Regional Digital Plan

GIPPSLAND

REGIONAL PARTNERSHIPS
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Committee for
GIPPSLAND

Statement from the Gippsland Regional Partnership Chair

Digital connectivity is fundamental to people's lives, however we are aware that many communities in our region are disadvantaged when it comes to accessing digital infrastructure and services.

The Gippsland Regional Partnership is taking steps to reduce the digital divide through the Gippsland Regional Digital Plan.

While the Digital Plan analysis offers a solid evidence-base and often indicates good mobile coverage, we know from our regional consultations that the 'lived experience' for many users can be quite different.

Our digital priorities have been determined through various stakeholder conversations along with input from our partners, Committee for Gippsland, Regional Development Australia Gippsland, and the Gippsland Local Government Network.

Ultimately, this collaboration has resulted in a series of priorities that aim to address Gippsland's digital connectivity gaps. Our priorities centre on addressing mobile blackspots; better services for our remote and vulnerable communities; influencing stronger NBN and successor technologies beyond NBN for business; facilitating digital literacy training; and enhancing connectivity in tourism hotspots, such as Lakes Entrance and Phillip Island.

The Partnership's role is to advocate and help governments understand what the community values. Our conversations will continue, and our Digital Plan will be a living document to reflect local input and solutions that reduce the digital divide.

Maree McPherson
Chair,
Gippsland
Regional
Partnership

What is a Digital Plan?

The Gippsland Digital Plan identifies current gaps in the region's digital landscape and outlines priority actions for how these gaps can be addressed.

This Digital Plan forms the basis of our Regional Partnership's advocacy to all levels of government, as well as industry and community groups. It will also be a valuable resource to other stakeholders in the region for their own advocacy and action.

Our Digital Plan and priority actions have been informed by the evidence base and analysis contained within the Gippsland Digital Plan Supporting Document.

This document can be accessed at:
www.rdv.vic.gov.au/regional-partnerships/gippsland

Given the fast-changing nature of the digital environment, this Digital Plan will be a living document, to be reviewed and revised periodically by the Regional Partnership to ensure it continues to reflect the emerging issues and shifting priorities of the region.

Addressing the digital divide

Victoria's Regional Digital Plans are the first of their kind, filling the critical information gap needed to effectively reduce the persistent country-city digital divide, defined as regional shortfalls in:

Access to digital services

The ability to effectively use these services

Their affordability relative to their capital city counterparts

A substantial digital gap has been found between regional Victoria and Melbourne:

53

2018 Rural Victoria digital inclusion score

64^

2018 Metropolitan Melbourne digital inclusion score

These scores reflect differences in digital capability, access and affordability found in different locations. It highlights the need to address the digital divide in regional and rural areas as all Victorians deserve to have access to the same digital services – no matter where they live.

^ Rating from the 2018 Royal Melbourne Institute of Technology-Swinburne-Roy Morgan-Telstra Digital Inclusion Index (DII)

Digital issues affecting all regions

Six common issues and opportunities have emerged from discussions with Regional Partnerships and Digital Plan Working Groups:

Fixed broadband

Ensuring NBN service quality is sufficient to meet resident and business needs

Mobile coverage

Addressing the prevalence of blackspots

IoT (Internet of Things) networks

Availability of low-bandwidth networks to support the uptake of next generation technologies

Public WiFi

Availability of free public WiFi for disadvantaged residents and tourists

Access

Access to government assets to improve services locally

Digital skills

Improving digital literacy, supply of IT professionals, and workforce preparedness for the future

Stakeholder recommendations:

The Gippsland Digital Plan makes a series of recommendations to different stakeholder groups for their action – these recommendations will change as the key issues and priorities of the region shift. Key recommendations are summarised below.

Local Government

Uses their local presence, insights and planning powers to identify localised fixed and mobile blackspots, influence NBN technology deployment, promote early 5G rollout and facilitate digital literacy training.

Victorian Government

Continues, reviews and extends its regional telecommunications advocacy, co-investment and pilot programs to address unmet needs and capitalise on opportunities from IoT and 5G.

Commonwealth Government

Continues, reviews and extends its mobile blackspot co-funding program, requires NBN Co to maximise deployment of high performance technologies, mandates industry to meet stronger NBN service connection and maintenance requirements and invests in digital skills training programs.

NBN Co

Restructures its wholesale pricing to allow lower retail prices and encourage greater utilisation of network capacity, and quickly bring to market effective business grade services with strong Service Level Agreements (SLAs) with retailers and resellers.
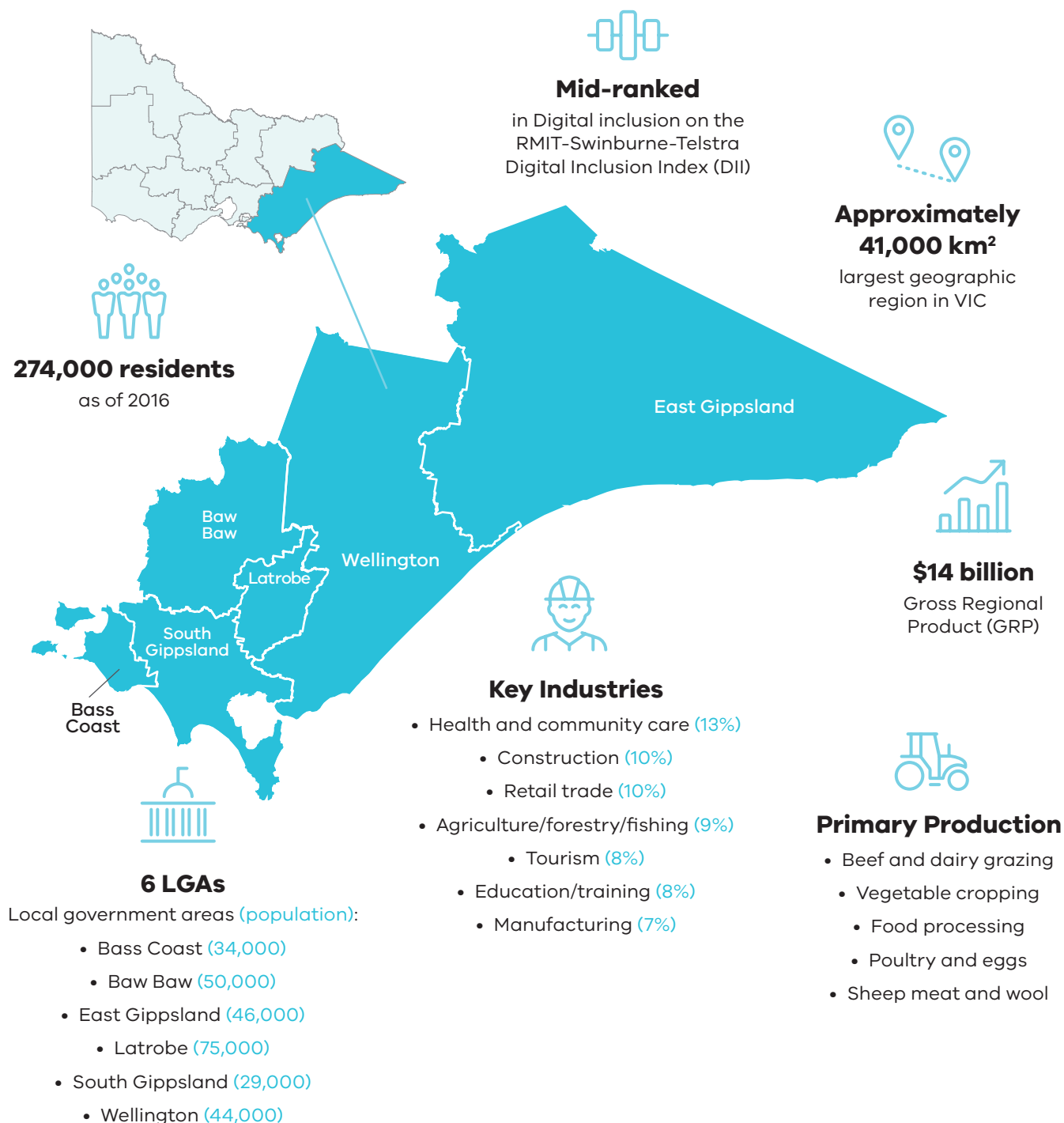
Telco Industry

Actively considers opportunities to provide competing broadband services for businesses in high demand precincts, particularly if NBN Co fails to restructure its wholesale pricing or does not provide effective business grade services.

Gippsland: at a glance

Gippsland is the largest region in Victoria, characterised by numerous towns spread throughout the region, its extensive Bass Straight coastline, substantial grazing areas, alpine terrain in the north and a diversity of industry. Like many rural and regional areas, the Gippsland region faces challenges in digital equality for its residents which continues to limit attainment of the region's aspirations as a prosperous, enjoyable, secure and equitable place to live, work and do business.

Mid-ranked
in Digital inclusion on the RMIT-Swinburne-Telstra Digital Inclusion Index (DII)

Approximately 41,000 km²
largest geographic region in VIC

274,000 residents
as of 2016

East Gippsland

Baw Baw

Latrobe

Wellington

South Gippsland

Bass Coast

$14 billion
Gross Regional Product (GRP)

Key Industries
- Health and community care (13%)
  - Construction (10%)
  - Retail trade (10%)
- Agriculture/forestry/fishing (9%)
  - Tourism (8%)
  - Education/training (8%)
  - Manufacturing (7%)

Primary Production
- Beef and dairy grazing
  - Vegetable cropping
  - Food processing
  - Poultry and eggs
- Sheep meat and wool

6 LGAs
Local government areas (population):
- Bass Coast (34,000)
- Baw Baw (50,000)
- East Gippsland (46,000)
- Latrobe (75,000)
- South Gippsland (29,000)
- Wellington (44,000)

NOTE: Two sources of data were used for the statistics on this page: *Data by Region and Quickstats from ABS.* Refer to Appendix A of the Gippsland Digital Plan Supporting Document for full acknowledgements.

Stakeholder engagement

Gippsland businesses, stakeholders and community members were engaged to help develop the Gippsland Digital Plan.

Their perspectives on key digital issues has been a valuable contribution to the development of this plan, providing the voice of those across our region who need and use digital technologies every day.

The Committee for Gippsland conducted a series of discussions with a range of stakeholders that included:

- Committee for Gippsland members
- Businesses in Gippsland
- Council personnel.

Additional fieldwork has been undertaken to tap into the experience of the six local governments in Gippsland and develop a business case analysis of our top priority project. This work has included:

- A detailed online survey of local governments
- Face-to-face onsite interviews by expert market research field staff
- Analysis of existing studies provided by respondents.

Key digital issues in the region

The Gippsland Regional Partnership has identified the following key issues broadly affecting the region:

Inadequate mobile coverage

There is a persistent and significant divide in the quality of mobile services available to regional users compared to metropolitan users with important implications for public safety, economic development and general liveability. Regional users have emphasised this issue recently, **registering 496 blackspots˘** experienced across the Gippsland region as part of the Commonwealth's black spot funding program.

The Digital Plan has relied on public mobile coverage maps provided by the carriers. The analysis reveals the maps to be too high-level and low resolution to enable identification of areas where coverage is unreliable, weak and incapable of supporting the data services which users have come to expect to access 'on-demand'. This means that while an area may appear well-serviced by these maps, the 'lived experience' of regional users is often very different. The analysis summarised on the following pages should be read with this in mind. Better data in the future can provide a more complete picture about mobile coverage issues within towns and in areas not yet analysed by the Digital Plans.

The Gippsland Regional Partnership calls for continued Commonwealth and State funding to address mobile coverage issues and better data from carriers to enable more informed funding decisions. A collaborative approach from government, industry and private investment will be required to address mobile coverage issues for the region.
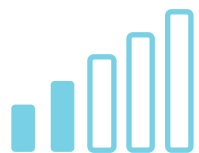
˘ based on the Commonwealth National Mobile Black Spot Database, last updated October 2018

Digital skills shortages

Digital skills shortages are a persistent issue across the region, both in terms of basic digital literacy as well as specialist technical skills to support business growth and competitiveness across the region. Gippsland industry consultations have highlighted the importance of this issue and the ways in which current digital skills training is often not well targeted to regional business needs and government supported courses are too inflexible. Lack of access to IT training courses or specific industry specialist training would result in difficulties retaining a digitally-capable regional workforce.

Further research is needed to understand the place and sector perspectives of this issue, along with new initiatives to build the digital skills workforce across Gippsland.

Lack of NBN business-grade services

The availability of adequate, affordable business-grade services for regional businesses across all NBN technology types remains a concern. This is despite the introduction of NBN's Enterprise Ethernet business service, which due to technical limitations will not be accessible to many businesses who have not received the higher capacity technologies in the rollout.

Stakeholder consultations have also revealed issues with the reliability of services and fault and maintenance response times. Enabling access to business grade services for all Gippsland businesses and sectors is a high priority for the Gippsland Regional Partnership. Areas such as food and fibre, education, e-health and professional services like engineering can all benefit from better services.

Need for more public WiFi networks

Gippsland regional stakeholders have shown strong interest in improving public WiFi networks across the region to provide reliable internet access for Gippsland residents and tourists.

Many regional areas have begun to implement their own initiatives, such as with the Bass Coast Shire implementing free networks in several places around Phillip Island and Meeniyan, another town that has established its own public WiFi network.

The Victorian Government recently announced it will deliver public WiFi networks to Traralgon, Moe and Morwell. The Gippsland Regional Partnership welcomes this initiative and calls on continued State Government support for public WiFi networks, as well as Commonwealth Government support for these initiatives in high priority areas.

Key digital issues in the Local Government Areas

The most significant digital issues and priorities identified across each of Gippsland's Local Government Areas (LGAs) includes:

Baw Baw

- Poor mobile phone coverage and reliability
- No or inadequate public WiFi, including in small towns

Bass Coast

- Lack of general digital proficiency
- Lack of access to existing government telecommunications infrastructure

South Gippsland

- Lack of digital proficiency
- Lack of access to technology skills training
- No or inadequate public WiFi in small towns

Wellington

- A shortage in skilled technology professionals
- Lack of access to technology skills training
- Poorer than expected NBN capability and reliability
- Limited knowledge and uptake of IoT technology

Latrobe

- Lack of general digital proficiency
- Poorer than expected NBN capability and reliability
- Lack of access to technology skills training
- A shortage of skilled technology professionals
- No or inadequate public WiFi in small towns

East Gippsland

- A shortage of skilled technology professionals
- Lack of general digital proficiency
- Lack of access to technology skills training
- Poor mobile phone coverage and reliability
- No or inadequate public WiFi in small towns

Assessment of digital needs

Analysis of digital supply and demand is conducted on a place and sector basis across the region to provide the evidence base necessary for effective digital planning. Places and sectors in the region have been analysed as follows:

Place/sector analysis

Significant Places
Looks at the demand and supply of digital infrastructure and services in the most populated cities, towns and localities of the region.

Primary Production
Looks at the most economically significant primary production industries in the region.

Tourist Locations
Looks at the supply of and demand for digital services in the most important tourist attractions / locations in the region.

Transport Blackspots
Looks at the availability of mobile services along the region's key transport routes.

Digital infrastructure analysis

Fixed access
Includes National Broadband Network (NBN) fixed-line broadband services including Fibre-to-the-Premises (FttP), Fibre-to-the-Node (FttN), Fibre-to-the-Curb (FttC), Fixed Wireless and Satellite.

Mobile
Availability of digital mobile networks capable of supporting voice telephony and data applications through 3G and 4G networks.

WiFi
The availability of public WiFi services through public libraries and buildings, information centres and other local government initiatives.

LP-WAN IoT
The availability of Low Powered Wide Area Networks (LP-WAN) that can support Internet of Things (IoT) applications like remote sensors and devices that are increasingly relevant to industry applications.

Findings of the Digital Plan

Significant places with a shortage of digital infrastructure

There are 31 cities and towns above 1,000 people in the Gippsland region. A selection of 16 of these, including the largest and smallest, have been analysed in this Digital Plan. Another six localities with less than 1,000 people were also included in the analysis to provide a broader perspective of different town sizes[†].

The analysis has not looked comprehensively at smaller population centres with less than 600 people and looks exclusively at the town centre in each location, noting that this, in effect, misses people living nearby in sparsely populated areas where services tend to be worse.

While our analysis of public coverage maps indicates there is generally good 4G mobile coverage within population centres, we know from regional consultations that the 'lived experience' for many users can be quite different with continuing demand for better mobile infrastructure.

Of the 22 selected significant places in the Gippsland region that were analysed, it was revealed that:
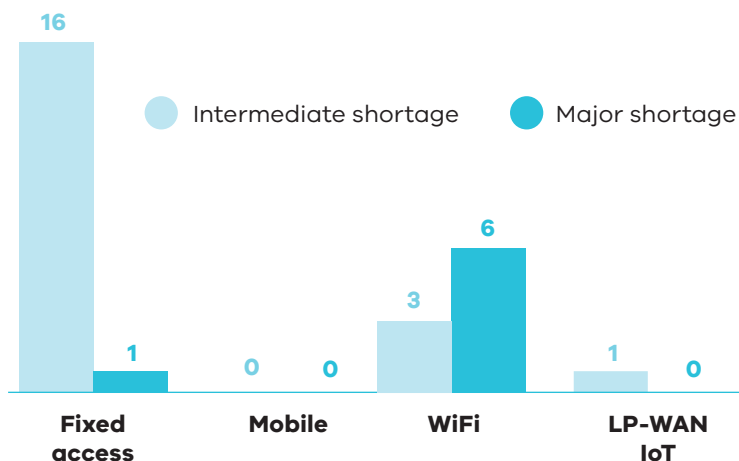
- **Fixed access broadband** had an intermediate supply shortfall for 16 cities/towns/localities*, with one town, Orbost, suffering a major supply shortfall, indicating the widespread need for business broadband to be further considered and addressed.

- **Mobile coverage** was assessed as adequate within the main population centres based on carrier coverage maps, indicating they have good coverage. However, there is concern whether these maps reflect the lived experience of users, and what is not assessed here is how services deteriorate when moving beyond town centres. The impending rollout of 5G technology has the potential to uplift mobile services for early recipients, but smaller regional population centres are at risk of being left further behind.

- **Public WiFi** access was either a major or intermediate supply shortfall for nine places.

- **LP-WAN IoT** was only found to be an intermediate supply shortfall for Orbost business users, but with demand expected to grow strongly over the next 3-5 years, closer attention will need to be paid to how these networks develop in coming years relative to demand.
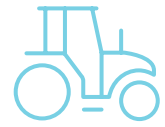
[†] based on 2016 ABS census data.

* Traralgon, Moe-Newborough, Warragul, Morwell, Sale, Bairnsdale, Drouin, Wonthaggi, Lakes Entrance, Leongatha, Trafalgar, Yarragon, Yallourn North, Mallacoota, Neerim South, and Glengarry.

Number of places with unmet digital needs:

Legend: Intermediate shortage, Major shortage

Category	Intermediate shortage	Major shortage
Fixed access	16	1
Mobile	0	0
WiFi	3	6
LP-WAN IoT	1	0

Analysis of primary production in the region

Primary production in the region revolves around beef and dairy grazing, vegetable cropping and food processing, with some poultry and eggs, sheep meat and wool. The five locations analysed, Warragul, Foster, Maffra, Orbost and Omeo, all use the land for beef and dairy grazing.

Fixed access broadband services for businesses involved in primary production needs to be addressed. In its current state, the digital infrastructure is unable to meet the region's needs, with all locations found to have a major supply shortfall in fixed access broadband services for business users.

According to publicly available coverage maps, **mobile coverage** appears to be good. However it has been highlighted through consultation that the 'lived experience' for residents and businesses is often poorer than what coverage maps suggest, owing to the detail and resolution limitations of the maps.

Three of the locations, Foster, Orbost and Omeo were found to have an intermediate supply shortfall for **LP-WAN IoT** supported services.

Looking forward three to five years, there is likely to be little market driven improvement in coverage, and 5G technology is unlikely to replace 4G in these

locations. Rising demand in the face of a largely static supply will mean the unmet demand situation will worsen.

It is likely that local governments and regional businesses will need to consider leveraging available government assets for cost-effective bespoke solutions, as well as tailoring mobile blackspot programs to the region and its needs to ameliorate this growing supply-demand gap.

Mobile coverage near population centres is better than services available in more remote primary production locations, however obtaining a clear picture of where specific gaps exist or where there is weak and inadequate coverage is difficult with existing public data. Better quality coverage data is becoming increasingly important to identify priority locations in need of better mobile infrastructure.

Analysis of tourist locations

Tourist sites include year-round attractions, signature annual festivals and other periodic events, and hiking trails that are frequently visited. Tourist locations, including 15 permanent spots, eight events and two trails were assessed on the adequacy of digital infrastructure[‡]:

F M Tinamba Food and Wine Festival

F M Walhalla

F M Mount Baw Baw National Park

F M Lardner Park

Omeo **F M**

Bruthen Blues and Arts Festival **F M**

Buchan Caves Reserve **F M**

Mallacoota **F M**

Wilderness Coast Walk **F M**

East Gippsland

Baw Baw

Latrobe

Wellington

East Gippsland Rail Trail **F M**

Marlo **F M**

Lakes Entrance **F M**

Metung **F M**

Ninety Mile Beach & Loch Sport **F M**

Boolarra Folk Festival **F M**

Tarra Bulga National Park **F M**

Mirboo North Italian Festa **F M**

Meeniyan Garlic Festival **F M**

Unify Gathering Heavy Music Festival **F M**

Wilsons Promontory **F M**

Venus Bay **F M**

Inverloch **F M**

South Gippsland

Bass Coast

Phillip Island
– Cowes **F M**
– Australian Motorcycle Grand Prix **F M**
– Phillip Island Penguin Parade & Nature Park **F M**

Legend

🔴 Major supply shortfall

🟡 Intermediate supply shortfall

🟢 Current supply meets or exceeds demand

F Fixed access broadband

M Mobile service coverage

‡ Analysis combines operator and visitor user types.

All locations have issues with fixed access broadband services. Most tourist spots appear to have adequate mobile coverage, but national parks and trails are underserved.

Analysis of transport blackspots

Road and rail transport corridors need good mobile coverage for continuous mobile connectivity. Fourteen transport corridors were analysed below:

Road Class	ID	From	To	Mobile coverage
M	M1	Longwarry North	Yarragon	🟢 4G coverage by 3 carriers
A/B	A1	Yarragon	Rosedale	🟢 4G coverage by 3 carriers
	A1	Rosedale	Lakes Entrance	🟢 4G coverage by 3 carriers
	A1	Lakes Entrance	Cann River	🔴 3G or little/no coverage
	A1	Cann River	Victorian Border	🔴 3G or little/no coverage
	A440	Lang Lang	Foster	🟢 4G coverage by 2+ carriers
	A440	Foster	Sale	🟢 4G coverage by 2+ carriers
	B23	Cann River	Victorian Border	🔴 4G or little/no coverage
	B420	Anderson	Cowes	🟢 4G coverage by 3 carriers
	B460	Anderson	Leongatha	🟢 4G coverage by 3 carriers
	B460	Leongatha	Morwell	🟡 4G/3G or little/no coverage
	B500	Bairnsdale	Dinner Plain	🟢 4G coverage by 3 carriers
	M420	Lang Lang	Anderson	🟢 4G coverage by 3 carriers
C	All	113 roads		🔴 Little/no coverage in alpine regions
Rail		Melbourne	Traralgon	🟢 4G coverage by 3 carriers; good in-train reception
		Traralgon	Bairnsdale	🟡 4G coverage by 3 carriers; uncertain in-train reception

Legend

🔴 Major supply shortfall

🟡 Intermediate supply shortfall

🟢 Current supply meets or exceeds demand

More significant transport corridors like class A/B roads tend to have sufficient mobile coverage, with coverage weakening on class C roads in the alpine regions and remote rail lines.

Gippsland Regional Partnership Priorities

THEME	PROJECT	DESCRIPTION
Access, Ability and Affordability	**Enhanced broadband projects**	• Transition towns located outside of Gippsland's main regional centres to higher capacity fixed broadband networks (i.e. Glengarry, Lindenow) • Assess and invest in digital enhancements for remote towns and locations of high usage
	Business / Industrial Digital Clusters and Shared Services	• Service providers to develop alternative billing options to offer clustered services where businesses share data to reduce costs • Enable business and industry to access existing government infrastructure (e.g. VicTrack)
	Improved connectivity for tourists	• Invest in enhancing digital connectivity across Gippsland's key tourist and event locations identified in the Digital Plan • Enable mobile roaming for international visitors to improve connectedness in rural and regional Victoria • Support event organisers to prepare with appropriate technology to meet demand of population spikes associated with community events
	Better service standards	• Establishment of a national independent telecommunications advisory service for consumers regarding technology options, programs and pricing • Implement stronger NBN service level agreements and a monitor to uphold these standards
	Mobile blackspots	• Continue the mobile blackspot funding program • Future programs should only fund solutions that result in mobile coverage from two or more carriers • The State should advocate for mobile roaming in remote locations
	Fast-track 5G rollout	• Fast-track the early rollout of 5G in high demand regional areas
	Implement digital hubs service centres	• Identify a series of hubs from existing business centres and government facilities to provide Gippsland communities with leading edge digital access
	IoT enhancement program	• Identify farming areas and towns that will benefit from IoT network coverage • Implement IoT coverage in the areas that will gain significant productivity gains from the use of IoT applications and devices
	Digital Plan Engagement	• Gippsland Regional Partnership continue business and community engagement to showcase the Digital Plan and continue to seek local input • Launch the State Level Information Management (SLIM) database making it widely accessible for use as an investment tool for regional Victoria • Advocate for periodical funding to update the digital plans and SLIM database
	Land Planning	• Legislate digital connectivity in land planning laws for commercial and industrial developments

THEME	PROJECT	DESCRIPTION
Access, Ability and Affordability	**Digital skills and literacy training**	• Drive initiatives that remove financial barriers for young students and adult learners to access technology • Facilitate digital literacy learning across Gippsland targeting community and business, including funding to develop region-specific training courses • Increase post-secondary Information Communications and Telecommunications (ITC) skills to support Gippsland's growth • Develop and deliver a digital capability assessment/strategy for Gippsland businesses that will assist in economic growth and access to export markets
	High-speed connectivity for new infrastructure	• Prioritise enhanced digital investment in to new infrastructure developments (i.e. Gippsland Hi-Tech Precinct, Latrobe Gov Hub, and the E-Learning Hub in Bairnsdale)
	Regional rail connectivity expansion	• Advocate for enhanced mobile services on V/Line trains east of Traralgon to Bairnsdale
	Free WiFi projects	• Continue free WiFi pilots across Gippsland • Deliver free passenger WiFi on public transport
	Digital access for remote communities	• Enable mobile roaming for Gippsland's rural and remote communities to bridge the digital divide

Our priorities reflect the perspectives offered by Gippsland businesses, local government and community stakeholders, and the evidence and analysis contained in the accompanying Gippsland Digital Plan Supporting Document.

Our priorities reflect a point in time perspective on what should be done to address the digital divide across Gippsland. As technology advances, infrastructure investment continues, the economy develops, and community expectations change, we will refresh these priorities to ensure they remain an accurate representation of the region's most pressing needs.

Next steps

The findings and priority actions contained in the Gippsland Digital Plan will form the basis of our Regional Partnership's advocacy to the Commonwealth, Victorian and local governments, as well as industry and community groups in developing the future digital landscape of our region.

This Digital Plan highlights the region's current gaps in digital infrastructure and where our future demands may lie, bringing to light the areas where our efforts should be focused to bridge the digital divide, noting that there will inevitably be changes to key issues and priority actions as the technology landscape and needs of our region continue to evolve. By addressing these priority areas, we will ensure our local residents, businesses and community flourish as the digital age continues to advance.

The Gippsland Regional Partnership would like to thank the members of the Gippsland Regional Digital Plan Working Group who have generously given their time and energy towards the development of the Gippsland Regional Digital Plan.

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Last updated August 2019

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