

March 2026



MAPPING THE DIGITAL GAP

Measuring Digital Inclusion and Media Use in Remote Aboriginal and Torres Strait Islander Communities 2021-24



Galiwin'ku, NT

2026 Community Update Report



Acknowledgement of Country

We respectfully acknowledge the Yolŋu (Djambarrpuyŋu, Gupapuyŋu, Djinang) people, and pay our respect to their Ancestors and Elders, past and present. We also acknowledge the Traditional Custodians and their Ancestors of the lands and waters across Australia where we work, live and undertake our research.

About the Mapping the Digital Gap Research Project

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

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The 'Mapping the Digital Gap' project received funding support from Telstra and the Australian Research Council Centre of Excellence for Automated Decision-Making and Society (CE200100005).

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Suggested citation: Featherstone, D, Ormond-Parker, L, Hegarty, K, Hawkins, L, Parkinson, S, Johnson, Y, Bawden, S, Thomas, J, Kennedy, J, Dhamarrandji, M (2026) *Mapping the Digital Gap: Galiwin'ku NT 2026 Community Update Report*. ARC Centre of Excellence for Automated Decision Making and Society: RMIT University, Melbourne, DOI: 10.60836/hjad-ds91

Acknowledgements

We would like to thank the following key contributors:

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Research Participants and Stakeholders

Thank you to all the community residents and local agency staff who generously participated in surveys and interviews. We conducted 87 surveys with First Nations community residents in 2024, 70 in 2023, and 45 in 2022. From 2022-24 we undertook 36 interviews with community leaders, residents and the following stakeholder agencies:

- + East Arnhem Regional Council (EARC)
- + Marthakal Homelands Resource Centre
- + Yalu Aboriginal Corporation
- + ALPA (Arnhem Land Progress Association)
- + National Indigenous Australians Agency
- + Community Development Program (ALPA)
- + ALPA Higher Education
- + Shepherdson College
- + Connected Beginnings, Shepherdson College
- + Families and Schools Together
- + Elcho Island Arts
- + Post Office (run by EARC)
- + East Arnhem Real Estate
- + AFL NT
- + Anglicare

Galiwin'ku research trips dates

4-7 June 2024; 12-16 June 2023; 16-20 May 2022

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01. EXECUTIVE SUMMARY

This report outlines updated findings based on our third and final research visit to Galiwin'ku in 2024 as well as updates since our 2024 visit.

Galiwin'ku is located on the southern end of Elcho Island and the largest Yolŋu community in the East Arnhem region of the Northern Territory (NT). It is located about 150 km west of Nhulunbuy, and 500 km north-east of Darwin. The Yolŋu traditional owners are the Djambarrpuyŋu, Gupapuyŋu and Djinang people, however there are other clan groups also living in Galiwin'ku. According to the 2021 Australian Bureau of Statistics (ABS) Census, the population of Galiwin'ku is 2,199 with 94% identifying as Aboriginal people (Yolŋu). Of these, 97% speak an Aboriginal language, primarily Djambarrpuyŋu (81.6%) and Galpu (1.5%) (often grouped as Yolŋu Matha). There are approximately 369 residential dwellings.

Galiwin'ku is home to the Marthakal Homeland and Resource Centre and Marthakal Homelands Health Service, which supports 30 homelands throughout the Marthakal region, including 14 located on Elcho Island. Because of this inter-dependence with Galiwin'ku, this report also looks at the communications services and needs in the Marthakal Homelands.

Our third visit to Galiwin'ku was undertaken on 4-7 June 2024. The RMIT University team worked with community research partner Yalu Aboriginal Corporation and co-researchers Evelyn Djojja Bukulatjpi, Wesley Dhurrkay, Cyril Bukulatjpi and Shaun Dhamarrandji. The team had a very productive week, undertaking 87 surveys with residents and conducting 7 interviews with agencies and community leaders. We thank all residents and agency staff who participated in the research and made us feel very welcome.

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

This report presents research findings to date, compares survey results from 2022 to 2024, renews analysis with 2024 findings and quotes, and outlines changes in communications and media services and usage during and since our visits. The report also presents 2025 Australian Digital Inclusion Index scores for Galiwin'ku relative to national averages.

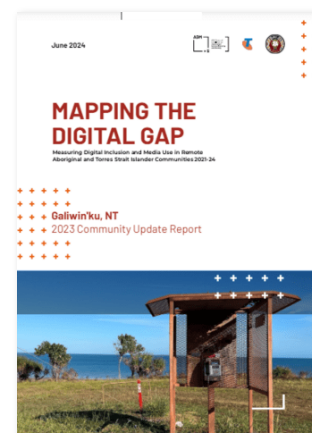
The proposed Digital Inclusion Plan has been updated based on community input and progress to date, as well as planned activities.

This report is part of our commitment to Indigenous data sovereignty, providing data and research findings to the participating communities to use for their own analysis, planning and advocacy.



- 150 km**
Nearest major regional centre (Nhulunbuy)
- 2,199**
Population (ABS 2021)
- 94%**
Aboriginal and/or Torres Strait Islanders

- 87**
surveys conducted in 2024 (70 in 2023, 46 in 2022)
- 7**
interviews conducted in 2024 (13 in 2023, 16 in 2022)



Galiwin'ku at a Glance

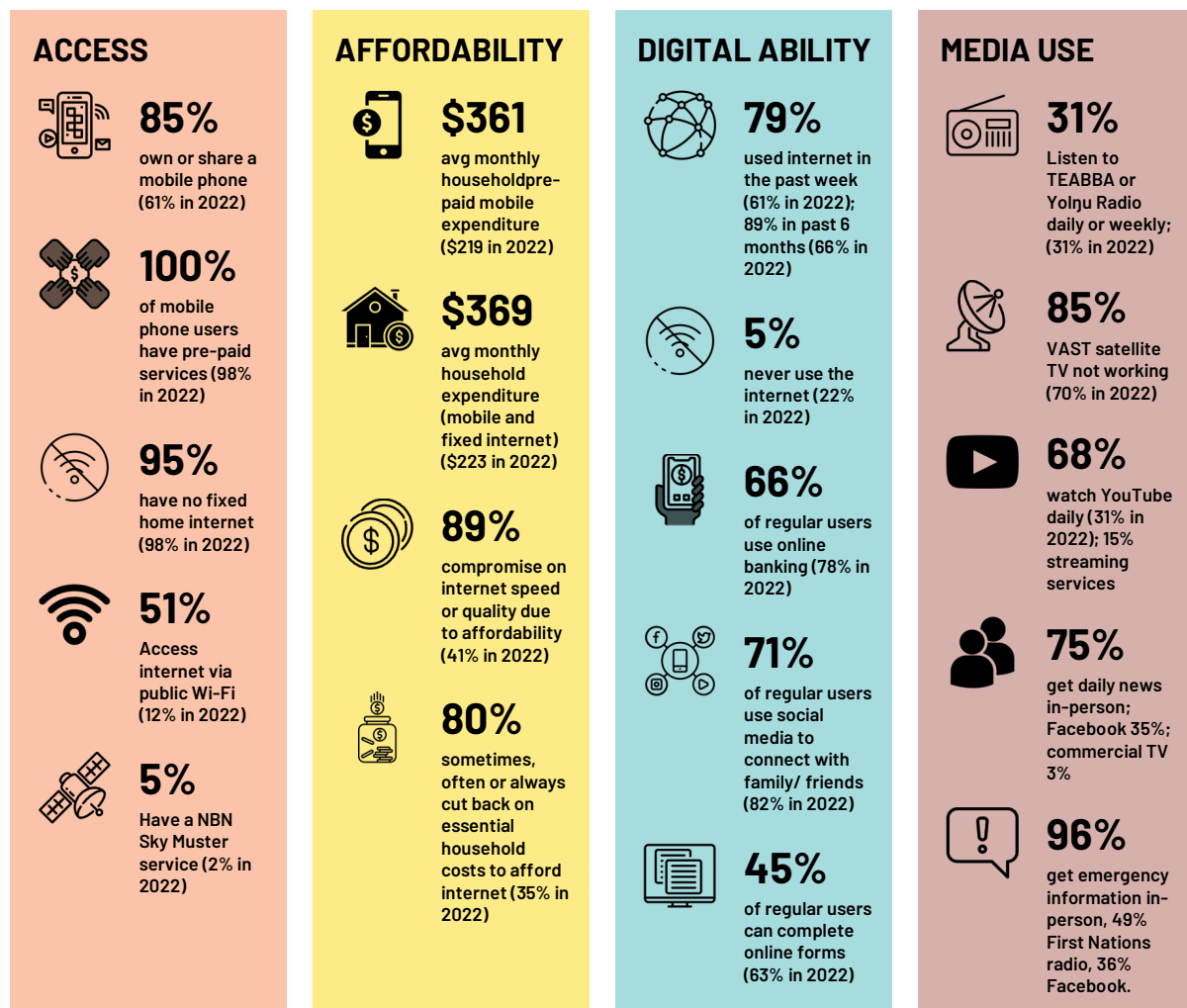
Distance	150 km	north-east of Darwin
Dwellings	369	occupied dwellings
	6.3	people per ATSI household
Language	96.9%	ATSI people who speak an Aboriginal language
Income	\$338	median ATSI weekly personal income



Figure 1: Aerial photo of Galiwin'ku community

Key Survey Findings

The figure below provides a summary of weighted 2024 survey results (87 respondents).



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

What is Digital Inclusion? How is it measured?

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

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

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

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

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

DIGITAL INCLUSION

ACCESS

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

AFFORDABILITY

- > Affordable phone and internet services
- > Affordable devices

DIGITAL ABILITY

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

ADII First Nations Data Dashboard

The [First Nations dashboard](#) on the ADII website provides interactive charts and community-specific results for the ten research sites in 2024. The Mapping the Digital Gap [2025 Outcomes Report](#) provides summary findings across all sites.

View dashboard using the QR code below:

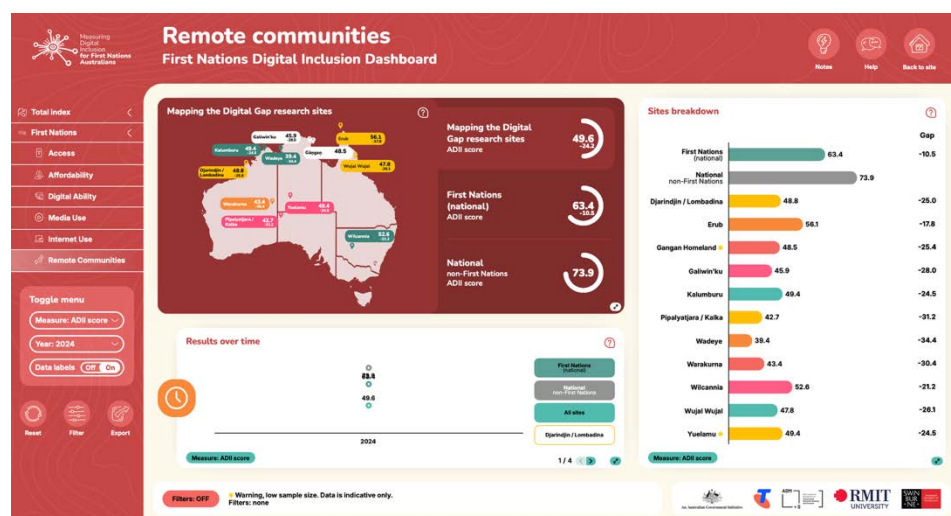


Figure 2: Mapping the Digital Gap results are on the Remote Communities page within the new First Nations dashboard on the ADII website

ADII 2025 Report Findings

The 2025 ADII found a digital gap of 10.5 points for First Nations people compared with other Australians. This gap widened substantially for people living in remote (16.5) and very remote Australia (22.8), where contributing factors include limited access to digital infrastructure and services, high internet costs relative to income, climate, geography and cultural context.

Based on our 2024 survey results, the average ADII score for Galiwin'ku was 45.9, a gap of 28.0 points below the national average for non-First Nations Australians.

The key elements of this gap (see Figure 4) were in the Access dimension score of 30.6, which was 46.5 points below the non-First Nations average, along with a large gap of 34.6 for Digital Ability. The smaller gap in Affordability (2.9) is due to large household sizes enlarging household income relative to expenditure, and does not reflect lived reality in Galiwin'ku where Affordability is a major concern. These gaps vary widely for different demographic groups as detailed below.

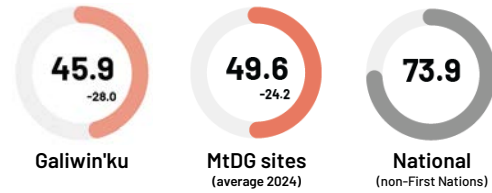


Figure 3: Galiwin'ku 2025 ADII score compared to the national non-First Nations Average and the average score across 11 MtDG research sites, based on 2024 surveys

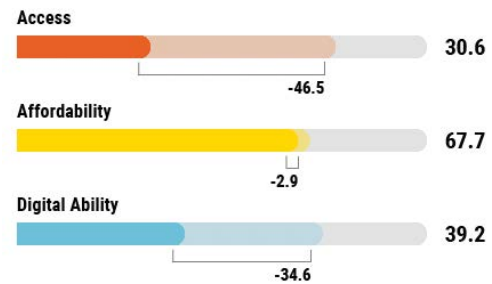


Figure 4: 2025 ADII scores for Galiwin'ku, with gap against national non-First Nations averages

Demographic gaps in Galiwin'ku:

The Index results derived from the 2024 survey results show significant variations in digital inclusion between certain demographic groups. These results demonstrate that targeted digital support activities would benefit these groups in Galiwin'ku.

	<p>Income support gap</p> <p>Those on income support had an 11.9 gap in average digital inclusion scores relative to those not on income support (45.9 compared with 53.8). The gap was greatest in the areas of Digital Ability (40.4 compared with 48.6) and Affordability (66.8 compared with 77.2).</p> <p>11.9</p>
<p>Age gap</p> <p>Those aged 55 and over had an average digital inclusion score of 35.2, compared with a score of 47.8 for those aged 18–34 years (12.6 gap). The gap was greatest in the areas of Digital Ability, with a 29.2 gap (15.8 compared with 45.0). The relative gap for Access was 8.0 (23.5 compared with 31.5), with Affordability similar across age groups (66.3 compared with 66.9).</p> <p>12.6</p>	<p>Education gap</p> <p>There was a 6.1 gap in ADII score between who did not complete secondary school (42.2) and those who completed secondary school (48.3), and a 15.1 gap relative to those who did further training (57.3). The gap was greatest in Digital Ability with relative gaps of 18.8 and 36.7 (29.7/48.5/66.4). Access scores also had gaps of 2.6 and 6.8 (29.1/31.7/35.9).</p> <p>15.1</p>
<p>Disability gap</p> <p>Those with a disability or long-term health condition had a 2.6 gap in digital inclusion scores relative to people without disability (44.7 compared with 47.3).* There was a 4.9-point gap in Access (27.2 compared with 32.1) and a 3.4-point gap in Digital Ability (38.5 compared with 41.9).</p> <p>2.6</p>	<p>Employment gap</p> <p>The average digital inclusion score for people who were employed (full-time or part-time) was 50.4 compared to 45.4 for those who were unemployed. The gap was greatest in Digital Ability with a 14.0 gap (51.3 compared with 37.3).</p> <p>5.0</p>

A demographic gap also exists for people living in large, shared housing, with those living in multi-generational family households scoring lower than single person households (42.6 compared to 51.0).

* Note that low sample sizes may impact reliability of these results.

02. INTRODUCTION

The Mapping the Digital Gap project tracks changes in digital inclusion and media and communications use in each research site over three years. This report provides an update from our third visit to Galiwin'ku in June 2024, comparing the survey and interview results to our findings from the first two visits in May 2022 and June 2023. It also includes updates up to February 2026. The report outlines progress on the suggested strategies for a local Digital Inclusion Plan and updates the plan with newly identified strategies or activities.

2022 Findings

During our first visit to Galiwin'ku in 2022, we heard significant frustration from residents at the poor quality of communications services in Galiwin'ku, particularly the 3G/4G mobile service which was described as highly congested and slow throughout much of the day, with limited coverage in Buthan and nearby homelands. With the Telstra services delivered via a microwave link from Mapuru community on the mainland, which is connected to the Arnhem Fibre Network (initially installed in 2008), we also heard about delivery chain and technical issues causing regular dropouts, especially in wet season, and several extended outages in recent years. There was a lack of backup services in Galiwin'ku, with only a small number of agencies having NBN satellite services and Telstra connectivity.

We heard multiple accounts of the impacts of poor quality and unreliable services. These included challenges in delivering services, and difficulty for residents in accessing and using online services and building digital agency. Outages had led to stores being unable to operate causing food security issues, as well as health and safety risks and significant community unrest.

There were plans underway to upgrade the Arnhem Fibre Network by July 2023, however no plan at the time to upgrade the microwave link to Galiwin'ku – a key element in the congestion. Interviewees expressed their frustration at the lack of a timeframe for the much-needed infrastructure upgrades and called for an interim solution. Beyond upgrading the microwave link, there were calls for an additional mobile service in Buthan, where housing construction was underway to address population growth.

Residents of the Marthakal homelands on Elcho Island and nearby areas on the mainland also described quality and reliability issues with some of the community Wi-Fi phones or public phones located in homelands, with calls for these to be upgraded and have more regular maintenance. Homeland residents were keen to have improved internet access while maintaining control over times when services were on. Some homelands could pick up weak 3G mobile reception from Galiwin'ku or mainland communities, with concerns that the 3G switch-off planned for June 2024 would reduce access to emergency phone services while on homelands or when fishing.

Yolŋu residents in Galiwin'ku were primarily dependent on pre-paid mobile for both phone and internet access, with very few ADSL or Sky Muster connections in households. This increased reliance on the mobile service for connection with family and friends, access to online services, and emergency communications, with few working public phones at the time of our visit.



Figure 5: The Galiwin'ku mobile tower with microwave repeater links from the mainland

With at least 70% of households without satellite-delivered TV services working, the mobile service was the default source of all media-based entertainment and news. The increased use of mobile phones, including by children, along with growing demand for data-hungry streaming and gaming services, is a key contributor to network congestion. As a result, young people were staying up at night for gaming, streaming and other online activities, impacting on school and workplace attendance.

The lack of access to reliable news sources via television or radio—which have low household access—was resulting in social media platforms being a primary source of news and information. Social media is used widely as a primary social communications tool by Yolŋu. However, the lack of alternate sources to verify online information meant that people experienced high levels of misinformation. This resulted in a high level of vaccine hesitancy during the COVID-19 pandemic.

The increased data usage was also an affordability issue, with pre-paid data costing an average of \$3/GB and users typically spending \$60–\$90 per month on data recharges. With increased freight costs to the island, costs had increased for most essentials in Galiwin'ku – food, rent, fuel, power cards and other household needs. With mobile phones often being shared, transferred or damaged in crowded households, the need for regular replacement of devices was a further affordability issue.

Our 2022 survey found relatively low levels of digital inclusion levels in Galiwin'ku, even compared to other very remote communities. The primary contributing factors were the lack of household internet access and limited access to online devices, as well as a large gap in Digital Ability.

Further, we found a lack of community access computers, public access Wi-Fi and digital skills programs or support in Galiwin'ku to help residents build digital capability and agency. Most service providers described providing ad-hoc support to clients or residents with setup or use of online services, activating phones or SIMs, sourcing identification documents, and assisting with translation issues to helpline attendants. There were calls for more access computers, free public Wi-Fi and dedicated digital support services to help address the community demand.

While Galiwin'ku has a strong history of music, media production and language and cultural programs, there was demand for more support for these activities as well as access to archives of previously produced content. While young people are skilled in creating and sharing content on social media platforms, Elders are keen to harness these skills to support language, cultural and community outcomes.



Figure 6: The 2022 research team co-researcher James Bayung, Yalu Program Manager Alice McCarthy, co-researcher Yungirrŋa Bukulatjpi, Dr Lyndon Ormond-Parker (below), Dr Daniel Featherstone, and co-researcher Cyril Bukulatjpi

2023 Findings

During our 2023 visit to Galiwin'ku, we heard many of the same issues that were raised by residents and service providers during the 2022 visit. The quality and reliability of Telstra mobile and fixed line services in Galiwin'ku remains a critical issue, with a high level of frustration at the lack of improvement after years of effort to highlight the impact on the community.

The 4G mobile service continued to struggle with dropouts and congestion, with very slow data speeds from early morning to midnight most days. While ADSL services were described as more reliable than mobile, ADSL users nevertheless struggled with slow speeds and long delays in connections and repairs. There was still very limited mobile coverage in Buthan suburb, with 84 new houses being built there but no plan to address increasing communications needs.

We also heard about several major outages in 2023–24, with back-to-back outages over 12 days in October 2022, and a series of outages in January and April 2023. There were calls for Telstra to undertake upgrades to the microwave link from Mapuru and provide a redundancy system in the interim. There were also calls for improved customer notification about the status of repairs. Since our first visit, several businesses had installed Sky Muster or Starlink satellite systems as backup in case of outages. Other agencies said they were considering getting a Starlink service, particularly due to frustration with speed, download limits, or unreliability of existing services.

Telstra representatives visited Galiwin'ku in May 2023 (during our visit) to hear directly from residents and announce planned upgrades to the Arnhem Fibre Network by June 2023 and upgrades to the mobile service and microwave link from Mapuru planned for mid-2024. Public telephones were also to be upgraded to provide free Wi-Fi. Residents were pleased to have their concerns heard with plans finally underway to address them.



Figure 7: Telstra's First Nations Advocate Lauren Ganley helping residents

We heard calls for more Wi-Fi access to help reduce costs, enable access to critical online services when pre-paid credit runs out, and to provide access in areas with poor mobile coverage such as Buthan. However, Elders urged that Wi-Fi be available in residential areas to enable supervision of children, with content filtering and a curfew time set on Wi-Fi services. This led to advocacy by Yalu and the research team for community-wide Wi-Fi for Galiwin'ku.

Two of the larger Marthakal homelands on Elcho Island, Gäwa and Banthula, were scheduled to have solar powered satellite small cell mobile services installed, along with Mapuru and Rorruwuy on the mainland. These will be the only mobile services on the island outside of Galiwin'ku, with concerns raised about potential loss of existing access to mainland 3G services following the upcoming 3G switch-off (re-scheduled to August 2024). Due to limited communications services and reliability issues with existing phones on many homelands, the support agency pushed for an audit of communications services for all Marthakal homelands, as well as basic technical training for homelands residents to troubleshoot outages.

Our survey of Yolŋu residents found that reliance on pre-paid mobile services had increased since 2022, with **78% of respondents owning or sharing a mobile phone and 100% of these pre-paid. There was no increase in Yolŋu household internet access, with only 3% of households having Sky Muster, and no ADSL connections by survey respondents.** The primary uptake of household internet was by agency staff or people with regular income, including several staff who had Starlink installed.

Most households still did not have VAST satellite television services working, creating flow-on effects with reliance on streaming services adding pressure on the already congested mobile network, increasing household costs for pre-paid data, and causing news and information to be consumed through less reliable sources on social media platforms. Galiwin'ku has two First Nations radio services – Yolŋu radio and TEABBA – providing locally relevant news, information and music, with relatively high listenership, mostly by car radio or via online streaming.

Maintenance of IT networks and equipment is costly and time-consuming for agencies and residents, with technicians traveling from Darwin or Nhulunbuy. An option to reduce technical support expenses would be to coordinate technical support arrangements across multiple agencies.

Affordability of internet access remains a key issue due to low incomes and high costs for pre-paid data, especially since the cost of commonly purchased Telstra pre-paid vouchers increased in mid-2023 (from \$30 to \$35, with data allocation up from 10 GB to 15 GB data). Following resident feedback in Galiwin'ku, Telstra undertook trials of more affordable pre-paid vouchers in First Nations communities.

There were increased calls from residents for a community-access computer facility in Galiwin'ku for accessing services, research or learning, and working on digital projects. There were also continued calls for a local digital mentor to provide support with the use of mobiles and online services when needed and promote awareness of scams and cyber-safety issues. ALPA Higher Education Centre had recently set up a lab near Buthan store with five laptops for use by higher education students and residents, however with limited awareness of the facility, there was low usage at the time.

2024 Findings

During our 2024 visit, residents and agencies outlined similar issues to those we heard in 2022 and 2023, with little change at that time. The ongoing impacts of poor-quality and unreliable communications services, VAST TV services not working, and limited Wi-Fi access continue to shape how people stay in touch with family, access online services, run programs, and respond to emergencies.

However, the community was looking forward to several positive developments. With the East Arnhem Fibre Network upgrade completed in 2023, Telstra was planning to upgrade the Galiwin'ku mobile tower, exchange and microwave link later in 2024. Also, an NBN public Wi-Fi mesh network had been announced to provide free Wi-Fi access across Galiwin'ku and the Buthan suburb, with site surveys being conducted during our visit. Across interviews, free Wi-Fi was consistently framed as a priority because it can reduce reliance on prepaid credit, enable access to critical online services when credit runs out, and provide coverage in areas like Buthan where mobile reception is weak. In addition, discussions were advancing with traditional owners at the Gäwa and Banthula homelands, at the northern end of Elcho Island, about installing Telstra small cell mobile services. These initiatives would collectively help address long-term constraints in core connectivity, network reliability and household access and affordability. Progress and impacts of these are outlined in the 2026 section below.

However, at the time of our 2024 visit, these planned upgrades were little consolation. The quality of communications services in Galiwin'ku remained a critical issue. The 4G network was still highly congested through much of the day, despite minor improvements since 2023, with Buthan still having limited mobile coverage. The speed and reliability of ADSL and Sky Muster satellite services was an ongoing challenge for service providers and households with reports of regular outages in wet season. Outages remained an ongoing concern, with a strong view that increased demand, ageing infrastructure and power reliability were compounding service failures.

As a result, the most significant change since 2023 was the widespread Starlink uptake by agencies. In many cases these became primary services, with Sky Muster or ADSL retained as a backup service. Feedback on Starlink was overwhelmingly positive as a practical workaround for continuity, with reduced service dropouts and improved use of videoconferencing, cloud-based platforms, reporting systems and client service delivery.

While most businesses and agencies had installed backup satellite services, there were continued calls for Telstra to provide a more resilient and reliable network, rather than leaving this to individual organisations. We also heard calls for better communication about outages, with more timely information on fault status, progress of repairs, and restoration timeframes. This was framed as essential to community safety, business continuity, and maintaining trust during service disruptions.



Figure 8: A Starlink dish (left) among an array of communications equipment on the East Arnhem Regional Council office

For Yolŋu households, fixed internet uptake had increased marginally, with 5% of households having Sky Muster services, mostly in Buthan. Computer access had decreased sharply (down from 32% in 2022 to 8% in 2024), with pre-paid mobile services the primary means of internet access (98%). **These factors contributed to a very low ADII Access score of 30.6 based on 2024 survey results—a huge gap of 46.5 relative to national non-First Nations average (77.2) and 4.2 points below the for Mapping the Digital Gap sites average of 34.8—indicating that Access is a primary barrier to digital inclusion.**

Another development was that East Arnhem Regional Council (EARC) was in the process of setting up a computer access room in the sport and recreation hall with 10 computers for youth programs as well as community access and training. The ageing library was also being relocated into the same facility. It was hoped this would address ongoing demand for community access computers for online services access, research and learning, and to work on digital projects (including language and cultural projects). The recreation hall was planned as one of three sites to receive internal Wi-Fi under the NBN model (along with Yalu and the Miwatj clinic).

Digital Ability continued to be a critical barrier in Galiwin'ku, with an ADII score of 39.2 based on 2024 surveys, 34.6 below the national non-First Nations average (73.8), and 15.3 below the average for Mapping the Digital Gap research sites (54.5). Against trend, this score was down slightly since 2022, from 41.0 to 39.2. We again heard demand for digital mentor support, training for Elders and others target groups, and more cyber-safety awareness. There were increasing reports of scams, online abuse and inappropriate content, with online gambling an emerging issue, leading to calls for financial counselling and strategies to recognise Yolŋu cultural governance in the digital realm. Despite this, there was increased use of digital technologies for local language and cultural content, with interest in establishing a multimedia archive facility to enable access to community archives and heritage materials.

Radio remained important and locally relevant despite limited usage. **Yolŋu Radio and TEABBA continued to have about 30% of respondents listening weekly (around three times the rate of ABC radio), with the devices for listening shifting from home radio (22% of radio listeners), and car radio (60%) to streaming via mobile phone (75%).** While there was still no local broadcaster in Galiwin'ku in 2024, the PA system provided a proven means of transmitting daily updates in language.

Television access continued to be constrained by **widespread failure of VAST satellite television (85% of households without VAST working, up from 70% in 2022).** As a result, there there was a clear shift from TV to online services with YouTube the primary source of daily media content (68%, up from 31% in 2022) and Facebook used much more to access news and information than commercial TV (35% daily compared with 3%). The increased reliance on online content and social media for news and information resulted in reduced access to trusted, reliable and local language sources of information and

increased exposure to misinformation, disinformation and cyber-safety risks. This increased data use added further pressure on the mobile network, as well as **increasing household expenditure on prepaid data (up from \$223/month in 2022 to \$369/month in 2024).**

Combined with increasing cost of living pressures for food, fuel and essentials, affordability was an increasing barrier to digital inclusion. **While the ADII Affordability score for Galiwin'ku based on 2024 surveys appeared relatively high at 67.7 (2.9 below the national non-First Nations average of 70.6), this is a constructed measure based on cost of a bundle of services relative to household income. The significant over-crowding in Galiwin'ku households raises household income rates, obscuring the affordability challenges we heard on the ground. For instance, 25% number of respondents said they often or always cut back on essential household costs to afford internet (up from 12% in 2022) and 56% sometimes cut back (up from 23%), while 92% had compromised on internet speed or data costs in the past 6 months (36% in 2022).**

However, affordability and long-term sustainability remain unresolved, underscoring the need for ongoing investment and community-led planning.

Changes since 2024

Since our 2024 visit there have been significant improvements in communications services in Galiwin'ku. The first of these was the completion of the Telstra mobile and network upgrade, with a new tower and microwave links from Mapuru on the mainland. This long-awaited upgraded included provision of 4G and 5G mobile services, following the 3G switch-off in October 2024 and improved backhaul capacity via the upgraded East Arnhem Fibre network. As well as addressing long-term issues of mobile service congestion and reliability, this also improved speed and capacity for ADSL and telephony services.

The other major communications upgrade has been the NBN Community-wide Wi-Fi network, completed in June 2025. This was one of 23 remote communities provided with free outdoor access Wi-Fi networks under an Australian Government community Wi-Fi program designed to address access and affordability barriers, a key outcome of 2023 recommendations by the First Nations Digital Inclusion Advisory Group. This network also provided indoor Wi-Fi access at the recreation hall, Yalu office, airport and Miwatj Health Clinic.

Other changes include the setup of a community access computer facility and library relocation to the recreation hall in 2024 by East Arnhem Regional Council, with extensive use by residents and local and visiting agencies, as well as further uptake of Starlink services by agencies on Galiwin'ku, providing improved speed and reliability in case of Telstra network outages.

While the research team has not returned to Galiwin'ku since these major upgrades were implemented, we have heard a very positive response from residents and agencies. Stakeholder feedback and industry data indicates high uptake of the community Wi-Fi, with thousands of connected devices, and improved speed, reliability and coverage of the mobile service. There are still reports that connectivity in Galiwin'ku remains patchy in Buthan and surrounding areas, with outages still reported during wet season.

The residential development of 84 new houses in Buthan is now mostly completed, bringing more people to Galiwin'ku and boosting the population since the 2021 census. The influx is predominantly from homelands where housing is reportedly in a poor state of repair.

While survey and interview data in this report was collected prior to the upgrades, we have sought to include updated comments and data where available to reflect changes. We recommend further research be undertaken to assess the impact of these upgrades on digital inclusion levels among Galiwin'ku residents.

Updates to Proposed Digital Inclusion Plan

Telecommunications in remote communities relies on finding telco providers who will deliver services that meet community needs. Due to the remote locations and small populations, these projects typically require external funding from federal, state and/or local governments, with decisions and timeframes often determined by funding programs and industry players. This can leave residents and agencies feeling disempowered, with limited input to ensure the technology and services are fit for purpose.

The proposed digital inclusion plan in Section 7 is intended as a tool to assist communities to determine and communicate local needs and priorities. This updated plan builds upon the proposed digital inclusion plan in the 2022 Outcomes Report, including new strategies proposed by residents and stakeholders during our 2023 visit, as well as a summary of progress to date and planned activities for each item listed.

We recognise the challenges in implementing a local digital inclusion plan as multiple agencies are involved in delivering media, communications and digital programs. However Galiwin'ku agencies have collectively advocated for improved services over several years. This draft plan is intended to support planning and advocacy for improved media and communication services and digital inclusion activities in Galiwin'ku.

While our research work with Galiwin'ku community is now complete, the Mapping the Digital Gap team can provide advice on future digital inclusion initiatives upon request.



Figure 9: Research crew and Yalu support team. Top: Co-researcher Cyril Bukulatjpi, Yalu CEO Ana Tonkin, Lyndon and Kieran (RMIT); Middle: Yalu Engagement Officer Ben Ngwele, Chairperson Evelyn Djotja Bukulatjpi, Wesley Dhurrkay; Front: co-researchers Shaun Dhamarrandji, Dhawa Bukulatjpi with Daniel (RMIT)

03. MEDIA & COMMUNICATIONS IN GALIWIN'KU

Existing Telecommunications Services



Mobile coverage

The Telstra 4G/5G mobile coverage in Galiwin'ku is provided from a new tower (replaced in November 2024) located near the EARC library on Riyalanura Road. The coverage maps below shows 4G mobile reception at Galiwin'ku and out to sea to the north of Elcho Island, however this is not available to most of the Marthakal homelands on Elcho Island. 5G coverage is more limited in range around Galiwin'ku. The 3G service was switched off on 30 October 2024.

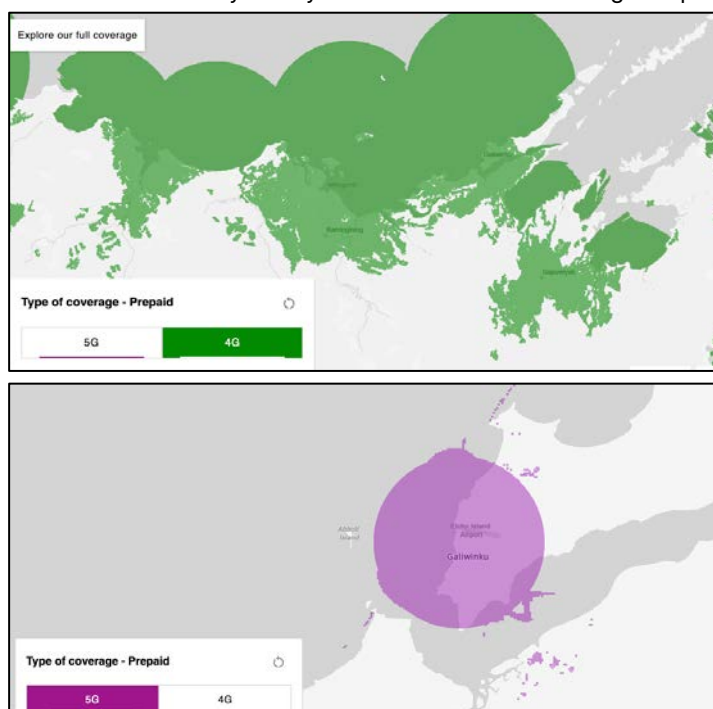


Figure 10: Initial 4G and 5G Telstra coverage maps for Galiwin'ku based on use of pre-paid mobile devices. Source: <https://www.telstra.com.au/coverage-networks/our-coverage>



Backhaul to community

Backhaul for Telstra services (4G/5G mobile, ADSL and fixed line phone services) is via a microwave link from Mapuru community on the mainland, connected to the Arnhem Fibre Network. The mobile tower and microwave link were upgraded in November 2024. Established in 2009 and costing \$34 million, the Arnhem Fibre Network stretches 800 km from Jabiru to Nhulunbuy. A \$5.5 million upgrade to the backbone from 5 Gbps to 100 Gbps capacity was completed in August 2023, with co-investment from the Northern Territory Government, Telstra, Developing East Arnhem Limited (DEAL), and the Australian Government's Regional Connectivity Program.¹



Mobile phones and recharge sales

A range of smartphones and flip phones (facilitating calls only), as well as pre-paid Telstra recharge vouchers, are available from the ALPA supermarkets in Galiwin'ku and Buthan and other local stores. Many users purchase Telstra recharges online and some use Boost pre-paid.



Landlines

The copper network is available to most houses in Galiwin'ku, enabling fixed line phone and ADSL services. However, no Yolŋu residents had landlines or ADSL connections. The primary phone service reported by survey participants is via mobile.

¹ Source: <https://www.miragenews.com/increased-connectivity-to-improve-services-and-657977/> 23/11/21



Public phones

There are eight public phones in Galiwin'ku. Telstra public phones are now free to use, enabling voice calls for people without mobile phones or credit. Several of the Marthakal homelands on Elcho Island and the mainland have Activ8me Wi-Fi phones and/or Telstra public phones (see Section 4).



Community Wi-Fi network

A free-use community-wide Wi-Fi network was installed by NBN in June 2025, covering residential areas in both Galiwin'ku and Buthan. It uses Sky Muster Plus Premium backhaul so is affected by rain or heavy cloud. While primarily outdoor access, there are three community buildings with internal Wi-Fi access—the basketball court, clinic, airport and Yalu office.



NBN services

Under NBN zoning, Galiwin'ku residents can only access Sky Muster satellite services. These are primarily post-paid plans through retail service providers, with very low uptake by Yolŋu households (3% in 2023 surveys, 4% in 2022). Most usage is by agencies and staff.²



Starlink services

There were no reports of Starlink use during our 2022 visit. By our 2023 visit, several agencies and staff houses had Starlink services (though no Yolŋu households), with positive feedback on performance and reliability.



Telemetry

PowerWater, the NT government-owned corporation responsible for electricity, water and sewerage services in Northern Territory communities, use System Control for monitoring, operation and control of regulated power systems,³ supported by on-site personnel. TEABBA also uses remote monitoring of RIBS transmission and studio equipment.



HF / UHF Radio

VHF radio was previously used as a primary communications mode in Galiwin'ku and the Marthakal Homelands up to the 1990s. Today, HF or UHF radio use is limited, with most use by rangers. Digital HF is used for aviation, shipping, emergency services, military, and border security.



Wi-Fi hotspots

The NBN community Wi-Fi network has reduced demand for Wi-Fi hotspots within Galiwin'ku. However, the EARC and Centrelink offices have free Wi-Fi for online service and banking use, with ALPA and other agencies also allowing Wi-Fi access. The main need is now in homelands and high-traffic sites such as Barge Landing.



Public Address (PA) system

EARC's PA system is used to broadcast information to the community. It is networked with speakers at the central EARC office, Marthakal Homelands and Resource Centre, and the Buthan Store.

² New Sky Muster Plus Premium products enable faster download speeds (up to 100 Mbps) and unlimited data use.

³ Source: <https://www.powerwater.com.au/market-operator/system-control>

Media Services



Radio services

Yolŋu Radio (88.9 FM) broadcasts primarily in Yolŋu Matha languages from Nhulunbuy. TEABBA also provide a regional First Nations radio service from Darwin, locally broadcast on 106.7 FM. The Galiwin'ku RIBS studio, was not staffed during our visits. There is also ABC Darwin (105.9 FM) and Vision FM Christian service (107.5 FM).



TV services

All houses in Galiwin'ku require Viewer Access Satellite Television (VAST) direct-to-home satellite for free-to-air TV services. However, our 2024 survey found that 85% of households did not have TV services working, mostly due to set top boxes not working or dishes or cabling requiring maintenance.



Newspaper

There is no supply of national or NT newspapers in the ALPA stores. However, the Land Rights News, produced by Northern Land Council three times a year, is distributed to Galiwin'ku.



Local and regional news

Regional news is shared via TEABBA radio, Yolŋu Radio and ABC Darwin. Local news is shared on Facebook pages by EARC, Yalu, Shepherdson College and other agencies. Local noticeboards display upcoming events, training, job opportunities and health information, with daily messages shared via the PA network.

Access and Support Facilities



Community access facilities

Public access facilities for computer use in Galiwin'ku are limited. The ALPA Higher Education Centre in Buthan has five laptops and a printer available for community access and learning. The library provides free Wi-Fi access but had no access computers in 2024.



IT Support

Informal support in accessing and using online government services is available at the EARC office, post office and the ALPA Higher Education Centre. Other local agencies, including the school and CDP office, provide some support to staff or clients, as well as private residents.

04. COMMUNICATIONS IN THE MARTHAKAL HOMELANDS

About the Marthakal Homelands

There are 32 homelands on Elcho Island and across the northern mainland area of East Arnhem, supported by the Marthakal Homelands and Resource Centre Aboriginal Corporation (MHRCAC)⁴ as a hub and service provider. Each homeland belongs to individual clan groups, with representatives making up the Board of Directors of MHRCAC.

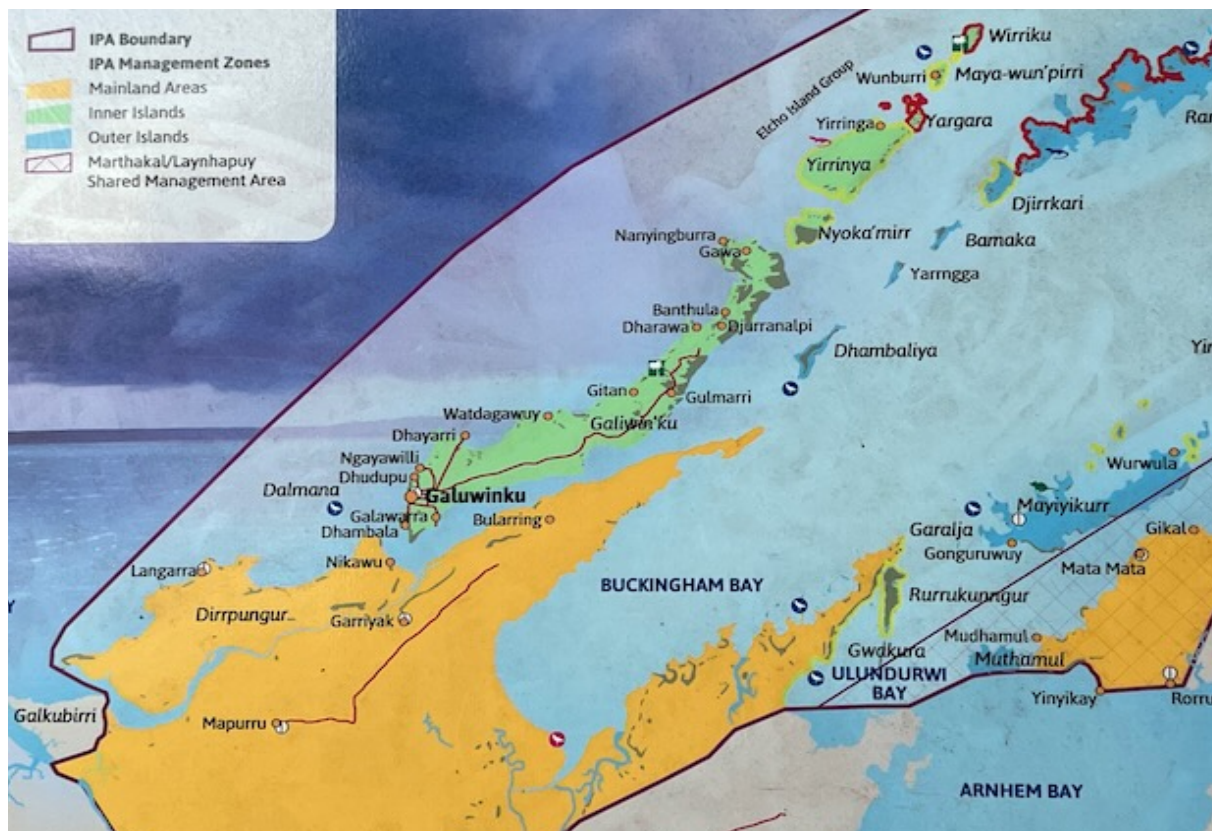


Figure 11: Map of Marthakal Homelands



“[The] homeland movement [began in the mid 1970s] where people go back to country [to] not only establish their homeland but create a better lifestyle, a healthy lifestyle, and to grow the children on country but also to have some sort of development happening. [MHRCAC manages the] working on country [program and] central services for housing, water, all the other essential needs that homelands are run by.”

- Marcus Lacey, Marthakal Homelands and Resource Centre, 2022

⁴ MHRCAC is a parent entity of the Marthakal Group, which includes Marthakal Health, Marthakal Rangers, Marthakal Yolngu Airline Pty Ltd, and Marthakal Business Enterprise Pty Ltd, with the administration and services based in Galiwin'ku Community.

History of communications in the homelands

While Yolŋu have used traditional modes of communication for tens of thousands of years, new communications technologies have changed the way people maintain social and cultural practices.

- + “Sometimes in the olden days, we lit a fire to signal other people and family, but nowadays in modern days we now use the phones and sometimes people walk to find good reception to use a mobile phone.” (Jane Garrutju, Chairperson, MHRCAC, 2022)



“In the past Yolŋu were communicating very well ... Our people would journey to connect together ... attending the ceremony... We were sending smoke [and] fire to let them know that this event will be happening, or come to our ceremony, and the moon shows us, telling us where to go ... But nowadays it’s different [with] more technology coming and learning and taking. They were given for good purposes but [now], we all over the place.”

- Elaine Lawurrpa Maypilama, Elder, 2022

By the 1960s mission era, communications from Elcho Island to the mainland was primarily via VHF radio.

- + “Communication in those days with the outside world, apart from Radio Australia,⁵ was VHF [radio, to contact] friends or family down south. Telegrams were very hard to send. [We] really had no outside communication, except for the Codan [VHF] radio system ... wherever they were, especially in the homelands, they could listen and know what’s happening everywhere else ... I would go out to a homeland and someone’s sitting there with the Codan radio on and they’re going ‘Oh, so and so’s just caught a big fish’ or ‘So and so’s had an argument’ ... it was just an amazing communication system.” (Kaye Thurlow, long-time resident/ former Manager, East Arnhem Regional Council, 2022)

VHF Radio was the only mode of western communication in the Marthakal homelands until the 1990s. While mostly the domain of adults, children would sometimes use the radio to talk to each other.

- + “When we’d finish school we’d go back to the radio station and would sit down and wait till [people] finish their work for the day and [go] hunting ... then we’d talk to our friends and family from other homelands through the radio. We’d talk about the days at school [or] what they caught on the weekend hunting. Sometimes we’d play music [on] our ghetto blasters ... But then someone [would hear us and say] ‘what you mob doing, leave it, that’s not toy’, ‘oh sorry, sir’. Then we’d ... go off air, it was fun.” (Marcus Lacey, Marthakal Homelands and Resource Centre, 2022)

The VHF radio enabled people to have multiple conversations concurrently in language.



“[The VHF radio channel was] just a river of language ... the old people they would communicate with those people [from other language groups] while others are talking and they would keep that conversation going ... not get distracted by the other conversations that’s happening. ... that was the social media of the day and that’s how we connected just using voice and just picturing it in your mind what is happening ... it was great.”

- Marcus Lacey, as above, 2022

⁵ Radio Australia was broadcast to the Asia-Pacific region via short-wave radio from 1939, and as an ABC service from 1950 until 2017.

Introduction of public phones and Wi-Fi connectivity

Public phones were introduced in remote communities in Australia in the mid-1980s, with some installed in Marthakal homelands in the early 1990s.

- “Telstra then came and started to build ... public phones, [the] old orange ones where you can put from a 10-cent piece to up a dollar.” (Marcus Lacey, Marthakal Homelands and Resource Centre, 2022)

Telstra managed all remote public phones under the Universal Service Obligation until the early 2010s⁶, with the Australian Government developing the supplementary Remote Community Telecommunications program in about 2014. Australian Private Networks (branded Activ8me) was contracted to install satellite-delivered community telephones in over 300 small communities of less than 50 people nationally and maintain Telstra public phones in 240 sites. Most Activ8me phones were upgraded to have Wi-Fi capability in the late 2010s, enabling internet access and Wi-Fi Calling.



Figure 12: Map of Marthakal Homelands with Wi-Fi phones (red) (Source: First Nations Connectivity Mapping Tool, DITRDCA)

The Marthakal homelands with Telstra public phones are Rorruwuy, Mata Mata, Mudhamul, Mapuru and Yinyikay on the mainland and Gäwa on Elcho Island. These are described as relatively reliable and well maintained.

Wi-Fi telephones are established in ten of the Marthakal homelands—Bulariny (on mainland), Dhayirri, Dhudupu, Galawarra, Gitan, Gulumarri, Nanyingburra, Ngayawili, Nikawu (Howard Island) and Watdagawuy—and voice-only phone at Dhambala.⁷ While these provide a primary means of communications for homelands, we heard ongoing reports of issues with some of the Wi-Fi phones.

- “The public phones, some are working and some are not working. The [Wi-Fi] is a bit slow and it takes time, it’s not a good service ... sometimes it’s echoing like [the sound is from under] water.” (Jane Garrutju, Chairperson, MHRAC, 2022)
- “They have limited contact on the homelands. [Sometimes] they can’t contact families if they need diesel or petrol for the generator. When I [stay] at Nanyingburra [near Gäwa at the eastern end of Elcho Island], they have [an Activ8me] public phone [but it’s] not always working [so I] go down to the beach to try to get Telstra signal [from the mainland].” (Joanne Wanambi, Family and Schools Together, 2023)



Figure 13: Activ8me Wi-Fi phone in Dhayirri homeland

⁶ The microwave repeater network used for voice communications backhaul was upgraded from Digital Radio Concentrator System (DRCS) to Higher Capacity Radio Concentrator (HCRC) in about 2002

⁷ Source: National Indigenous Australians Agency (data set provided 10/8/2021)

In 2023, we visited Dhayirri homeland, about 15km from Galiwin'ku, which had a Wi-Fi phone. The phone worked but the Wi-Fi was very slow, requiring regular trips into town to access essential services.

- + “[There’s] no internet here. [For] the boys on Jobseeker it would be good for them to be able to have [internet access] on the homeland so they can every fortnight report their Centrelink and ring CDP. [So we have to drive a half hour] back to town [to access] Centrelink, government, that sort of thing. [We need upgraded] payphone, internet as well, instead of [driving] 60 minutes a day, going up and down.” (Jeffrey Lungarriny, as above, 2023)



Figure 14: Maliku Dhamarrandji (centre) with Jeffrey Lungarriny and Denzel Dhamarrandji at Dhayirri homeland

In 2024 we visited Ngayawili homeland, a single premise homeland about 3-4km from Galiwin'ku with an Activ8me Wi-Fi phone. At the time, the Wi-Fi service was working but the phone was not, with no ringtone and salt corrosion jamming the buttons. The satellite dish mount was rusted due to its location near the beach. Residents could not recall when the unit was last maintained.

Reliance on public phones can create challenges for service providers to contact clients or to arrange maintenance visits.

- + “The only way that CDP can get in touch with people in homelands [to arrange] service appointments [is to] call up those pay phones ... But when payphone doesn’t work, that’s it, we can’t do anything. [It] causes inconvenience.” (Bobby Magai, CDP Team Leader, ALPA, 2024)



Figure 15: The Wi-Fi phone unit at Ngayawili homeland was quite rusty with the phone not working (2024)

Homelands residents requested more regular maintenance of the phones to ensure reliability. They also asked to be informed about how the communications equipment works, or why it fails.

- + “When [Activ8Me technicians] come to visit ... they don’t really explain about the situation. They just come and just do their job without [telling us] what they are doing ... When like rain or lighting comes it will stop the line from communicating ... It’s very hard when there’s no signal for people that live a long way from the town area.” (Jane Garrutju, Chairperson, Marthakal Homelands and Resource Centre, 2022)

There was a call for homeland residents to have basic technical training to help address outages.

- + “It’s always important to be able to maintain that [service]. So [Activ8me could give] simple training to someone in the community, small information, just check on it and make sure it keeps going.” (Marcus Lacey, as above, 2023)

Use of Sky Muster services and Wi-Fi

The Gäwa Christian School at Gäwa Homeland has a Sky Muster satellite connection, enabling students to communicate via videoconference with children from mainland schools.⁸ The Gäwa Clinic, operated through weekly outreach visits by Marthakal Health Service, has a Sky Muster service to enable telehealth services, with local Wellbeing Rangers being trained to provide telehealth support.⁹ With the community over 60km from Galiwin'ku, this supports remote health access. Road access is often closed during wet season, with charter flights required to get to the Marthakal clinic in Galiwin'ku.

In Gäwa, a managed community Wi-Fi access is provided via a Sky Muster service from the Old School House (private residence), with solar power backup and community control over access times and content filtering.¹⁰ The Wi-Fi service is available from 2-9pm daily, with no limits during school holidays.

- + “[Internet is available] at Gäwa [as well as] Rorruwuy homeland [on the mainland, via] a Wi-Fi system through their local clinic. But the good thing about it is that we have power to switch it off. [That means it doesn’t] take away the freedom of knowing where we are and what the purpose of living out there is.” (Marcus Lacey, Marthakal Homelands and Resource Centre, 2023)



Figure 16: Gäwa homeland (Photo: Simbani research)

Beyond the Wi-Fi at schools and clinics in the larger homelands, and the Wi-Fi public phones, there is a lack of internet access on most Marthakal homelands. Some homelands have set up household Sky Muster services, which provide a backup service for residents if community phones are not working.

- + “[Some people] have their own connections like Activ8me and [SkyMesh. So] when there’s a problem, we call them. But it’s slow.” (Jane Garrutju, as above)

We also heard that the Sky Muster service drops out with cloud cover or rain, especially in wet season.

- + “When rain or lightning comes it will stop the line from communicating ... It’s very hard when there’s no signal for people that live a long way from the town area.” (Jane Garrutju, Chairperson, Marthakal Homelands and Resource Centre, 2022)

Mobile signal at homelands near Galiwin’ku remains patchy since 3G switch-off

Prior to the 3G switch-off in October 2024,¹¹ several Marthakal homelands near Galiwin’ku could access a weak 3G signal, with some southern homelands able to pick up occasional 3G connectivity from a mainland community such as Milingimbi. Residents at Barge Landing and Dhayirri could access mobile reception from Galiwin’ku at a high point, with no reported change since the mobile upgrade to 4G/5G.

- + “At the top of the hill ... that’s where you get a signal. But they have to move around with the mobile and when they get bars on the mobile they can start ringing.” (Jeffrey Lungarriny, Dhayirri homeland resident, 2023 – paraphrased by Maliku Dhammarandji)

⁸ Source: Marcus Lacey, Executive Officer, Marthakal Homelands and Resource Centre, 2022.

⁹ Simbani Research have undertaken a pilot study to assess the effectiveness of remote telehealth services via Sky Muster See: <https://simbani.com.au/crcna-telehealth-project/>.

¹⁰ The Wi-Fi equipment was provided by NBN Co and supported by Easyweb Digital since 2021 through a NTG Community Benefit Fund grant.

¹¹ Telstra extended the 3G switch-off date from 30th June to 30th October 2024 to allow more time for existing 3G devices to be upgraded.

- + "I live at the [Galawarra] outstation ... five kilometres from here. [Sometimes] we can use our mobile at the outstation [but] it gets worse during the wet season [and] there's just no reception at all." (Margaret Dhurrpuy, artist, Elcho Arts, 2022)

At Dhambala homeland, just south of Galawarra, the signal was almost non-existent.

- + "I've got NBN at my place in Dhambala [homeland] because Telstra is pretty much non-existent out there. There's only one bar and most of the time it just drops [out] and makes it difficult for me to get in contact with my family." (Bobby Magai, CDP Team Leader, ALPA, 2024)

Ngayawili homeland had a reasonable 4G signal due to its proximity to Galiwin'ku and being along the coastline. This service has been maintained since 3G switch-off, however other homelands may have reduced mobile signal since 3G switch-off. There are ongoing calls to expand the Telstra 4G coverage beyond Galiwin'ku by adding an additional tower at Buthan and transmission directed towards nearby homelands.

Marthakal Homelands and Resource Centre have called for upgraded communications on the homelands and sea country, including small cell mobile coverage in larger homelands and on neighbouring islands.

- + "[Mobile] should be on [Drysdale and] Stephens Islands for emergency purposes. A lot of families go hunting that way and if they break down there's no [communications]." (Marcus Lacey, Marthakal Homelands and Resource Centre, 2022)



Figure 17: RMIT team (Lyndon, Kieran, Daniel) at Ngayawilli homeland with Yalu co-researchers (from left) Aaron Garrawitja, James Wunungmurra, Stephen Maliku Dhamarrandji, Jordan Wanambi

Mobile small cells for three Mathakal homelands

Under the NTG funded Remote Small Cells Program with Telstra announced in 2022,¹² small cell mobile services were scheduled to be installed on two homelands on Elcho Island, Gäwa and Banthula, as well as Mapuru and Rorruwuy on the mainland. Four years on, only Rorruwuy has been installed with positive

¹² <https://publicspectrum.co/remote-territory-communities-receive-5-8m-for-new-mobile-services/>

reports about the service. However, at the time of writing (January 2026), Banthula and Mapuru were still awaiting installation of the small cell service.

Following consultation by Telstra, Gäwa community leaders chose to opt out of the program, preferring to maintain community control over internet access via a locally managed Wi-Fi service.

- + “Gäwa and Banthula are the major populated small homelands ... 100 miles [away] from the main township of Galiwin’ku [at] the end of this island ... Those places were established so our kids and our people can live [in] harmony with the Country and our spirituality. That’s why some homelands won’t accept full mobile coverage.” (Marcus Lacey, Marthakal Homelands and Resource Centre, 2023)

A young Gäwa resident we spoke to described the importance of community decision making but expressed a personal preference to have a mobile service.

- + “We have to talk about it among the community [to get] agreement about this. [We] need to focus on our kids [so they] attend the school every day ... also educating the kids about data use, how we use the phones [and] social medias and stuff like that. [But] personally I would say it’s a good opportunity finally to have [better communications], because our community needs to report to Centrelink, [have meetings, access services], call the bank [or make emergency calls]. It’s a good opportunity for us for the future to have that.” (Clive Gurrumuluy Munyarryun, Gäwa homeland resident, 2024)

Community-led audit and planning needed for appropriate communications services

With some homelands without any phone service, and a mix of solutions now in place, there were calls for support for Marthakal Homelands AC to undertake an audit of the communications services on all Marthakal homelands, and an assessment of unmet needs. To date, this has not occurred.

Decisions about communications services are often determined by external service providers or government agencies with limited community input. A community-led and place-based planning approach with cultural governance would help to deliver locally appropriate, robust and sustainable solutions.



“[My advice] to that Telstra [and government] mob, as much as you want to provide us with this service, you have to listen to the people ... the Traditional Owners and the Elders of each homeland [because] our lives depend on this type of decision. [And] it’s peaceful out there, we don’t want to lose that peace ... That’s what we most value. [We want] control over the communications, so we don’t get be governed by the outside system.”

- Marcus Lacey, Marthakal Homelands and Resource Centre, 2023



Figure 18: Beach in front of Ngayawilli homeland

05. KEY FINDINGS FROM DATA ANALYSIS

This section provides key findings from the 36 interviews conducted from 2022 to 2024 with community leaders and stakeholders, as well as observational data and survey results. The analysis builds upon the findings in the [2022](#) and [2023](#) Community Outcomes Reports, with new topics labelled (2024).

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

Snapshot and 2026 update

Across our three visits to Galiwin'ku, residents, service providers and homeland leaders consistently described the significant challenges created by poor-quality communications, with many describing Galiwin'ku as having the least reliable services in East Arnhem. These issues include network congestion, limited mobile coverage, frequent dropouts and outages, unreliable VAST TV services, and limited availability of free public Wi-Fi. These ongoing issues continue to affect safety, service delivery, local businesses and everyday family life. The interviews in this section were primarily undertaken in 2024, with many of the issues described since addressed by a series of upgrades undertaken in response to community demand and advocacy.

By 2025, several major improvements had been implemented to services in Galiwin'ku, including the upgrade to the Arnhem Fibre backbone network in 2023, the Telstra mobile tower and network upgrade in November 2024 and the introduction of community-wide Wi-Fi in June 2025. There has also been increased adoption of Starlink by local agencies and some households. Despite these much-needed improvements, there is further work needed to improve digital inclusion in Galiwin'ku.

These updates are included, along with our 2024 findings, within the Analysis sections below.

Communications Access

The ADII Access score for First Nations people in Galiwin'ku based on 2024 surveys was 30.6, a huge gap of 46.5 compared with the national non-First Nations average (77.2), and 4.2 points below the average for other Mapping the Digital Gap research sites (34.8). Galiwin'ku ranked sixth of the 11 remote communities visited in 2024, indicating that Access is a critical barrier for many remote and very remote communities. This is due to Access being a measure of personal and household internet access, device access (mobile and computer), and adequate data needed to use online services. It is not a measure of the range of services available within the community, however these are covered within this section.

Quality of communications services was a critical issue in Galiwin'ku prior to 2025 upgrades

The Arnhem Fibre Network, rolled out by Telstra from Jabiru to Nhulunbuy in 2009, led to improved communications services in the East Arnhem region, including 3G and 4G mobile in most communities. However, with significantly increased demand on broadband data, and shared network use by NBN in Nhulunbuy, communications quality and reliability deteriorated across the region by the late 2010s. This was particularly the case for the four island communities that rely on microwave links from the mainland to deliver Telstra mobile and fixed line services— Galiwin'ku, Milingimbi, Warruwi on South Goulburn Island and Minjilang on Croker Island.

During initial visits to Galiwin'ku in 2022-23 we heard from many residents and local agency staff about high levels of congestion impacting usability of mobile and ADSL services during much of the day, as well

as regular dropouts and network outages. While work was underway to address network issues at the time of our visit in June 2024, we heard reports of the same quality and reliability issues continuing to impact residents and agencies in Galiwin'ku.

EARC Regional Manager of Council Services Shannon Cervini described the challenges for Galiwin'ku staff in joining regional online meetings via its ADSL connection.

- “The poor people at Galiwin'ku [would try to join] sport and rec or local authority meetings [but] were always dropping out, pixelated like and it was crazy. [Galiwinku was] that bee in the bonnet that's like holding everyone up.” (Shannon Cervini, Regional Manager of Council Services, 2024)

To address the limited network capacity for communities across the Arnhem Land region, Telstra undertook a major upgrade of the Arnhem Fibre Network in 2023 with RCP co-funding. Beyond that, Telstra began upgrades of the microwave links to the four island communities of Galiwin'ku, Waruwi, Minjilang and Milingimbi. The Galiwin'ku upgrade, completed in November 2025, included upgrades to the mobile tower and microwave link from Mapuru on the mainland, with upgraded transmission hut, power supply and batteries at Mapuru.¹³ However, there were still calls for expanded mobile coverage for Buthan and neighbouring homelands.



Figure 19: The mobile tower was upgraded to 4G and 5G in November 2024 (Photo: Yalu)

While our team has not visited Galiwin'ku since these upgrades were completed, follow-up interviews indicate that the speed and reliability of the mobile service has improved significantly, with a Telstra representative describing the mobile service as ‘faster than Darwin’.



“Since late last year, we've had the upgrade to the Telstra network ... There has definitely been noticeable differences with 4G [with] better connectivity ... It still takes a bit of time [to] download a PDF document [but I can] do it now, whereas two years ago [I couldn't] unless it was 6-7 in the morning before people get up.”

— Anahita Tonkin, Yalu CEO, 2025

The 4G network was still highly congested and unreliable in June 2024

In 2024, the visit prior to the upgrade, the 4G network remained highly congested during the day despite minor improvements. Interviewees said it was difficult to use the service from mid-morning to late evening.

Our previous reports include quotes from agency staff of having to undertake critical work or personal tasks during non-peak periods including overnight. Some young people also stay up late at night to access online entertainment or gaming, known locally as ‘daybreaking’, which is cited as a cause for low school attendance.

- “Sometimes they daybreak it, [they stay up all night] ‘til morning, go back to sleep. [They are] using apps like Tik Tok, YouTube, Facebook, Instagram [or] gaming [on] mobile phones ... So it's 50% chance to [go to school, or] sometimes [they] just sleep all day.” (Jerome Lacey, Galiwin'ku Youth Sport and Recreation, 2023)

The congested and unreliable mobile service still disrupted service delivery and client engagement.

¹³ Source: Nic Danks, NT / SA Regional Manager, Telstra.

- + “[Clients] don’t know when their next appointment [is] because they don’t get the text message from us.” (Bobby Magai, CDP Team Leader, ALPA, 2024)

There was limited mobile coverage in Buthan suburb, where new housing was being built

Prior to the mobile upgrade in November 2024 the suburb of Buthan, about two kilometres from Galiwin’ku’s town centre, had very limited mobile coverage. Buthan residents previously described having to walk to the town centre to get good reception or access online services.

To meet the needs of an increasing population in Galiwin’ku, 84 new houses were being built in Buthan. With overcrowded housing a significant issue, the aim was to reduce the average household size from 13-19 people down to 8-10. However, there was no associated communications service planning to address the population shift, and there were calls for an additional mobile tower in Buthan.



Figure 20: Buthan suburb (left) is up to 2km north-east of Galiwin'ku

- + “[More houses are] going to be built [in Buthan but there's no facilities] to access the internet or telecommunications [here] so it's a struggle ... EARC really needs to look at [the needs of Buthan], not just focus on the CBD or the town itself, but look at the outer suburbs and how to support them.” (Christopher Alchin, AFL NT, 2023)

During our 2024 visit, Buthan residents continue to highlight the lack of reliable mobile coverage. Poor reception within homes and streets significantly affects residents’ ability to communicate, work, and access essential services.

- + “We know that in Buthan, especially the new subdivision, nine times out of ten I won’t be able to communicate with anybody, any of our team that are there. They can’t get anything, so they need to go outside or closer to the street. We’ve had people even stay over at other family’s houses when they are doing work to be [contacted], which is just unacceptable [when] overcrowding already is such a huge issue.” (Anahita Tonkin, Yalu CEO, 2024)



Figure 21: Buthan community store

Follow-up reports in 2025 indicate that mobile coverage and speed have improved in Buthan, however they remained patchy compared with Galiwin’ku, with cheaper mobile phones less likely to have a signal than more expensive devices (e.g. Oppo, Samsung, Apple). This reinforces the need for expanded mobile coverage in Buthan and neighbouring homelands, along with redundancy planning and consumer awareness regarding device selection.

Regularity and impact of network outages

Prior to the 2024 upgrades, Galiwin’ku had numerous network outages. Outages had been caused by damage to Telstra’s fibre optic backhaul network, stretching across Arnhem Land from Jabiru to Nhulunbuy, which can cut all services – telephony, ADSL and mobile – on Galiwin’ku. A common cause of outages was failure of the microwave link from Mapuru on the mainland. During the wet season, the underground copper network can also get flooded, impacting phone and ADSL services. Local power

supply outages also led to communications outages, and the mobile tower battery is limited to a few hours.

There have also been instances of cyclones knocking down mobile towers and communications infrastructure, including Cyclone Lam in 2015. Network outages have significant impact on remote communities, restricting access to emergency calls, EFTPOS and ATM in stores, systems, use of online or cloud-based services, and creating food security issues.

Our previous reports cite the significant impacts of outages in recent years on residents and service providers, including:

- safety risks during medical emergencies
- delays and missed appointments due to failed reminders
- households are unable to top up power cards or purchase food when EFTPOS fails
- increased stress and social disruption during extended outages.

The network reliability issues were ongoing in 2024, with reports of repeated outages in January and April. An ABC report in April 2024 described nightly mobile outages for 12 nights in Galiwin'ku (from 22/3/24), with residents reporting intermittent outages since December 2023.¹⁴ This was reportedly due to power supply issues at the microwave link to Galiwin'ku from Mapuru, where one of three battery racks had failed, leaving insufficient power to maintain services overnight. The nearby community of Milingimbi also reported daily Telstra outages in March 2024.

During our 2024 visit, interviewees described how dropouts and outages were still a common issue.

- + “Telstra outages seem to be getting worse rather than better unfortunately. We’ve had outages for a significant amount of time ... There was a period where it would go out every [night] from 8pm until 9am.” (Joe Hewett, Principal, Shepherdson College, 2024)

Outage regularity appears to have been compounded by climate-related weather instability.

- + “We’ve had what seemed like a mini cyclone... and there were days I had the team on the ground in Galiwin'ku and I could not communicate with them... It makes me really nervous knowing that there are thousands of people on an island... and there’s very little way of communication with them.” (Anahita Tonkin, Yalu CEO, 2024)

While most outages were short, some had lasted days and remained unpredictable. Disruptions delay access to essential services and can pose risks to community safety, particularly in medical emergencies.

- + “Sometimes it’ll go off for days... especially in dire situations, like when people need medical assistance at home and have no coverage to call the ambulance or clinic.” (Bobby Magai, CDP Team Leader, ALPA, 2024)

There were ongoing calls for better information for residents during outages about the status of repairs.



“[During outages] there has to be ways of communicating with this community to [advise] what’s going on. You’d hope the same for a very basic service. Telstra [must have] a way of getting communication to the council so then they could actually communicate across the speaker.”

- Margaret Hewett, as above, 2023

¹⁴ <https://www.abc.net.au/news/2024-04-04/galiwinku-and-milingimbi-without-telstra-mobile-coverage-nt/103658508>

Residents were looking forward to the upcoming Telstra network upgrade, scheduled for August 2024, however some described it as “too little, too late” given the history and severity of service interruptions.

NTG has reported that there have been no outages since the network upgrades.¹⁵ However we heard a report of an overnight outage on 14 November 2025 without clear notification, reinforcing the need for timely communications of outages and redundancy planning.¹⁶

At the end of 2025, residents were also waiting to see the impacts of the tropical weather and cyclone season on the reliability of the new communications services.

- + “This seems to be a very early wet season [so we will find out] how good is the Starlink holding up, how good is the community Wi-F holding up and how good is Telstra holding up through this weather.” (Anahita Tonkin, as above, 2025)

Agencies were installing back-up communications, with calls for more emergency planning

By 2024, the ALPA store and several agencies had invested in redundancy communications systems, including Sky Muster and Starlink satellite services, to reduce the impact of network and mobile outages.

- + “[Some] businesses [have backup options] now. I know that ALPA have done that, the café have done that, where they’ve upgraded [to satellite backup] so at least there’s the ability to pay for food with cards, so that has been a change.” (Margaret Hewett, Director, Connected Beginnings, 2023)

The school also had an NBN satellite back-up system to provide communications for the community cyclone shelter in the case of another cyclone.¹⁷

- + “At the school [there] is a satellite now for emergencies, [so people can] check in with family just to send a little message to say, ‘Yep, all okay, but we just don't have coverage’.” (Margaret Hewett, as above, 2023)

By 2024, the school had also installed a Starlink service for additional back-up.

- + “We’ve got Starlink in one small area of the school, so between that free community Wi-Fi and Starlink, we do have [a] bit of a backup plan, but it’s pretty limited.” (Joe Hewett, Principle, Shepherdson College, 2024)

East Arnhem Regional Council had recently set up Starlink at the community office.



“This office was the first [Council office to have Starlink installed] and it’s helped reduce dropouts. The connection is shared with other services across town, including municipal and aged care, where access was previously impossible. Milingimbi has since followed as a test site to improve reliability, even during storms.”

- Shannon Cervini, EARC Regional Manager of Council Services, 2024

Yalu had also done the same, however found that the domestic service was insufficient from the organisation’s needs and had ordered the business grade dish equipment and service.

¹⁵ Email correspondence with NTG rep 4/2/2026.

¹⁶ Source: Interview with Yalu CEO Anahita Tonkin 18/11/25

¹⁷ This was provided by NBN under the Australian Government’s Strengthening Telecommunications Against Natural Disasters program.

- + “We have [Starlink in the] house that we have which is okay, [and] one on our smaller office that is next door... it’s better than what we had, but it’s absolutely not adequate. We are now waiting for our business Starlink for this office.”
(Anahita Tonkin, Yalu CEO, 2024)

However redundancy still remained uneven in 2024, with many agencies still without backup systems when Telstra services fail and NBN Sky Muster services drop out during heavy cloud and rain. Previously we heard calls for more reliable communications services and a redundancy plan to reduce the significant impact of outages for Yolngu residents.

- + “[Outages] are going to happen [so] what's the backup? [Galiwin’ku] has unique needs [so] we need the right supports in place so that people aren’t disadvantaged when those outages happen ... Some people [don’t stock] food in the cupboard. [When] an outage happens and people can’t [access] their money, [it] impacts on the way that they are coping day to day.” (Margaret Hewett, as above, 2023)

While the upgrades have improved network reliability in Galiwin’ku, there are still multiple points of potential failure in the delivery chain, and increasing cyclone and weather instability impacting all communications services, making the calls for back-up planning just as relevant today. A coordinated emergency communications plan is still needed across Galiwin’ku and the homelands to ensure continuity for health, emergency response, education, municipal operations and business, especially during the wet season and extreme weather events.

Mobile is the primary communications device, with few fixed services in Yolngu households

Despite the limited mobile service in Galiwin’ku, mobile phones are the most common device for phone and internet access among Yolngu residents.

Our survey findings indicate high reliance on smartphones and pre-paid credit, with limited fixed service uptake by households:

- 84% of respondents owned or shared a mobile phone in 2024 (up from 61% in 2022), with 100% of these using pre-paid services
- 98% of respondents who had used the internet in the last six months used a smartphone to do so, up from 80% in 2022
- 5% of First Nations households had a fixed broadband service in 2024 (all NBN Sky Muster), up from 2% in 2022
- No First Nations households had fixed-line phones in 2024 (1% in 2022)
- 21% reported using public phones (8 across Galiwin’ku and Buthan), up from 14% in 2022, although 45% described these as unreliable or sometimes reliable.



Figure 22: Mobile phones are a primary means of voice and internet access

Interviews highlight the importance and cost of pre-paid connectivity:

- + “Unemployment is a big issue here and then buying credit is sometimes a big challenge for people... when they don’t have credit... it’s stuck until they get the next payout.” (Bobby Magai, CDP Team Leader, ALPA, 2024)

Participants also noted that families may prioritise phone/data over other essentials, and that public phones remain a safety net when credit runs out—though faults and repair delays can limit reliability. We heard ongoing calls for more household internet access to reduce cost of pre-paid mobile data use.



“There is a real sense of inequity that families here can't have some kind of Wi-Fi at home [or] a plan for internet. [I live in] a Department of Education house [and pay] \$80 a month [for an] ADSL plan, [which is a lot] less than these families who are having to constantly top up their phones ... A lot of money [is spent] on phone credit every month.”

– Ros Beadle, Family and Schools Together, 2023

Mixed response to Sky Muster services, with rain fade a key issue

There is low uptake of Sky Muster services with only 5% of Yolŋu households with NBN Sky Muster in 2024 (up from 2% in 2022). Most uptake is by agencies and non-Yolŋu staff residences. The reasons given for not using Sky Muster by Yolŋu residents included only having a post-paid (billed) option, being unreliable in wet season, insufficient data limits and being unaffordable. Despite Sky Muster Plus Premium plans enabling higher speed and unlimited data use since 2023, there was very low awareness of this option among residents and agency staff.¹⁸

Sky Muster services were described as an important backup when phone services are not working.

- + “SkyMesh is really good. So when Telstra goes down we still have internet. [I can] still connect with families [and] do work as well if my internet's down.” (Va Matarakura, Manager, Marthakal Motel, 2022)

However, other Sky Muster users reported a range of issues including speed, latency and unreliability during wet season. Users on legacy Sky Muster plans described the limitation of low data limits.

- + “I got a satellite [service] at my residence [but] I found [I] was using up their daytime data really, really quickly. [Peak data is only] 75 gigs [so if] you are streaming content [or] trying to do a video conference and stuff you will use that 75 gig very quickly. [Off-peak has more data but] I'm not going to stay up to 1 am in morning just so I can do all my work, that's not feasible.” (Shishir Kushwaha, Higher Education Program Coordinator, ALPA, 2023)

Starlink uptake is increasing by agencies and staff

While Starlink was not yet available during our initial visit in 2022, there was some initial uptake in 2023. However, by 2024, there were a rapidly growing number of agencies and staff with Starlink services, including East Arnhem Regional Council, Yalu, the Manymak Café and Marthakal Homelands office and health service. This reflected the rapid uptake of Starlink across remote and regional Australia due to the high speed, low latency, unlimited data and reliability during cloudy weather.



“People vote with their feet. We have seen a definite uptake of [Starlink]. People are much happier with it.”

– Anahita Tonkin, Yalu CEO, 2024

Previously, we heard from agencies that said they were considering getting a Starlink service, particularly due to frustration with the speed and reliability of existing ADSL or Sky Muster services.

¹⁸ This provides unlimited data use and download speeds of up to 100 Mbps for a monthly cost of between \$59 and \$99.

- + “[If the ADSL isn’t fixed soon we may] just get Starlink so we can run our business ... More and more people are actually shifting [to Starlink] because unfortunately, Telstra has been unreliable. [The ADSL] wasn't built for the types of services people are using. [During Telstra outages the only places with connectivity were] those with satellite connection, hence why more and more are shifting [to] that option.” (Anahita Tonkin, CEO, Yalu Aboriginal Corporation, 2023)

A challenge in ordering Starlink is that customers have to purchase the dish online using a specific street address (lot numbers cannot be used). This is then sent out for self-install using an app to identify a suitable position. While a domestic Starlink service is relatively easy to install, a larger business grade dish needs to be secured to the roof. Agencies are required to arrange a qualified contractor to work on the roof, which is a challenge in Galiwin’ku.

- + “[We] have to get it installed and there is only a couple of organisations that can do that. [They need] safety equipment [to work] on the roof, they have to test it and install it and so on. So, it’s [expensive but] it is the cost of business.” (Anahita Tonkin, as above, 2024)

By 2024, there had been some uptake of Starlink by Yolŋu households, however the regular cost of \$139/month was seen as a challenge to maintain.

- + “[Starlink payments] are quite expensive [and people face] layers of challenges when it comes to those automatic payments. [Some of] our team, because of their income, are also supporting ten plus other people [in the household, so] it’s a juggle. [If] they stop working [or their income] changes, [the service will be] cut out and unfortunately the whole family misses out.” (Anahita Tonkin, as above, 2024)

Some participants also noted that, although Starlink plans are expensive, they may be cheaper than legacy Sky Muster plans once excess data charges are considered.



“Some people have got the old Sky Muster services [with] excess data [charges and are] paying well over \$200 a month compared with \$139 for Starlink with unlimited downloads. [For those households] it might actually end up saving people money.”

- Anahita Tonkin, as above, 2024

ADSL is relatively reliable, but users described slow speed, outages and connection delays

Prior to the 2024 upgrades, residents and agencies with ADSL service described the services as slow due to congestion, to the point of being unusable during peak use periods. However it was described as relatively reliable, even during wet season.

- + “[In] bad weather, which is for four or five months of the year, [Sky Muster services drop out]. ADSL connections aren’t as fast but [are] just so much more reliable. [It] doesn’t slow down much in the evenings whereas the mobile phone network becomes unusable.” (Stephen Henderson, resident/Community IT Support, 2022)

However, we heard several reports of long delays and multiple calls to get ADSL services fixed. We also heard about difficulties in getting a new ADSL service connected.

- + “My husband and I [depend on] internet at home [for our work. It took] almost three months [to get ADSL installed after] weekly telephone calls to Telstra ... One of the big barriers [is that houses have] a lot number. [Even the Telstra technician] struggled to identify the address. [A] lot of staff [in] Galiwin’ku have given up on Telstra and go with satellite.” (Rosalind Beadle, Support Worker, Families and Schools Together program, 2022)

For Yolŋu residents it can be more difficult to get a fixed line service connected.

- + “I know a couple of Yolŋu families who do want internet in their household [and] have previously had copper running to them, [but] Telstra seemed to be saying to them that there is no more ADSL slots in the exchange.” (Stephen Henderson, resident/Community IT Support, 2022)

Cost and timeliness of technical support is a critical issue

Maintenance of IT and satellite equipment is a recurring and costly factor for agencies and residents. Climatic factors of wet season flooding, humidity and coastal winds and cyclones impact on communications equipment. However, with no technicians living in Galiwin’ku, most technical support comes from Nhulunbuy or Darwin, resulting in high costs and delays in getting IT equipment or support.

- + “[Technicians] need to get flown out here to do the smallest repairs. Even a fridge repair would take weeks and weeks to get a technician out here, let alone our NBN one.” (Bobby Magai, CDP Team Leader, ALPA, 2024)

Long delays for basic repairs leave agencies and households without reliable communication for extended periods. Participants noted that providers often wait until there are “enough jobs” to justify a trip, resulting in prolonged outages and community risk, particularly during extreme weather events. Limited coordination between agencies in scheduling maintenance visits compounds these issues.

With only 44% of 2024 survey respondents saying they understand spoken English very well and 35% understanding written English very well, language barriers can be an issue for Yolŋu when seeking technical support over the phone. Telstra has a First Nations Connect helpline providing support in First Nations languages,¹⁹ however there was low awareness of this service among residents in Galiwin’ku.

Access to IT devices, Wi-Fi or shared facilities

There had been ongoing calls for public Wi-Fi in Galiwin’ku and Buthan

Prior to installation of the NBN community Wi-Fi network across Galiwin’ku and Buthan in 2025, we heard regular calls for public Wi-Fi during each of our visits, with this included as a recommendation in the Digital Inclusion Plan. **Usage of Wi-Fi in public spaces as a means of internet access has risen from 12% in 2022 to 51% in 2024, showing the high reliance of Wi-Fi as a means of connectivity.**

During our visit, there were very few public Wi-Fi hotspots available in Galiwin’ku, with the library Wi-Fi on from 9am to 4.30pm daily and the 24/7 Wi-Fi at the Centrelink office limited to online service use.

- + “The closest thing to a free Wi-Fi [is] at the Centrelink office there, which is pretty limited. You can only access the essentials like your email [and] government websites.” (Bobby Magai, CDP Team Leader, ALPA, 2024)

¹⁹ First Nations Connect (Ph: 1800 444 403) was started in March 2021 to assist First Nations people to navigate these language issues. Source: <https://exchange.telstra.com.au/supporting-indigenous-customers-with-new-centre/>.

As a result, people would often gather after hours at the shop, EARC office or other business premises with Wi-Fi access. As outlined earlier, the emergency shelter at the school has NBN satellite-delivered public Wi-Fi, providing back-up connectivity during mobile network outages or congestion periods.

- + [The public Wi-Fi at the cyclone shelter is] available to anyone at any time. It hasn't been without issues and there has been some connectivity challenges with that. But when we have had challenges with Telstra, [the Wi-Fi's] been a pretty valuable resource in the school." (Joe Hewett, Principal, Shepherdson College, 2024)

Over the years, we have heard strong demand among research participants for improved public Wi-Fi access in Galiwin'ku, especially to provide reliable access to critical online services.



"When the signal's down in Galiwin'ku, [people] need Wi-Fi to use [online services]."

- Verity Burarrwanga, EARC Post Office, 2023

- + "The community need to have a public Wi-Fi [at the] shop [and] basketball courts." (Jerome Lacey, Galiwin'ku Youth Sport and Recreation, 2023)

There were also calls for Wi-Fi to be available in Buthan which had very poor mobile reception.

- + "Buthan should have Wi-Fi [in] the public community area ... At Buthan shop they use it with a password ... They always ask the manager, but we need a public one to make it easier and just connect it." (Verity Burarrwanga, as above, 2023)

However, Elders raised concerns about Wi-Fi services being accessible by young people at night, with calls for Wi-Fi to be available close to houses and family supervision.

- + "Some kids hang around the organisation or the department [at night] just to use Wi-Fi. [This makes the kids stay up] really late and their [school] attendance is going down ... Kids need to understand [that] the parents buy phones for them to communicate with them." (Jane Garrutju, Chairperson, Marthakal Homelands, 2022)

Some First Nations communities in central Australia have set curfew times on public Wi-Fi to address this challenge.

The NBN Community Wi-Fi has been well received with high usage, despite early challenges

Based on community demand for public Wi-Fi and survey data showing low rates of Access and Affordability, Yalu nominated Galiwin'ku as a site for the NBN Community Wi-Fi Program in 2024. Yalu also played an important role in community awareness and consultation on the location of equipment needed to distribute the signal from the hub satellite receivers on the Yalu building.

While happy to help provide an important community service, Yalu did say that a longer consultation process would have been better.

- + "It would have been ideal to have a much longer consultation process, [with a community meeting with] NBN initially on the ground [and then Yalu go out] on day two or three with stakeholders within the community. [It's] challenging with a community of 2,500 plus people." (Anahita Tonkin, Yalu CEO, 2024)

With Galiwin'ku having relatively low levels of digital inclusion, the Wi-Fi network aimed to address a critical barrier in access to information and online services. It also provides back-up communications service during outages or emergency situations.



"[It is critical] for people to have access to information [and] really importantly during natural disasters or natural hazards that we know we are very much prone to in regards to cyclones, storms and fires ... it's really important to have the ability to communicate in various ways and hopefully the Wi-Fi will be one option, the Starlink [services] will be another option. We have satellite phones but we have to have a multi-pronged approach."

- Anahita Tonkin, Yalu CEO, 2024

With Affordability a key barrier to digital inclusion, the Wi-Fi network will enable access and improved safety even when pre-paid mobile data has run out.

- + "[This provides] a cost effective solution to be able to make immediate calls. [With pre-paid mobile], having to recharge with \$20 or \$30 can sometimes be not possible for people. [It's a risk if you can't] make that call for someone to pick you up [or] if you are in a compromised situation." (Anahita Tonkin, as above, 2024)

While the network was not yet built during our 2024 visit, we heard strong support for community Wi-Fi and the potential for free internet access close to homes. Here are some examples of positive comments from 2024 survey respondents (see page 75):



"We want free wi-fi because pre-paid vouchers are too expensive."

"I want home internet because I always run out on the recharge vouchers."

"We want Wi-Fi at our house to make it easier for kids to use."

"We need free Wi-Fi here to access services when we run out of credit."

Community agency stakeholders were also very positive.

- + "It nearly blew me off the chair [when I heard about the free] public mesh Wi-Fi system that [people can access] outside your house or on public spaces ... That's such a good idea [to] bridge the digital gap." (Shannon Cervini, EARC Regional Manager of Council Services, 2024)
- + [The] free Wi-Fi initiative for the community [is] a really fantastic idea. It would really help our people in community." (Bobby Magai, CDP Team Leader, ALPA, 2024)

The Wi-Fi network was seen as potentially addressing security issues associated with young people gathering at community facilities and businesses at night to access Wi-Fi hotspots.



“[Currently] Night Patrol drive around and see heaps of people sitting outside the shop or they’re at the school and [places] where all those Wi-Fi hotspots are. [With community Wi-Fi people could access internet] at home or sitting at the oval or just somewhere where it’s available and [not] need to come to these places after hours now. So [it will help] make stakeholder buildings probably more secure.”

- Shannon Cervini, as above, 2024

At the time of our visit in June 2024, a survey team from Australian Private Networks (APN) were in Galiwin’ku planning the design of the community network to provide outdoor coverage across all of Galiwin’ku as well as Buthan. The hub site on the Yalu building has ten NBN Sky Muster dishes and a Starlink dish, used for network management and monitoring. We heard about APN’s approach to designing the network, which has been designed to meet demand of increasing population in Buthan.

- + “We start with a central station [at the Yalu building], that’s got the guaranteed power. Then [we consult with] community stores, health centres [or other community agencies that have] got large roofs [and reliable] power. [Usually] there’s three indoor access points that are part of the NBN design model ... We picked the basketball stadium [and the] Miwatj Health Clinic. They said it would be very beneficial for their clients to have [a Wi-Fi] access point within the building.” (David Denham, APN Site Surveyor, 2024)

As well as the Recreation Hall and clinic, indoor access points were added at the basketball court, airport terminal and Marthakal Motel, which has high numbers of visiting service providers and contractors.

While the network was initially intended for completion in 2024, installation was delayed due to challenges with community stakeholder engagement over location of repeater towers and a busy rollout schedule to 22 other sites. The change of location for the primary Access Point in Buthan from the ALPA store to the storage sheds impacted on network design, resulting in some loss of coverage to the new sub-division, with this being rectified as part of maintenance.²⁰



Figure 23: Ten NBN Sky Muster satellite dishes were installed on the Yalu building to provide backhaul for the Wi-Fi network (Source: Yalu Facebook page)

The network was finally launched on 5 June 2025. A Yalu Facebook post on 23/5/25 provided a community update and initial feedback from members of the Yalu team:

<https://www.facebook.com/share/v/16sZTMNuP5/>.

Following installation there was rapid uptake of the services with very positive community response to the introduction of the free Wi-Fi. The Yalu team voiced the community’s appreciation.²¹

²⁰ Correspondence with Yalu and NBN staff, 15/2/26

²¹ Quotes provided by NBN 18/2/26

- + “This service is going to make it easier for the community to enjoy and connect with their families far and near... Thank you.” (Wesley Dhurrkay, Yalu Digital Champion, 2025)
- + “Even though it’s a small, remote, isolated island, we have this free Wi-Fi. Thank you very much.” (Evelyn Bukulatjpi, Yalu Chairperson, 2025)
- + “People have been very grateful, and they talk about it and they point at the [repeaters], oh, my Wi-Fi. So, it’s definitely been a positive, positive change.” (Anahita Tonkin, as above, 2025)

There was immediate high usage of the network with 8.6 Terabytes of data used in the first month and 2375 devices connected to the network. Usage dropped to 1.5 TB in July 2025, seemingly due to teething issues with the system, before returning to 6.7 TB in August 2025. Average monthly usage between August 2025 and January 2026 has stabilised, with NBN data showing:

- **an average of 7.4 TB of data is consumed by 2,622 devices each month**
- **users connecting to the network consume an average of 2.8GB per device**
- **general web browsing, including browser-based streaming and gaming, accounts for 52% of total traffic consumed followed by 13% on Tik Tok and 35% other (uncategorised).²²**

The network enables community governance of network operation times, with the hours currently set to 6am to 10pm daily. The network also has content filtering to restrict access to pornography, gambling and other sites deemed by the community to be inappropriate.

While not as robust as a fixed line or fixed wireless service, a Wi-Fi mesh network provides a cost-effective way of distributing a community-wide network to enable free internet access for households, as well as supporting local agencies, businesses and visiting service providers.

As hoped, an outcome of the community Wi-Fi has been reduced congregation at community agencies and businesses at night. This is seen as a contributing factor in a reduction in vandalism and break-ins in the community.



“[We’ve seen a] really reduced crime rate [and] I think one of the factors potentially could have been [the community Wi-Fi]. We don’t have any of the hordes of people around [Wi-Fi hotspots] at night anymore. [Now] people are able to sit on their porch or walk from one place to another and have access. So that’s been quite a significant change. And now we don’t keep running out of data [at Yalu] because people aren’t using it at night.”

– Anahita Tonkin, as above, 2025

NBN feedback from community leaders was that the community Wi-Fi is having a strong positive impact, helping people stay connected with family, complete daily tasks like banking and online services, and easily access essential services. While also referencing reduced vandalism, they noted that roof-mounted installations are being respected because people support the free Wi-Fi.²³

²² Usage data provided by NBN 18/2/26

²³ Via email from NBN 18/2/26

Demand for community access facilities and digital support was being addressed

In 2024, the most cited internet-use barrier was “I am not confident using the internet” (72%, up from 42% in 2022). The second highest barrier was “I do not have convenient access to the internet” (42%, down from 81% in 2022). Only 8% of respondents in 2024 had access to a computer at home, and 5% with a laptop, with most internet usage via a smartphone (98%).

Community access computers and digital mentoring are essential for developing basic skills, including online search and service use, keyboard skills and using work-related applications. In 2022 and 2023, the EARC library lacked any community access computers or digital support. Residents urged the need for public access facilities with computers and Wi-Fi where they could learn to do online services and use computers for shopping, learning, media production and access language and cultural archives. Interviewees urged the need for a better equipped internet access facility in Galiwin’ku.

- + “[People] need that space [to do] their online banking, online shopping. [The library is] an old building, we need a proper building with [about] five or six [computers] so people can just come in and help each other to do the job.” (Jane Garrutju, Chairperson, Marthakal Homelands, 2022)
- + “The library could do so much [to] increase awareness about how to utilise technology, [to] have a safe area to do your studies, [or] for printing [and other services].” (Christopher Alchin, Healthworker / IT enthusiast, 2022)



Figure 24: The old library was closed down in 2024 and about to be relocated to the Recreation Hall.

East Arnhem Regional Council (EARC) was acting on these requests when we visited in June 2024, with the old library closed and a new library and community access computer room being established in the new Sport and Recreation Hall. This was aimed to be open in August 2024.

- + “[We are about to] move this library into [the] rec hall centre. [Also] the youth program [have set up] about 10 or so computers that are all brand new [and] that’ll be a part of the library. [We will employ] a facility manager [who] can bring classes in [and provide support to use] computers and [other] interactive things.” (Shannon Cervini, EARC Regional Manager of Council Services, 2024)

The former EARC Facility Coordinator provided the following update in February 2026.



“The library moved to the Rec Hall in Galiwinku in January 2025, with 10 computers available for community use. After school hours and in the school holidays every computer is being used by a young person—ages between 6 yrs to early 20s. During the daily library open hours we would average between 3-5 users of adults ranging between 20s to 60s as an estimate. We have helped many people with computer usage and are working toward having more computer education activities on the planner.”

- Vicki Wassens, Council Services Manager, EARC, February 2026

In a follow-up discussion in February 2026, EARC Regional Manager of Active Communities & Youth Services Peter Dunkley provided further details about community use of the library, computer room and meeting room. These facilities are open for general community access from 9-12am and 1-3pm daily, as well as Saturday mornings, with free Wi-Fi in the Centre provided by the EARC. The library is staffed by the Recreation Hall Coordinator and two identified Yolngu Library and Cultural Heritage



Figure 25: An access space was being set up with 10 computers in the Sport and Recreation Hall

Worker roles (one currently unfilled) who provide digital support. The Centre is very popular, with hundreds of community visitors of all ages each week. Computer use includes internet search, email, online banking and basic printing. As well as books to read, the library runs story time for toddlers, art/craft activities, and other activities, with some people just wanting an air conditioned space to relax.

The computer room and meeting room, which has a videoconferencing facility, are regularly booked for training workshops, engagement sessions or meetings by local or visiting agencies—Families as First Teachers, school groups, aged care and disability support agencies, Anglicare’s financial counsellors, NAAJA/community court. In the afternoons, the facilities are often used by the sport and recreation team as a youth drop-in facility, including a range of activities from online gaming or skills workshops to video screenings. While funding is limited, there is interest in running more skills development and cyber-safety workshops, digitising photos and archive access, and employing more Yolngu staff in the library. Milingimbi and Ramingining are also interested in having similarly upgraded library and computer facilities.

A National Device Bank project is supporting computer access by women

There has also been a donation of 10 laptops and four mobile phones to the Galiwin’ku Women’s Space in January 2026 for use by staff and clients at the Women’s Space. This was part of an NBN and Work Ventures First Nations Device Bank pilot program, which provided about 500 computers and digital support to 25 remote communities across Australia. A co-designed training plan was being developed, with digital skills training to be delivered to staff to use MS Office for case notes, admin tasks and video calls and for clients to access cyber-safety information and essential online services.

Community-partnered initiatives of this nature help to address community demand for sustainable computer access, tailored training for a specific target group, and ongoing support and learning in a safe and comfortable space.

Service Delivery and Use of Online Services

Unreliable communications have impacted service delivery over many years

Galiwin’ku service providers use a range of communications technology for engaging with clients and stakeholders, including email, phone, text messages and Facebook, depending on the client’s access to communications. Service providers described using a range of channels to share information.

- “[To get messages out] we rely on a few things, our Facebook page, posters and word of mouth when the phones go down. You can’t rely on just one thing here.”
(Shannon Cervini, as above, 2024)

Reliable connectivity is critical to service delivery or running a business.

- + “We are required to report [and] be on Teams meetings [with] any business in Australia. [We use videoconferencing for] our board meetings [and for] family visits [with incarcerated children and to] host [inter-agency meetings]. [Reliable connectivity is] absolutely crucial for us, and as we are expanding [beyond] Galiwin'ku [we need it] more than ever.” (Anahita Tonkin, Yalu CEO, 2023)

However, prior to the November 2024 Telstra upgrades, we heard numerous reports from services providers about ongoing communications challenges due to unreliable connectivity.



“[We] depend on [Telstra mobile for connectivity but it] seems to constantly be failing us ... We've had big periods when there's been Telstra outages [where] we've just literally [had] to pause [our programs. Unreliable connectivity is] constantly inhibiting us having our meetings with people that we depend on outside the community.”

- Ros Beadle, Family and Schools Together, 2023

- + “We can't do a Teams meeting without someone freezing at least 36 times. Not being able to hear it, having to dial in again, having to dial in with a different device ... We cannot do [online training with staff in other communities [so] we fly them into Galiwin'ku and do training with them on the ground. [And] we always submit [funding reports the] day in advance to have that buffer. [Outages] impact our funding, which impacts our business, which impacts our payroll and so on.” (Anahita Tonkin, as above, 2023)

Agency staff spoke of having to do critical reporting or funding applications overnight once peak network usage had dropped off.

Cloud-based and automated systems are increasingly used by service providers and government agencies. Online government portals used for funding applications and reporting create particular challenges for Galiwin'ku agencies, often requiring a work-around.



“[NIAA funded organisations use] a portal to download those documents [but] it's not always accessible. It might be because of the network, sometimes our network could be down. [But] CEO's don't want to be waking up at 4:00am in the morning to be trying to submit things or send 40 different pages of one PDF because it's too large a file to be sending all at once. [So we] just ask them to email it to us ... We're trying to work with providers on that.”

- Nathan Ballard, Senior Engagement Officer, NIAA, 2024

Cloud-based platforms can improve efficiency and data management when working well, however can increase challenges when the internet is not reliable. Anglicare runs the Money Support Hub East Arnhem, a financial wellbeing program for people in East Arnhem communities. They described how poor connectivity impacts on their ability to support clients when visiting Galiwin'ku.

- + “I visit Galiwin’ku once a month for three days, so [I see first-hand] the internet and the problems that my clients face. [Beyond early morning] we find it quite difficult to [help clients to] look on their ATO in MyGov or just anything to do with the internet ... We’re just waiting, waiting, waiting and nothing happens. [Some] clients might just walk out and go ‘I’m not even bothering’ because they deal with this all the time [and] end up getting [in a] worse place financially.” (Monique Achterberg, Anglicare, 2023)

The lack of phone connectivity and email usage amongst residents also restricts the ability for service providers to communicate with clients, with several agencies describing the need to drive around the community to find clients rather than relying on phone connectivity.



“Probably the best way that we try to get in contact with someone if we can’t reach them by phone is [the] engagement officer. We directly just go over to the residential address ... It’s not a big place so you don’t need to go far to look [for] someone.”

– Bobby Magai, CDP Team Leader, ALPA, 2024

Challenges with use of internet banking and other online services

In 2024, of the 89% of survey respondents who had used the internet within the prior six months, 65% had used online banking, 58% had accessed online government services (e.g., Centrelink, MyGov, licensing etc), and 35% had used the internet for online learning or study. These relatively low rates of engagement with online services point to the need for ongoing access to face to face services as well as improved digital training and support. However, with increased mainstreaming of government programs and reduced on-site agencies, online service delivery has increased in remote communities.

- + “[Yolŋu] have to navigate that [online] system, either speaking to someone on a phone, or having to do it online. [That] was very stressful and required a lot of support, particularly from non-Indigenous people around them.” (Rosalind Beadle, Support Worker, Families and Schools Together program, 2022)

The abolition of CDEP (Community Development Employment Projects) program in the late 2000s meant that Yolŋu have to deal directly with Centrelink and have less community-led support. While Galiwin’ku has a Centrelink agency, clients are encouraged to use online reporting and/or phone support.

The last 10-15 years has also seen a shift from cash wages to online payments directly into a bank account, resulting in a requirement to use online banking. While Galiwin’ku has a staffed Traditional Credit Union banking service in the central office precinct, customers of other banks have to use internet banking or pay high ATM fees for withdrawals or to check bank balances. Research participants called for a more coordinated banking service.

- + “[With] limited options for banking outlets [a support person is needed] who’s not attached to a bank but can represent a range of banks. [Maybe the TCU bank could have] an MOU around access [and] cash out or [offer] balance [checks] without the charge.” (Margaret Hewett, Connected Beginnings, 2022)



Figure 26: Traditional Credit Union branch

While uptake of online services has improved, there is still a need for more support, especially for Elders and those with limited English literacy.

- + “We [regularly] deal with ... Westpac and Centrelink [where] the Yolŋu person relays information to me in English and a bit of Yolŋu Matha and I try and understand [and] relay that on [but] that is difficult. [For example], somebody was waiting for a card from Westpac. [We] rang Westpac [and they] cancelled that card and reissued a new one [but I] subsequently found out that the card had come but just wasn’t activated.” (Stephen Henderson, Resident/ Community IT Support, 2022)

Helpline staff often have limited cross-cultural communications skills or understanding of the remote First Nations community context, and policy can restrict support offered by local agency staff.



“[We often need to assist Yolŋu clients to use helplines because] there’s a language gap and they don’t know what the [person is] talking about and [the person doesn’t understand] them. So you’re like, “I’m sitting here with such and such, now we’re just trying to do this”, and they go, “Right we’ll email you that”. [But] most people don’t have emails [or have forgotten their password].”

- Shannon Cervini, Regional Manager of Council Services, 2024

Slow network speed was also described as an obstacle with many online services not working properly, leading to people giving up trying to use online services. The range of digital barriers contribute to financial exclusion, missed payments, and increased dependence on overstretched local services.

High reliance on agency support to use online services

With services increasingly moving online, digital literacy is becoming a necessary life skill. However, with limited training and support available in Galiwin’ku, many residents rely on service providers to help them set up online banking, complete a form or do tax returns.

- + “During tax time, [people are] knocking on our doors asking us to help them do their taxes, lodging it online ... a lot of our time is spent doing that.” (Tia Roko, Yalu Indigenous Engagement Coordinator, 2023)

While there is some basic support available at the Centrelink office, post office and other agencies, there are limited options for digital skills training, especially for the elderly, people with disability, and those with low English and digital literacy.



Figure 27: The post office staff provide basic digital support

Residents often seek help at the post office with activating SIMs on new phones, as well as using online services. One of the challenges people face is not having the identification documents needed.



“That’s the difficulty—they don’t have the ID [documents], Medicare card or license or passport. [When people] buy a new phone ... they come here [for help] to activate the SIM card. [They] are still learning how [to do] the Telstra activation [or don’t have ID so we help them with] email address and everything.”

- Verity Burarrwanga, EARC Post Office, Galiwin’ku, 2023

Regularly changing phone numbers affects communication and two-factor authentication

There is high turnover of mobile phones, due to phones being broken, lost, shared within extended families, or used as communal resources. This is culturally appropriate but difficult for service systems that assume stable, individual contact details.

- + “People do change their mobile numbers out here quite often... often it gets lost or, you know, misplaced and handed to someone else... It just gets used between the families, which is fine, but then it’s hard to get in touch with that particular person.” (Bobby Magai, CDP Team leader, ALPA, 2024)

It is common for people to purchase a new SIM with a replacement phone rather than porting their former number.

- + “[People are regularly] buying a smartphone from the shop for a few hundred dollars and getting a [new] SIM [and number. That] is the preference.” (Anahita Tonkin, as above, 2024)

This practice, called ‘number churn’, hinders contact by family and service providers for appointments, emergency contact, and two-factor authentication for online services.

However, with telcos providing bonus data with a new SIM, replacement is incentivised by the mobile networks. Greater regulation is required to limit this. Addressing this at a community level requires:

- targeted digital literacy support on SIM activation, number porting and account linking;
- more flexible system design that recognises shared phone use and communal practices;
- community-based digital mentors who can help people maintain stable contact details and navigate verification requirements.

Access to media and new services

Local media and information channels

Effective modes of communication are critical to ensure residents are aware of local news or activities. In Galiwin’ku, news and information are shared through a range of channels, including:

- Radio services – Yolŋu radio (ARDS), TEABBA radio, ABC AM Radio Darwin
- Websites and Facebook pages – East Arnhem Regional Council, Elcho Island Facebook, Yalu etc.
- Community noticeboards and distribution of flyers
- Public Address (PA) announcements.



Figure 28: The EARC noticeboard shares community information and events

Participants stressed the importance of maintaining trusted, locally controlled channels, particularly the PA, noticeboards and Yolŋu-language radio, to counter misinformation and ensure Elders and those without digital access receive information.

With limited TV and radio access in most Galiwin’ku households, Facebook and other social media platforms have become primary sources of news and information, used by many organisations to communicate activities and upcoming events. For instance, Yalu use their website and social media channels to promote activities to the community and external stakeholders.

However, there were concerns about heavy reliance on social media, increasing risks of misinformation and scams, and confusion over un-verified information. Also, online messages may not reach everyone.

- + “[Agencies shouldn’t rely only] on Facebook ... What about people that aren’t on Facebook? How are they going to get the information? [Not] everyone’s got a smart phone ... How are you accounting for elderly people [or those without phones]?” (Melissa Jones, Community Development Coordinator, EARC, 2022)

Our 2024 survey found that Facebook is the second most common source of daily news and information (35% daily), after direct and in person communications (75% daily). These were followed by local noticeboards (16% daily), community PA alerts (11% daily), with First Nations radio services (Yolŋu Radio and TEABBA) (7% daily, 24% weekly).

The EARC Council’s public address (PA) system provides a means of sharing messages and alerts in language, with networked speakers on the central office, Marthakal Homelands office, and Buthan store.



“[The] community announcement [comes through] speakers all around community ... That’s the main information we’ll get [about] things that are important in community. [They give] updates around funerals and meetings [and] hearing ceremony, sports activities. [Sometimes they give] warnings not to go to the beach because the crocodile there, jellyfish [or] cyclone [alerts]. Once they did one [telling] young people to talk to somebody if they’re feeling concerned about wanting to commit suicide.”

- Galiwin’ku Youth Sport and Recreation workers (group), 2023

- + “[This morning It was used] five times ... one after another, people making announcements. [It gets used for] ceremonies with bodies arriving ... anything, like AFL [or school activities].” (Melissa Jones, as above, 2022)

Very few households have free to air television services in Galiwin’ku

Our 2024 survey found that 85% of households did not have VAST television services working, up from 70% in 2022. Free-to-air television access is taken for granted in urban and regional Australia. However in remote First Nations communities, the shift to direct-to-home delivery via VAST satellite in about 2013 without a funded maintenance program has resulted in a high proportion of remote First Nations households. **This includes an average 61% of households in Mapping the Digital Gap sites being without free-to-air TV access.** A key cause is the failure of set-top boxes, which cost nearly \$600 to replace in the local store.

Beyond the lack of free access to TV services including NITV and ICTV, this shifts content viewing to primarily online, increases household costs for pre-paid data and adds to congestion on the mobile network. Participants also raised the need for access to a Northern Territory news service.

- + “[Previously] everyone did have TVs [and] they could see [local news]. In the territory Channel Nine have an actual Darwin based news [service so] you can actually watch [NT] news up here ... If people had TVs again as well it’s more of exposure to things like that.” (Shannon Cervini, Regional Manager of Council Services, 2024)



Figure 29: The radio tower could be used for digital TV broadcast

The lack of access to reliable and regulated TV news services also means that most news and information is being sourced from less reliable sources on social media platforms, with associated misinformation, disinformation, and racist or abusive comments and posts.

The lack of household TV services in Galiwin'ku is addressed in a detailed case study in Section 6 of the [2023 Outcomes report](#). This outlines community preference for returning to a broadcast model of digital television in Galiwin'ku rather than VAST direct-to-home delivery. Interviewees expressed interest in being a pilot site for a TV broadcast upgrade program, with an upgraded tower and transmission facility in place where this could be housed.

First Nations radio services are primary services but there is limited access

Galiwin'ku receives two First Nations radio services. Yolŋu radio is delivered from Nhulunbuy to six major communities and 15 homelands in the north-east Arnhem region by ARDS,²⁴ primarily in Yolŋu Matha languages. The TEABBA²⁵ radio network delivers services to 29 Top End communities from their Darwin studios. These radio services provide locally relevant news, information, and music to the community.

- + “[When services] like Yolŋu radio [are] running well, people do enjoy it and there’s lots of news shared on that platform.” (Margaret Hewett, Connected Beginnings 2022)

Our 2024 survey found that 30% of those surveyed listen to a First Nations radio service (Yolŋu Radio and TEABBA) daily or weekly (also 30% in 2022), compared with 10% listening to ABC radio daily or weekly. However, 23% said they never listen to radio (down from 42% in 2022). With low home radio access, there has been a shift to accessing radio streaming, music and online audio content via mobile phone. Our survey found that 75% of respondents access audio content on a phone or tablet, while 60% listen to radio via car radio and 22% use a radio at home (multi-choice question).

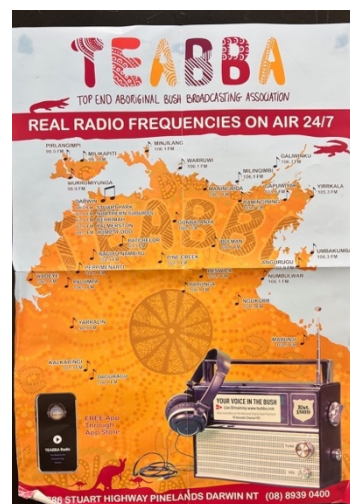


Figure 30: TEABBA Radio

Interviewees highlighted the potential communications role that improved radio access could provide.



“It’s one of the key ways that people get information, however, I don’t think there’s a huge amount of people listening to it regularly. [Some] workplaces might have TEABBA or Yolŋu Radio on [but] people don’t [have] the radio at home. [It] needs to be made more accessible to people.”

– Kaye Thurlow, resident/ former Manager, East Arnhem Regional Council, 2022

With 100% of Yolŋu residents speaking a language other than English, language content is crucial.

- + “People switch off when it’s English only. [They say] ‘My head’s full up with English, I need to have a break’ ... Yolŋu Radio or TEABBA is really vital [in providing] information in their own languages.” (Kaye Thurlow, as above, 2022)

East Arnhem Regional Council is responsible for operation of the RIBS radio station, located in the EARC office, as well as employment of the RIBS broadcaster. While there have been active RIBS broadcasters in

²⁴ Aboriginal Resource and Development Service. See: <https://www.ards.com.au/about-2>

²⁵ Top End Aboriginal Bush Broadcasting Association. <https://www.teabba.com.au/>

the past, there was no local broadcaster in Galiwin'ku during our three visits. EARC want to revitalise the RIBS radio service but are aware of the low radio use in the community.

- + “I want the radio to be back and thriving [in East Arnhem communities]. We could do test runs [of local broadcasts to] kick that in. But then you think no one’s got radios [at] home. The shops [don’t] even sell them in most communities. [We want] young people [as broadcasters but] they’re not interested in it. Maybe there’s no [older people] teaching them either.” (Shannon Cervini, Regional Manager of Council Services, 2024)



Figure 31: TEABBA Radio studio in the EARC complex

To improve reliability, EARC relocated the broadcast equipment from the old transmission room into a new air-conditioned sea container beside the broadcast tower in 2023.²⁶ TEABBA also rolled out a Wide Area Network radio system in November 2022 to deliver targeted content and improve reliability through remote monitoring, and support to reduce outages.

Demand for online entertainment and gaming continues to grow

Just as in other parts of the country, there is high demand in Galiwin'ku for streaming services for movies and TV series, news and sports, and music, as well as online gaming. **Our 2024 survey found that YouTube was the most popular source of TV and media content (68% watched daily, up from 31% in 2022) followed by streaming services (15% daily). There is relatively low use of TV services with only 8% watching commercial TV daily, 7% for ABC TV and 4% for NITV.**

While this reflects national trends toward on-demand content, a key factor in this shift is the limited availability of free-to-air TV services. This has further increased demand for online platforms to access media and entertainment, especially for young people.

- + “Young people [use] a lot of social platforms [like Instagram, Facebook, Snapchat]. They use iPads or iPods to listen to music [and use] Spotify. [They are] watching YouTube [and TikTok]. Kids upload a lot of games [on their phones including] puzzles, fishing [and flying] games.” (Cyril Bukulatjpi, Media Officer, Yalu, 2022)

As outlined previously, the expanded use of streaming services and gaming was a key contributor to congestion on the 4G network. The high data use of using online media platforms has also been a significant cost burden for users, especially on pre-paid mobile data rates. This will have been alleviated somewhat since the installation of the Wi-Fi network providing free internet access. However, the Wi-Fi network is likely to have enabled use of online content and gaming to increase substantially. NBN data shows primary applications used on the network in August 2025 were web browsing including YouTube and social media (56%) and TikTok (13%), with Netflix use at 2%.

²⁶ This includes Yolŋu Radio, ABC services and communications equipment for EARC and Arnhem Land Progress Association.

Affordability

The ADII Affordability score for Galiwin'ku based on 2024 surveys was 67.7²⁷, a gap of 2.9 compared with the national non-First Nations average (70.6), and 8.1 points above the average for Mapping the Digital Gap research sites (59.6). While this suggests that Affordability is not a critical barrier, it does not show the full picture. The ADII Affordability measure is based on the cost of an ideal bundle of internet and mobile services relative to household income. With significant over-crowding in Galiwin'ku households, the co-location of multiple income earners increases household income on paper, impacting the Affordability measure.

However, our research shows that Affordability remains a significant barrier to digital inclusion and everyday life in Galiwin'ku. High costs of data, devices, and transport intersect with limited income, creating a cycle of financial stress and digital disconnection. While initiatives like the community Wi-Fi and Telstra's low-cost pre-paid plan will provide some relief, sustainable solutions require systemic reform, including more affordable data options, transparent pricing, and low-cost or donated devices.

Cost of living is very high in Galiwin'ku

Due to Galiwin'ku's remoteness and supplies coming via barge, food, fuel and essentials are very costly.



"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. [People] struggle to be able to survive in their own communities because of these costs, which is exceptionally unfair."

- Monique Achterberg, Anglicare, 2023

Increased freight costs impact people's ability to purchase large items such as cars.

- + "The cost of barge [freight has increased]. [In 12 months the cost to] freight in a car [increased from] \$1,400-\$1,500 [to about] \$2,400. [And that's] on top of buying the car." (Margaret Hewett, Director, Connected Beginnings, 2023)

Affordability of pre-paid mobile data is a significant concern

Affordability of internet access is a key issue due to low incomes and high rates for pre-paid data. **In our 2024 survey, 25% of respondents said they often or always cut back on essential household costs to afford personal or household internet within the past six months (up from 12% in 2022), with 56% saying they sometimes cut back (up from 23% in 2022). 92% said they had compromised on internet speed or data due to cost in the last 6 months (up from 36% in 2022).**

Galiwin'ku households had an average of 4.4 mobile phone services in 2024 and were paying an average of \$361 per month for pre-paid mobile phone use (up from \$285 in 2023), with total household internet costs averaging \$369 per month (up from \$223 in 2022).

²⁷ Affordability scores are based on 2022-2024 data collection and do not take into consideration the NBN Community-wide Wi-Fi network completed in June 2025

With the cost of Telstra pre-paid mobile recharge having increased from \$30 to \$39 since 2023,²⁸ data costs add further pressure to household budgets. This can result in people being without phone access and ability to use online services while waiting for their next pay.



“Unemployment is a big issue here [so the cost of pre-paid] credit is sometimes a big challenge for people. [They] rely on their phones to access a lot of things, banking, CDP, Centrelink, taxation and things like that, and, when they don’t have credit [they’re] stuck until they get the next pay.”

– Bobby Magai, CDP Team Leader, ALPA, 2024

Following feedback from Galiwin’ku residents and First Nations Digital Inclusion Advisory Group members, Telstra undertook a trial of Boost pre-paid in communities and then introduced a low-cost Pre-paid Community Mobile plan in First Nations communities in July 2024. This product provides 25GB of data for \$25 over a 14-day period.²⁹ However, initial feedback indicates low awareness or uptake of the product. Telstra is planning to increase promotion.

- + “[Yolŋu need] a cost-effective solution to make immediate calls. Things like having a recharge with \$20 or \$30 can sometimes be not possible for people. [You need to be able to reliably] call for someone to pick up if you are in a compromised situation.” (Anahita Tonkin, as above, 2024)

With regular outages, the 28-day period for most pre-paid vouchers can run out before users have accessed services or data they have paid for. This makes the increased data allocation irrelevant to many users much of the time. There is little opportunity for remote consumers to have this addressed.

- + “There’s certainly a big cost, especially when you’ve paid for pre-paid [top-up], and then there’s no service [so they can’t use] what they’ve actually paid for. And the process [of] rectifying that is so lengthy [that people] let it ride. [But they] haven’t been able to [use the service. During outages the pre-paid] expiry date [is] ticking all the time.” (Margaret Hewett, Director, Connected Beginnings, 2023)

There is little shift towards post-paid mobile plans, partly due to negative experiences

Despite pre-paid data rates being considerably higher than post-paid plans, our 2024 survey found that **100% of people with a mobile phone have a pre-paid service**. Pre-paid plans are preferred because people pay what they can afford, rather than commit to a monthly billed service. However, there is little choice with pre-paid phones being the only option available in the local stores.

Due to high pre-paid costs, some Galiwin’ku locals have expressed interest in getting a post-paid plan. However they encountered difficulty in setting up plans without a nearby Telstra shop and a difficult online application process.



Figure 32: Discarded pre-paid voucher

²⁸ The cost was raised to \$35 in mid 2023 with data increased from 10GB to 15GB, then further increased to \$39.

²⁹ A 2023 trial was undertaken to sell Boost pre-paid vouchers in community stores, which have cheaper data rates than Telstra pre-paid vouchers. However with low uptake, Telstra introduced a Community Pre-paid card in June 2024.

- + “A few of the younger workers have been asking about post-paid, but when we try to [help] set them up, it’s hard online. Others cited accessibility barriers, with online sign-up processes proving difficult without reliable internet or local assistance.” (Nathan Ballard, Senior Engagement Officer, NIAA, 2024)

There is also limited awareness of the types of plans available and potential risks of low-cost plans.



“[Some post-paid plans have] excess data charges. That’s what gets people into a lot of trouble out here. [They] look at a plan and think ‘\$60 a month, yes we can afford that’. [But] they get their first bill and it’s \$1,000.[So] it doesn’t get paid [and] the service gets cancelled. [On] a pre-paid [plan],if the data runs out [they can] recharge [when they can afford to but] don’t have to go through that whole process [of re-activating services].”

- Monique Achterberg, Anglicare, 2023

Some people had negative experiences with post-paid bundle plans that were unaffordable. Numerous Galiwin’ku residents were impacted by the historic mis-selling practices of some Telstra shops, including in Darwin, which resulted in action by ACCC against Telstra in 2021.³⁰

- + “People still have that trauma from the Telstra debt thing... They’d rather just pay when they can [using pre-paid].” (Anahita Tonkin, Yalu CEO, 2024)

Anglicare financial counsellors and Yolŋu staff assist victims of mis-selling practice to seek compensation.

- + “Sometimes we [assist] the Anglicare mob [to support] people [who] lost their money [through mobile phone plans. And] when the phone is broken, they’re still paying it off. So [we help] fill out the [compensation] forms for those people [to get] their money back. [Some] are sorted out, but some of them are still struggling.” (Verity Burarrwanga, EARC Post Office, 2023)

Since that time, Telstra has significantly changed their selling practices. They no longer include devices in post-paid bundles, do not charge excess usage fees, and offer simpler month-to-month plans rather than fixed term. However, Optus was fined in 2025 for mis-selling practices, including to First Nations customers, and we have heard reports of similar practices by other mobile providers. It is hoped that these fines and improved regulation by ACCC and ACMA will reduce the risk of further mis-selling, however there is low consumer trust as a result.

Cost of devices is also a concern, with high device turnover

As outlined, phones are often shared between family members, lost or broken, leading to regular turnover of devices and phone numbers. Some people described demands from children or family members to buy or give them a phone.

- + “[I] have to buy my own phone [but also] my three kids always [tell me] I have to give them. But my new phone I am not going to give it to my son.” (Joanne Wanambi, Family and Schools Together, 2023)

Joanne Wanambi is the coordinator of the Family and Schools Together program and is provided a phone to do her work. However, she told us about demand from family members to share her work phone.

³⁰ <https://www.accc.gov.au/media-release/telstra-to-pay-50m-penalty-for-unconscionable-sales-to-indigenous-consumers>

- + "I spend \$70, \$60, \$80 [a fortnight on data]. Even the six rooms crowded [in my house, people always ask] 'Can I borrow your phone [to] ring Basic card or ring Telstra'. They always [ask for my] work phone but [I] said 'that work phone please. You have to get your own phone'." (Joanne Wanambi, as above, 2023)



Figure 33: ALPA store has a range of mobile phones

With high demand on smartphones as entertainment devices, we heard that some people use non-smartphones to reduce requests from children or others.

- + "Many people are still running the flip style mobile phones [to reduce humbug.] So you can't text them, and they can't watch anything." (Hannah Fincham-Thomson, East Arnhem Real Estate, 2022)

The high cost of smartphones, combined with limited local repair or replacement options, continues to restrict digital participation and access to critical services.

- + "[Very few people] have computers, so the only access they do have is on their phones. And a lot of the older clients ... don't have mobile phones either, so they have no access [or they] have a phone but don't know how to [access a service and] keep using it. So there's a whole lot of compounding issues [around digital ability and] not being able to afford it, even if they do have that access." (Monique Achterberg, Anglicare, 2023)

High use of mobile phones and data by children is increasing household costs

Young people's extensive phone use for streaming, gaming and social media continues to increase household data costs and pressure parents to purchase or replace devices more frequently.



"[Kids always] ask mother or family for their phone so they can watch the YouTube. [My grandchild is] always watching, connected on phone, TV ... Kids love to see but it cost a lot to recharge ... You have to pay credit every [day], \$30 at the shop."

- Joanne Wanambi, Family and Schools Together, 2023

There is also high demand on parents or grandparents to buy mobile phones for children.

- + "Even the little ones ... I've seen them in the shop, they don't cry for toys, they cry for their mother to buy them phones." (Va Matarakura, Manager, Marthakal Motel, 2022)
- + "One phone can be often shared between family. But sometimes the parents might have a phone, but in the night [kids may] take the parents' phones while they're sleeping and they might not see them again because the kids will be playing with them, pass around and all of a sudden the phone's broken ... Start again situation." (Miranda Rielly, Connected Beginnings, 2023)

We heard calls to improve children's awareness of safe use of devices, online content and data costs.

- + "We need to be educating the kids about data use, how we use the phones, because a lot of our kids are lacking on education [in use] of social media [and] YouTube and other social platforms." (Clive Gurrumuway Munyarryun, as above, 2024)

Digital Ability

Digital ability levels in Galiwin'ku are relatively low, especially for Elders

The ADII Digital Ability score for Galiwin'ku based on 2024 surveys was 39.2, a huge gap of 34.6 below the national non-First Nations average (73.8), and 15.3 below the average for Mapping the Digital Gap research sites (54.5). While average Digital Ability scores had risen across most remote communities (up from 45.8 in 2022 to 54.5 in 2024), the average Digital Ability scores had reduced in Galiwin'ku since 2022 from 41.0 to 39.2.

Galiwin'ku ranked ninth of the 11 remote communities visited in 2024, with consistently low results across different indicators of digital ability. Comparisons between 2022 and 2024 in Digital Ability scores show very minor improvements in Basic Skills (element score of 44.6, up from 44.2), Advanced Skills (46.6, up from 55.2) and Social Skills (40.8, up from 40.2). There was a slight drop in Information Search Skills (39.4, down from 40.5) and large drops in Creative Skills (32.1, down from 38.3) and Smart Technology Skills (31.8, down from 38.6).

This reinforces the need for targeted digital skills programs and support for residents to independently and safely use online services, access news and information, communicate with family and service providers, and learn applications needed for employment and economic opportunities.



"When you're looking at digital inclusion, you need access, affordability and digital ability. You can't just have one or two of those things, you need all three. At the moment, digital ability is being left behind here."

- Nathan Ballard, Senior Engagement Officer, NIAA, 2024

As outlined on page 7 of this report, digital literacy in Galiwin'ku varies widely between demographic groups. Elders in particular face barriers in learning how to use mobile phones, navigate online systems and maintain safe digital practices. While family support plays an important role, structured community-based programs (such as peer mentoring, intergenerational learning, and culturally appropriate digital training) are needed to ensure Elders are not left behind in the digital transition.

- + "The elderly are [often] not well versed on the use of mobile phones and that's really something that needs to be looked into. [Sometimes] elderly people [ask us for help to] communicate with their partners who may be in hospital. [People ask] how do I create something on my mobile phone and account so that I can call my partner?" (Tia Roko, Yalu Indigenous Engagement Coordinator, 2023)

Ted Gondarra, an Elder who previously worked with the Connected Beginnings program, described his challenges with using the internet and concerns about its impact for Yolŋu people.



"I [find] the internet [has a] different mindset ... It's good, bad and challenge. [It's good for] connecting or online service, but [it] sometimes lead them into a financial stress ... It's not Yolŋu language, it's not identifying [us online]. We are so invisible."

- Ted Gondarra, Community Engagement Leader with Connected Beginnings, 2022

While some people get family support to use online services, targeted support is needed for elders.

- + "We don't know how to use that. We can slowly learn but ... we do it slowly, slowly." (Yungirrŋa Bukulatjpi, Yalu researcher, 2022)

Low digital literacy can be an obstacle to employment and further education

Digital skills are now often needed for jobs in communities, including for use of Microsoft Office software, email correspondence, online learning and meetings, and other job-specific applications. **However, our 2024 survey found that of the 90% of regular internet users, 98% use the mobile phone primarily for internet use. Only 8% reported that they use a desktop computer (typically occasional users in the Centrelink office or a workspace) and only 5% use a laptop or notebook computer.** This low use of computers can limit development of keyboard skills and understanding of typical workplace systems.

During our 2024 visit, service providers highlighted that digital skills gaps remain a major barrier to equity, particularly as government and financial systems increasingly require online interactions.



“It is a big challenge out here, especially in workplaces that require jobseekers to be able to upgrade, use computers or send emails or things like that. Not everyone has the same digital skills... people sort of just assume that everyone’s got the same digital skill, but they don’t, and limited [mobile] service out here is just making it a big challenge for Yolŋu mob.”

- Bobby Magai, CDP Team Leader, ALPA, 2024

- + “If you’re trying to [do a] customer service job [and] don’t have any previous experience of dealing with computers and emails [or using] technology [such as] scanning in parcels, you’re left behind already.” (Shannon Cervini, Regional Manager of Council Services, 2024)

Lack of identification documents can also be a barrier to employment.

- + “[Many people] miss out on employment opportunities because they don’t have their Medicare card or [ID documents and] don’t know how to apply for one. [We assist them because] they can’t get employed if they don’t have those documents.” (Shannon Cervini, Regional Manager of Council Services, 2024)

ALPA Higher Education Program provides local support for people who are studying through Batchelor Institute or Charles Darwin University or other registered training organisations. In 2023, Program Coordinator Shishir Kushwaha outlined how he works with students with very limited language, literacy, and numeracy and digital literacy. He helps them learn to use computers, laptops or phones to access learning materials, use online learning platforms, and use videoconferencing for lectures.

Shishir described how poorly designed online forms for seeking employment or workplace learning resources can be a barrier to seeking employment. Some job application processes are overly complex, text-heavy and not configured for use on mobile devices.

- + “Not all websites translate well onto a mobile device. [And] the lack of digital literacy that seems to exist in this community [means that] people are not so comfortable using a PC.” (Shishir Kushwaha, Higher Education Program Coordinator, ALPA, 2023)

Shishir set up a computer lab in 2023 to support students to undertake online training.

- + “A lot of RTOs deliver courses that are online so you need a space [where] participants can use computers and go on to the website and click links and look up information and do research that way. So I thought it was important to have a space that could facilitate that.” (Shishir Kushwaha, as above, 2023)

ALPA Higher Education Program runs a Certificate I in Workplace Skills course for entry level digital skills, including computer, scanner and printer use, typing skills, office software and email use. ALPA also

delivers an online foundation program for language, literacy and numeracy, called Building Key Skills Blocks (BKSB), which is needed to progress to other qualifications.

- + “BKSB was developed by TAFE Queensland It’s designed to grade ... someone’s performance against the Australian Core Skills Framework [and is a requirement for many] higher-level qualifications.” (Shishir Kushwaha, as above, 2023)

There are currently few language-based learning materials and resources for higher education. However, we heard about a recent language-based Learning Pathways app designed for use in schools. It outlines the two-way education pathway from kindergarten to Year 12, using both mainstream and Yolŋu systems.

Online learning is starting to be embraced

Being a remote island community with limited access to adult education and training without costly travel, online learning provides an opportunity.

- + “[Online learning provides] better opportunities for education and training, [especially] for young parents who are interested in furthering their education and doing online courses. [But] currently it’s probably a bit challenging.” (Miranda Rielly, Connected Beginnings, 2023)

We also heard about the challenges faced by students leaving the community to do training, such as being away from family and friends, and language barriers. For this reason, a mix of locally delivered and online training is considered a more appropriate means of training delivery. While online learning can save significant travel time and expense, Yolŋu students often experience challenges with poor connectivity, low digital literacy and language barriers.

- + “I have found that Yolŋu prefer [face to face training] to online ... That’s how they learn traditionally, [from] family and friends in groups, so that’s more familiar to them.” (Shishir Kushwaha, Higher Education Program Coordinator, ALPA, 2023)

There is demand for a dedicated agency to provide digital support

With widespread transition to online services, there is increased need for support to activate and use online services. However, with limited digital support available, agency staff in Galiwin’ku are regularly asked to assist with personal digital needs, such as setting up banking, online services and email accounts, or activating a mobile SIM. While many provide assistance, it can impact on essential service delivery.

- + “ [One of] our post office ladies ... usually helps a lot of people out doing their tax returns and things like that. It’s not part of her job, but I’m fine if she wants to help ... Even banking stuff ... and printing and scanning and stuff like that. We just help them if we can because what else are you going to do? IT [support] is very limited.” (Melissa Jones, Community Development Coordinator, EARC, 2022)

To address this community demand, there were calls for a dedicated digital support agency or hub.



“They should have an office in [Galiwin’ku] for the people to come bring the ID’s, and [have a digital support] worker help them activate everything. I would like to make another office [set up for that role] because this community is getting bigger, and all organisation should do something about [digital support], especially for the phone.”

- Verity Burarrwanga, EARC Post Office, 2023

- + “A [digital] resource hub would be fantastic [with] computers just available to the public ... They can log in [and] get [support].” (Anahita Tonkin, Yalu CEO, 2024)

Some community members suggested Yalu as an appropriate agency due to existing services and having an experienced team of cultural leaders and translators.

- + “Definitely Yalu, for sure. They have a good model to properly utilise the space to create that awareness [in a culturally appropriate way].” (Christopher Alchin, Healthworker/IT enthusiast, 2022)

Digital mentors could help support residents to use online services and learn

While there was demand for more digital training and support, the preference was for one-one-one support with a Yolŋu digital mentor as needed, rather than doing workshops.

Peer learning already happens within families, particularly with young people and those with digital skills helping older ones to use phones and online services. There were suggestions that young people could play a role as digital mentors, as they are rapid adopters of communications technologies.

- + “Young people these days they’re ahead of us. They are very clever in how they use technology.” (Marcus Lacey, Marthakal Homelands and Resource Centre, 2022)
- + “I think they [young leaders] would be the best people to mediate and mentor ... the next generation. [They also] need a mentor to show them [web design and creative applications, which could lead to] opportunities for future business.” (Christopher Alchin, Healthworker / IT enthusiast, 2022)

Cyber-safety is a significant concern, with calls for more e-safety awareness and support

Local agencies identified a range of cyber-safety issues prevalent in Galiwin’ku from scams, online abuse, access to inappropriate content, and copy-cat behaviour on social media. Some people pointed to the impact of inappropriate use of social media, and the need to extend Yolŋu protocols to online use.

- + “[People have been swearing in language on social media] and caused trouble [and people] arguing each other.” (Ted Gondarra, Community Engagement Leader with Connected Beginnings, 2022)
- + “[There’s a lot of] conflict that probably breaks out and comes from platforms like Facebook or Diva Chat. [Social media use is still relatively new so there aren’t] the social rules, the way to keep everybody safe and happy ... There’s still a lot of navigating going on.” (Margaret Hewett, Connected Beginnings, 2022)

Parents’ awareness by of the need to keep children safe online is growing, but awareness of how to manage privacy settings and parental controls on phones and online platforms such as TikTok remains limited. There were requests for more cyber-safety awareness support for parents.

- + “I’ve seen often that parents will thrust their phone towards their children, and the kids will end up on various social media sites like TikTok and Instagram, which obviously are unfiltered, and have the potential to be a little bit unsafe for these small children.” (Miranda Rielly, Connected Beginnings, 2023)

There are also concerns about the impact of online bullying and abuse on young people’s mental health.



“We’re under a lot of depression and a lot of pressure. [Those untrue and negative stories on Facebook] takes you away from who you ought to be, a strong cultural person.”

- Marcus Lacey, Executive Officer, Marthakal Homelands and Resource Centre, 2022

The local Shepherdson College has been promoting cyber-safety awareness for children at school.

- + “Cyber safety and cyberbullying [are] talked about quite a lot at school [but more work is needed to keep up with changes].” (Margaret Hewett, as above, 2022)

College staff recognise the importance of addressing digital safety through a cultural lens and have developed a social and emotional learning program. However, the Principal highlighted the challenges of translating digital safety concepts into Yolŋu languages.



“We’ve developed a social and emotional learning program at school and part of that is talking to students about being safe online in a culturally responsive way and in first language. [However] we have to ensure that there is an equivalent term in first language as it’s [often] a pretty tricky concept.”

- Joe Hewett, Principal, Shepherdson College, 2024

Cyber-safety awareness is needed for all age groups. Both EARC and Yalu are exploring options to provide digital literacy and cyber-safety support in future.

- + “We are looking at ways to ensure that we increase people's digital literacy and understanding of how to use social media, the risks of it and the protections around it. So, we [will] look at doing some training around that and [the] cyber-bullying space potentially as well.” (Anahita Tonkin, Yalu CEO, 2024)

One interviewee said that digital literacy and safety training requires a two-way learning model that respects and incorporates cultural protocols.

- + “Education does need to be done to keep people safe online and keep their digital identity safe [but] it needs to be a two-way learning piece [to] be culturally safe.” (Nathan Ballard, Senior Engagement Officer, NIAA, 2024)



Figure 34: Yolŋu language e-safety awareness posters on the airport noticeboard

Social media is being used for calls for help around self-harm and suicide attempts

[Content warning: This section discusses self-harm and suicide]

We heard reports of a growing incidence of suicidal messages on social media.

- + “[It’s] calling out for help ... They’re reaching out for people to help [and] trying to get attention from the family, see if they love him or caring for him.” (Jerome Lacey, Galiwin’ku Youth Sport and Recreation, 2023)

In 2023, there had been recent incidents of people self-harming or suicide attempts on Facebook.

- + “[Some people] harm themselves on the [Facebook Live]. One man ... went on the Facebook [to] let the people know what was happening in his life. Instead of keeping it, he was sharing it ...with everyone on Facebook. Then he just suicides himself while he was on the live ... But lucky one of the friends saw it and went [and saved him].” (Verity Burarrwanga, EARC Post Office, 2023)

While there is mental health support available for young people in Galiwin’ku, clearly more is needed to help stem this emerging trend. It indicates how social media is used by young people for expressing emotional issues that may be difficult to express in face-to-face communications.

There are helpline services available at 13YARN (13 92 76), an Aboriginal & Torres Strait Islanders crisis support line, and Lifeline Australia on 13 11 14.

There is increasing incidence of scams, with many people losing money

There is a need for more scam awareness, with scams becoming more regular, harder to identify and with some scams targeted at people living in remote communities.



“There is a problem with scams, like Facebook advertisement [saying] you can get \$800,000, and people just go in with their debit card ... Many people [in Galiwin’ku] were caught [by scams], they’re losing money on day-to-day basis.”

- Ted Gondarra, Community Engagement Leader with Connected Beginnings, 2022

Scams have a significant impact for people that are already struggling on very low incomes.

- + “It’s quite unfortunate seeing people that have got scammed online. [They] had no money left because they got scammed.” (Bobby Magai, CDP Team Leader, ALPA, Galiwinku,2024)



Figure 35: A poster warning about scams on the ALPA store window

Verity and Esther Burarrwanga work in the EARC post office. They often hear about the scam messages people receive (including parcel delivery and prize scams) so offer people advice on how to avoid scams.

- + “[People] receive a message saying that their phone is coming, you'll receive a parcel ... When they click the link [the] scammers ask for the account details. I had that once before but I didn't give my bank details because I knew that was the scammers ... And the other day another old lady came and said, 'I receive a message here saying that I've won a hundred thousand dollars' ... I said, 'No that's not real. It's the scammers. You have to be careful using your phone.' That's what I said to old people, even the young people.” (Verity Burarrwanga, EARC Post Office, 2023)

We heard about a scam caller contacting people directly through Facebook Messenger.

- + “One day [I got a] video call on my Facebook. I said, 'Hello' and I just put video, it shocked me ... that someone [called me direct. So I] texted 'don't do you ever call me on my video otherwise I'll go and see police' ... Then I had to block that number.” (Joanne Wanambi, Family and Schools Together, 2023)

Scams are becoming increasingly sophisticated and difficult to identify. This often leaves individuals vulnerable unless they possess the skills and awareness to recognise potential threats.

- + “[I see lots of scam alerts] on Facebook [with] people going 'this is not me, this is fake profile'. [Cyber safety is hard] to navigate [but] people [with a] bit of computer savviness [are more] cautious and ask someone about it and not just [hand over their] card number.” (Shannon Cervini, Regional Manager of Council Services, 2024)

More information about scams is available on the Scamwatch website (<https://www.scamwatch.gov.au/>), where people can also report scams. The ACCC have also produced *The Little Black Book of Scams* which is regularly updated.³¹

Online gambling was emerging as a new issue (2024)

Online gambling is emerging as one of the most concerning digital harms in Galiwin'ku, with an increase in targeted promotion of online gambling sites including from within online games. While card game gambling has been part of community life for decades, the shift from cash wages to online banking means that money can be lost quickly after fortnightly payments arrive. Unlike traditional card games, online gambling removes the physical reminder of cash spending and results in money leaving the local economy. This increases affordability issues for families.



“Families are unfortunately going in the direction of using money for [online gambling] instead of food and power and things like that. [This is] a new challenge, which [has increased in] the last couple of years [and] impacts on families greatly. [The] introduction of gambling apps has meant that people are spending money on something they weren't before.”

– Anahita Tonkin, Yalu CEO, 2024

³¹ <https://www.accc.gov.au/about-us/publications/the-little-black-book-of-scams>

We also heard about a growing trend of Facebook posts promoting fake gambling websites which require upfront payment but do not pay out winnings.

- + “[Some people are being told they’ve won on dodgy] online gambling [sites] and then they think it was real money, [but actually] their real money’s gone from their bank.” (Shannon Cervini, Regional Manager of Council Services, 2024)

We heard calls for targeted cyber-safety and financial counselling support to address the harms from gambling platforms. These are seen as critical to community wellbeing.

- + “[Online gambling] a big issue here ... That’s why it’s really important to have this education around cyber safety.” (Bobby Magai, CDP Team Leader, ALPA, 2024)

There are calls for more cultural authority of Elders in the digital realm

Some Elders expressed concerns about the impact of social media and digital technology on Yolŋu cultural protocols, as they introduce behaviours that are against cultural protocols.

While there is rapid adoption of digital technologies and skills by young people, many adults do not know how to restrict their access to inappropriate online content.

- + “Online [is easy] for new generation. [There] has been fast learning. So, it’s so amazing that you could see little kid could teach adult. I have seen many, many done this but there has to be some sort of a policy [so they can’t] get into adult themes and it’s not appropriate.” (Ted Gondorra, Leadership Development Officer, NIAA, 2024)

Community governance over new communication systems would reduce the sense of disempowerment.

- + “[We’ve] always been disempowered in [decisions around communications services]. Always community have been let down and there’s another cry for help.” (Ted Gondorra, as above, 2024)

We heard concerns that online content or views is eroding young people’s respect for Elders’ guidance.



“When I [was young, I listened to] old people, they always there to teach us [and encourage us for school and work] ... When this technology came [children are] not really listening to your old people. [We need to teach children how to] access [the phone] in proper way.”

- Yungirrŋa Bukulatjpi, Yalu researcher, 2022

Elder Jane Garrutju stressed that phone and internet access on homelands is to be used appropriately.

- + “It’s no good using the phone or the [online] services ... for bad reasons ... It’s for the emergency ... We need to use it wisely and properly.” (Jane Garrutju, Chairperson, Marthakal Homelands, 2022)

Homelands leaders are keen to have the capability to switch the internet off when required.

- + “Elders and ... parents can step in and actually monitor how long [kids] can use [the internet. They want power over] the technology [so it] can be adjusted and monitored closely by the community.” (Marcus Lacey, Executive Officer, Marthakal Homelands and Resource Centre, 2022)

- + “In homelands, I think that there needs to be an option for Traditional Owners to be able to turn connectivity off and disconnect from social media. [They] should have the right [to] turn it off.” (Hannah Fincham-Thomson, East Arnhem Real Estate, 2022)

A digital driver’s license was suggested for young people before using mobile devices and social media.

- + “[The kids need to learn] the rules, so guidelines of this is how to use it ... in a safe way. [We need a] plan for the community ... [because] they introduced [mobile coverage with] no plan.” (Yunḡirrḡa Bukulatjpi, Yalu researcher, 2022)

Local Digital Media Content Production, Archiving and Sharing

Digital content is being produced by young people for TikTok and other platforms

There is interest in reinvigorating digital media production in Galiwin’ku, including supporting young people to create content in language. Cyril Bukulatjpi, former Communications Officer at Yalu, described the potential use of digital technologies for transferring cultural knowledge.

- + “I would really love to see media production [come back] in Galiwin’ku to capture every event, every language, every knowledge ... When kids are recording [the] songlines ... that becomes their identity to understand those songlines ... [It’s] a good way to learn.” (Cyril Bukulatjpi, Communications Officer, Yalu, 2022)

Yalu have done some in-house video production, including providing basic training for staff.

- + “We made [two] music videos ... the respect video and the Miyarrk respect one, so there’s one for men, one for women.” (Tia Roko, Yalu Indigenous Engagement Coordinator, 2023)

Building on ideas from the Northern Territory Government’s Department of Education’s Vamp TV, the local school developed its own channel for student-led media production.

- + “We’ve set [up] Shep TV [as a] vehicle for students and classes to produce online content or digital content and share that broadly through YouTube. And that’s obviously linked to social media [to promote] that.” (Joe Hewett, Principle, Shepherdson College, 2024)

While there is no training program for digital media production currently, we did hear about video productions by young people being shared on TikTok, Instagram and other platforms, including new Tjuki dance videos being distributed on TikTok.



“Yeah the kids are really genius what they’re doing ... They make comedy [and] put a music track onto it. [It’s a] mix, all things, but pretty much the popular one is just singing with the song.”

- Jerome Lacey, Galiwin’ku Youth Sport and Recreation, 2023

We heard about the potential of sharing locally produced content but also the difficulty faced by digital producers in uploading media content via the mobile network.

- + “There's a lot of talent and there's a lot of stories [to] be told from the local people, but getting those stories online and uploading them is a bit of a challenge ... Often we hear all the negatives, but in community there's so many rich stories that haven't been captured, and I think having digital speed would be really good to get out to the world and tell the stories, especially for people who are digital content creators like me.” (Tia Roko, Yalu Indigenous Engagement Coordinator, 2023)

By 2024, participants described a new wave of digital storytelling, with young people sharing Tjuki dance videos and other creative content online. Many spoke about the potential for local stories to challenge negative narratives about remote communities—if only digital barriers could be overcome.

Digital storytelling and media production represent a major opportunity for Galiwin'ku, particularly for youth engagement, language revitalisation and cultural identity. However, poor connectivity continues to restrict the ability to upload and share locally produced content. Without faster, more reliable internet and investment in training, facilities and digital infrastructure, much of this creativity remains confined to phones. Strategic, community-led investment could unlock new pathways for cultural transmission, creative employment and positive representation of Yolŋu communities.

History of digital media and cultural knowledge programs in Galiwin'ku

Galiwin'ku has a strong history of Indigenous knowledge and digital media projects. There were calls for renewed support for language and cultural recording projects.

In the early 1990s a project called Yolŋu Nations Knowledge Centre, supported by Sydney University, Charles Darwin University and Flinders University set out to collate an archive of cultural information (photos, songs, language recordings) across numerous Yolŋu clans. In 2001, a Galiwin'ku Community Newspaper was set up as a youth employment project, including digital media production skills.

Over the last 20 years, numerous researchers have helped design or document a range of Indigenous knowledge recording and archiving projects.³² One archive project delivered community-managed access to “a web-enabled knowledge database developed by Yolŋu people.”³³ In the 2010s, Galiwin'ku established a multi-media program, called Digital Futures Live, but it was forced to close when funding was discontinued in the mid-2010s. A recent thesis by Cathy Bow (2020) outlines the use of digital technologies for language resources in Indigenous NT communities. An Indigenous Knowledge Centre was opened on 12 June 2003 by the Galiwin'ku Community Council, with support from NT Library and Information Service. Organisations still support language projects in Galiwin'ku, including Yalu, ARDS, Charles Darwin University, Menzies School of Health, the Shepherdson College Literature Production Centre, and the bible translation program.



Figure 36: Language books produced at the Shepherdson College

³² These include including Beale (2003), Richmond (2005), Anderson (2005), Christie (2008, 2009, 2010), Corn (2012, 2013, 2019 with Stephen Patrick), De Lary Healy (2013), Deger (2013), Gumbula (2005, 2009, 2019) Maina (2012), Masterson et al (2019), and Van Gelderen & Guthadjaka (2019). Michael Christie has an extensive body of research with Yolŋu, in particular the *Indigenous Knowledge and Resource Management in Northern Australia: Making collective memory with computers* project (2003-2006). As part of this Scott (2004) produced an audit of Indigenous Knowledge Databases in Northern Australia, including the Galiwin'ku IKC.

³³ Beale, 2003: 289.

A renowned cultural output from Galiwin'ku is the Tjuki dancers, a talented troupe of young men melding traditional dance moves with western music styles. This grew from a video of a performance by local students for a departing schoolteacher posted to YouTube in 2007. The video went viral, leading to requests for the dance troupe to perform at events in Australia and overseas for more than a decade.

Strengthening cultural and community digital memory

Across the three visits, participants emphasised the need for a locally managed multimedia archive to safeguard Galiwin'ku's growing body of digital materials, from photographs and music recordings to language, art, and community history. As outlined above, there have been a number of archiving and cultural heritage projects over the years. However, the absence of a dedicated local archive in Galiwin'ku means that valuable media content (such as photos, videos and audio recordings), community and family records, cultural heritage, and creative works are not easily accessible and recently produced content is not archived.

Several institutional collections hold Galiwin'ku cultural, language and historic content, including Batchelor Institute's CALL Collection, CDU's Living Archive of Aboriginal Languages, and the Northern Territory Library and Archive.³⁴ However, these are not always accessible to Yolŋu people or managed in accordance with community protocols. A locally controlled archive could address these gaps, supporting both personal digital storage and collective cultural preservation. This would also provide opportunities for digital skills training, helping people learn how to back up, curate, and share their content safely.



Figure 37: Poster describing seasons based on cultural knowledge



“There should be some sort of archive centre [for] the history of Galiwin'ku and the [many] Yolŋu nations from this area.”

- Marcus Lacey, Marthakal Homelands and Resource Centre, 2022

A digital archive can help to transfer cultural knowledge and strengthen identity of future generations, provided it had sustainable funding and support.

- + “[We need] something to empower [this] generation to make them think how strong our people were [in the] ‘40s and late ‘70s ... when Yolŋu had the self power and determination. [Knowing that history would] encourage the new generation [and] make them feel good about themselves.” (Marcus Lacey, Executive Officer, Marthakal Homelands and Resource Centre, 2022)

We are not aware of any plans for a local archive facility, however Yalu are planning to include a community access space for digital archives within their proposed new facility.

³⁴ Northern Territory Library previously supported the development of a Galiwin'ku archive collection using the a Keeping Culture software in the early-mid 2010s, however this was mothballed due to software licencing costs.

- + “We are working on digital repatriation of photos. [In our new facility we want] to have a viewing room [for] the community. [It won’t] be an archive centre, because there might be other places that are more appropriate, but [it will provide] access to photos, to music, to videos, to the Yolŋu radio ... To make it a positive space is really important for us long term.” (Anahita Tonkin, Yalu CEO, 2024)

Storage of personal collections is also an emerging challenge with increasing use of phones for taking photographs and video. People are wanting help to save their content on a server or cloud-based storage so it isn’t lost when they replace their phone. However, this can be costly and challenging.

- + “It’s been so difficult to [back up] all my photos and now my phone is full ... How do I save my photos ... back up everything? That’s the issue I’ve had.” (Margaret Dhurrpuy, Artist, Elcho Arts, 2022)



Figure 38: Aerial view of Galiwin'ku

06. CONSIDERATIONS FOR LOCAL DIGITAL INCLUSION PLAN

Developing a local Digital Inclusion Plan enables a coordinated place-based approach to addressing some of the challenges outlined in this report. It also provides a useful tool for advocacy to government, industry, and for fundraising efforts. The strategies below are based on input from community stakeholders and provide options for local planning to improve communications services and digital inclusion in Galiwin'ku. These are not intended to be prescriptive, nor are they listed in order of priority.

Based on our 2024 and 2025 interviews and discussions, the proposed Digital Inclusion Plan has been updated with new strategies and a column for Progress/Next Steps, with colour coding to show progress to date.

Legend	
Issue resolved	
Issue partly resolved/underway:	
Yet to be addressed:	

Identified Issue	Possible Actions	Potential Stakeholders	Progress / Next Steps
Access			
Mobile service in Galiwin'ku slow, congested and unreliable: Highly congested 4G coverage, very slow speeds during day, patchy coverage, with regular outages and dropouts	Ask Telstra to provide interim solution to reduce 4G congestion while awaiting planned upgrades (e.g. cell on wheels with satellite backhaul or satellite delivered Wi-Fi mesh network)	Telstra NT Government (NTG) East Arnhem Regional Council (EARC) Developing East Arnhem Limited (DEAL)	<i>Telstra completed the mobile service upgrades to 4G/5G, microwave link and exchange upgrades in November 2024. This built upon the Arnhem Fibre Upgrade Project to improve backhaul capacity in 2023.</i>
Poor mobile coverage in Buthan: Limited reception in Buthan and nearby homelands	Additional 4G tower may be required near Buthan to address poor reception and increased demand with new housing development.	Telstra NTG EARC	<i>Yet to do The upgraded Telstra tower improved coverage, but the signal is still weak and patchy in places</i>
Coordinated technical services: Technical and IT support for multiple agencies costly due to remoteness, and	Review maintenance and IT support needs of local agencies and options for coordinated maintenance contracts to reduce costs	EARC DEAL Marthakal Homelands and Resource Centre (Marthakal HRC)	<i>Yet to do APN employ a local community liaison officer for the Wi-Fi network but this is not a technician role</i>

Identified Issue	Possible Actions	Potential Stakeholders	Progress / Next Steps
delayed in wet season	Train/employ local technicians based on Galiwin'ku	Other agencies	
Limited communications services on most Marthakal homelands: Reports of some Marthakal homelands having limited or no connectivity and/or existing infrastructure not working reliably	<p>Audit of communications infrastructure in Marthakal homelands to identify additional infrastructure needs and upgrades</p> <p>Review maintenance processes including remote monitoring and support to reduce costs and outage times</p> <p>Improve community awareness of services and on-site maintenance</p>	<p>Marthakal HRC</p> <p>NLC</p> <p>EARC</p> <p>Telstra</p> <p>NBN</p>	<p><i>Audit yet to be undertaken</i></p> <p><i>Telstra Small cell mobile installed at Rorruwuy in 2025, with Banthula and Mapuru yet to be installed</i></p> <p><i>Gäwa opted for locally managed Wi-Fi service over small cell mobile</i></p> <p><i>Ongoing maintenance of Activ8me community Wi-Fi phones, but upgrades needed to some units that are rusty or not working</i></p>
Limited free Wi-Fi access: Lack of Wi-Fi coverage to enable affordable use of online services and to provide access when 4G access is congested	Set up free Wi-Fi mesh network or public Wi-Fi hotspots in Galiwin'ku and Buthan (e.g. near EARC office, store, Buthan Store, sport and recreation centre)	<p>EARC</p> <p>ALPA</p> <p>NTG</p> <p>NT Library</p> <p>NBN</p> <p>Yalu AC</p>	<p><i>Galiwin'ku community-wide Wi-Fi mesh network completed by NBN/APN in June 2025 (one of 23 sites) providing free Wi-Fi to residential areas.</i></p> <p><i>While mostly external access, indoor access is at Yalu, Miwatj Clinic, airport, Marthakal Motel and basketball stadium</i></p> <p><i>EARC provide free Wi-Fi in the Sport and recreation Hall and library facility</i></p>

Identified Issue	Possible Actions	Potential Stakeholders	Progress / Next Steps
Lack of community access computers for skills development, personal use, and creative and study needs	Purchase computers for use in Galiwin'ku library Expand access of ALPA Training Centre facility and computers Set up computer access within proposed new Yalu facility	EARC ALPA Yalu AC Work Ventures / NBN Galiwin'ku Women's Space	<i>EARC set up a new computer room and library in the Sport and Recreation Hall, opened January 2025</i> <i>Donation of 10 laptops to Galiwin'ku Women's Space in 2025 by NBN and Work Ventures under First Nations Device Bank pilot program</i> <i>ALPA Higher Education have a computer lab with 5 laptops, but low usage</i>
Affordability			
High cost of pre-paid mobile data: Primary use of pre-paid for data, including for household use; limited awareness of changes to post-paid plans and satellite service options	Provide easy-to-read materials in IGA store and post office (posters, brochures) and radio messages outlining options for more affordable mobile and data services via Telstra and NBN Sky Muster retail service providers Telstra to provide affordable pre-paid option	EARC ALPA Telstra NBN retailers Australian Communications Consumer Action Network (ACCAN) Yalu AC	<i>Telstra rolled out a Community Pre-paid Mobile Plan for low-cost pre-paid data in 2024, however there is low awareness and uptake to date</i> <i>The Wi-Fi network provides a safety net when data runs out</i>
High device turnover: Regular replacement of devices due to phone or screen damage	Provide rubber phone cases with new phones, especially high-priced models Recommend retention of existing SIM where possible	ALPA Stores EARC Work Ventures/ NBN	<i>Yet to do</i>
High excess data cost for Sky Muster users: Reports of high bills for Sky Muster plans up to \$200/month due to excess data use	Recommend customers on Sky Muster or Sky Muster Plus plans transfer to the new Sky Muster Plus Premium plans, which have unlimited data use and higher speed options	NBN Sky Muster retailer service providers Yalu AC	<i>Yet to do, however some households have dropped Sky Muster services since introduction of Wi-Fi</i>

Identified Issue	Possible Actions	Potential Stakeholders	Progress / Next Steps
Digital Ability			
<p>Digital skills support: Need for more regular digital skills training and support, particularly for seniors and other target groups</p>	<p>Provide one-on-one digital literacy training and support for community members in library</p> <p>Consider running targeted digital skills workshops at Yalu office, library or EARC meeting room</p>	<p>EARC/Galiwin'ku Library</p> <p>NT Library</p> <p>Yalu AC</p> <p>ALPA</p>	<p><i>Digital skills support is available at EARC library computer room, Yalu and ALPA CDP training centre.</i></p> <p><i>Work Ventures to provides Women's Space training</i></p> <p><i>More targeted training and support needed</i></p>
<p>Digital mentors: High demand on service providers for support in setting up and using online services, banking, sourcing identification, SIM activation, etc.</p>	<p>Employment of a digital mentor, possibly based at library and/or post office, to support people with limited digital ability to use government and online services and apps, set up phones, and add recharge data</p>	<p>EARC</p> <p>Australia Post</p> <p>Centrelink/Services Australia</p> <p>Banks</p> <p>NTG</p>	<p><i>EARC employ two Library and Cultural heritage workers; Yalu workers provide basic IT support</i></p> <p><i>Funding for Digital Mentors program approved in 2024 Federal budget, with program yet to be developed</i></p>
<p>Online safety: Demand for cyber-safety awareness, training and resources about scams, online safety for young people, malware, content filtering and privacy</p>	<p>Run cyber-safety awareness workshops (including in schools, workplaces, for Elders)</p> <p>Awareness campaign to highlight cyber-safety risks using resources designed / adapted for Galiwin'ku audience (radio, Facebook, posters etc)</p> <p>Establish a Council of Elders to enable cultural authority in the digital space</p> <p>Design a youth-based 'digital driver's license'</p>	<p>EARC</p> <p>Yalu AC</p> <p>Office of e-Safety</p> <p>Aboriginal Resource and Development Service (ARDS)</p> <p>TEABBA</p> <p>Anglicare</p> <p>Connected Beginnings</p>	<p><i>Yet to do</i></p> <p><i>Office of e-Safety have targeted First Nations messages shared on Yolŋu radio, TEABBA and ICTV</i></p> <p><i>Posters and resources available in some locations but more regular and updates and support needed.</i></p> <p><i>Discussion held on local cultural authority by Yalu but no established Elders Council to date</i></p>

Identified Issue	Possible Actions	Potential Stakeholders	Progress / Next Steps
Workplace digital skills: Demand for IT skills for workforce readiness and use of online services	Expand awareness of ALPA courses including Certificate I in Workplace Skills course Provide specific CDP training in workforce readiness digital skills as needed	ALPA Higher Education EARC Yalu AC	<i>ALPA Higher Education delivers basic on-site training, however not operating at time of last visit</i>
Media Services and Production			
TV services failure: VAST Direct-to-home TV services not working in 85% of residential households High household cost to replace set-top boxes Difficulty with activating smart cards	Explore options to upgrade to digital broadcasting of Freeview services plus ICTV Alternately, advocate for funding to upgrade or install residential VAST satellite services, replace set-top boxes where not working	NT Housing NT Government EARC Dept of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA)	<i>No outcome to date from DITRDCA-run Remote and regional TV Audit Group (2023-4) to review future of VAST services in remote communities</i> <i>Strong community interest in being part of a trial of digital TV broadcast, with most infrastructure to support this</i>
RIBS broadcaster role not filled: Challenge with recruiting RIBS broadcaster role for 3 hrs/day to do local radio shows	EARC to look into expanding RIBS broadcaster roles from 3hrs/day to full-time, possibly including other tasks/activities (e.g., journalism, social media, music/video production) and provide training and support	EARC TEABBA National Indigenous Australians Agency (funding agency)	<i>Yet to do</i>
Digital media and music production: Demand for digital media skills and social media skills for creative and cultural production	Run skills workshops in digital photography, music recording, social media for promotions, and multi-media production Run TikTok production workshops for young people	Elcho Arts ALPA ARDS Batchelor Institute EARC	<i>Digital media workshops and VAMP TV run at school, with EARC looking at running digital skills workshop in computer room</i>

Identified Issue	Possible Actions	Potential Stakeholders	Progress / Next Steps
<p>Demand for multi-media production facility: Lack of multi-media facility to support production of local cultural and creative content and archiving of existing content</p>	<p>Review demand for local multi-media production facility (e.g., video, online, music, photography, art/design, archiving)</p> <p>Pending review, develop a Business Plan to establish a facility, including staffing, production development and support, training activities, exhibition/distribution etc.</p> <p>Seek partnerships to provide training and support</p>	<p>Elcho Arts</p> <p>EARC</p> <p>Yalu AC</p> <p>ARDS</p> <p>Artback NT</p> <p>Library and Archives NT</p>	<p><i>Yalu and EARC exploring options for local media digitisation and archive access</i></p> <p><i>Elcho Arts has local media storage, use SAM platform for content storage/sharing</i></p>

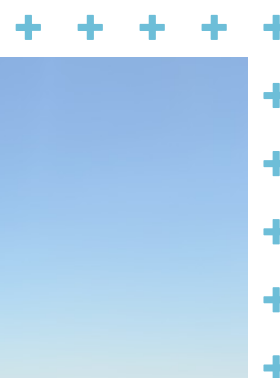


Figure 39: Pandanus trees near beach at Galiwin'ku

Appendix 1: Summary of Survey Results

Notes:

- 1) Survey results are weighed using ABS data to be more representative of Galiwin'ku's population.
- 2) Not all respondents answered all questions, so percentages are based on respondents to that question.
- 3) Weighed data removes any non-First Nations results collected in 2022 (only First Nations people surveyed in 2023-4).
- 4) Some questions or responses were not asked in all three years. These are indicated by N/A.

Demographics		2022	2023	2024
Respondents (n)		46	70	87
Age	18-34 years	49%	49%	49%
	35-44 years	16%	23%	21%
	45-54 years	19%	13%	15%
	55-64 years	15%	11%	10%
	65-74 years	1%	4%	6%
Gender	Male	48%	48%	48%
	Female	52%	51%	52%
	Non-binary	0%	1%	0%
Aboriginal or Torres Strait Islander	Aboriginal	99%	100%	100%
	Both Aboriginal and Torres Strait Islander	1%	0%	0%
Speak a language other than English at home		95%	100%	99%
Health	Have a disability, health condition or injury (over 6 months)	19%	13%	20%
Education	Did not complete secondary	5%	10%	20%
	Up to Yr 10	33%	23%	17%
	Up to Yr 11	26%	26%	26%
	Up to Yr 12	21%	24%	13%
	Certificate level I or II	21%	24%	13%
	Certificate level III or IV	11%	3%	20%
	Advanced Diploma or Diploma	0%	7%	1%
	Bachelor or above	2%	0%	0%

Demographics		2022	2023	2024
Employment				
Main Activity	Employed (FT, PT, self-employed, casual)	29%	29%	29%
	Unemployed	18%	35%	26%
	Retired or on a pension	9%	5%	9%
	Home duties	11%	10%	19%
	Not able to work due to a disability	7%	7%	9%
	Unpaid carer	0%	3%	1%
	Given up looking for work	4%	0%	0%
	Engaged in CDP/CDEP activities	19%	3%	7%
	Other	3%	7%	0%
	Occupation (of those who are employed)	Manager	0%	2%
Professional		7%	7%	5%
Technician/trade worker		0%	0%	5%
Community/personal service worker		15%	68%	71%
Clerical/administrative worker		1%	0%	9%
Sales worker		2%	6%	6%
Machinery operator/driver		0%	0%	0%
Labourer		0%	18%	4%
Hours worked per week (of those who are employed)	35 or more hours	10%	36%	35%
	Less than 35 hours	19%	60%	52%
	None	0%	4%	13%
Job seeking	Looking for FT work	12%	2%	5%
	Looking for PT/Casual work	11%	19%	23%
	Not looking for work	77%	79%	72%
Welfare	Received income support (e.g. JobSeeker, Family Tax Benefit)	68%	81%	89%
Government Benefit Type (of those on income support)	Family Tax Benefit	26%	33%	19%
	Age pension	0%	4%	9%
	JobSeeker/Youth allowance	38%	46%	44%
	Disability (Support) pension/Mobility allowance	23%	16%	12%
	Carer allowance/payment	8%	2%	2%
	Single or partnered parenting payment	20%	29%	21%
	Other pension or benefit	2%	4%	1%
Housing	Housing tenure			
	Own outright/purchaser	0%	0%	2%
	Rent from private landlord	0%	0%	0%
	Rent from public housing authority	82%	96%	84%
	Other (boarding, living at home etc.)	18%	4%	13%
Household type				
Single person	6%	2%	3%	
Group / Share household	8%	5%	0%	

MAPPING THE DIGITAL GAP



	Couple without children	0%	1%	1%
	Couple with children	0%	0%	10%
	One parent family	0%	1%	3%
	Multi-generational or shared households	84%	91%	84%
Household size	Number of people in household	9.1	7.6	7.6
Age of dependent children	5 years old or under	61%	58%	64%
	6-12 years old	37%	68%	52%
	13-14 years old	26%	41%	27%
	15-17 years old	18%	30%	16%
	18 years old or over	11%	19%	2%
Understanding of spoken English	Very well	49%	14%	44%
	Quite well	45%	70%	41%
	Only a few words	6%	16%	14%
	Not at all	0%	0%	0%
Understanding of written English	Very well	53%	15%	34%
	Quite well	38%	49%	40%
	Only a few words	8%	36%	24%
	Not at all	0%	0%	2%
ATSI languages spoken (by 10% or more respondents)	Yolŋu Matha	90%	93%	58%
	Djambarrpuyngu	11%	24%	40%
	Aboriginal English	0%	1%	17%
Weekly household income	\$1-\$399	0%	0%	1%
	\$400-\$999	17%	14%	17%
	\$1,000 - \$1,999	76%	65%	54%
	\$2,000 - \$3,999	8%	18%	28%
	above \$4,000	0%	3%	0%
Phone Use		2022	2023	2024
Primary devices used for phone calls (multi-choice question)	Fixed line telephone in my home	1%	1%	0%
	Public phone	14%	24%	21%
	A mobile phone	65%	97%	96%
	Phone in community office or workplace	16%	30%	26%
	Satellite phone	4%	0%	1%
	No phone access	12%	0%	4%
Reliability of nearest public phone	Reliable	11%	36%	21%
	Not reliable	24%	13%	38%
	Sometimes reliable	20%	5%	7%
	Do not use a public phone	45%	46%	34%
Mobile phone ownership	Have mobile phone (owned)	54%	70%	68%
	Have mobile phone (shared)	7%	8%	16%
	No mobile phone	39%	22%	15%

MAPPING THE DIGITAL GAP



For those who have a mobile phone (owned or shared):					
Primary phone type	Smartphone		87%	98%	99%
Phone plan	Pre-Paid (pay-as-you-go, top ups)		98%	100%	100%
	Post-paid (monthly)		2%	0%	0%
Average monthly data allowances	10GB or less		48%	23%	11%
	11-40GB		52%	69%	85%
	41-60GB		0%	7%	2%
	61-100GB		0%	1%	2%
	Unlimited		0%	1%	0%
5G network usage with mobile phone	Yes		0%	0%	0%
	No		100%	100%	100%
Average no. of mobile phone services			4.52	4.55	4.43
Average household cost of pre-paid mobile services per fortnight			N/A	\$285	\$361
Media Use			2022	2023	2024
Radio access (multi-choice question)	Through the TV/VAST		4%	3%	3%
	Listen to a radio at home		17%	20%	22%
	Listen via car		68%	43%	60%
	Streaming via phone or tablet		0%	64%	75%
	Streaming via computer		9%	0%	1%
	Individual radio shows via podcasts		2%	0%	1%
	Only listen to radio at places other than home or car		19%	13%	11%
	Never listen to radio		42%	12%	23%
Radio listenership	Local First Nations radio - Yolŋu Radio or TEABBA radio	daily	22%	11%	11%
		weekly	8%	27%	19%
	ABC radio	daily	8%	1%	2%
		weekly	8%	19%	8%
	Commercial radio	daily	6%	1%	1%
		weekly	17%	2%	0%
	Community radio	daily	16%	1%	2%
		weekly	14%	0%	1%
TV access (multi-choice question)	On home TV via VAST satellite		31%	11%	16%
	Broadcast TV with TV antenna		3%	0%	0%
	Subscription satellite TV service		3%	1%	2%
	Online TV streaming (via mobile or internet)		10%	1%	75%
	Only watch TV at places other than home		17%	5%	14%
	Never watch TV		45%	13%	12%
Movies/Online content access (multi-choice question)	Via mobile phone		N/A	N/A	91%
	On computer or tablet		N/A	N/A	1%
	Smart TV connected to internet		N/A	N/A	20%

MAPPING THE DIGITAL GAP



	Memory stick or hard drive connected to TV		N/A	N/A	24%	
	DVDs		N/A	N/A	1%	
VAST TV access status (for those who have access)	VAST service working		30%	9%	15%	
	VAST service not working		70%	91%	85%	
Reason VAST not working	Set-top box not working		97%	76%	88%	
	TV not working		3%	27%	28%	
	Satellite dish or cabling damaged		33%	72%	77%	
	Lost smart card		2%	0%	9%	
	Do not know why service not working		6%	20%	9%	
Most popular sources of TV and media content (multi-choice question)	ICTV	daily	8%	6%	2%	
		weekly	6%	0%	8%	
	NITV	daily	8%	10%	4%	
		weekly	6%	1%	11%	
	ABC TV	daily	12%	8%	7%	
		weekly	3%	3%	11%	
	SBS TV	daily	8%	8%	5%	
		weekly	6%	0%	8%	
	Commercial TV	daily	9%	11%	8%	
		weekly	4%	1%	12%	
	Streaming service	daily	17%	13%	15%	
		weekly	1%	12%	21%	
	YouTube	daily	31%	54%	68%	
		weekly	14%	24%	9%	
	Other	daily	13%	24%	21%	
		weekly	6%	5%	0%	
	Primary sources of news and information	First Nations radio	daily	20%	12%	7%
			weekly	4%	25%	24%
ABC radio		daily	11%	0%	2%	
		weekly	8%	16%	9%	
Other radio		daily	7%	0%	1%	
		weekly	3%	0%	1%	
ICTV		daily	8%	1%	1%	
		weekly	0%	0%	2%	
NITV		daily	8%	5%	1%	
		weekly	1%	3%	2%	
ABC TV		daily	7%	9%	2%	
		weekly	1%	0%	7%	
SBS TV		daily	11%	5%	1%	
		weekly	1%	3%	3%	
Commercial TV		daily	11%	9%	3%	

	weekly	0%	1%	6%	
Facebook	daily	36%	35%	35%	
	weekly	6%	3%	11%	
Other social media	daily	15%	15%	11%	
	weekly	4%	13%	8%	
Online news services	daily	15%	6%	7%	
	weekly	7%	17%	13%	
First Nations newspaper	daily	5%	0%	0%	
	weekly	0%	0%	2%	
Other newspaper	daily	0%	0%	0%	
	weekly	3%	0%	0%	
Noticeboard	daily	15%	14%	16%	
	weekly	45%	25%	19%	
Direct and in-person	daily	71%	88%	75%	
	weekly	10%	7%	16%	
Other (e.g. P.A.)	daily	12%	30%	11%	
	weekly	11%	14%	8%	
Primary sources of emergency information (multi-choice question)	First Nations radio	31%	57%	49%	
	ABC radio	14%	8%	14%	
	Other radio	5%	1%	2%	
	First Nations TV service (e.g. ICTV, NITV)	0%	2%	6%	
	ABC television	16%	12%	15%	
	SBS television	6%	6%	4%	
	Commercial television (e.g. Channels 7, 9, 10)	0%	4%	9%	
	Facebook	29%	33%	35%	
	Other social media (e.g. Twitter, AirG)	0%	5%	12%	
	Online emergency services (e.g. weather/govt app)	0%	8%	18%	
	Online news services	22%	2%	8%	
	Online - other sources	6%	0%	1%	
	Newspaper	2%	0%	0%	
	Noticeboard/posters	24%	20%	13%	
	Direct/in-person	0%	91%	96%	
	Text message (e.g. police / emergency services)	6%	8%	21%	
	Other (e.g. P.A.)	53%	70%	7%	
	Internet Use		2022	2023	2024
	Last time used internet	In the last week	52%	69%	79%
		In the last month	12%	20%	7%
In the last 3 months		0%	3%	1%	
In the last 6 months		2%	0%	2%	
More than 6 months		6%	2%	5%	

MAPPING THE DIGITAL GAP



	Never (Not an internet user)	28%	5%	5%
Regularity of internet use (for those who had used the internet within the last 6 month)	Constant to daily	35%	65%	68%
	Frequent use (weekly)	16%	23%	16%
	Infrequent (less than within week)	21%	6%	10%
	Never (Not an internet user)	28%	5%	6%
Barriers to internet use (multi-choice question for those who used the internet more than 6 months ago or never)	Have no need to use the internet/to use it more often	44%	0%	31%
	Not confident using the internet	42%	82%	72%
	The internet is too expensive	44%	77%	10%
	Concerned about privacy or scams	42%	0%	0%
	The internet is not a priority	29%	18%	22%
	Do not have access to the internet	81%	95%	42%
	Have a disability that prevents me using the internet	0%	0%	20%
	Concerned about inappropriate content / conflict	27%	19%	0%
	Do not have access to content in my own language	36%	76%	18%
Internet location other than own home (multi-choice question)	Place of work or education	30%	19%	11%
	Houses of friends or family	14%	8%	15%
	Public library	14%	9%	12%
	Government office	0%	24%	29%
	Shopping centre, retail, or service business	0%	18%	11%
	Public transport	2%	0%	1%
	Public space with free Wi-Fi	12%	40%	51%
	Other place	7%	6%	1%
Device used to access internet (multi-choice question)	Smartphone	80%	100%	98%
	Desktop computer	32%	16%	8%
	Portable laptop/notebook computer	14%	3%	5%
	Tablet	0%	6%	8%
	Smartwatch	0%	0%	2%
	Fitness wearable	0%	0%	0%
	Smart TV	25%	49%	21%
	Digital media player	0%	0%	1%
	Voice controlled smart speaker	0%	2%	5%
	Games console	0%	3%	9%
	E-reader	0%	0%	0%
Smart appliance/home device	0%	0%	0%	
Fixed Home Internet Connection	Have fixed home internet service	2%	3%	5%
	Do not have fixed home internet service	98%	97%	95%
Type of fixed home internet connection	NBN (including NBN Sky Muster)	100%	100%	100%
	ADSL	0%	0%	0%
	Satellite (other than NBN Sky Muster, e.g. Starlink)	0%	0%	0%

	Community Wi-Fi connected to house	0%	0%	0%	
Monthly household fixed home internet data allowance	50GB to 99GB	28%	47%	33%	
	100GB to 199GB	72%	53%	35%	
	Unlimited	0%	0%	32%	
Frequency of exceeding monthly fixed home internet data limits	1 - 5 times	28%	100%	30%	
	6 - 11 times	72%	0%	0%	
	12 times	0%	0%	70%	
Mobile Broadband Internet Connection (excluding mobile phone services)	Portable modem or Wi-Fi device (eg. a dongle)	3%	2%	0%	
	Sim card in a tablet/laptop	0%	0%	0%	
	Do not have mobile broadband internet services	97%	98%	100%	
Affordability		2022	2023	2024	
Total average household internet expenditure		\$223	\$291	\$369	
Cut back on essential household costs (e.g. food, bills) to afford internet in past 6 months	Rarely or never	65%	35%	20%	
	Sometimes	23%	55%	56%	
	Often	9%	9%	16%	
	Always	3%	1%	9%	
Have compromised on internet speed/ data due to cost in past 6 months		36%	90%	92%	
Digital Ability		2022	2023	2024	
<i>The following sections refer to respondents who had used the internet within the last six months</i>					
% of internet users who had used the internet within the last six months		66%	93%	89%	
Basic digital ability skills	Download and then open a file	Very true of me	54%	14%	24%
		Mostly true of me	25%	25%	22%
	Save files in the cloud and re-open them	Very true of me	41%	14%	21%
		Mostly true of me	12%	23%	17%
	Find and install apps/software	Very true of me	55%	18%	21%
		Mostly true of me	28%	39%	36%
	Identify which apps/software are safe to download	Very true of me	38%	12%	21%
		Mostly true of me	32%	36%	26%
	Open a new internet browser tab	Very true of me	69%	16%	21%
		Mostly true of me	18%	34%	28%
	Complete online forms	Very true of me	36%	7%	21%
		Mostly true of me	27%	30%	24%
	Use shortcuts (e.g. Ctrl-C for copy on a computer)	Very true of me	32%	6%	18%
		Mostly true of me	35%	22%	11%

	Customise the look or sound of a device	Very true of me	60%	13%	23%
		Mostly true of me	23%	50%	33%
	Set and manage secure passwords	Very true of me	66%	19%	19%
		Mostly true of me	22%	31%	39%
	Adjust privacy settings	Very true of me	53%	13%	17%
		Mostly true of me	26%	24%	24%
	Connect to a Wi-Fi network	Very true of me	62%	54%	47%
		Mostly true of me	18%	37%	35%
	Use a mobile phone or device as a Wi-Fi hotspot	Very true of me	63%	58%	44%
		Mostly true of me	27%	20%	29%
Online Search Skills	Choose keywords to search for information	Very true of me	60%	14%	20%
		Mostly true of me	32%	34%	34%
	Find a website I have visited before	Very true of me	59%	12%	21%
		Mostly true of me	34%	32%	34%
	Navigate most websites and apps	Very true of me	50%	13%	18%
		Mostly true of me	37%	30%	34%
	Adapt to Website/App Changes	Very true of me	46%	10%	14%
		Mostly true of me	38%	19%	24%
	Use a range of search techniques	Very true of me	58%	13%	16%
		Mostly true of me	33%	29%	28%
Check information trustworthiness	Very true of me	40%	6%	15%	
	Mostly true of me	26%	21%	23%	
Control personal information collected	Very true of me	35%	5%	18%	
	Mostly true of me	31%	20%	11%	
Advanced Digital Skills	Decide what to share online	Very true of me	48%	7%	21%
		Mostly true of me	20%	30%	32%
	Act appropriately online	Very true of me	50%	9%	19%
		Mostly true of me	21%	28%	32%

	Manage who sees my content	Very true of me	68%	33%	28%
		Mostly true of me	16%	38%	36%
	Check if somebody is who they say they are	Very true of me	48%	6%	23%
		Mostly true of me	32%	22%	16%
	Set up a group chat or video call	Very true of me	54%	32%	31%
		Mostly true of me	17%	28%	22%
	Send/receive email	Very true of me	56%	19%	25%
		Mostly true of me	21%	24%	26%
Creative Skills	Make basic changes to other's online content	Very true of me	28%	6%	10%
		Mostly true of me	14%	13%	8%
	Create a website	Very true of me	22%	4%	4%
		Mostly true of me	14%	8%	3%
	Create something new from existing images/audio/video	Very true of me	35%	8%	12%
		Mostly true of me	14%	13%	16%
	Post a video	Very true of me	61%	7%	20%
		Mostly true of me	12%	25%	24%
	Comment on a blog, website or forum	Very true of me	40%	5%	20%
		Mostly true of me	21%	21%	24%
	Consider laws before posting or copying content	Very true of me	35%	2%	13%
		Mostly true of me	12%	7%	7%
Smart Skills	Connect smart devices to internet	Very true of me	39%	17%	23%
		Mostly true of me	26%	45%	22%
	Operate smart devices via apps	Very true of me	32%	8%	16%
		Mostly true of me	33%	30%	24%
	Adjust privacy and security settings	Very true of me	40%	5%	12%
		Mostly true of me	13%	16%	25%
	Customise look or sound of a device	Very true of me	40%	4%	14%
		Mostly true of me	18%	27%	19%

Online activities used in past six months	Used the internet for learning or study	49%	26%	35%
	Used banking websites or apps to manage money	78%	63%	65%
	Accessed a government service	65%	55%	58%
	Booked or used a health service	14%	16%	13%
	Compared prices of products or services	49%	33%	32%
	Looked for work	36%	22%	18%
	Looked for housing/accommodation	19%	22%	18%
	Buy or sell online (website or app)	42%	30%	19%
	Tracked online order delivery	47%	41%	32%
Social Skills	Connected with people online	72%	47%	54%
	Kept in touch with family or friends	82%	56%	71%
	Make or reconnected with friends online	81%	47%	48%
	Joined or took part in an online group	42%	16%	35%
	Used online entertainment services	84%	91%	95%
	Attended online music, arts or cultural event	26%	23%	34%

2024 Comments

Need for mobile service upgrades

- + We want an ongoing connection, telecommunications is now an essential service
- + Stronger connection- sick and tired of bad connection, need to use for online banking
- + Need internet upgrade, fast internet
- + The internet is slow at our area



We want a proper network coverage. The population is growing but the network hasn't caught up. Visitors think they are in a third world country!

- + We need signal better here, too slow
- + Better Telstra at Buthan and need proper Wi-Fi
- + Make it proper one so it doesn't go off all the time. It's an essential service and we're missing out. It's not fair!
- + The mobile is not working, needs fixing
- + Telstra drop-down unexpectedly and slow during year - internet access bad but worst at Christmas time
- + I've just got Skymesh for our house because the mobile signal is too slow and weak
- + We want better mobile reception and free Wi-Fi here.
- + Need upgrading on the Telstra and internet
- + Mobile still not working. We've been waiting too long



Make it proper one so it doesn't go off all the time. It's an essential service and we're missing out. It's not fair!

Demand for public Wi-Fi

- + Need internet Wi-Fi everywhere
- + Better Wi-Fi hotspot
- + We really need to get network Wi-Fi
- + Need internet to house and TV channels
- + We need internet at the house
- + More free Wi-Fi - use free Wi-Fi at ALPA
- + We want free wi-fi because pre-paid vouchers are too expensive
- + I want home internet because I always run out on the recharge vouchers
- + We want Wi-Fi at our house to make it easier for kids to use
- + We want Internet at our house
- + We need free Wi-Fi here to access services when we run out of credit
- + We need satellite systems within our community
- + We need wi-fi and more digital training in language
- + Vital we get emergency Wi-Fi or telecommunication especially during cyclone
- + Need better Wi-Fi and hotspots

Homeland communications



We live on homeland and the Activ8me phone not working, only Wi-Fi. We have a VAST dish but it's too rusty, TV doesn't work

- + We need better phone on the homeland. The Activ8me phone needs fixing. The phone doesn't work but Wi-Fi is working but too slow. Luckily we get mobile here
- + Need Wi-Fi and tv to work on outstation
- + I live at the homeland. The Wi-Fi phone has not worked for a long time

Affordability

- + We need cheaper recharge, it costs too much
- + Sometime no signal at all for day - need to fix up
- + I'm saving up to get a phone. I also want to get Starlink at our house
- + I want some free data from Telstra; other people get it
- + Saving up for another mobile phone
- + I share a phone with my grandson. It's too much to buy another phone

Demand for television services

- + Have antenna for tv instead of watching online - like the olds when just had aerial
- + VAST box not working since they put it in - long time need help with tv
- + Maintenance program for the TV VAST system make easy to fix
- + Need Foxtel or VAST to connect the TV
- + Need VAST free-to-air TV working

- + We just got a new VAST set top box, it cost about \$600, it is too expensive. But it's good to have TV working again. We needed help to activate the smart card from one of our family.
- + We would like TV again but the set top box is too expensive. We want to see what happening around the world
- + We want TV working and internet at our house in Buthan
- + We want TV working. It costs too much to get TV on the phone

Digital ability

- + I have hearing problems, I never learnt internet
- + I would like someone to help Elders to learn to use phone and internet
- + I would like to learn more about how to use online services
- + I never learnt to use internet. It would be good to have a place to learn
- + Help for online banking
- + I need help from my grandchildren to use the online services like banking
- + I need some help to learn to use internet and phone safely
- + I want to learn to use internet. I get some help at ALPA training
- + It would be good to get internet training to use apps and know about scams



It would be good to get internet training to use apps and know about scams

Other comments

- + I have been a community leader. We need better communications here. We want to stop the gambling online, it's wasting our money
- + I might go back to do radio broadcasting because no one is doing that job
- + Bigger range for mobile - iPhone 15 please



Figure 40: Kieran Hegarty and co-researcher Wesley Dhurrkay doing a survey with Mark Gelinda

Appendix 2: Community Communications Audit

About the community	
Community name	Galiwin'ku
Alternate name	Elcho island
Traditional owners/ Language group	Yolŋu Matha (Djambarrpuyŋu, Gupapuyŋu, Djinang)
Location (Coords)	Longitude: 135.5664 Latitude: -12.0235
Region	East Arnhem
LGA/Shire/ Regional Council	East Arnhem Regional Council
Land Council	Northern Land Council
Regional Service Centre, distance	Nhulunbuy – 150 km east (40 min flight); Darwin – 550 km south-west
Remoteness (ABS)	Very remote
Demographic data – ABS 2021	
ABS link – All persons	https://www.abs.gov.au/census/find-census-data/quickstats/2021/SAL70106
ABS link – Aboriginal and/or Torres Strait Islander people QuickStats	https://www.abs.gov.au/census/find-census-data/quickstats/2021/ILOC70600401
Total population	2,199
Aboriginal and Torres Strait Islander population	2,027 (92.2%)
Gender breakdown	49.6% male / 50.4% female
Median age / breakdown	25 (All persons) / 23 (ATSI population); Children aged 0–14 years made up 26.8% of the population and people aged 65 years and over made up 3.1% of the population
Families	474 (All persons) / 444 (ATSI population)
Language group – number of first language speakers	Djambarrpuyŋu (81.6%), Galpu (1.5%), Australian Indigenous Languages (1.2%), Gumatj (0.8%), Warramiri (0.6%)
% ATSI people who speak an ATSI language	96.90%
% who speak only English at home	4.8% (All persons) / 0.2% (ATSI population)
Employment levels	In the labour force – 616 (38.1%); Not in the labour force – 911 (56.4%); Not stated – 90 (5.6%). Of those in the labour force, 40.9% were employed full time, 19.0% part-time, 8.0% were away from work and 32.5% were unemployed
Education levels – % of people attained	Bachelor's degree or above – 4.5%; Diploma/Adv Dip- 2.2%; Cert 3/4 – 5.7%; Year 12- 19.1%; Year 11 – 15.2%; Year 10 – 17.2%; Cert 1/2; 0.4%; Year 9 or below – 17.3%; No education attainment – 0.8%; Not stated – 17.9%
Number of buildings	309 occupied private dwellings, 34 unoccupied

Housing suitability for ATSI households	Average number of people per household – 5.6 (all households) / 6.3 (ATSI households); Average number of people per bedroom – 2 (ATSI households)
Median Weekly ATSI household income	\$1,913 (All persons) / \$1,812 (ATSI population)
Median personal income – over 15 years	\$352 (All persons) / \$338 (ATSI population)
Average weekly rent	\$200
Number motor vehicles per dwelling	63.2% – none; 25.7% – 1 motor vehicle; 6.9% – 2 motor vehicles; 1.3% – 3 or more motor vehicles

Community services and plans

Community layout plan	See Bushtel: https://bushtel.nt.gov.au/profile/492
Agencies in community	EARC Council office / post office / public library; Centrelink; Two ALPA (Arnhemland Progress Association) stores and CDP service; Yalu offices; Baby Hub – Territory Families (NTG); Hope for Health; Miwatj Health; Shepherdson College – up to year 12; Marthakal Homelands Resource Centre; Galiwin'ku Primary School; Galiwin'ku Depot – EARC; Elcho Island Arts; Ngalkanbuy Wellbeing Centre; Galiwin'ku Aged And Disability Service; Galiwin'ku Women's Space; Marthakal Housing Services; Marthakal Motel and Contractors Quarters (EARC); Marthakal Health; Marthakal Rangers; Takarrina Tuckerbox; Nhawe Manymak Café; Elcho Island Airport
Visiting agencies	NLC, NTG, Anglicare (providing financial literacy and support), AMSANT, East Arnhem Real Estate (provide housing management)
Community development plans	See Bushtel: https://bushtel.nt.gov.au/profile/492 ; Yalu AC have a Strategic Plan mapping to CTG targets including digital inclusion (Target 17)
Power supply type in community	Diesel generator, solar farm near airport; power outages reported as a key factor in communications outages
Use of smart power recharge	Yes

Types of communications available

Public phones – number/ location	8 (several not working in 2023)
Home phones – number	No reports of community houses with home phones
Mobile services, provider, location of base station	4G/5G mobile base station in town centre behind library (upgraded to 5G on 29 November 2024 after 3G switch-off on 30 October)
Coverage description	Improved coverage in Galiwin'ku since 5G upgrade, with slightly improved reception at Buthan and Beach Camp, however limited signal on outskirts of town
Fibre to community	No (microwave link at Mapuru connected to East Arnhem Fibre Network, upgraded in 2024)

ADSL – number of connections	44 of 367 ports used (as of 2022, no updated data)
Satellite services – number, locations, provider	Starlink and Sky Muster taken up by many staff houses and agencies, but very few community households due to cost
UHF or HF Radio	HF for aircraft and shipping; UHF used by Marthakal Rangers
Communications funding programs	Regional Connectivity Program funding to Telstra (\$2.77 million) for Arnhem Fibre Upgrade Project, with upgraded transmission equipment at Telstra sites across East Arnhem Land, increasing backhaul capacity from 5 Gbps to 100 Gbps (completed 2023)
Any planned upgrades?	Telstra public telephones boxes to provide free Wi-Fi; small cell mobile service completed in Rorruwuy homeland on mainland, planned for Banthula on Elcho Island and Mapuru on mainland (NTG Remote Small Cells program)
Emergency information system	No
Telemetry network	All generators, pumps, water chlorination etc monitored via telemetry; TEABBA use a remote monitoring system for RIBS broadcast equipment
Media services available	
Radio services broadcast – AM or FM	88.9 FM ARDS / Yolŋu Radio; 105.9 FM ABC Darwin; 106.7 FM TEABBA (not working currently); 107.5 FM – Vision FM
TV services – local broadcast, number of DTH services, number working	All TV services via VAST direct-to-home; East Arnhem Real Estate (tenancy managers) estimates 90% of community houses do not have TV working
RIBS radio station – location, staff, roles	No RIBS station currently active
RIMO – regional provider	TEABBA – Top End
Other media services – newspaper etc	NLC Land Rights News (no sign of distribution)
Community access facilities	
Internet computer access facilities	10 computers in EARC-run computer room and library in Sport and Rec Hall; 5 computers and printer at ALPA Higher Education Centre, Buthan (running off Starlink); 10 laptops donated to Galiwin'ku Women's Space by Work Ventures
Public Wi-Fi availability	NBN Wi-Fi mesh network (installed June 2025) provides free external Wi-Fi across Galiwin'ku and Buthan plus 5 indoor sites; EARC provide free Wi-Fi in the library and Sport & Rec Hall; free Centrelink Wi-Fi provided by DHS
Training / skills data	
Nature and provider of training programs	Cert 1 in Business Skills (through ALPA Higher Education)
Training options available – school, TAFE, CDP, other	ALPA Higher Education Centre works with Charles Darwin University and Batchelor Institute
Any workplace digital skills training – rangers, art centre, media, store etc	ALPS provide digital skills training for CDP participants

Appendix 3: Photos of 2024 Research Activities



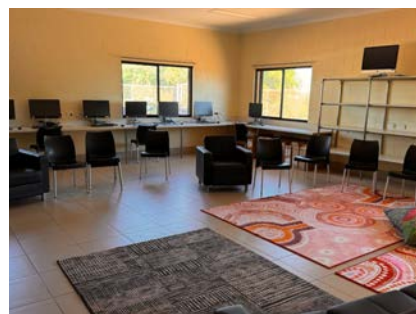
Figures 41 & 42: The research team—RMIT team with Yalu CEO Anahita Tonkin and co-researchers; Kieran Hegarty doing survey with resident Mark Gelinda



Figures 43 & 44: Kieran and Lyndon with Stephen Maliku Dhamarrandji and wife Anita Golung at Ngayawilli homeland; Activ8me Wi-Fi phone at Ngayawilli homeland



Figures 45 & 46: Gumurr Marthakal Rangers base; Shepherdson College entrance



Figures 47 & 48: Books in old library awaiting relocation to new library in rec hall; New library space in rec hall