



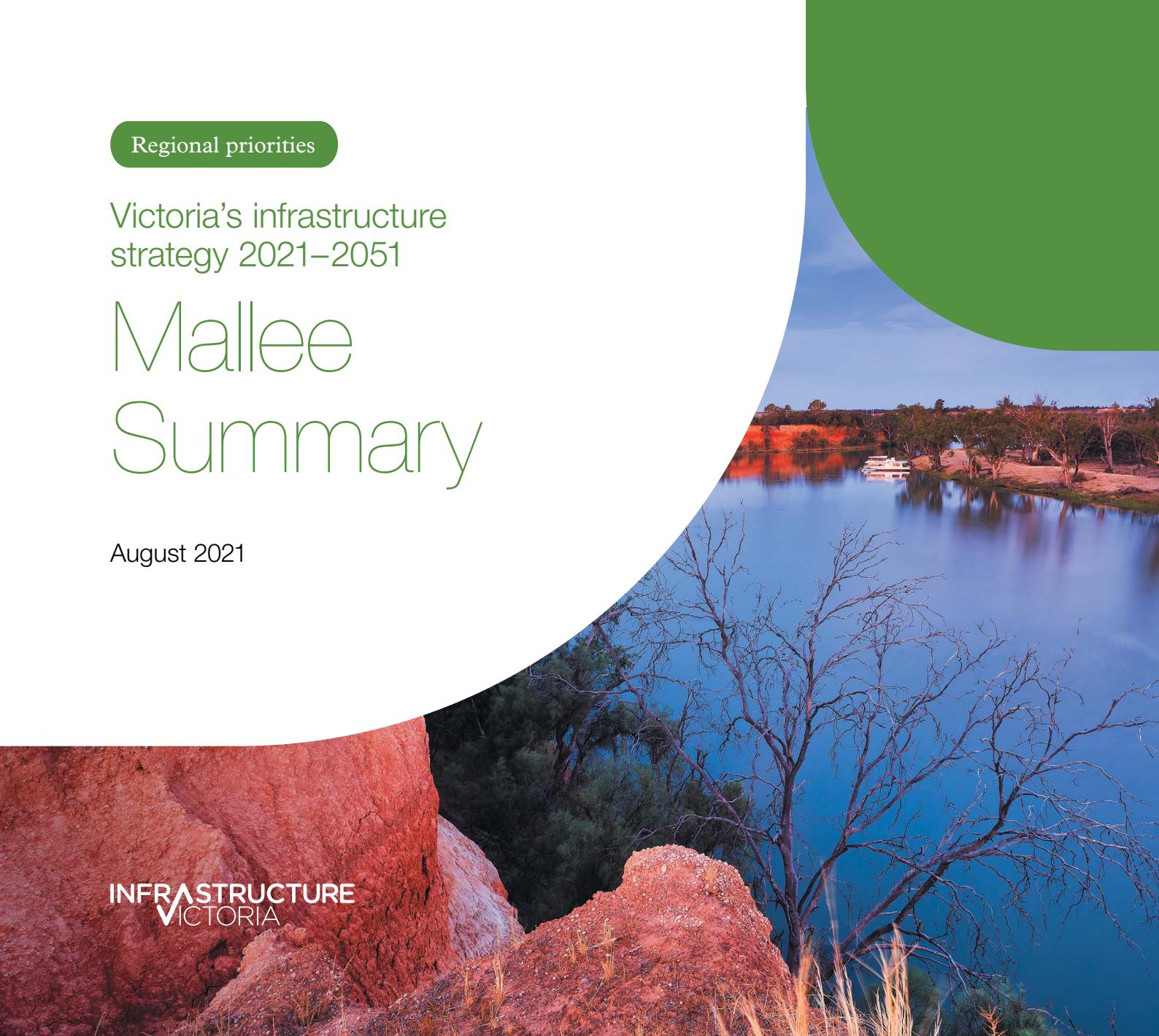
Regional priorities

Victoria's infrastructure  
strategy 2021–2051

# Mallee Summary

August 2021

INFRASTRUCTURE  
VICTORIA



## Victoria's infrastructure strategy 2021–2051

In 2016, Infrastructure Victoria developed Victoria's first ever 30-year infrastructure strategy. The 2016 strategy was evidence-based, covered all types of infrastructure, and we consulted widely with stakeholders and the community. To stay relevant and reflect Victoria's evolving infrastructure needs, we update the strategy every three to five years.

*Victoria's infrastructure strategy 2021–2051* builds on the 2016 strategy, revising many of our original recommendations and adding others in response to Victoria's changing circumstances. But we retain a long-term view of Victoria's infrastructure needs over the next 30 years, remembering that infrastructure lasts many decades and must meet both immediate needs and those in the future. The strategy can be downloaded from our website at [infrastructurevictoria.com.au](http://infrastructurevictoria.com.au).

### Aboriginal acknowledgment

Infrastructure Victoria acknowledges the traditional owners of country in Victoria and pays respect to their elders past and present, as well as elders of other Aboriginal communities. We recognise that the state's infrastructure is built on land that has been managed by Aboriginal people for millennia. The Mallee region includes the traditional lands of the First Peoples of the Millewa-Mallee, being Latji Latji, Ngintait and Nyeri Nyeri Traditional Owners, and the Wotjobaluk, Jaadwa, Jadawadjali, Wergaia and Jupagalk peoples.



## Infrastructure Victoria listened to regional Victorians

Over the last four years, we built a deeper understanding of the Mallee region's infrastructure needs, industry composition, and social disadvantage, in our *Regional infrastructure needs* and *Infrastructure priorities for the regions* projects. We have consulted widely with Mallee communities, industries and local governments to build our regional knowledge, and examined the unique opportunities and challenges that face each of Victoria's regions.

This work produced a *Mallee regional profile*, a *Mallee regional industry profile*, and a *Factsheet on Mallee regional disadvantage*, all available on our website. We used this evidence to develop strategy recommendations that can apply to the Mallee region.

### Engagement timeline



During the consultation period for the draft strategy, we provided more opportunities for Mallee communities and stakeholders to offer feedback on our draft recommendations, including through surveys, submissions, and hosting a Mallee regional roundtable discussion.

Combined, this comprehensive process of consultation and engagement guided the development of this Mallee regional summary and the relevant strategy recommendations. It focusses on infrastructure-related opportunities to build on Mallee's economic and industry advantages, and to strengthen local communities by improving health, education, and social inclusion outcomes, while reducing disadvantage.



This document provides a summary of selected recommendations from *Victoria's infrastructure strategy* which respond to the needs and opportunities we identified in Mallee.

## Overview

Bordering the Murray River, the Mallee is the only region in Victoria bordering both New South Wales and South Australia. The main freight route from Adelaide to Sydney passes through Mildura, the region's largest city.

Agriculture – broadacre cropping and irrigation – dominates the Mallee's economy, along with associated processing, manufacturing, and services. The region benefits from its proximity to the River Murray. Water is used for irrigation in agricultural production of fruit, citrus and grapes, in the tourism and recreation industries and provides drinking water for local communities.

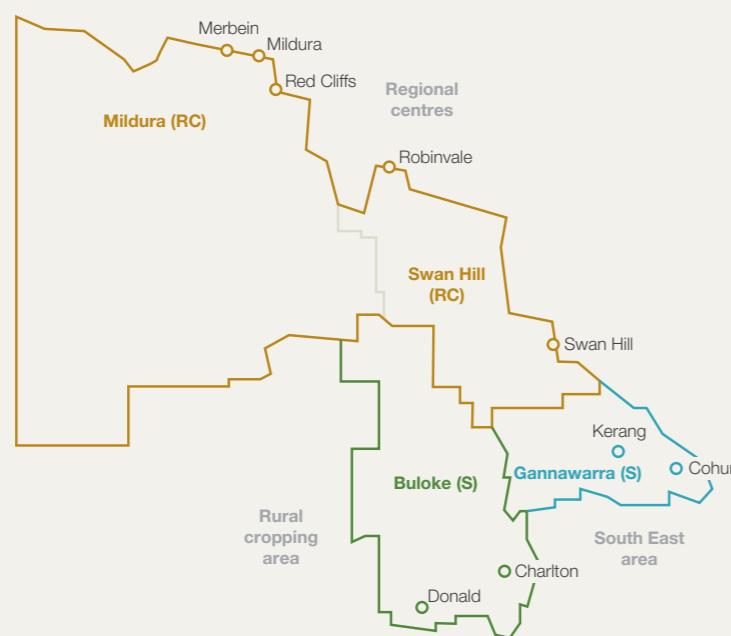
### The regions of Mallee



Mildura and Swan Hill are the main regional centres.



The Mallee region includes the traditional lands of the First Peoples of the Millewa-Mallee, being Latji Latji, Ngintait and Nyeri Nyeri Traditional Owners, and the Wotjobaluk, Jaadwa, Jadawadjali, Wergaia and Jupagalk peoples.



## Enhance market access and regional economic growth

### Unlock industry growth opportunities

Of the six Victorian renewable energy zones identified by the Australian Energy Market Operator, the Murray River zone in Victoria's north-west is forecast to see significant new generation by 2040. The Mallee has significant renewable energy sources, particularly solar. Areas around Mildura, Swan Hill and Gannawarra are developing large scale solar farms. However, existing transmission infrastructure limits the ability of generators to connect to the grid, which impedes future industry development. For instance, the Kiamal solar farm near Ouyen experienced delays due to grid constraints.

The Mildura-based Regional Innovation Centre is recognised as a National Energy Resources (NERA) Hydrogen Technology Cluster, and the Centre has obtained funding from both the private sector and the Victorian Government. While the cost and application of hydrogen technology are still uncertain, stakeholders report that Mallee's unique and extensive solar resources would allow it to produce cheap hydrogen—thus increasing its viability.

Mallee stakeholders also identify electricity infrastructure as a potential constraint on business productivity and future growth in the region. Where outdated single wire earth return power lines power farms, changing industry practices and more energy intensive farming equipment are leading to capacity constraints which limit production and stop farms from expanding.

### Recommendations to remove energy infrastructure barriers in the Mallee

Our renewable energy recommendations aim to remove constraints to future industry development, advocating for solutions which leverage potential renewable energy opportunities in the Mallee. Infrastructure Victoria supports the Australian Energy Market Operator's proposed transmission extension of the Victoria to New South Wales Interconnector West (VNI West), which will better connect these states and unlock the potential of significant renewable energy resources. The Victorian Government's preferred route, known as KerangLink, would significantly increase the ability for renewable generation to connect in the Murray River Renewable Energy Zone.

Our recommendation to co-fund power supply upgrades responds to constraints associated with outdated power supply infrastructure and allows new investment opportunities for regional businesses. Where upgrades are shown to deliver benefits to existing users and unlock potential future investment, upgrade costs can be shared between the Victorian Government, power distribution companies, and local businesses.

#### Recommendation 03

### Augment electricity transmission for renewable energy and resilience

Support augmentation of critical electricity transmission infrastructure by 2027–28 to accommodate new renewable energy generation and improve network resilience and reliability through interconnection with other states.

#### Recommendation 04

### Identify and coordinate Renewable Energy Zones

In the next year, identify Renewable Energy Zones, especially in the state's north-west, and continue to coordinate their development over the next 10 years.

## Recommendation 8

**Upgrade power supply for agriculture and regional industry**

In the next five years, contribute toward strategic power supply infrastructure upgrades for agriculture and regional industry, where an independent assessment demonstrates significant potential for increased productivity, competitiveness, and growth.

**Enhance water security and industry resilience**

The Mallee is a highly productive agricultural and horticultural region. It is one of Victoria's major dryland cropping regions. Along its northern border, the Murray River supports extensive horticulture and dairy. The Mallee produces more than 90% of Victoria's grapes and nuts, 86% of its citrus and 28% of its grains.

The past decade has been challenging for the Mallee agriculture industry, with extensive periods of drought and unfavourable conditions affecting the region's grain production. However, the diversity of Mallee's agricultural produce is its key strength.

In the longer term, climate change is a significant threat for the region. Climate change is likely to increase the incidence and severity of droughts, extreme weather events and reduce average rainfall.

By the 2030s, Mallee's average maximum temperatures could increase by up to 1.6°C, while average annual rainfall is projected to decrease by 9%. By the 2050s, the Mallee could have twice as many days over 40°C and up to 50% more very high fire danger days.

The Murray River is a key natural advantage, but water security will be increasingly uncertain. The Barmah Choke, for example, helps deliver irrigation water to the Mallee, stakeholders have revealed that water capacity through the Choke is substantially decreasing which elevates the risk of water delivery shortfalls. While stakeholders report that irrigation systems in the Mallee are amongst the most efficient in Australia, a continued focus on renewing irrigation infrastructure and improving water efficiency can help ensure future water security. Community members also underscored the need for a balanced implementation of the Murray-Darling Basin Plan.

**Recommendations to improve water security for the Mallee's agriculture industry**

Our recommendations aim to further strengthen water security in the Mallee by using all sources of water supply, continuing to modernise irrigation systems, and upgrading Victoria's emergency water supply network to ensure farmers can get water as rainfalls continue to decline. These recommendations will benefit Mallee's agriculture and related businesses, helping to support continued industry growth.

## Recommendation 13

**Consider all water supply sources**

Consider all water sources for supply augmentation, including identifying and addressing barriers to purified recycled drinking water within the next 10 years. When planning for future water supply, investigate all options including, but not limited to, recycled water, seawater desalination, stormwater harvesting and better use of the water grid.

## Recommendation 16

**Strengthen agricultural water security by modernising irrigation**

In the next 30 years, contribute funding toward planning and delivery of water infrastructure and irrigation modernisation projects across Victoria.

## Recommendation 17

**Upgrade Victoria's emergency water network**

In the next year, assess the condition, capacity and security of Victoria's emergency water supply point network, and upgrade or replace inadequate supply points. Clarify ongoing responsibility for monitoring, maintenance and funding to secure a resilient network.



Please refer to Victoria's *infrastructure strategy* (section 1.2) for additional recommendations on water and responding to a changing climate.

**By the 2030s**

Average maximum temperatures could increase by up to 1.6°C



Average annual rainfall is projected to decrease by 9%

**By the 2050s**

Could have twice as many days over 40°C



Could have up to 50% more very high fire danger days

**Foster tourism in the Mallee**

The Mallee region's tourist offering includes the Murray River, natural attractions such as the Murray-Sunset and Wyperfeld National Parks and Lake Tyrrell, Victoria's largest salt lake. The Mallee region has a strong Aboriginal heritage. Important heritage sites on the land of the First Peoples of the Millewa-Mallee are found in the Hattah-Kulkyne National Park and the Murray-Sunset National Park. In addition, the region's gourmet food and wine production can support agritourism experiences.

The COVID-19 pandemic significantly affected the tourism and hospitality industries in the Mallee. Tourism can support the region's economic recovery. Projects — such as the development of Koondrook Wharf and the creation of the Silo Art Trail — serve as examples of success in the region and demonstrate the economic potential of tourism in the Mallee. For instance, the Koondrook Wharf helped attract private investment in the town, and has subsequently underpinned the establishment of new eco-tourism offerings. Opportunities exist to further develop the region's domestic tourism offering in the short to medium term, building on the Mallee's existing natural assets and Aboriginal heritage.

Mallee stakeholders told us improving access and facilities for tourists can enhance the visitor experience and encourage longer stays in the region. For example, they said improved amenities and accommodation along the Murray River can help develop the Mallee's nature-based tourism offering. Enabling infrastructure could better support the seasonal tourist population at Lake Tyrrell, while development of tracks, trails and bike networks will further expand the range of activities on offer within the region.

**Recommendations to support a recovery in regional tourism**

Our regional tourism recommendations, centred on nature-based and Aboriginal tourism opportunities, aim to support sustainable growth in Mallee's tourism industry. Developing a nature-based tourism strategy to guide future investment in Mallee's tourist infrastructure will help ensure tourism experiences, and supporting facilities and infrastructure, meet visitor expectations and that the region's natural assets are protected and enhanced. Nature-based tourism sites, including national parks, require basic amenities and infrastructure to encourage investment in experiences, food, and accommodation services. Re-examining existing policies, such as policies around tourism leasing in national parks, can help encourage investment in tourist facilities and services, as well as support longer-term industry growth in Mallee.

Developing a Victorian Aboriginal tourist strategy with Aboriginal communities can help further drive sustainable economic activity in the Mallee, helping to preserve and promote the region's Aboriginal cultural histories and heritage sites as well as create job opportunities for Aboriginal communities.

These recommendations can build on Victorian Government investments in Mallee's tourism infrastructure, including funding towards the Buloke Town Revival Project, the Murray River Adventure Trail, a visitor centre for Lake Tyrrell and the next stage of the Mildura Riverfront Precinct development.

## Recommendation 81

**Plan for and facilitate regional nature-based tourism investments**

In the next two years, develop a Victorian nature-based tourism strategy to guide industry development and prioritise future investments. During the next 15 years, support regional tourism investment by allowing more site-specific leases for up to 49 years for infrastructure proposals that meet strict criteria and complement environmental and cultural values.

## Recommendation 82

**Develop a Victorian Aboriginal tourism strategy with Aboriginal communities**

Support and partner with Aboriginal communities in the next two years to guide future investments in Aboriginal tourism and cultural heritage, including through Joint Management Plans.



Lake Tyrrell



## Improve freight networks

The Mallee is centrally located between Melbourne, Adelaide, and Sydney, with the region's major freight routes providing access to domestic and export markets. Mallee's freight task is growing due to its expanding horticulture, grain, and mineral sands industries. But existing freight networks are struggling to meet demand. Rail freight can offer advantages in costs, capacity, and efficiency, but rail's share of Victorian freight is currently stagnant or in decline.

The rail freight network has more assets in average, poor, or end-of-life condition, compared to regional passenger rail. Many Mallee stakeholders expressed disappointment in the reduced scope of the Murray Basin Rail Project.

Mallee stakeholders also express a need for improvements on major road freight routes. Agricultural representatives observe that changing crop yields and freight vehicles are affecting the road freight network's performance. They identify opportunities to assess Mallee's current B-double network, which contributes to longer travel times, productivity obstacles, and more wear on the roads with multiple trips. Likewise, Mallee stakeholders name the Swan Hill Bridge replacement project as a desirable option to lower business transport costs and facilitate economic growth.

Maintaining and enhancing transport infrastructure will help future industry development, by creating cheaper, faster connections between producers and their processors and markets.

### Recommendations to better connect Mallee businesses with processors and markets

Providing funding certainty for road maintenance and upgrade programs can help leverage Mallee's road freight networks to better support the region's businesses – helping to improve market access, connectivity, and safety while also reducing supply chain costs, allowing businesses to remain competitive. As large freight vehicles and smaller private vehicles share the road network, ongoing maintenance and upgrades not only produce efficiency benefits, but also help keep all road users safe.

Funding and planning for ongoing rail freight network development and maintenance can help maximise efficient investment and support the Mallee's rail freight competitiveness. A published long-term network development and asset management plan would offer an opportunity to consider scope that is no longer part of the revised Murray Basin Rail Project and help address concerns raised by Mallee stakeholders. Additionally, an ongoing freight rail development and maintenance program would provide further confidence to investors and producers in the Mallee.

#### Recommendation 78

##### Deliver long-term funding certainty for regional road maintenance and upgrades

Within two years, specify clear levels of service for each type of regional road and bridge. Following this, dedicate a 10-year funding program to sustainably fund Victorian Government regional road and bridge maintenance and upgrades to meet these service levels. Funding should be prioritised based on improving safety, decreasing vehicle emissions, and lifting productivity.

#### Recommendation 79

##### Fund and plan for ongoing regional rail freight network development and maintenance

In the next year, fund a 30-year periodic regional freight rail maintenance program, informed by a publicly available network development and asset management plan. Using the plan, thoroughly determine the feasibility of the next major regional freight upgrade within five years.

## Better connect the regions

### Improve public transport

Mallee residents are highly dependent on cars to get around. Less than 1% of the region's workforce travel to work by public transport, and access to public transport across the region is very low – including in Mildura, where 53% of residents live within ready access of public transport compared to the Victorian average of 74%. Public transport access among Boroondara Shire residents falls to just 7%.

Stakeholders highlighted a range of transport issues within the region, affecting residents' ability to access work, healthcare, education and services, which are increasingly concentrated in larger centres. These include:

- ＼ Limited public transport and poor timetabling within Mildura, and from surrounding areas into regional centres.
- ＼ A lack of public transport infrastructure between townships.
- ＼ Limited frequency of the regional train and coach network to Bendigo and Melbourne, particularly affecting residents needing to travel to Bendigo Hospital for healthcare services.
- ＼ Limited public transport networks to link Aboriginal community controlled organisations (ACCOs) to key services and regional transport links.

Community transport provides an alternative to public transport within the region. For example, the Mallee Flexible Local Transport project, funded by the Victorian Government's Flexible Local Transport Solutions Program, provides community bus services and information

on community and public transport options in Boroondara, Gannawarra and Swan Hill. However, community transport solutions may rely on volunteers, and funds are limited.

Timely and reliable access to transport is essential for residents in the Mallee's rural and semi-rural communities to access the services they need and to foster social inclusion, including for residents who do not own a car or who do not drive – such as older residents, young people, low-income individuals, and people with a disability.

### Recommendations to enable viable transport options across Mallee

Our recommendation to reform regional public transport focusses on improving transport options within the Mallee region. It seeks to develop solutions which integrate traditional public transport with more innovative, flexible transport options to deliver services which respond to community needs, such as by using community transport, on-demand services, and the school bus network. It advocates ongoing funding for regional transport, moving away from short-term trials to lasting transport commitments, and providing long-term certainty to local communities.

The Victorian Government is improving service quality and capacity between Melbourne and Swan Hill under the Regional Network Development Plan, which aims to deliver five service every weekday.

#### Recommendation 83

##### Redesign regional public transport to meet local needs.

In the next five years, redesign existing regional transport services so they are integrated, based on regional needs assessments, and sustainably funded. Use significant technological and reform opportunities to deliver innovative service delivery models that meet local needs.



Please refer to Victoria's infrastructure strategy (section 4.2) for Infrastructure Victoria's position on Very Fast Rail for the regions.

## Improve digital connectivity and telecommunications infrastructure

The *Mallee digital plan* identifies the lack of availability of adequate, affordable business-grade telecommunications services for regional businesses, along with poor mobile coverage, a lack of Wi-Fi networks and low take-up of Internet of Things (IoT) applications. IoT enables devices embedded with sensors to connect to and interact with each other via the internet, collecting information and monitoring data to help farmers make more informed decisions. Research suggests that digital agriculture could increase the gross value of agricultural production by up to 25%.

IoT network deployment is a priority digital project for the region, to underpin future competitiveness and productivity in the region's agriculture industries. [The Victorian Government's On-Farm Internet of Things trial in Birchip](#) is supporting digital connectedness for broadacre grain farms, helping collect and manage detailed location and plant-specific data across large areas to help mitigate risk.

Mallee stakeholders told us improving digital coverage and capacity for businesses remains a priority. Current digital connectivity prevents businesses from fully benefitting from new technologies. For example, Sea Lake is among the

biggest towns in Victoria that lacks fixed wireless NBN technology.

Instead, Sea Lake's local businesses and tourism sector, schools, emergency services, and hospital can only access satellite internet, which can be slower, less reliable, and have less data allowance than fixed wireless or fibre services.

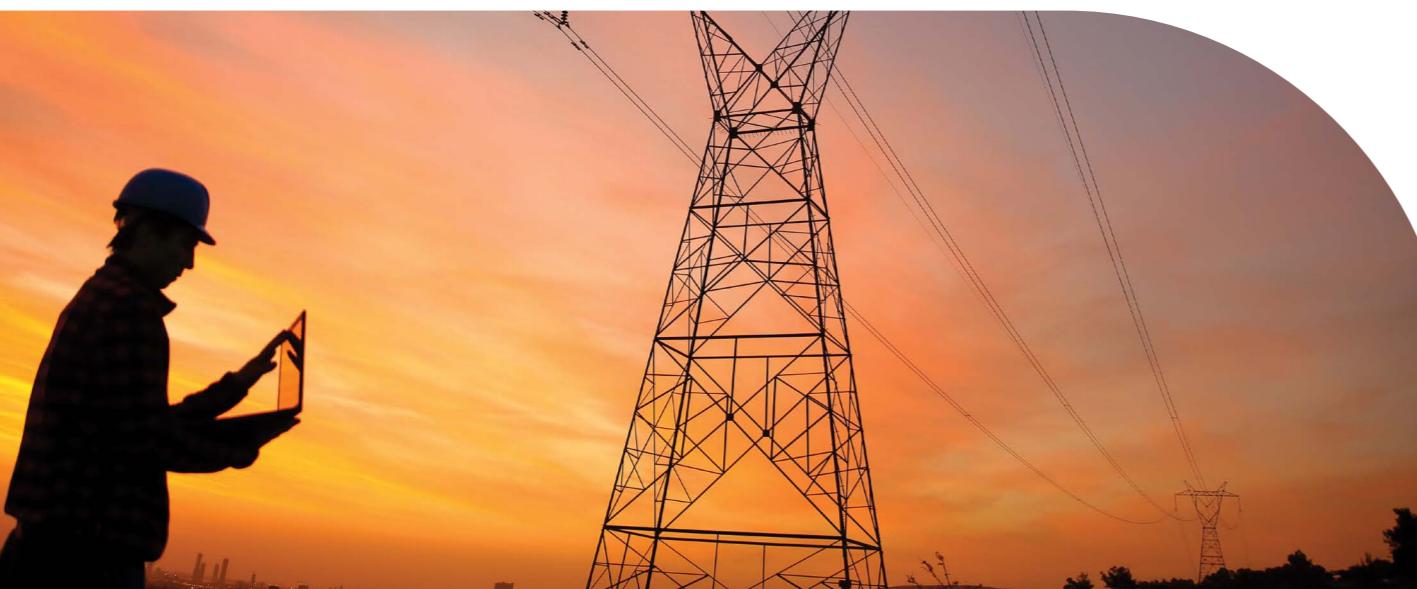
For the Mallee's businesses, improvements to digital infrastructure and connectivity could enable productivity gains in farm businesses and processing facilities, and meet demands across the health, education, tourism, and local government sectors. Stakeholders highlight infrastructure for digital connectivity as a necessary tool to aid tourism, since booking systems, point-of-sale, and marketing technologies all rely on high-speed mobile phone and broadband coverage. Lower population densities across the region and a lack of competition between suppliers is creating a need for bespoke solutions, with implications for service and cost. Resilience is a consideration for Mallee telecommunications technology upgrades, as stakeholders have noted that telecommunications in areas subject to flooding have often failed during flood events.

Poor digital connectivity also affects liveability and community safety in the region. Household internet access rates

are low across the Mallee, due to inequity in digital infrastructure, service quality and cost

One in four Mallee households do not have internet access compared with the Victorian average of one in seven. The COVID-19 pandemic increased the need for internet access and connectivity, and highlighted the deficiencies of current levels of connectivity across the Mallee. Families and young people without internet at home experienced barriers to remote learning and working from home. Poor digital connectivity has made it difficult for some people to connect with services and support, increasing social isolation.

Mobile coverage is also an issue across the region. The *Mallee digital plan* highlights a persistent divide in the quality of mobile services available to regional users compared to Melbourne, with 195 mobile black spots registered across the region. Stakeholders have identified the area north of Birchip, Wooronook/Jeffcott and Coonooer West, and the Mallee track between Ouyen and Murrayville as some of the worst affected areas in the Mallee. Poor mobile quality and coverage have implications for public safety, affecting emergency services and the ability of residents to access critical information in times of need.



## Recommendations to continue to bridge the Mallee's digital divide

### Recommendation 84

#### Address regional Victoria's digital connectivity gaps

In the next five years, continue delivering regional digital connectivity improvements, and monitor and review the need for further government investment following the roll-out of the Digital Future Now initiative.

### Recommendation 85

#### Improve regional telecommunications infrastructure resilience

In the next five years, develop more resilient regional telecommunications infrastructure so communities can stay safe during emergencies, including better mobile coverage, back-up systems and power supply, and emergency mobile roaming.

### Recommendation 86

#### Fund regional libraries to provide better internet access

In the next year, start a five-year funding program for libraries in regional towns and rural areas to improve community access to fast, free internet services, leveraging existing library infrastructure.



Please refer to Victoria's *infrastructure strategy* (section 1.4) for recommendations which embrace technological opportunities.

## Households without internet access



The COVID-19 pandemic has **increased the need for internet access**, highlighting the deficiencies of current levels of connectivity across the Mallee region



**One in four** Mallee households **do not** have internet access



**1 in 7**

In comparison, **one in seven** Victorian households **do not** have internet access

## Foster regional Victorians' health, wellbeing, and inclusion

### Improve access to healthcare

Outside Mildura, the Mallee region has relatively high rates of preventable hospitalisation, suggesting that primary health provision may not be readily available or accessible for some Mallee residents. Like some other regional areas, the Mallee faces challenges in attracting and keeping a skilled health workforce to the region. Centralisation of health care services from rural areas to regional centres means that fewer services are locally available for declining rural populations, and there is limited public transport to access services. While telehealth services can help improve service access, local services will continue to be needed, particularly for certain health services that require face-to-face interactions.

Mallee Regional Partnership's Addressing Entrenched Disadvantage project highlights pockets of socio-economic disadvantage across the region, with interdependent factors including relatively high rates of preventable health issues, particularly related to alcohol and drug use, and obesity. The region has above average numbers of mental health clients, as well as those receiving drug and alcohol treatment.

Mildura has double the Victorian average of registered mental health clients and persons receiving drug and alcohol treatment services, while Gannawarra Shire has high rates of drug and alcohol treatment – more than four times the state average. However, access to local support services is limited. There are no residential alcohol and drug rehabilitation facilities in the region, for example, and many people need to leave the area to access the services they need. The Mallee's geographical remoteness means local provision of treatment services is needed to support improved health outcomes.

Stakeholders report that the COVID-19 pandemic has exacerbated existing mental health issues in the regions. Vulnerable groups include Aboriginal Elders, older community members who are socially isolated, those experiencing family violence and agricultural workers who are already affected by drought.

Across the region, ACCOs play a central role in the provision of services and the promotion and protection of Aboriginal people's rights. The Mallee's large Aboriginal population is projected to grow 30% between 2018 and 2028, which could lead to more demand for Aboriginal and other services in the region. The combination of increasing client numbers and inadequate infrastructure is restricting the ability of ACCOs to provide timely and effective service delivery across the region. Stakeholders highlighted the need for family healing facilities to provide integrated, culturally appropriate services to Aboriginal people in Mallee.

#### Recommendations to improve health outcomes for Mallee residents

Our recommendations aim collectively to improve access to healthcare and related services for Mallee residents. We recommend using innovation in healthcare delivery and seek to expand the use of technology in service provision, to better connect regional communities with specialist health services. A plan for future investment in Aboriginal community controlled infrastructure aims to respond to the current and future infrastructure needs of the Mallee's Aboriginal community, as well as contribute to Closing the Gap outcomes for Aboriginal Victorians.

Providing residential rehabilitation facilities in the Mallee and improved access to mental health facilities aim to respond to gaps in local service availability and provision. Residential alcohol and drug rehabilitation services are particularly needed in Mallee, due to community distances from other centres. Service planning can help guide the development and location of residential rehabilitation facilities.

These recommendations can build on recent Victorian Government investments in Mallee's healthcare infrastructure, including funding towards the Swan Hill District Hospital upgrade, the future redevelopment of Mildura Base Hospital, and a new mental health clinical outreach facility at Swan Hill.

#### Recommendation 25

#### Use innovation to deliver better models of health care

Within two years, help slow the growth in demand for hospital infrastructure by developing a comprehensive statewide health innovation strategy, supported by funding over five years to promote and progressively implement better models of health care.

#### Recommendation 67

#### Co-design an Aboriginal community controlled infrastructure plan

In the next year, start a co-design process with Aboriginal Victorians to develop a plan to guide investment in Aboriginal community controlled infrastructure to meet current and future social, economic, and cultural needs.

#### Recommendation 70

#### Deliver infrastructure for a more responsive and integrated mental health system

In the next year, establish a dedicated infrastructure fund to support more responsive and integrated mental health and wellbeing services, consistent with the recommendations of the Royal Commission into Victoria's Mental Health System.

#### Recommendation 91

#### Build regional residential alcohol and drug rehabilitation facilities

Within five years, build residential detoxification and rehabilitation facilities in regional Victoria to provide equitable access to alcohol and other drug treatment.



Please refer to Victoria's infrastructure strategy (section 3.3) for recommendations on aligning social infrastructure with better service delivery.

### Improve and better use community and council infrastructure

Demographic changes, such as an ageing population, are affecting the scope and mix of services councils need to provide. Regional councils can lack the revenue to upgrade and repurpose existing infrastructure, often relying on Victorian Government grants.

The Mallee faces challenges in ensuring that residents have access to the services that they need. For instance, smaller rural councils such as Buloke and Gannawarra, have a small (and declining) ratepayer base which is further constrained by below average incomes of residents. These councils face additional complexities in continuing to provide services over a relatively dispersed area. Areas of relative socio-economic disadvantage such as Buloke, the tenth most disadvantaged local government area in Victoria, have a higher per capita need for a range of health and community services. As regional centres for relatively remote communities, it is important that Mildura and Swan Hill provide a range of services to the wider region, and that these are accessible to all.

The impact of climate change adds further complexity to the challenges facing local governments and communities. Already one of the hottest regions in the state, the Mallee is further exposed to the impacts of climate change with even higher temperatures, more days of extreme heat, and declining rainfall forecast. As well as increasing the incidence of extreme heat and heatwaves, climate change is increasing the frequency of conditions for catastrophic bushfires.

Poor revenue and limited grants dedicated to upgrades or maintenance means many ageing community facilities across the Mallee need upgrading. Stakeholders identify ageing aquatic facilities throughout Mallee local government areas, the Swan Hill Municipal Office, and aerodromes in Swan Hill, Robinvale, and Sea Lake, as key sites requiring attention.

Cases such as these demonstrate the need for funding to be directed towards councils in the Mallee so communities can improve, repurpose, or retire and replace existing infrastructure.

#### Recommendations to make better use of community infrastructure

The Victorian Government can support regions and local governments in providing fit for purpose social infrastructure which can respond to local needs. Service planning can help identify gaps in existing infrastructure, or opportunities for shared facilities, supported by funding to retrofit, repurpose, or retire existing community facilities. Integrating transport planning within planning for service delivery will ensure that essential services can be accessed by all those who need them.

Our recommendation to create climate-adapted facilities for rural communities aims to support local governments to deliver a network of facilities which can help reduce the health impacts of exposure to heat, and prolonged smoke from bushfires. Combined with the recommendation to build back better after emergencies, this aims to build community resilience to the impacts of climate change.

#### Recommendation 19

#### Build back better after emergencies

In the next year, consider policy changes and funding mechanisms so high priority public infrastructure destroyed by emergencies is built to a more resilient standard or in less vulnerable locations.

#### Recommendation 88

#### Deliver multipurpose shared social service facilities in the regions

In the next year, start regional planning for social services to identify opportunities for multipurpose shared services facilities, then deliver them where appropriate, over the next five years, in partnership with local governments and community organisations.

#### Recommendation 89

#### Update community infrastructure

Fund regional councils in the next five years to update, repurpose or retire outdated community infrastructure for better service delivery.

#### Recommendation 90

#### Create climate-adapted facilities for rural communities

In the next five years, fund local governments to plan and help deliver a network of designated, accessible climate-adapted community facilities, to manage the health impacts of extreme heat and bushfire smoke.



Please refer to Victoria's infrastructure strategy (section 2.4) for more recommendations on adapting infrastructure for modern needs.



## Address social housing challenges

The Mallee region has relatively high, and increasing, levels of socio-economic disadvantage compared with Victorian averages. Other drivers of demand for social housing in the region include homelessness and family violence. Mallee has an estimated 3.2 homeless persons per 1000 people, the second highest rate in regional Victoria. The region has the highest per capita rate of family violence in Victoria. In December 2020, over 900 Mallee households were on the waiting list for social housing, with almost 500 households requiring urgent assistance.

Although Mildura and Swan Hill have higher levels of social housing compared to Victorian averages, access to affordable housing remains an issue. One in three rental households in Mildura experience rental stress, and stakeholders have raised concerns about the poor quality of existing housing stock. Mallee Regional Partnership's Addressing Entrenched Disadvantage project focused on the need to improve the availability of appropriate housing in the region. This project found that the private rental market is tight. Cheaper housing options are often poorly heated or cooled and may be far from required services. It highlighted the need for improved social housing, in locations which are accessible for work, healthcare, education and services.

Even where heating and cooling is available, the region's extreme temperatures have a significant impact on energy costs. This negatively affects the cost of living, meaning many low income residents avoid using air conditioning to reduce energy costs.

This can particularly affect the health of vulnerable residents, including infants, the elderly, or persons with a disability.

*The Mallee Family Care Report* examined the lived experiences of social housing residents in Mildura who do not have access to air conditioning during extreme heat conditions and identified negative physical, mental, and social health and wellbeing impacts on residents. Mildura social housing residents, for example, reported various issues in extreme heat, including dehydration, headaches, heat stroke, and breathing troubles. Residents with pre-existing medical conditions also shared that chronic conditions or illnesses worsen during extreme heat, increasing their vulnerability.

Mallee stakeholders also expressed concerns about the rising number of young people seeking assistance from social housing agencies in the region. The combination of poor access to social housing and the disproportionate impact of the COVID-19 pandemic on young people has potentially further exacerbated hardships for this cohort in the Mallee who are navigating significant life transitions. Even before the COVID-19 pandemic, only 57.1% of Mildura young people aged 17-24 years were engaged in full-time study or work, compared to 71.8% in Victoria. Mallee stakeholders suggested that a Youth Foyer in Mildura would benefit disadvantaged young people who are particularly at risk for homelessness and are disengaged from education and employment.

### Recommendations to enhance access to affordable, fit for purpose housing

Making social housing suitable for changing climates helps address the need for adequate heating and cooling in the region's social housing. As well as installing split system air-conditioning to better regulate temperatures in the home, solar panels can help low-income residents to offset additional energy costs during extreme temperatures.

Combined with recommendations to expand social housing in regional centres, in locations with good access to transport, work, education and services, and to renew old public housing stock, this aims to improve Mallee residents' access to affordable and fit for purpose housing.

Funding more Youth Foyers in regional Victoria responds to housing and integrated services gaps for young people who are at risk of homelessness, including in Mallee. It aims to help break cycles of disadvantage by providing stable accommodation for young people aged 16-24 who commit to education and training pathways. Our recommendation for Youth Foyers identifies Mildura as a possible priority location.

#### Recommendation 55

##### Rapidly renew old public housing

Rapidly renew dilapidated public housing properties to improve functionality, accessibility and energy efficiency with a priority to renew at least half of all older low-rise apartments and older three-bedroom detached dwellings by 2031.

#### Recommendation 92

##### Fund more Youth Foyers in regional Victoria

Fund at least six new Youth Foyers in regional Victoria by 2026, to better use existing education infrastructure and support vulnerable young people.

#### Recommendation 93

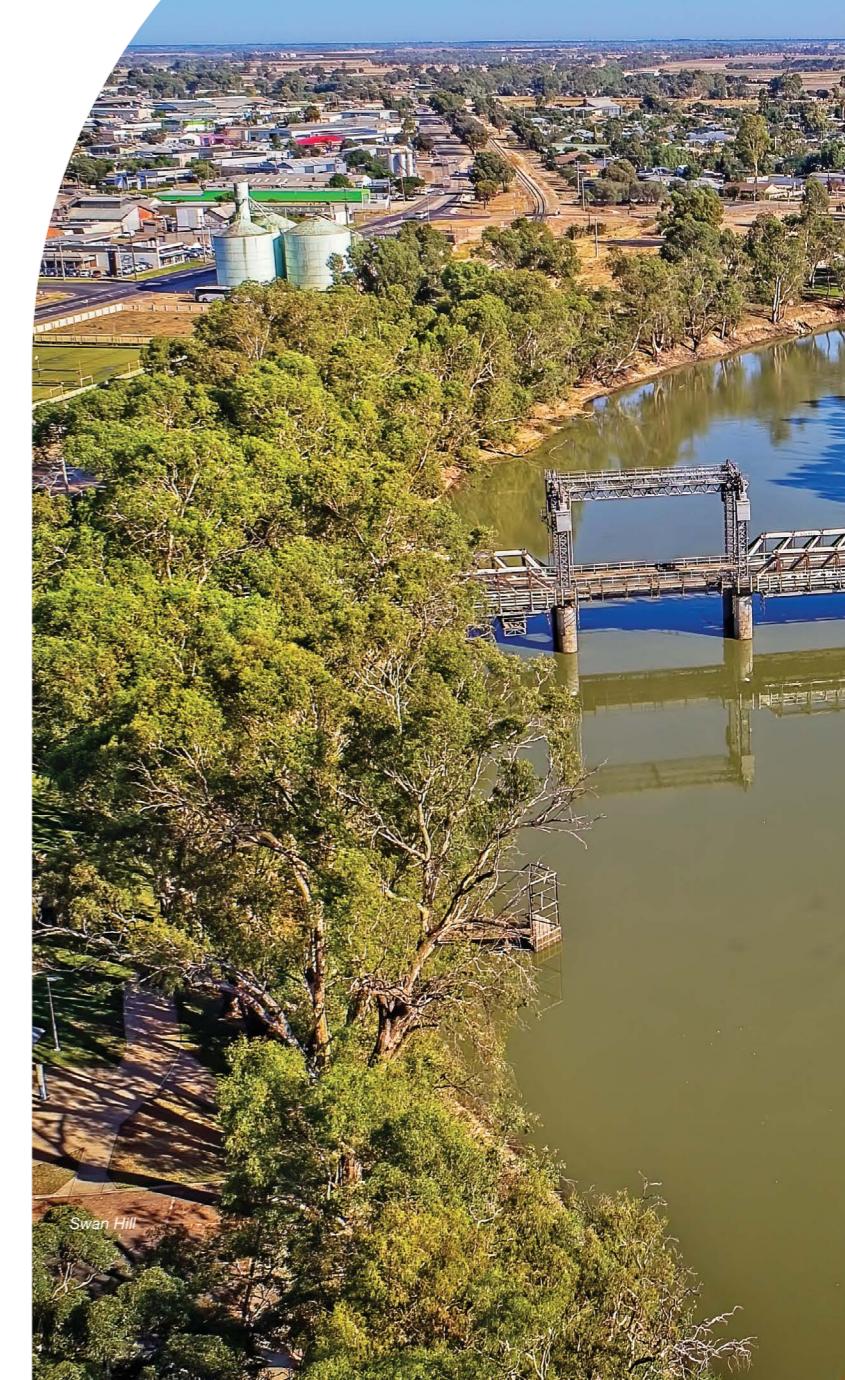
##### Expand social housing in regional centres, in locations with good access

Focus social housing investments in regional centres, near transport and services, for better access to health, social and economic support.

#### Recommendation 94

##### Make social housing suitable for changing local climates

Continue to deliver a long-term program of modifying social housing to be climate-resilient by improving the energy efficiency and energy affordability of residences.



Swan Hill



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