



ARC Centre of
Excellence for
Automated
Decision-Making
and Society



MAPPING THE DIGITAL GAP

**2024 OUTCOMES
REPORT**

We respectfully acknowledge the Baarkandji, Eastern Kuku Yalanji, Erubam Buaigiz, Warumungu, Anmatyerr, Warlpiri, Yolŋu (Djambarrpuyŋu, Gupapuyŋu, Djinang, Dhuwala), Kwini, Kulari, Bardi, Kardu Diminin, Ngaanyatjarra, Ngaatjatjara, Pitjantjatjara and other Traditional Owners for the lands on which Mapping the Digital Gap research was conducted. We extend that respect to all Aboriginal and Torres Strait Islander peoples today, and 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.

Warning: Aboriginal and Torres Strait Islander people should be aware that this report may contain images and names of deceased persons.

Cover image: Galiwin'ku community

Inside image: Sunset near Wilcannia

Suggested Citation

Featherstone D, Ormond-Parker L, Parkinson, S, Hegarty K, Hawkins, L, Thomas J, Kennedy J, Valenta L, Ganley L (2024) Mapping the Digital Gap: 2024 Outcomes Report, Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society. doi: [10.60836/xspj-w062](https://doi.org/10.60836/xspj-w062).

DOI: [10.60836/xspj-w062](https://doi.org/10.60836/xspj-w062)

The text and data in this report (except any logos) is licensed under the Creative Commons Attribution – Non Commercial – Share Alike 4.0 International licence. See: <https://creativecommons.org/licenses/by-nc-sa/4.0>

Acknowledgements

The Mapping the Digital Gap project is being undertaken through RMIT University as part of the Australian Research Council (ARC) Centre of Excellence for Automated Decision-Making and Society (ADM+S) in partnership with Telstra. The 'Mapping the Digital Gap' project gratefully acknowledges funding from Telstra and the Australian Research Council Centre of Excellence for Automated Decision-Making and Society (CE200100005). The views expressed herein are those of the authors and are not necessarily those of the ARC or Telstra.

The research team would like to thank the many people and organisations who supported the Mapping the Digital Gap project and contributed to this annual report. In particular, we thank all remote community residents and stakeholders who have participated in the research, the First Nations Expert Advisory Group for their guidance, and the many contributors from government, industry, non-profit and research sectors.

Research Partners

This research would not have been possible without our First Nations community partners. We thank Regional Enterprise Development Institute, Wujal Wujal Aboriginal Shire Council, Torres Strait Islanders Media Association, Julalikari Aboriginal Corporation, Pintubi Anmatjere Warlpiri Media and Communications, Yalu Aboriginal Corporation, Laynhapuy Homelands Aboriginal Corporation, Kalumburu Aboriginal Corporation, Djarindjin Aboriginal Corporation, Thamarrurr Development Corporation, Warakurna Community Council, Ngaanyatjarra Council and NPY Womens' Council for their collaboration and support.

Community co-researchers

We also thank our community co-researchers

Audrey Shadforth, Bernadette Angus, Marlon Sampi (Djarindjin / Lombadina)
Nixon Mye, Lala Gutchen (Erub Island)

Yungirrŋa Bukulatjpi, Cyril Bukulatjpi, James Bayung, Maliku Dhamarrandji,
Glen Gurruwiwi, Evelyn Djoŋja Bukulatjpi, Wesley Dhurrkay, Shaun
Dhamarrandji (Galiwin'ku)

Djamika Ganambarr, Guruwuy Ganambarr, Billy Gumana, Marrpalawuy Marika
(Gänŋaŋ)

Leanne Kelly, Ashlyn Hassett, Julia Campbell, Maggie Captain (Kalumburu)
Sheana Sampson, Deb Cain, Floyd King, Linda (LT) Turner (Tennant Creek)

Marcus Kinthari, Veronica Munar, Vincent Jinjair, Honorata Jinjair, Teresa Jinjair
(Wadeye)

Anthony Wiltshire, Shaylin Wiltshire, Katelyn Whyman, Sheldon Hunter, Monica
Kerwin, Shalarna Thorpe, Bobbi Harris (Wilcannia)

Lexton Nandy, Marie Shipton, Vincent Tayley, Dallas Walker, (Wujal Wujal)
Stephanie Lynch, Dennis Charles, Mel Langdon (Yuelamu)

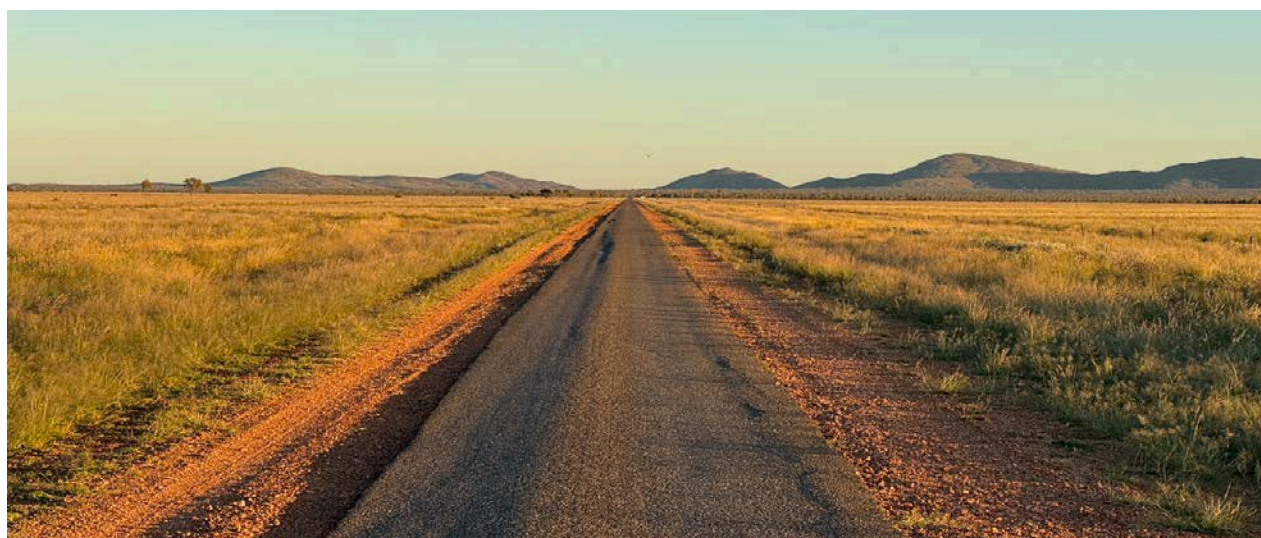
First Nations Expert Advisory group

Scott Winch, Dr Heron Loban, Dr Romane Morten,
Lauren Ganley, Yingiya Mark Guyula MLA

CONTENTS

Executive Summary	2	Analysis	40
Key Findings	4	Access	40
Access	4	Case study: Wi-Fi mesh networks in remote First Nations communities	45
Affordability	6	Affordability	46
Digital Ability	8	Digital Ability	50
Media and Information	10	Case study: Use of social media for social and cultural activities in remote communities	55
Policy Actions	12	Media and Information	56
Research Sites	13	Service Provision	58
Djarindjin / Lombadina	14	Case study: A 1000km trip to the bank - the impact of physical bank closures on remote communities.....	60
Erub	16	Policy Impact	61
Galiwin'ku	18	Next Steps	63
Gänggaṇ homeland	20	Endnotes	64
Kalumburu	22	Appendix 1 - Project Outputs to date	66
Pipalyatjara / Kalka	24	Appendix 2 - Key News Stories	70
Tennant Creek	26	Appendix 3 - Community Partners	71
Wadeye.....	28		
Warakurna	30		
Wilcannia	32		
Wujal Wujal	34		
Yuelamu	36		
Feedback from research partners	38		

Tanami
Highway to
Yuelamu,
NT



MAPPING THE DIGITAL GAP

2024 Outcomes Report

Authors

Daniel Featherstone, Lyndon Ormond-Parker,
Sharon Parkinson, Kieran Hegarty, Leah Hawkins,
Julian Thomas, Jenny Kennedy, Lucy Valenta,
Lauren Ganley

Photography

Daniel Featherstone

Design

Leah Hawkins

EXECUTIVE SUMMARY

Digital inclusion is about ensuring that all Australians can access and use digital technologies effectively. We are experiencing an accelerating digital transformation in many aspects of economic and social life. Our premise is that everyone should have the opportunity to benefit from digital technologies: to manage their health, access education and services, participate in social and cultural activities, organise their finances, follow news and media, and connect with family, friends, and the wider world.

Digital inclusion is critically important in ensuring informed decision-making and agency among First Nations Australians. However, there is a digital inclusion gap between First Nations Australians and other Australians, with those living in the 1,505 remote and very remote First Nations communities and homelands among the most digitally excluded people in Australia.¹

CLOSING THE GAP OUTCOME 17

Recognition of this digital gap and the growing importance of digital inclusion led to Outcome 17 of the National Partnership Agreement on Closing the Gap:²

Aboriginal and Torres Strait Islander people have access to information and services enabling participation in informed decision-making regarding their own lives

Target 17 sets out an ambitious goal:

By 2026, Aboriginal and Torres Strait Islander people have equal levels of digital inclusion.



Newly
activated
4G
tower in
Yuelamu



Daniel
Featherstone
(right) with
the wati
(men):
Freddie
Ken, Colin
Paddy, co-
researcher
Danny Fox,
and Lawrence
Brumby in
Pipalyatjara

MAPPING THE DIGITAL GAP

From 2022 to 2024, the Mapping the Digital Gap team partnered with local First Nations organisations to undertake three annual research visits to 12 remote and very remote First Nations communities across Australia.

Guided by a First Nations Expert Advisory group, this supplementary project of the Australian Digital Inclusion Index (ADII) addresses a lack of data to understand the scale and nature of the digital gap for First Nations people³ and to track progress toward Target 17. ADII data is now being used by the Productivity Commission as a supporting indicator for Target 17.⁴

Between 2022 and 2024, we undertook 32 site visits to 12 communities, partnering with local First Nations organisations in each site, working with up to 26 community co-researchers each year. A map showing the research sites is on page 13. Over the three years, we have collected a total of 2063 surveys and undertaken 350 interviews with community leaders, local agencies and residents.

The project follows NHMRC and AIATSIS guidelines for ethical research with Aboriginal and Torres Strait Islander peoples and communities. In the spirit of Indigenous data sovereignty, annual Community Outcomes reports were provided to each community, to support local planning and advocacy, along with suggestions for a local digital inclusion plan. More information about the project objectives, context and methods is available in the 2022 Background Paper.

This report updates the 2023 Outcomes Report,⁵ with a focus on the most significant changes registered over the 2022-2024 period. Three years of data for each community provides important insight into what can drive improvements in digital inclusion in remote First Nations communities.⁶ During this period, we have seen significant investment in improving telecommunications infrastructure, including a new mobile service and roll-out of Wi-Fi mesh networks or hotspots in several communities.

This report explores changes in digital inclusion over several years, what may be driving these changes, and what further is needed to ensure those living in remote First Nations communities are digitally included.



32

site visits to 12 communities



44

local co-researchers



2063

surveys collected



350

interviews conducted



Julian Thomas doing a survey with Kalumburu resident



Djarindjin co-researcher Audrey Shadforth doing a survey with Tyresha Gore

MORE INFORMATION

More information about the project is available on the Mapping the Digital Gap website (mappingthedigitalgap.com.au), including a project Background Paper⁷ detailing the research objectives, methodology, site selection and research and policy context. There are also links to the individual Community Outcomes reports. A dedicated [First Nations interactive dashboard](#) is available on the ADII website, providing detailed survey results for all Mapping the Digital sites.



mappingthedigitalgap.com.au



mtdg@rmit.edu.au



[@MappingTheDigitalGap](https://www.facebook.com/MappingTheDigitalGap)



[linkedin.com/showcase/mapping-the-digital-gap/](https://www.linkedin.com/showcase/mapping-the-digital-gap/)

Key Findings

Access

Across the 12 research sites, the team observed a range of barriers to digital inclusion. While barriers to access are gradually being addressed through a range of programs, many sites are still struggling with **patchy, slow and unreliable mobile and broadband services**.

Many homelands still have **limited or no communications services**. While mobile coverage continues to improve, including upgrades in preparation for 3G switch-off in October 2024, there are still an estimated 796 small communities and homelands (of 1505 remote and very remote communities) without mobile services. Expanded delivery of free Wi-Fi hotspots and mesh networks, under a range of programs, are playing an important role in improving access (see case study on page 45).

Overall, our survey findings are indicating some promising improvements in internet access between 2022 and 2024, as well as some areas of concern.



Gangan
Traditional
Owner
Marrpalawuy
Marika on
phone

INTERNET USE AND ACCESS

Internet use is increasing, with the number of non-users decreasing from 20% in 2022 to 14% in 2024. More than half are now using the internet several times a day or more.

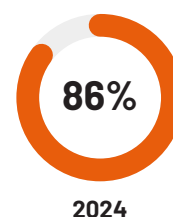
There have been **significant developments aimed at improving digital inclusion** between 2022 and 2024, particularly in terms of Wi-Fi and mobile infrastructure to enable access. Examples from our research sites include the **installation of a Telstra 4G mobile tower in Yuelamu in 2023** and a **small cell mobile tower in Djarindjin in 2022**, providing essential connectivity. Further expansion of mobile services in remote communities has been funded under the Mobile Black Spot Program, Regional Connectivity Program (RCP) and State Government co-investment programs.

Community
office in
Yuelamu



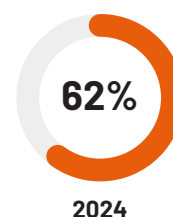
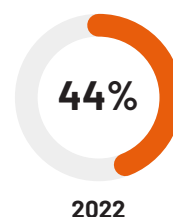
6%

increase
in internet
users



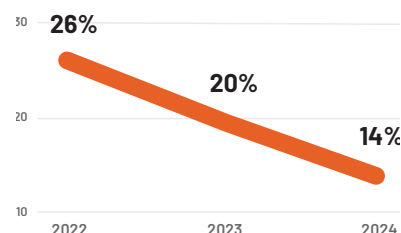
19%

increase
in regular
internet use
(daily or more)



12%

improvement
in internet
access. The
number
of people
without any
form of access
reduced from
26% in 2022



PUBLIC WI-FI

The expansion of public Wi-Fi and improved mobile coverage has driven a surge in internet access. Mobile phone ownership, particularly smartphones, continues to grow. However, fixed home broadband remains rare in First Nations households, and computer ownership has declined sharply, highlighting a high and increasing reliance on the pre-paid smartphone as the primary mode of access.

LEOSAT USE

The introduction of **Starlink LEO satellite coverage in northern Australia in 2022** has seen rapid uptake among community agencies and staff. However, costly equipment costs and post-paid plans have limited uptake to only 1% of First Nations households surveyed.

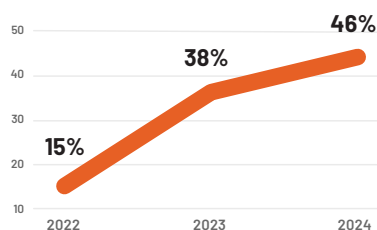
Starlink dish on top of house in Warakurna



LEOSats are also beginning to be used as a backhaul technology for small cell mobile services in small communities without fibre optic. This is likely to improve speed, quality and reliability of small cell services that previously relied on geostationary satellites for backhaul.

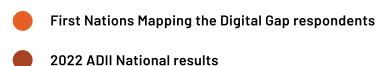
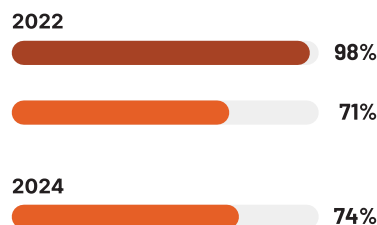
31%

increase in those accessing the internet via Wi-Fi in public spaces, up from 15% in 2022 to 46% in 2024.



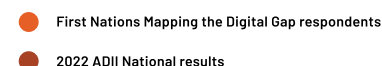
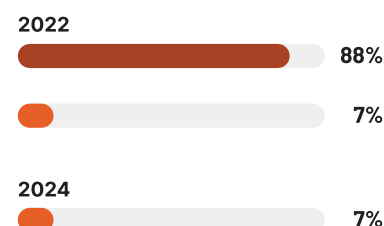
74%

owned or shared a mobile phone in 2024, up from 71% in 2022. 13% shared a mobile phone in 2024. Comparatively, 98% of other Australians owned a mobile phone



7%

of households had fixed home broadband in 2024, the same as in 2022. In comparison, 88% of households nationally had fixed home internet in 2022.



98%

of mobile phones used were smartphones in 2024, up by 9% since 2022.

19%

reduction in First Nations households with a computer, down from 34% in 2022 to 15% in 2024.

GREATER ACCESS PRESENTS CHALLENGES

With greater use of digital services and devices has come an increase in scams and cybersafety issues, with many reports of people in communities being impacted. Additionally, some providers have taken advantage of the relative digital exclusion of remote communities and have engaged in unconscionable sale practices.⁸ These developments illustrate **the need for regulation to support the deployment of digital technologies and services in responsible, ethical, and inclusive ways.**

Key Findings

Affordability

Rising affordability challenges since 2022 are a significant barrier to digital inclusion.

Cost of living pressures that have impacted Australia over the past three years have hit remote communities particularly hard due to the high costs of food, fuel, power, rent and mobile data. In 2024, 73% of survey respondents reported they had made sacrifices or cut back on essential costs in order to afford connectivity, a major increase from 38% in 2022. This compares with 20% nationally in 2022.



Public phones still get regular use in most communities

Discarded recharge voucher in Warakurna

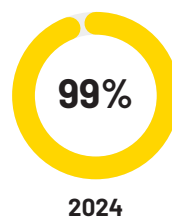
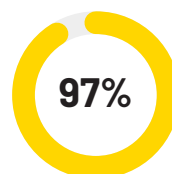


COST OF MOBILE DATA

With 99% of mobile users surveyed in 2024 using pre-paid services, and households spending an average \$280 per month on data, the cost of mobile data is a major concern in communities. Increases to the cost of data recharge vouchers in July 2023 and again in October 2024, along with greater data needs, has increased affordability concerns.⁹

Despite potential savings with post-paid mobile plans and fixed broadband services, the overall trend is toward higher uptake of pre-paid services. The use of post-paid mobile plans has reduced from 3% to 1% of mobile users since 2022, while post-paid household services remained relatively unchanged at 7%.

Mobile phones in Wilcannia store



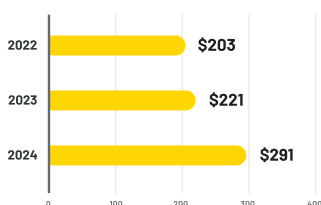
99%

of those with mobile phones use pre-paid data (up from 97% in 2022)

\$291

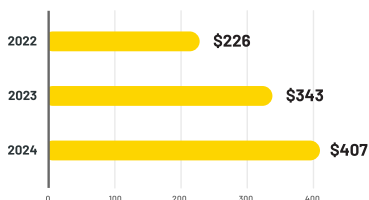
average monthly household expenditure on mobile phone and internet, up by \$88 since 2022.

Avg monthly household communications expenditure



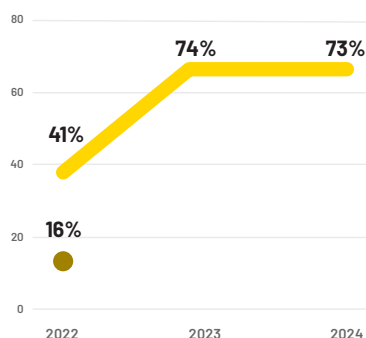
The increase was greatest for large family households (8-10 people), whose monthly costs had increased from \$226 to \$407 in 2024.

Monthly household communications expenditure (large families)



73%

of internet users surveyed in 2024 said they 'made compromises on speed and/or data in order to afford it', an increase of 35% since 2022.



- First Nations Mapping the Digital Gap respondents
- 2022 ADII National results

This compares with 16% nationally in 2022.

2 in 3 people

said they have had to sacrifice or cut back on essential costs (food, bills) to afford the internet in 2024



This is an increase of 28% since 2022. Nationally, this number was 20% in 2022.

3 in 5 households

(57%) have fewer devices than required to be digitally included This has increased by 8% since 2022.



Aerial photo of Wadeye

Key Findings

Digital Ability

4 in 5 people recently participated in online activities in 2024, up from 3 in 5 in 2022.

In particular, there was **increased engagement in social activities** and **entertainment and cultural activities**, including engaging with online music, videos, and games. This highlights that First Nations people are engaging in online activities that are relevant to their lives and communities, despite significant barriers around access and affordability.

Other barriers include lack of digital support, language barriers, and concerns about scams and cyber-safety issues.

Overall, we saw increased use of online banking, government services and online shopping, however some communities had reductions in usage. Engagement with online services are impacted by lack of personal identification documents and difficulties using two-factor authentication due to regular changes in mobile numbers and low use of email services.

3 in 5

respondents participated in online activities in 2022



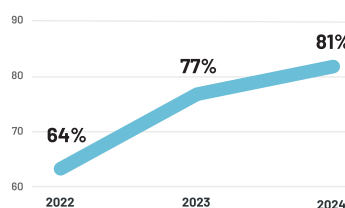
4 in 5

in 2024



17%

increase in participation in online activities



AN URGENT NEED FOR DIGITAL ABILITY PROGRAMS

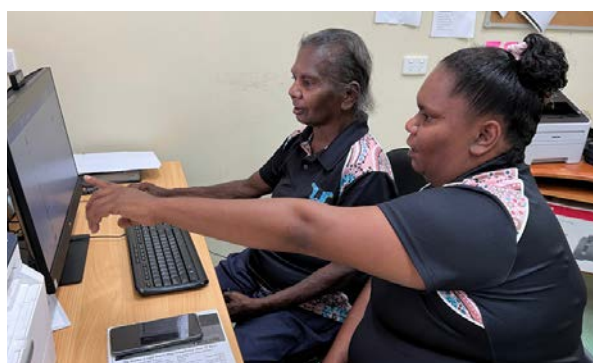
There remains an urgent need for programs and support to address digital ability, particularly for people aged over 45, people with disability, language speakers, those with limited educational attainment, and those not currently in the labour force.

The planned Digital Mentors program included in 2024 Budget measures is a positive development.

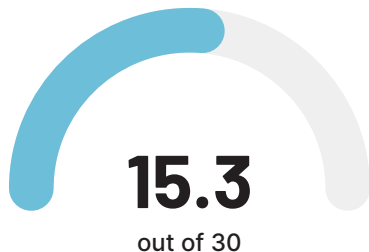
However, more expansive programs for digital skills, support and online safety awareness are needed. Without this, the gap in Digital Ability is likely to further widen, particularly in a period of rapid digital transformation to online service delivery and withdrawal of face-to-face services.



Co-researcher Floyd King doing a survey with elder John Duggie, Tennant Creek



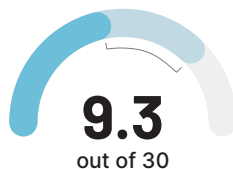
Janice Daisy with Marie Shipton in Wujal Wujal



The average measure of digital ability in 2024

This level has increased by 1.9 points since 2022. Despite improvement, there remains a significant gap in digital ability compared to the national score of 23.2 in 2022.

Guruwuy Ganambarr using Wi-Fi in Gängan homeland



Education gap

between those who had completed vocational training (22.8 / 30 in 2024) and those who had not completed secondary school (13.5 / 30). This illustrates that education is a key determinant of digital ability



Computer access gap

Those with computer access scored 21.8 in 2024, 4.0 points higher in 2024 than those who were mobile-only (17.8). Those with access to a computer saw greater rates of improvement in their digital abilities.



Age gap

between 18-24 and 65+ age groups in 2024. There remains a significant gap in digital ability level between the younger and older groups.



Employment gap

The difference in digital ability between those in manager, professional and technical roles (25.0 in 2024) compared with those out of the labour force (10.5 in 2024).



Jennifer Ward using computer at PY Ku centre, Pipalyatjara

MEASURING DIGITAL ABILITY

Due to not having Index scores in 2024, we have used the Internet Skills Scale to create Digital Ability scores out of 30¹⁰ to enable comparison between 2022 and 2024. This score is derived from the 6 key skill types - basic, advanced, information navigation, social communications, creative and smart device use. Using this method of scoring, we identified demographic gaps by age, education level, employment type, dis/ability, as well as gaps in terms of types of devices used.

Key Findings

Media and Information

In the past two years, there has been a reduction in the use of traditional broadcast media and an increase in online streaming. While this is consistent with national trends towards preference for online and on-demand content, the factors driving these changes are different.

LACK OF WORKING VAST SERVICES

A key contributor to the reduction in use of TV services is the lack of working VAST (Viewer Access Satellite Television) services in remote community households, with 61% of households unable to access free-to-air TV in 2024, up from 50% in 2022. The primary cause is set-top box failure (79% in 2024) followed by satellite dish or cabling failure (58%). This is leading to predominant use of online services, such as YouTube (66% daily in 2024) and streaming services (26% daily), for entertainment using pre-paid mobile data. The high use of data for streaming increases household costs.

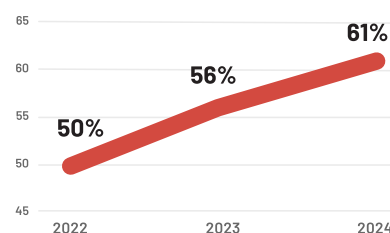
There is strong demand in communities for upgrades to VAST equipment, or to return to local broadcast delivery, to enable access to free-to-air television services. There is currently a government review of the delivery of television services in remote communities.



Marrpalawuy Marika doing daily announcements over community public address system in Gängan homeland, NT

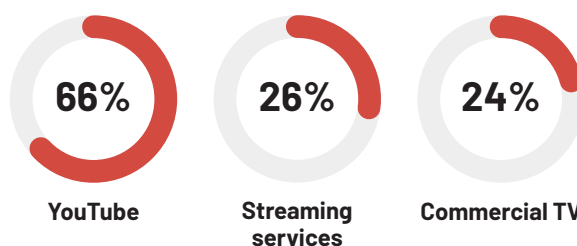
61%

did not have VAST services working at home in 2024



66%

used YouTube daily to access TV and online media services in 2024, up from 30% in 2022; This was followed by streaming services and commercial TV



Rusted VAST satellite dish on house in Erub, Torres Strait



Community noticeboards remain an important source of local news

FIRST NATIONS NEWS AND INFORMATION

First Nations radio and television services remain trusted sources of locally relevant news and information. This was especially during emergencies, COVID-19 and the Voice Referendum, which saw increased online dis- and misinformation, racism and hate speech.

However, our survey found reduced listenership to radio services compared with online music and social media platforms. In several sites, this is due to local RIBS broadcast facilities not functioning due to funding constraints.

ABC radio services are available in less than half of sites visited due to not having operational funding to maintain equipment. Direct and face to face communications remains the primary way that people access news and emergency information.

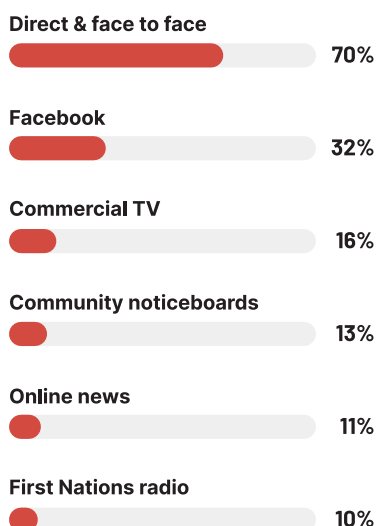
There are many examples of local radio, video and music production, language and cultural heritage projects and community archives in communities visited, showing interest in locally relevant content and applications remains a high priority. More support is needed to enable these community-driven projects.



Robert Clayton,
Wilcannia
River Radio

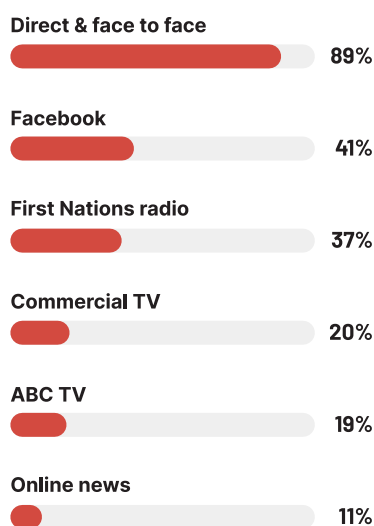
70%

accessed daily news and information through direct and face to face communications in 2024



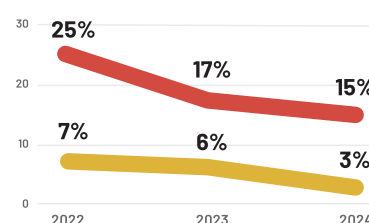
89%

accessed emergency information through direct and face to face communications in 2024



15%

listened to First Nations radio daily in 2024, down from 25% daily in 2022; 3% listened to ABC radio daily, down from 7% in 2022.



● First Nations Radio
● ABC Radio

1 in 2 people

access radio and music via streaming services on a mobile phone or tablet



POLICY ACTIONS

Closing the Gap Target 17, aimed at closing the gap in digital inclusion for First Nations Australians, has provided an important framework for policy and action. The formation of a **First Nations Digital Inclusion Advisory Group and Expert Panel** in 2023 has further supported efforts to meet these goals. The Advisory Group's *Initial Report* in October 2023¹¹ helped influence **\$68 million in funding** in the 2024 Federal Budget to help address First Nations digital exclusion, including resources for Wi-Fi mesh networks, a digital mentors network and a First Nations Digital Inclusion Support Hub.¹² The Advisory Group is currently developing a Roadmap to guide future programs and investment.

Building on existing federal and state government programs, these measures represent a significant commitment to closing the digital gap for remote First Nations communities. The ADII and Mapping the Digital Gap projects help to measure the impact of these measures and provide timely data and community-led strategies to guide future policy and program initiatives.



The First Nations Digital Inclusion Advisory Group Initial Report, 2023

Gunbarrel Highway, Ngaanyatjarra lands



MAPPING THE DIGITAL GAP PHASE 2 AND NATIONAL DATA COLLECTION

To ensure continuity of the Mapping the Digital Gap research in remote Australia, Telstra has committed funding to a second phase of the project from 2025 to 2028. This will involve partnering with First Nations organisations in eight new sites across Australia, while completing research visits to two existing sites.

In addition, the ADII team has been funded by the Australian Government to expand its First Nations data collection in urban and regional Australia in order to better understand the nature and scale of the digital gap nationally and effectively measure progress on Closing the Gap Target 17.



Phone box at Wuppa town camp, Tennant Creek

Research Sites

Mapping the Digital Gap currently visits 12 research sites across remote Australia. Research sites were identified based on criteria to ensure a diverse national sample. The research team works in partnership with local First Nations organisations on all community-based research and the analysis of results to ensure the project adheres to local policies and cultural protocols, community trust and engagement, and to ensure the research addresses local needs and provides benefit to the community.

In the following pages, we have included specific results from each community, highlighting variations due to communications infrastructure and social, cultural, and geographic context, as well as case studies on the most significant changes.

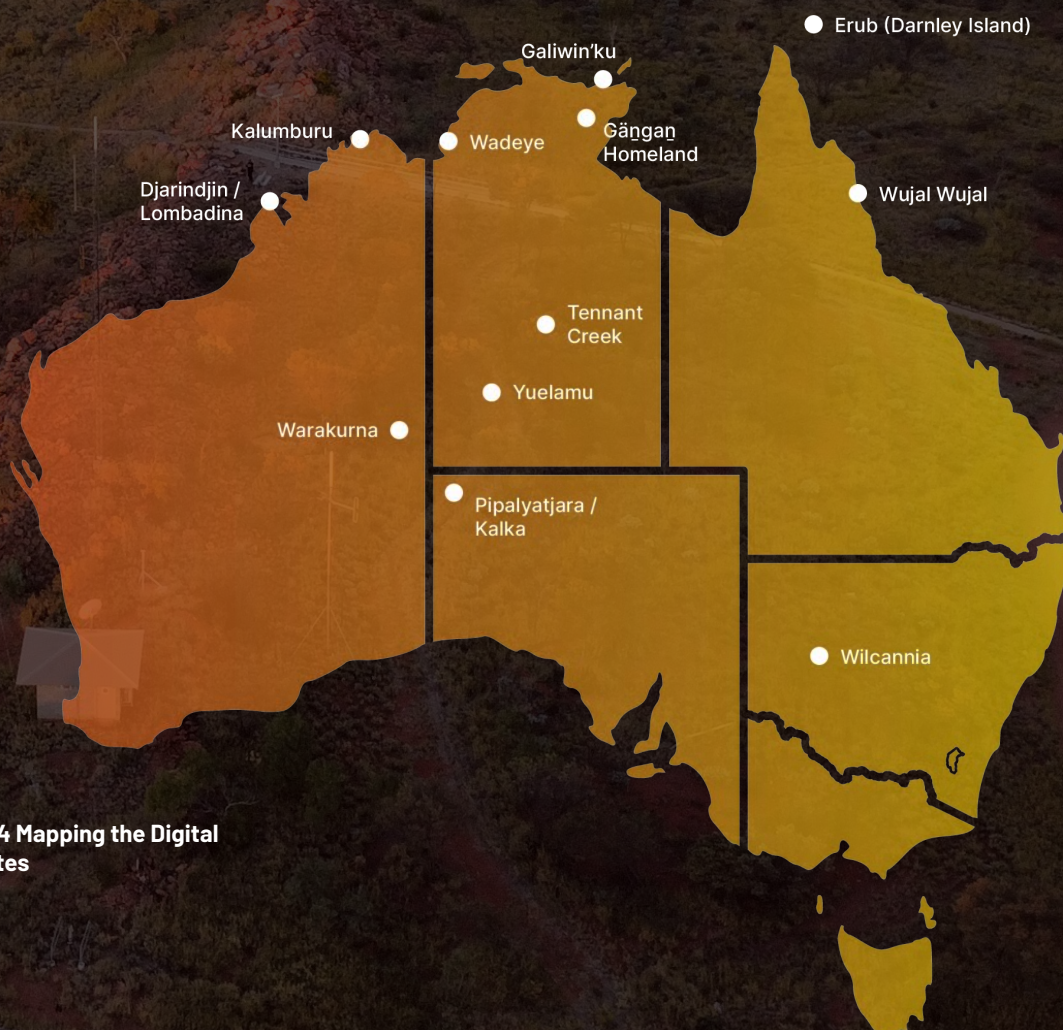


Figure 1: 2022-24 Mapping the Digital Gap Research Sites

Djarindjin / Lombadina WA

AT A GLANCE

Distances	196km	to Broome
	1990km	to Darwin
Population	253	81.4% Aboriginal and/or Torres Strait Islander ¹³
Dwellings	111	private dwellings
	3.3	people per ATSI household
Language	43.2%	ATSI people who speak an ATSI language
Income	\$360	median ATSI personal income

Communications
and media
services
(at time of last
visit in 2024)



Mobile coverage
Telstra 3G/4G,
inc 4G small
cell



Backhaul
Fibre optic
cable



ADSL
Yes



nbn type
Sky Muster



**Starlink
LEOsat use**
Most agencies,
and staff houses



Public Wi-Fi
Near community
office, 6am-6pm
weekdays



Public phones
3/4 working



Access computers
2 (Centrelink,
CRC)



TV services
VAST only



Radio services
2 (ABC, PAKAM)



**First Nations
radio**
PAKAM/ RIBS studio
inactive at time
of visit

Mobile service
rating



Coverage



Speed
depending on
proximity to tower



Congestion
at peak use times



Reliability

Photo of Djarindjin
research team in
2023

Left to right: Daniel
Featherstone, co-
researcher Marlon
Sampi, Julian Thomas,
and co-researcher
Audrey Shadforth



ABOUT

Djarindjin and Lombadina are discrete communities, located adjacent to each other on the Dampier Peninsula in Western Australia's Kimberley region. The Traditional Owners are the Bardi people.



PARTNER

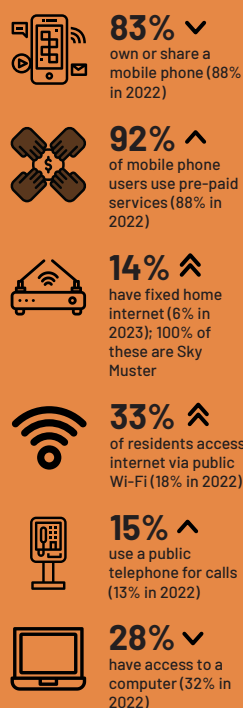


Find out more about our
research in Djarindjin /
Lombadina through the latest
[2023 Community Outcomes
Report](#):

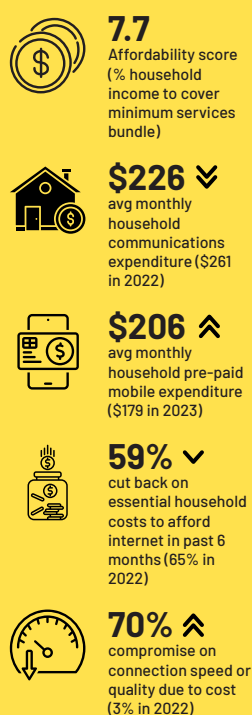


KEY FINDINGS

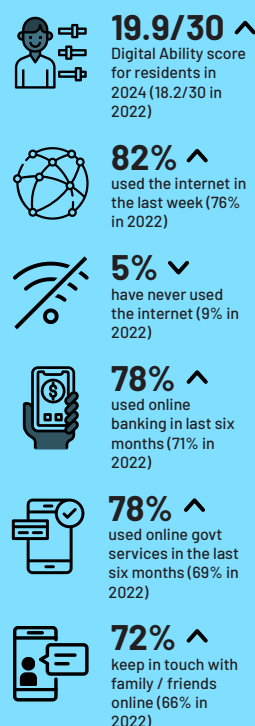
Access



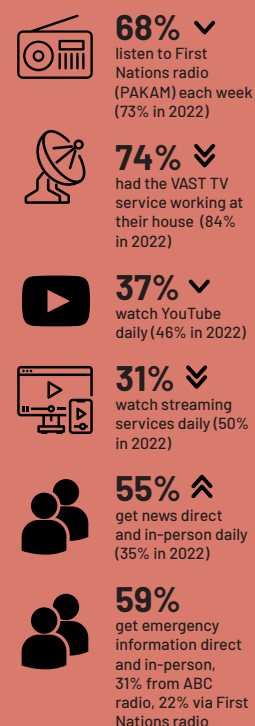
Affordability



Digital Ability



Media Services



Weighted analysis of surveys with respondents who identified as Aboriginal and/or Torres Strait Islander

MOST SIGNIFICANT CHANGE

2022 introduction of Telstra 4G small cell mobile services

Funded by regional agencies, the Djarindjin 9m tower was installed to address issues of low signal strength and frequent dropouts from the existing mobile base station. This has improved 4G coverage and speeds, with better signal penetration inside homes, enabling residents to access services more reliably indoors.

However, its range does not extend far enough to provide good coverage in nearby Lombadina, leaving some areas with poor service. The improved connectivity has increased data usage, raising concerns about affordability for residents, especially given the higher costs associated with pre-paid data. By 2024, demand had led to increased congestion during peak use, especially in the evenings.

Affordability

Affordability remains a challenge, as resident Marlon Sampi explained: "[My] fortnightly pay is \$720. [My biggest expenses are] food, fuel, clothes, everything [so] I'd be lucky to have some left over the next week just for [mobile] credit ... It's pretty hard out here."

There are big positives [of having improved] connectivity... being able to do business more efficiently, being able to contact friends and family and all those things very easily. But then one of the negatives is that... everybody can get in touch with you [and] social interaction is now done between a screen and it's not done around a table [or] a fire. (Nathan McIvor, CEO, Djarindjin Aboriginal Corporation)



Average monthly household expenditure on pre-paid mobile increased from \$179 in 2022 to \$206 in 2024. However, overall communications expenditure had reduced slightly from \$261 to \$226 per month due to household uptake of fixed internet (from 6% in 2023 to 14% in 2024) and reduction in post-paid mobile services from 12% in 2022 to 8% in 2024.

(photo left) Djarindjin 4G small cell

Erub

Torres Strait, Qld

AT A GLANCE

Distances	196km	to Horn Island
	1990km	to Darwin
Population	326	90% Torres Strait Islander (6% not stated)
Dwellings	80	occupied dwellings
	3.5	people per ATSI household
Language	91.8%	ATSI people who speak an ATSI language
Income	\$387	median ATSI personal income

Communications and media services (at time of visit)

**Mobile coverage**
Telstra 4G macro-cell

**Backhaul**
Microwave repeaters via Cape York

**ADSL**
Yes

**nbn type**
Sky Muster

**Starlink LEOsat use**
Most agencies, up to 10 staff/ residents houses

**Public Wi-Fi**
Centrelink/ DHS Wi-Fi for govt services only

**Public phones**
2/3 working

**Access computers**
1 (Centrelink/ IKC)

**TV services**
VAST only

**Radio services**
2 AM (4MW, ABC regional), 1 FM (4DI/ 4MW)

**First Nations radio**
TSIMA 4MW/ active local RIBS station 4DI

Mobile service rating



Photo of Erub research team in 2024

Left to right: Daniel Featherstone, Leah Hawkins, co-researcher Lala Gutchen, co-researcher Nixon Mye, TSIMA broadcaster Gilmore Johnston, and Lyndon Ormond-Parker



ABOUT

Erub (Darnley Island) is located in the eastern island group of Zenadth Kes (Torres Strait), near the Great Barrier Reef. The Traditional Owners are the Erub Mer people.



PARTNER

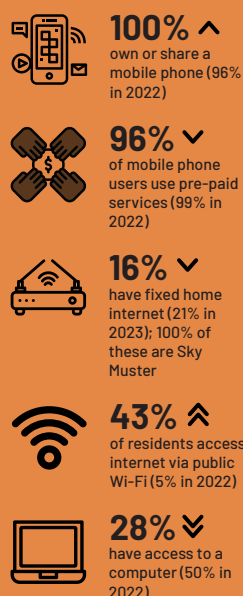


Find out more about our research on Erub through the latest [2023 Community Outcomes Report](#):

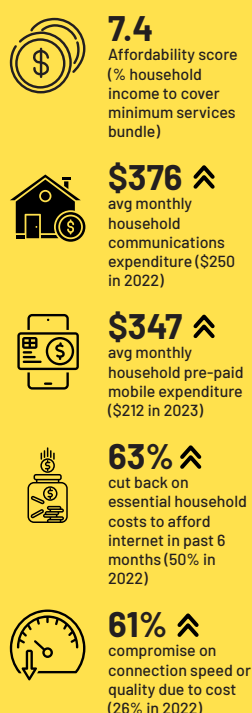


KEY FINDINGS

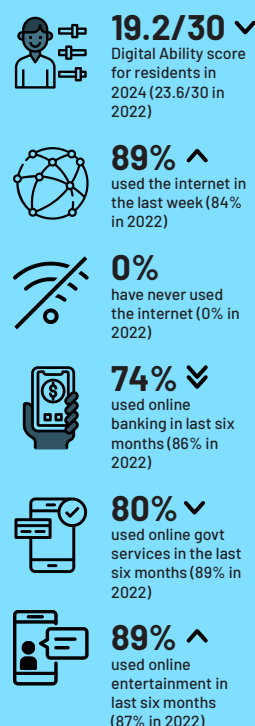
Access



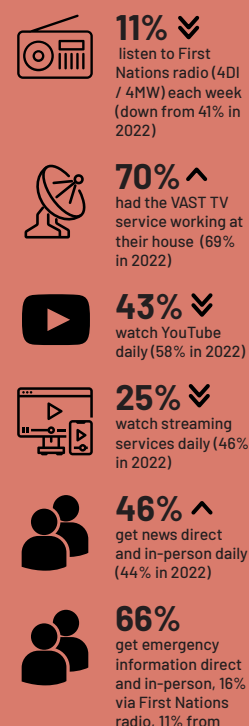
Affordability



Digital Ability



Media Services



Weighted analysis of surveys with respondents who identified as Aboriginal and/or Torres Strait Islander

MOST SIGNIFICANT CHANGE

nbn Wi-Fi hotspot

The recent nbn Wi-Fi hotspot, located at the community office, has seen high usage, particularly among young people and those without mobile credit. However, the current Wi-Fi hotspot is positioned in the central village where mobile coverage is already strongest. Many residents, especially those in the 16 out of 19 villages with limited or no mobile access, must walk or drive up to 4 km to reach the hotspot. The greatest need for a Wi-Fi service is closer to these outer villages, where internet access would be more valuable to residents living in areas with poor or no connectivity.

Re-opening of IKC

In addition to the Wi-Fi hotspot, the reopening of the IKC during 2022 has increased opportunities for digital access and learning. The IKC had been largely unavailable for the previous two years due to the lack of a coordinator, but the reopening has brought new possibilities for community members. With new computers and iPads on the way, the IKC plans to offer computer access and support, particularly focused on Elders and community members



Erub resident Jimmy Thaiday using the nbn Wi-Fi hotspot outside community office

needing assistance with tasks like internet banking, Centrelink, and online safety.

While the nbn Wi-Fi hotspot has been a useful tool, there is clear demand for expanded access, especially in underserved areas, and for the IKC to play a more central role in supporting both Access and Digital Ability in Erub.

"We've just recently got a new IKC coordinator in [and] we're just waiting for all the laptops and stuff to come [from] the State Library of Queensland... The IKC coordinator [will provide training and support] for Elders and community members, [to] teach them simple things [like] internet banking and Centrelink stuff" (John Armitage, Erub Divisional Manager, Torres Strait Island Regional Council)

Galiwin'ku

East Arnhem Land, NT

AT A GLANCE

Distances	150km	west of Nhulunbuy
	550km	north east of Darwin
Population	2199	94% Torres Strait Islander
Dwellings	369	occupied dwellings
	6.3	people per ATSI household
Language	96.9%	ATSI people who speak an ATSI language
Income	\$338	median ATSI personal income

Communications and media services (at time of visit)

 Mobile coverage Telstra 4G	 Backhaul Microwave link from East Arnhem fibre network	 ADSL Yes
 nbn type Sky Muster	 Starlink LEOsat use Most agencies & non-local staff	 Public Wi-Fi At public library, daily data limits
 Public phones 5/8 working	 Public computers 2 (ALPA Higher Education Centre)	 TV services VAST only
 Radio services 4	 First Nations radio Yolngu Radio; TEABBA / RIBS studio inactive	

Mobile service rating (prior to upgrade in November 2024)

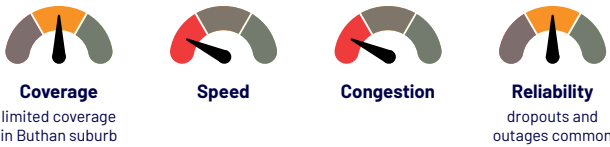


Photo of Galiwin'ku research team with Yalu staff in 2024

From top:: Cyril Bukulatjpi, Anahita Tonkin, Lyndon Ormond Parker, Kieran Hegarty, Ben Ngwele, Evelyn Djotja Bukulatjpi, Wesley Dhurrkay, Shaun Dhamarrandji, Daniel Featherstone



ABOUT

Galiwin'ku is the largest Yolngu community in the East Arnhem region. The Traditional Owners are the Djambarrpuyngu, Gupapuyngu, and Djinang people.



PARTNER



Find out more about our research on Galiwin'ku through the latest [2023 Community Outcomes Report](#):



KEY FINDINGS

Access



85% [▲]
own or share a
mobile phone (61%
in 2022)



100% [▲]
of mobile phone
users use pre-paid
services (98% in
2022)



5% [▲]
have fixed home
internet (2% in
2023); 100% of
these are Sky
Muster



51% [▲]
of residents access
internet via public
Wi-Fi (12% in 2022)



22% [▲]
use a public
telephone for calls
(14% in 2022)



9% [▼]
have access to a
computer (36% in
2022)

Affordability



7.1
Affordability score
(% household
income to cover
minimum services
bundle)



\$369 [▲]
avg monthly
household
communications
expenditure (\$223
in 2022)



\$361 [▲]
avg monthly
household pre-paid
mobile expenditure
(\$285 in 2023)



80% [▲]
cut back on
essential household
costs to afford
internet in past 6
months (35% in
2022)



92% [▲]
compromise on
connection speed or
quality due to cost
(36% in 2022)

Digital Ability



16.2/30 [▲]
Digital Ability score
for residents in
2024 (14.9/30 in
2022)



79% [▲]
used the internet in
the last week (52%
in 2022)



5% [▼]
have never used
the internet (28%
in 2022)



58% [▲]
used online
banking in last six
months (52% in
2022)



52% [▲]
used online govt
services in the last
six months (43% in
2022)



63% [▲]
keep in touch with
family / friends
online (54% in
2022)

Media Services



31%
listen to First
Nations radio
(Yolngu Radio,
TEABBA) each week
(same as 2022)



15% [▼]
had the VAST TV
service working at
their house (30%
in 2022)



68% [▲]
watch YouTube
daily (31% in 2022)



15% [▼]
watch streaming
services daily (17%
in 2022)



75% [▲]
get news direct and
in-person daily (71%
in 2022)



96%
get emergency
information direct /
in-person, 49% via
First Nations radio,
14% from ABC radio

Weighted
analysis of
surveys with
respondents
who
identified as
Aboriginal
and/or
Torres Strait
Islander

MOST SIGNIFICANT CHANGE

Upgrade of Telstra microwave link and services

In Galiwin'ku, delays to the long-awaited upgrade of Telstra's mobile service and ADSL network have hindered efforts to improve digital inclusion. After years of complaints about unreliable mobile and broadband services, Telstra has upgraded the East Arnhem Fibre Network with RCP funding and finalised an upgrade to the microwave link and mobile tower to 4G/5G (completed in late November 2024).

These upgrades will significantly improve the community's digital infrastructure and community access to reliable voice and data services. The fibre network, originally installed in 2008, along with the upgraded microwave link and mobile tower, may increase data capacity, improve internet speeds, and enhance service quality and reliability. Telstra is also planning further network upgrades to address ongoing reliability issues.

nbn Wi-Fi mesh network

Additionally, a planned community-wide NBN Wi-Fi mesh network is due for installation in mid-2025.



Various
receivers
on East
Arnhem
Regional
Council
office roof,
with 4G
tower in
background

The network will offer free external internet access throughout Galiwin'ku, including in the Buthan suburb, where mobile coverage is currently poor. NBN will be responsible for the installation and maintenance of the network, with funding in place for three years of operations. However, there are still challenges. There is no plan to install an additional mobile tower to improve coverage in Buthan and nearby homelands, which may leave some areas without sufficient service.

Gängaṅ homeland

East Arnhem Land, NT

AT A GLANCE

Distances	206km	south of Nhulunbuy
Population	100	100% Aboriginal people (6% not stated) ¹⁴
Dwellings	13	occupied dwellings ¹⁵
	7.8	people per ATSI household ¹⁶
Language	100%	ATSI people who speak an ATSI language
Income	\$282	median ATSI personal income (Laynhapuy–Gumatj homelands)

Communications
and media
services
(at time of visit)



Mobile coverage
No mobile service



Backhaul
HCRC microwave repeaters for phone services



ADSL
No



nbn type
Sky Muster



Starlink LEOsat use
Starlink on store for ATM / EFTPOS



Public Wi-Fi
At public library, daily data limits



Public phones
One Telstra public phone, phone at store



Access computers
None



TV services
VAST only



Radio services
Yolŋu Radio (FM)(inactive during visit)



First Nations radio
Yolŋu Radio (FM)(inactive during visit)

Mobile service rating No mobile service in Gängaṅ homeland

Photo of Gängaṅ research team in 2024

Left to right: Kieran Hegarty, co-researcher Djamika Ganambarr, Lyndon Ormond-Parker, Daniel Featherstone



ABOUT

Gängaṅ homeland is a small, community-managed homeland located in the East Arnhem region. The Traditional Owners are the Yolŋu / Dhuwala people.



PARTNER



Find out more about our research on Gängaṅ through the latest [2023 Community Outcomes Report](#):



KEY FINDINGS

Access



88% ▾
own or share a
mobile phone (80%
in 2022)



100% ▲
of mobile phone
users use pre-paid
services (88% in
2022)



0%
have fixed home
internet (same in
2022)



71% ▽
of residents access
internet via public
Wi-Fi (91% in 2022)



100% ▲
use a public
telephone for calls
(96% in 2022)



12% ▾
have access to a
computer (22% in
2022)

Affordability



5.5
Affordability score
(% household
income to cover
minimum services
bundle)



\$266 ▲
avg monthly
household
communications
expenditure (\$166
in 2022)



74% ▽
cut back on
essential household
costs to afford
internet in past 6
months (56% in
2022)



96% ▲
compromise on
connection speed or
quality due to cost
(73% in 2022)

Digital Ability



15.8/30
Digital Ability
score for residents
in 2024 (same in
2022)



86% ▲
used the internet in
the last week (58%
in 2022)



12% ▾
have never used
the internet (18%
in 2022)



73% ▲
used online
banking in last six
months (62% in
2022)



61% ▲
used online govt
services in the last
six months (54% in
2022)



84% ▲
keep in touch with
family / friends
online (64% in
2022)

Media Services



13% ▲
listen to First
Nations radio (Yolŋu
radio) each week
(15% in 2022)



0%
had the VAST TV
service working at
their house (same
in 2022)



76% ▾
watch YouTube
daily (43% in 2022)



9% ▽
watch streaming
services daily (34%
in 2022)



100% ▲
get news direct
and in-person daily
(79% in 2022)



100%
get emergency
information direct
and in-person, 48%
via Yolŋu radio

Weighted
analysis of
surveys with
respondents
who
identified as
Aboriginal
and/or
Torres Strait
Islander

MOST SIGNIFICANT CHANGE

Planned NBN Wi-Fi mesh network

Gāṅgaṅ community is largely offline, with no mobile service and no internet access in any of the 13 dwellings. Residents rely on the Telstra public phone and the free Wi-Fi at the shop, available from 2-8pm daily.

Since 2022, the community awaited the rollout of a Regional Connectivity Program funded community-wide Wi-Fi network. The project was delayed and funding eventually revoked. However, a planned NBN Wi-Fi mesh network is now being installed to provide much needed connectivity in Gāṅgaṅ, one of 23 communities included under a 2024 budget measure.

The Wi-Fi mesh network will provide internet access and Wi-Fi calling across the whole community, reducing the need to walk to the public phone or shop. NBN will maintain the network with three-year operational funding for Sky Muster Plus Premium backhaul, with Starlink backup to ensure reliability in heavy rain. Internet access will be free, an improvement on the earlier proposal which included pre-paid data.

The mesh would be external access only, with limited penetration inside metal-clad buildings. Additionally, coverage will not extend beyond the community, including to the nearby airstrip.

Planning will need a community-led approach — including control of access hours and content filtering — to ensure the network supports local needs and preserves the community's way of life and cultural values.

"Yolŋu [need] access [to] internet banking, news, reporting to Centrelink and all those things. But it has to be done in a really careful way, because there's potential [of] negative impact upon the way of life out here, which [is] really special". (Rachel Godley, LHAC Youth Program Manager)

"We want NBN to [talk to us] before we say okay for our Wi-Fi ... to make it right for my homeland and for my community." (Billy Gumana, community leader)

Kalumburu

East Kimberley, WA

AT A GLANCE

Distances	279km	north west of Kununurra
Population	388	87.6% Aboriginal people
Dwellings	85	occupied dwellings
	4.4	people per ATSI household
Language	14.9%	ATSI people who speak an ATSI language
Income	\$296	median ATSI personal income

Communications and media services (at time of visit)



Mobile coverage
4G (Optus satellite small cell)



Backhaul
HCRC microwave network



ADSL
No



nbn type
Sky Muster



Starlink LEOsat use
By store, school, police, CDP office, staff



Public Wi-Fi
Free Activ8me Wi-Fi community mesh & hotspots



Public phones
2/5 working



Access computers
2 (Centrelink, CRC (\$5/hr))



TV services
VAST only



Radio services
2 (ABC, PAKAM)



First Nations radio
Pilbara and Kimberley Aboriginal Media / RIBS inactive during visit

Mobile service rating



Coverage
limited to community, approx 3km radius



Speed



Congestion



Reliability
regular dropouts and outages

Photo of Kalumburu research team in 2024

Left to right: Maggie Captain, Julian Thomas, Julia Campbell, Daniel Featherstone



ABOUT

Kalumburu is a very remote community situated on the banks of the King Edward River in the Wyndham-East Kimberley Shire. The Traditional Owners are the Kwini and Kulari people.



PARTNER

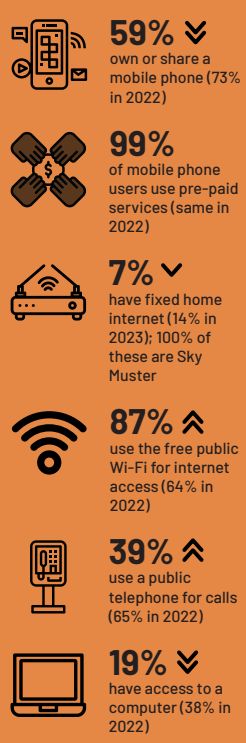


Find out more about our research in Kalumburu through the latest [2023 Community Outcomes Report](#):

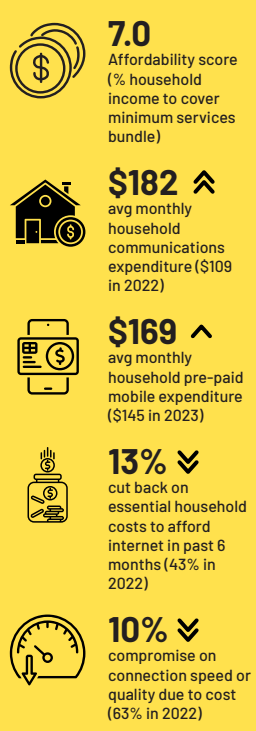


KEY FINDINGS

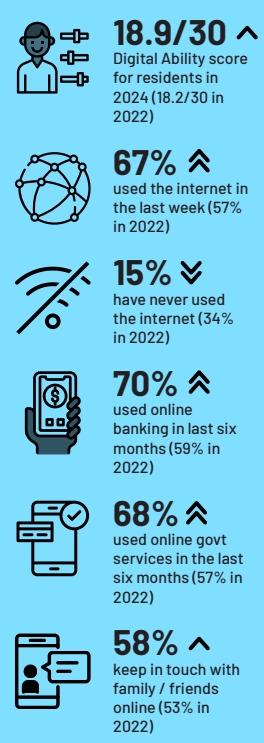
Access



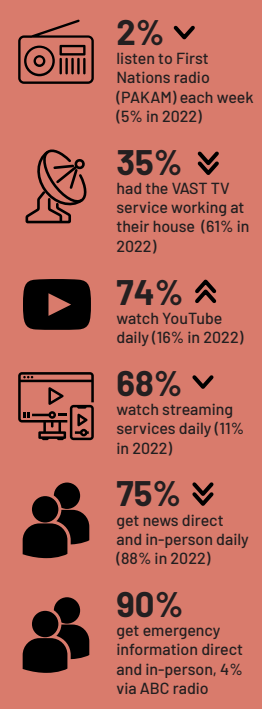
Affordability



Digital Ability



Media Services



Weighted analysis of surveys with respondents who identified as Aboriginal and/or Torres Strait Islander

MOST SIGNIFICANT CHANGE

Free household internet and calls

In Kalumburu, an upgrade of the RCP-funded Activ8me Wi-Fi mesh network to the new Sky Muster Plus Premium satellite service in November 2023 introduced free household internet and calls. This upgrade has enabled unlimited download, higher speeds and free access in all 128 households and Wi-Fi hotspots in town. The upgrade also replaced a \$2/GB paid voucher system to access the network which had placed financial strain on households.

"Two dollar for 1GB is not bad for [Elders] trying to jump onto their MyGov [but for] younger generations on TikTok, Facebook [and YouTube]... You go and download one movie, there's your data gone". (Natalie Perry, resident)

Key impacts of this upgrade have been notable. Network reliability has improved, with the elimination of service downtimes caused by data limits, resulting in a significant increase in community data usage. Since the shift to free access, data use across the network increased from 1.4 TB per month to 13 TB in



Sky Muster dishes on top of Kalumburu community office; four of which provide the backhaul for the mesh network

the first three months. Free VoIP calls to both fixed and mobile numbers have also reduced the cost burden of telecommunications among Kalumburu residents, supporting communication needs and access to essential services.

The wet season continues to cause network dropouts due to rain fade and power outages, and some equipment failures have left parts of the community without service.

Despite these challenges, the transition to unlimited, free internet access represents a major improvement for Kalumburu, and has resulted in significant benefits to economic and social wellbeing. The number of people who reported having to cut back on essential household costs to afford internet has since dropped by 53%.

Pipalyatjara / Kalka

Anangu Pitjantjatjara lands, SA

AT A GLANCE

Distances	700km	south-west of Alice Springs
Population	159	82% Aboriginal and/ or Torres Strait Islander people
Dwellings	39	occupied dwellings
	4.1	people per ATSI household
Language	88%	ATSI people who speak an ATSI language (Pitjantjatjara 74%, Ngaanyatjarra 5%)
Income	\$293	median weekly ATSI personal income

Communications
and media
services
(at time of visit)



Mobile coverage
4G macro-cell



Backhaul
Fibre optic cable



ADSL
Yes



nbn type
Sky Muster



Starlink LEOsat use
By Pilaytjara clinic, art centre



Public Wi-Fi
Free NBN Wi-Fi at PY Ku centre 6am-6pm; DHS Wi-Fi at Centrelink



Public phones
0/1 working



Access computers
1(PY Ku centre)



TV services
VAST only



Radio services
2 (PY Media, ABC)



First Nations radio
Pitjantjatjara Yankunytjatjara (PY) Media (no RIBS studio)

Mobile service
rating



Coverage
no service in Kalka



Speed



Congestion
peak use congestion



Reliability

Photo of Pipalyatjara
research team in
2024

Left to right: Daniel
Featherstone, co-
researcher Renae Fox,
Jenny Kennedy

Thanks also to co-
researcher Danny Fox



ABOUT

Pipalyatjara and Kalka are neighbouring remote communities at the westernmost edge of the Anangu Pitjantjatjara lands in SA near the tri-state with WA and NT. The Traditional Owners are the Pitjantjatjara people.



PARTNER



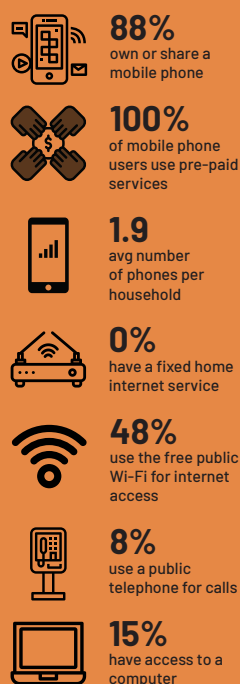
**Ngaanyatjarra
Pitjantjatjara
Yankunytjatjara
Women's Council**

Check back on our research
in Pipalyatjara / Kalka via
the [Mapping the Digital Gap](#)
website:

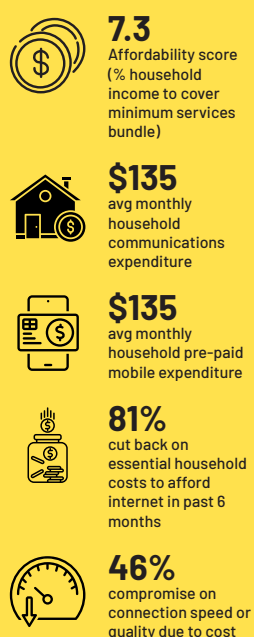


KEY FINDINGS

Access



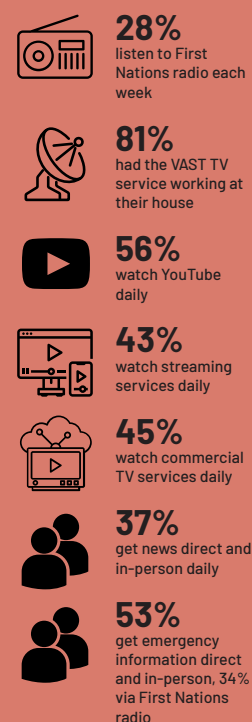
Affordability



Digital Ability



Media Services



Weighted analysis of surveys with respondents who identified as Aboriginal and/or Torres Strait Islander

MOST SIGNIFICANT CHANGE

nbn and DHS Wi-Fi hotspots

An nbn Wi-Fi hotspot was installed at the Pipalyatjara community store under the Australian Government funded Strengthening Telecommunication Against Natural Disasters (STAND) program, operated by Activ8me. The hotspot operates 6am to 6pm daily and is well used, especially by young people, elders and those without mobile credit. Seating is available outside the store, making it a popular place to gather and use the Wi-Fi.

Wi-Fi is also provided by Department of Human Services at the PY Ku centre adjacent to the store, limited to Centrelink, MyGov, banking and government services. As in most other communities, DHS Wi-Fi is available 24/7, providing a backup when the NBN Wi-Fi hotspot is off at night.

While 4G mobile is available in Pipalyatjara, affordability constraints mean that residents often top-up mobile data fortnightly, with periods without mobile access. Wi-Fi hotspots provide a crucial backup service for internet access during these times.



Residents using the access computer at the PY Ku Centre in Pipalyatjara

Kalka awaiting a small cell mobile service

Kalka is a small community of 112 residents (ABS 2021), located about 5km from Pipalyatjara on the northern side of a large dividing hill, and has no mobile coverage or public Wi-Fi services. Most Kalka residents are reliant on phone and internet access in Pipalyatjara.

Kalka is one of six small APY communities that was funded to receive a 4G satellite small cell mobile service under the Regional Connectivity Program in early 2022. While rollout was intended in June 2023, Kalka was still awaiting installation during our March 2024 visit, caused by national delays and wait times for Telstra getting a permit to enter the APY lands to begin the project. APY Council approval was finally granted in July 2023, however a completion date for the small cells is yet to be announced.

Tennant Creek

Barkly Region, NT

AT A GLANCE

Distances	508km	north of Alice Springs
Population	3080	1707 (55.4%) Aboriginal and/ or Torres Strait Islander people
Dwellings	943	occupied dwellings
	3.7	people per ATSI household
Language	44.8%	ATSI people who speak an ATSI language
Income	\$336	median ATSI personal income

Communications
and media
services
(at time of visit)



Mobile coverage
Telstra/Optus 4G



Backhaul
Fibre optic cable



ADSL
No, nbn FTTN (see overleaf)



nbn type
FTTN, FTTP for key service facilities



Starlink LEOsat use
No uptake in 2023



Public Wi-Fi
installed 2024, limited access previously



Public phones
6/10 working (estimated)



Access computers
1 (Centrelink)



TV services
Broadcast of 16 Freeview channels



Radio services
10 FM (inc 8KIN FM and 8CCC); 2 AM (ABC)



First Nations radio
8KIN FM – Central Australian Aboriginal Media Association

Mobile service
rating



Coverage



Speed



Congestion
at peak times



Reliability
occasional outages

Photo of Tennant Creek research team in 2022

Left to right: former JCAC Chair Linda Turner (LT), co-researcher Sheana Sampson, Fungisai Siggins, Dr Lyndon Ormond-Parker, JCAC Executive Manager David Curtis, and Dr Daniel Featherstone



ABOUT

Tennant Creek is the regional centre of the Barkly Region, located on the Stuart Highway. The Traditional Owners of the region are the Warumungu people.



PARTNER



**Julalikari
Council
Aboriginal
Corporation**

Find out more about our research on Tennant Creek through the latest [2023 Community Outcomes Report](#):



KEY FINDINGS

Access



67% ▼
own or share a
mobile phone (78%
in 2022)



92% ▲
of mobile phone
users use pre-paid
services (84% in
2022)



11%
have fixed home
internet (same in
2023); 100% of
these are nbn fixed
line



51% ▲
use the free public
Wi-Fi for internet
access (24% in
2022)



26% ▲
use a public
telephone for calls
(12% in 2022)



29% ▼
have access to a
computer (30% in
2022)

Affordability



8.7
Affordability score
(% household
income to cover
minimum services
bundle)



\$156 ▼
avg monthly
household
communications
expenditure (\$184
in 2022)



\$158
avg monthly
household pre-paid
mobile expenditure



34% ▼
cut back on
essential household
costs to afford
internet in past 6
months (40% in
2022)



38% ▲
compromise on
connection speed or
quality due to cost
(36% in 2022)

Digital Ability



13.2/30 ▼
Digital Ability score
for residents in
2024 (18.5/30 in
2022)



68% ▲
used the internet in
the last week (66%
in 2022)



31% ▲
have never used
the internet (25%
in 2022)



56% ▼
used online
banking in last six
months (70% in
2022)



56% ▼
used online govt
services in the last
six months (69% in
2022)



47% ▼
keep in touch with
family / friends
online (66% in
2022)

Media Services



41% ▼
listen to First
Nations radio
service (CAAMA)
each week (50% in
2022)



24% ▼
watch YouTube
daily (46% in 2022)



11% ▼
watch streaming
services daily (40%
in 2022)



48% ▲
watch commercial
TV services daily
(43% in 2022)



49% ▼
get news direct
and in-person daily
(64% in 2022)



69%
get emergency
information direct
and in-person, 39%
via First Nations
radio and ABC
Radio

Weighted
analysis of
surveys with
respondents
who
identified as
Aboriginal
and/or
Torres Strait
Islander

Note:
Headline
results are
from 2023
surveys

Note: Results
affected by
different
demographic
sampling
between
2023 and
2022- see

MOST SIGNIFICANT CHANGE

Planned Wi-Fi for community living areas

In Tennant Creek, the planned introduction of free Wi-Fi for community living areas has faced delays due to funding and governance issues. Initially planned for 2022, the project is expected to be completed by late 2024. The initiative aims to provide Wi-Fi to First Nations residents across seven community living areas. Funding initially allocated to town centre hotspots has been redirected by the Barkly Regional Council to support the completion of the Wi-Fi project.

Note:
We did
not visit
in 2024,
planning
to review
in 2025

Free Wi-Fi access close to residential areas would allow young people to stay connected near their homes, reducing the need to gather in the town centre at night—a factor that has been linked to social issues. The project is also expected to improve affordability by reducing reliance on pre-paid mobile data for accessing essential services and media. Local management of the network, including content filtering and a nightly curfew, will be critical to provide community control over what is accessed, where, and when. Brody Moore, CEO of Julalikari Aboriginal Corporation in 2023, highlighted the importance of the project for community stability:

"In the last three weeks we've restarted that project and [have] connected up now to four [community living areas]. The aim is that this will be a free service for the community in order to keep kids and families in their [community living areas], rather than coming in[to] town to access the hotspots that are in the main street." (Brody Moore, Julalikari AC CEO, 2023)

For residents, the project represents an opportunity to address long-standing issues. One survey respondent said, "We want Wi-Fi at home to stop kids roaming the streets looking for Wi-Fi at night".



Newly installed solar Wi-Fi benches at Wuppa and Tingkarli CLAs, with wireless charging station (courtesy of Easyweb Digital)

Wadeye

West Daly region, NT

AT A GLANCE

Distances	403km	south-west of Darwin
Population	1960	86-89% Aboriginal and/or Torres Strait Islander
Dwellings	339	occupied dwellings
	5.4	people per ATSI household
Language	95.5%	ATSI people who speak an ATSI language
Income	\$161	median ATSI personal income

Communications
and media
services
(at time of visit)



Mobile coverage
Telstra 3G/4G



Backhaul
Fibre optic cable



ADSL
Yes (plus fibre connections to some services)



nbn type
Sky Muster



Starlink LEOsat use
Most agencies, non-local staff



Public Wi-Fi
At WDRC library during opening hours



Public phones
New Telstra Wi-Fi phone in 2024, previously none working



Access computers
7 (TDC office, Centrelink, Men's Shed)



TV services
VAST only



Radio services
3 (TEABBA, ABC Darwin, ABC National)



First Nations radio
TEABBA / Wadeye
RIBS inactive during visit

Mobile service
rating



Coverage



Speed



Congestion
at peak times



Reliability
has had several major outages

Photo of Wadeye
research team in
2024

Left to right: Co-researcher Vincent Jinjair, John Jauncey, Jenny Kennedy, Heather Rea (Telstra), co-researcher Honorata Jinjair, Tracey Leo, Lyndon Ormond-Parker, and Daniel Featherstone



ABOUT

Wadeye is a large coastal community made up of 22 traditional owner groups, surrounded by 30 homelands and outstations within the Thamarrurr region. The Traditional Owners are the Dinnuman people.



PARTNER



Thamarrurr
Development Corporation

Find out more about our research on Wadeye through the latest [2023 Community Outcomes Report](#):



KEY FINDINGS

Access



50% ▼
own or share a mobile phone (64% in 2022)



100% ^
of mobile phone users use pre-paid services (99% in 2022)



1% ▼
have fixed home internet (2% in 2023); 100% of these are Sky Muster



31% ^
use the free public Wi-Fi for internet access (3% in 2022)

Affordability



7.5
Affordability score (% household income to cover minimum services bundle)



\$235 ^
avg monthly household communications expenditure (\$202 in 2022)



\$233 ^
avg monthly household pre-paid mobile expenditure (\$161 in 2023)



78% ^
cut back on essential household costs to afford internet in past 6 months (45% in 2024)



74% ^
compromise on connection speed or quality due to cost (36% in 2022)

Digital Ability



10.8/30 ^
Digital Ability score for residents in 2024 (6.8/30 in 2022)



62% ▼
used the internet in the last week (65% in 2022)



25% ^
have never used the internet (11% in 2022)



44% ^
used online banking in last six months (30% in 2022)



32% ^
used online govt services in the last six months (21% in 2022)



52% ^
keep in touch with family / friends online (22% in 2022)

Media Services



19% ^
listen to First Nations radio service (TEABBA) each week (29% in 2022)



48% ▼
had the VAST TV service working at their house (52% in 2022)



75% ^
watch YouTube daily (23% in 2022)



23% ^
watch commercial TV services daily (7% in 2022)



68% ^
get news direct and in-person daily (55% in 2022)



89%
get emergency information direct and in-person, 39% via First Nations radio, 14% via ABC

Weighted analysis of surveys with respondents who identified as Aboriginal and/or Torres Strait Islander

MOST SIGNIFICANT CHANGE

Uptake of Starlink by key facilities

Introduced in late 2022, Starlink provides a high-speed, low latency broadband service with unlimited data and reduced rain fade impact, offering an alternative to existing Sky Muster / ADSL services. Many agencies, including the store, installed Starlink to address persistent congestion and outages, reporting improved service quality and reliability.

Starlink has provided a redundancy option to mitigate problems associated with extended network and power outages in recent years, addressing critical issues like food security, access to services and social unrest. The improved reliability of LEOSat services has proven beneficial in a region where these disruptions have had significant impacts.

"[Staff] criticisms have stopped. [Previously] if they've been sitting on their computer for the last hour trying to get access to their emails, or SharePoint, [I] soon hear about it. [But now] I don't hear about the connectivity, the speed issues anymore". (John Gawen, CEO of the Thamarrurr Development Corporation)



The Murrinhpatha Nimmipa Store in Wadeye has recently switched to Starlink services, alongside several other agencies

The up-front cost of Starlink equipment and high post-paid cost of \$139/month remains a barrier for adoption by First Nations households in Wadeye. While service providers and contractors can gain faster and more reliable connectivity through LEOSat services, most residents still rely on costly prepaid mobile services, limited data, and slow, unreliable connections. This is resulting in a widening digital divide at a local level in Wadeye and other communities.

Following several instances of unrest since 2022, many people relocated to outstations but have returned to Wadeye due to limited services. Planning is underway to upgrade housing, roads and services to enable ongoing residence in homelands. It is likely that LEOSat and other satellite services will play an important role in providing critical services to these homelands.

Warakurna

Ngaanyatjarra Lands, WA

AT A GLANCE

Distances	780km	west of Alice Springs
Population	185	86% Aboriginal and/or Torres Strait Islander
Dwellings	69	occupied dwellings
	2.8	people per ATSI household
Language	85%	ATSI people who speak an ATSI language
Income	\$305	median ATSI personal income

Communications
and media
services
(at time of visit)



Mobile coverage
Telstra 3G/4G



Backhaul
Fibre optic cable



ADSL
Yes



nbn type
Sky Muster



Starlink LEOsat use
Most agencies, non-local staff



Public Wi-Fi
At Centrelink office



Public phones
2/2 working



Access computers
2 (Centrelink)



TV services
VAST Only



Radio services
2 (Radio NGM, ABC Alice Springs)



First Nations radio
Ngaanyatjarra Radio

Mobile service
rating



Photo of Warakurna
research team in
2023

Left to right: Renisha
Yates, Jeannie Pegg,
Warakurna CDA Gina
Livesay, Lyndon
Ormond-Parker and
Daniel Featherstone



ABOUT

Warakurna is situated in the foothills of the Rawlinson Range in the Ngaanyatjarra Lands of Western Australia. The Traditional Owners are the Ngaanyatjarra and Ngaatjatjarra people.



PARTNER



**Ngaanyatjarra
Council Group**

**Warakurna Community
Council**

Find out more about our
research on Warakurna
through the latest [2023
Community Outcomes Report](#):



KEY FINDINGS

Access

-  **90% $\uparrow$**
own or share a mobile phone (78% in 2023)
-  **100%**
of mobile phone users use pre-paid services (same in 2023)
-  **4%**
have fixed home internet (same in 2023); 75% NBN Sky Muster / 25% Starlink
-  **100% $\uparrow$**
use the free public Wi-Fi for internet access (72% in 2023)
-  **44% $\downarrow$**
use a public telephone for calls (11% in 2023)
-  **8% $\downarrow$**
have access to a computer (14% in 2023)

Affordability

-  **7.7**
Affordability score (% household income to cover minimum services bundle)
-  **\$234 $\uparrow$**
avg monthly household communications expenditure (\$163 in 2023)
-  **\$229 $\uparrow$**
avg monthly household pre-paid mobile expenditure (\$164 in 2023)
-  **71% $\uparrow$**
cut back on essential household costs to afford internet in past 6 months (43% in 2023)
-  **71% $\uparrow$**
compromise on connection speed or quality due to cost (29% in 2023)

Digital Ability

-  **17.5/30 $\uparrow$**
Digital Ability score for residents in 2024 (13.6/30 in 2023)
-  **64% $\downarrow$**
used the internet in the last week (72% in 2023)
-  **8% $\downarrow$**
have never used the internet (10% in 2023)
-  **79% $\downarrow$**
used online banking in last six months (66% in 2023)
-  **75% $\uparrow$**
used online govt services in the last six months (46% in 2023)
-  **57% $\uparrow$**
keep in touch with family / friends online (45% in 2023)

Media Services

-  **38% $\uparrow$**
listen to First Nations radio (Radio NgM) each week (29% in 2023)
-  **32% $\downarrow$**
had the VAST TV service working at their house (71% in 2022)
-  **73% $\uparrow$**
watch YouTube daily (70% in 2023)
-  **39% $\downarrow$**
watch streaming services daily (68% in 2023)
-  **77% $\downarrow$**
get news direct and in-person daily (80% in 2023)
-  **95%**
get emergency information direct and in-person, 61% via First Nations radio, 29% via ABC radio

Weighted analysis of surveys with respondents who identified as Aboriginal and/or Torres Strait Islander

Note: 2023 to 2024 only

MOST SIGNIFICANT CHANGE

nbn Wi-Fi mesh network

The introduction of Warakurna's nbn Wi-Fi mesh network in 2022 provided free access to the internet through 13 Wi-Fi hotspots across residential areas as one of four trial sites. This was further enhanced in late 2023 with an upgrade to the Sky Muster Plus Premium service, which offers unlimited data usage and continuous service.

The benefits of this network upgrade have been significant for digital inclusion in Warakurna. Residents now have free Wi-Fi available outside their homes, reducing reliance on costly pre-paid mobile data. The ongoing management and maintenance by nbn, which will continue until 2028, seeks to ensure that the service is regularly monitored, updated, and maintained. The introduction of local management features, such as content filtering, curfew settings, and the ability to switch off certain zones, has given the community greater control over internet usage. Since the Sky Muster Plus Premium upgrade, residents have been able to access a faster and more reliable service with unlimited data access.



Warakurna co-researcher Renisha Yates using the free Wi-Fi from the mesh network

However, some challenges remain. The Wi-Fi service is only available for external use, meaning that during extreme weather conditions residents face difficulty accessing the network indoors. Additionally, some households struggle with poor signal strength and continue to rely on mobile data.

Despite these limitations, the introduction of the nbn Wi-Fi mesh network has made a significant difference. As co-researcher Jeannie Pegg noted, "Sometimes people have no credit, [now] they use the Wi-Fi. They are free". The younger generation, in particular, has benefited from the service, as DY, the Warakurna Community Chairperson, explained: "Yeah, good for them kids ... now they [can] get free internet, makes it easy for them [instead of paying the high cost of pre-paid mobile data]."

Wilcannia

Central Darling Shire, NSW

AT A GLANCE

Distance	197km	to Broken Hill
	557km	to Dubbo
Population	735	75% Aboriginal and/or Torres Strait Islander
Dwellings	189	occupied
	3.3	people per ATSI household
Language	3.8%	ATSI people who speak an ATSI language
Income	\$442	median ATSI income

Communications and media services



Mobile coverage
Telstra 4G, small cell near hospital



Backhaul
Fibre optic cable



ADSL
Yes



nbn type
Sky Muster



Starlink LEOsat use
Many agencies, non-local staff, some residents



Public Wi-Fi
At Centrelink office, REDI.E, Wings drop-in centre



Public phones
2/3 working



Access computers
4 (Centrelink, Wings drop-in centre)



TV services
Broadcast



Radio services
5



First Nations radio
Wilcannia River Radio

Mobile service rating



Coverage
patchy in parts of community



Speed
depending on location



Congestion
at peak times



Reliability
has had several major outages

Photo of Wilcannia research team in 2024

Left to right:
Shalarna Thorpe,
Daniel Featherstone,
Bobbi-Jean Harris,
Monica Kerwin, Leah
Hawkins, Sharon
Parkinson



ABOUT

Wilcannia is located in the Central Darling Shire. The Traditional Owners are the Barkindji people.



PARTNER

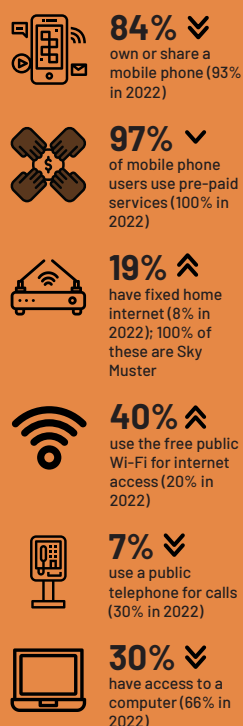


Find out more about our research on Wilcannia through the latest [2023 Community Outcomes Report](#):

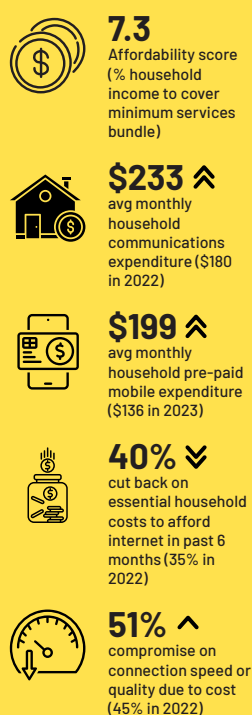


KEY FINDINGS

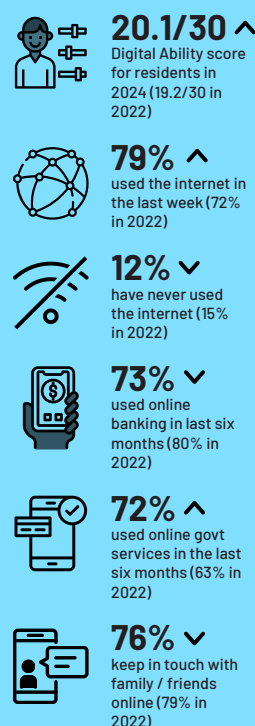
Access



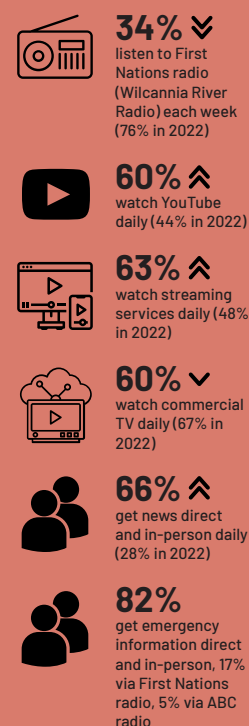
Affordability



Digital Ability



Media Services



MOST SIGNIFICANT CHANGE

Communications services during COVID-19 outbreak

In 2021, Wilcannia experienced the first major COVID-19 outbreak in an Aboriginal community. The outbreak highlighted the town's poor mobile and internet services, which were insufficient for the multiple agencies arriving to provide support. To address immediate needs, a temporary Cell on Wheels and a Rural Fire Service 4G booster were deployed. However, these temporary solutions were removed once the outbreak subsided, leaving Wilcannia with minimal sustained improvements to its communications infrastructure.

While the outbreak did draw attention to the poor state of communications in Wilcannia, and a 4G small cell tower was installed near the hospital to improve phone and internet access for health services, the broader mobile and internet issues remain largely unresolved and no other long-term upgrades have been made in the three years since the outbreak. The two primary mobile towers are located 11 km and 46 km away from the town, contributing to patchy and congested coverage.

"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, nurse, Maari Ma Health)

Despite this improvement near the hospital, the rest of Wilcannia continues to struggle with slow ADSL services and unreliable mobile coverage. The community is still waiting for a comprehensive and sustained upgrade to its communications infrastructure to improve digital inclusion.



Co-researcher Monica Kerwin doing a survey with Natika Clayton, and co-researcher Shalarna Thorpe doing a survey with Rob Clayton

Wujal Wujal

Cape York, Qld

AT A GLANCE

Distances	170km	north of Cairns (338 km by road)
Population	276	94% ATSI population
Dwellings	73	occupied dwellings
	3.4	people per ATSI household
Language	39.9%	ATSI people who speak an ATSI language
Income	\$332	median ATSI personal income

Communications
and media
services
(at time of visit)



Mobile coverage
Telstra 3G/4G



Backhaul
Fibre optic cable



ADSL
Yes



nbn type
Sky Muster



Starlink LEOsat use
Key services and some staff houses



Public Wi-Fi
At Centrelink office, REDL.E, Wings drop-in centre



Public phones
1 (in town centre)



Access computers
4 (3 at IKC, 1 at Centrelink)



TV services
VAST only



Radio services
2 (Black Star Network, ABC FNQ (AM))



First Nations radio
Black Star (Queensland Remote Aboriginal Media) / Wujal Wujal RIBS (destroyed by flood)

Mobile service
rating



Coverage
patchy in community and surrounding homelands



Speed
depending on location



Congestion
at peak times



Reliability
regular dropouts and history of outages, including during flood

Photo of Wujal Wujal
research team in
2024

Left to right: Lyndon Ormond-Parker, Co-researcher Vincent Tayley, Helen Teece, Co-researcher Dallas Walker, and Daniel Featherstone



ABOUT

Wujal Wujal is an Aboriginal community located on the Bloomfield River in Cape York, North Queensland. The Traditional Owners are the Eastern Kuku Yalanji people.



PARTNER



Find out more about our research on Wujal Wujal through the latest [2023 Community Outcomes Report](#):



KEY FINDINGS

Access



88% ▾
own or share a mobile phone (97% in 2022)



95% ▴
of mobile phone users use pre-paid services (80% in 2022)



17% ▴
have fixed home internet (9% in 2022); 100% of these are Sky Muster



52% ▴
use the free public Wi-Fi for internet access (2% in 2022)



3% ▾
use a public telephone for calls (27% in 2022)



19% ▾
have access to a computer (43% in 2022)

Affordability



7.1
Affordability score (% household income to cover minimum services bundle)



\$237 ▴
avg monthly household communications expenditure (\$111 in 2022)



\$213 ▴
avg monthly household pre-paid mobile expenditure (\$159 in 2023)



91% ▴
cut back on essential household costs to afford internet in past 6 months (26% in 2022)



73% ▴
compromise on connection speed or quality due to cost (26% in 2022)

Digital Ability



16.4/30 ▴
Digital Ability score for residents in 2024 (15.7/30 in 2022)



65% ▴
used the internet in the last week (53% in 2022)



19% ▾
have never used the internet (34% in 2022)



62% ▾
used online banking in last six months (61% in 2022)



61% ▴
used online govt services in the last six months (52% in 2022)



62% ▴
keep in touch with family / friends online (58% in 2022)

Media Services



58% ▴
listen to First Nations radio (Black Star/ Wujal Wujal RIBS) each week (18% in 2022)



76% ▴
had the VAST TV service working at their house (70% in 2022)



49% ▴
watch YouTube daily (14% in 2022)



76% ▴
watch commercial TV daily (31% in 2022)



65% ▴
get news direct and in-person daily (38% in 2022)



88%
get emergency information direct / in-person, 40% via First Nations radio, 14% via ABC radio

MOST SIGNIFICANT CHANGE

Major flood event and impact on communications

In December 2023, Wujal Wujal community was severely impacted by a major flood event in the wake of Cyclone Jasper. It destroyed most facilities and over 40% of houses, breaking the fibre optic cable and leaving the mobile service inoperative after two days. With constant rain depleting the mobile tower's batteries and local power supply destroyed, the community had no reliable communications for many weeks. Starlink services were sent out as an interim solution, but long-term upgrades are urgently needed to ensure communications resilience and redundancy in future.

While a flood warning system was in place, this failed due to the speed and severity of the flood, with residents forced to evacuate homes at night without warning. Lack of communications impacted on the community's ability to respond effectively during a critical evacuation period, and emergency response coordination was disrupted over several months.

Key learnings from the event highlight the need for resilient and backup communication systems,



Damaged Bana Yirriji Arts Centre in Wujal Wujal; image taken five months after flood

particularly in preparation for future cyclones and heavy rain conditions. Power reliability was closely linked to communication failures, emphasising the need for longer-life battery backups and generators for mobile services. Solar recharging systems failed due to continuous rain, and the generator's limited fuel tank required frequent refills by helicopter. Additionally, satellite services, including Sky Muster and satellite phones, were rendered ineffective due to heavy rainfall, and the iTerra satellite backup system was washed away in the flood.

The flood event underscores the urgent need for upgraded, resilient communications infrastructure to ensure that communities like Wujal Wujal are better prepared for future emergencies and can maintain critical communication links even under severe weather conditions.

Yuelamu

Central Desert, NT

AT A GLANCE

Distances	50km	east of Yuendumu
	300km	north west of Alice Springs
Population	149	94% Aboriginal and/or Torres Strait Islander
Dwellings	35	occupied dwellings
	4.8	people per ATSI household
Language	99%	ATSI people who speak an ATSI language
Income	\$254	median ATSI personal income

Communications and media services (at time of visit)



Mobile coverage
Telstra 4G (installed 2023)



Backhaul
HCRC micro-wave network (for phones only)



ADSL
No



nbn type
Sky Muster



Starlink LEOsat use
Council office, CDP, childcare, some staff houses



Public Wi-Fi
Centrelink (for services), Activ8Me hotspot / rec hall (via vouchers)



Public phones
2/3 working



Access computers
2 (Centrelink, recreation hall for youth)



TV services
VAST only



Radio services
PAW Radio (FM); ABC (AM-faint signal)



First Nations radio
PAW Media / Yuelamu RIBS not active at time of visit

Mobile service rating



Photo of Yuelamu research team in 2023

Left to right: Daniel Featherstone, co-researcher Mel Langdon, Lyndon Ormond-Parker



ABOUT

Yuelamu community is a small community located in the Central Desert region of the Northern Territory. The Traditional Owners are the Anmatjerre people.



PARTNER

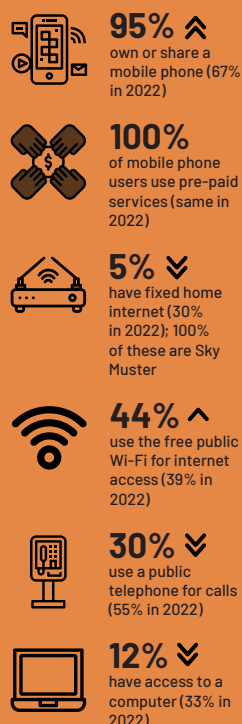


Find out more about our research on Yuelamu through the latest [2023 Community Outcomes Report](#):

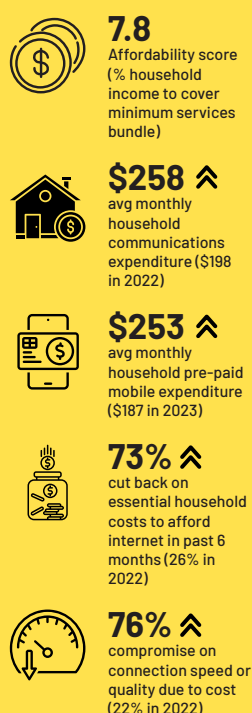


KEY FINDINGS

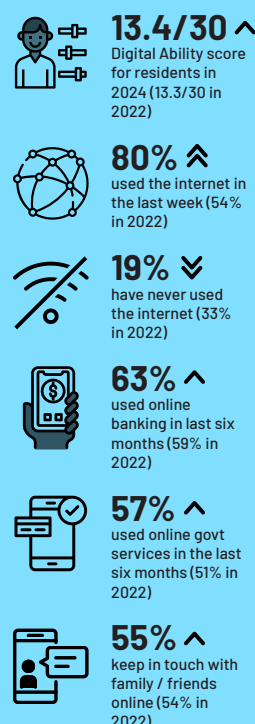
Access



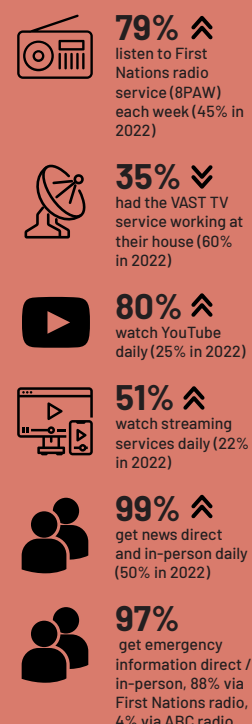
Affordability



Digital Ability



Media Services



MOST SIGNIFICANT CHANGE

Introduction of Telstra 4G mobile service

In Yuelamu, a Telstra 4G mobile macro-cell was introduced in June 2023, following years of community advocacy and delays. Prior to this, residents had limited access to phone and internet services, relying on a public telephone, intermittent Wi-Fi, and a passive mobile signal booster (CfAT hotspot). The new mobile service has brought about much-needed improvements in connectivity, allowing residents to access services from their homes.

In 2022, Dennis Charles, a Broadcaster and Archive Worker at First Nations Media Australia, told us:

"They've been fighting for years for this 4G mobile coverage. They're still waiting on it, but it's coming. [Then everything is] going to change".

The changes have had a largely positive impact on the community. With most essential services located in Yuendumu (50 km away) or Alice Springs (275 km away)—including the clinic, high school, government services, aged care, and banking—the availability of phone and internet access in Yuelamu has reduced



Previously the only mobile access was via the CfAT hotspot, boosting the signal from Yuendumu

the need for travel to access services. It also provides coverage in a 20-30 km range from Yuelamu, improving reception while driving to Yuendumu or during hunting trips and homelands visits.

"[It will be] good for emergency communications. [For] people that goes out hunting, [if they break down] they can call back [so] we know where they are when they're stuck up somewhere in the scrub" (David Japanangka McCormack, traditional owner and community leader)

However, the shift to mobile data has increased household expenditure, adding to the cost of living for many households. This shows that improvements in access do not automatically result in improvements in affordability, illustrating the need for cohesive and coordinated approaches to address digital exclusion.

Feedback from research partners

Local research partnerships have been critical to the success of the Mapping the Digital Gap project. In each community, we have established collaboration agreements with First Nations community-controlled organisations to ensure local guidance and leadership and deliver reciprocal outcomes.

This partnership approach promotes community engagement, ownership and trust in the research, provides a conduit for liaising with local agencies and stakeholders, and enables the employment of community co-researchers, and builds skills and local capacity.

Over the last three years, the Mapping the Digital Gap team have engaged deeply with each research partner and participating community, both while in community and remotely in-between site visits to track progress on existing projects and digital inclusion plans.



Co-researcher
Djamika
Ganambarr
doing
survey with
Gawumala
Gumana
at Yirralka
Ranger base
in Gängan

*"The partnership with RMIT for [Mapping the Digital Gap research] has been awesome. It's basically highlighted a lot of areas that [the] majority of us wouldn't think of on a day-to-day basis. It also highlights the remoteness of Kalumburu and what is needed for these parts of the world and what can be done, what needs to be improved, and what still is a possibility."
(Madeline Gallagher-Dahn, CEO of Kalumburu Aboriginal Corporation, Kalumburu)*



Co-researcher
Leanne
Kelly, Lyndon
Ormond-
Parker,
Kalumburu
CEO Madeline
Gallagher-
Dahn, Ashlyn
Hassett, Julia
Campbell,
and Daniel
Featherstone
in Kalumburu

*"[The co-researcher approach] was a great model that we have since replicated for other research projects. I learnt a lot from the experience and the youth workers who were co-researchers were engaged every visit."
(Rachel Godley, Youth Programs, Layhapuy Homelands Aboriginal Corporation, Gangan)*

*"The team was excellent, and community looked forward to contributing their experiences during the team's visits. The Mapping the Digital Gap team also communicated with us outside of their visits and were good advocates for our push to improve communications."
(Kiley Hanslow, CEO of Wujal Wujal Aboriginal Shire Council, Wujal Wujal)*

*"I do appreciate you guys coming out [and] and staying [for] a week. [A lot of people come here with a] lack of understanding [of what's] playing out at a community level ... So it's good that you guys came out and built a bit of a connection and saw Thaddeus at Fossil Head and [found out] about the place ... that resonates with them."
(John Gawen, Thamarrurr Development Corporation, Wadeye)*



Fossil Head
homelands
near
Wadeye

OUTCOMES

The survey data, analysis of interviews, and documented case studies are provided back to the participating communities through individual Community Outcomes Reports, updated each year. Each community report includes suggestions for a local Digital Inclusion Plan. These identify barriers to digital inclusion and outline suggested strategies to address these barriers, which can be used in local advocacy, planning and partnerships with government and industry stakeholders.

First Nations-led community organisations are critical to the successful delivery of place-based digital inclusion initiatives in remote communities. We are delighted to share some outcomes supported by our research and achieved through the tireless efforts of our incredible community partners and local stakeholders.



Julian Thomas doing a survey with Djarindjin resident

"[The Community outcomes reports] have assisted in our advocacy for improvements in communication and digital facilities in Wujal Wujal. [We've since seen a] better relationship with NBN [which] has helped with the upcoming installation of a community-wide Wi-Fi free of charge for community." (Kiley Hanslow, CEO of Wujal Wujal Aboriginal Shire Council, Wujal Wujal)



Daniel Featherstone, Robert Bloomfield, Wujal Wujal ASC CEO Kiley Hanslow, and Lyndon Ormond-Parker in Wujal Wujal

"The Digital Gap research is also supporting our business case for an Internet Cafe and Digital Mentors in community." (Tracey Leo, Thamarrur Development Corporation, Wadeye)

"Djarindjin Community has been identified as a potential site for the Regional Digital Service Centre (Fujitsu First Nations Call Centre) expansion into the Kimberley." (Research Partner, Djarindjin)

"The outcomes have been very helpful and the statistics have been used in presentations to give context on the digital exclusion we experience in Galiwin'ku. [We've seen] increased visibility of digital inclusion issues within the community resulting in [the upcoming] community wide Wi-Fi rollout." (Anahita Tonkin, CEO of Yalu Aboriginal Corporation, Galiwin'ku)



Tia Roko (Yalu), Lyndon Ormond-Parker, Co-researcher Maliku Dhamarrandji, Daniel Featherstone in Galiwin'ku

Vincent Jinjair, John Jauncey, Jenny Kennedy, Heather Rea, Honorata Jinjair, Tracey Leo, Lyndon Ormond-Parker, and Daniel Featherstone in Wadeye



Analysis | Access

Internet access is primarily via smartphones in remote First Nations communities

Opportunities to access the internet using a variety of digital devices remain limited in most remote First Nations communities, with **55% of 2024 survey respondents reliant on a single device—the smartphone**. This compares with **7% nationally**. While smartphones are versatile devices, they are not well-suited for all tasks, particularly those related to **work or study**. As a result, smartphones serve as a “second-class mode of primary access”.¹⁸ Indeed, **access to a computer is essential** for many daily activities that smartphones alone cannot support, including participating in online education, completing online forms, creating and editing documents, and engaging in creative projects.

Nationally, **12% of Australian households lacked access to a computer at home in 2022**. In the same year, we found that **66% of remote First Nations households surveyed were without a computer**. By 2024, this had risen to 85%. Over the past three years we have seen a corresponding increase in use of a smartphone for internet access, up from 89% in 2022 to 98% in 2024. This suggests that First Nations households are solely relying on smartphones more than ever.

Access to computers is especially crucial for children’s education, providing the tools needed for online learning, completing school assignments, and developing essential digital skills. Nationally, households with children are more likely to have a computer in the home, with 91% of households having a computer. This means most households had the necessary digital resources to support their children to engage in online learning and digital skill development. However, **in remote First Nations communities, only 25% of households with children had access to a computer in 2022**. By 2024, this rate had declined to 9%—a polar opposite to the situation nationally. The consequences of this are profound. This growing gap exacerbates educational inequalities and hinders children in First Nations communities from fully engaging in the digital world.



Health worker
Xephina
Nunggumajbarr
with daughter
watching
cartoons on
smart phone

This growing gap in access to appropriate devices makes it increasingly difficult to achieve other Closing the Gap targets, such as:

- + **Target 5**, which focuses on increasing the proportion of 20- to 24-year-old Aboriginal and Torres Strait Islander people attaining Year 12 or equivalent to 96% by 2031.
- + **Target 6**, on increasing the proportion of those aged 25-34 years completing a tertiary qualification to 70%;
- + **Target 7**, focused on increasing the proportion of youth in employment, education, or training to 67%.

Without achieving Target 17, which calls for equal levels of digital inclusion by 2026, the ability to meet these education and employment goals is severely undermined. Digital inclusion, including access to computers, underpins educational outcomes and broader participation in the workforce, making it foundational to sustaining and advancing progress across other targets.

Access is improving, but mobile services continue to be congested and intermittent

Opportunities to gain reliable internet access also remain limited in remote First Nations communities, with less than 7% of households with fixed household broadband services. Nationally, 7% of Australians relied on mobile-only access in 2022, whereas across the Mapping the Digital Gap research sites, **mobile-only access rates increased from 44% to 55% from 2022 to 2024**. Mobile-only access limits opportunities to develop the broader digital skills needed to fully leverage the benefits of internet connectivity, including information seeking, content creation, buying and selling, and accessing government services.¹⁹

An almost ubiquitous reliance on pre-paid services in First Nations communities means **access is contingent on having data**. By 2024, **99% of First Nations people were using pre-paid mobile plans**, up from 97% in 2022. This growing reliance on pre-paid services reflects ongoing affordability issues, as pre-paid plans tend to be more expensive per gigabyte compared to post-paid options, which are more common in the broader Australian population. In communities, the most common recharge type was \$35 for 15GB, with a 28 day expiry.²⁰ While

15GB will likely be sufficient for basic web browsing, data-heavy applications such as video streaming or video calls will see this data quickly run out. This requires further recharge or periods without access. Meanwhile, in communities with limited or no mobile access, such as in Gängan homeland, data may expire, and internet access lost, because of limited opportunities for use.

It is important to note that **mobile access does not mean quality, reliable, and continuous service**.²¹

Research participants in most sites described experiences of slow internet speeds due to congestion, especially during peak use periods, with Galiwin'ku, Kalumburu and Wujal Wujal residents unable to use the mobile service at times. Others described patchy coverage in parts of the community and low penetration inside houses. We also heard about regular dropouts and extended outages in several sites, as a result of network or power outages or weather impacts, with specific examples and community impacts outlined in community reports. It is hoped that upgrades as part of 3G switch-off and government funding programs to improve network resilience and battery life will improve the quality and reliability of mobile services in remote First Nations communities. Audits of mobile service quality and range underway across Australia need to also include remote communities.



Aerial photo of Erub island; mobile tower and CBD area

Analysis | Access

The number of people not using the internet has decreased but remains substantial

Access also concerns frequency and intensity of use. The proportion of Australians not using the internet at all has sharply declined over the past decade, with 3% reporting not accessing the internet in the past 6 months in 2022. Meanwhile, with the internet increasingly mobile and wireless, over half the population now report using the internet “almost constantly”. The frequency of use is dramatically different in remote First Nations communities compared to what is happening nationally. In 2022, **20% of First Nations respondents reported not using the internet**. In 2024, rates of non-use fell slightly to 14%.



Jennifer Ward using computer at PY Ku centre, Pipalyatjara

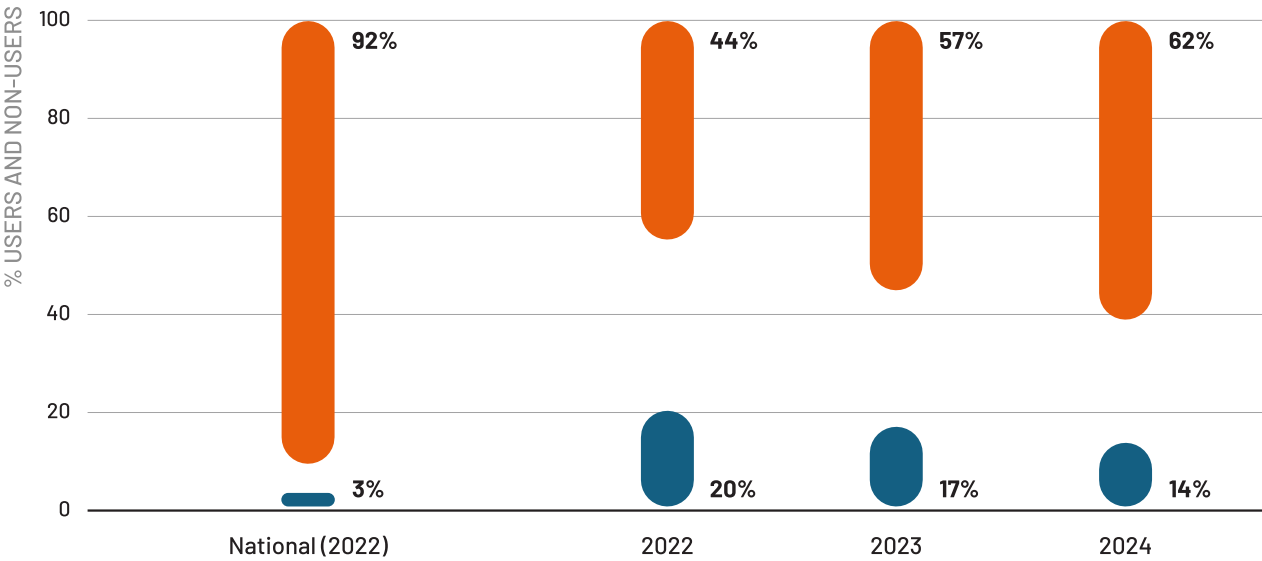


Figure 2: Internet usage comparison: National vs. remote First Nations communities

- Constant to daily internet use
- Not an internet user

This continued high rate of non-use, coupled with limited access to diverse digital devices and expensive pre-paid data, highlights the ongoing barriers to achieving reliable and consistent internet access for remote First Nations communities.

Access on homelands is critical, but community-led solutions are needed

Homelands or outstations are typically very small communities with limited facilities where First Nations family groups maintain connection to their traditional lands. There are an estimated 1200 homelands across Australia, including around 500 in the Northern Territory. Across several sites, we repeatedly heard about how communications infrastructure on homelands was significantly more limited than in larger communities. While some larger homelands are well established with housing, water, power, road access, and communications services, many of the smaller homelands and bush camps have very limited services. This lack of services limits access to emergency support and essential online services, preventing people from returning to homelands or living there full time.

While 301 homelands have Wi-Fi phones under the NIAA Community Phones Program and others have public phones or Wi-Fi via nbn Communities in Isolation, hundreds still have little or no connectivity, even for emergency purposes. Some living on homelands have no access to communications nor vehicles, making options in case of an emergency extremely limited.

Without internet access, residents are less prepared to stay on the homelands, especially young people:

"If we're serious about [supporting] people returning to homelands, we need to improve the digital connection out there ... you won't get kids staying out on homelands [if] there's no communications." (Lea Brady, Coordinator, Da Ngilmanin Family Centre, Wadeye, 2023)

Reliable internet access would enable children to access traditional schooling online while living on Country. This would not only enable parents of school-aged children to live on homelands, but enable children to do on-country learning surrounded by Elders.

New and more affordable communications technologies, including satellite-delivered Wi-Fi or satellite small cell make homelands communications more feasible than ever before.

However, while the desire for communications infrastructure on homelands is strong, especially among younger people, there is nevertheless a real concern from homelands residents about potential social and cultural impacts of mobile coverage.



Old communications systems at Fossil Head homeland near Wadeye; microwave tower for Telstra phone and HF radio antenna. The more recent wall mounted phone hasn't worked for nearly a year.

Analysis | Access

Activ8me
Wi-Fi
community
phone at
Ngayawilli
homeland
near
Galiwin'ku



"Homelands have been protected from that in a lot of ways but now that we're starting to get access through Wi-Fi, we're seeing that exposure growing. [A] few years ago community was speaking against mobile networks ... whereas now, most people have mobiles [and want more coverage]." (Haidee Dentith, Laynhapuy School Principal 2022)

It is therefore essential that any communications infrastructure rollouts be done in consultation with Traditional Owners. Traditional Owners of homelands want to be involved in the decision making about the type of communications services to be established on their homelands, particularly to ensure it is fit for purpose, affordable and sustainable. This includes being able to decide between mobile, and Wi-Fi solutions which enable local control over times of availability, data limits and content filtering to block access to unwanted sites.

Given the constantly-evolving technological landscape, this will require ongoing support to Traditional Owners and Elders so they can understand new options as they become available, and can make informed decisions about what is likely to suit the needs of their community. One of the largest homelands in East Arnhem, Gängan (see page 21), is currently grappling with how to balance the need for connectivity with community ownership and control as they discuss a community-wide Wi-Fi network. As more homelands face these challenges, it is critical that any solutions are designed by and for communities.

Case study: Wi-Fi mesh networks in remote First Nations communities

Wi-Fi mesh networks are increasingly recognised as essential infrastructure for providing affordable, accessible internet in remote First Nations communities where traditional broadband and mobile access are often limited or unavailable. These networks, funded through initiatives such as the Regional Connectivity Program (RCP) and the nbn Wi-Fi network rollout, address barriers to connectivity, particularly in areas where affordability and infrastructure limitations persist.

The networks operate through repeaters positioned on buildings or towers, distributing internet access from a central point across the community. The network management is often managed locally, allowing communities to control hotspot locations, content filtering, curfew times, data limits, and whether access is free or voucher-based. Despite its benefits, Wi-Fi has limitations: range is typically low, line-of-sight is required for optimal coverage, and users often rely on outdoor public spaces for access, which can reduce privacy. Additionally, speed and data capacity can be constrained by available backhaul and the number of simultaneous users.

Since 2021, NBN has trialled community-wide Wi-Fi mesh networks in Warakurna (see page 30), Indulkana, Koonibba, and Aurukun, providing free internet in residential areas (mostly available outdoors). Western Australian communities such as Kalumburu have adopted an alternative model, with in-house Wi-Fi repeaters and VoIP phones. Kalumburu's network was initially installed in 2021 under RCP funding, with four centralised Sky Muster satellite services connecting 128 dwellings, providing affordable broadband to a community previously reliant on a congested satellite small cell and limited satellite broadband. In November 2023, Kalumburu upgraded to Sky Muster Plus Premium, offering unlimited downloads and speeds up to 100Mbps has enhanced capacity for local Wi-Fi. This enabled a shift to free data use in November 2023—replacing the previous \$3/GB voucher system—led to a **dramatic increase in usage**, from 1.5TB to 13TB per month. This in-house access model is being expanded to other large WA communities, including

Mowanjum, Bidyandanga, and Jigalong to date.

In 2024, Wi-Fi mesh networks received further expansion under Federal budget measures, with NBN installing networks in 23 remote communities, including research sites Pipalyatjara in SA and Arnhem land communities of Galiwin'ku and Gängän, which previously relied on a shared public phone and single Wi-Fi hotspot for connectivity (see page 34). Other sites are Ampilatwatja, Wandawuy, Mungkarta, and Arawerr in the Northern Territory; Kowanyama, Pormpuraaw, and Doomadgee in Queensland; Pukatja, Kaltjiti, Mimili and Amata in South Australia; and seven homelands near Fitzroy Crossing in the Kimberley. This rollout enables place-based connectivity solutions with a level of community control, improving digital inclusion across these remote First Nations communities.

Wujal Wujal will also have a Wi-Fi mesh installed in 2025 under RCP funding, one of several upgrades following a significant flooding event in 2023. Tennant Creek has had Wi-Fi services installed in 3 of the 7 Community Living Areas in 2024 after long project delays.

Other programs have contributed to the expansion of free internet access via Wi-Fi hotspots. The NBN's Communities in Isolation (CII) program (106 sites), NBN Strengthening Telecommunications Against Natural Disasters (STAND) program, the Department of Social Services' Digital Connectivity Project in the NT (25 sites), Activ8me Wi-Fi phones in nearly 300 homelands, and various state government and community-led initiatives have all enhanced connectivity. Since 2023, Erub, Wujal Wujal and Wilcannia have benefited from NBN-installed Wi-Fi hotspots, and Wadeye has had a Telstra Wi-Fi public phone installed in the town centre.

While these upgrades are welcome, most programs are time-limited. The CII program is due to end in December 2024 and STAND in December 2025, with NBN reviewing its capacity to extend the life of these programs. Further, there is still significant demand for improved communications services in these sites and neighbouring homelands.

Analysis | Affordability

The rising cost of living has hit remote First Nations communities particularly hard

The affordability of connections, devices, and data is a significant concern in remote First Nations communities. While Australia has seen rising costs between 2022 and 2024 nationally, inflation has hit First Nations communities particularly hard.

Food in remote communities was already over 50% more expensive than regional supermarkets due to long supply chains and poor quality roads in 2021.²² Since then, the significant surges in freight costs has seen the price of food, fuel and goods rise even further. Audrey Shadforth, a Centrelink office worker and resident in Djarindjin, told us in a 2023 interview:

The shops [in communities are] too expensive. [People] spend \$150 [for one food shop so our] weekly pay is gone by the end of the week. By Friday we've got no money left.

Likewise, Tamara Hancock from Community Focus National told us in a 2022 interview in Kalumburu that basic goods such as food “are extraordinarily priced”, meaning that families “can’t afford their food so I’m not sure how they’re expected to afford a phone”. The price of grocery items and fuel in Kalumburu was cited in a 2024 ABC article on the cost of living crisis in remote communities and towns.²³

In many coastal and island communities, supplies are delivered by barge for part or all of the year, such as this one at Barge Landing near Kalumburu



Additionally, the cost of energy, transportation, and housing has increased greatly, and both the rising cost, and shortage of labour, has seen rising costs for installation and maintenance of essential infrastructure.

For example, in Galiwin'ku, an island community in North East Arnhem land, all supplies have to come via barge, meaning the cost of food, fuel and other essentials has increased. Monique Achterberg from Anglicare told us in a 2023 interview in Galiwin'ku:

When community members go to the store to buy the week's groceries [they pay] inflated prices because of freight. [So] the cost of living [is] a lot higher. There's a lot of people living in houses, so there's a lot of strain on the people that do bring the income ... And then you've got the cost of fuel if they've got a vehicle ... And then the kids on the mobile phones ... Poverty [is] in your face when you go to Galiwin'ku ... It's their land, it's their country [but] they struggle to be able to survive in their own communities because of these costs, which is exceptionally unfair.

In this context, **the ability to afford connections, devices, and data becomes increasingly challenging**. Despite this, connectivity is even more important, to enable communication and access to services without the need to travel via car or plane, which carries significant cost. Jennifer McFarland from the Central Australian Youth Link Up Service told us in 2023:

[Fuel costs are up to] five dollars a litre. [So people] need good connectivity, because if you want to check out what's happening with Auntie in the next community, you can't afford to jump in your car and drive there.

In the context of very high prices for basics such as transportation, power, and food, the **lack of affordable connectivity in remote communities undermines not only progress toward Closing the Gap Target 17, but other targets relating to access to healthcare, education, employment, and services.**



More than 1 in 3 people in remote First Nations communities report internet costs as too expensive, compared with around 1 in 20 nationally

Affordability challenges are compounded by a reliance on pre-paid services, which have **higher relative costs per gigabyte of data compared with post-paid mobile services** and fixed or satellite service. 42% of First Nations people reported internet costs as too expensive in 2022, compared to 6% of the broader Australian population. This affordability gap is compounded by a reliance on pre-paid services, which offer less data at higher relative costs, with the most common recharge now costing \$39 for 15GB of data. In 2024, Bettina Cooper of financial support organisation Mob Strong Debt Help, described pre-paid rates as the ‘poverty premium’.

First Nations people pay the poverty premium. [Remote households] have to do pre-paid electricity [which is at] a higher rate. [And they do] pre-paid for phones [and pay] more than the person who's earning \$100,000.

While prepaid arguably offers poorer value for money, there are barriers to accessing postpaid services, including a lack of identification, issues with credit

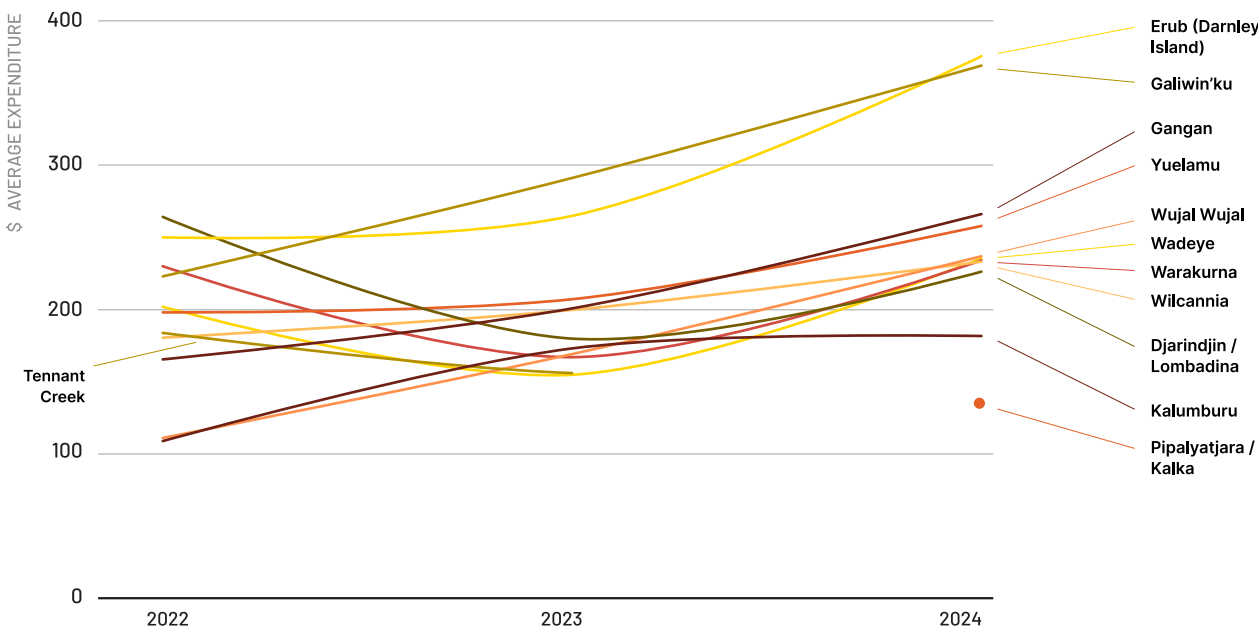
ratings, and fear of bill shock. As Co-researcher Floyd King from Julalikari Council told us in a 2023 interview:

People don't know how to do that postpaid thing ... If they knew, they would probably do it [because] it would be... better for them [cost-wise]. But a lot of them don't have it because [they're worried] they'll exceed [the data limit]. With prepaid, they know when they run out, they run out.

This highlights the various barriers that lead to the ubiquity of prepaid services in remote communities and the ongoing affordability issues that hinder digital inclusion.

In an effort to reduce the cost per gigabyte of pre-paid mobile data, Telstra introduced a new Pre-Paid Community Mobile Plan for remote community residents in October 2024, providing 25GB of data for \$25.²⁴ This initiative came out of consultation with community residents and findings from the Mapping the Digital Gap research. In our next round of research, we will track the impact of this new plan on household expenditure.

Figure 3: Average household expenditure on mobile and internet services by community, 2022-24



Analysis | Affordability

3 in 5 households in remote First Nations communities have fewer devices than required to be digitally included

With mobile phones the primary means of voice and data access, the costs of having a sufficient number of devices to meet the household's needs is an additional challenge. In 2024, **57% of households in remote communities have fewer mobile devices than required to be considered digitally included.**

This is based on estimated need relative to household size and composition. As Deb Cain from Julalikari Council told us in a 2023 interview in Tennant Creek:

A lot of [older] people don't own phones [or] they're losing them. [Often] their partners [or] family members help them [when they need a phone]. But a lot of the younger people [have a] phone. [There's rarely] more than two phones in the house.

Despite households not having enough devices, **First Nations households spend a great deal of their income on connectivity, with costs increasing each year.** This is due to a heavy reliance on pre-paid mobile (99% of mobile users) and low levels of household broadband (7% since 2022). In 2024, **households paid an average of \$291 for connectivity across multiple devices**, up from \$203 in 2022. To put this in perspective, the ADII measure of a quality "internet bundle", comprising fast internet and mobile services and adequate data, was \$240 in 2022. First Nations households are paying more than this and obtaining much lower data limits, with typically lower quality, less reliable, and intermittent communication services.

If households had enough devices to support their needs in 2024, they would have to pay 7.3% of their income to gain 180GB of data per month. While this is down from 8.3% in 2022, it is still well above the 2% threshold of household income spent on connectivity considered to be affordable.²⁵ If the data limit was 300GB, the proportion of income spent on connectivity would be 9%. Increasing demand for data means existing data limits are insufficient.

This is because of the uptake of streaming services, online games, and the increasing prevalence of video content on social media such as Instagram and TikTok, all of which are increasingly popular, particularly among young people. Barrumah Pilot, an Erub resident, told us in 2023:

I spend about \$90 a month because I spend a lot of time on social media ... Thirty dollars will probably last me 1.5 weeks ... my data runs out way before the expiry date comes along.

Likewise, Junibel Doughboy from Bana Yirriji Art Centre in Wujal Wujal told us that, because of the high prevalence of streaming, \$30 credit will be used up "in a couple of days", explaining:

My nephews and my son all are on TikTok or Facebook ... I have Netflix. Not really [others because] hardly everyone got credit on their phone to log in.

As Junibel indicated, affordability barriers are limiting use, and therefore restricting people's ability to gain and retain digital skills. A Wilcannia resident told us that:

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.

Household size impacts on affordability

Despite not having enough data or devices to support ongoing access and connectivity, **First Nations households are paying a large proportion of their income on prepaid phone vouchers.**

The size of households matters. In remote communities, there is a prevalence of overcrowding in housing, with 10 or more living in houses. **Internet expenditure is increasing**, particularly in households with 4 or more adults and teenagers living there. **This would be even greater if households had enough devices and data to support their needs.**



The composition of households is also significant. **Internet expenditure is increasing for single households (\$79/month in 2024) for households with 5 to 7 people (\$260/month in 2024),** and for

very large households with more than 10 people (\$427/month in 2024). Again, if these households had enough devices and data to support their needs, they would be paying a great even more.

MEASURING AFFORDABILITY

Due to shortcomings of applying existing frameworks in remote First Nations settings,²⁶ we are trialling a new model for analysing Affordability in this report. Many households do not have enough phones for everyone who needs one based on a minimum standard of access for adults and children over 12 years old. We have calculated an estimated total cost of the phones needed in the household as well as the costs for 180G and 300G phone allowance combined with fixed broadband connection.

We compare these minimum and ideal bundles against what households told us they were currently paying for their internet connection. Below we compare what different types of households currently would need to pay for different bundle plans in 2024.

While all households would face large affordability barriers to meeting their unmet needs for either a minimum or ideal quality bundle plan, this is especially so for low-income families with older children.

7.3 Minimum bundle Affordability score

Using our Affordability ratio model, average affordability of communications services has improved slightly since 2022, from 8.8% of household income down to 7.3%. However, affordability pressures have increased for low to middle income households (\$1000 to \$2000/week) and single person households.

Figure 4: Table comparison of affordability score for 180GB and 300GB bundle, by household type

Family type	Household income	Current mobile & fixed costs	Minimum 180GB bundle costs	Minimum 180GB bundle	Ideal 300GB bundle costs	Ideal 300GB bundle
		\$	\$	%	\$	%
All households		291	418	7.3	524	9
Single person	Below \$33,000	94.7	160	9.6	184	11
Single parent children under 12	Below \$52,000	100	179	7.4	210	8.6
Single parent children over 12	Below \$52,000	143	270	12	330	14.6
Family of 2 to 4; children under 12	Below \$52,000	144	244	8.2	295	9.9
Family of 2 to 4; children over 12	Below \$52,000	161	320	10.7	396	13.2
Family of 8 or 10	\$52,000 - \$64,999	312	478	9.8	604	12.4
	\$65,000 - \$77,999	344	510	8.6	646	10.8
	\$78,000 - \$90,999	280	492	7	622	8.8



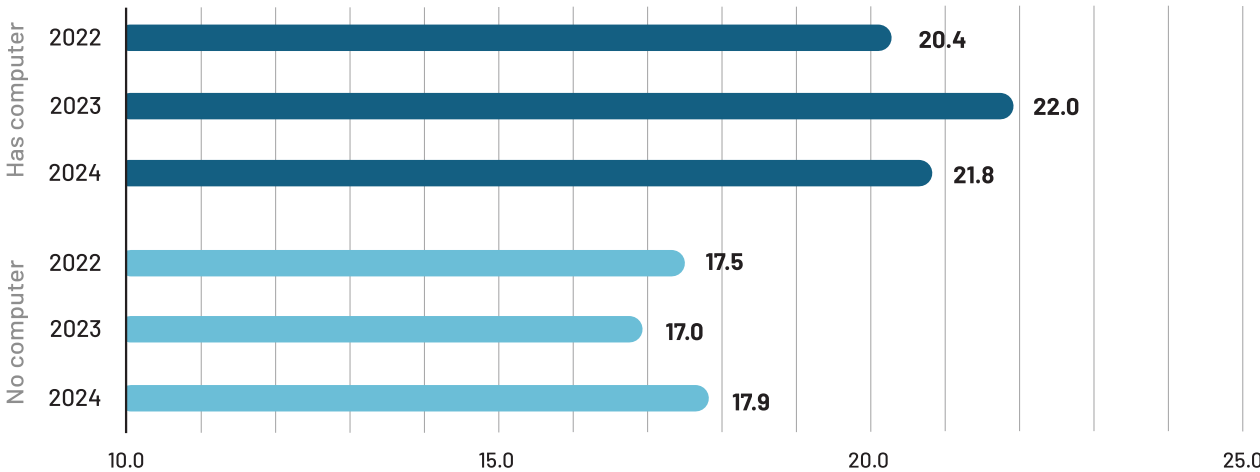
Analysis | Digital Ability

Digital ability concerns what opportunities people can take up through the use of digital technologies and the internet, and the ability to avoid harms that may flow from its use. As digital devices and services become more embedded in daily routines, having the skills and literacies needed to navigate them effectively is crucial to ensuring fair, safe and equitable access to essential services and online opportunities.

Digital abilities do not develop in a vacuum: they are developed and sustained by the prevailing social, material and cultural conditions.

There is a rich history of creative use of digital technologies in First Nations communities, including on smartphones.²⁷ In particular, **the ubiquity of smartphones as the primary (and often only) mode of access in remote First Nations communities shapes what skills are, and are not, developed.** This pattern has led to stronger proficiency in areas like social media use while limiting skill development in activities that require access to computers or laptops, such as word processing.

Figure 5: Digital Ability, computer vs. no computer



Being mobile only limits digital skills development

Access to multiple devices, beyond smartphones, remains limited in these communities, which reinforces existing digital inequalities. Reliance on smartphones alone restricts the range of digital activities individuals can perform.²⁸ Being dependent solely on mobile devices means it is difficult to complete important tasks such as completing forms, participating in online learning, or uploading resumes. These activities are particularly challenging to accomplish on small-screen devices in areas with limited connectivity. Across communities, survey data shows that those with a computer in their home scored significantly higher in digital ability in contrast to those without a computer, highlighting the

opportunities for skill development if resources and support were more accessible.

While digital ability levels increased marginally overall between 2022 and 2024, the increase was greater for those who had access to a computer compared to those who were mobile only users. Using the scoring model out of 30, those with computer access scored 4.0 points higher in 2024 than those who were mobile-only. The rate of improvement also varied, with those with computer access increasing by 1.4 from 20.4 in 2022 to 21.8 in 2024, whereas those without access to a computer increased by only 0.3 to 17.9 in the same period. This points to the importance of having computers available in remote communities for community access, along with digital training or support.



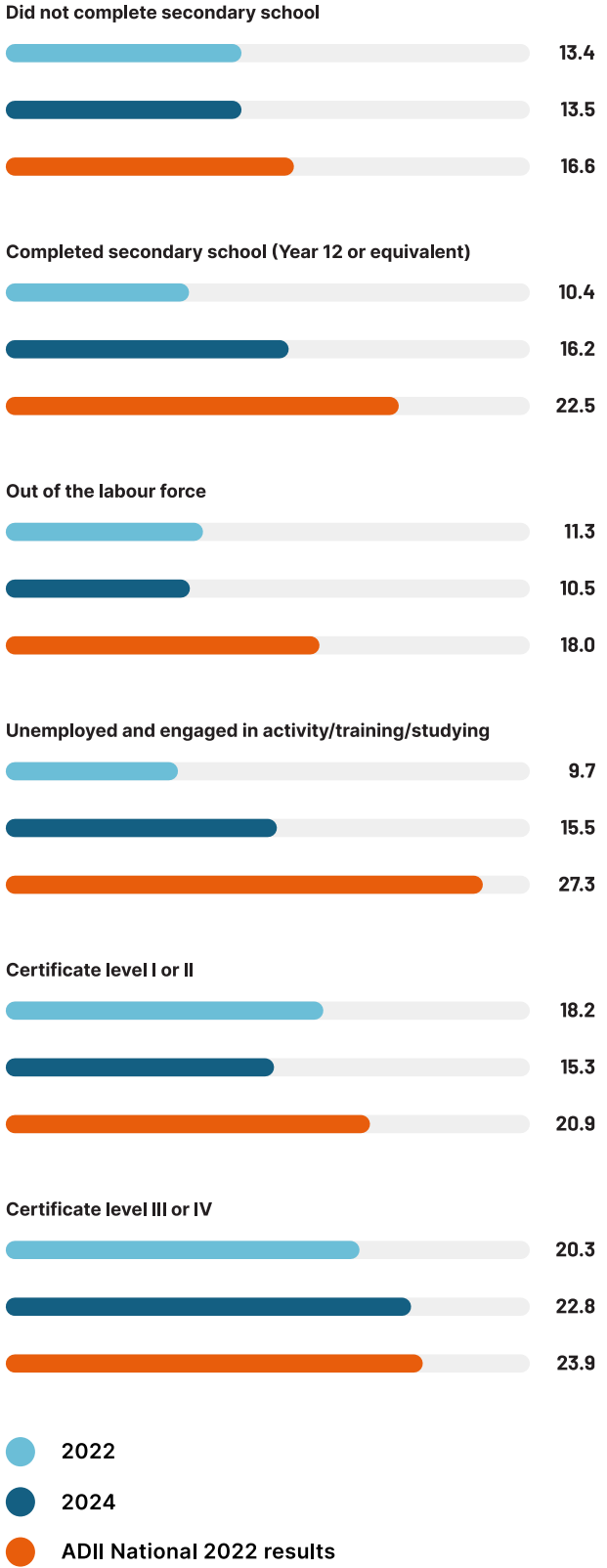
Digital skills are improving for some groups, particularly younger people, Elders, and those that have completed secondary school

Survey results indicate that **digital skills are improving for several groups, notably younger people, Elders, and those who have completed secondary school**. Among age groups, individuals aged 18 to 24 show consistent gains across all skill domains, with digital ability scores improving for foundational, creative and social skills. **While those aged 65 and over are relatively digitally excluded, this group has also made notable improvements in digital ability**, suggesting a growing digital engagement among Elders. Despite lower baseline levels, these gains reflect a positive trend in digital inclusion among older populations.

In terms of education levels, individuals who completed secondary school exhibited higher digital abilities compared to those who did not. **Those holding Certificate III or IV qualifications scored 22.8 (out of 30), 9.3 points higher than non-school leavers**. Additionally, **those with vocational qualifications showed greater improvement across all skills compared to those who did not complete secondary school**. Improvements are most notable for **advanced skills** (including navigating diverse platforms and websites, and adapting to changes in website or app design), **social skills** (including managing online privacy, adjusting sharing settings, handling contact lists, verifying contacts, and setting up group chats), and **smart skills** (connecting smart devices and operating and customising them through apps).

These findings suggest that formal education and vocational training underpin higher digital abilities, emphasising **the importance of educational attainment in fostering digital skills**. This trend underscores the growing digital competency among individuals with secondary and higher education, highlighting the role of education in bolstering digital inclusion.

Figure 6: Digital Ability by education status



Analysis | Digital Ability

However, the relationship between digital ability and education works both ways. A lack of quality, reliable, and affordable access can **limit the ability for remote residents to engage in further education**. For example, Lala Gutchen, an Erub language facilitator, teacher, fisherwoman and advocate, explained:

"I wanted to go out to do Uni [but] I would prefer to do my study [online] instead of leaving Country ... But the problem was that the signal is very bad ... If they better the Telstra service then we [could do our studies on] the island".



Villages on
Erub Island,
Torres
Strait

As education and training increasingly moves online, digital exclusion perpetuates broader inequalities, making it even harder for those in remote First Nations communities to participate in opportunities to develop skills, including digital skills, to enrich their lives and those of their communities.

There is an increase in online activities, particularly for entertainment and cultural activities

Increased access to and use of digital services has grown in recent years. The list below shows the rates of different online activities across all communities in 2024, and whether use has increased, decreased, or remained stable between 2022 and 2024:

While rates of general internet activities remain low and stable between 2022 and 2024, we see a **higher engagement in social activities**, and an **increase in engaging with entertainment and cultural activities**, including engaging with music, videos, and games. This highlights that First Nations people are engaging in online activities that are relevant to their lives and communities, despite significant barriers around access and affordability.

GENERAL ACTIVITIES

- + **Internet use for study:** 30% ▼ (down from 33% in 2022)
- + **Banking online:** 58% ▲ (up from 52% in 2022)
- + **Accessing government services:** 52% ▲ (up from 43% in 2022)
- + **Booking medical appointments or accessing health services:** 16% ■ (same as 2022)
- + **Online buying and selling:** 22% ▼ (down from 24% in 2022)
- + **Tracking online purchases:** 32% ▲ (up from 25% in 2022)
- + **Comparing prices online:** 33% ■ (32% in 2022)
- + **Looking for work:** 20% ■ (21% in 2022)
- + **Looking for housing or accommodation:** 16% ▲ (up from 14% in 2022)

SOCIAL ACTIVITIES

- + **Connecting with community online:** 49% ▲ (up from 41% in 2022)
- + **Keeping in touch with family/friends:** 62% ▲ (up from 49% in 2022)
- + **Making new or reconnecting with old friends:** 49% ▲ (up from 45% in 2022)
- + **Engaging with clubs or groups:** 33% ▲ (up from 22% in 2022)

ENTERTAINMENT / CULTURAL ACTIVITIES

- + **Using entertainment services:** 76% ▲ (up from 56% in 2022)
- + **Attending music, arts, or cultural events:** 32% ▲ (up from 18% in 2022)

Key: ▲ = increase between 2022 and 2024; ■ = stable rates between 2022 and 2024; ▼ = decrease between 2022 and 2024.



Younger people are more likely to engage in online activities, with 9 in 10 people under 45 now engaging

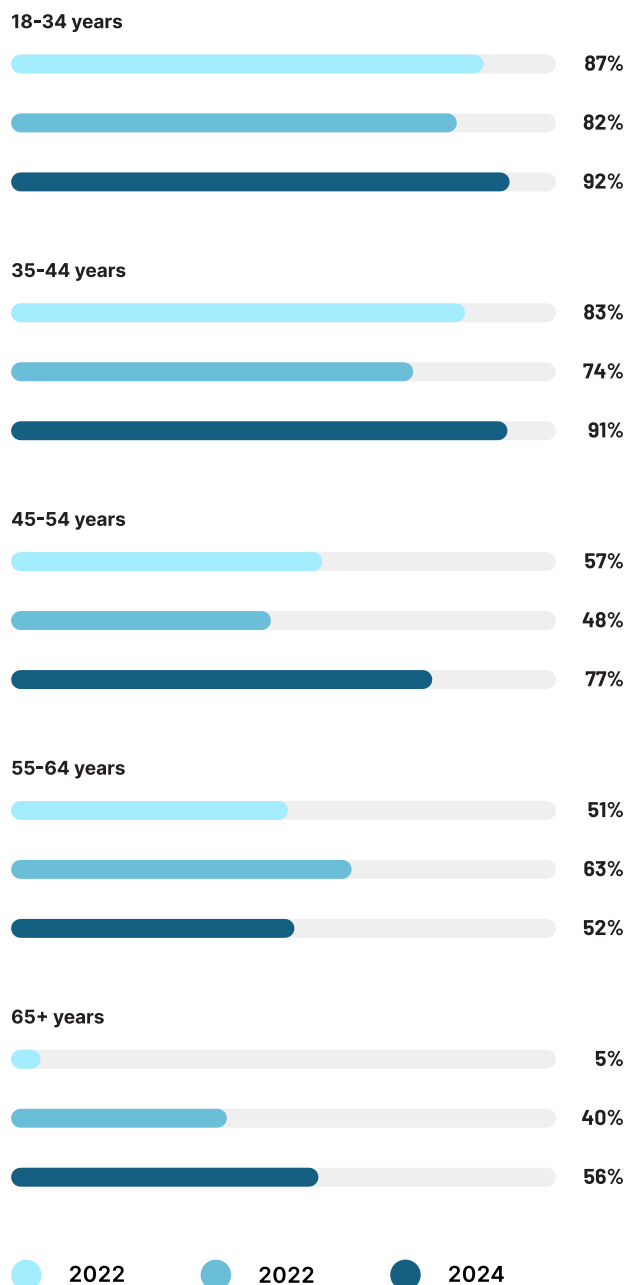
There is much higher uptake of online activities among younger people in communities, however rates have increased across all age groups between 2022 and 2024 (see figure 7):

9 in 10 people under 45 have engaged in an online activity in 2024, increasing since 2022. Meanwhile, **older age groups, particularly those aged 65 and above, experienced the most dramatic growth from 1 in 20 to 1 in 2 over the past three years**, indicating a substantial shift towards digital engagement across generations.

Warakurna
resident
Simon
Butler using
phone



Figure 7: Accessed an online activity, by age (2022-2024)



Analysis | Digital Ability

Because of the increasing use of online platforms and services, there is a need for culturally appropriate and personalised assistance

Despite improvement in digital ability across several cohorts and an increase in overall activities, **remote First Nations communities still face challenges related to online safety and accessibility**. While there is a growing awareness of online harms such as scams and misinformation, the need for more localised support remains. To address these risks effectively, **community-specific digital safety initiatives are essential**.

Improving Digital Ability will require both understanding and responding to the broader contexts in remote First Nations communities that limit skill development, including limited access to education and employment, the high cost of devices and data, and the availability of devices beyond mobile phones.

Having dedicated, local digital mentors can build capability through a culturally appropriate model of diffusion. For example, in many communities there is already a strong culture of peer and family support for developing digital skills. However, there is demand for more digital skills training and support in language, especially for the elderly and people with disability.

Community members often express a preference for on-demand, one-on-one digital training over more generalised workshops. Indeed, leading digital inclusion researchers suggest the former is more effective than the latter,²⁹ highlighting the need for support that is relevant to the social and cultural context in which digital skills are developed and embedded.

While more work needs to be done to support and resource digital mentors, such mentors are already playing a vital role in helping individuals navigate online services, set up accounts, and manage digital safety. Community members, like Anthony Wiltshire from Wilcannia, emphasise the need for local support for those without digital skills, particularly older residents. He notes the challenges faced by elders in having to travel to nearby towns to access face to face services due to limited digital skills:

"[We need] someone on hand here in [Wilcannia] that can give the elderly people [support or] advice on how to use social media platforms, and how to use the internet ... instead of going to Broken Hill." - Anthony Wiltshire, Wilcannia, 2022

These insights underscore the importance of investing in culturally appropriate and personalised assistance to ensure that all those living in remote communities can safely and effectively navigate, and help create their own, digital world.

Djarindjin residents Philomena Manado, Samina Manado and Katherine May doing a survey on iPad



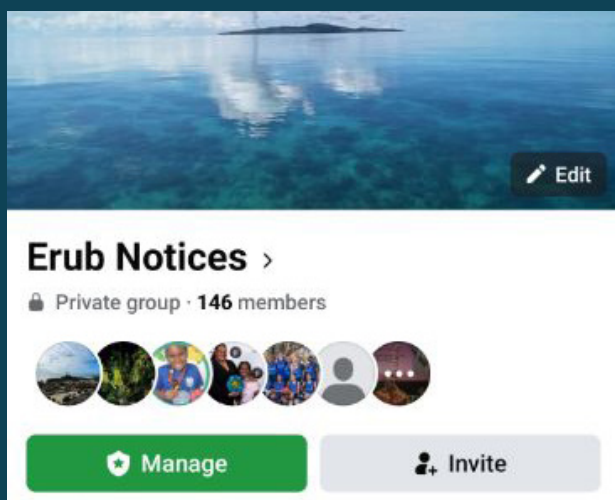
Case study: Use of social media for social and cultural activities in remote communities

Social media and texting are the primary modes of digital communication in many remote First Nations communities. Platforms like Facebook serve as hubs for local news, emergency information, and cultural knowledge exchange. For example, in Erub in the Torres Strait, RIBS broadcaster/digital content producer Nixon Mye runs a Facebook page called “Erub Notices”, which he started during the COVID-19 pandemic to share important updates, meeting notices:

“I started up ... Erub notices [during COVID. It] has been very useful to the people that's in isolation, because they get their information through there, because people text me, and I put it on the Facebook ... [People use it] to sell stuff, like selling, buying ... if there's a public meeting, or if there's an inter-agency meeting where the public can come and be involved. Schools, they tell me to upload stuff for them.”

“[Erub Notices is] specifically for people living on island. [I put up] anything really, like meetings or fundraising events, any social events that's happening in the community by other people ... I have to approve it because I don't want people to be putting stuff like sly grogging or selling smokes [or] bad stuff ... A lady that's working with TSIRC division in Cairns [uploads] job vacancies [and] council office [updates].”

Screenshot of Erub Notices on Facebook, courtesy of Nixon Mye



Social media pages like Erub Notices not only provide critical updates but also function as virtual community boards, facilitating everyday activities such as buying and selling goods and coordinating community events. This platform allows Nixon to moderate content and maintain a focus on relevant and positive community-oriented information.



Screenshot of post shared to Erub Notices, courtesy of Nixon Mye

The Torres Strait Island Regional Council and Torres Strait Regional Authority also rely heavily on Facebook to disseminate information to their communities:

“Gone are the days of just radio service ... we've got that multi-platform to deliver now with the recording studio, the newspaper, radio, [TV] and social media page.” (Jenni Enosa, Senior Content Creator, TSIMA, 2023)

Digital platforms are not only used for news but also play a key role in preserving and sharing cultural knowledge. Community leaders, such as Lala Gutchen from Erub and Djamika Ganambarr from Gangan, use social media channels like Instagram and WhatsApp to share language resources and traditional knowledge. This demonstrates the adaptability of communities in leveraging digital technologies to maintain cultural practices and connections.

Analysis | Media and Information

The Mapping the Digital Gap project considers both online and offline modes of accessing news and information by remote First Nations people. This helps our understanding of progress on Closing the Gap Outcome 17: 'access to information and services enabling participation in informed decision-making regarding their own lives'. For those with limited broadband or mobile connectivity, traditional channels such as radio, television, First Nations media services and local channels are primary means of accessing information.

However, our survey results show increased use of social media and online services to access news and information and reduction in the use of traditional broadcast media. While this is consistent with national trends towards preference for online and on-demand content, it is of particular concern for First Nations Australians, given the rise in misinformation and disinformation, bias and racism and hate speech following the 2023 Voice Referendum.

There has been an increase on the use of social media as a source of news and information, with



Wujal Wujal RIBS broadcaster Carmel Haines doing a local radio show in 2022 (pre-flood)

Facebook up from 27% daily in 2022 to 32% in 2024 and other platforms up from 15% to 21% daily. At the same time, the reliance on traditional media has reduced, with commercial TV down from 19% daily to 16% since 2022, NITV down from 10% to 8% and First nations radio down from 19% daily to 10%. However, this change is likely more due to technical and funding issues in the delivery modes of radio and television as a result of changes in audience behaviour. Simply put, TV and radio services are not working as well due to limited maintenance funding.

VAST television services are not working in most households, increasing reliance on mobile services

There has been a steady reduction in the number of households that can access free-to-air television services, available in remote communities via Viewer Access Satellite Television (VAST)³⁰ direct-to-home delivery. Our 2024 survey found that 61% of respondents were unable to access VAST TV services at home in 2024, an increase from 50% in 2022. The primary cause is set-top box failure (79% in 2024, followed by satellite dish or cabling failure (58%).

The lack of free-to-air TV means that most entertainment is consumed from online platforms at pre-paid data rates. This is significantly increasing the cost burden on households due to ever-growing demand by all family members to access streaming services, gaming and other online entertainment. This high data usage is also adding pressure on already strained mobile networks, leading to some communities such as Galiwin'ku reporting almost no capacity for much of the day.

The lack of working TV limits access to free-to-view services for entertainment, news and emergency information, adding a cost burden to access online content via pre-paid data. Our survey found that 65% of respondents used YouTube daily to access TV and media content in 2024, up from 30% in 2022, followed by streaming services (26% in 2024) and commercial TV (24%). There is high demand in communities for upgrades to VAST equipment, or return to local broadcast delivery, to enable access to free-to-air television services.



Resident's phone in Galiwin'ku, 2023

There is high demand for First Nations media, however RIBS upgrades are needed

First Nations radio and television services remain the most trusted and reliable sources of locally relevant news and information, with information provided in language where relevant.

In 6 of the 12 research sites, First Nations radio is the only local broadcast radio service available making it an essential service.³¹ First Nations radio has played a critical role during emergencies, COVID-19 and the Referendum, which saw increased online misinformation, racism and hate speech.



TSIMA Senior Broadcaster Jenni Enosa interviews Dr Indigo Holcombe-James and Co-researcher Lala Gutchen in the Erub RIBS studio, 2022

However, our survey found a dramatic reduction in listening to radio broadcasts over the three years, with First Nations radio listening down from 25% daily in 2022 to 15% daily in 2024. Rates for ABC listenership (only broadcast in 6 communities) reduced from 7% daily to 3% and commercial radio (only available in 5 communities) down from 4% to 3%.

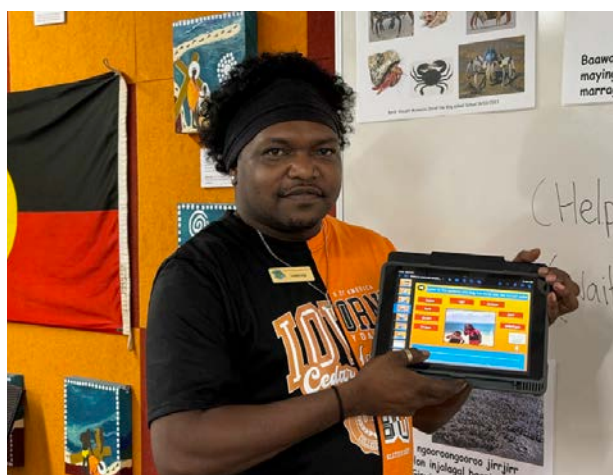
A factor in this reduction is that radio services were not working in four communities visited in 2024, despite having been active during previous visits. This is a direct result of limited maintenance funding to First Nations media organisations over many years. Additionally, the Wujal Wujal RIBS had been destroyed by the flood. We also saw the challenge that communities had in recruiting a local RIBS broadcaster due to low salaries and ageing facilities. ABC radio services are also not working in over half the sites visited due to not having operational funding to maintain equipment. Direct and face to face communications remains the primary way that people access news and emergency information.

Digital media production and and cultural and language applications

We saw many examples of local digital projects in communities visited, including media and music production, language and cultural heritage projects and community archives. While much of this content is shared on YouTube, TikTok and other online and social media platforms, it demonstrates that interest in local content production remains a high priority. More support is needed to enable these community-driven projects to meet local needs.

We have seen many examples of innovative First Nations digital applications in use for cultural and language preservation, land management, arts management and teaching tools. This includes preservation of the Erub Mer language by NAIDOC award winner Lala Gutchen in Erub, use of VR goggles for training on airport operation in Djarindjin, digital archiving in Wadeye, species tracking and feral plant management by the Jabalbina Rangers in Wujal Wujal, and the Stories Art Money database used in most art centres.

Diverse media and communication channels continue to play an integral role in remote First Nations communities amidst a rapidly changing media environment. Despite changing media preferences to include online channels, there is an urgent and ongoing need for revitalisation of free access radio and TV services, and support for locally relevant media and communications channels in remote First Nations communities.



Vincent McKenzie with a digital learning resource he has developed for his Bardi language course in Djarindjin

Analysis | Service Provision

One measure of progress on Outcome 17 is the 'proportion of Aboriginal and Torres Strait Islander people using the internet to access government services'. Digital inclusion is increasingly critical as government services - such as social security, health, taxation and payment of bills - transition to online delivery. With banks, post offices, licensing and other face to face services being gradually removed from remote communities and towns, it is critical that First Nations people have reliable and affordable online access, requisite skills, and support when needed.

The use of online services like government platforms (e.g., Centrelink, MyGov) by First Nations communities has increased, with an average 52% of remote First Nations respondents accessing government services online in the last six months in 2024 compared with 43% in 2022. However, this is significantly lower than 90% of other Australians using online services in 2022.

The relatively low level of engagement is partly due to online services being a relatively new means of accessing services, with most people familiar with

using face to face services for Centrelink, shopping, healthcare and other key services. The gradual withdrawal of in-person services, such as bank agencies, post office and libraries is driving the need to learn to use online services (see Case Study). This is a key driver for the need for improved digital ability.

Other accessibility factors impact on access to services. For one, mobile access is the primary mode of internet use in remote First Nations communities, but many platforms designed for government services are often not optimised for mobile devices. This creates additional barriers to digital inclusion, as many platforms assume users have multiple devices, reliable internet, multiple forms of identification, email addresses, physical addresses—factors often lacking in remote First Nations communities. Currently, local service providers are spending considerable time supporting remote residents to set up and use online services due to the lack of dedicated roles and support programs.

Keshiah
Sykes on
computer in
Wujal Wujal
Indigenous
Knowledge
Centre



Second, to set up online services typically require a mobile phone number, email address, street address, birth certificate or other form of identification. However, there are cultural factors that hinder engagement with online services. For example, it is common for Aboriginal people in central Australia to change their first name, particularly if they have the same name as someone who has passed away, which can also create identification issues. Once set up, log-in requires a consistent mobile number for two-factor authentication. Carol Hermans from RN Employment told us about the issues this can cause in 2023 interview in Tennant Creek:

If you forget [your password you need to] get on the phone to try and get it fixed. [This is difficult with] English not being first language ... Sometimes they put it in the name they're known as, but it's not the name on their birth certificate. And talking to someone who doesn't understand the challenges [is] a bit frustrating. [If this prevents them reporting to Centrelink], that means they're not getting their money.

A penalty for being digitally excluded is having to rely on helplines for support. Getting phone support from Centrelink can also be challenging with reports of extensive wait times of well over an hour. This requires patience, reliable connectivity and sufficient prepaid credit. Call centres are often ill-equipped to deal with First Nations languages or accents and may have limited understanding of the remote community context. Carol explained that:

The hardest one that [our] clients struggle with is MyGov [for] Centrelink reporting ... MyGov ID [is] horrendous because you need to have [an email address for] logging into MyGov, and then it's got two authentications and all that. That starts to get hard [with] people changing their phone numbers all the time. [So if they] get a new phone, [we advise them to] keep the number [instead of getting] a new number every time.



Colin Paddy
calling
Centrelink
helpline,
Pipalyatjara

For these reasons, many clients end up being breached for non-reporting and lose welfare payments. If clients have opted to do online reporting through MyGov, it is not permitted to report over the phone:

If you've ticked the button [to report online] through myGov, when you ring to try and declare, they won't let you. So you have to jump through the hoops to [change it]. We have people sitting there for hours [waiting] on hold. [They have to give] permission for one of us to [help] get it fixed. But even that can be a challenge ... it needs to be a lot more user friendly. (Carol Hermans, as above, 2023)

These issues illustrate the assumptions built into the design and delivery of services and the mismatch between these assumptions and the social, cultural, and material realities in remote First Nations communities.



Centrelink
office in
Tennant
Creek

Case study: A 1000km trip to the bank - the impact of physical bank closures on remote communities

In remote First Nations communities, access to basic banking services is a persistent challenge, exacerbated by limited digital connectivity and the closure of physical bank branches. The use of banking websites or apps in 2024 was at 60.3% for First Nations people, far below the national average of 89.8%. Many First Nations people prefer face to face services, particularly older people, who are far less likely to use online banking services. Additionally, the reliance on pre-paid mobile services, which are often patchy and congested, makes it difficult for residents to access online banking reliably, leaving many to undertake long, costly journeys for in-person banking tasks.

Across several sites, we heard from post offices (that also provide key services such as banking and selling lower-cost mobile phones) and Traditional Credit Union agencies (dedicated banks for First Nations people and organisations) that they are struggling to remain viable as on-site services in remote communities. In the remote island community of Galiwin'ku, the nearest major bank branch is located in Nhulunbuy—a one-hour flight away on the mainland. However, with some branches now closed, some residents have to travel as far as Darwin, over 500km each way, simply to open or reactivate accounts. These trips are not just inconvenient but come with a hefty price tag.

"The bank says they have to go into the branch, but the nearest branch is in Kununurra, so they have to fly in. Bankwest and Westpac [customers] have to travel [as] far as Broome now because [the Kununurra branch is closed]" shared Maggi Captain from Kalumburu, which is 500km from Kununurra and over 800km from Broome. For many, this journey consumes a substantial portion of their fortnightly income, leaving little for other necessities.

The lack of physical banking services is not just an inconvenience; it also introduces risks around financial management and abuse. Many residents, accustomed to in-person banking interactions, face barriers in using digital banking due to limited digital skills, shared device use, and insufficient

training. According to Bettina Cooper from financial counselling service Mob Strong Debt Help:

"[Many] people are more comfortable [using the bank's] counter service [than] going to the ATM [or using] digital banking. Because it hasn't been adequately taught and it's now a shared device, there's actually a greater risk of financial abuse."

As in Galiwin'ku, remote communities across the Northern Territory and the Kimberley region experience these issues. The lack of local banks and limited connectivity forces residents to spend substantial amounts on flights or endure unreliable digital services. In Kalumburu, for instance, a round-trip flight to the nearest bank in Kununurra can cost as much as \$780, further straining household budgets already stretched by high local living costs.

A Senate inquiry into bank closures in regional Australia in early 2024 highlighted these challenges, calling for policies to protect banking access in remote areas. Suggested solutions include periodic visits by bank representatives to remote communities, enhanced support for digital banking transition, and the establishment of First Nations helpline centres to provide culturally sensitive assistance. Addressing these banking access issues is essential to ensuring financial security and autonomy for First Nations communities, many of whom are still left out of Australia's digital transformation.

Read more about the inquiry at rmit.edu.au/news/all-news/2024/feb/bank-closures



Customer at Traditional Credit Union agency in Galiwin'ku

POLICY IMPACT

The 2023 Mapping the Digital Gap research outcomes provided baseline results on the scale and nature of the digital gap by remoteness categories for the first time, enabling tracking of Closing the Gap Target 17 and progress towards the 2026 target date. The findings and First Nations Index scores have been cited in numerous government reports, submissions by industry and advocacy groups, and are included on the Productivity Commission's Closing the Gap Information Repository as a supporting indicator in measuring target 17.³²

Target 17 has driven active policy focus on First Nations digital inclusion by federal, state and territory governments, as well as by industry and First Nations organisations and communities. Target 17 is a key enabler of other Closing the Gap targets, with improved remote communications infrastructure, services, and engagement critical for improvements in health, education, employment, justice, language revitalisation and economic opportunity.

This research is also informing policy and program development, with team members represented on the [First Nations Digital Inclusion Advisory Group](#) and Expert Panel established in early 2023 by Communications Minister Michelle Rowland MP. Associate Professor Lyndon Ormond-Parker was appointed Co-Chair of FNDIAG in late 2023, alongside Dot West. They have travelled extensively in 2024 to undertake stakeholder engagement with communities, First Nations organisations, government agencies and industry and develop a Roadmap for improving outcomes under Closing the Gap Target 17. The Expert Panel, which includes Dr Daniel Featherstone and Lauren Ganley (Telstra), have supported the Group in developing key initiatives for inclusion in the Roadmap, which will be launched by Minister Rowland on 10th December 2024.³³

Based on recommendation in the group's initial report to Minister Rowland (August 2023), and informed by our research evidence, \$68 million in Budget measures were announced in the May 2024 Budget for projects aimed at progressing Target 17. These includes \$40 million for Wi-Fi mesh networks in over 40 communities, \$22 million for a digital mentors program and First Nations support hub, and \$6 million to expand the Australian Digital Inclusion Index through increased First Nations sampling in urban and regional Australia

Figure 8: 2023 First Nations ADII scores by remoteness with gap against National Average (non-First Nations), based on 2022 surveys

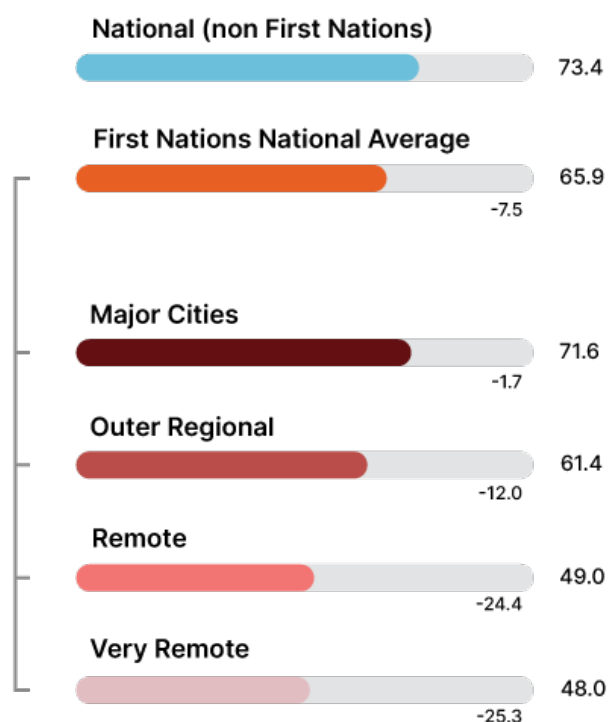


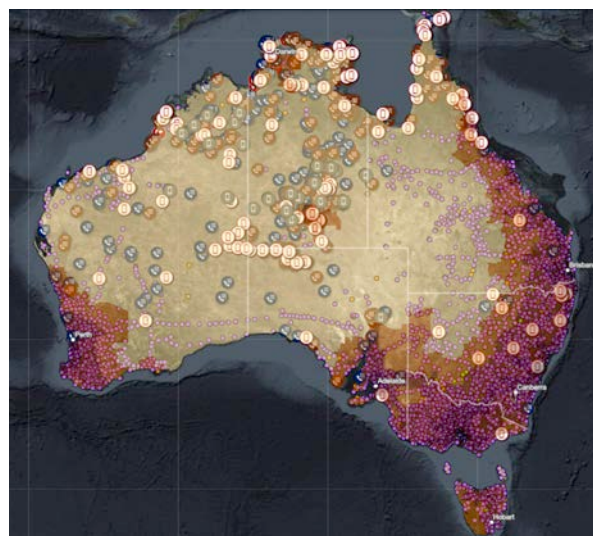
Photo of Advisory Group visit to Koonibba - left to right: Lyndon Ormond-Parker, Dot West, Corey McLennan, CEO of Koonibba Aboriginal Community Corporation, and Daniel Featherstone, courtesy of FNDIAG

to accurately measure Closing the Gap Target 17 (more detail in Next Steps). In addition, \$15 million of Regional Connectivity Program Round 3 was targeted at communication solutions in First Nations communities in central Australia.

For the communities visited under this project, we have also assisted with a range of initiatives to improve communications services as part of our model of action research and reciprocal outcomes. This included successfully advocating for improvements to the Kalumburu Wi-Fi mesh network, proposing Gangan and Galiwin'ku for the rollout of Wi-Fi mesh solutions, encouraging Wujal Wujal to apply for funding for a Wi-Fi network and redundancy services, and advocating for the NBN School Student Broadband Initiative to expand to the Torres Strait and other island communities.

In addition, the Mapping the Digital Gap team have continued to work with the Australian Government to expand the First Nations connectivity map of communications and broadcast infrastructure in towns, communities and homelands across Australia.³⁴ This compiles datasets from multiple sources in governments, industry and the community sector, and is being used to identify infrastructure and service gaps.

In the last year, the research team have contributed to multiple policy and program reviews, including the Regional Telecommunication Review, Universal Services Review, Bank Closure Inquiry, and Digital ID review among others (see Appendix 1). The team have also participated in multiple Federal and State working groups and committees in the communications, technology, digital inclusion and regulatory spaces, to provide First Nations experience and research-based evidence to the decision making. Team members have attended and presented at multiple conferences, government and industry events, symposia (see Appendix 1) in order to highlight the findings.



Screenshot of Australian Government public facing map of communications and broadcast infrastructure



Lyndon Ormond-Parker presenting at the 2024 CommsDay Summit



Lyndon Ormond-Parker, Jessa Rogers, Lauren Ganley, Daniel Featherstone and Dot West presenting at the 2023 ADM+S Symposium

NEXT STEPS

The 2024 round of Mapping the Digital Gap research visits was completed in July 2024 with the preparation of the final Outcomes for ten of the sites reports underway, as well as final outcomes report in 2025.

Telstra have generously funded a second phase of Mapping the Digital Gap from 2025 to 2028, with research to be undertaken in eight new sites while continuing to engage with some existing communities from Phase 1. The team are now working on identifying the new sites and partner organisations to begin fieldwork from early 2025.

In addition, the 'Measuring Digital Inclusion for First Nations Australians' project has received funding from the Australian Government to provide nationally representative survey data to accurately measure progress on Closing the Gap Target 17, with survey rounds in 2025 and 2027 to align with the ADII data collection. Work has begun on this project to recruit a First Nations survey company to collect national survey data in urban and regional Australia. In addition, the project will involve data collection in 10 regional and remote towns in partnership with First Nations partner organisations. The outcomes of this project will be available on a dedicated First Nations dashboard on the ADII website, enabling First Nations organisations to access, analyse and download the data in line with Closing the Gap Priority Reform Four.

A dedicated Mapping the Digital Gap [project website](#) is underway to share research findings, community profiles, case studies, reports and publications, and links to relevant research. The team will continue to support participating communities to develop local Digital Inclusion Plans, with relevant resources provided on the website.

Our research team will continue to share our findings in a range of conferences and forums, including with First Nations communities and peak agencies, governments, industry and the broader research community. We will also continue to contribute to public submissions and provide advice on policy and programs to address the identified obstacles to digital inclusion, with a focus on community-led strategies and capacity building. Further details of the project outcomes and impact to date are outlined in Appendix 1.

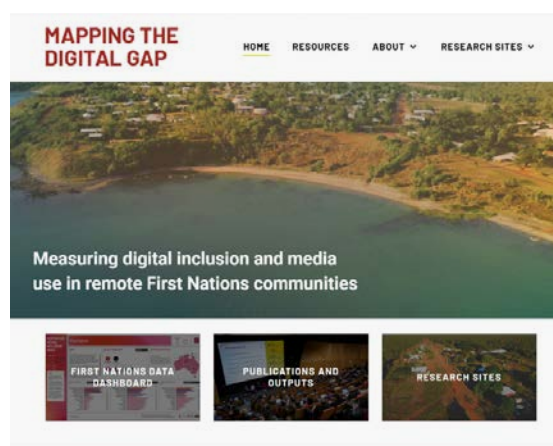
Through these initiatives, we hope to contribute to closing the digital gap and helping foster agency and self-determination across Australia's remote First Nations communities.



Co-researcher Bobbi Harris doing a survey with resident Kelly Bates in Wilcannia



Co-researcher Mel Langdon doing a survey with elder Ned Wilson Jakamarra in Yuelamu



Mapping the Digital Gap project website



Lala Gutchen, Leah Hawkins, Daniel Featherstone, and Nixon Mye presenting short film 'End of the Line' at 2024 ADM+S Symposium

ENDNOTES

1. Julian Thomas et al., *Measuring Australia's Digital Divide: Australian Digital Inclusion Index: 2023*, (Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society, RMIT University, Swinburne University of Technology, and Telstra 2023), doi:10.25916/528s-ny91.
2. Department of the Prime Minister and Cabinet, "7B. Table B: Outcome 17 | Closing the Gap", accessed: 12 September 2023, <https://www.closingthegap.gov.au/national-agreement/national-agreement-closing-the-gap/7-difference/b-targets/b17>.
3. Rennie, E., Thomas, J., & Wilson, C. (2019). Aboriginal and Torres Strait Islander people and digital inclusion: What is the evidence and where is it?. *Communication Research and Practice*, 5(2), 105-120.
4. <https://www.pc.gov.au/closing-the-gap-data/dashboard/se/outcome-area17/digital-inclusion>
5. Featherstone, D., Ormond-Parker, L., Ganley, L., Thomas, J., Parkinson, S., Hegarty, K., Kennedy, J., & Holcombe-James, I. (2023, September 26). Mapping the digital gap: 2023 outcomes report. ARC Centre of Excellence for Automated Decision-Making and Society. <https://doi.org/10.25916/a01g-fp91>
6. Due to changes to the capacity of the partner organisation, Tennant Creek was only visited twice in 2022 and 2023. Warakurna was visited twice in 2023 and 2024, and Pipalyatjara/Kalka was visited once in 2024.
7. Daniel Featherstone et al., *Mapping the Digital Gap. Background paper: project objectives, context and methods, working paper no. 005*, ADM+S Working Paper Series (ARC Centre of Excellence for Automated Decision-Making and Society, 2022), doi:10.25916/fazn-eh86.
8. <https://www.accc.gov.au/media-release/optus-in-court-for-alleged-unconscionable-sales-and-debt-collection>
9. <https://www.whistleout.com.au/MobilePhones/News/telstra-boost-mobile-plan-price-increases>
10. <https://www.digitalinclusionindex.org.au/case-study-taking-a-deep-dive-into-digital-ability/>
11. First Nations Digital Inclusion Advisory Group. (2023, October). First Nations Digital Inclusion Advisory Group initial report. <https://www.digitalinclusion.gov.au/sites/default/files/documents/first-nations-digital-inclusion-advisory-group-initial-report.pdf>
12. First Nations Digital Inclusion Advisory Group. (2024, June 5). First Nations digital inclusion measures. <https://www.infrastructure.gov.au/sites/default/files/documents/first-nations-digital-inclusion-advisory-group-first-nations-digital-inclusion-measures-5june2024.pdf>
13. Unless otherwise stated all population statistics in research site pages (p. 20-39) refer to: Australian Bureau of Statistics (ABS), "Search Census data", (2021), accessed: 12 September 2023, <https://www.abs.gov.au/census/find-census-data/search-by-area>.
14. Laynhapuy Homelands Aboriginal Corporation, survey data.
15. Laynhapuy Homelands Aboriginal Corporation, survey data.
16. Laynhapuy Homelands Aboriginal Corporation, survey data.
17. Higher Capacity Radio Concentrator microwave repeater network for telephony.
18. Mossberger, K., Tolbert, C. J., & Hamilton, A. (2012). Measuring digital citizenship: Mobile access and broadband. *International Journal of Communication*, 6, 2492-2528.
19. Correa, T., Pavez, I., & Contreras, J. (2020). Digital inclusion through mobile phones? A comparison between mobile-only and computer users in internet access, skills and use. *Information, Communication & Society*, 23(7), 1074-1091. <https://doi.org/10.1080/1369118X.2018.1555270>; Correa, T., Valenzuela, S., & Pavez, I. (2024). For better and for worse: A panel survey of how mobile-only and hybrid internet use affects digital skills over time. *New Media & Society*, 26(2), 995-1017. <https://doi.org/10.1177/14614448211059114>
20. Telstra voucher rates increased in June 2023 from \$30 for 10GB to \$35 for 15GB, making cost per GB slightly lower (down from \$3/GB to \$2.33/GB). Optus vouchers also increased in price in 2023. Telstra has announced another price increase in October 2024 to \$39 for 15GB (\$2.60/GB). See: <https://www.telstra.com.au/consumer-advice/price-changes#pre-paid>

21 Helsper, E. (2021). *The Digital Disconnect: The Social Causes and Consequences of Digital Inequalities*. SAGE.

22. Aboriginal Medical Services Alliance Northern Territory. (2021). Food Summit Report: Food Security in the Northern Territory. Aboriginal Medical Services Alliance Northern Territory. <http://www.amsant.org.au/wp-content/uploads/2021/10/Food-Summit-Report-V2.pdf>

23. <https://www.abc.net.au/news/2024-06-04/high-cost-of-living-in-remote-australia-national-strategy/103902456>

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

25. Thomas, J., McCosker, A., Parkinson, S., Hegarty, K., Featherstone, D., Kennedy, J., Holcombe-James, I., & Ormond-Parker, L. (2023). Measuring Australia's Digital Divide: Australian Digital Inclusion Index: 2023. Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society, RMIT University, Swinburne University of Technology, and Telstra. <https://doi.org/10.25916/528s-ny91>

26. <https://www.digitalinclusionindex.org.au/case-study-mapping-the-digital-gap-digital-inclusion-in-remote-first-nations-communities/>

27. See, for example: Miyarrka Media. (2019). *Phone & Spear A Yuta Anthropology*. Goldsmiths Press.

28. Napoli, P. M., & Obar, J. A. (2014). The emerging mobile Internet underclass: A critique of mobile Internet access. *The Information Society*, 30(5), 323-334

29. Helsper, E. (2021). *The Digital Disconnect: The Social Causes and Consequences of Digital Inequalities*. SAGE.

30. The Viewer Access Satellite Television (VAST) service is a satellite television platform that provides digital television and radio services to remote and rural areas. See: <https://www.infrastructure.gov.au/media-centre/publications/viewer-access-satellite-television-vast-fact-sheet>

31. The six sites are Erub, Wujal Wujal, Kalumburu, Yuelamu, Gangan and Pipalyatjara. Weak ABC AM signals from regional centres can be picked up in some of these communities.

32. <https://www.pc.gov.au/closing-the-gap-data/dashboard/se/outcome-area17>

33. <https://www.infrastructure.gov.au/have-your-say/roadmap-first-nations-digital-inclusion>

34 <https://www.digitalinclusion.gov.au/first-nations-data-map>



APPENDIX 1 - PROJECT OUTPUTS TO DATE

ADII 2023 REPORT AND DASHBOARD

Thomas, J, McCosker, A, Parkinson, S, Hegarty, K, Featherstone, D, Kennedy, J, Holcombe-James, I., and Ormond-Parker, L. *Measuring Australia's Digital Divide: Australian Digital Inclusion Index: 2023*. Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society, RMIT University, Swinburne University of Technology, and Telstra, 2023. doi:[10.25916/528s-ny91](https://doi.org/10.25916/528s-ny91).

First Nations [dashboard](#) and [case study](#) on ADII Website 2023

2023 OUTCOMES REPORT

Featherstone, D., Ormond-Parker, L., Ganley, L., Thomas, J., Parkinson, S., Hegarty, K., Kennedy, J., Holcombe-James, I., Valenta, L., Hawkins, L. (2023). Mapping the digital gap: 2023 outcomes report. Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society. doi:[10.25916/A01G-FP91](https://doi.org/10.25916/A01G-FP91).

COMMUNITY OUTCOMES REPORTS

Featherstone, D., Ormond-Parker, L., Hawkins, L., Thomas, J., Parkinson, S., & Kennedy, J. (n.d.). Mapping the digital gap: Tennant Creek, NT 2023 community update report. Melbourne, Australia: ARC Centre of Excellence for Automated Decision-Making and Society. doi:[10.60836/GSRJ-G371](https://doi.org/10.60836/GSRJ-G371).

Featherstone, D., Ormond-Parker, L., Hawkins, L., & Thomas, J. (2024). Mapping the digital gap: Gängen NT 2023 community update report. Melbourne, Australia: ARC Centre of Excellence for Automated Decision-Making and Society. doi:[10.60836/TWFK-9Q41](https://doi.org/10.60836/TWFK-9Q41).

Featherstone, D., Ormond-Parker, L., Hawkins, L., & Thomas, J. (2024). Mapping the digital gap: Galiwin'ku, NT 2023 community update report. Melbourne, Australia: ARC Centre of Excellence for Automated Decision-Making and Society. doi:[10.60836/6S6J-BD71](https://doi.org/10.60836/6S6J-BD71).

Featherstone, D., Ormond-Parker, L., Hawkins, L., & Thomas, J. (2024). Mapping the digital gap: Yuelamu NT 2023 community update report. Melbourne, Australia: ARC Centre of Excellence for Automated Decision-Making and Society. doi:[10.60836/3B0G-S164](https://doi.org/10.60836/3B0G-S164).

Featherstone, D., Thomas, J., Ormond-Parker, L., & Hawkins, L. (2024). Mapping the digital gap: Djarindjin and Lombadina, WA 2023 community update report. Melbourne, Australia: ARC Centre of Excellence for Automated Decision-Making and Society. doi:[10.60836/XAC6-JG29](https://doi.org/10.60836/XAC6-JG29).

Featherstone, D., Ormond-Parker, L., Hawkins, L., & Thomas, J. (2024). Mapping the digital gap: Kalumburu, WA community update report 2023. Melbourne, Australia: ARC Centre of Excellence for Automated Decision-Making and Society. doi:[10.60836/XZ2E-2G30](https://doi.org/10.60836/XZ2E-2G30).

Featherstone, D., Ormond-Parker, L., Hawkins, L., & Thomas, J. (2024). Mapping the digital gap: Erub (Darnley Island), Zenadth Kes (Torres Strait), Queensland 2023 community update report. Melbourne, Australia: ARC Centre of Excellence for Automated Decision-Making and Society. doi:[10.60836/W1WQ-4D36](https://doi.org/10.60836/W1WQ-4D36).

Featherstone, D., Ormond-Parker, L., Hawkins, L., Thomas, J., Parkinson, S., & Kennedy, J. (2024). Mapping the digital gap: Wadeye, NT 2023 community update report. Melbourne, Australia: ARC Centre of Excellence for Automated Decision-Making and Society. doi:[10.60836/TQG0-WS75](https://doi.org/10.60836/TQG0-WS75).

Featherstone, D., Ormond-Parker, L., Hawkins, L., & Thomas, J. (2023). Mapping the digital gap: Warakurna, WA 2023 community outcomes report. ARC Centre of Excellence for Automated Decision-Making and Society. doi:[10.60836/DT8K-JE45](https://doi.org/10.60836/DT8K-JE45).

Featherstone, D., Ormond-Parker, L., Hawkins, L., & Thomas, J. (2023). Mapping the digital gap: Wilcannia, NSW 2023 community update report. ARC Centre of Excellence for Automated Decision-Making and Society. doi:[10.60836/TQYT-V573](https://doi.org/10.60836/TQYT-V573).

Featherstone, D., Ormond-Parker, L., Hawkins, L., & Thomas, J. (2023). Mapping the digital gap: Wujal Wujal, Queensland 2023 community update report. ARC Centre of Excellence for Automated Decision-Making and Society. doi:[10.60836/3KC3-WP92](https://doi.org/10.60836/3KC3-WP92).

Featherstone, D, Holcombe-James, I, and Ormond-Parker, L. *Mapping the Digital Gap: Wilcannia, NSW community outcomes report 2022*. Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society, 2022. doi:[10.25916/tkgz-bj76](https://doi.org/10.25916/tkgz-bj76).

Featherstone, D, Holcombe-James, I, and Ormond-Parker, L, Hawkins, L. *Mapping the Digital Gap: Wujal Wujal, Queensland community outcomes report 2022*. Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society, 2022. doi:[10.25916/ah26-m948](https://doi.org/10.25916/ah26-m948).

Featherstone, D, Holcombe-James, I, and Ormond-Parker, L, Hawkins, L. Mapping the Digital Gap: *Erub (Darnley Island), Zenadth Kes (Torres Strait), Queensland community outcomes report 2022*. Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society, 2022. doi:[10.25916/13hs-3h71](https://doi.org/10.25916/13hs-3h71).

Featherstone, D, Ormond-Parker, L, Holcombe-James, I, Hawkins, L, Thomas, J and Kennedy, J. *Mapping the Digital Gap: Tennant Creek, Barkly NT Community Outcomes report 2022*. Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society, 2022. doi:[10.25916/ad1n-mw04](https://doi.org/10.25916/ad1n-mw04).

Featherstone, D, Ormond-Parker, L, Holcombe-James, I, Hawkins, L, Charles, D, Thomas, J and Kennedy, J. Mapping the Digital Gap: Yuelamu, NT Community Outcomes report 2022. Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society, 2022. doi:[10.25916/h8yh-f780](https://doi.org/10.25916/h8yh-f780).

Featherstone, D, Ormond-Parker, L, Holcombe-James, I, Hawkins, L, Ganambarr, G, Ganambarr, D, Thomas, J and Kennedy, J. *Mapping the Digital Gap: Gangan, East Arnhem Land NT Community Outcomes report 2022*. Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society, 2023. doi:[10.25916/tqzj-wf36](https://doi.org/10.25916/tqzj-wf36).

Featherstone, D, Thomas, J, Ormond-Parker, L, Holcombe-James, I, Hawkins, L, and Kennedy, J. *Mapping the Digital Gap: Djarindjin/ Lombadina, Kimberleys, WA, Community Outcomes report 2022*. Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society, 2023. doi:[10.25916/knvr-0g72](https://doi.org/10.25916/knvr-0g72).

Featherstone, D, Ormond-Parker, L, Holcombe-James, I, Hawkins, L, Thomas, J and Kennedy, J. *Mapping the Digital Gap: Kalumburu, Kimberleys, WA, Community Outcomes report 2022*. Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society, 2023. doi:[10.25916/fn75-4n95](https://doi.org/10.25916/fn75-4n95).

Featherstone, D, Ormond-Parker, L, Holcombe-James, I, Hawkins, L, Bukulatjpi, Y, Bukulatjpi, C, Thomas, J and Kennedy, J. *Mapping the Digital Gap: Galiwin'ku, East Arnhem Land NT Community Outcomes report 2022*. Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society, 2022. doi:[10.25916/vjtt-mb25](https://doi.org/10.25916/vjtt-mb25).

Featherstone, D, Ormond-Parker, L, Holcombe-James, I, Hawkins, L, Thomas, J and Kennedy, J. *Mapping the Digital Gap: Wadeye, NT, Community Outcomes report 2022*. Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society, 2023. doi:[10.25916/svqb-3j44](https://doi.org/10.25916/svqb-3j44).

WORKING PAPER

Featherstone, D, Thomas, J, Holcombe-James, I, Ormond-Parker, L, and Kennedy, J. *Mapping the Digital Gap Background paper: Project objectives, context and methods*. ADM+S Working Paper 005, 2022. doi:[10.25916/fazn-eh86](https://doi.org/10.25916/fazn-eh86).

ARTICLES

Featherstone, D, Thomas, J, Holcombe-James, I, & Ormond-Parker, L. "Closing the digital gap for remote first nations communities: 5G and beyond?" *Media International Australia*. (2021). doi:[10.1177/1329878X231201746](https://doi.org/10.1177/1329878X231201746).

Featherstone, D, Stuchbery, C, Huebner, S, Ormond-Parker, L, and Dodd, A. (2021). "Archiving First Nations media: The race to save community media and cultural collections." *Australian Aboriginal Studies*, (1) (2021): 53-68.

BOOK CHAPTER

Featherstone, Daniel. "Dirt Tracks off the Superhighway: How COVID widened the digital gap for remote First Nations communities in Australia," in *Digital Inclusion*, eds. Simeon Yates and Elinor Carmi. Palgrave Macmillan, 2023.

EDITORIALS / NEWS STORIES

'Measuring digital inclusion to increase equitable access for all' RMIT Research Impact case study on ADII and Mapping the Digital Gap. <https://www.rmit.edu.au/research/impact/digital-inclusion-equitable-access>

Featherstone, D., Ormond-Parker, L. (2023) '*Digital inclusion*' and closing the gap: how First Nations leadership is key to getting remote communities online. The Conversation, 23/11/2023. <https://theconversation.com/digital-inclusion-and-closing-the-gap-how-first-nations-leadership-is-key-to-getting-remote-communities-online-216085>

Featherstone, D., Ormond-Parker, L., Thomas, A. (2022). *Natural disasters and the COVID-19 pandemic reveal the crucial role of First Nations media*. The Conversation, 16 March 2022. <https://theconversation.com/natural-disasters-and-the-covid-19-pandemic-reveal-the-crucial-role-of-first-nations-media-178769>

Featherstone, D. (2022). Mapping the Digital Gap coming to Erub. News story for Torres News. 29/3/22

POLICY SUBMISSIONS

Featherstone, D. *Indigenous Digital Inclusion Plan: ADM+S Response to NIAA Discussion Paper*. 5 November 2021.

ACCC Regional Mobile Infrastructure Inquiry 2022 – in-person submission.

House of Representatives Standing Committee Inquiry into Co-investment in multi-carrier regional mobile infrastructure – Witness in public hearing, Alice Springs May 2023.

ADM+S submission to the Better Delivery of Universal Services Review 2024.

ADM+S submission to the Regional Telecommunications Review 2024

ADM+S submission to the Senate inquiry into bank closures in regional Australia 2024

REPRESENTATION

First Nations Digital Inclusion Advisory Group and Expert Panel: The FNDIAG was established by Communications Minister Michelle Rowland MP to provide First Nations leadership on Closing the Gap

Target 17. Associate Professor Lyndon Ormond-Parker is the Co-Chair of the FNDIAG, with Dr Daniel Featherstone and Lauren Ganley (Telstra) are on the Expert Panel supporting the Advisory Group. (Website link: <https://www.digitalinclusion.gov.au/>)

Lyndon is also Deputy Chair of National Film and Sound Archive of Australia's Indigenous Connections Committee, Chair of Return Reconcile Renew Archive Governance Board, Australian National University, a Member of the University of Sydney's Library Cultural Collections Reference Group, and Member of Informit's First Peoples' Lens Steering Committee.

Australian Communications Consumer Action Network (ACCAN): Distinguished Professor Julian Thomas was Chairperson of ACCAN until September 2024. Dr Daniel Featherstone was elected to the ACCAN Board in September 2024.

Dr Daniel Featherstone is also a member of the NSW Closing the Gap Data Development Advisory Group (2023-4), State Library of Queensland Digital Inclusion Working Group (2023-24), ACCAN Indigenous Steering Group (2013- 2024), DITRDCA Remote and Regional Television Audit Working Group (2023-4).

Other team members also have extensive representation on academic and professional committees as well as ADM+S Centre working groups.

FORUMS AND PRESENTATIONS

Stakeholder Updates

Four virtual Mapping the Digital Gap stakeholder updates to date 2021-23.

2024 Presentations or Panel discussions

- + ACMA Radcomm Conference, Melbourne
- + ADM+S Symposium on Mobilities, UNSW Sydney
- + CONVERGE First Nations Media Conference and Digital Inclusion Forum, Canberra
- + Public Sector Communications Conference, Canberra

2023

- + ADII 2023 Report Launch, Adelaide
- + ACCC/ AER Regulatory Conference, Brisbane
- + ADM+S News and Media Symposium, Sydney

- + State Library of Queensland Future Libraries symposium, Brisbane
- + NetThing Conference, Brisbane
- + CONVERGE First Nations Media Conference, Canberra
- + Amplifying Indigenous News Symposium, University of Canberra
- + 13 other academic forums and industry events in 2023

2022

- + ACMA Radcomm Conference, Melbourne
- + Digital Inclusion for Low Income Families Symposium, Brisbane
- + Understanding Inclusion and Exclusion: Perspectives on ADM in Australian Society, Melbourne
- + Digital Inequalities and ADM Workshop, Melbourne
- + Australian Digital Inclusion Alliance forum
- + Automation, Wellbeing and Harms in a COVID Age, Melbourne
- + 11 other academic events and industry forums

2021

- + Digital Inclusion Policy and Research Conference (DIPRC), UK, 2021 (online)
- + ADM+S News and Media Symposium, Brisbane
- + Community Network Exchange Asia Pacific conference
- + CONVERGE / Indigenous Digital Leadership Forum, Lismore
- + 10 other academic events and industry/ community briefings

The team have also delivered numerous presentations to federal and state government agencies, peak bodies, community organisations, land councils and service providers.

FILMS / MEDIA OUTPUTS

End of the Line (2024) A 15 minute documentary about communications on the remote Torres Strait island of Erub, through the eyes of language teacher / fisherperson / NAIDOC Award winner Lala Gutchen. Co-production between ADM+S and Torres Strait Islander Media Association. <https://www.youtube.com/watch?v=kV153RJbXOM>

Mapping the Digital Gap in Erub (2022) 5 minute video with co-researchers at Erub in the Torres Strait. https://www.youtube.com/watch?v=G9tIhu_yWw4

Mapping the Digital Gap in Wilcannia (2022) 6 minute video with co-researchers at Wilcannia in western NSW. https://www.youtube.com/watch?v=G9tIhu_yWw4

Project Brief: Mapping the Digital Gap. Podcast Episode by ADM+S as part of series on Phase 2 projects within the Centre. <https://open.spotify.com/episode/6JNwM2G3sHiOjh5xTgj1s1>

ONLINE PRESENCE

Websites

Project website: <http://mappingthedigitalgap.com.au>

ADII website: <https://www.digitalinclusionindex.org.au>

First Nations ADII Dashboard: <https://www.digitalinclusionindex.org.au/dashboard/firstnations.aspx>

Social media

LinkedIn: <https://www.linkedin.com/showcase/mapping-the-digital-gap>

Facebook: <https://www.facebook.com/MappingTheDigitalGap>

AWARDS



Mapping the Digital Gap was recognised at the 2023 RMIT Research Awards by winning the Vice-Chancellor's Award for Research Impact and Engagement - Team category.

In 2022, Daniel Featherstone and Lyndon Ormond-Parker won the Dean's Award for Indigenous Engagement in the School of Media and Communications.

APPENDIX 2 – KEY NEWS STORIES

Ganley, L. (2024) Understanding digital inclusion in remote First Nations communities. Telstra feature story. 27 May 2024

Burdon, A. (2023.) 'Conquering the digital divide Issue' Magazine article featuring interview with Daniel Featherstone. Issue #149, 16 May 2023. <https://www.outbackmag.com.au/conquering-the-digital-divide/>

How, B. (2023). 'First Nation's digital inclusion lags despite national improvement. InnovationAus online article about Mapping the Digital Gap findings. <https://www.innovationaus.com/first-nations-digital-inclusion-lags-despite-national-improvement/>

Johnstone, R. (2023) 'Closing the digital gap in Australia's least connected communities'. Case Study in 2023 Telstra Sustainability Report 'Bigger Picture', p.46. <https://www.telstra.com.au/content/dam/tcom/about-us/community-environment/pdf/Telstra-Bigger-Picture-Sustainability-Report-2023-Remediated.pdf>

Johnstone, R. (2022). 'The communities in Australia where digital inclusion is going backwards'. Telstra Sustainability News. May 2022. Key interviewee for article on Mapping The Digital Gap Project. <https://exchange.telstra.com.au/the-communities-in-australia-where-digital-inclusion-is-going-backwards/>

Parke, E. (2022). 'Australia's digital divide means 2.8 million people remain 'highly excluded' from internet access'. ABC Online feature article and Video story, featuring interview with Daniel Featherstone, 16 October 2022. <https://www.abc.net.au/news/2022-10-16/australia-digital-divide-millions-cannot-access-internet/101498042>

Weekes, M. (2022). 'How lack of connectivity entrenches the digital divide. ABC RN Life Matters, interview with Julian Thomas on ADII, and findings from Mapping the Digital Gap. <https://www.abc.net.au/radionational/programs/lifematters/how-lack-of-connectivity-entrenches-the-digital-divide/101543654>

MEDIA COVERAGE

Mapping the Digital Gap 2023 Report launch - Team members conducted over 20 interviews following 2023 Outcomes report launch. RMIT Media tracked 430 media stories, with highlights including ABC radio and online, Channel 7 and 9 News, Koori Radio, The West Australian, National Indigenous Times, SBS, The New Daily, community radio and Koori Mail.

In 2023 and 2024, Daniel Featherstone has done over 30 radio and print article interviews on the following topics: Mapping the Digital Gap research findings, the switch-off of 3G, regional bank closures.

APPENDIX 3 – COMMUNITY PARTNERS

Djarindjin Aboriginal Corporation



Djarindjin/ Lombadina
djarindjin.org.au

Julalikari Council Aboriginal Corporation



Julalikari Council Aboriginal Corporation

Tennant Creek
julalikari.org.au

Kalumburu Aboriginal Corporation



Kalumburu
kalumburu.org

Laynhapuy Homelands Aboriginal Corporation



Gäangan
laynhapuy.com.au

NPY Women's Council



Pipalyatjara / Kalka
npywc.org.au

Pintubi Anmatjere Warlpiri Media and Communications



Galiwin'ku
pawmedia.com.au

Regional Enterprise Development Institute Ltd



Wilcannia
redie.org.au

Thamarrurr Development Corporation



Wadeye
thamarrurr.org.au

Torres Strait Islanders Media Association Inc



Erub
tsima4mw.org.au

Warakurna Community Council



Warakurna
ngaanyatjarra.org.au/warakurna

Wujal Wujal Aboriginal Shire Council



Wujal Wujal
wujalwujalcouncil.qld.gov.au

Yalu Aboriginal Corporation



Yuelamu
yalu.org.au

MAPPING THE DIGITAL GAP

CONTACTS

E: mtdg@rmit.edu.au

Daniel Featherstone

Senior Research Fellow

E: daniel.featherstone@rmit.edu.au

Website

mappingthedigitalgap.com.au



ARC Centre of
Excellence for
**Automated
Decision-Making
and Society**