

September 2022



# MAPPING THE DIGITAL GAP

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

+ + + + +  
+ + + **WUJAL WUJAL, QUEENSLAND**  
+ + + **COMMUNITY OUTCOMES REPORT**  
+ + + **2022**



## Acknowledgement of Country

We respectfully acknowledge the Eastern Kuku Yalanji people, the traditional owners for Wujal Wujal, 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 being undertaken through RMIT University as part of Centre of Excellence for Automated Decision Making and Society (CE200100005), with funding support from 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, Holcombe-James, I, Ormond-Parker, L, Hawkins, L (2022) Mapping the Digital Gap: Wujal Wujal Queensland Community Outcomes report 2022. ARC Centre of Excellence for Automated Decision Making and Society: RMIT University, Melbourne. DOI: 10.25916/ah26-m948

## Acknowledgements

We would like to thank the following key contributors to this research:

### Community Research Partner

Wujal Wujal Aboriginal Shire Council (WWASC)  
<https://www.wujalwujalcouncil.qld.gov.au/>

WWASC CEO: Stephen Wilton

WWASC Mayor: Bradley Creek

WWASC Director of Works: Victor Mills

Indigenous Knowledge Centre Coordinator: Kylie Mills

### Community Co-Researchers

Marie Shipton and Lexton Nandy

### Research Participants and Stakeholders:

Thank you to all the community residents and local agency staff who generously participated in the surveys and interviews, providing the personal experience to make this research meaningful. We conducted 41 community resident surveys, 12 interviews with local residents and 9 interviews with stakeholder agencies including:

- + Wujal Wujal Aboriginal Shire Council
- + Indigenous Knowledge Centre
- + Wujal Wujal Justice Group
- + Wujal Wujal Primary Health Care Centre
- + Wujal Wujal Police
- + Bana Yirriji Art Centre
- + Bloomfield River State School
- + Wujal Wujal RIBS/ Queensland Remote Aboriginal Media
- + State Library of Queensland

### Wujal Wujal research trip dates:

28<sup>th</sup> March to 1<sup>st</sup> April 2022

### RMIT University researchers:

Dr Daniel Featherstone

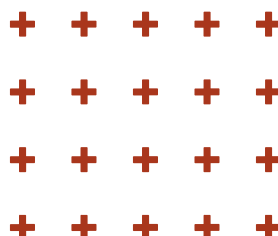
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**Cover photo:** Bloomfield River, Francis Walker

**Other photos:** Daniel Featherstone



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Figure 1: Photo of RMIT research team in Wujal Wujal - Dr Daniel Featherstone, co-researcher Lexton Nandy, Dr Indigo Holcombe-James, co-researcher Marie Shipton, Dr Lyndon Ormond-Parker, Kylie Mills, and Tidja

## 1. EXECUTIVE SUMMARY

Wujal Wujal is an Aboriginal community located on the Bloomfield River in Cape York, North Queensland. The traditional owners are the Eastern Kuku Yalanji. It was previously known as the Bloomfield River Mission, which was established by Lutheran missionaries in 1886. In 1979 it was re-named Wujal Wujal, after the sacred waterfalls nearby, and the Wujal Wujal Aboriginal Council was formed to manage the community. This became the Wujal Wujal Aboriginal Shire Council in 2004.

Wujal Wujal is located about 71 kilometres south of Cooktown, 346 kilometres north of Cairns by the inland road, and 2,017 kilometres north-west of Brisbane. The Wujal Wujal Aboriginal Shire Council (WWASC) Local Government Area (LGA) area covers approximately 64 hectares of land along the Bloomfield River, and is bounded by Cook Shire in the north, and Douglas Shire in the east, south and west.



Figure 2: Wujal Wujal Aboriginal Shire Council.

**The population of the Wujal Wujal Aboriginal Shire is 276 according to the 2021 Australian Bureau of Statistics (ABS) Census, however WWASC surveys have found that the actual population is much larger, at approximately 550 people.**

**The ABS results identified that 258 (94%) are Aboriginal and/or Torres Strait Islander people, with a median age of 29 and median personal income of \$332. There are 73 occupied private dwellings with an average of 3.4 people per household.**

Our first research visit to Wujal Wujal was undertaken from the 28<sup>th</sup> March to 1<sup>st</sup> April 2022. The RMIT research team worked with community research partner Wujal Wujal Aboriginal Shire Council (WWASC) and Indigenous Knowledge Centre (IKC) Coordinator Kylie Mills and co-researchers Marie Shipton and Lexton Nandy. The team had a highly productive week engaging with local residents and agencies discussing telecommunications use, digital inclusion, and media use in Wujal Wujal and surrounding communities. The team would like to thank all

residents and agency staff who participated in the research and made us feel very welcome.

Based on 41 surveys and 21 interviews with residents and stakeholders, this report outlines the findings from our initial visit and highlights the current access and use of media, communications and online services and the digital inclusion challenges in Wujal Wujal and surrounding communities.

Like other remote First Nations communities, Wujal Wujal has typically low household incomes and overcrowding in many households. Wujal Wujal faces a range of barriers to digital inclusion and affordable and reliable use of media and online services.

This report is intended to assist WWASC and community agencies to better understand the key barriers to digital inclusion in Wujal Wujal. It is designed to provide a basis for a local digital inclusion plan. This report along with a digital

**41**  
surveys conducted

**21**  
interviews conducted  
(9 agency representatives and 12 community residents)

inclusion plan will assist in identifying infrastructure and program needs, to enable a targeted approach for advocacy with government and industry stakeholders.

This report is also part our commitment to Indigenous data sovereignty, to ensure data collected and research findings from this project are available to the participating communities to use for their own analysis, planning and advocacy. The report will be updated following research visits in 2023 and 2024.

## Key Findings

### 1. 4G mobile coverage in Wujal Wujal is patchy, congested and unreliable

While 4G mobile is the primary means of phone and Internet access in Wujal Wujal, it has patchy coverage across the community (especially for houses south and west of the town centre) and surrounding area and was described as unreliable with high levels of congestion during peak use periods. There were reports of regular dropouts and low penetration inside houses. Several people cited the significant impact of a 10-day outage in 2020.

### 2. Wujal Wujal residents are predominantly reliant on mobile telephony and prepaid access

- + 100% of survey respondents primarily use a mobile phone for making phone calls, with only one survey respondent saying they did not own or share a mobile phone.
- + 90% are reliant on pre-paid mobile services.
- + Only 2 of 40 survey respondents (5%) have a fixed line home telephone.

### 3. About a quarter of residents surveyed have a home Internet connection

73% of households do not have any form of fixed home Internet (i.e. NBN Sky Muster, ADSL) with 27% having an NBN Sky Muster service.

### 4. There is a relatively high level of digital ability in Wujal Wujal

28 of 40 survey respondents (70%) use the Internet regularly or semi-regularly, with 30% of survey respondents rarely or never using the Internet. Of the 70% of Internet users:

- + 89% had used banking websites or apps in the previous 6 months, and 86% had accessed a government service online;
- + 86% had used the internet to keep in touch with family or friends in the previous 6 months, and 86% had used entertainment services (e.g., streaming video/music, playing online games);
- + 79% responded that the statement 'I know how to send and receive emails' is 'very true' of them; 64% chose 'very true' to the statement 'I know how to open a new internet browser tab', and 64% chose 'very true' to 'I know how to connect to a Wi-Fi network'.

### 5. Affordability is a key concern constraining Internet access and use of digital services

- + 54% of regular Internet users indicated the main reason they do not use the Internet more often was "The Internet is too expensive for me".
- + 40% had sacrificed essential household costs (food, bills, etc.) to afford Internet access.
- + The average household cost for mobile services is \$117/month, with 16% of households paying over \$200/month.

The full survey results are available in Appendix 1 (Note that the survey results are from raw data and have yet to be fully processed). A detailed audit of demographics, community information, and communications and media services available in Wujal Wujal at the time of this research is provided in Appendix 2.



“We'd like to see greater connectivity where people ... [can] stay connected to the world. Whether it's to do their personal online banking, or just personal communications to family ... or whatever they want to do ... So reliability and efficiency, and price isn't going to send them broke ... we need to have more service provided throughout the Cape so that the competition drives those costs down so that people have options.”

- Stephen Wilton, CEO Wujal Wujal Aboriginal Shire Council

## 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, Thomas et al., 2021) 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: they allow comparisons across different social groups and geographic areas, and over time.

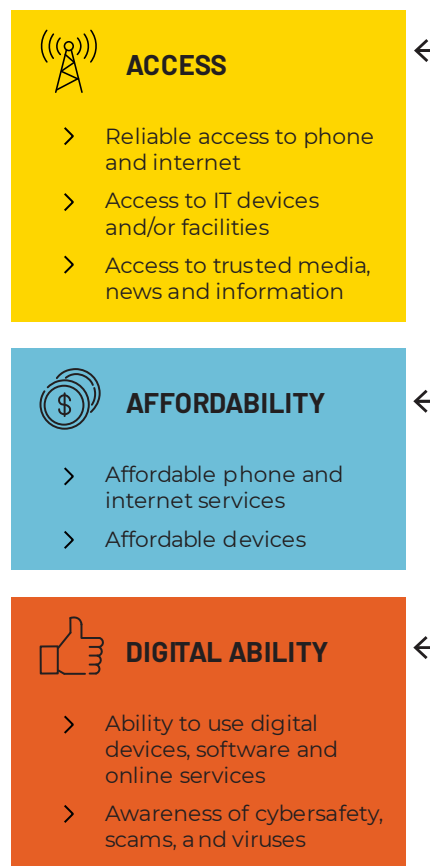
People living in Australia's 1100 remote Indigenous communities are likely to be among the most digitally excluded Australians. The ADII has previously found that people in remote communities often have extremely limited access to digital infrastructure and services and encounter very high costs for Internet access, especially in relation to their income (Thomas et al., 2018; Thomas et al., 2019).

The Mapping the Digital Gap project uses an amended version of the survey that underpins the ADII (the Australian Internet Usage Survey) to collect digital inclusion data. The Mapping the Digital Gap survey results will be available on the ADII website, with interactive charts that will provide insight into community-specific results as well comparison with other participating communities and national results collected by the ADII.

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

The Mapping the Digital Gap project is targeted at remote First Nations communities and does not include digital inclusion of First Nations people living in urban and regional centres. However, it is hoped this project will provide data that will help in measuring the scale and nature of this digital gap over time, as well as insights into strategies to address key obstacles and reduce the digital gap for all First Nations people.

### DIGITAL INCLUSION



## 2. INTRODUCTION

Access to and affordability of communications services has been identified as a critical issue for the Cape York region, with a 2021 Torres Cape Indigenous Council Alliance report (Babacan et al., 2021) identifying reliable telecommunications as a critical element to regional sustainability across Cape York and Torres Strait.

Despite nearly 20 years of mobile communications in Cape York, from 2G/CDMA to 3G and 4G, and the availability of NBN Sky Muster services since 2016, many of the issues of coverage, access and affordability reported in earlier studies of mobile and ICT use in Wujal Wujal (Brady et al. 2008<sup>1</sup>, Brady and Dyson 2010<sup>2</sup>, 2016<sup>3</sup>) remain similar today. Residents still rely primarily on pre-paid mobile access and pay premium rates to use online services.



**“We need a good digital system in place. [It’s] been a stop and go thing in Wujal Wujal, slow service ... [We] want to make it easier for people to access online services like Centrelink or MyGov or YouTube and other things.”**

**- Bradley Creek, WWASC Mayor**

The key difference now is that it is increasingly difficult to access essential services, such as online government and banking services, as well as communications and entertainment, without having reliable Internet access and an adequate level of digital literacy. The cost burden to access online government services is shifting to a user-pays model, further excluding people on very low incomes and vulnerable people from the very services needed to help address these barriers.

The increase in demand for digital services is far greater than the supply of infrastructure enabling access, leading to high levels of congestion. The prohibitive costs of fast broadband and generous data allowances are creating a growing digital divide at the local level.



**“The communications we find is a very big struggle in this community due to availability I guess of resources, and the supply of the network bandwidth in the community, which is failing us greatly ... we should have the same thing like they have out in Cooktown or Cairns or everywhere else, where people have that access to it when they need to.”**

**- Victor Mills, Wujal Wujal Aboriginal Shire Council**

Telstra is the only mobile and fixed line telecommunications provider in Wujal Wujal. While most of Wujal Wujal community has 4G mobile coverage, the location of the tower on Mt Pearce leads to coverage ‘shadow areas’ in the south and west parts of the community, settlements in hilly terrain to north and south, and reduced signal during rain or low cloud. The 4G service is described by residents as unreliable with regular dropouts,

<sup>1</sup> Brady, F., Dyson, L.E., & Asela, T. (2008). Indigenous adoption of mobile phones and oral culture. In F. Sudweeks, H. Hrachovec & C. Ess (Eds.), Proceedings of the Sixth International Conference on Cultural Attitudes towards Technology and Communication (CATaC), Nîmes, France, June 24-27, pp. 384-398.

<sup>2</sup> Brady, F., and Dyson, L. E. (2010). A comparative study of mobile technology adoption in remote Australia. Cultural Attitudes Towards Communication and Technology. Perth: Murdoch University.

<sup>3</sup> Brady, F., and Dyson, L. E. (2016). Exploring the Contribution of Design to Mobile Technology Uptake in a Remote Region of Australia. In International Conference on Culture, Technology, and Communication (pp. 55-67). Springer, Cham.

congested during peak use periods, and low penetration inside buildings. Several research participants described the impact of recent outages, including a 10-day outage of mobile or fixed line communications in 2020 caused by cable damage.



“[Connectivity in Wujal Wujal is] Bad. Nothing. No. Especially when we have wet season. Everything not working ... we can't ring out. We only just got to be in the house, no contact, you know ... Wet season goes here in Wujal from December right up to [April/May] ... it's a long time.”

– Kathleen Walker, elder/ traditional owner

Natural disasters, such as cyclones or floods, as well as communications or power failures, have had a significant impact in Wujal Wujal in previous years, resulting in inability to coordinate emergency procedures, access cloud-based systems, access EFTPOS and ATMs to access food and goods, and provide critical services. These issues led the WWASC to set up the award-winning Wujal Wujal Emergency Management Network in 2017, providing emergency Wi-Fi and information services throughout the community. Following a significant flood event in 2019, WWASC also commissioned the development of a flood monitoring and early warning system, which is currently being finalised. However, both systems rely on costly communications infrastructure and backup power generation and storage, with operational costs being a financial burden for Queensland's smallest Shire.

The Internet access options available in Wujal Wujal are 4G mobile coverage, Sky Muster satellite or Wi-Fi available at the Centrelink office and Indigenous Knowledge Centre during opening hours. Despite reported issues of limited coverage and congestion levels on the 4G network, there is limited uptake of Sky Muster services beyond local agencies and staff housing.

Despite these connectivity challenges, there is growing demand for broadband data by residents and agencies, especially following COVID-19 restrictions on travel and services, which led to increased use of digital services for tele-health, and online meetings and training. As elsewhere, during the lockdown periods over the last two years there was a much greater demand on Internet for accessing news, services and information, as well as mobile and social media communications and entertainment. Young people are particularly heavy internet users with streaming services (YouTube, Netflix, Stan, TikTok, Spotify etc.), gaming and other high-bandwidth applications increasing in popularity, with some individuals paying high monthly bills for unlimited data plans. Limited access to free-to-air TV services, due to VAST direct-to-home satellite services not working in most households, is exacerbating the demand for online streaming and subscription services, and further privatising the costs of entertainment.



“It's vital that our kids are digital learners and are growing up in an electronic world where they are competent with recent technology ... [However our students are not] digitally literate up to the standard of other parts of Australia. Not because the community doesn't want it. Purely because they haven't had the opportunity to access it like other areas of Australia”

– Reece Tomey, Principal, Bloomfield River State School

The Bloomfield River State School (BRSS) struggles with poor connectivity impacting use of many online learning applications and resources. This is despite a new mobile tower being installed next the school recently (currently awaiting connection into the school online system). BRSS, 5.5 km north-east of Wujal Wujal, has

about 95% Indigenous students (of about 60). BRSS was one of four schools in Queensland that ran an offline version of the NAPLAN test due to poor connectivity (Interview with BRSS Principal Reece Townley, 2022).

Limited communications access also impacted on schooling outcomes during COVID-19 lockdowns. Many young people had to stay home from school or boarding school but struggled to engage in online learning due to lack of home Internet access, high cost of pre-paid data, lack of devices and limited digital skills. For those returning to boarding school, this has left them behind in their studies.

Staff from local agencies in Wujal Wujal talked about the importance of having reliable communications and the need for upgraded infrastructure for effective service delivery. Some described challenges in using cloud-based database systems for financial and client records management, remote servers, and online administrative systems, particularly as congestion levels on 4G and ADSL services increased throughout the day. As a result, those agencies with access to both fixed line and satellite services described alternating between the two depending on which was working best at any time.

There is relatively high level of digital literacy and cyber-safety awareness in Wujal Wujal. Residents have access to online computers and support to use digital services at the Indigenous Knowledge Centre and Centrelink office, as well as public Wi-Fi in both spaces during office hours. However, there is demand for more digital skills training and support, particularly by elders and those needing to improve or develop skills for the workplace. Most people told us they would prefer one-on-one mentor-style learning, using a 'just-in-time' approach as support is needed with specific applications or tasks, in contrast to a group workshop model which may include content that is not relevant or timely. There is demand for awareness-raising around issues such as scams, stranger danger for young people on social and gaming platforms, misinformation, and other cyber-safety issues. There is also demand for remote access to online education, tele-health and IT support for small businesses and local agencies.

Research participants also requested facilities and support for music, media, and cultural content production. There is a significant existing collection of language and cultural heritage recordings in need of archival storage and digitisation and called for establishing a cultural centre to enable sharing of cultural knowledge and local creative content with visitors and for inter-generational knowledge transfer.

In order to address the media and communications needs identified in this report, and support improvements in digital inclusion and service delivery, it is recommended that a Digital Inclusion Plan be developed for Wujal Wujal. Based on the audit of existing media and communications infrastructure and services outlined in section 3 (and Appendix 2), current planning (section 4) and analysis of surveys and interviews with community residents and stakeholders in section 5, a list of potential strategies for consideration for a Digital Inclusion Plan in section 6. As part of our ongoing research work with the Wujal Wujal community in 2023-24, the Mapping the Digital gap team can assist with development of this plan.



Figure 3: Wujal Wujal Falls

## 3. MEDIA & COMMUNICATIONS IN WUJAL WUJAL

### Existing Telecommunications Services

**Backhaul to community:** There is Telstra fibre optic to Wujal Wujal from Cooktown 71km away, connecting to the exchange and 4G tower, and communities along the route (Rossville, Helenvale, Bloomfield, Ayton).

**Mobile coverage:** The 4G mobile coverage from Mt Pearce tower only covers the central town area, with patchy or no coverage to the north and south of the town. There is a separate 4G tower at Ayton, 7.5km NE of Wujal Wujal, and a newly installed 4G / 5G small cell tower beside the Bloomfield River State School 5.5km from Wujal Wujal. There is limited 3G available in some areas along the road north towards Ayton, however due to hilly terrain several areas have poor connectivity (especially south of Wujal Wujal and China Camp). Telstra have plans to install a 4G booster at the Health Care Centre to address low coverage to housing in the west side of town and facilities such as the art centre, but the planned installation date is not known.

**Landlines:** Landlines are available to most service agencies and some residences, however the vast majority of residents surveyed do not have landlines and use mobile for primary phone use.

**ADSL access:** Telstra still provide ADSL services to existing customers, mostly agency building and staff houses. No new ADSL services are being connected.

**Fibre to the premises:** The WWASC (Shire) building and Wujal Wujal Health Care Centre both have direct fibre connections, with WWASC sharing this service via point-to-point microwave links to the depot, IKC, post office, art centre, and staff houses. All other community agencies and residences are reliant on ADSL via copper network or satellite services.

**Community networks:** WWASC has a fibre connection a hybrid network and managed server, with point-to-point microwave links to the Shire depot, IKC, post office, art centre and staff houses. The current service is a 20Mbps business grade service, which they are wanting to upgrade to 50Mbps, but there is not network capacity to do so. In addition, WWASC pays \$4000/month for a Telstra Iterra satellite service as backup in case of failure of the fixed line service. These communications services cost the Shire about \$10,000 a month, a significant burden for a small council with low rates income.

**Public Phones:** There is one public phone near the Rural Transaction Centre (RTC) in the middle of town. Another is located in the town of Ayton, 10km away. According to survey participants, the public phone has limited use, despite now being free to use.

**NBN services:** Wujal Wujal is designated as a satellite delivery zone under NBN planning. However, due to the lack of a pre-paid billing option, there has been very limited take-up of Sky Muster services by community residents. It is estimated that 12-15 (of 73) residences have Sky Muster services, with these primarily being households of agency staff.

**Wi-Fi:** Free Wi-Fi vouchers are available at the IKC during opening hours (via a voucher system) and from the Centrelink office for access to Centrelink, government, and banking services.



**550**

Population estimated by WWASC (276 according to ABS 2021)



**94%**

Aboriginal and/or Torres Strait Islanders (ABS 2021)



**346km**

Nearest major regional centre- Cairns



**2017km**

Nearest capital city - Brisbane



**73**

Private dwellings



**3.4**

Average people per household

*NBN Wi-Fi Service:* Since our visit, NBN have installed a free public Wi-Fi hotspot (on 25/7/22) at the RTC through its Communities in Isolation program, with free services provided via Sky Muster Plus satellite backhaul until June 2024.

*Emergency Communications:* WWASC established the *Ngana Muruku Jundkurjiku Janay Wujal Wujal Emergency Management Network and Community Forum* in 2017 to address the issues of being isolated without communications or power during natural disasters (cyclones, flooding etc). WWASC won the 2018 National Award for Local Government for this project. Following floods in 2019, this system is being augmented to include a flood monitoring and early warning system designed to provide 4-5 hours advance notice of floods (currently being finalised). This has also received a Queensland Government Community Resilience Award. However, operational costs are a significant concern for WWASC.

*Telemetry:* WWASC also run a telemetry system for monitoring water pumps, sewerage plants and other municipal services around the community. The system runs off the 4G network with up to 72 hours backup via the Telstra Iterra satellite system.

*HF/UHF Radio:* There is some use of HF or UHF radio by WWASC, Police, Rangers, and SES, including for land and sea rescue, but satellite phones are more commonly used by police and other agencies when working in remote locations.

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## Media Services

*Radio services:* Black Star Radio 107.7FM with Wujal Wujal RIBS operating from 7.30am to 4pm weekdays, ABC Far North AM radio service (faint signal, broadcast from Cairns).

*TV services:* Free to air TV is only available via VAST satellite direct-to-home, however in many houses the VAST service is not working due to lack of maintenance or set top boxes not working. The cost of replacing these is not insignificant, at approximately \$450 at the local store. Some houses have subscription satellite TV services (Foxtel or Austar), especially to access sports and movies.

*Local news:* WWASC runs a Facebook page with local news or activities and distributes a monthly newsletter which provides health and COVID-19 updates, upcoming events/meetings/visits in community, public holidays, school events, messages from police, Justice Group etc and local history. Information is also shared on community noticeboards and a new digital sign located by the RTC.

*Newspaper:* Ayton Store sells the Torres and Cape News but there are no First nations newspapers available (e.g. Koori Mail).

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## Access and Support Facilities

*Community Access facilities:* The IKC is open 8am -3pm Monday to Thursday and provides three community access computers, library facilities, language and cultural projects. The IKC also provides IT support and runs occasional training workshops through Deadly Digital Communities and Tech Savvy Seniors (both coordinated by State Library of Queensland). The Centrelink office at the RTC is open 2.5 hours a day and has one computer available for accessing Centrelink, banking and other government services.

*IT Support:* Support services for accessing and using online services provided at IKC, Centrelink office and by Wujal Wujal Justice Group

*Mobile phones and recharge sales:* Available from Wujal Wujal store, Post Office and Ayton store.

## 4. CURRENT PLANNING AND PROGRESS

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WWASC currently have a network managed server on fibre connection, with point-to-point microwave links to the depot, IKC, post office and art centre. WWASC has also set up a Telstra Iterra satellite backup solution in case the fibre and mobile network go down and to ensure continuity of emergency communications and flood monitoring during disasters.

The current bandwidth on the fibre connection is 20Mbps which WWASC wants to increase to 50Mbps to meet the additional demand, however Telstra have advised they may not be able to provide that speed over the existing network infrastructure. WWASC have called for upgrades to the ageing copper network and exchange which services two towns of 6-800 people (Wujal Wujal and Ayton) to meet increasing demand.

There is also demand from WWASC, local agencies and residents for improved 4G coverage and boosters to fill coverage dead spots along the river, to the south of Wujal Wujal, at China Camp, west of town near the art centre, as well as to increase bandwidth and speeds. There is concern about the likely loss of coverage along the Bloomfield River and out to sea when the 3G service is switched off in March 2024.

As communications services are not a Shire activity, they are not included in the WWASC Corporate Plan 2016-2021. However, the Plan does include objectives of providing community access to the IKC, offering an informative and culturally appropriate community radio service and revising Council IT systems to reflect current technology and needs. A new 5-year Master Plan is currently in development.

Recent reports have highlighted the need for telecommunications improvements in the region. The TCICA commissioned the *TCICA Region Telecommunications and Digital Connectivity Final Report 2021* (Babacan et al. 2021)<sup>4</sup>, which identified key challenges across the Torres Strait and Cape York region and outlined a regional Telecommunications and Digital Connectivity Strategy with six strategic focus areas. Another report by the Rural Economies Centre of Excellence entitled *Leveraging digital development in regional and rural Queensland: Policy Discussion Paper* (Marshall, Babacan, & Dale, 2021<sup>5</sup>) argues that “a more holistic and bold approach is required that prioritises and invests in both the hard infrastructure and the social infrastructure needed to achieve overall digital inclusion, social equality, and economic development” (Executive Summary p.ii). The report sets out six recommendations to the Queensland Government to lead and support digital development efforts across regional areas of the state, including Cape York. These include a call to “Address the urban-rural digital divide with appropriate place-based analysis, planning, and solution building” (Marshall et al. 2021, p. iii).

Wujal Wujal would potentially be eligible for funding under the Connecting Northern Australia initiative announced in the 2021-22 Budget, which dedicated \$72.4 million to improving telecommunications infrastructure in Northern Australian sites through the Mobile Black Spot Program and the Regional Connectivity Program. The Daintree/Cape Tribulation area, south of Wujal Wujal, is listed on the 2018 Mobile Black Spot Program Priority Locations list. It is anticipated that new funding initiatives for communications infrastructure and programs targeted for remote First Nations communities may be announced by the new Labor Government in the next budget cycle.

In March 2022, the Queensland Government and Telstra announced a collaborative program to improve connectivity in Queensland schools<sup>6</sup>. It is hoped this program will include Bloomfield River State School, which is in need of improved connectivity.

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<sup>4</sup> Babacan, H., McHugh, J., Marshall, A., Gopalkrishnan, N. and Dale, A. (2021). *TCICA Region Telecommunications and Digital Connectivity Review Final Report 2021*. Report prepared for Torres and Cape Indigenous Councils Alliance (TCICA) by Cairns Institute at James Cook University (JCU) and Digital Media Research Centre at Queensland University of Technology (QUT).

<sup>5</sup> Marshall, A., Babacan, H., & Dale, A. (2021). *Leveraging digital development in regional and rural Queensland: Policy Discussion Paper*. Rural Economies Centre of Excellence: QUT Digital Media Research Centre and James Cook University. Brisbane.

<sup>6</sup> Source: <https://exchange.telstra.com.au/were-bringing-faster-Internet-to-qld-schools/>

## 5. KEY FINDINGS FROM DATA ANALYSIS

This section provides the key findings from analysis of the survey results and interviews with stakeholders and residents in Wujal Wujal.

Note that the survey data provided is based on initial analysis of 40 of the 41 surveys undertaken (full results in Appendix 1). More detailed data analysis and weighting of results against ABS statistics will be undertaken in early 2023 prior to display of the data on the Australian Digital Inclusion Index dashboard. This process may result in minor variations from these statistics.

### There is low household adoption of fixed home Internet

Most households (73%) do not have any form of fixed Internet service, such as satellite or ADSL. Despite reported issues with limited 4G coverage and slow Internet access, only 27% of survey respondents reported have an NBN Sky Muster service at their home and no respondents had ADSL or other fixed Internet. These were mostly agency staff, people with regular income or those living in villages outside of the 4G coverage area.

Residents expressed reluctance to sign up for Sky Muster services primarily due to concerns about affording monthly bills on low incomes. Residents also cited challenges in the application process, data limits being insufficient for large shared households, and unreliability of satellite services during wet season.

Of those using Sky Muster services, there were mixed reports about the service with some users describing issues such as dropouts with cloud cover (especially during wet season), high costs of plans, need for higher data limits, and congestion during peak periods.

- ✦ “I’ve got [SkyMesh] at home down at the beach ... I’ve got good Internet down there sometimes. Every time the wind comes it cuts out ... And it’s like when the rain comes everything ... cuts out.” (Katherine Gibson, Manager Wild Honey Café, 2022)
- ✦ “I study myself, and I’ve got a Sky Muster dish at home on the roof, and I will notice that that’s a lot quicker in the morning than in the evenings.” (Vince Connellan, Director of Nursing, Wujal Wujal Primary Health Care Centre, 2022)
- ✦ “A lot of people can’t afford to have Sky Muster ... [due to the] ongoing monthly cost ... I’ve got three kids at home, and they all got tablets with their learning stuff on it, and they can’t even complete some of the assessment ... [due to monthly data limits. Over] the eight-week school holidays, after the first week they have nothing in there [monthly data used].” (Victor Mills, Director of Works and Building Services, Wujal Wujal Aboriginal Shire Council, 2022)

### Pre-paid mobile is the primary means of phone and Internet access

40 of 40 survey respondents (100%) said they use a mobile phone for making phone calls, with only one respondent not owning or sharing a mobile phone. Only 2 of the 40 respondents (5%) have a fixed line phone in their home. Of those with mobile phones, 82% had smartphones, and 90% used pre-paid services. 96% of people said they use their smartphone as their primary means of Internet access.

There is one Telstra public phone in the Wujal Wujal town centre and one at Ayton Store, which provide free calls. While these provide an important backup service when mobile services are not working or when residents do not have mobile credit, they are used infrequently. More than half (58%) of survey respondents said they never use the public phone.



Figure 4: The public phone is now free but has limited use.

## Affordability is a significant concern

With most Wujal Wujal residents on low incomes, the cost of Internet access and digital devices are a significant burden. 54% of regular Internet users said the main reason they do not use the Internet more often was “The Internet is too expensive for me” and 40% had sacrificed essential household costs (food, bills, etc.) to afford Internet access.

Most community residents are using pre-paid mobile services as their primary means of phone and Internet access. The most commonly purchased pre-paid costs \$3/GB (\$30 for 10GB data, excluding calls), more than ten times the rate of post-paid plans. Despite these high costs, people prefer pre-paid because they can pay what they are able to afford at the time, rather than commit to a billed service they may not be able to pay when it is due.

- + “I reckon everything should be like that [pre-paid] ... it’s what’s accessible for people. Yeah I reckon [Sky Muster] should be prepaid too. ... [It’s like electricity and] the mobile that you got to top up every time, so I think everything else should be like that too, otherwise we’re finding ourselves deep in debt when we commit to [post-paid] services like that, whereas with the top-ups we’ve got full control of it.” (Katherine Gibson, Manager Wild Honey Café 2022)

There is limited community awareness about the difference in data costs between pre-paid and post-paid services, or modern mobile plan options of month-by-month billing and speed shaping, rather than excess data costs. However, post-paid plans are not available to purchase in Wujal Wujal, with signing up for one requiring a trip to Cooktown or Cairns.

Some residents who are heavy data users are on costly post-paid plans, which can become a financial burden if income levels change:

- + “[I’m] paying at least \$300 and something a month ... one SIM was \$120, and another one was a little bit more than \$120 because I had some other little devices ... like headphones and speakers, in my plan. ... I’m struggling now at the moment ... I only just got this Telstra bill that I try stick with ... but because of no work on Fridays anymore for council, it’s just sort of creeping up on me a little bit ... which means I have to make more sacrifices to other stuff.” (Resident, 2022)

The cost of smart phones was raised as an issue, with regular replacement of phones and limited local options.

- + “It costs a lot of money to buy it [about \$2-300 for a mobile phone]. Living in a remote community ... they charge freight for a lot of things. We have three shops in the area, and when you want to buy a mobile phone you have to go to Cairns or Cooktown. They’re the nearest towns [to buy a phone. Older people find non-smart] phones are easier for them to use.” (Marie Shipton, Elder and Cultural Advisor, 2022)

Pre-paid credit is a valued commodity in the community. There is demand by young people on parents and grandparents to buy smartphones and pre-paid vouchers, or share data via hotspot, to enable access to online content including social media, streaming and games.

## The 4G network is congested, unreliable and patchy

As outlined throughout this report, the 4G mobile coverage covers the central town area, with patchy or no coverage to the north and south of town. Residents cited issues of regular dropouts, congestion, and low penetration in houses.

- + “The Internet is just unreliable in this particular area here, it just drops out whenever it feels like it.” (Resident, 2022)
- + “It’s quicker in the morning and slower in the afternoon ... if I want to send a text message ... especially if I’m sending a text message with a photograph or

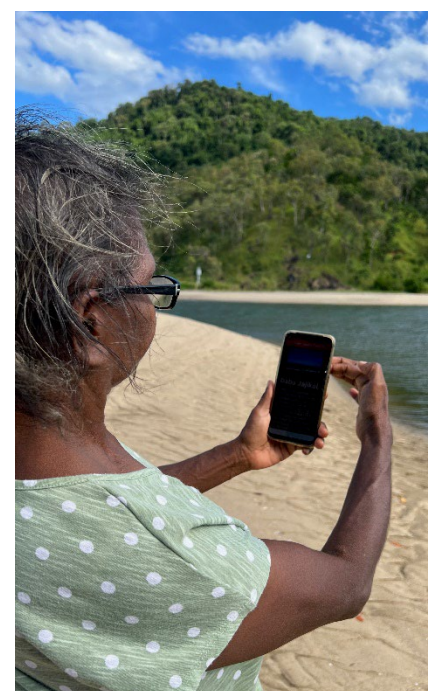


Figure 5: The 4G network has patchy coverage outside the Wujal Wujal town centre.

something like that, I've got to go into the other side of the building to get that off." (Vince Connellan, Director of Nursing, Wujal Wujal Primary Health Care Centre, 2022)

Telstra are planning to install a mobile booster on the clinic to improve coverage of the western end of the community, however there is demand for coverage of other populated areas. Increased bandwidth to reduce congestion and reliability issues remain to be addressed.

## Effective communications is critical for health and safety

During cyclones, the community loses all satellite services for Internet and TV, and the 4G signal is generally weak or non-existent due to the tower's location on the hill. Community members "just have to wait it out" (Stephen Wilton, WWASC CEO).

- + "[We] drive a couple of minutes out of town either way and the radios and things drop out ... [We need] that ability, wherever we are, if something goes down, something urgent, we can call comms straight away without any issues" (Wujal Wujal Police, 2022)

People can easily get in trouble while fishing out to sea with rapidly changing tides or while travelling on the popular Bloomfield Track through Cape Tribulation from Port Douglas, which has no communications access.

- + "Since I've been here for eight years, we've rescued about nearly 19 people that actually travel down the coast road, between here and Cape Trib[ulation] ... [Along that road] you've got no signal for anything. And three of them were fatalities." (Victor Mills, Director of Works and Building Services, Wujal Wujal Aboriginal Shire Council, 2022)



**"Communications is paramount. One of our principal roles, particularly here in Wujal being in the tropical north, is disaster management. I've yet to be through a local disaster where one of the identified pitfalls or shortcomings in any response to a natural disaster isn't lack of communications."**

- Stephen Wilton, CEO Wujal Wujal Aboriginal Shire Council

Effective communications are critical for elderly and vulnerable people, but accessing and affording these connections are issues:

- + "One of my workers [saw a post on Facebook last night and] ... rang me. There was a lady up here ... needed medical attention. So, she had no phone. And the person next door who knew about it, couldn't bloody ring because she had no credit on her phone, so she put her on Facebook. And that is the only way people knew ...to get the ambulance up there to her." (Victor Mills, Director of Works and Building Services, Wujal Wujal Aboriginal Shire Council, 2022)
- + "I have heart problem, short of breath. I used to have landline, but it cost a lot, so I stopped that, and I tried this [pre-paid mobile] ... it's good." (Kathleen Walker, elder/ traditional owner, 2022)

The issue of communications for people experiencing suicidal behaviour was also raised by interviewees, with a recent example of a life lost to suicide through lack of effective communications protocols.

## Digital literacy levels are relatively high, but limited by mobile-only use and English literacy

Respondents report relatively high levels of basic IT skills. Of the 70% of people who use the Internet, the most common applications they use are online banking (89%), online entertainment services (e.g., media streaming, online games, 86%), social media (86%), accessing government services (86%) and health information (75%), online learning or study (68%) and online shopping (64%).

With services increasingly moving online, digital literacy is becoming a necessary life skill:

- + “Those days of walking into Centrelink ... they’re disappearing. It’s all going digital, it’s all going online. ... [but a lot of people] don’t have that education on the Internet and how to use it. So, it’s all very well upgrading all the systems ... but without that education, it’s just not going to work.” (Agency representative, 2022)

However, skills development in using more advanced applications which require computers, including Microsoft Office software, is hindered by primary reliance on mobile devices (96% usage compared with 36% who also use desktop computers). Also, English text literacy can be another obstacle to digital literacy, with only 67% of recipients saying they understood written English very well and 50% having attended school to Year 10 or less.

## There is demand for community access computers, Wi-Fi and support to use online services

There are good support services in Wujal Wujal for accessing and using online services, but residents reported interest in more training and support. Local agencies (Centrelink, IKC, Justice group) provide IT support to access online services. The IKC also provides IT support and runs occasional computer skills workshops through Deadly Digital Communities and Tech Savvy Seniors (supported by State Library of Queensland). The Centrelink office at the RTC is open weekdays and has a computer available for accessing Centrelink, banking and other government services.

- + “When people go on Centrelink payments, they can use those computers to set themselves up for MyGov ... people haven’t got the money [for home computers] and everyone is low income ... The Internet is there for everyone to use at Centrelink [for free]. They can come and sit on the veranda and connect to the Wi-Fi” (Marie Shipton, Elder/ Cultural Advisor, 2022)

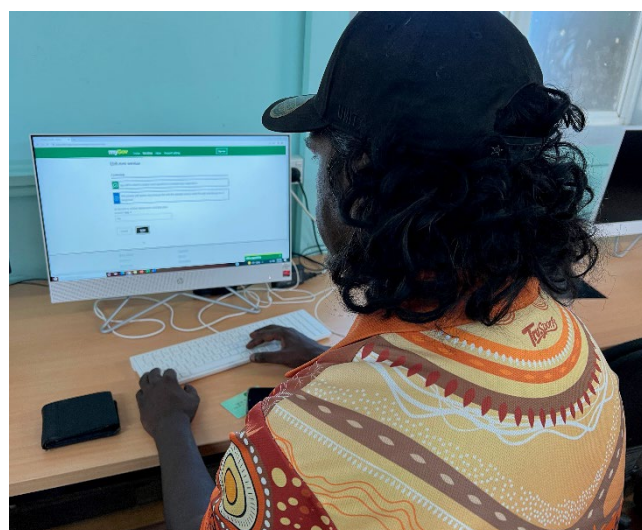


Figure 6: Resident using community access computer at Wujal Wujal Indigenous Knowledge Centre.

However, there is demand for more training and support, especially for the elderly, people with disabilities, and those with low English literacy. Digital skills development is currently typically driven by the need to undertake an often time sensitive task such as accessing MyGov, activating a SIM, doing online banking or completing a form.

For this reason, there is demand for full-time digital mentor support to provide one-on-one peer support when needed (‘just-in-time’ model of learning) rather than occasional workshops covering a range of topics that may not be relevant or timely.

- + “I work for Centrelink as a Centrelink agent [2 hours a day] ... I help customers with their payments, set them up for MyGov, talk to Centrelink on behalf of them. I ask them if their MyGov details. ... A lot of them don’t understand, so that’s where I come in and talk to Centrelink customer service officers and help them talk to them in my language. ... Younger people with smartphones will use the Centrelink app, but there are a lot of people who don’t seem to have smartphones and can’t access it.” (Marie Shipton, Elder/ Cultural Advisor, 2022)

## Online learning is growing but face-to-face learning is still preferred

Online training enables community members to learn without leaving the community and is being used by some people, including use of YouTube self-learning videos.

- + “I reckon the internet is good for online training. I’ve done it twice, business admin and we just finished a mental health one about three weeks ago ... some were through video, connection was okay because it was in the community, if we were over that side [south side] that wouldn’t have worked at all ” (Junabel Doughboy, Artswoker)

- + “[I like to] self-train. Like I’ll jump on the internet, like YouTube has everything [...so I] learn about stage performance or watching singers ... they have vocal coaches on there as well, so I just watch that and, you know, train with them sometimes.” (Patrick PJ Nandy, resident/musician, 2022)

However, Kylie Mills pointed out that only a few local residents use online learning, most requiring support from agency staff and facilities. Several people said that face to face training is still their preferred model:

- + “I reckon face to face training would be better, hands-on training. ... Our mob are visual people, and yeah to have a really good facilitator/trainer would be absolutely [crucial], who has a lot of people skills that can come and understand and connect with our people.” (Katherine Gibson, Manager Wild Honey Café, 2022)

## COVID-19 led to increased use of videoconferencing for meetings, training and tele-health

During COVID-19 lockdowns, there was increased use of videoconferencing (e.g., Teams, Zoom) by most agencies for meetings, tele-health consultation, client engagement, court proceedings, and professional development. This reduced the need for travel and saved staff time and expense.

- + “[During COVID lockdowns] we have a lot less face-to-face consults happening, so patients will come in, we’ll do GP clinics through Team meetings, again, and also just plain telephone meeting... our Indigenous population [prefer] face-to-face. However, we do use telehealth, and they accept that form of consultation” (Vince Connellan, Director of Nursing, Wujal Wujal Primary Health Care Centre, 2022)

Reliable telehealth can save lives through more immediate diagnosis and treatment, reduce the cost of emergency evacuation flights, and give peace of mind to clinic staff on confirming the best treatment process. Telehealth systems are enabling triage to be undertaken remotely and support to undertake more on-site treatment or emergency procedures.

- + “[We have a] tele emergency management service unit [TEMSU] ... so if we’ve got an emergency in the clinic we can call the emergency doctors and they’ll be over straight into our treatment room and see the patient on the bed, and decide whether a chopper needs to come in ... [or] we just do treatment onsite ... We did it recently with a woman in labour ... to guide the nurses through the birth.” (Vince Connellan, Director of Nursing, Wujal Wujal Primary Health Care Centre, 2022)

However, the rapid increase in two-way video traffic and high-bandwidth applications during COVID-19 increased pressure on already over-loaded communications services, with many reports of congestion, dropouts, and lack of mobile penetration significantly impacting on the quality and reliability of services unless through a fibre connection. WWASC described staff efforts to connect to the server from home via satellite broadband as “a nightmare” during wet season.

For many agencies, videoconferencing has continued beyond COVID lockdowns as a key mode for meetings, client consultation and training. However, there are still mixed results due to connectivity:

- + “We logged on online and we weren’t able to see the presenter. We could hear her, but we weren’t able to view her slides ... so staff had to do PD offline weeks later. [We have] big challenges with ... running professional development if it is live ... due to where we sit geographically.” (Reece Tomey, Principal, Bloomfield River State School 2022)

The Wujal Wujal Justice Group described extensive use of videoconferencing for connecting young people away from home at boarding school with their families, for counsellors to talk with prisoners, and families to connect with people away in hospital or prison.

- + “We do a bit of training via Zoom ... that Internet is, yeah, not reliable, it drops in and out so things freeze, we have to then maybe get on the phone or maybe leave till another day” (Rachel Salam, Wujal Wujal Justice Group 2022)

## Cyber safety and scams are a growing concern

The survey results indicate reasonably high online security and cyber-safety awareness, with most people knowing how to set privacy settings (82% said 'very true' or 'mostly true'), decide what personal information to share online (79%), and change who they shared content with on social media (82%).

However, local agencies identified a range of cyber-safety issues prevalent in the community from online bullying and harassment, access to inappropriate content, grooming, scams, and social media posts causing family disputes. Social media is a primary means of communications (86% of those surveyed use it to keep in touch with family or friends) and accessing news and information for most residents. The primary platforms used are Facebook, TikTok (preferred choice for younger people) and Instagram. However, some people expressed concerns about inappropriate use of social media:

- + "I worry about for the kids and their access to TikTok, Facebook, all those things where people [strangers] can actually communicate with them. ... I don't think the parents are aware what the kids are accessing either." (Kylie Mills, IKC Coordinator, 2022)
- + "It's a good thing to see something [on Facebook], but I don't go on it all the time. ... Sometimes people say the wrong things on newsfeeds from other communities." (Elder, 2022)

The local school delivers some formal lessons to students on safe internet use and online stranger danger. However, Wujal Wujal Justice Group are urging more training on these topics for adults, which they say needs to be locally delivered and culturally appropriate.

- + "[There needs to be] more education around [cyber bullying] and just education on how to safely use the Internet really, you know, computers for the elders... they just rely on us in the office. ... I think we all need to be educated more." (Rachel Salam, Wujal Wujal Justice Group, 2022)

Scam calls, texts and online messages are becoming more commonplace, with limited awareness in the community of how to discern and avoid them.

- + "Last week I was a victim to cybercrime. ... [I was] just paying some bills through my bank and then my phone rang [claiming to be the bank ... I] just followed the prompts that they were telling me to do and boom, \$5000 gone." (Resident, 2022)

Elder abuse is also described as an issue, with young people transferring money from elders' bank accounts, or using their debit card. More digital and financial awareness for elders is needed to reduce these issues.

## Confidentiality and password security can be issues

With shared devices and a lack of systems to store log in details such as passwords, these are often kept in insecure places such as on scraps of paper or on the phone itself. This can lead to issues where family members or others may be able to access bank accounts, social media accounts or other online services.

Marie Shipton described helping people to set up email addresses and Centrelink or MyGov log-in passwords as part of her job at Centrelink, and then assisting them to safely store their passwords.

- + "That's your record, that's confidential, you've got to keep it to yourself ... if you give it to your family, they'll be logging into your MyGov every fortnight and they'll know what you're receiving and how much you're receiving!" (Marie Shipton, Elder/ Cultural Advisor, 2022)

The Wujal Wujal Primary Health Care Centre send out messages by text about upcoming appointments or specialist visits, however, are careful not to send personal information due to device sharing.

- + "Mobiles are usually shared, at least between partners, can be even between larger family groups. We don't want to give personal information out, so it'd be just more letting them know what type of appointments that we've got going, so vaccinations or 'come out.'" (Vince Connellan, Director of Nursing, Wujal Wujal Primary Health Care Centre, 2022)

## There is growing demand for high-bandwidth applications, but data speeds limit use

Just as in other parts of the country, there is growing demand in Wujal Wujal for high bandwidth applications such as streaming of online media and music, online gaming, and cloud-based applications. For many people reliant on pre-paid mobile these activities are not possible due to the cost data and the limited bandwidth during peak periods. Only those with satellite or costly mobile plans with high data allowances can reliably use high bandwidth applications.

- ✦ “It’s a luxury in Bloomfield to watch movies ... Staff who come from the city are spending] hundreds on data because they’ve got kids who entertain, who play games, who watch movies” (Wendy Rowlands, Information Management Officer, Wujal Wujal Aboriginal Shire Council 2022)

Online gaming requires low latency for playing in real time, often with friends or family, in other locations. Due to congestion on the 4G mobile network, gaming is mostly undertaken using a Sky Muster service or at off-peak hours during the night.

- ✦ “[I play] mostly during the night. [It’s] way better ... [but sometimes there’s] internet lag that just makes the game do its own thing. It offsets for a period of time before you actually get back into the actual game.” (Malcolm Ohlson, resident, 2022)
- ✦ “I used to play Modern Warfare but that takes up a lot of gigs when it comes to updating time [downloading new versions].” (Patrick PJ Nandy, resident, 2022)
- ✦ “I want the speed to be a bit faster [to play Fortnite] ... all the kids love that game. But they can’t play it because of the lagginess ... [but if we got] fast internet, it will keep kids out of harm, in a safe environment instead of roaming around and getting up to mischief.” (Patrick PJ Nandy, resident, 2022)

## Many households are without TV services or paying subscription rates

The VAST direct-to-home satellite TV service, installed in about 2013-14, is no longer working in about 25% of households, due either to set-top box failure and high cost of replacement (\$450 at store) or damage to satellite equipment. Maintenance of VAST, was made a householder responsibility by the federal Government, without any support for coordinated maintenance programs in remote communities. The cost of satellite technicians, including travel from Cairns, is prohibitive for individual households.



Figure 7: Many households are without TV services or are paying subscription rates

A common technical issue is the power unit in the VAST set-top box ‘blowing out’. This due to surges in the community power supply attributed to the surge protectors not being installed in the initial rollout.

- ✦ “They came in, installed it [VAST equipment at my house in 2013], it was all good and everything. But then within about a month of installation we had a power surge and mine blew out. And they said they might replace it ... [but] my phone calls went unanswered for days on end ... and then someone told them they no longer existed, so I was left in the lurch there. And I couldn’t really afford to ... spend another \$4-500 to buy another VAST box. ... Even now it’s still happening. The VAST box is blowing out on them [local people]. It’s pretty expensive because you have to buy the VAST box and then get a satellite technician to come and realign the dish, so it becomes a big thing for such a little item.” (Bruce Harrigan, Wujal Wujal Shire Depot 2022)

As a result of VAST free-to-air services not working, there has been uptake of subscription TV services (Foxtel or Austar) by some households, including to access sports and movie channels. However, with subscription fees of up to \$100/ month this is another cost burden for people on low income.

Another impact of the loss of free-to-air TV services has been increased demand on broadband services for streaming of movies and TV content. This adds a significant cost burden, especially on pre-paid data rates, but also increases congestion on the 4G network and makes viewing difficult during peak hours.

## Local news sharing and radio services are important

Our survey found the most common sources of news and information are direct, in-person communication (50% daily), followed by commercial television (48% daily), Facebook and First Nations Radio (both 25%), local noticeboards or posters (23% daily), NITV (18%) and other social media (eg Twitter, TikTok, etc) (15%).

Local news and information is shared via a number of community channels to keep the community informed of current events and upcoming activities, including the WWASC and other Facebook pages, monthly newsletters, noticeboards, and the local RIBS radio station.

- + “We put a lot on the radio. We’re getting a new digital sign put in, so it’ll be on that and Facebook, yeah and word of mouth around here, things go round pretty quick, so noticeboards are a big thing as well. If you put something on the noticeboard, people tend to read that” (Kylie Mills, IKC Coordinator, 2022)

The local RIBS service is the only FM service in Wujal Wujal, broadcasting from 7.30am-4pm daily. The Black Star radio network supports the RIBS with regular news and weather, information messages and programming when the RIBS is not broadcasting. The RIBS service’s importance for local community residents was underscored in the survey data. 33% of people surveyed listen to the local station daily with 45% listening occasionally, compared with 5% daily and 22% occasionally to the ABC AM radio service.

- + “[I listen to Black Star radio every day] ... for any special news that needs to get out there, it’s all said on the radio as well as ... international news.”(Patrick PJ Nandy, resident, 2022)

Local information channels enable delivery of reliable, trusted sources of information to counter misinformation on social media.

- + “We give up a monthly update on the RIBS [radio station], trying to explain maybe some of the information that people are getting on places like Facebook is not the most correct information ... [also] uploading or sending information to councils to put on the councils’ Facebook.. word of mouth is a very good form of communication.” (Vince Connellan, Director of Nursing, Wujal Wujal Primary Health Care Centre, 2022)



Figure 8: (left) Carmel Haines in Wujal Wujal RIBS radio station. Local radio services provide a trusted source of relevant news and information.

Figure 9: (right) Community noticeboards are also used as a means of sharing local information.

## 6. CONSIDERATIONS FOR LOCAL DIGITAL INCLUSION PLAN

Developing a local Digital Inclusion Plan would enable a coordinated whole-of-community approach to address some of the challenges outlined in this report. It would also provide a useful tool for advocacy to government, industry, and fundraising efforts.

Some of the gaps and strategies suggested during community and agency consultation are outlined below, to assist community stakeholders in considering possible strategies to improve communications services and digital inclusion in Wujal Wujal. These are not intended to be prescriptive, nor are they listed in order of priority.

Note: A regional Telecommunications and Digital Connectivity Strategy is also outlined in the TCICA report (Babacan et al., 2021: 69-70), with strategic focus areas grouped under the same dimensions of digital inclusion as below (access, affordability and digital ability). Reference to this Strategy could also help to align a local digital inclusion plan to regional planning, coordination and fundraising.

Identified Issue	Possible Actions	Potential Stakeholders
<b>Access</b>		
Patchy and congested 4G coverage in town and to communities along the Bloomfield River (with potential reduction in coverage with switch-off of 3G in 2024)	<p>Advocate to Telstra and Queensland Government for upgrades to 4G mobile service to improve speed, reliability and coverage within Wujal Wujal;</p> <p>Apply for Mobile Black Spots program or Regional Connectivity Program funding for 4G small cell or boosters to cover China Camp, southside, and unserved homelands and villages</p>	WWASC, Telstra, Queensland Government, Australian Government (DITRDC)
Current business-grade broadband services and redundancy back-up Iterra satellite system used by WWASC are not scalable to meet increasing needs and too costly for limited budget	<p>Investigate alternate business-grade broadband service/provider options to meet WWASC needs (and aggregated use by other agencies);</p> <p>Review options for more affordable redundancy system in case of fixed line outages and wet season impacts, or change plan to pay only when used</p>	WWASC, Queensland Government, Australian Government, Telstra, NBN
Need for fast, low latency broadband services with unlimited data for business use	Trial of Starlink satellite service for business and/or residential use (Note: Queensland Government are undertaking a trial of Starlink)	<p>Queensland Government, WWASC</p> <p>A key question regarding this action is to determine possibilities for sharing access between multiple premises</p>

Identified Issue	Possible Actions	Potential Stakeholders
Need for improved safety and emergency communications, especially on Cape Tribulation road and for ocean fishing and sea rescue.	Explore options for expanded use of HF radio, UHF radio and satellite communications for safety and emergency communications in areas without mobile coverage	Wujal Wujal Police, Wujal Wujal Health Care Centre, Rangers, SES, WWASC
Need for increased number of up-to-date community access computers and software in Indigenous Knowledge Centre	Seek funding through State Library of Queensland for new community access computers and regularly used software, including learning games	Wujal Wujal Indigenous Knowledge Centre (IKC), State Library of Queensland (SLQ); Discount software can be sourced through Connecting Up
Need for public Wi-Fi to fill 4G coverage gaps and provide affordable access to online services  (Note: Wi-Fi at IKC and Centrelink during office hours; NBN installed Wi-Fi at Rural Transaction Centre in centre of town in July 2022)	Establish NBN satellite service and public Wi-Fi with content filtering at Bana Yirriji Art Centre and café.  Review need for Wi-Fi in other sites with limited 4G access.  Note: An option to recoup costs is to use NBN Public Interest Premises service with voucher system.	WWASC, Bana Yirriji Art Centre, NBN, retail service providers
Low number of VAST direct-to-home satellite TV services working; high cost for households to repair equipment and replace set-top boxes; no maintenance program in place	Advocate for funding to install digital TV broadcasting of required services (16 Freeview channels) and ICTV to replace VAST direct-to-home TV services within Wujal Wujal community footprint	WWASC, Australian Government, Queensland Government
ABC AM radio service very patchy and poor quality signal	Consider re-establishing local broadcast of at least one ABC FM radio service (e.g., ABC regional from Cairns) in Wujal Wujal, installed in the local RIBS facility; ask NIAA if equipment and maintenance can be included within RIBS funding allocation.	WWASC/ Wujal Wujal RIBS, NIAA, QRAM

Identified Issue	Possible Actions	Potential Stakeholders
<b>Affordability</b>		
Primary use of pre-paid for data (high cost data); limited awareness of changes to mobile pre-paid and post-paid plan options or satellite service options	Provide easy-to-read materials in store, IKC and post office (posters, brochures) and radio messages outlining options for more affordable mobile and data services via Telstra, NBN Sky Muster and any other providers	Wujal Wujal IKC, SLQ /Deadly Digital Communities, ACCAN, QRAM/ RIBS, Telstra, NBN
Need for free Internet access to enable affordable access to essential online services	Provide public Wi-Fi or other form of Internet access, with a free daily data allowance (e.g. 500MB/ device), to ensure residents have affordable access to MyGov, Centrelink and other government, banking and online services	Australian Government/ Centrelink, Queensland Government, WWASC
<b>Digital Ability</b>		
Need for more regular IT and mobile use training, particularly for seniors	Provide more regular training opportunities in-house at IKC and through Deadly Digital Training and Tech Savvy Seniors, including in use of online services, cyber-safety, online privacy and security	Wujal Wujal IKC, SLQ
Mentor support in use of government and online services when needed	Employment of Digital mentor/ IT support roles to support people to access government and online services independently; extend Centrelink office hours and role to provide mentor support in use of MyGov, Centrelink, banking services etc	WWASC, Centrelink, Wujal Wujal IKC, possibly banks
Demand for IT skills for workforce readiness and use of online services	Provide specific training workshops or one on one support in workforce readiness skills as needed (e.g. MS Office, keyboard/typing skills, file management, search and online tools, preparing a CV, letter writing, email use, job search etc)	My Pathways (work ready provider), Wujal Wujal IKC

Identified Issue	Possible Actions	Potential Stakeholders
Need for regular upskilling of workforce to use new digital tools, applications, and cloud-based systems, as well as IT policies	All agencies to include induction and workplace training in use of relevant digital systems /applications, and awareness of agency IT policies	All agencies
Concerns around cyber-safety issues especially scams and on social media	Arrange cyber-safety awareness workshops (including in schools and workplaces) as well as locally targeted posters and radio promos to build awareness	Wujal Wujal IKC, Justice Group, Bloomfield River State School
<b>Other Identified Needs</b>		
Lack of local IT and technical support	Arrange IT technical services company as regular service provider to support multiple agencies' needs (reduce travel costs)\	WWASC
WWASC webpage very media content heavy, making it slow to open and navigate	Engage web design company to help update website, reduce file size of media content and ensure site is mobile friendly and meets accessibility standards	WWASC
Strong interest in media and music production and creation/ storage of local language and cultural digital content, however lack of a local cultural centre to support production, cultural displays and archiving of existing archival records	Explore possibilities for a cultural centre for multi-media production and archiving facility within community, including at IKC or art centre  Consider establishing a cultural committee to advise on models for recording and sharing of cultural knowledge	WWASC, Wujal Wujal IKC, Bana Yirriji Art Centre, Justice Group

## Appendix 1: Summary of Survey results

Note: This is based on initial analysis of 40 of 41 surveys undertaken. More detailed data analysis and weighting of results against ABS statistics will be undertaken in early 2023 prior to display of the data on the Australian Digital Inclusion Index dashboard. This process may result in minor variations from these statistics.

### Demographics

- + 65% of the 40 respondents were female.
- + 88% of respondents were of Aboriginal and/or Torres Strait Islander origin.
- + 50% had completed year 10 or lower, 13% completed year 12, 17.5% had completed Certificate level 3 or 4 and 5% had a tertiary qualification
- + 53% were employed (43% of these full-time), 20% were unemployed, and 20% had been looking for work in the last month.
- + 60% received some form of government pension or benefit.
- + 63% lived in multi-generational or shared households, with an average of 3.9 people per house
- + 35% of respondents' household income was \$800 per week or lower, and 48% were between \$800 to \$1250 per week.
- + 30% had a long-term disability or health condition.
- + 71% speak Kuku-Yalanji and 18% other Aboriginal/Torres Strait languages (89% overall). 80% speak a language other than English at home.

### Phone and Data Use

- + 100% of respondents used a mobile phone for phone calls, with only 2 (5%) having a fixed line phone in their home.
- + Only one respondent did not have a mobile phone. Of those with phones, 82% had smartphones, and 90% used pre-paid services.
- + 58% reported not using the public phone, with another 20% stating it was not reliable or only sometimes reliable.
- + Average monthly mobile data allowances – 34% use up to 10GB/month, 45% 11-40GB/month, 8% (3 people) 41-60GB/ month and 13% (5 people) over 60GB. However, 87% reported exceeding their data limit at least once over the past year, and 31% reported exceeding their limit every month, so actual data use is likely much higher.
- + Of the 38 responses on household mobile expenditure, the average household cost was \$117/month. 21 (55%) households paid up to \$100/month, 11 (29%) paid \$101 - \$200/month, and 6 (16%) paid over \$200/month.



**65%**

female respondents



**88%**

Aboriginal and/or Torres Strait Islander



**53%**

Employed (full-time, part-time or casual)



**98%**

Own or share a mobile phone



**\$117**

Average monthly household expenditure



**33%**

Listen daily to local RIBS radio



**75%**

Get emergency information direct and in person

## Media Use

- + Local First Nations Radio Service (Black Star radio network / Wujal Wujal RIBS) is the most popular radio service, with 33% of people listening daily and 45% listening occasionally.
- + The ABC radio is only available as a weak AM signal from Cooktown, with only 5% listening daily and 73% of respondents never listening to ABC radio. 83% never listen to commercial radio. 18% said they never listen to any radio services.
- + There are various ways that people listen to radio. 38% of respondents said they listen by car radio, 25% listen on a radio at home or 23% through the TV, 30% at places other than their home or car, and 18% listen via streaming or podcasts on a phone or tablet.
- + 83% of respondents reported getting TV services via local broadcast, 43% reported using their phones, tablets, or computers (primarily phones), and 18% used a satellite subscription TV service.
- + 75% of respondents reported having VAST satellite TV working; 5 said the VAST wasn't working.
- + Commercial television stations (e.g., 7,9,10) were most popular (45% watch daily) followed by NITV (28% daily), and streaming services (Netflix, Stan etc.), YouTube, and ICTV about 20-23% daily. Some TV channels were watched occasionally, most notably ABC TV (48% occasionally), SBS TV (40%), NITV (43%) and ICTV (35%). 50% had never used a streaming service such as Netflix or Stan.
- + Most popular sources of news and information are direct, in-person communication (50% daily and only 2 people reported never), followed by commercial television (48% daily), Facebook and First Nations Radio (25%), local noticeboards or posters (23% daily), NITV (18%) and other social media (e.g. Twitter, TikTok, etc.) (15%).
- + The most used sources of emergency information are direct and in-person (73%), commercial TV (58%), local noticeboards or posters (55%), local radio (53%), online and app-based emergency services (48%), and Facebook (43%).

## Internet use

- + 63% of all respondents had used the Internet in the last week, with 30% never using the Internet.
- + Of the 28 people who use the Internet regularly (25) or semi-regularly (3):
  - o Many use Internet provided by others, with 54% reporting using Internet at their place of work or education, 39% at houses of friends and family, and 25% at both public libraries and community/shire offices.
  - o 54% said they use Internet almost constantly and another 29% several times a day.
  - o The most commonly used devices are smartphones (96%), smart TV (54%), laptop computer (43%) and desktop computer (36%).
  - o The most common reasons people gave for not using the Internet more often was "The Internet is too expensive for me" (54%), "I do not have



**63%**

Used the Internet in the past week



**30%**

Never use the Internet



**54%**

said "The Internet is too expensive" for not using Internet more



**50%**

Said "I do not have convenient access to the Internet"



**73%**

Households do not have any form of fixed Internet



**71%**

Can complete online forms



**89%**

Use online banking



**86%**

Use social media to keep in touch with family or friends

- convenient access to the Internet” (50%), “I am concerned about privacy or scams” (39%), and “I am concerned about inappropriate content and causing conflict” (29%).
- There was some concern about the amount of time spent online, with 32% extremely to moderately concerned, 39% slightly concerned, and 7 people (25%) being not at all concerned.
  - During COVID-19 restrictions, most people stated the time they spent online and their digital skills stayed the same (61%) as did their access to community facilities and/or Wi-Fi (68%). However, some highlighted that the importance they placed on quality Internet access had increased (43%) as did some people’s digital skills (36%).
  - Some people felt that COVID-19 restrictions led to slight or significant increase in their Internet use, especially social and physical distancing restrictions (including isolation) (51%), lockdowns (49%), and proof of vaccination requirements (48%).
  - + Of the 12 respondents who rarely or never use the Internet, they cited ‘I am concerned about privacy or scams’ (66%) ‘I am not confident using the Internet’ (58%) and ‘I have no need to use the Internet’ (50%) as the main reasons, with 5 out of 12 also expressing that they do not have access to the Internet.
  - + Most households (73%) do not have any form of fixed Internet with only 28% on an NBN Sky Muster service.
  - + Of the 28% of respondents with NBN: 3 had a 12mbps plan, 3 had a 25mbps plan, and 4 had 50mbps or higher. These respondents spent an average of \$95.73 on Internet.
  - + Only 4 households (10%) used a portable 4G modem for sharing.

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## Digital Ability

- + Digital literacy is relatively high among regular Internet users, but very low among the 30% of non-users. Importantly, this cohort is mostly elderly.
- + Of those who regularly or semi-regularly use the Internet (28 people):
  - Most people reported being able to use a mobile device or phone as a Wi-Fi hotspot *and* connect to a Wi-Fi network (82% said ‘very true’ or ‘mostly true’) download and open a file (75%), find and install apps (68%), complete online forms (71%), use an Internet browser (86%), set secure passwords (82%) and send and receive emails (86%). 32% did not know how to use computer shortcuts and 25% of respondents were not able to set up a group chat or video call.
  - Online security and cyber-safety awareness are also reasonably high, with most people knowing how to set privacy settings (82% said ‘very true’ or ‘mostly true’), decide what personal information to share online (79%), add or remove friends or followers on social media (79%), and change who they shared content with (82%). A smaller percentage were able to check if information is trustworthy (64%).
  - Most people know how to connect smart devices (e.g., smart TV) to the Internet (82%) and adjust privacy and security settings (71%).
  - There are limited skills in creating websites (21%), but some skills in producing online content (64%) and posting videos (68%). There is good understanding of online copyright law (64%).
  - The main online activities include online banking (89%), accessing government services (86%) and health information (75%), learning or study (68%) and online shopping and/or selling (64%).
  - Social media is popular for keeping in touch with family or friends (86%) and meeting new friends or reconnecting with old friends online (82%), as well as engaging with community (79%).
  - 86% of respondents had used online entertainment services (e.g. streaming video/music, playing online games).
  - 36% reported use maps on smart phone to navigate.

## COMMENTS

*Note:* Survey respondents were given the opportunity to add a comment at the end of the survey to raise any areas of concern or need relating to the survey topics covered. As the surveys are anonymous, comments are not attributed to any individual. The anecdotes have been grouped according to key themes.

### Mobile Coverage/ Quality of Service Issues

- + I live over the river and it's terrible coverage over there. I have to take calls outside and there's no mobile coverage inside. Nothing whatsoever. I used to be able to work from home but the service is so bad. If I could get Internet inside I could have a home office. I was studying and struggling to download and find stuff and upload my assignments. It comes down to the service. It just isn't good.
- + Better signal coverage.
- + Very poor mobile signal where I live in Ngara.
- + Need to address black spots in mobile coverage, especially on road to Cooktown.
- + Better Telstra network. Dish for Internet Wi-Fi - a secure Internet connection.
- + My house is in a shadow from the 4G tower so gets poor coverage.
- + Where I used to stay there was no reception in the house there was certain areas in the back where I could access it but not in the house. That was up near Thompson creek. That meant you had to wait for your phone to connect to the network. It was a big issue in emergency.



"Sometimes reception plays up out here. You can't get connected. On a rainy day or an overcast day we have trouble connecting with the Internet. Sometimes I can't get good reception so I can't talk to people and it plays up."  
(Survey comment)

- + The Internet has been playing up lately. When you download stuff it takes time. In the office you have to go outside to answer your phone. With my work emails and stuff, the Internet connection is so slow.
- + It's very slow. You go to Cooktown and it's so fast but here it's so slow. Especially on the south side ... you can't get service in the rooms. It needs to be upgraded for fast browsing.
- + I've got a 4G and sometimes it doesn't work when I want it to. The tower is just up here but there's no reception between here and Ayton. If we could get full coverage from here to Ayton that would be good because sometimes when we're waiting Centrelink wise you've got to wait on the phone for a good couple of hours and if you have to travel during that time it cuts out.
- + More coverage - spread the signal wider as the signal is slow - more free Wi-Fi

### Affordability Issues

- + I spend a lot of money on my phone but I don't use the Internet. I have to call a lot of people Centrelink child safety things like that. I have grand children in a foster home so I have to stay in touch with them. It's expensive for this phone here. I have to buy a phone that was \$200, the credit is expensive. I'm always buying \$30 Telstra credit a fortnight but it runs out. When I have credit I'm not the only one who uses the phone. My family members come through and ask if they can ring this person or that person. People are always calling.
- + I share my phone with my partner because we like to have everything all in one. I could buy my own but I can't afford it ... I come down to the library or the My Pathways office to use their phone.
- + At home we don't have the Internet. My nan doesn't want it. The bills are too much. She wouldn't want Wi-Fi because of that ... Instead we use our phones which is very expensive.

- + I'm a bit concerned about the money. I wouldn't go on it if I had to spend more than sixty a month including phones.



"When I get paid I buy my groceries and then I buy my power card and then I top up my phone with what is left. My family borrow my phone because I have credit. They use the phone and then give it back to me. Sometimes I run out of credit and can't call." (Survey comment)



"I'm still learning how to use this here phone. When people text me I don't know how to text back. When we go for reporting at Centrelink I want someone to teach me properly how to do it ... The system like this is a bit hard. Especially for older people like us. People text me and I just don't have a clue." (Survey comment)

## Digital Ability Needs

- + I want to get into Internet. Like for Centrelink things I want to be able to do that myself.
- + Well really I'd like to learn something like reading and writing. I think I need to do that face to face. But once I knew that I might go online more.
- + More people come to teach technology training for old people.
- + Not interested in the Internet. I don't like it. I don't like any of that thing.
- + Would like to do online learning and set up own business.
- + I don't know [about Internet] because I don't know what I could get out of it. If I got on to it maybe I would know. I could find information.
- + Want to record family history and cultural heritage for next generations.

## Technical Issues

- + I've got Skymesh and pay between 70 and 100 a month but it's not working. So I'm paying for the service and it comes out by direct debit but I'm not getting any Internet.
- + For my Wi-Fi I want that to be fixed and I want to know the password. We have Wi-Fi at work but we don't know the password and we want it because we need to go online.

## Cyber-safety Concerns

- + I'm worried about children seeing inappropriate content on Internet and scams and other online safety issues.

## Appendix 2: Community Communications Audit

About the Community	
Community Name:	Wujal Wujal
Alternate name	N/A
Traditional owners/ Language group	Kuku Yalanji
Location (Coords)	15.9476° S, 145.3182° E
Region	Cook
LGA/Shire/ Regional Council	Wujal Wujal Aboriginal Shire Shire
Land Council	Cape York Land Council
Regional Service Centre, distance	Cooktown- 71km; Cairns - 346km (inland route)/ 320km (coastal route); Brisbane - 2017km
Remoteness (ABS)	Very Remote
Population Data - ABS 2021	
ABS link	<a href="https://abs.gov.au/census/find-census-data/quickstats/2021/LGA37570">https://abs.gov.au/census/find-census-data/quickstats/2021/LGA37570</a>
ABS link- Aboriginal and Torres Strait Islander Quickstats	<a href="https://abs.gov.au/census/find-census-data/quickstats/2021/IQSLGA37570">https://abs.gov.au/census/find-census-data/quickstats/2021/IQSLGA37570</a>
Total population	276; (WWASC survey found 550 in 2021)
Aboriginal and Torres Strait Islander population	258 - 94% (2% not stated); WWASC - 480 (2021)
Gender breakdown	45% male, 55% female
Median age and breakdown	Median age 29; 85 (32.7%) 0-19; 41 (15.8%) 20-29; 46 (17.7%) 30-39; 25 (9.7% 40-49); 35 (13.5%) 50-59; 22 (8.4%) 60-69; 6 (2.3%) 70+
Number of families and number of children per family	70 families; Avg 1.9 children for families with children, 1.2 for all families (including without children)
Language group, no. of first language speakers	92 (33.3%) speak Kuku Yalanji, 12 speak other Indigenous languages
% Aboriginal and/or Torres Strait Islander people who speak an Aboriginal or Torres Strait Islander language	39.9% Aboriginal and Torres Strait Islander people speak language at home
% Aboriginal and Torres Strait Islander people who speak English at home	150 (54.3%) speak only English at home
Employment levels: number of people working, on Jobseeker, CDP, aged/disability pension etc	ABS data to be released October 2022
Education levels: No of people reached	8 attending pre-school; 31 attending primary school; 7 attending secondary school; 3 attending tertiary; 34 unstated (full data set of attainment to be released October 2022)
Number of occupied dwellings	73 occupied private dwellings
Housing suitability: average people per household and per bedroom	Avg 3.4 people per household; 1.3 people per bedroom
Median weekly household income	\$840
Median weekly personal income - for residents over 15 years of age	\$332
Average weekly rent	\$70 (\$75 for Aboriginal and Torres Strait Islander people)

Community Services and Plans	
Community Layout Plan	Draft Corporate Plan 2022 -27 - <a href="https://www.wujalwujalcouncil.qld.gov.au/assets/Uploads/Draft-Corporate-Plan-2022-to-2027.pdf">https://www.wujalwujalcouncil.qld.gov.au/assets/Uploads/Draft-Corporate-Plan-2022-to-2027.pdf</a>
Agencies in community	Bana Yirriji art centre, Bloomfield River State School, Centrelink, Justice group, Lutheran Church, Post Office, RIBS radio station, Store, Women's Centre, Wujal Wujal Aboriginal Shire Council, Wujal Wujal Kindergarten, Wujal Wujal Police, Wujal Wujal Primary Health Care Centre.
Visiting agencies	Indigenous Consumer Advice Network (ICAN), Ergon Energy, Telstra, NBN, State Emergency Service (SES), contractors
Existing Community Development Plans	See Draft Corporate Plan 2022 -27 and Operational Plan 2021-22: <a href="https://www.wujalwujalcouncil.qld.gov.au/assets/Uploads/WWASC-Operational-Plan-2020-2021-002.pdf">https://www.wujalwujalcouncil.qld.gov.au/assets/Uploads/WWASC-Operational-Plan-2020-2021-002.pdf</a>
Power supply/type/backup in community; Relevance to telecommunications	Power supply from Cooktown, local backup generators (100kVA) at Shire Council infrastructure to maintain power for water management system, Rural Transaction Centre, store, art centre etc
Use of power cards in households	Yes, Ergon Energy; can buy from WWASC, Wujal store, Ayton Store; only WWASC can apply rebate
Basics card site?	No
Types of Communications Available	
Public phones	One in front of RTC, one at Ayton store (10kms away)
Home phones	Very few
Mobile - 3G, 4G, 5G, small cell (satellite backhaul), provider, location of base station	3G, 4G available; main tower on Mt Pearce; booster behind ranger station at Ayton; booster coming at clinic
Coverage description	See Telstra coverage map: <a href="https://www.telstra.com.au/coverage-networks/our-coverage">https://www.telstra.com.au/coverage-networks/our-coverage</a>
ADSL, number of connections	Unknown
Business grade services, number of connections	Unknown
Fibre to community	Yes
Satellite services, number, locations, provider	Mostly staff residences have NBN satellite services
UHF or HF Radio	UHF used for emergency communication by police, health; also for cultural burning
Status of services: faults, issues, speeds during peak use time etc	Occasional outages reported on Telstra mobile, public phones
Communications Programs History	Had public Wi-Fi network trial from DPMC, removed since then, replaced by microwave network
Any planned upgrades?	4G booster planned to go at clinic, NBN Wi-Fi on community hall (Communities in Isolation)
Emergency information system	Emergency flood warning system in development, being tested. Council will take over management
Telemetry network	Monitor water pumps, sewerage, weather station; Runs on Mobile 4G network, with up to 72-hour satellite backup

Media Services Available	
Radio services broadcast	Black Star 107.7FM, ABC AM (faint signal)
TV services	VAST (lot of houses don't have VAST service working it or doesn't work), some houses have Foxtel
RIBS radio station	Local broadcaster in Wujal Wujal RIBS; works 7.30am to 4pm each day
RIMO	Queensland Remote Aboriginal Media (QRAM, based in Cairns)
Other media services	WWASC have a Facebook page and distribute a monthly newsletter; Ayton Store has Torres and Cape News
Community Access Facilities	
Internet access facilities	IKC provide 3 computers, 3 iPads, plus training tablets, printer, laminator, binder etc
Public Wi-Fi availability and mode	IKC has free Wi-Fi - requires vouchers; Centrelink Wi-Fi for Centrelink services only; NBN looking at setting up Communities in Isolation Wi-Fi on community hall (installed 15/7/22)
Access computers available in other facilities	Centrelink (for Centrelink purposes only); staff at Post Office helpful with IT support
Programs supporting community access	State Library of Queensland deliver Deadly Digital Communities and Tech Savvy Seniors program through IKC
Expenditure Data	
Amount of money being spent on telecommunications per month	No details
Expenditure on mobile prepaid cards per month	No details
Expenditure on Wi-Fi vouchers per month	No details
Any cost saving mechanisms in place	Shared Wi-Fi at IKC and Centrelink office; NBN have set up Communities in Isolation Wi-Fi on RTC (installed 15/7/22); WWASC have aggregated data service for Shire facilities
Training / Skills Data	
Number of community members that have undertaken digital training	No details
Nature and provider of training programs	IKC runs occasional Deadly Digital Communities and Tech Savvy Seniors workshops; IKC needs to apply to SLQ for funding to do training; School and kindergarten get child cyber-safety training
Training options available	No TAFE; My Pathways offer some courses e.g. machinery operators
Any workplace digital skills training	Clinic on the job training for patient records system and other software; Artsworker does training in Stories Art Money (SAM) database
Staff/resources to support digital skills/access	IKC; Centrelink; Post Office
Use of online services/ applications	
Apps or digital tools in use	SAM database well used at Art centre; server in RIBS for running radio; State Library of Queensland portal OneSearch for archival photos

# MAPPING THE DIGITAL GAP



<b>Use of My Gov, government services, banking</b>	MyGov, 90% + use; Internet banking used by predominantly young people, supported by IKC, post office and Home and Community Care (HACC).
<b>Number of people using social media</b>	Used broadly but some people wary about Facebook due to misinformation and conflict
<b>Number of people using email</b>	Used by most workers in government agencies, community services, local business etc. Limited reporting of use amongst community residents.
<b>Number of people using streaming services</b>	Extensively used, however limited by service quality and reliability
<b>Telehealth usage</b>	Being used extensively at Health Care Centre
<b>Online education or training</b>	Staff at Shire, Justice Group, police, school, clinic all do online training via Zoom
<b>Online court hearings or prison visits</b>	Justice Group do some court hearings and prison visits online
<b>Cyber-safety or scam support</b>	ICAN helped residents recover funds from a funeral fund that went bust

## Appendix 3: Photos of Research Activities



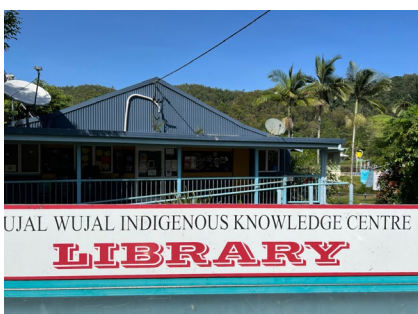
Figures 10 & 11: The Research team meet with WWASC CEO Stephen Wilton and Mayor Bradley Creek, and did a live interview with Carmel on Wujal Wujal RIBS.



Figures 12 & 13: During the week 41 surveys were conducted by the co-researchers, as well as 21 interviews.



Figures 14 & 15: Interviews were held with local agencies including Bloomfield River State School, Wujal Wujal Police and Wujal Wujal Health Care Centre.



Figures 16 & 17: The research team were based at the Indigenous Knowledge Centre for the week.