2021 Regional Telecommunications Review

As the NSW state member for Murray, I welcome this inquiry into telecommunications services in rural and remote areas.

A significant and unacceptable gap in connectivity and service reliability exists between my rural electorate and cities across NSW, presenting rural and remote constituents with inequities in health status, and limiting their employment opportunities.

By focusing on high population centres, our rural and remote communities continue to be denied the chance to prosper; insufficient telecommunications infrastructure is disincentivising individuals from relocating to these areas.

Not only does this impact the mental health and wellbeing of constituents, it also limits business and educational capabilities, as well as access to emergency services.

At the beginning of July 2020, I received a flood of emails from constituents who shared the long-standing impact of unreliable mobile coverage, little to no coverage, or known mobile black spots, on their lives and livelihoods.

Overwhelmingly, their correspondence indicated that it is geography not need that determines if:

- They can connect to 000 in an emergency
- Emergency services can communicate with Base when attending an emergency
- Businesses can trade
- Students can access reliable internet
- Tourists can navigate their way from town to town

In 2016, there were over 3,200 reported regional blackspot locations across NSW, of which many are located in the Murray electorate, as identified in the following map:

https://www.google.com.au/maps/d/edit?mid=11tj4ypM2GpSzjIVywaOmA3wz1iRAKVjC&us p=sharing

Since its inception in 2014, the Government has committed \$380 million under six rounds of the *Mobile Black Spot Program*.

Despite the funding of over 1000 base stations, very few have benefitted my constituents in the South West and Far West. Indeed, only an estimated 174 new or upgraded mobile base stations were delivered in Regional NSW in 2019. Worryingly, I have reports of some base stations that are not fit-for-purpose, even after an upgrade.

When I've raised connectivity issues with the Commonwealth and NSW Governments, I'm told there has been significant investment in mobile connectivity and other telecommunication services. Yet, despite promises of better telecommunications infrastructure in the bush, the same issues remain.

We all accept that if our rural communities and economies are to prosper, a fast and reliable telecommunications network is vital; however, my discussions with constituents suggest that the current level of investment does not acknowledge the extent of the problem, nor its impact, and is more symbolic than efficacious in nature.

Lockdowns have only further exposed the unreliable nature of networks in the Murray electorate where fast, reliable internet is not a luxury, but essential for business. The effects on education of poor network connectivity have also been profound, with many students without network capacity necessary for home learning.

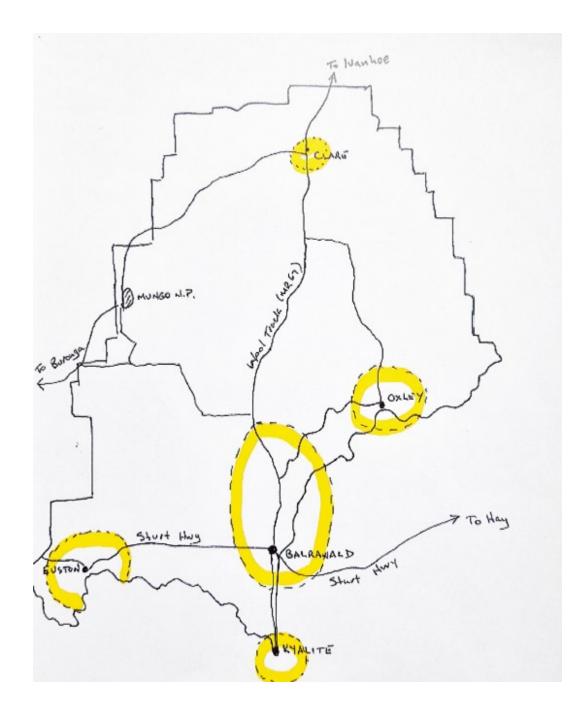
Murray constituents have done the hard work of identifying the blackspots; it is now incumbent on state and federal governments to provide a roadmap for how each blackspot will be addressed.

Establishing this inquiry into telecommunications services in rural and remote areas is a start; even better will be a raft of specific measures informed by the experiences of rural and remote communities having encountered firsthand the damaging effects of a lack of connectivity.

Telecommunication issues by Local Government Area

Balranald

Mobile coverage and connectivity in the Balranald Shire is totally inadequate at worst and patchy at best. Significant blackspots exist across the Shire, including main transport routes east, west and south of Balranald township. Whilst coverage is important for the whole shire, transport routes west and south of Balranald township could be considered as priorities. The map of the shire shown below indicates zones where there is reasonable coverage, yet the other areas suffer from unreliable or non-existent telecommunication access.



As a result, contacting emergency services, improving employment opportunities, encouraging people to move to rural communities are all impacted.

I propose for a cell tower to be installed at the Pan Ban exchange that reaches Pooncarie, Darnick and Mungo NP. With many community members working or learning from home, the need for a stable connection with high bandwidth allocation continues to increase. To ensure access, many are forced to purchase satellite-based internet, resulting in real financial strain on families.

Berrigan Shire

Mobile and internet connectivity is by far the biggest issue for Berrigan Shire constituents. Mobile internet is already struggling, but of particular concern within the Shire is the discontinuation of 3G (planned for 2023), as 4G is at present intermittent or unavailable across large areas of the Shire, including main towns.

In the Shire seat of Berrigan, non-Telstra networks are patchy and often drop out completely indoors, thus limiting consumer choice and competition. Specific locations of concern include Logie Brae, Myrtle Park, Aratula and Bullatale.

Beyond town centres, Telstra remains the only option for many areas.

Farmers have been instructed to 'invest in boosters', yet in many cases costs exceed\$1000 for each unit, a cost not shared by city-dwellers. This, along with the fact that many would have to buy multiple for their house, ute, and tractor, leads many to believe that the government is not fairly supporting rural and remote Australians.

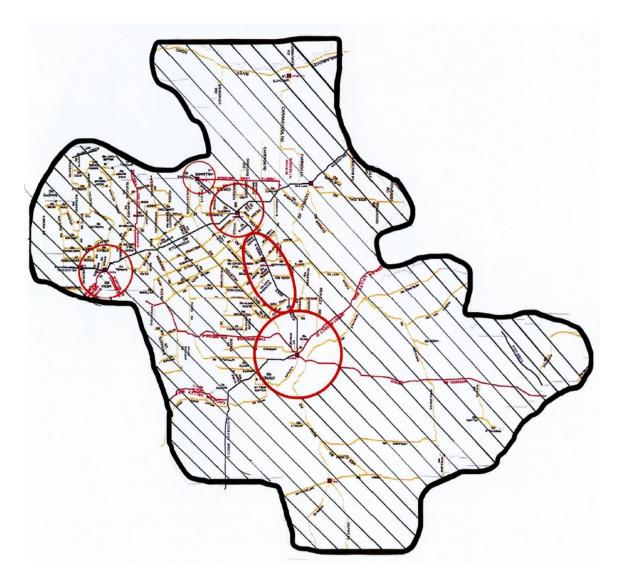
Within the Berrigan Shire Local Government Area (LGA), Tocumwal/Finley/Barooga have access to fibre-optic, yet Berrigan is restricted to fixed-wireless; this form of internet is unreliable and there needs to be better standardisation across the LGA to ensure that all towns are allowed to access good internet.

The government must allocate funding to increase coverage across the shire to ensure that residents are able to communicate with others without significant detriment to their education, employment or lifestyle opportunities. Berrigan must also be hooked up to the NBN fibre-optic network to improve the reliability of network connections.

Carrathool Shire

The following map identifies areas of the Carrathool Shire LGA which are able to access somewhat stable internet, with the majority of the region experiencing reception which varies from intermittent, to unreliable to non-existent, except of course if residents possess expensive infrastructure such as very high aerials, satellite phones or car boosters.

On the map below, only the areas within the orange boundaries have a reliable mobile connection.



The government must invest in telecommunication infrastructure to increase the consistency of internet access across the shire, which will ensure that my constituents of Carrathool do not have to spend thousands of dollars of their own money simply to access the internet, as well as improve the safety of travellers coming into the LGA.

Edward River

Once you leave Deniliquin, there is very limited mobile coverage across the Edward River LGA.

The following area have been identified as problematic by Edward River Council and constituents:

- Finley Road, Deniliquin to Blighty
- Maude Road at the Hay Shire boundary
- Conargo Jerilderie Road
- Pretty Pine Road at Murgha Station

- Cobb Highway outside Pretty Pine
- Cobb Highway from Deniliquin to Mathoura
- Tuppal Road to Tocumwal
- Waragoon, south of Riverina Highway
- Wakool Road

The lack of coverage and connectivity, as with all rural communities, continues to impact on business productivity, agriculture, attracting investment and ensuring individual's safety in the event of fire or accident.

Griffith

There are a number of areas that have insufficient and unreliable coverage, including:

- Bringagee Road
- Boorga Road (Mallinson Road to Dickson Road)
- Benerembah area
- MR80 West (Hillston West)
- Lakes Road area
- Parts of Rankin Springs Road

Hay Shire

Unreliable mobile coverage and poor connectivity is a common theme in the Hay Shire. Many residents have shared stories relating to crisis situations where they've been unable to access telecommunications networks due to the abundance of blackspots. This is of great concern as many of my constituents work in agriculture, far from towns, and if an accident were to occur, emergency services would be unreachable.

Results from the Australian Digital Inclusion Index 2019 indicate that the Murray and Murrumbidgee Area (in which the Hay LGA falls) have the lowest scores in NSW. With an overall score of just 53, the region has an obvious deficit in comparison to other parts of NSW.

The region has the lowest internet data allowance in NSW, which has an impact on the equity for the community in all aspects of digital inclusion – from agribusiness to education.

While the Hay township has access to fibre to the node internet, the majority of my constituent rural landholders access the internet either via mobile or satellite. These connections are expensive and have data limits which further inhibits the community's ability to connect to the digital economy.

At the very basic level, Hay still lacks widespread mobile coverage; while services extension devices such as repeaters and high gain aerials are available to assist local community members in improving access. For visitors there are large areas of the LGA without any mobile coverage. This presents a safety issue as a tourism destination dependent on the

drive tourism market; all of the major tourism corridors into Hay are without mobile coverage between towns.

Upon coordination with Hay Shire Council, it has been confirmed that areas without mobile coverage are:

<u>South Cobb Highway</u> Service cuts out from Auscott Gin 912km) to Booroorban (little or no coverage)

West Sturt Highway

Service cuts out 9km from Hay until Yanga (17km from Balranald)

<u>Maude Road</u>

Service cuts out 9km from hay until Maude (60km from Hay)

North Cobb Highway

Service cuts out 16km from Hay until 16km from Booligal. Then no coverage until Mossgiel North East to Hillston from Booligal – 9km coverage from Booligal and then nothing until Hillston.

East *Mid Western*

Service cuts out 15km until Gunbar.

Carrathool Road

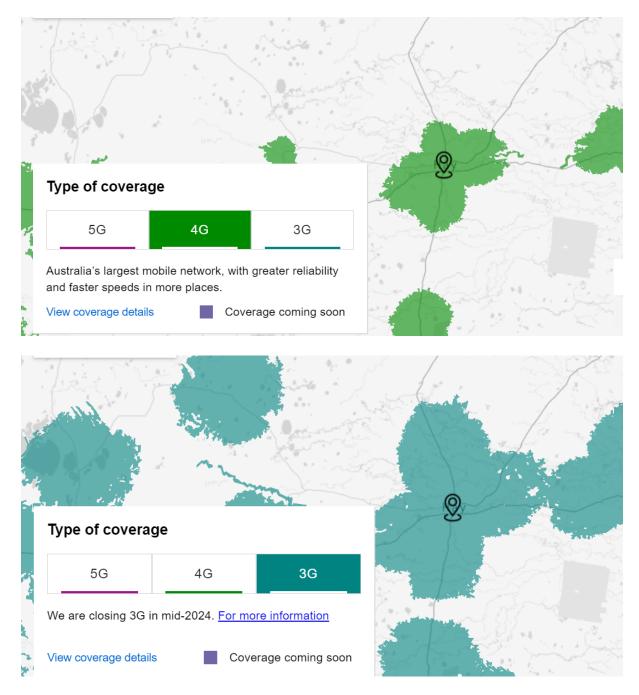
Service cuts out at 12km mark until Carrathool (65km from Hay)

<u>Sturt Highway</u>

Service cuts out 15km from Hay to Rivcott Gin.

The Telstra coverage map also highlights the significant tracts of the agricultural land without coverage, which impedes business and raises safety concerns for vehicles without external aerials.

Visitors to the Hay LGA also report that they have no coverage in the area with mobile service because they are not Telstra customers. Given the wealth of options for carriers in urban areas, visitors often find themselves without coverage across all corridors until reaching town centres.



Leeton Shire

Within the Leeton Shire area, several blackspots exist. The most impactful on community members are:

- Merrungle Hill
- Corbie Hill
- Murrami
- Stanbridge
- WR Connect (Wumbulgal Irrigation Way)
- Brobenah Rd Leeton
- Colinroobie Rd

- Crowes Rd
- Carbone Rd
- Whitton Rd
- Dallas Street Yanco
- Irrigation Way

Murray River

In areas between Moulamein and Deniliquin, businesses and individuals have little or no signal without an external antenna. Coverage is particularly problematic in the following areas:

- Between Barham and Moulamein
- Barham and Caldwell
- Caldwell and Bunnaloo
- Mathoura and Deniliquin
- Murray Downs and Koraleigh
- Tooleybuc and Koraleigh
- Old Deniliquin Road, north of Moama township
- Picnic Point, Mathoura (through the Murray Valley National Park)

Wentworth Shire

Within the Wentworth Shire, there are a number of well-documented issues.

• NSW Fire & Rescue

Communication laptops within the trucks rely on mobile phone coverage for their data. Their experience shows that coverage drops out about 15KM to the north of Wentworth, limiting functionality and the ability to communicate back to their central dispatch.

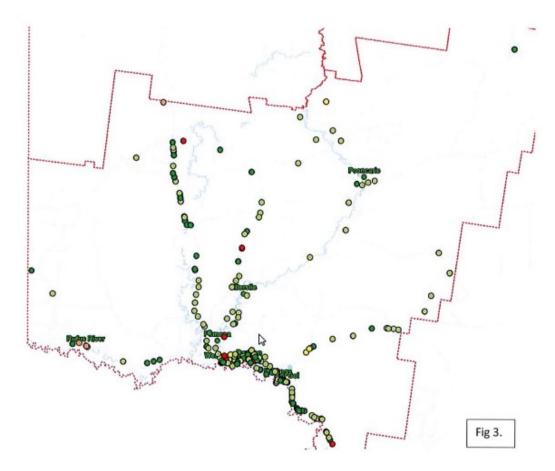
• The NSW Ambulance

They have just installed "Cel Fi" mobile phone boosters in their vehicles to extend the coverage range as they were finding an increase in turnouts where they had limited communication capabilities. Again they are carrying laptop computers in their vehicles for communication and dispatch. This allows them to have constant updates of incidents details as they come to hand. With no mobile phone coverage they were left to find some details out themselves which in turn delayed the response time.

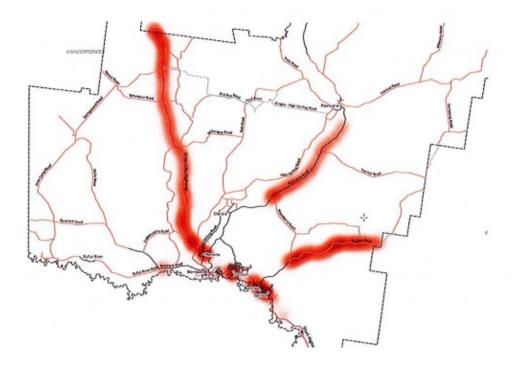
• Road crashes

There is a concentration of crashes on the Silver City Highway to the north as well as Nob Rd and Pooncarie Rd. To the West, around Rufus River and the Old Renmark Road, and to the East on the Silver City Highway and Arumpo Rd, there is a cluster of crashes. These locations all have limited or non-existent mobile phone coverage, delaying emergency response to incidents, and resulting in potentially life threatening situations

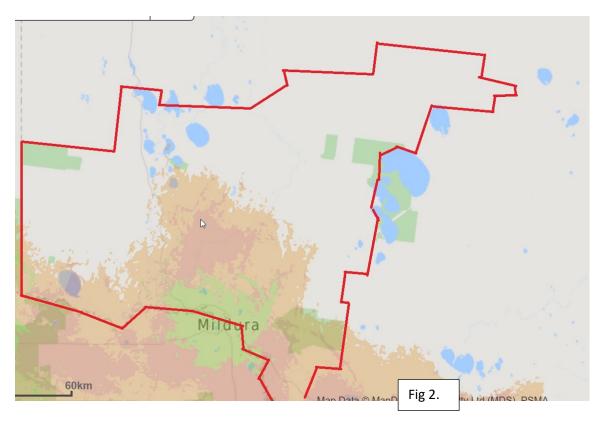
The following map identifies road crash locations in the Wentworth Shire. All of these locations have limited or non-existent mobile phone coverage delaying emergency services response.



The below map identifies key blackspot locations in the LGA



According to the below map, coverage in a number of locations is limited or non-existent. The only colours that should be taken note of in this figure is the pink and green areas. The orange area is coverage with an external antenna which is few and far between, and should be ignored.



It is for these reasons that considerable investment must be made to fix mobile phone black spots as soon as possible.