**REGIONAL
AUSTRALIA
INSTITUTE**

REGIONAL TELECOMMUNICATIONS REVIEW 2021

Submission by the Regional Australia Institute

September 2021

ABOUT THE RAI

The Regional Australia Institute (RAI) welcomes the opportunity to provide information to the 2021 Regional Telecommunications Review Committee.

The RAI is a not-for-profit think tank devoted to the prosperity and wellbeing of regional Australia. Our robust research and community engagement enables us to develop better policy outcomes to transform Australia's future.

Since its inception in 2011 the RAI has worked in partnership with government, academia, and community and industry organisations to develop a deep portfolio of research and policy work. This work and these associated relationships have successfully positioned the RAI at the forefront of the regional Australia conversation.

- We gather and analyse the best information we can find on regions and make this accessible to people around the country.
- We work with regional leaders around the nation to understand their challenges and help them identify opportunities for future development that they can implement.
- We also talk to governments at all levels and provide independent, evidence-based advice about the options they have to make regions even greater.

In addition to a significant national research agenda, the RAI also has a strong track record of working directly with regional communities right across Australia to help identify opportunities and provide sound and tailored solutions for economic growth.

RAI's research and analysis has been proven to help regional leaders create a unified, achievable and relevant set of priorities and actions to benefit their region. Workforce, skills and labour issues have been central to many of our projects with regional organisations. RAI adds value by blending economic analysis with local input to provide regional leaders with the information needed to agree on actions that will have the greatest impact.

EXECUTIVE SUMMARY

The Regional Australia Institute (RAI) welcomes this triennial Regional Telecommunications Review. Our submission reflects the focus of our research and policy work in the last three years, which been more on the social and economic impacts of digital communications in regional Australia than the technical aspects of connectivity.

Our submission specifically addresses many of the questions in the Discussion Paper, in particular those relating to **Adequacy** (changing nature of demand), **COVID-19 impacts**, issues facing **remote communities**, and policy and program changes needed to maximise the impact of telecommunications on **regional development** in Australia.

Feedback from regional leaders received by the RAI is indicating that the NBN rollout across Australia is proceeding quite well. We are hearing fewer complaints about availability. There are still concerns about availability of mobile broadband, especially in remote places. Service providers (banks, insurers and retailers, for example) are increasingly expecting that customers will have access to high quality broadband and this is disadvantaging consumers in remote Australia in particular.

As availability improves, two things follow:

1. The importance of converting availability to productive use; and
2. The importance of managing 'expectations creep' and associated usage demands which will inevitably lead to escalating demands and expectations for coverage, bandwidth and reliability.

As coverage and availability improve, the digital divide is moving to know-how and getting social and economic value from connectivity. The RAI is keen to see more take-up and creative application of bandwidth in regional Australia, so that the social and economic benefits can be realised.
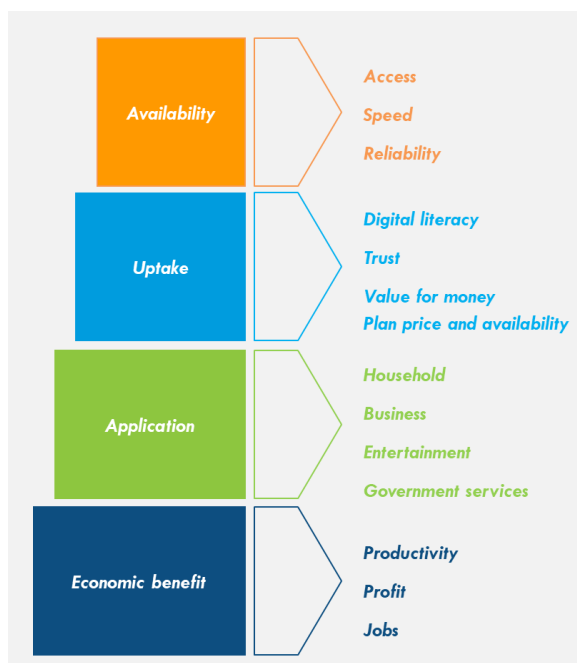
The RAI has identified that there is a four step process to maximising the social and economic impact from regional telecommunications.

As availability improves, policies and programs need to address the other 3 steps to ensure that the digital divide seen in regional Australia is reduced.

Service providers are increasingly moving services online, and this provider-driven 'expectations creep' excludes regional and remote consumers from more advanced services. An example is reliance on 2-factor authentication for advanced banking services, which consumers in more remote locations report is simply not workable given the lack of bandwidth and device availability in these regions.

COVID-19 has increased desire for regional self-reliance, and over the last 18 months digital technologies have been boosting the availability of quality health and education services in regions.

High quality regional telecommunications are also important in meeting the liveability expectations of people living in or moving to regional Australia. Good quality digital connectivity is a vital pre-requisite for living and working in regional Australia, and therefore is a crucial enabler for regional employers looking to recruit in a highly competitive labour market with growing demand for high skilled workers in regional Australia.

COVID-19 has also brought a step change in accessibility of Work From Home, which is also impacting on regional growth. There are two benefits:

1. Regional communities will benefit from the (predominantly) professional workers who are showing interest in working remotely from a regional location, and
2. Work from home will also help fill existing professional vacancies in regions as lack of local employment for a spouse is often a disincentive to moving, and some spouses will be able to bring their work with them if the telecommunications infrastructure is up to requirements.

In facilitating regions to improve their digital connectivity and maximise the social and economic benefits of this, it is very important that policies and programs enable place-based responses. In 2019 and 2021 regional leaders have told the RAI that they want to be at the table, making decisions for their regions, they want partnerships with telcos and service providers, and they don't want to be involved in 'tick the box' style consultation which doesn't validate or act on their concerns.

As the availability and quality of digital connectivity in regional Australia continues to improve, policies and programs need to adapt to focus support on increasing know-how in regions. This includes fast-tracking the take-up of connections in regions, and facilitating high value uses from the connections - uses which advance social and economic outcomes in regional Australia.

RECOMMENDATIONS

1. Work with communities on place-based responses to solving service access issues.

2. Match infrastructure support with support to build know-how in regional Australia.

3. Develop pilots and case studies of how regional communities have put telecommunications access to work for their communities and businesses – highlighting the social and economic benefits of the applications.

DIMENSIONS OF DIGITAL CONNECTIVITY

High quality regional telecommunications are becoming increasingly important for regional communities. This importance has accelerated over the last 18 months while physical connectivity has been compromised by COVID-19 restrictions. High quality digital connectivity is playing a very significant role in regional development.

Regional communities are placing more reliance than ever before on telecommunications for education, health, sourcing information and advice, business deals, shopping and even travelling. High quality telecommunications are a critical part of the liveability package which brings people to regional Australia and enables them to live fulfilling lives away from our capital cities.

Our experience at the RAI has been that we are getting fewer complaints overall about poor quality coverage than we were getting a few years ago. There are still 'black spots' and areas with very poor coverage, particularly in remote Australia, but our sense from regional leaders is that the availability of mobile and broadband continues to improve. Two things follow from this:

3. The importance of converting availability to productive use; and
4. The importance of managing 'expectations creep' and associated usage demands which will inevitably lead to escalating demands and expectations for coverage, bandwidth and reliability.

The RAI's work over a decade with regional communities and businesses has led us to a four-step process for getting full value from regional telecommunications.
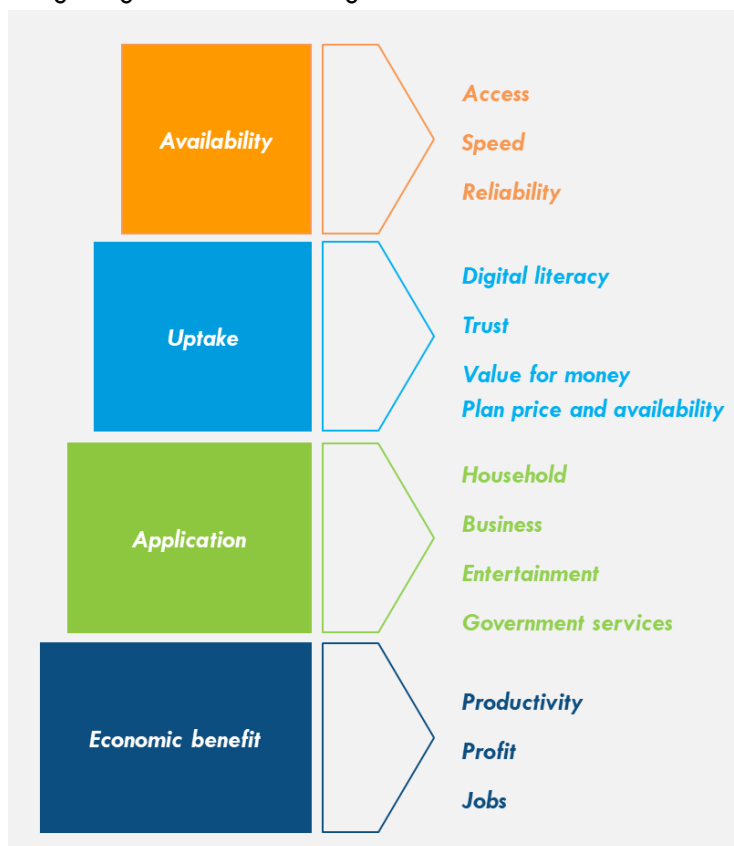
In this four-step process, only the first has to do with telecommunications connectivity hardware.

The subsequent three steps are more about lifting the knowledge base in regions to make best use of the connectivity hardware.

They involve a mix of community and business education, local networks and story sharing, and the ability to tap into specialist expertise to design and deliver productivity-raising applications in each regional context.

The overall goal is getting beyond Netflix, putting applications to community and economic value, by broadening service access (eg telehealth and education) and improving business efficiency and productivity.

The issue of expectations creep affects not just consumers and their ever-increasing desire for bigger bandwidth, but also service providers with ever-growing expectations of how digitally enabled their consumers can be.

Many private (and public) sector service providers such as banks, insurers, and retailers are relying on consumers having reliable broadband access. Broadband access in remote Australia is still a concern, as is device availability and know-how in our more remote regions. An important example is how banking transactions increasingly require 2-factor authentication. It is understandable how this has evolved to

increase customer security, but it is unworkable in our remote regions. Remote residents have told the RAI that limited device availability and limited broadband capacity in their communities mean it is impossible for them to run two devices in parallel to meet the 2-factor authentication requirements – excluding them from most value-adding banking services and leaving them with the bare minimum of banking service access.

COVID-19 has increased desire for regional self-reliance. Nationally this is playing out in renewed interest in re-shoring manufacturing for national security. Regionally this is playing out in making regional business and labour markets more self-sufficient and therefore better able to withstand internal border closures and lockdowns.

Over the last 18 months, digital technologies in the regions have been boosting the the availability of quality health and education services.

RAI Telehealth Webinar

Telehealth has seen rapid growth in regions. This growth is driven by necessity as well as fast-tracking eligibility for coverage under Medicare. RAI hosted a webinar on telehealth (details here http://regionsrising.regionalaustralia.org.au/2021-webinar-series/) in late August 2021.

Some of the key points were:
- Importance of familiarity with the technology – at both specialist and patient ends. E.g. patients may need assistance in managing the consultation, and specialists may need guidance on understanding the context of their regional or remote patient.
- Importance of supporting telehealth with local backup – local people to help patients progress the outcomes of their telehealth consultation.
- Recognition that telehealth is a vital addition to but not a replacement for local health capability.

Online education has also jumped in capability in the last 18 months. This is a welcome development in relation to the National Regional, Rural and Remote Tertiary Education Strategy as submitted to the Federal Government in late 2019. The Strategy highlighted the decline in availability of post-school learning options in regional Australia, and the consequences for regional student support and completions. Then Minister, The Hon Dan Tehan MP endorsed the Strategy's seven recommendations, and the RAI is looking forward to seeing progress. Research by the Regional Universities Network has shown that students are much more likely to practice their trade or profession in regional places when that learning can be done **in region**.

But while better telecommunications infrastructure can provide a platform for reforming regional learning options, it is just one part of the puzzle. Community capability is equally important.

A case in point is that of Warialda Primary School in northwestern NSW where, when the 2020 COVID-19 lockdowns were imposed, the school surveyed parents about alternative learning options. Connectivity in the region is generally adequate, but the survey found that more than half of the students' households did not have a reliable or high enough bandwidth connection, or enough computers or know-how in the home, to be able to do remote learning digitally. So the school went to a paper-based curriculum, an unexpected and concerning outcome in 2020 Australia.

CONNECTIVITY AND LIVEABILITY

Regional "liveability" plays an important role in influencing people's decisions to move to, stay in or move from a regional town. Understanding the role that liveability plays in directing people's decisions to move to, stay in or move from a regional town can help communities more keenly target policy and program efforts to attract and retain residents.

A standard of infrastructure services is a key component in the decision to move to a place – this includes access to water, good roads and digital connectivity. Generally, the presence of these things in a regional area acts as a 'hard gate' in people's decision making. Without these factors in place, a person will not seriously consider making the move.

As well as understanding why people consider moving to regional Australia, it is also useful to know what some of the perceived barriers are. The RAI's 2020 research showed that concern about the lack of broadband connectivity was the fourth most important reason people **may be hesitant** to move to regional Australia:

1. Perceived lack of job opportunities (55%)
2. Moving away from friends and families (52%)
3. Concerns about healthcare (51%)
4. Concerns about lack of broadband (49%).

Regional digital connectivity not only supports Work From Home arrangements, but it is also a critical factor to facilitate long-distance tertiary studies and connection to family and friends.

From a service provision perspective, the ability to access health services has been significantly boosted with the increased access to Telehealth in regional Australia in response to COVID-19 lockdowns. This has effectively broadened the scope of services available remotely.

CONNECTIVITY AND REGIONAL JOBS

Hand in hand with growth in digital technology availability in regional Australia has been remarkable changes in the nature of regional employment. The following chart shows how in just 10 years, since the height of the mining boom, advertisements for jobs in regional Australia have gone from being dominated by low skilled labouring and clerical jobs, to being dominated by high skilled trades and professional jobs. These are the jobs regional employers need filling, and they reflect the increasing sophistication of regional labour markets, with improved telecommunications a key underlying factor.

The number of positions advertised in regional Australia has hit a record high in August 2021 of 69,800 and over 70% of these are Certificate 4, trades or professional jobs.

And COVID-19 has brought a step change in accessibility of Work From Home, which is also impacting on regional growth. There are two benefits:

1. Regional communities will benefit from the (predominantly) professional workers who are showing interest in working remotely from a regional location, and
2. Work from home will also help fill existing professional vacancies in regions as lack of local employment for a spouse is often a disincentive to moving, and some spouses will be able to bring their work with them if the telecommunications infrastructure is up to requirements.

Regional Job Vacacancies September 2010 - August 2021 Source: National Skills Commission, RAI

Legend:
- MANAGERS
- PROFESSIONALS
- TECHNICIANS AND TRADES WORKERS
- COMMUNITY AND PERSONAL SERVICE WORKERS
- CLERICAL AND ADMINISTRATIVE WORKERS
- SALES WORKERS
- MACHINERY OPERATORS AND DRIVERS
- LABOURERS

INVESTMENT IN CONNECTIVITY

To advance regional Australia's digital future, our national telecommunications strategy needs to adopt a holistic approach to digital connectivity investment and technological roll out that includes a focus on availability, but also other issues like uptake and application. This means ensuring that investments also target education and awareness of prospective users such that improved digital connectivity is not just a potential outcome but a real one, and that opportunities for social and economic benefits are maximised. Such a holistic approach recognises that digital connectivity is a multidimensional phenomenon, with various opportunities for policy emphasis.

Regional communities want to have a say in how their challenges are addressed. The RAI has convened two policy hacks with over 200 regional leaders in both 2019 and 2021, and in each hack, local involvement in program design and spending has been highlighted as critical in getting regional communities engaged.

In 2021 participants called for government to be less siloed and to work more cohesively across portfolios. Regional leaders are looking for partnerships and more effective linkages, as they are well aware of the duplication and gaps and know that there is a better way. True partnerships are being called for, ones which allow for genuine engagement. They can take a variety of forms:

- public/private partnerships,
- national/state/regional partnerships,
- partnerships among regions,
- partnerships within the community,
- partnerships which develop pathways, for example from school through to tertiary education and to the workforce.

This is not a call for more opportunities to give input on the regional perspective. Indeed, some regional leaders note that they have simply stopped giving input to centralised policy making, feeling that it is an exercise in "ticking the box". Rather, participants called for a change in mindset: to design, plan and enact policies and projects together.

In 2019 participants agreed that allowing flexibility in the way that policies are delivered would bring about better results across diverse regional and remote areas of the country. This requires a rebalancing away from the current emphasis on programs that seek to maximise economies of scale, towards recognising the importance in smaller regional communities of the value of economies of scope – where different services can be bundled together for more effective local impact. This reflects a shift in focus away from the blanket polices that often seek to ease the burden of administrative functions, towards the place itself, and towards the intended outcomes of the intervention. Some specific ways to help shift this focus include establishing cross-border commissioners and extending regional deals. Regions need different approaches, especially where policies are designed to work in areas with large populations, while effective delivery is difficult to achieve where populations are small and dispersed.

The implications for regional telecommunications policies and programs are clear: local voices need to be included, and solutions need to reflect partnerships between telcos, broadband service providers, governments and communities.

Place-based programs need to be continued to ensure that remaining 'black spots' are dealt with efficiently. Programs need to flexible, and fit-for-place and purpose.

Given that rates of connectivity can vary so much, especially at the LGA level, programs need to be flexible enough to target particular issues in particular places. This can be realised in two different ways:

- Co-investment with telcos (when looking to address state-identified connectivity issues)
- Grants for local governments or businesses (when looking to identify and address unknown connectivity issues).

Governments typically focus on getting the broadband infrastructure in place, in a way which meets the cost and reliability needs of consumers. The market is then able to package and offer suitable plans. Yet the big economic returns come less from the hard infrastructure and more from the 'soft infrastructure'; the

applications used by businesses to improve productivity and expand markets. This was recognised in the 2018 Regional Telecommunications Review with its call for increased digital literacy.

Across Australia there has been little public sector effort to accelerate digital literacy and support businesses accessing the kinds of commercial gains possible from the clever application of high-speed broadband. Soft infrastructure is even more important in regional Australia, as there are fewer business-to-business digital service providers operating in or servicing regional communities, and few examples of innovative business applications that could lead the way for others. This is an area for policy consideration.

Physical connectivity challenges have or are being addressed in many areas, but it is important now to address the 'know-how' aspect of the digital divide.