coverage to Cobar and Broken Hill	- Central Darling Shire - Telstra - NSW Government	Telstra 4G/5G upgrades done on McCulloch and Netallie Trig towers with improved speeds in 2024 Coverage on road to Broken Hill now improved (REDI.E update 8/4/25) Low signal spots in town centre and residential areas in February 2024

⁹ Strengthening Telecommunications Against Natural Disasters program

Identified Issue	Possible Actions	Potential Stakeholders	Progress / Next Steps
Competition in mobile services. Demand for Optus mobile service to improve competition and enable tourist access		- NSW Government - OneWiFi - Optus	NSW Government provided \$5.5 million funding to OneWiFi and Pivotal to improve multi-carrier 4G/5G services in Brewarrina and Wilcannia ¹⁰. Pivotal service due 2025 Advocate for Optus to provide service on OneWiFi tower
ADSL service very slow / unreliable Lack of alternate fixed line broadband options	Seek upgraded NBN delivery options via terrestrial (fibre to the premises or fixed wireless)	- Central Darling Shire - NBN	Telstra ADSL upgrades undertaken 2024, reportedly improved services (Source: REDI.E update 8/4/25) NBN to upgrade Wilcannia from Sky Muster delivery to fixed wireless under NSW Government Gig State program in next 2-3 years
Need for business grade broadband services (fast, low latency, unlimited data)	Trial of Starlink satellite service for business and/or residential – including trial of sharing between premises	- Central Darling Shire - REDI.E - Local agencies/ businesses	Central Darling Shire have set up Starlink to its agencies, staff houses and Caravan Park; Maari Ma Health and most agencies / business now using Starlink
Impact of power outages on mobile & communications services, especially in emergencies	Review mobile battery duration, back-up power supply, and options for redundancy for key services. Develop power outage contingency plan	- NSW Government agencies - Emergency services - Central Darling Shire - Telstra - NBN	Starlink on CDS buildings provides redundancy. Telstra mobile upgrades undertaken to improve battery capacity. NBN Wi-Fi installed at REDI.E under STAND program
Affordability			
Primary use of pre-paid for data Limited awareness of lower data costs on mobile plans and reduced risk of bill shock	Ask to be included in Telstra Pre-paid Community Mobile Plan¹¹ rollout Display connectivity options material outlining mobile and internet plan options and costs	- REDI.E - Telstra - Post office - Wilcannia Community Grocer	Post office and store to put up information about pre-paid mobile and broadband service options and data costs

¹⁰ Source: nsw.gov.au/departments-and-agencies/departments-of-regional-nsw/news-updates/mobile-boost-for-brewarrina-and-wilcannia#

¹¹ <https://www.telstra.com.au/mobile-phones/prepaid-mobiles/prepaid-community-plan>

Identified Issue	Possible Actions	Potential Stakeholders	Progress / Next Steps
Digital Ability			
Limited IT training / support to use computers, applications, and online services	Employment of digital mentor/support roles for improving digital skills and support to access to government services	- REDI.E - DSS / Centrelink - NSW Government agencies - TAFE NSW - Wings Drop-in Centre - Wilcannia Land Council	TAFE NSW provides training in basic digital skills as part of several VET courses, with Centrelink participants encouraged to enrol
Demand for IT skills for workforce readiness and use of online services	Digital literacy and workforce readiness training workshops (e.g. MS Office, file management, search tools, email, preparing a CV, job search etc)	- Centrelink - REDI.E - TAFE / School - Yilabara Solutions	REDI.E and Yilabara (CDP provider) to arrange workforce digital skills training TAFE to provide regular digital workplace skills training
Concerns around cyber-safety issues especially on social media	Arrange cyber-safety awareness workshops (including in schools and workplaces) as well as posters and radio promos to build awareness	- REDI.E - Wilcannia River Radio - TAFE - Wilcannia Central School - ACCAN - Office of e-Safety	Wilcannia River Radio broadcast information on scams and e-safety messages The School to provide cyber-safety awareness for students.
Media production and archiving			
Demand for cultural, language and media production for Baaka Cultural Centre, cultural tourism and inter- generational knowledge sharing.	Training and support for photography, multi-media production, recording of oral histories and cultural stories. Establish multi-media recording and production facilities.	- Baaka Cultural Centre - REDI.E - Wilcannia River Radio - AFTRS - TAFE NSW - Community Media Training Organisation	Baaka Cultural Centre construction nearing completion (April 2025) REDI.E / WRR setting up new studio for local TV news/ production REDI.E / WRR to arrange photography and multi-media training for WRR staff
Archiving of locally produced content, cultural and historic content No current archive system	Setup of archiving system for multi-media content (local content, language and cultural recordings, historic content Repatriation of materials from NSW State Library, AIATSIS and other collections	- Baaka Cultural Centre - REDI.E / Wilcannia River Radio - NSW State Library - AIATSIS	Baaka Cultural Centre / REDI.E to seek advice from AIATSIS and NSW State Library re archiving systems and support

Identified Issue	Possible Actions	Potential Stakeholders	Progress / Next Steps
Other issues			
Lack of local IT and technical support to reduce maintenance costs / delays	Arrange IT technical services company to service multiple agencies in community, with IT support logging system Training program for local workers to develop basic technical and IT skills	- Central Darling Shire - REDI.E - TAFE NSW - Yilabara Solutions - Other agencies	No action to date REDI.E / Yilabara to discuss training options with TAFE



Figure 27: Bridge over Baaka (Darling River) on entry into Wilcannia

Appendix 1: Summary of Survey Results 2022-24

This section provides the full list of survey results undertaken with First Nations participants in Wilcannia from 2022-24. There may be variation to results published in the previous outcomes reports which used 'raw' survey results, prior to cleaning and weighing against ABS statistics.

Demographics	2022	2023	2024
Gender	53% female; 47% male	53% female; 47% male	53% female; 47% male
% Aboriginal respondents	100%	100%	100%
Education			
Completed year 11 or 12	24%	29%	27%
Completed year 10 or below	64%	66%	66%
Holds tertiary education qualification (certificate, diploma, degree)	12%	5%	7%
Employment			
Employed or on CDP	31% (18% of these full-time)	31% (59% of these full-time)	32% (50% of these full-time)
Unemployed	21%	35%	43%
% looked for work in past month	19%	15%	10%
Welfare			
Receives Centrelink payments	76%	72%	74%
Most common payments	Family Tax Benefit (35%), Disability Support Pension (35%)	Family Tax Benefit (24%), Disability Support Pension (24%)	JobSeeker / Youth Allowance (22%), Disability Support Pension (16%)
Housing – Live in a multi-generational or shared household	61%	37%	62%
Average number of people per household	3.9	3.9	3.8
% with long-term disability or health condition	23%	30%	20%
% speak language other than English at home	22%	6%	4%
ATSI languages spoken (multi-choice question)			
Paakantyi / Paakantji / Barkindji	41%	12%	10%
Aboriginal English	1%	56%	3%
Understanding of English (very or quite well)			
Spoken English	100%	99%	100%
Written English	95%	95%	95%
Income			
Average weekly household income	\$922.27	\$1,134.51	\$1,111.49
Households with weekly income of \$1-\$399	5%	3%	8%
\$400-\$999	52%	38%	41%
\$1000-\$1999	22%	27%	23%
above \$2000	3%	8%	10%
No household income	0%	0%	0%

Phone use	2022	2023	2024
Primary devices used for phone calls			
Mobile phone	94%	89%	88%
Public phone	30%	11%	7%
Phone in community office or workplace	26%	22%	5%
Fixed line telephone in home	3%	6%	3%
No phone access	0%	4%	10%
Reliability of public phone			
Stated the public phone was reliable	41%	46%	25%
Stated the public phone was not or sometimes reliable	59%	15%	62%
Do not use the public phone	0%	39%	13%
Rate of mobile phone ownership	93% (89% of these smartphones)	89% (84% of these smartphones)	84% (96% of these smartphones)
Pre-paid mobile phone use			
% of phone owners on prepaid services	100%	95%	97%
Average number of prepaid services per household	3.4	2.3	2.6
Expenditure			
Average monthly household expenditure on pre-paid mobile	No data	\$136.22	\$198.69
Monthly household expenditure on phone and internet services	\$180.43	\$199.68	\$233.10
Media use	2022	2023	2024
Radio Access (multi-choice question)			
Via car radio	88%	82%	72%
Via radio at home	61%	64%	46%
Via phone or tablet	0%	15%	16%
Never listen to radio	3%	8%	17%
Radio programs listenership			
Local First Nations radio service	76% daily or weekly, 20% occasionally	50% daily or weekly, 33% occasionally	34% daily or weekly, 17% occasionally
ABC Radio	18% daily or weekly, 50% occasionally	29% daily or weekly, 25% occasionally	28% daily or weekly, 18% occasionally
Commercial radio	17% daily or weekly, 16% occasionally	20% daily or weekly, 23% occasionally	26% daily or weekly, 15% occasionally
TV Access (multi-choice question)			
Via local broadcast	83%	83%	86%

Via phone	30%	33%	32%
Only via USB/DVDs on TV	17%	17%	17%
Via computer or tablet	16%	20%	30%
Never watch TV	0%	4%	12%
VAST TV Access			
% with working VAST service	87% (33% not sure why, 67% due to set-top box not working)	85% (94% not sure why, 0% due to set-top box not working)	23% (64% not sure why, 36% due to set-top box not working)
Without working VAST service	13%	15%	18%
VAST not installed on house / not applicable	0%	0%	59%
Most popular sources of TV and online content (multi-choice question)			
Streaming service	48% daily, 14% weekly	39% daily, 17% weekly	63% daily, 20% weekly
YouTube	44% daily, 21% weekly	38% daily, 17% weekly	60% daily, 18% weekly
Commercial TV	67% daily, 9% weekly	46% daily, 25% weekly	60% daily, 11% weekly
NITV	27% daily, 15% weekly	37% daily, 18% weekly	31% daily, 21% weekly
Primary sources of news and information (multi-choice question)			
Direct / in-person communication	48% daily, 14% weekly	39% daily, 17% weekly	63% daily, 20% weekly
Commercial TV	44% daily, 21% weekly	38% daily, 17% weekly	60% daily, 18% weekly
Facebook	67% daily, 9% weekly	46% daily, 25% weekly	60% daily, 11% weekly
Other social media	27% daily, 15% weekly	37% daily, 18% weekly	31% daily, 21% weekly
NITV	18% daily, 10% weekly	18% daily, 20% weekly	23% daily, 20% weekly
Local noticeboards	24% daily, 17% weekly	23% daily, 17% weekly	23% daily, 20% weekly
Primary sources of emergency information (multi-choice question)			
Direct / in-person communication	69%	64%	82%
Facebook	51%	44%	59%
Commercial TV	58%	42%	33%
ABC TV	37%	19%	23%
ABC radio	46%	19%	20%
Text message from police or emergency services	13%	34%	20%

Internet use	2022	2023	2024
Latest internet use			
Have used the internet in the past week	72%	68%	79%
In the past month	11%	10%	6%
Never uses the internet	15%	13%	13%
Rate of internet use (of respondents who had used the internet within the last three months)			
Use the internet almost constantly	41%	59%	62%
Several times a day	25%	22%	23%
About once a day or several times a week	5%	6%	6%
Regular internet users (The following indented sections refer to respondents who had used the internet within the last six months)	83%	83%	86%
Primary online devices (multi-choice question)			
Smartphone	100%	90%	92%
Smart TV	68%	29%	48%
Games console	0%	15%	27%
Tablet	0%	27%	25%
Laptop or notebook computer	55%	44%	24%
Desktop computer	39%	25%	15%
Use of Internet provided by others (multi-choice question)			
At houses of friends or family	66%	45%	59%
Public space with free Wi-Fi	21%	19%	40%
At place of work or education	28%	41%	18%
Government or community office	0%	17%	16%
Concern about amount of time spent online			
Extremely concerned	9%	11%	10%
Moderately concerned	5%	12%	9%
Slightly concerned	14%	19%	17%
Not at all concerned	70%	50%	60%
Low internet users	17%	17%	14%
Reasons given for not using the internet more – low internet users (multi-choice)			
No need to use the internet	78%	65%	No data
Not confident using the internet	49%	26%	No data
Internet is too expensive for me	13%	0%	No data
Internet is not a priority for me	10%	49%	No data

No access to the internet	13%	15%	No data
Use of fixed internet services			
Does not have fixed home internet	92%	75%	81%
ADSL	8%	15%	10%
Satellite (other than NBN Sky Muster)	0%	2%	3%
NBN including NBN satellite/Sky Muster	0%	7%	3%
Data allowances of those with fixed broadband			
Have less than 49 GB / month	48%	9%	3%
Between 50-199 GB / month	0%	34%	46%
Above 200 GB / month	0%	16%	0%
Have unlimited internet data	52%	41%	51%
Frequency of exceeding fixed broadband data limits within the last year			
1 - 5 times	0%	13%	21%
6-11 times	0%	16%	21%
Every month	32%	7%	8%
Use of mobile broadband services			
No mobile broadband device	61%	73%	87%
Use a Wi-Fi dongle / device	39%	19%	10%
Use a laptop/tablet SIM	0%	4%	2%
Use other mobile broadband device	0%	4%	0%
% of services that are on pre-paid plans	36%	79%	69%
Mobile broadband data allowances			
Less than 10 GB / month	6%	20%	0%
Between 11-40 GB / month	12%	58%	24%
Between 41-100 GB / month	80%	8%	58%
Above 100 GB / month	0%	3%	15%
Unlimited mobile data	1%	11%	4%
Frequency of exceeding mobile broadband data limits within the last year			
1 - 5 times	6%	17%	17%
6-11 times	1%	3%	17%
Every month	9%	14%	2%

Affordability	2022	2023	2024
Total monthly household expenditure on phone and internet services	\$180	\$199	\$233
% of respondents who cut back on essential household costs to afford personal or household internet			
Sometimes	Not asked	27%	23%
Often or Always	Not asked	8%	17%
% of respondents who compromise on internet speed and/or quality to prioritise affordability	Not asked	45%	51%
Digital Ability	2022	2023	2024
Regular internet users (The following sections refer to respondents who used internet in last three months)	83%	83%	86%
Basic digital ability metrics			
Connect to a Wi-Fi network	95%	85%	85%
Use a mobile device as a Wi-Fi hotspot	77%	88%	85%
Open a new browser tab	71%	69%	81%
Download and then open a file	65%	71%	78%
Find and install apps	69%	75%	77%
Complete online forms	69%	68%	73%
Online security and cyber-safety awareness			
Set/manage secure passwords	77%	85%	80%
Add or remove friends or followers on social media	93%	76%	79%
Set/adjust privacy settings	72%	71%	76%
Decide what personal information to share online	82%	74%	79%
Identify which apps/software are safe to download	62%	66%	75%
Check if information is trustworthy	83%	73%	77%
Online content creation			
Post videos	68%	73%	70%
Awareness of online copyright law	65%	69%	66%
Produce online content	47%	62%	63%
Create websites	10%	54%	35%
Use of smart devices			
Connect smart devices (e.g. smart TV) to the internet	88%	86%	75%
Adjust smart device privacy and security settings	62%	76%	72%

Primary online activities (activities undertaken in past six months)			
Tracking packages	No data	58%	52%
Online banking	97%	85%	85%
Accessing government services	75%	81%	83%
Online shopping	58%	74%	66%
Comparing prices of products or services	67%	57%	57%
Online learning / study	47%	63%	42%
Online buying /selling	No data	63%	41%
Booking medical appointments	18%	35%	36%
Looking for work	30%	43%	36%
Looking for housing / accommodation	No data	45%	34%
Social media use (activities undertaken in past six months)			
Keeping in touch with family or friends	95%	85%	88%
Meeting new friends or reconnecting with old friends online	78%	73%	83%
Engaging with community	52%	73%	80%
Online entertainment (activities undertaken in past six months)			
Used online entertainment services	97%	83%	84%
Attended an online music, arts, or cultural event online	35%	42%	58%

Comments



We're in the 21st century, but they don't deliver the service, it's poor service. They need to do a proper review and deliver at 100%. it is a human right. If there is an emergency and you don't get service, it's life or death. You become nothing but a statistic. Why should we get poor quality when everyone else gets top quality, it's not fair. Is there any advantage for people in remote areas - is it only in times of crisis we get free internet, free pre-paid? I would be able to learn better to adapt to technology but I don't get proper access, so what's the point?

- Survey respondent, 2024

Patchy and unreliable mobile service



Mobile service is very poor. It should be better with all the technology we need now. It drops out halfway through a conversation. You miss calls, doesn't ring. It makes it hard for working around the town

- + The mobile signal is weak at the Mission. You have to walk outside to get signal. Even the TV has weak signal and ABC cuts out all the time. We need better services here because we rely on mobile for emergency. We don't have home phone
- + The mobile reception is no good at the Mission and the Mallee. It's only one bar and drops out all the time. It's especially bad at night. There's lots of lag and dropouts when trying to watch a movie
- + The mobile service is very bad at my house in the Mallee. I can't get a signal inside my house and only one bar outside. The phone always drops out when you're talking. We need it fixed up
- + There should be a tower in the middle of town
- + Need more services in our community and to fix internet for all phone users in our community
- + Slow and inconsistent
- + Weak signal and slow internet
- + We need better mobile service
- + Need to update to 5G
- + Its slow, needs to be fixed
- + The signal is not very strong at my house
- + Residence area is identified black spot
- + We need better mobile signal in town, lots of places have no signal
- + Poor mobile reception at our house, nothing inside the house. We need better mobile. I might change to Optus when it comes
- + Mobile and internet service the reception is really BAD!
- + There's mobile black spots in town so Telstra service drops out a lot. We need better mobile speed, takes a long time to download.
- + Quality of connection is not good it cuts out
- + I would like better connection

Regular outages or dropouts

- + The internet is always cutting out in bad or cloudy weather
- + All the blackouts. Internet service is too slow to be able to use
- + Internet service is shit here
- + Connection drops out when there is storm
- + The mobile service drops out a lot. we get blackouts and everything goes out in town. When I'm doing online records it can close down suddenly, it wastes a lot of time



Response time for outages in area is not acceptable, it can be a week for the connection to be restored. [We need information] when outages occur. Needs improvement. We have two towers and if one is out it's not enough and very slow.

Sky Muster

- + Sky Muster service doesn't work when you have storm it kicks you out. Unreliable and unpredictable and you use internet on phone or use at work to be able to access the internet
- + It's been good getting Sky Muster at home, it's good enough for me

ADSL service

- + I want NBN here because ADSL is slow
- + We're thinking of getting Starlink because ADSL is very slow and can't keep up with our use
- + Internet slow
- + Fix internet

Demand for alternate mobile services

- + I have an Optus phone but there's no Optus service here so I have to connect to Wi-Fi to use my phone
- + There should be more availability of services that are not connected to Telstra so they have more choice of a providers other than Telstra. That causes a problem for people who are using Optus or others services. Have to use other free Wi-Fi services on their phone.

Affordability

- + Affordable unlimited data
- + Fix services and make it cheaper to afford
- + Wilcannia needs free internet...desperately
- + Internet needs to be cheaper
- + I need cheaper home internet, data doesn't last long
- + Have slowly put NBN but it's only for businesses and not everyone else it needs to cover all households the whole community. They put the towers in during Covid but then it was cut back
- + Good to have internet but it's too expensive on the pension
- + I don't have a mobile because I don't have the money to replace it

Demand for more Wi-Fi access

- + We should have Wi-Fi around the whole community to make it cheaper for people to use internet
- + We should have free Wi-Fi at the pool

Need for digital training and support

- + It would be good to have mor digital training and support



I find it hard to learn to use phone so I don't worry about having one. I don't make calls. I go into Centrelink to get help when I need, or my carer

- + I lost my mobile phone but I only ever used it for phone calls. I never learnt to read or write so don't use the internet. We didn't even have phones when I grew up here
- + I would like someone to help me to learn to use internet banking and MyGov and things on my phone
- + We should have a place to learn to use phone and internet. I push buttons but I might be doing the wrong thing. I need glasses to see the screen
- + If there was a computer training room, I would like to learn more
- + I never learnt about phones or internet and don't want to learn. I have a flip phone, less humbug from young ones to borrow it.

Concerns about online abuse

- + I don't go on the internet much, too much trouble on Facebook, people die

Some elders do not want to use digital technology

- + My eyesight is no good. I don't want to know about internet, not interested in all that rubbish on there.
- + I don't want to learn internet. That's for the young people. I haven't had a phone for years.
- + I've got no time to get a phone or internet. And phones ring all the time, but you can't ring them back. I'm not rushing for phone calls.

Appendix 2: Community Communications Audit

About the community	
Community Name	Wilcannia, NSW
Alternate name	N/A
Traditional owners / Language group	Barkandji (Paakantyi/ Paakantji / Barkindji)
Location (Coords)	31.5590° S, 143.3784° E
Region	Murdi Paaki
LGA / Shire / Regional Council	Central Darling Shire
Land Council	Wilcannia Land Council
Regional Service Centre, distance	Dubbo 557 km; Broken Hill 197 km
Remoteness (ABS)	Very Remote
Population data – ABS 2021	
ABS 2021 Census All persons QuickStats	abs.gov.au/census/find-census-data/quickstats/2021/SAL14307
ABS 2021 Census Aboriginal and/or Torres Strait Islander (ATSI) people QuickStats	abs.gov.au/census/find-census-data/quickstats/2021/ILOC10300506
Total population	735 (51.4% ATSI / 22.4% not stated)
ATSI population	367
Gender breakdown (ATSI)	49.7% male / 50.3% female
Median Age / breakdown (ATSI)	Median age 27, children 0–14 29.5%, 15–34 31.6%, people aged 65 years and over 6.3%
% who speak an ATSI language (ATSI)	2.7%
% who speak English at home (ATSI)	95.9%
Employment levels	20% participation in the labour force. Of these 41.5% were employed full time, 32.1% were employed part-time and 18.9% were unemployed.
Education levels – No of people reached	Of people aged 15 and over in Wilcannia, 1.9% reported having completed Year 12 as their highest level of educational attainment, 7.5% year 11, 21.5% year 10, 41.9% Year 9 or below; 6.8% had completed a Certificate III or IV, and 3.7% had completed a Diploma, Advanced Diploma or Bachelor Degree.
Number of dwellings, people/household	361 private dwellings. Average 2.8 people per dwelling (3.3 for ATSI households)
Housing over-crowding	18.90% ATSI households require one or more extra bedrooms
Median Weekly ATSI household income	\$1,020
Median Weekly ATSI personal income – over 15 year	\$419
Average weekly rent	\$175

Community services and plans	
Community map	See: wilcanniatourism.com.au
Agencies /service providers in community	Central Darling Shire, NSW Police, Wilcannia Land Council, Wilcannia hospital, Maari Ma Health Service, Wilcannia Central School, Regional Enterprise Development Institute (REDI.E), Wilcannia River Radio, Centrelink, St Therese Community School, Community Restorative Centre, Women's Safe House, Wilcannia Local Aboriginal Land Council, NSW Government Family and Community Services, Centacare, Wings Youth Drop-in Centre, Wilcannia Courthouse
Business / other stakeholders	Wilcannia Community Grocer (operated by REDI.E / Outback Stores), Roadhouse, hotel, pharmacy, two caravan parks, Wilcannia Motel, several small businesses
Community Development Plan	Central Darling Shire Wilcannia and District Improvement Plan 2022-2032
Power supply/type in community (back-up or redundancy options)	Power supply from Broken Hill; mobile tower and exchange have battery backup; power outages have impacted telecommunications services in 2024
Use of power cards in households – monthly expenditure	No
Communications services available	
Public phones – number / location	2 - near police station and in old mission
Mobile – 4G, 5G, small cell (satellite backhaul), provider, location of base station	Telstra towers: MacCullochs Range 46 km south-east of Wilcannia near Barrier Highway, 4G/5G (ACMA Site ID 11185); Netallie Trig 11 km west, 4G/5G (ACMA Site ID 132137); a 4G small cell at the Telstra exchange (27 Cleaton St Wilcannia); and a 4G small cell tower (10m) near hospital (1-7 Ross Street). Note: 3G services were switched off in October 2024, impacting some devices and outer sites with previous 'fortuitous coverage'.
Coverage description	Coverage across community has improved but still poor coverage in some parts - near post office and Mallee and Mission residential areas; lack of coverage on roads to Broken Hill, Cobar and Ivanhoe; See: https://www.telstra.com.au/coverage-networks/our-coverage
ADSL – number of connections	Several businesses/ agencies (REDI.E office, Centrelink, store) and some staff residences have legacy ADSL; Limited new ADSL services provided by Telstra due to being in NBN satellite footprint
Business grade services – number of connections	Fibre to premises services at Shire, police station, hospital, school

Fibre to community	Yes + internal fibre to hospital and to airstrip
NBN Sky Muster Satellite services	Some agencies and residences have NBN Sky Muster satellite services
Starlink satellite services	Central Darling Shire staff houses, caravan park caretaker house (shared for public use by tenants/ visitors), Cooee Cafe and several other businesses and residences now have Starlink
UHF or HF Radio	UHF used by Shire and National Parks and Wildlife Service
Status of services – faults, issues, speeds during peak use time etc	Reports of regular outages on mobile services, sometimes related to power outages and limited battery backup. ADSL services described as slow and unreliable.
Communications Programs History (Mobile Black Spots Program, Regional Connectivity Program etc)	OneWiFi tower and Active Mobile Neutral Host solution installed in June 2023 under NSW Regional Digital Connectivity Program, with Pivotal to offer mobile services; Previously Wi-Fi trial under Indigenous Communications Program by Easyweb Digital in 2015–16
Any planned upgrades?	Pivotal mobile service in 2025; no other known
Media services available	
Radio services broadcast – AM or FM	ABC- AM only; Wilcannia River Radio - 103.1 FM, 2WEB Bourke FM
TV services – local broadcast, number of DTH services, number working	All 16 digital TV + radio channels available on local broadcast; some houses in the Mission area have VAST dishes
RIBS radio station – location, staff, roles	Wilcannia River Radio 103.1FM, 39 Reid St, Wilcannia. Station Manager: Robert Clayton (2024), Anthony Schembri (2025).
Other media services – newspaper etc	Local Wilcannia News published monthly
Community access facilities	
Internet access facility (location, number of computers, server, printers, other facilities, videoconferencing)	Two computers in Centrelink office for accessing online government services with staff support. REDI.E had 3 laptops for community access (being replaced in 2025)
Other computers or facilities available	REDI.E, Wings Drop-in Centre. Demand for more access computers
Public Wi-Fi availability, free or voucher system, agency, RSP, monthly download limit	Free public Wi-Fi at REDI.E / Centrelink, provided by DHS as well as NBN under STAND program 9am–9pm daily; Wi-Fi at Wings Drop-in centre; Some government agencies allow work hours Wi-Fi access
Training / support	
Number of community members that have undertaken digital training	No details
Training options available (e.g. at school, TAFE, CDP, other)	TAFE provide basic digital skills training, School support former students with computer access

Any workplace digital skills training	Shire and REDI.E train staff in use of applications. Little other workplace digital training mentioned
Use of online services / applications	
Apps or digital tools in use – archive, media server, language apps	Cloud-based services used by government agencies and NGOs, no language or archiving software being used currently, but aspiration to do so at Baaka Cultural Centre
Use of MyGov, government services, banking	Used by most community members but some still require support
Telehealth usage	Yes, in Maari Ma health clinic and hospital - cameras set up to enable remote consults and clinical support
Online education or training	Wilcannia Central School use online education extensively
Online court hearings or prison visits	Not possible to due to limited connectivity to courthouse



Figure 28: The Baaka (Darling River) plays a key role in Wilcannia's culture and history

Appendix 3: Photos of Research Activities



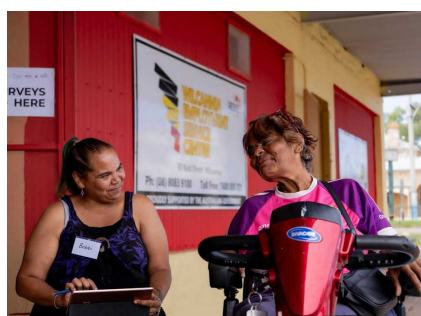
Figures 29 and 30:
Surveys underway at
REDI.E office;
Shalarna doing
survey with resident
Shanisha Harris



Figures 31 and 32:
Monica doing survey
with Natika Clayton;
Shalarna doing
survey with Morna
Johnson



Figures 33 and 34:
Shalarna doing
survey with Tuvesi
Williams; Daniel,
Monica, Leah and
Sharon outside
REDI.E office



Figures 35 and 36:
Bobbi doing survey
with Kelly Bates;
Daniel with REDI.E
Site Manager Darrin
Atkinson