

# BUILDING THE RESILIENCE OF TOURISM DESTINATIONS TO DISASTERS:

The 2020 Victorian Bushfires and COVID-19 Pandemic April 2021







A report by Victoria University, Melbourne in collaboration with Victoria Tourism Industry Council (VTIC)

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### **ACRONYMS AND KEY TERMS**

**DELWP** Department of Environment, Land Water and Planning

**BAU** Business as usual projection (based on previous growth of region)

**DSF** Destination Sustainability Framework

**EMT** Echuca-Moama Tourism

**GRP** Gross Regional Product

**GSP** Gross State Product

HRM Human Resource Management advisor

ICT Information and communication technology

IVS International Visitor Survey

**LGA** Local Government Area

MRT Murray Regional Tourism

**NSW** New South Wales

**NVIVO** A qualitative data analysis (QDA) computer software package

by QSR International

**NVS** National Visitor Survey

QTF Quality Tourism Framework

**RSA** Responsible Service of Alcohol

SPSS Statistical Package for the Social Sciences by IBM

**SVE** School for the Visitor Economy

**TNE** Tourism North East

**Tourism spend** All tourist related spending on final goods produced in the region

TRA Tourism Research Australia

**TSA** Tourism Satellite Accounts

V/R analysis Vulnerability/ Resilience analysis

VTIC Victoria Tourism Industry Council

**VU** Victoria University

### **EXECUTIVE SUMMARY**

### **Project background**

The Victorian visitor economy is in crisis due to the impacts of bushfire and the COVID-19 pandemic. The industry is vital to the social, economic and environmental health of all localities and destinations, but has particular impacts on regional areas where naturebased attractions (e.g., beaches, snow, national and state parks), provide the foundation for the operation of the visitor economy. While the 2019/2020 bushfires severely curtailed normal visitation to the regions, the travel restrictions and long-term forced business closures and border closures due to COVID-19 mean that the visitor economy has been at various crisis points over 2020 and is slowly emerging in an uncertain environment in 2021. These crises are unprecedented and associations such as the Victoria Tourism Industry Council (VTIC) and Regional Tourism Boards (RTBs) have been focussed on recovery planning and implementing measures to ensure sustainability.

The School for the Visitor Economy (SVE) at Victoria University has a long track record in planning and research in relation to tourism risk, recovery and resilience to disaster. Funded by Victoria University through a planetary health research fund, SVE and VTIC partnered on this project to develop a deeper understanding of the impact of crises on the Victorian Visitor Economy and develop strategies and frameworks to build resilience to future crises and shocks.



### Methodology

This project was guided by a vulnerability and resilience framework based on a coupled human-environment system that encompasses the inter-related aspects of the tourism destination such as the environment, governance, economy, infrastructure, human and social factors to shocks (e.g., bushfire, flood) and stressors (e.g., climate change, exchange rates).

The project was phased and employed a mix of methods including:

The collation of reports and media on the unfolding of the crisis and its impacts on tourism across the world.

A state-wide survey designed to capture the impacts of the bushfires and COVID-19 and explore the resilience of the businesses and their development needs moving into the recovery phase. The survey received 323 responses with representation from key tourism sectors (accommodation, tours and transport, food and beverage, attractions, events and camps).

The conduct of case studies in two Victorian destinations, Echuca-Moama along the Murray River and Bright River in North East Victoria.

The case studies were based on document analysis, in-depth interviews and focus groups with a cross-section of industry, community and government stakeholders.



### **RESULTS AND DISCUSSION**

### **Business impacts**

Survey results demonstrated the wide-reaching impacts of the 2019/2020 bushfires and the extent of the devastation to the Victorian tourism industry by the COVID-19 pandemic. These are described in the following sections on financial, staffing, and wellbeing impacts.

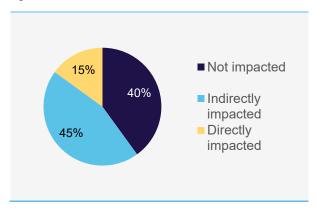
### **Financial**

### **Bushfire impacts**

- The bushfires impacted 60% of the businesses surveyed, despite only 15% being in direct bushfire regions (see Figure A).
- Of those impacted by bushfire,77% experienced moderate to extreme financial impacts to their businesses.

Eighteen per cent of the businesses surveyed had been impacted financially by other natural disasters in the last year including storms, flooding or drought.

Figure A. Surveyed businesses impacted by 2019-2020 bushfires



### **COVID-19 Impacts**

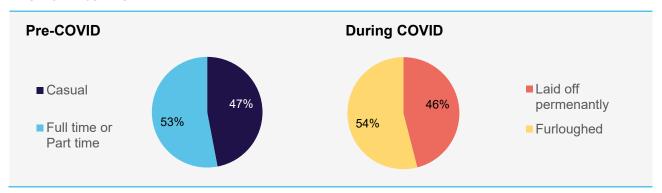
International and domestic travel restrictions, border closures, as well as multiple lock downs during 2020 had a devastating effect on Victorian tourism businesses and destinations:

- The majority of businesses (84%) were forced to close at least once during the pandemic.
- Revenue losses of 75% 100% were estimated by 65%.
- Bright lost 85% of their visitation and visitor economy income in Quarter 2 (1 April to 30 June 2020) as well as July and 100% in August and 95% in September, 2020.

### Staffing

Figure B. Average proportion of employee types pre-COVID-19

Figure C. Impact of COVID-19 on casual workforce



Prior to the COVID-19 pandemic, nearly half the tourism workforce was casual (47%) and they were most heavily impacted by the pandemic. On average, 46% were laid off permanently and 54% were furloughed temporarily (see figures B and C).

Job Keeper was a key federal support taken up by 91% of the businesses surveyed. Only 30% of casual staff received Job Keeper as opposed to 70% of full-time staff.

Such large losses in the casual workforce translated to fears for business owners in being able to recruit adequately skilled staff in the future, with only 30% feeling confident they could do so. Challenges affecting the renewal of the workforce included:

- Many staff had either moved away from the regions or into other industries offering more stable employment.
- Seasonality and the short-term nature of available work (e.g., Bright, Ski-fields).
- A lack of affordable housing for staff due to high tourist visitation meaning that available housing is used as holiday rental properties.

### Wellbeing impacts

Social isolation, financial strains and juggling family commitments during lockdowns are some of the challenges that have been faced by people worldwide because of the COVID-19 pandemic.

- Almost half (45%) of survey respondents had mental health concerns and 41% were concerned for their staff.
- Further assessment using a validated wellbeing scale (WHO-5) - showed that the average wellbeing of the cohort was very low and would usually warrant assessment for depression.
- Significant barriers to accessing help for mental health issues were identified including inadequate services, lack of knowledge about availability of services and a general reluctance to seek help.

### Positive impacts

Whilst the crises had extensive negative impacts, there were also positive impacts described in both the surveys and the case studies including:

- · Greater collaboration.
- Business innovation (e.g., changed business models, changed operating hours, diversification of product offerings).
- Adoption of better online presence and IT strategies.
- Spending more time with family.

### **TOURISM BUSINESS AND DESTINATION RESILIENCE**

The second aim of this project was to explore strategies that may build resilience to future shocks. A number of key factors were identified that were associated with a more resilient or adaptable business or tourism destination. Using a 'coupled human-environment' system framework, consideration was given to the broad and interconnected systems in tourism to reveal impacts at the business, destination and governance levels. Outlined below are the key areas identified as priorities to build resilience in the future.

### Workforce

Given the mass staffing and skill losses that have occurred, an assessment and development of the tourism workforce across Victoria is required to enable recovery following the crises.

### Mental health

There is a need to increase the relevance and availability of mental health services to small business operators across regional Victoria. There is a need to consider the barriers to attending and seeking help in regional areas to ensure that all those in need can access support and services.

### Planning for crises

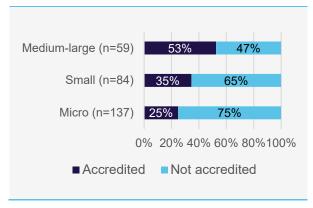
- The findings showed low levels of risk management and continuity planning (particularly in small businesses) due to a lack of resources and skills. More than one-third (36%) of businesses identified the need to develop skills in adapting to change (business planning, business models and risk management). Lack of council resources and community complacency was a barrier to better risk management at the destination level.
- Business insurance in bushfire affected areas has increased by 100-400% making it unaffordable and a major issue for future resilience to crises if the issue is not

- addressed. In most cases business insurance did not cover COVID-19.
- Experience of past disasters was a factor that contributed to the resilience of businesses. To ensure that risk planning remains a priority, strategies are needed to guard against complacency.

### Skills development

The quality of human capital in tourism businesses is vitally important for organisational resilience and the study indicated that various types of training will be a particularly important focus in the recovery period and to build future resilience.

Figure D. Proportions of businesses surveyed with VTIC accreditation



Accreditation: businesses accredited through the VTIC Quality Tourism Framework are more likely to recover more quickly than those without accreditation. Smaller businesses, however, were less likely to be accredited by VTIC than larger businesses (See Figure D).

ICT capacity: The pandemic has forced the need for improvements in ICT for tourism businesses and destinations and while many businesses implemented digital strategies (42%), invested in new IT infrastructure (31%) and trained staff in IT skills during the pandemic (23%), 39% of businesses still feel that they and their staff need additional training in digital and technical skills. This is especially the case for older people running micro businesses.

**Marketing:** Only 50% of the businesses felt they had the skills to be able to connect to customers (customer service, digital marketing, advertising, and negotiating service and marketing).

### Leadership and institutions

Stakeholder engagement: Tourism is a complex multi-stakeholder sector including visitors, businesses, local community, government agencies, special interest groups and so on. Many of the responses in the case studies identified that stakeholder communications are fragmented, especially between tourism stakeholders and state and federal government departments during the COVID-19 pandemic. This resulted in poor understanding of the diverse operational realities across the tourism sector and between different tourism destinations. While some government support measures, such as the Job Keeper scheme was widely regarded as extremely important, there was a perception by many stakeholders that support measures were 'not quite right'. Engaging stakeholders more effectively in state planning and provision of funding for destination development outside the crisis period will be critical for ensuring that support measures are relevant to destinations and the diverse stakeholders within them.

Cross-governance collaboration: during the crises, the ability to communicate effectively between government departments was vital and it was noted that in many cases, there were no working relationships between key staff in different government departments that could facilitate crisis information flow when required.

In addition, competition between states in relation to the delivery of tourism funding was a key issue for border towns due to funding guidelines that failed to consider the community connectedness of destinations that cross borders.

**Tourism organisational leadership:** strong leadership at both the destination and business level was critical to resilience during both the pandemic and the bushfires.

- a. Destination leadership:\_Management of the crises as well as enabling growth during the recovery period requires strategic tourism planning. The extent to which regional destinations have clear tourism planning that integrates crossregional and cross-border linkages is patchy.
- b. Business leadership: Leadership capabilities were identified as being important to improve business resilience to crises. These included having adequate skills and capacity to equip business for crises (e.g., financial and risk planning, connecting with other businesses and networks who can provide support and collaborate during crises and supporting staff).

### Climate change

Climate change forecasts predict the increased frequency and intensity of natural disasters such as bushfire, drought, flood and storm, as well as producing additional stressors such as sea levels rising. Given the visitor economy's inherent vulnerability to climate related disaster, it is vital to implement effective adaptation strategies at a destination level as well as support low carbon initiatives across the industry and more broadly.

### RECOMMENDATIONS FOR RECOVERY

It is recommended that a Victorian recovery roadmap be developed to address the current vulnerabilities in the tourism system and increase resilience to future crises. This should be a collaborative effort between government, key stakeholders from the Victorian tourism industry and related experts. Implications arising from the findings of this research highlight the need to address the following:

### Policy and planning

- Long term problems relating to industry skills gaps and workforce capacity have been exacerbated by the pandemic and there is a need for a state-wide review of workforce capability and sustainability.
- The barriers to effective destination planning and infrastructure development by border communities require further investigation and a strategic response.
- There is a need to review tourism stakeholder communications during crisis to ensure clear and coordinated approach to crisis preparedness, management and recovery.

### Structural issues

- Given that the tourism industry is on the front line of the impacts of crises, there is a need to consider the adequacy and accessibility of mental health services to the tourism industry.
- Given the exhaustion of financial and emotional reserves following the extended crisis period, appropriate support for businesses and destinations to maintain and grow tourism infrastructure will be a priority for industry recovery.

### Business management/capacity building

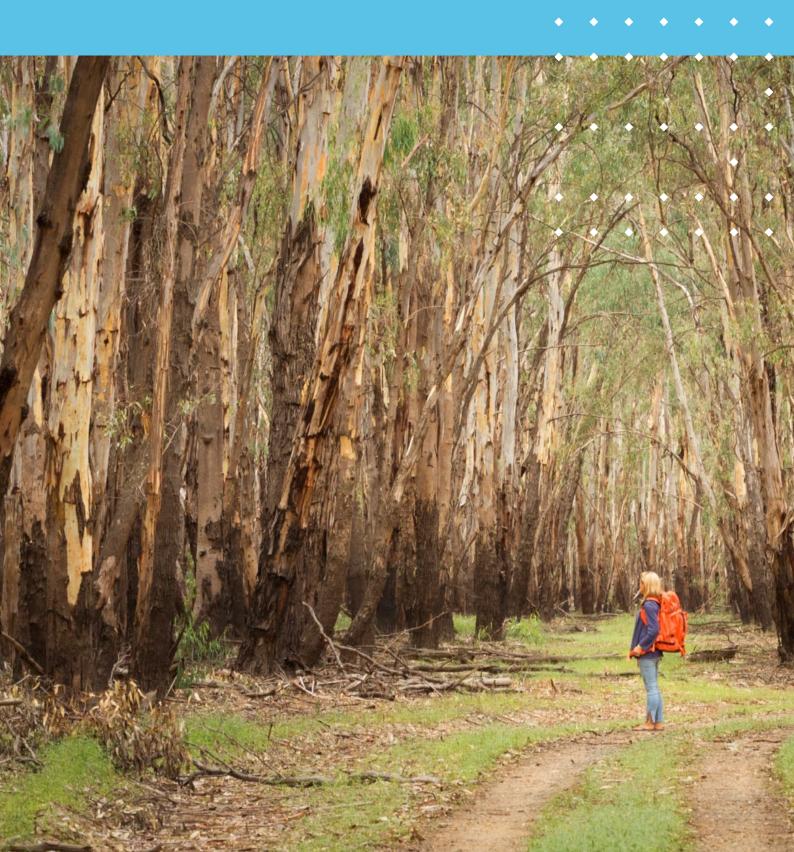
- Consider barriers to engaging in training or capacity building activities as well as how best to encourage businesses to put learning into practice.
- Increased digital capability is a priority across the industry with consideration for a diversity of needs and digital skills.
- Increased industry access to and uptake of training with a focus on resilience is a priority (e.g., risk management, leadership, contingency and continuity planning).
- As a key resilience factor, tourism business accreditation such as the VTIC Quality Tourism Framework, which includes training in risk management, strategic business planning and management and guidance on marketing, should be encouraged.

### Research

 Each tourism destination in Victoria has its own unique context and vulnerabilities.
 The assessment of individual destinations would assist in promoting sustainable tourism development.

There is little investigation of the impact of multiple crises to date. Longitudinal research on the recovery process would be beneficial for better understanding crisis resilience in tourism (longitudinal studies)

## 1. INTRODUCTION, BACKGROUND AND OVERVIEW



### 1.1. Introduction

This report presents the background, findings and implications of research undertaken by a project team from Victoria University (VU) School for the Visitor Economy (SVE), in collaboration with the Victoria Tourism Industry Council (VTIC). Funded by Victoria University through a Planetary Health Research Fund, the project was undertaken between June and November 2020, with the aim of developing a deeper understanding of the impact of crises on the Victorian Visitor Economy and to develop strategies and frameworks to build resilience to future crises and shocks.

The two specific objectives of the project were to:

- 1. Document unfolding events through media analysis and stakeholder consultations.
- 2. Identify strategic responses that will help the sector in the short, medium and long term.

The project consisted of two distinct parts. The first was a Victoria wide survey of impacts and resilience factors and the future needs of tourism businesses. The second was undertaking case studies of two destinations that were impacted by the January 2020 bushfires as well as COVID-19. The destinations chosen were Bright in North Eastern Victoria and Echuca-Moama in the Central Murray region, bordering Victoria and NSW.

This report is structured in six parts. This section provides the background, context, an overview of relevant literature, methodology and limitations of the project. Part Two describes the theoretical basis for the approach that was used to undertake the project as well as the methods used for data collection. Part Three reports on the findings of the Victoria wide survey relating to financial impacts, resilience strategies in place and business needs for recovery. Part Four describes the tourism profile and economic value of tourism in Bright and Echuca-Moama at a shire and town level based on primary and secondary visitor data, the economic impacts on tourism in the destinations as a result of the Bushfires and COVID-19 and finally, provides a 'vulnerability/resilience' analysis of the tourism economy in the case study destinations. Part Five brings together the results from the survey and the case studies to describe the overarching impacts and key strategies for building organisational and destination resilience to future crises. Part Six identifies the policy and strategic implications of the research and makes recommendations to promote destination resilience building in the case study regions as well as Victorian-wide industry resilience building.

### 1.2. Background

Tourism is a significant driver of the economy both nationally and in Victoria. In 2019, the visitor economy in Australia was worth \$152 billion (Tourism Research Australia, 2020). By the 'visitor economy', we refer to the goods and services produced to supply the consumption (spend) of visitors to the destination. This includes the direct goods and services sold to visitors through the tourism, hospitality and events industry sectors as well as the indirect goods and services, such as agricultural products that supply the sector (Victoria State Government, 2016). Through both the direct and indirect effects of the visitor spending, the industry is vital to the social, economic and environmental health of all localities and destinations. In 2019 there were nine million international visitors to Australia, spending \$45 Billion. \$31 billion reached the Australian economy. In addition, \$107 billion was spent by Australians on domestic overnight and day trips. The visitor economy employed 666,000 people directly and 370, 000 indirectly (providing goods and services to the industry) (Tourism Research Australia, 2020).

In the year prior to COVID-19 (2018-2019), tourism generated \$29.4 billion (directly and indirectly) in Gross State Product (GSP) for the Victorian Economy, which equates to 6.5% of the overall state economy. In the same year, the visitor economy employed 263,300 people (7.8% total Victorian jobs) (Business Victoria, 2020).

The global Novel Coronavirus (COVID-19) pandemic and the associated travel restrictions have led to the worst year for global tourism in history, with 1 billion fewer international arrivals worldwide than the previous year, a 74% reduction (UNWTO, 2021). The UNWTO World Tourism Barometer estimates that this reduction equates to a loss of USD 1.3 trillion in export revenues, putting 100-120 million direct tourism jobs in predominantly small-medium sized enterprises at risk (UNWTO, 2021).

Despite fewer cases and deaths from COVID-19 than most other countries, the halt in tourist movement caused by pandemic has equally affected tourism in Australia. Victoria specifically has experienced more significant losses than other states because of a second wave, leading to repeated border closures and lock downs in addition to the worst bushfire season in history that occurred at the end of 2019 just before the pandemic.

The tourism sector is particularly vulnerable to crises and disasters but regional areas reliant on nature-based attractions, such as national and state parks, ski fields, beaches and touring routes are particularly impacted. The 2019-2020 bushfires caused loss of life, property and livestock damage as well as destruction of extensive protected areas. This damage, as well as wide-spread smoke haze across Victoria, severely curtailed normal visitation to the regions immediately affected by fire but also outside the bushfire impact zones (Huf & McLean, 2020).

The first case of Novel Coronavirus (COVID-19) was confirmed in Australia on January 25, 2020 after an infected person flew to Melbourne from Guangdong, China on 19 January, 2020. Soon after, international travel restrictions were put in place, initially for travellers from China. On March 11, the World Health Organisation (WHO) officially declared COVID-19 a pandemic. After this time, travel restrictions to Australia became more severe and voluntary self-isolation was required by all arriving travellers. As Australian levels of infection increased, lock down restrictions were progressively put in place across the country, with non-essential services and schools being closed from March 21, 2020 and international and internal (inter-state) border control measures put in place including compulsory hotel quarantine for returning Australians with most international visitors prohibited. Internal border measures were eased in Mid-May 2020. However, Victoria experienced a second wave and increasing restrictions on movement were put into place initially in metropolitan Melbourne and followed by a full lock down for metropolitan Melbourne and Mitchell Shire on 7 July 2020. All international arrivals to Melbourne were suspended on July 2 and interstate borders between NSW and Victoria also closed on July 8. A state of disaster was declared in Victoria on 2 August 2020, which included strict lock down measures state-wide (Lupton, 2020). The relaxation of restrictions began on 13 September as a five-step process with gradual easing over the course of the next two months. Of particular importance to the tourism and hospitality sector was that regional Victorian schools began to return in September 13 and businesses reopened and movement was reintroduced at a regional level on October 18, which somewhat improved the situation for Victorian regional tourism businesses. In metropolitan Melbourne, day care, kindergarten and childcare services reopened between 5 October and 12 October. All retail, restaurants, hotels, cafes and bars being allowed to reopen with restrictions in place from 27 October, and the lifting of the "ring of steel" around metropolitan Melbourne on 8 November, 2020, allowing Melbourne residents to visit regional Victoria again. Finally, the NSW and Victorian Border was reopened on Midnight 23 November, 2020. Further border closures of varying duration and locations have occurred beyond these dates as various infection outbreaks have occurred in NSW, Qld, WA and SA over the December 2020 - February 2021 period.

The travel restrictions and forced business closures due to COVID-19 have ceased international travel and curtailed domestic travel for more than six months. Combined, these circumstances have led to a national and state crisis for the tourism industry.

Two types of regional destinations that have been particularly hard hit by the recent crises have been those in natural surrounds that were impacted by bushfire and border towns where state border closures have wreaked havoc on the businesses and the communities that rely on free movement between states for their livelihoods.

Two such destinations are Bright and Echuca-Moama. As such, they have been chosen as case studies for this report to demonstrate the impacts of the crisis as well as vulnerabilities and resilience factors in regional destinations to disasters. Figures 1-3 show the destinations within the context of their wider regions. Bright is located in the High Country region of North Eastern Victoria, within the Federal Division of Indi and situated in the Alpine Shire local government area. The town is surrounded by natural resources such as Owen's River, Mount Buffalo National Park and Mount Beauty, Falls Creek and Mount Buffalo ski fields (see Figure 2). Bright was heavily impacted by the bushfires in 2019, with local national and private forests being burned and the town being evacuated. Bright is also situated approximately 100km from the NSW border and some businesses employ staff from both sides of the border.



Figure 2: Bright situated within Alpine Shire



Figure 3: Echuca-Moama within Campaspe and Murray River Shires



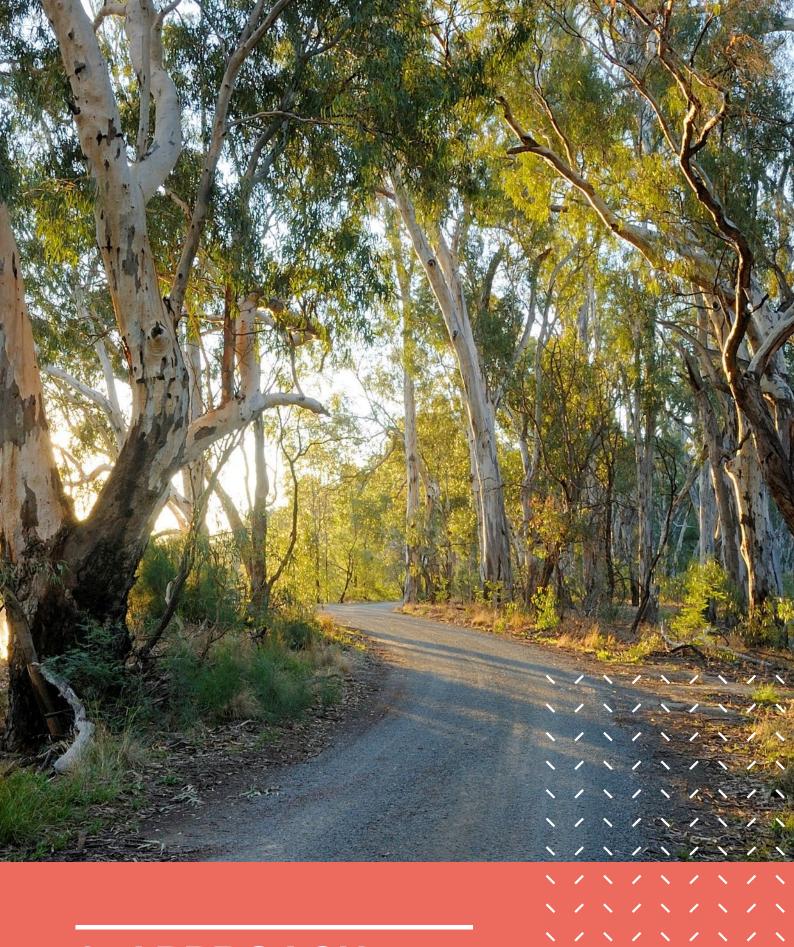
Echuca-Moama is the largest population and visitor centre in the Central Murray region. Two conjoined border towns separated by the Murray River, Echuca sits within Campaspe Shire in Victoria and Moama sits within the Murray River Council area (see Figure 3). The Murray River and the Campaspe River are the key natural features in Echuca-Moama, with the world's largest fleet of operating riverboats and the largest concentration of heritage paddle steamers in Australia (Ruzzene & Funtera, 2018). Whilst not directly affected by bushfires in January 2020, visitation was still reduced compared to other years due to less travel by domestic tourists who were traumatised by the magnitude of the fires. COVID-19 had a debilitating impact on the functioning of the conjoined towns that usually function as one. Regulations ceased all visitation to the area from Victoria, which is the key market, and the community were deeply affected by regulations making travel across the river either impossible or time consuming. For example, acts of daily life such as taking children to school on the other side of the border could take approximately 3 hours return trip and many staff and business owners were unable to travel to work at all.

These two examples are typical of the struggles that are faced by tourism destinations in regional Victoria in 2020. Given the uncertain nature of the COVID-19 pandemic and climate change increasing the likelihood the likelihood of repeat bushfires or other natural disasters like drought, flood, storm somewhere in regional Victoria in 2021, this project aimed to examine the vulnerabilities and resilience factors of tourism destinations in Victoria and explore what steps may assist in making Victorian tourism destinations more resilient to crises in the future.

### 1.3. The project team

The research was undertaken by a project team from Victoria University, Melbourne, comprised of a group of researchers selected for their specific expertise from the School for the Visitor Economy (SVE) and the School of Business at Victoria University. The Victoria Tourism Industry Council (VTIC) was a partner in this research and provided key expertise and assistance in planning and managing the project.

- Dr Joanne Pyke (project leader, research design, data collection, community liaison and reporting)
- Professor Terry de Lacy (project advisor and expertise in vulnerability and resilience of tourism destinations, and sustainable tourism, natural resource and protected area management)
- Dr Gabrielle Lindsay-Smith (project manager, research design, data collection, community liaison and reporting)
- Dr Ancy Gamage (research design, data collection, small business and Human Resource Management (HRM) advisor).
- VanKhanh Nguyen (research design, data collection and analysis survey, reporting)
- Salsabil Shaikh (qualitative data analysis and reporting)
- Maleda Sok (administration)
- Chris Porter (VTIC representative key industry advisor)



## 2. APPROACH AND METHODS

### 2.1. Introduction

The aim of this project was twofold. The section begins with an explanation of the conceptual framework applied before discussing key elements of the vulnerability/ resilience (V/R) analysis. This includes an exploration of 'shocks', 'stressors', 'vulnerabilities' and 'resilience factors' to provide an understanding of the factors that contribute to the underlying vulnerability¹ and resilience of Bright in the Alpine area of North East Victoria, Australia and Echuca-Moama in the Campaspe and Murray River areas in the Victorian Central Murray Region, Australia. While this V/R assessment was conducted in the context of bushfire and COVID-19 risk, these factors alone do not cause vulnerability – instead it is better conceptualised as a trigger that reveals underlying vulnerability and resilience in a destination (Calgaro, Lloyd, & Dominey-Howes, 2014).

### 2.2. Understanding resilience

Resilience is 'the ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organisation, and the capacity to adapt to stress and change' (IPCC., 2007) p. 880) and is a direct expression of the strength of a coupled human-environment system (Carpenter, Walker, Anderies, & Abel, 2001). This project examined the resilience of Victorian tourism businesses (Organisational resilience) using a state-wide survey as well as overarching destination resilience for the two case study destinations examined.

### 2.3. Organisational resilience

Resilience of a tourism business is the organisational capacity to withstand, adapt, and recover from disaster (Prayag, Spector, Orchiston, & Chowdhury, 2020). Organisational resilience should be divided into two dimensions (Lee, Vargo, & Seville, 2013), i.e., (i) planned resilience and (ii) adaptive resilience. Planned resilience relates to the use of existing planning capabilities, which are proactive activities before the occurrence of disaster or crisis. Adaptive resilience refers to the responsiveness of an organisation to emergent situations. Prior research suggests that a tourism business which is more resilient will recover faster from crises (Prayag et al., 2020).

### 2.4. Predictors of organisational resilience.

There are many factors that have been shown to be important for organisational resilience including; aspects of economic capital, availability of resources & financial strength) (Calgaro, Lloyd, et al., 2014); human capital including skills (e.g., leadership, communication); knowledge (e.g., risk management planning and awareness) (Lee et al., 2013; Caroline Orchiston, Prayag, & Brown, 2016); past experience of crises (Caroline Orchiston, 2013); adaptation capacity (Prayag et al., 2020); innovation and creativity (Lee et al., 2013; Caroline Orchiston et al., 2016); employment flexibility (Lee et al., 2013; Caroline Orchiston et al., 2016; Prayag et al., 2020)); business, social capital<sup>2</sup> and social networks/connectedness (e.g., group/tourism organisation association membership, family and friends, relationships with other businesses) (Calgaro, Dominey-Howes, & Lloyd, 2014; Espiner, Orchiston, & Higham, 2017); partnerships with other organizations that may be needed in a disaster (Lee et al., 2013; Caroline Orchiston et al., 2016); community cohesion, perceived support within community (Espiner et al., 2017); collaboration

<sup>&</sup>lt;sup>1</sup> Vulnerability is a place-based and dynamic condition of the coupled human-environment system and is defined here as "the degree to which an exposure unit [households, human groups, ecosystems, and communities] is susceptible to harm due to exposure to a perturbation or stress, and the ability (or lack thereof) of the exposure unit to cope, recover, or fundamentally adapt (Kasperson, Turner, Schiller, & Hsieh, 2001, p. 7)".

<sup>&</sup>lt;sup>2</sup> Social capital is defined as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit" (Nahapiet & Ghoshal, 1998, p243, p243)

within and outside organisations (Lee, 2013; Zenker, 2020); availability of trusted sources of information (Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008).

### 2.5. Destination resilience - conceptual framework

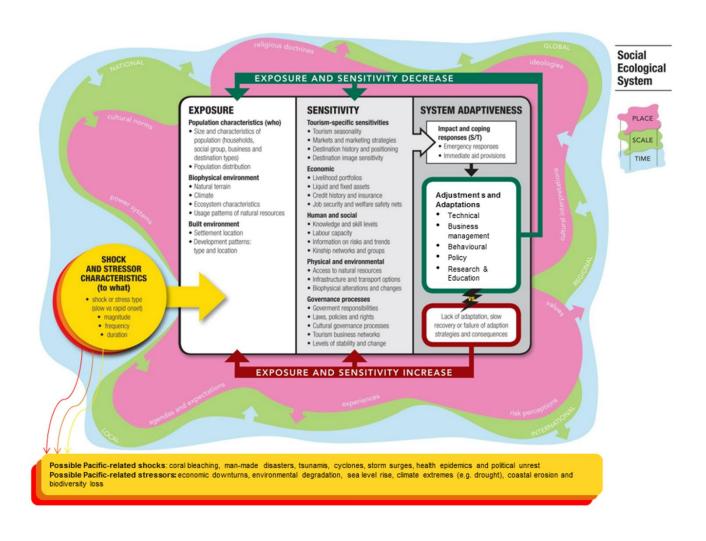
Informed by tourism adaptation theory, the case study section of the project takes the V/R approach and seeks to understand the complex interactions between external risks (with a particular focus on bushfire risk and COVID-19) and the affected tourism system's conditions. A myriad of compounding (and often overlapping) economic, political, and environmental factors in the tourism destination/system can directly and indirectly disrupt tourist flows (Aliperti et al., 2019; Becken & Khazai, 2017; Cró & Martins, 2017; Y. Jiang, Ritchie, & Verreynne, 2019; Kacetl, Klimova, & Kuca, 2018; Kato, 2018; Liu & Pratt, 2017; Reddy, Boyd, & Nica, 2020; B. W. Ritchie & Jiang, 2019; Brent W Ritchie, Mair, & Walters, 2014; Rosselló, Becken, & Santana-Gallego, 2020), which means that the effectiveness of resilience-building activities for tourism ultimately relies on understanding and addressing the underlying socio-political processes and environmental linkages that form the foundations of vulnerability (Calgaro et al., 2014). The Destination Sustainability Framework (DSF) (Figure 4) is used in this project as the overarching theoretical framework for assessing tourism vulnerability and resilience to inform tourism planning and management in the context of fire and COVID-19 risk.

### Assessing destination resilience in the context of bushfire and COVID-19

The purpose of the DSF is to guide the identification of the multiple factors and processes that influence vulnerability and resilience in the tourism context, along with the social actors and agendas that drive action and non-action. Understanding these factors and processes creates entry points for effective adjustments and positive change. Originally developed by Calgaro (2010) and Calgaro et al. (2014), the DSF has been modified and applied in a number of destinations in the South Pacific including Samoa, Tonga and Vanuatu (M. Jiang & DeLacy, 2014). The main modifications include aspects of the tourism system model (Gunn & Var, 2002; Leiper, 2004) as well as the climate adaptation portfolio for the tourism-recreation sector by Scott et al. (2009). This was done to focus the framework on the type of adaptation strategies available to tourism stakeholders to (1) reduce vulnerability and increase resilience; and (2) prepare and adapt to change. As shown in the Figure 4, the DSF comprises six main elements: (i) the combination of shock(s) and/or stressor(s) that affect destinations. (ii) the three interconnected dimensions of vulnerability - exposure, sensitivity, and system adaptiveness - that form the core of the DSF, (iii) the dynamic feedback loops that express the multiple outcomes or consequences of actions taken (or not taken) in response to the shocks and stressors, (iv) the contextualised root causes and drivers that shape places (including destinations) and their characteristics, (v) the scale, and (vi) multiple timeframes within which social-ecological change occurs.

The following sections further explain the key components of the DSF and how the Tourism System Model (adapted from Leiper (2004)) and Climate Adaptation Portfolio for the Tourism-Recreation Sector (Scott et al., 2009) fit in to the DSF to add the required depth needed to assess the vulnerability and resilience of destinations and the supporting tourism system to change, with particular emphasis given to climatic changes.

Figure 4: The modified Destination Sustainability Framework (DSF) (Adapted from Calgaro et al. 2014)<sup>3</sup>



Dominey-Howes.

<sup>&</sup>lt;sup>3</sup> The modification of DSF (Calgaro, Dominey-Howes, et al., 2014; Calgaro, Lloyd, et al., 2014) for tourism vulnerability and resilience assessment in the context of climate change was made to be applied in an AusAID Australian Development Research Award project Pacific Tourism – Climate Adaptation Project (PT-CAP) (ADRA0800029). The key research team that contributed to the development of the modified DSF include Dr Emma Calgaro, Dr Louise Munk Klint, Dr Min Jiang, Professor Terry DeLacy, and Professor Dale

### Shocks & stressors

The V/R analysis begins with identifying *to what* the tourism destination/system is vulnerable or resilient, which is the event or events that destabilises the existing system. The *shocks and stressors* element (*to what*) is shown as piercing the core of the social-ecological system. The event does not cause vulnerability - it is the trigger event that reveals vulnerability and resilience patterns - but the nature of the shock or stressor does influence how the system is affected over space and time (Wisner, Blaikie, Blaikie, Cannon, & Davis, 2004). Shocks and stressors are differentiated here because they have significant implications for prioritising adaptation strategies especially when resources are limited (M. Jiang & DeLacy, 2014). Figure 4 shows that the extended yellow box on the bottom of the modified DSF includes a range of shocks and stressors relevant for the South Pacific small island destinations. This provides an example of localised identification of shocks and stressors. In this project, bushfire and COVID-19 are the predetermined risks concerned. However, a range of other shocks and stressors facing the local tourism stakeholders in Bright and Echuca-Moama were also identified.

### The tourism system

The addition of the Tourism System Model in the application of the DSF is helpful to fully understand *who* is vulnerable or resilient to the shocks and stressors. It is important to identify the key players of the tourism system because they might be potentially exposed to shocks and stressors in different ways (M. Jiang & DeLacy, 2014). Their perceptions towards certain shocks and stressors may also vary, which could lead to difference in their vulnerability and resilience level. The identification of the tourism system components also helps to scope out the relevant stakeholders who are in special need for, responsible for, or able to take adaptation actions.

### Vulnerability and resilience

Vulnerability and resilience are place-specific conditions of the coupled human-environment system. Therefore, the three interconnected dimensions of vulnerability form the heart of the DSF (the three columns at the centre of Figure 4. The factors that contribute to exposure, sensitivity, and system adaptiveness are then broken down into subgroups, enabling the easy identification of key assessment focal points, but the lists are not exhaustive.

Exposure presents an inventory of the destination's defining physical characteristics. Sensitivity captures the pre-existing economic, social, political and environmental conditions that shape how the destination is affected by the shocks and stressors. System adaptiveness highlights how the system and its people respond to the shocks and stressors, and the consequences of these responses. There are numerous ways in which different tourism stakeholders can respond and adapt to change. In line with Scott et al. (2009) Climate Adaptation Portfolio for the Tourism-Recreation Sector, the types of adaptation responses are grouped under six categories: behavioural and social; technical and structural; business management; policy; research; and education. It is important to understand that post-event responses may have different consequences on future vulnerability and resilience levels in the tourism system/destination. Actions can produce both positive and negative outcomes for different players in the tourism system. Positive outcomes lead to reduced exposure and vulnerability and enhanced resilience. In contrast, lack or failure of adaptation may increase vulnerability levels. This feedback loop is shown in Figure 4 by the green (positive feedback) and dark red (negative feedback) arrows.

The tourism destination and its tourism system do not exist in vacuum. It is important to understand the socially constructed and dynamic spatial-temporal context within which vulnerability and resilience manifest in the tourism destination/system. This context, including place, scale, and time, is also acknowledged in the framework Figure 4). The destination's vulnerability and resilience to shocks and stressors are shaped by multiple actions and decisions, which occur at different levels of *place*, *scale*, and *time*.

The actions and decisions of actors involved in the tourism system are also influenced by a range of contextual factors, as shown in the element of *place* (in the pink area of Figure 4). As a crucial part of the tourism system, tourists' perceptions of the destination, their travel choices or preferences play a significant role in determining destination vulnerability to shocks and stressors. *Scale* represents the tourism system, through its various actors, its value chain, and social networks, crossing local, regional, national, and international levels (in the green area of Figure 4). Finally, the element of time is represented in the blue area of Figure 4, acknowledging the importance of the timing of responses to shocks and stressors and their consequent outcomes in planning effective adaptation. These contextual spatial-temporal factors interact with the tourism system's environmental, political, economic, and social conditions, which together influences vulnerability and resilience. Investigation of *place*, *time*, and *scale* is embedded in the vulnerability/resilience analysis as integral consideration in the assessment.

### 2.6. Data collection and analysis methods

The design and methodology of the project was guided and informed by consultation with VTIC in their role as an industry advocacy body. Early discussions were also conducted with the Murray Regional Tourism and Tourism North East agencies as well as council representatives from Campaspe, Murray river Council and Alpine Shire council to ensure their interest and capacity to be involved in the study. These discussions were conducted in the early phases of the project to identify relevant community, government and industry stakeholders who were representative of the tourism systems in Bright and Echuca-Moama and to seek advice on the appropriate methods, timing and logistics of gathering data.

Following these discussions, and in line with project objectives, the project adopted a mixed method approach including analysis of secondary data, a state-wide survey and two destination case studies. The details of these methods for these parts of the project are outlined in the next part of the report.

### Part 1: Victoria-wide survey of the impact of bushfires and COVID-19 on tourism businesses:

The survey was designed to measure the impacts of crises and the vulnerability and resilience characteristics of tourism businesses and contained primarily closed response questions, with some options for comment throughout. The questions included in the survey were designed to capture information about factors that have been identified in the most current research on tourism business resilience and recovery in times of crises. The table below outlines the key types of questions that were asked in the survey and justification for their inclusion. A copy of the full survey questionnaire is included as Appendix 1.

Table 1. Variables measured in the survey, how they were measured, and literature source of survey questions

Variable	Question
Business characteristic	<ul> <li>Tourism sector</li> <li>Region/s of operation</li> <li>Business types</li> <li>Business size</li> <li>Business age</li> </ul>
Accreditation	Types and years of accreditation (VTIC/other)
Risk management plan	Presence of risk management plan (Y/N)
Other crises	Whether or not businesses had experienced other crises which had impacted their revenue in the last 12 months (e.g., bushfire, flood, drought) and how significant the impact was.
Impact of COVID- 19 crisis (Financial and closures)	Estimated reduction in revenue due to COVID-19 between March and September, 2020)  Business closure as a result of COVID (number of closures and length of closure and extent of closure – partial or full)
Staffing arrangements	Staff numbers prior to COVID-19 and during (casual, PT, FT) and staff on Job Keeper, laid off temporarily or permanently as a result of COVID (Casual, PT, FT)
Challenges	Key challenges faced by businesses due to COVID-19 (e.g., cash flow, mental health concerns, fear of virus, attracting/retaining customers) (Micromex Research, 2020). Respondents could indicate more than one choice
C	Types of government support received during the crisis (federal, state and local and importance of the support received). The main support packages available from each level of government were included as options. Participants also indicated their reasons for not receiving funding to date.

Variable	Question
Business confidence	Business prospects and ability to attract and retain appropriately skilled staff in the next 12 months. These two items were developed by the researchers to measure Respondent's confidence in next 12 months. On a 5-item Likert scale from Extremely worried to Extremely confident
Wellbeing	Captured using the WHO-5 wellbeing scale (Bech, 2012), a 5 item scale measuring of mental health related quality of life and scored between 0 (worst possible wellbeing) and 25 (best possible wellbeing) A score below 13 indicates significant distress and in clinical practice an assessment of depression would be undertaken.
Organisational resilience	Planned resilience (5 items, Likert scale) (Whitman, Kachali, Roger, Vargo, & Seville, 2013)
	Adaptive resilience (5 items, Likert scale) (Prayag et al., 2020)
Business connectedness	Business connectedness was used as an indicator of strength of business networks. This question was developed by the researchers and participants were asked to indicate their level of connectedness— with industry associations, Victorian Chamber of Commerce, local community and other tourism operators/businesses (Likert scale 5 items from not at all connected to strongly connected). Participants were also given the opportunity to describe the role of the connections during the crisis using free text.
Collaboration	Collaboration was measured as a single item response indicating whether during COVID-19 their business had Collaborated with or sought ideas from other business owners or business associations
Speed of recovery	Predicted time for revenue to return to pre-COVID-19 levels (7 item discrete variable - from less than 1 month to more than 2 years of never)
Opportunities	Innovation – seven types of innovation were listed to explore which types of innovation strategies that businesses had changed to create new opportunities during the COVID-19 pandemic. (Micromex Research, 2020)
Information and Communication technology	Strategies that were implemented during COVID-19. – eight different strategies were listed, which were adopted from (Australian Bureau of Statistics, 2016)
Skill needs	Skills or training important to recover from crisis seven types of training. Closed response question. Six options were developed to align with training being provided by the Queensland Government for Small businesses post COVID-19 (Queensland Government, 2020) and adapted to align with findings from the VTIC consultations between January and June 2020.

The survey was administered using Qualtrics <sup>4</sup>and was distributed via email and newsletter to all 2000 members of the Victoria Tourism Industry Council. The survey was also circulated to the eleven Regional Tourism Boards across Victoria for distribution to their individual databases. The online survey was open between September 30, 2020 and October 26, 2020. A total of 323 people took part in the survey. There was some dropout by the end of the survey, with the last question receiving 220 responses. A summary of the representation of sectors, regions, business types and positions of people who responded to the survey is shown in the results section below.

### Part 2: Two case studies of Victorian regional tourism destinations

Two in depth case studies were conducted, which included semi-structured interviews of tourism stakeholders as well as analysis of secondary tourism data and statistics. A total of 33 semi-structured interviews (average 60 minutes in length, completed over Zoom or Microsoft Teams) were conducted using a question outline to guide the interviews. A copy of the interview questions is provided in Appendix 1. Interviewees were identified to ensure representation by a cross-section of tourism stakeholders These included people engaged in operating private tourism businesses, community members with an interest in the wider social and economic wellbeing of the two communities, relevant governance officers at state, regional and local levels and other peak tourism and event management organisations. A summary of the stakeholder types that were interviewed is shown in Table 2 below. The interview data was transcribed and analysed using NVIVO, specialized software for the analysis of qualitative data.

Table 2. Breakdown of Interviews by Stakeholder Group

Stakeholder group	Bright	Echuca
Tourism Industry (including operators, event organisers and peak bodies).	7	9
Community Participants in this category were chosen because of their individual community perspectives and engagement with community planning processes - however, most also have a stake in tourism through the nature of their employment, business operations or their interest in community wellbeing.	3	2
Government Officers (from across the spectrum of tourism related sectors such as parks management, land use planning, Alpine Resort Management Boards, community engagement and events management at a local and state level)	7	5
Total	17	16

<sup>&</sup>lt;sup>4</sup> Qualtrics is research tool for online surveys used by many international and Australian universities. It is used to securely collect responses to online surveys that can then be analysed by researchers

Analysis of secondary tourism data and statistics: e.g., visitor data from the International Visitor Survey (IVS) and the National Visitor Survey (NVS), VTIC reports on the surveys conducted to assess the impact of the fires and COVID-19 between January and June 2020, reports on the tourism industry and reports/document written on the cases study destinations. The data informed part of the contextual information describing the value of tourism in Victoria as well as the two case study destinations and other background information about the distinctions relevant to the resilience/ vulnerability analysis.

The selection of methods was guided primarily for practical purposes in that specific data was required to respond to the objectives. For example, it was necessary to gain a local and state-wide tourism operator perspective and thus it was necessary to conduct both a survey and in-depth interviews with the tourism sector. A further consideration, however, is that multiple complementary methods (method triangulation) is useful in order to enhance the validity of the results (Creswell & Plano Clark, 2011). Overall, the secondary and primary data were used to inform the analysis relevant to the project objectives. The following sections of the report elaborate on the use of the data to explore the value of tourism, impact of Bushfire and COVID-19 crises across Victoria and vulnerability to fire and COVID-19 of regional Victorian Destination and specifically, Bright and Echuca-Moama.



## 3. SURVEY RESULTS

### 3.1. Introduction

This section provides the detailed findings of the state-wide survey designed to identify the impacts of crises and the vulnerability and resilience characteristics of tourism businesses and communities. The details of the survey methods are described in Section 2 and the survey questionnaire is included as Appendix 1.

### 3.2. Overview

A total of 323 respondents participated in the survey. There was some dropout by the end of the survey, with the last question receiving 220 responses. A summary of the representation of sectors, regions, business types and positions of people who responded to the survey is shown in the results section below.

### 3.3. Business characteristics of survey respondents

### Sector representation

Table 1 below shows the representation of respondents by sector. Respondents could identify as being from one or more sectors with the largest representation from the accommodation sector (52%). Tours /transport and food/beverage had similar representation at 24% and 22%. The events sector had the smallest representation (13%).

Table 3. Survey respondents by sector

Sector	Responses	Percent of responses	Percent of Cases (n=323)
Accommodation	167	33.50	51.70
Tours/Transport	78	15.70	24.10
Food/Beverage	70	14.10	21.70
Attractions	53	10.60	16.40
Events	43	8.60	13.30
Other	43	8.60	13.30
Retail	21	4.20	6.50
Sport and outdoor activities	15	3.00	4.60
Tourism agency and government	8	1.60	2.50
Total	498	100.00	154.20

### Region

There was a broad cross section of responses from across the region. Interestingly, 32% of the respondents worked across multiple regions. The greatest response rate from a single region came from Geelong and the Bellarine (16%), followed by the High Country (9%) and Greater Melbourne (9%). The Murray Region had the smallest response rate (2%).

Table 4. Regional representation of survey respondents

Tourism regions	Frequency	Percent
Multiple regions: Please specify	101	31.9
Geelong and the Bellarine	50	15.8
High Country	29	9.1
Greater Melbourne	29	9.1
Gippsland	18	5.7
Phillip Island	15	4.7
Daylesford and Macedon Ranges	13	4.1
Great Ocean Road	13	4.1
Yarra Valley and Dandenong Ranges	13	4.1
Goldfields (including Bendigo, Ballarat)	11	3.5
Grampians	10	3.2
Mornington Peninsula	8	2.5
The Murray	7	2.2
Total	317	100

### Business types

The highest proportion of businesses to complete the survey were from companies (42%), followed by sole traders (18%) and trusts (18%).

Table 5. Business types represented in the survey

	Frequency	Percent
Company	114	41.6
Sole trader	52	19
Trust	49	17.9
Partnership	37	13.5
Not for profit or incorporated association	13	4.7
Government owned agency	9	3.3
Total	274	100

### Business size

Almost all businesses surveyed (98%) were micro, small or medium sized enterprises (MSMEs). This is reflective of the tourism industry in Victoria as a whole which had less than 1% large businesses in 2019 (Tourism Research Australia, 2021b). Of the full cohort of businesses that responded to the survey, 47% of the workforce was casual, 18% part-time and 35% full-time.

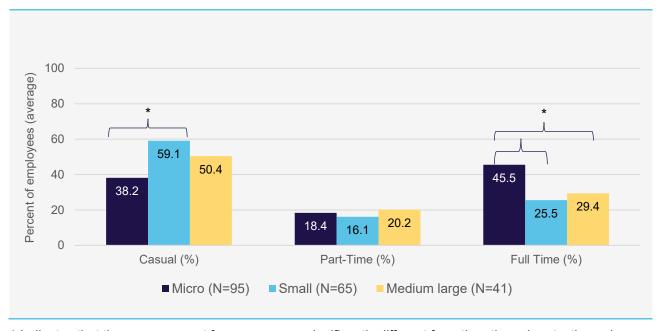
Figure 5 shows the workforce statistics for Micro, small and medium- large businesses. Micro-sized businesses employ a significantly smaller<sup>5</sup> proportion of casual staff than small businesses (38% Vs 59%) and a significantly greater proportion of full-time staff than either of the two other businesses sizes (46% Vs 25% (small) and 29% (medium-large).

<sup>&</sup>lt;sup>5</sup> Assessed using a one-way Analysis of Variance and a Tukey Post-Hoc test (P<0.05).

Table 6. Business sizes represented in the survey (business size was measured as number of employees prior to COVID-19.)

Business size	Frequency	Percent	Vic Percent
Micro (0 to 4 employees)	137	49	59.1
Small (5 to 19 employees)	84	30	31.6
Medium (20 to 199 employees)	53	19	8.6
Large (200 employees or more)	6	2	0.6
Total	280	100	
Did not answer the question	43	13.3	
Total	323	100	

Figure 5. Workforce statistics for different business sizes prior to COVID-19.



<sup>\*</sup> Indicates that the mean percent for a group was significantly different from the other when testing using an ANOVA test (P<0.05)

### Business age

Survey respondents were asked to indicate how many years they had been operating under the present ownership. The greatest proportion of responding businesses had been operating ten years or more (46%), followed by one to four years (24%).

Table 7. Years of operation of business

	Frequency	Percent
Less than 1 year	10	3.6
1 year to 4 years	77	27.5
5 years to 9 years	44	15.7
10 years or more	149	53.2
Total	280	100
Did not answer the question	43	
Total	323	

### Quality accreditation

The Quality Tourism Framework (QTF) is an online pathway to support the development of Australian tourism businesses. The program includes three elements including Quality Tourism Accreditation, star ratings and an awards program. The QTF accreditation program is a means for encouraging the professional development and continuous improvement of the tourism industry. It gives public and consumer recognition to businesses that have met a standard within their business operations and who strive to maintain and improve ethical and professional standards that are set and agreed to by the industry. A Quality Tourism accreditation application covers risk and emergency management, strategic business planning and management, marketing planning and basics for online marketing, human resource management, customer service procedures, business operating systems and environmental sustainability. The primary industry program is delivered by VTIC although other programs are available. Table 8 below shows the results of a question to identify the proportion of respondents that had undergone the accreditation process.

Approximately one third of businesses surveyed (37%) had undertaken VTIC accreditation (see Table 8). The results also show that larger businesses were more likely to be accredited by VTIC than smaller businesses (see Figure 6). The majority of VTIC accredited businesses had undertaken the Quality Tourism accreditation (76%), followed by Sustainable Tourism accreditation (18%). However, a large proportion of businesses surveyed had not undertaken any training or accreditation programs for their tourism business (44%). Participants could indicate more than one response for these questions.

Table 8. Types of tourism business accreditation that have been undertaken by survey respondents (respondents could indicate more than one response)

	Responses		
Accreditation or training programs	N	Percent of responses	Percent of Cases (n=280)
Accredited by VTIC	106	28.6%	36.3%
Completed other accreditations	64	17.3%	21.9%
Completed business development training programs	72	19.4%	24.7%
Have not undertaken any programs	129	34.8%	44.2%
Total	371	100.0%	127.1%

Table 9. Types of VTIC accreditation that have been undertaken by survey respondents (respondents could indicate more than one response)

	Responses		
VTIC Accreditation	N	Percent of responses	Percent of Cases (n=106)
Quality Tourism	76	58.5%	76%
Sustainable Tourism	18	13.8%	18%
Visitor Information Centre Accreditation	10	7.7%	10%
Camp and Adventure Activity	17	13.1%	17%
Unsure	9	6.9%	9%
Total	130	100.0%	130%



Figure 6. Proportions of businesses surveyed with VTIC accreditation.

### Demographic characteristics of the respondents

The majority (75%) of respondents were business owners, with the next highest response from managers (25%). Respondents were able to select more than one option, which is why the percent of cases in Table 10 is greater than 100%. There was a range of ages of respondents, with the greatest representation coming from the 50-59 age group (35%). There were far fewer respondents below the age of 40 than the other groups (9%). (See Table 11). Of the 212 respondents who indicated their gender, 59% were female (see Table 12). There was a range of experience levels of the respondents. A similar proportion of respondents have worked in the business for between 3-5 years (30%), and more than 20 years (18%) and the other experience groupings are in between (see Table 13). Most respondents (39%) had been working for the business for more than 10 years and only 12 per cent worked for the business for less than three years.

Table 10. Role of survey respondents in business

Role in business	N	Percent responses	Percent of Cases
Manager	56	22.80%	25.60%
Business Owner	165	67.10%	75.30%
CEO	15	6.10%	6.80%
Others	10	4.10%	4.60%
Total	246	100.00%	112.30%

Table 11. Age range of respondent

Age of respondent	Frequency	Percent (n=219)*
Less than 40	19	8.7
40 to 49	56	25.6
50 to 59	77	35.2
60 or more	67	30.6
Total	219	100
Not answered	98	
Total	317	

<sup>\*</sup>Not all respondents answered this question.

Table 12. Gender of survey respondents.

Gender	Frequency	Percent (n=212)*
Male	86	40.6
Female	126	59.4
Total	212	100
Did not answer	105	
Total	317	

<sup>\*</sup>Not all respondents answered this question.

Table 13. Number of years the respondent has been working for the business.

Years working for the business	Frequency	Percent (n=219)*
Less than 3 years	26	11.9
3 to 5 years	65	29.7
6 to 10 years	42	19.2
11 to 20 years	46	21
More than 20 years	40	18.3
Subtotal	219	100
Did not answer	98	
Total	317	

<sup>\*</sup>Not all respondents answered this question.

#### 3.4. Impact of disasters on business performance

The 2019/20 bushfires and COVID-19 were not the only disaster that has impacted on Victorian tourism businesses in the last twelve months. Across the state, there have been destinations that have also been exposed to dust storms, floods, blue-green algae outbreaks, heatwaves and drought to varying degrees. The following section describes the findings in relation to the financial impacts of disaster on businesses.

#### Natural disasters

Of the 287 businesses that responded, only 35% had not been impacted at all by a disaster other than COVID-19. The broadest reaching disaster was bushfire, which impacted 60% of the respondents. The areas that were directly affected by the bushfires were Gippsland and the High Country. Given that participants working in these regions made up only 15% of the responses to the survey (see Table 4), this demonstrates the additional, wider reaching indirect impact of the bushfires resulting from ongoing smoke, media sensationalism and general consumer fear of travelling. The extent of the impact of other natural disasters was less than bushfire but 9% and 8% of businesses were still impacted by storms, hail, flooding or the ongoing drought, respectively. Other events affected 13% of the respondents. Figure 7 shows the severity of revenue losses experienced by businesses impacted by the various disasters. Each type of disaster had a varied impact on revenue, which reflects the varied nature of crises and that impact depends on preparedness, severity and location of the event. The single disaster that impacted businesses most severely was bushfire, with 39% suffering high to extreme revenue losses. Storm hail and flood and ongoing drought impacted 30-34% of the businesses experiencing them in a high-severe way (see Figure 7). Table 15 captures the estimated proportions of revenue lost during the period from December 2019 to January 2020 when the Victorian Bushfires were occurring. Of the 213 businesses that responded, 74% of businesses had experienced some form of revenue reduction during that time. Thirty-eight per cent estimated their losses to be between 1 and 50% during that time and 36% estimated more significant losses of between 50 and 100%.

Table 14. Number and proportion of businesses that have had their revenue impacted by natural disasters in the last 12-months.

Prior disasters	N	Percent	Percent of Cases*
Bushfires	138	48.10%	59.7%
Storms, hail, or flooding	20	7.00%	8.7%
Ongoing drought	18	6.30%	7.8%
Other events	31	10.80%	13.4%
Other not bushfire1	59	NA	18%
Revenue was not affected	80	27.90%	34.6%
TOTAL	287	100.00%	NA

<sup>\*</sup>survey respondents could indicate more than one disaster has impacted them in the last 12 months.

¹ Other not bushfire is number of business who have experienced any of the following - Storms, hail, or flooding, drought combined.

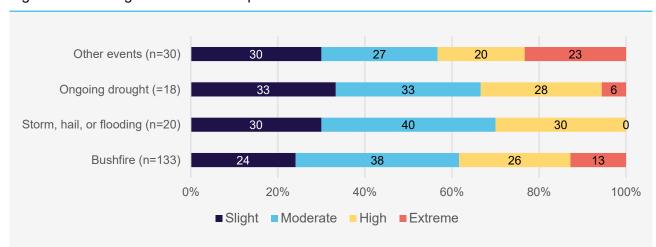


Figure 7. Degree of financial impact of natural crises in last 12-months.

Data is presented as degree of revenue impact for each crisis. Proportions are only of businesses that were financially affected.

Table 15. Reductions in revenue during the bushfire crises (December 2019- January 2020).

	Frequency	Percent (n=213)*
0%	55	25.8
1 - 24%	55	25.8
25 - 50%	26	12.2
51 - 75%	36	16.9
76 - 100%	41	19.2
Total	213	100

<sup>\*</sup>Represents proportion of survey respondents who answered the question (n=213)

#### The COVID-19 pandemic

As discussed, the impact of the crises has not only had a financial impact but has also required major adaptations to business operations which in turn, have generated mental health challenges. One of the main adaptations was forced business closure.

Of the businesses who responded to this question (n=237), 84% had been forced to close at some point since the COVID-19 pandemic began. At the time of the survey, 48% of the businesses who had closed were now either partially or fully reopened, 44% planned to reopen when able and only one business had closed permanently (See Table 17).

Table 16. Businesses that have had to close for one or more times during the COVID-19 pandemic.

Business closure during pandemic	Frequency	Percent (n= 237)
Yes	200	84.4
No	37	15.6
Total	237	100

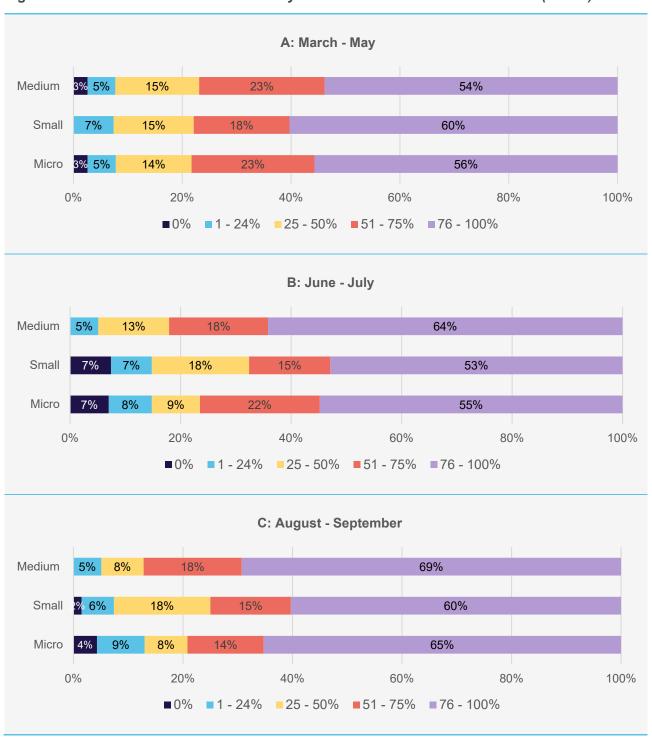
Table 17. Business trading status at time of the survey (30 September, 2020 - 26 October 2020.)

Business trading status	Frequency	Percent (n=199)
We closed but have partially reopened	70	35.2
We closed but are now fully reopened	25	12.6
We have closed our business temporarily – but we plan to re-open when feasible	87	43.7
We have closed our business permanently due to the COVID-19 situation	1	0.5
Other	16	8
Total	199	100

#### Revenue

The revenue of tourism businesses of all sizes has been impacted by the COVID-19 pandemic. Between March and May 2020, more than 50% of businesses lost between 76 and 100% of their revenue, irrespective of size (see Figure 8). This was similar in the June- July period with between 53 and 64% of the businesses survey losing between 76 and 100% of their revenue (see Figure 8: B). By August- September 2020, 60-69% of the Victorian tourism businesses interviewed were losing most of their revenue.

Figure 8. Percent reduction in revenue by different sized businesses in 2020 (n=280)



#### Staffing arrangements

The survey asked respondents about the impact of the crises on staffing and the number of staff who were laid off permanently, temporarily or kept on Job Keeper.

Prior to COVID-19, the work force of respondents was primarily casual (47%), with approximately 18% part-time employees and 35% full-time employees. During the COVID-19 pandemic period, the greatest impact on staffing was seen in the casual workforce of whom 46% were laid off permanently and 55% were laid off temporarily. Only 30% of casual staff were employed on Job Keeper during the pandemic. Part-time staff were less likely than casual staff to be laid off, either temporarily or permanently, and also more likely to receive Job Keeper. This trend continued to full-time staff who were on average, 34% less likely than casual staff to be laid off permanently, 14% less likely to be laid off permanently and 40% more likely to receive Job Keeper (see Figure 12).

Figure 9. Average proportion of original workforce who were casual, part-time and full-time pre-COVID-19(n= 164 businesses)

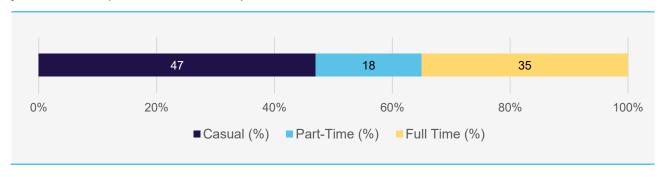
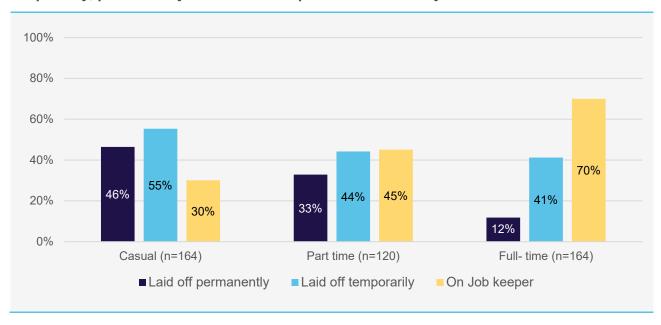


Figure 10. Average percent of original casual, part-time and full-time work force laid off temporarily, permanently and on Job Keeper at time of survey



#### **Business Confidence**

Figure 11 illustrates the degree of confidence of Victoria tourism businesses in terms of their business prospects in the next twelve months, and Table 18 presents the degree of future business confidence among business of different sizes. As shown in Figure 11, more than half of businesses (56%) felt worried about their business prospects in the next twelve months due to the severe impact of the pandemic on their business activity and performance. Only 3% of Victorian tourism businesses stated that they are extremely confident and 31% felt somewhat confident about their business prospects.

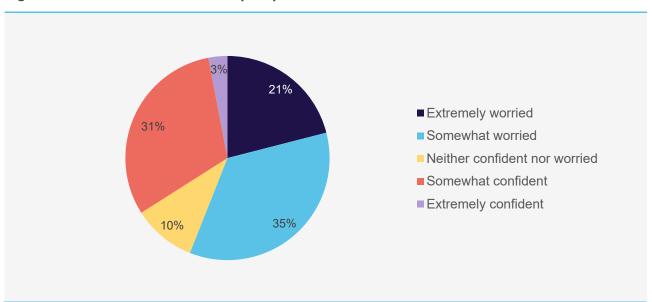


Figure 11 Confidence in business prospects in next 12-months

Since different sized businesses have different characteristics as well as organisational capability to cope with crises, statistical tests<sup>6</sup> were performed to investigate whether the degree of confidence is different between micro, small businesses and medium, large businesses.

The results reveal that micro businesses, on average, were more confident than their larger counterparts in terms of their business prospect in the next twelve months. This is evident by their mean score of 2.73 (i.e., neither confident nor worried) as compared to 2.55 (Somewhat worried) for small business, and 2.23 (Somewhat worried) for medium and large businesses. There was also a significant difference between micro versus medium, large businesses. Specifically, micro businesses are more confident than medium and large businesses in their business prospects over the next 12 months.

<sup>&</sup>lt;sup>6</sup> ANOVA tests were conducted to examine the mean differences among business size

Table 18 Business size comparison of degree of confidence in business prospects in next 12-months

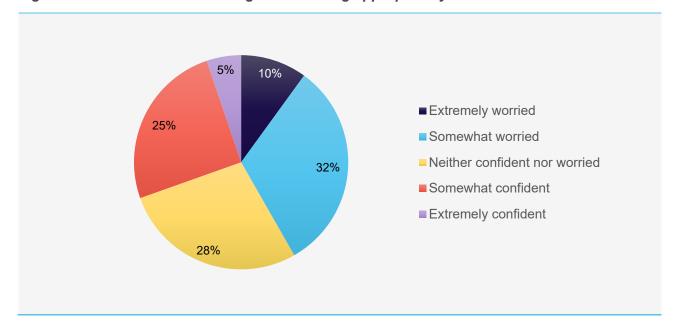
Business size	n	Mean	SD	Degree of confidence
Micro	120	2.73	1.24	Neither confident nor worried
Small	71	2.55	1.18	Somewhat worried
Medium large	47	2.23	1.15	Somewhat worried
Total	238	2.58	1.21	Somewhat worried

ANOVA test: p = 0.061\*. Significant mean difference: Micro vs Medium large (p=0.048\*\*)

Note: \*, \*\* statistically significant at 90% and 95% confidence level respectively

In addition to business prospects, the survey examined the confidence level of businesses regarding their ability to attract and retain appropriately skilled staff in the next twelve months and whether there are significant differences between business size. Figure 12 illustrates the degree of confidence of businesses in terms of their ability to attract and retain appropriately skilled staff, and Table 19 presents the degree of confidence among different business sizes.

Figure 12 Confidence in attracting and retaining appropriately skilled staff



Only 5% of Victorian tourism businesses felt extremely confident about attracting and retaining appropriately skilled staff, and 25% felt somewhat confident. Many businesses (42%) felt worried about attracting and retaining appropriately skilled staff, with 10% feeling extremely worried and 32% feeling somewhat worried. Statistical analyses <sup>7</sup> showed that micro businesses, on average, are also significantly more confident than their larger counterparts (medium and large businesses) in terms of their ability to attract and retain appropriately skilled staff in the future.

Table 19 Business size comparison

Business size	n	Mean	SD	Degree of confidence
Micro	120	3.03	1.05	Neither confident nor worried
Small	71	2.80	1.07	Neither confident nor worried
Medium large	47	2.49	1.12	Somewhat worried
Total	238	2.86	1.09	Neither confident nor worried

ANOVA test: p = 0.013\*\*. Significant mean difference: Micro vs Medium large (p=0.010\*\*\*)

Note: \*\* statistically significant at 95% confidence level

#### **Challenges Associated with the pandemic**

The unprecedented circumstances and severe impacts of the COVID-19 pandemic have been the major challenges to the survival and future growth of tourism businesses in Australia as well as globally. Table 20 below presents challenges faced by Victorian tourism businesses due to the COVID-19 pandemic.

Table 20. Challenges due to the COVID-19 pandemic

Challenges	Frequency	% of businesses (n = 263)
Cancellation of orders/bookings	196	74.5%
Cashflow	187	71.1%
Attract / retain customers	158	60.1%
Pay rent / utilities	138	52.5%
Mental health concerns, for your staff	117	44.5%
Mental health concerns, for you	109	41.4%

<sup>&</sup>lt;sup>7</sup> An ANOVA test showed a statistically significant difference between the degree of confidence is different between micro, small businesses and medium, large businesses.

Challenges	Frequency	% of businesses (n = 263)
Pay and support staff	115	43.7%
Pay suppliers	77	29.3%
Fear of catching the virus at work	81	30.8%
Access to suppliers/stock	34	12.9%
Bank/credit provider has been unsupportive	19	7.2%
Other challenges	53	20.2%

Note: Each business could report more than one challenge.

The data reveals that Victorian tourism businesses faced substantial challenges due to the COVID-19 pandemic (see Table 20). The two most reported challenges were cancellation of orders or bookings and cashflow with 74.5% of businesses surveyed citing cancellation of orders or bookings and 71.1% of businesses cited cashflow as the major challenges that affected their business operation and performance. In addition, more than half of businesses indicated that they also experienced considerable challenges in relation to attracting and retaining customers and to pay rent or utilities.

The mental health of the business owners/managers (41.4%) and staff (44.5%) was also a key concern due to the financial impact of the pandemic on business survival and the lockdown which disrupted normal daily life, work, and income. A large proportion (43.7%) of businesses also mentioned that they faced difficulties in paying and supporting staff during the pandemic. Other challenges included (i) fear of catching the virus at work (30.8%), (ii) paying suppliers (29.3%), (iii) access to suppliers or stock (12.9%), and unsupportive bank/credit provider (7.2%).

#### Financial support received by businesses

Throughout the crises, federal, state and local governments have provided a range of support and relief assistance for tourism businesses. As shown below, the large majority (89%) of businesses received some form of financial support.

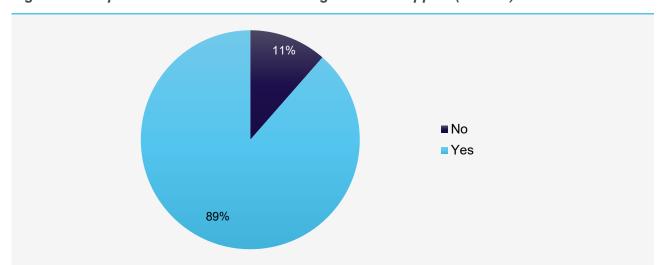


Figure 13. Proportion of businesses receiving financial support ( n= 280)

To better understand the source of support and its importance, the following tables present the federal and state support being received and the corresponding figures illustrate the importance of such support packages.

The most utilised federal support package is the Job Keeper program with 91.4% of Victorian tourism businesses in our sample receiving this type of support (Table 21). More than a quarter of businesses (26.3%) received the COVID-19 Relief and Recovery Fund, and 21.6% of businesses received the Bank Loan Repayment Deferrals package. Some businesses received support from Instant Asset Write-off (9.1%), Coronavirus SME Guarantee Scheme (2.2%), Sole Trader Relief (2.2%), Credit and Loans (1.7%); yet the number of businesses receiving these support packages is relatively small. Only 5.2% of businesses did not receive any federal government support.

Table 21. Type of federal support received

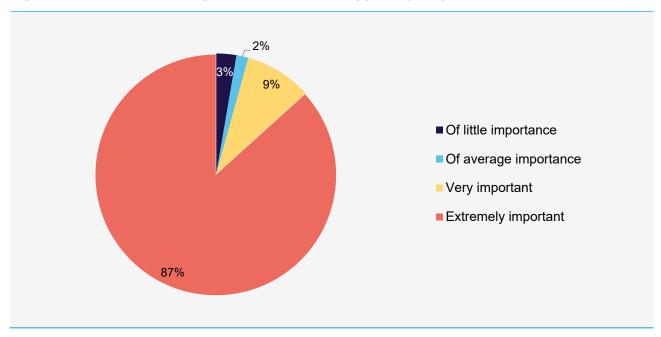
Federal support package	Frequency	% of businesses (n = 232)
Job Keeper	212	91.4%
COVID-19 Relief and Recovery Fund	61	26.3%
Bank Loan Repayment Deferrals	50	21.6%
Instant Asset Write-off	21	9.1%
Coronavirus SME Guarantee Scheme	5	2.2%
Sole Trader Relief	5	2.2%
Credit and Loans	4	1.7%

Federal support package	Frequency	% of businesses (n = 232)
Apprentices and Trainees	2	0.9%
Export Market Development Grant	1	0.4%
Others	15	6.5%
Did not receive Federal Support	12	5.2%

Note: Each business can receive more than one type of support

In relation to the perceived importance of support, 86.7% of businesses stated that the federal support is extremely important to them, while 9% of businesses stated that it is very important during this time of crisis.

Figure 14. Rated Level of importance of federal support by respondents



In addition to federal support, Victorian tourism businesses also received support from the state government. The table below illustrates various types of state support that Victorian tourism businesses received.

Table 22 Type of state support received.

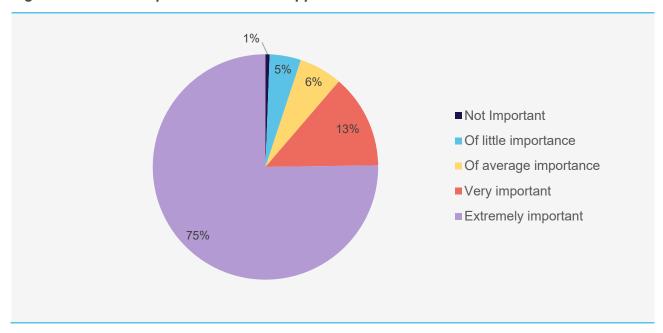
State support package	Frequency	% of businesses (n = 226)
Business Support Fund	164	72.6%
Regional Tourism Accommodation Support Program/ Accommodation Refund Scheme	80	35.4%
Payroll Tax Relief / PAYS cash flow boost	67	29.6%
Commercial Tenancy Relief Scheme	17	7.5%
Licensed Hospitality Venue Fund	15	6.6%
Tax Relief	13	5.8%
Outdoor Eating and Entertainment Package	8	3.5%
Hospitality Grants	6	2.7%
Seasonal Vehicle Registration	2	0.9%
Sole Trader Support Fund	2	0.9%
Others	15	6.6%
Did not receive state Support	25	11.1%

Note: Each business can receive more than one type of support.

Table 22 shows that the Business Support Fund is the most utilised package, with 72.6% of businesses receiving this support. The other two highly utilised packages are Regional Tourism Accommodation Support Program/Accommodation Refund Scheme (35.4%) and Payroll Tax Relief / PAYS Cash Flow Boost (29.6%). Less than 10% of businesses received Commercial Tenancy Relief Scheme (7.5%), Licensed Hospitality Venue Fund (6.6%), Tax Relief (5.8%), Outdoor Eating and Entertainment Package (3.5%), Hospitality Grants (2.7%), Seasonal Vehicle Registration (0.9%), and Sole Trader Support Fund (0.9%). There are 11% of businesses who did not receive any state support packages.

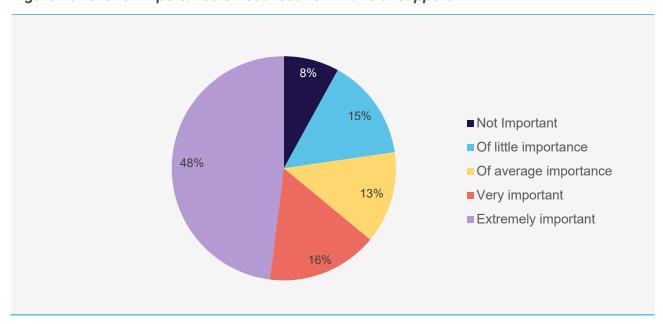
With respect to the perceived importance of support, three quarters of businesses in our sample stated that the state support they are receiving is extremely important to them, while 13% of businesses stated that it is very important during this time of crisis. 6% mentioned this support as of average importance, 5% of little importance, and 1% said it is not important.

Figure 15 Level of importance of state support



Local government played an important role in assisting tourism businesses during the pandemic, with 47 businesses that received support from their local councils. In terms of its importance, nearly half of surveyed businesses (48%) stated that the support from the local council is extremely important, whereas 16% stated it is very important. Only 8% of surveyed businesses referred to this support as not important.

Figure 16 Level of importance of local council financial support.



#### Well-being

Due to the significant impact on financial performance and the long lockdown caused by the COVID-19 pandemic, well-being is an important area of concern. The average wellbeing score for the whole group of survey respondents was only 11.9 (SD=5.8), which in a clinical setting would indicate the need for further assessment for depression. This score aligns with a large cross-sectional study that was conducted to measure the wellbeing of Australians during the Pandemic, which found the average to be 11.9 (SD=5.9) at the end of March, 2020 when the entire country was in lockdown (Dawel et al., 2020).

Table 23. Wellbeing scores by firm size, age and gender

Variable		N	Mean	SD
Firm size (3)	Micro	137	12.3	6.0
	Small	84	10.9	6.0
	Medium large	59	12.2	5.1
Age	30 to 39 years old	19	10.9	4.7
	40 - 49 years old	57	11.6	5.3
	50 to 59 years old	78	11.1	5.3
	60 or more years old	68	13.2	6.9
Gender	Male	88	12.6	6.1
	Female	128	11.6	5.6

An analysis of differences in wellbeing in different cohorts found no significant differences in wellbeing scores between firm size and the gender of the respondents but older business owners (older than 60) had significantly better wellbeing than the younger respondents.

Table 24 presents the well-being score by business types. Statistical analysis<sup>8</sup> indicated that from the various business types, on average, Sole traders, exhibit the highest well-being score (13.66), while respondents from Partnership organisations had on average, the lowest wellbeing score (9.00), which was significantly less than Sole traders<sup>9</sup>. Therefore, it can be concluded that representatives of Sole Trader organisations had better well-being than Partnership businesses. No significant differences were found among the remaining groups. Nevertheless, it should be noted that in addition to sole traders, not for profit and Incorporated associations also exhibit a high score of well-being (13.00) relative to the rest of the business types.

<sup>&</sup>lt;sup>8</sup> The ANOVA test was carried out to examine if there are significant difference among groups.

<sup>&</sup>lt;sup>9</sup> The mean difference among these two groups is confirmed by an ANOVA test (P<0.05)

Table 24 Business type comparison

Business type	N	Mean	SD
Sole trader	44	13.66	5.89
Partnership	31	9.00	4.63
Company	93	11.71	5.78
Trust	33	12.39	6.26
Government owned agency	9	12.11	5.42
Not for profit or incorporated association	10	13.00	6.04
Total	220	11.90	5.829

ANOVA test: p = 0.028\*\* Significant mean difference: Sole trader vs Partnership (p=0.008\*\*\*). Note: \*\* statistically significant at 95% confidence level

#### 3.5. Resilience

Resilience of a tourism business is the organisational capacity to withstand, adapt, and recover from disaster. Organisational resilience here, is divided into two dimensions: (i) planned resilience; and (ii) adaptive resilience. Planned resilience relates to the use of existing planning capabilities, which are proactive activities before the occurrence of disaster or crisis. Adaptive resilience refers to the responsiveness of an organisation to emergent situations. Prior research suggests that a tourism system which is more resilient will bounce back faster from crises (Prayag et al., 2020). This section aims to investigate the resilience of Victorian tourism businesses in the time of crisis.

#### Wellbeing and organisational resilience

The study investigated if there is a significant link (correlation) between well-being and resilience scores. The result is presented in the following table.

Table 25 Correlation between Resilience and Well-being

Relationships	Coefficient	p-value	Relationship
Planned resilience – Well-being	0.194	0.004***	Positive
Adaptive resilience – Well-being	0.188	0.006***	Positive

Note: \*\*\* statistically significant at 99% confidence level

As the results show, there is a significant positive correlation between (i) planned resilience and well-being, as well as between (ii) adaptive resilience and well-being. This implies that higher resilience is associated with a higher well-being score. In other words, people working in or owning resilient businesses are more likely to have better wellbeing during the pandemic and vice versa. However, this finding only shows a correlation, and it is important not to infer causation. The finding does not explain the actual causes of either wellbeing or business resilience – only that they are related.

#### Risk management

The crucial role of risk management to tourism business resilience has been increasingly recognised. Proactive risk management is important as it helps businesses respond to sudden changes in the business environment, reduce the impact of the events and facilitate the recovery process. Figure 17 illustrates the proportion of businesses with risk management systems in place.

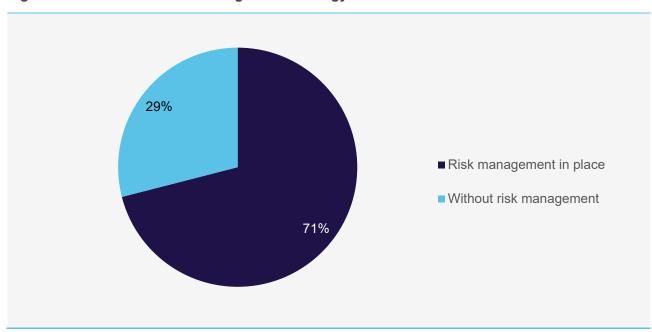


Figure 17. Presence of risk management strategy in business

As Figure 17 demonstrates, despite the importance of risk management systems, 71% of tourism businesses in Victoria had risk management strategies in place. Prior research suggests that micro and small businesses are a particularly vulnerable group to crisis or disaster given their limited resources to reduce their exposure to risk (Zeng, Carter, & De Lacy, 2005) and hence they are the group that would most likely benefit from risk management plans in place. The figure below presents the proportion of Victorian tourism businesses by business size.

Statistical analysis<sup>10</sup> indicates that there is a significant link between business size and risk management plans (at 99% confidence level). It is further revealed that the use of formal risk management strategies is more prevalent within large and medium businesses in the Victorian tourism sector than micro and small businesses. In our sample, 65% of micro and 79% of small businesses had a risk management strategy in place, whereas the numbers for medium and large businesses are 88% and 100%, respectively.

<sup>&</sup>lt;sup>10</sup> The Chi-squared test is conducted to examine if there are significant difference among business group.

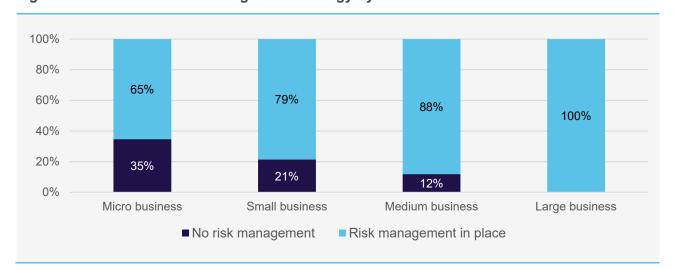


Figure 18 Presence of risk management strategy by business size

#### Resilience in regional vs metropolitan Melbourne businesses

Table 26 presents the resilience score of tourism businesses operating in regional areas and in Greater Melbourne. The t-test was undertaken to identify if there is a significant difference between the two tourism regions for planned and adaptive resilience.

Table 26 Resilience and tourism location

	Location	n	Mean	SD	Mean difference
Planned	Regional	241	3.82	0.79	Significant
Resilience	Melbourne	32	3.50	0.95	(p = 0.036**)
Adaptive	Regional	239	3.83	0.82	Not significant
Resilience	Melbourne	32	3.78	0.79	(p= 0.738)

Note: \*\* statistically significant at 95% confidence level

As the results show, regional tourism businesses, on average, has a higher resilience score than Greater Melbourne for both planned and adaptive resilience. The t-test analysis further confirms that there is a significant difference between planned resilience and tourism regions, with businesses in regional tourism areas being more resilient than those in Greater Melbourne. However, no significant difference in adaptive resilience is found between regional and Melbourne.

#### Business type

Table 27 and Table 28 present the planned resilience and adaptive resilience score by business type. In terms of planned resilience, businesses which are not for profit or incorporated associations exhibit the highest score (4.60), whereas companies show the lowest score (3.71). The differences among business types were statistically analysed. The results demonstrate that there are significant differences between not for profit or incorporated associations vs (i) Sole trader, (ii) Company, (iii) Trust. The estimates lead to a conclusion that businesses which are not for profit or incorporated associations are more resilient than Sole traders, Companies, and Trusts.

Table 27 Planned resilience by business type.

Business type	n	Mean	SD	Scale
Sole trader	47	3.79	0.86	Agree
Partnership	33	3.97	0.64	Agree
Company	101	3.71	0.77	Agree
Trust	39	3.79	0.80	Agree
Government owned agency	9	4.00	0.71	Agree
Not for profit or incorporated association	10	4.60	0.52	Strongly agree

ANOVA test: p = 0.016\*\*

Significant mean difference:

Sole trader vs Not for profit/incorporated association (p=0.030\*\*)

Company vs Not for profit/incorporated association (p=0.007\*\*\*)

Trust vs Not for profit/incorporated association (p=0.038\*\*)

Note: \*\*, \*\*\* statistically significant at 95%, 99% confidence level respectively

In terms of adaptive resilience, Partnership businesses have the highest score while Sole Traders have the lowest score among business types. Statistical analysis was also conducted to examine the differences among groups<sup>11</sup>. The result indicates that although there are differences in adaptive resilience scores among business types, these differences are not statistically significant.

<sup>&</sup>lt;sup>11</sup> ANOVA test is carried out to compare the mean among groups.

Table 28 Adaptive resilience by business type

Business size	n	Mean	SD	Scale
Sole trader	47	3.64	0.82	Agree
Partnership	33	4.12	0.74	Agree
Company	99	3.80	0.81	Agree
Trust	39	3.92	0.81	Agree
Government owned agency	9	3.67	1.00	Agree
Not for profit or incorporated association	10	3.90	0.32	Agree

ANOVA test: p = 0.145

#### Industry sector

Statistical tests were also conducted to examine the resilience scores among the tourism sectors <sup>12</sup>. The results show that government and tourism agencies have the highest planned resilience score, followed by sport, camping and, outdoor related businesses. These scores are highly significant. In terms of adaptive resilience, the significant and highest score is found in the case of sport, camping, outdoor activity related businesses. The planned and adaptive resilience scores of the remaining tourism businesses are relatively similar (not statistically and significantly different).

Table 29 Industry and Resilience

Sectors	Planned Resilience	Scale	Adaptive Resilience	Scale
Accommodation	3.76	Agree	3.78	Agree
Attraction	3.74	Agree	3.74	Agree
Food and drink	3.69	Agree	3.68	Agree
Tour and transport	3.70	Agree	3.74	Agree
Event	3.86	Agree	3.78	Agree
Retail	3.78	Agree	3.72	Agree
Sport, camping, outdoor activity	4.19***	Agree	4.12*	Agree

<sup>&</sup>lt;sup>12</sup> T-tests are conducted to test the resilience score of a given industry against the remaining tourism industries involved in the survey.

Sectors	Planned Resilience	Scale	Adaptive Resilience	Scale
Government, tourism agency	4.30**	Strongly agree	3.67	Agree

Note: \*, \*\*, \*\*\* statistically significant at 90%, 95%, 99% confidence level respectively

#### Connectedness, collaboration, and resilience

Aspects of social capital including business networks or connectedness and collaboration have been identified as important factors that are important for resilience in tourism at times of crises (Ahangama, Prasanna, & Blake, 2019; Chowdhury, Prayag, Orchiston, & Spector, 2019).

#### **Business connectedness**

Examination of the survey results<sup>13</sup> showed that among different types of connections that businesses had with other tourism stakeholders, being connected with the *local community* has a positive and significant impact on both planned and adaptive resilience. In addition, connectedness with *other tourism operators* also positively affects adaptive resilience. As one respondent commented,

"close ties with local community and other tourism business have provided personal support and sharing of information, ideas and building collaboration for re-opening".

Businesses who were well connected with VTIC also gained considerable benefits. Numerous free text responses indicated that VTIC has been very supportive by providing various support and assistance for tourism businesses such as by helping businesses understand and adapt to the changing restrictions, access to webinars and COVID briefings, provide direction, planning, and valuable information about government funding support, learning and development programs.

A number of businesses stated that "advice from VTIC has been very helpful". VTIC provided "optimism to reduce uncertainty" and especially "mental health support" in such a hard time. Overall, there was a clear consensus amongst survey respondents which can be summarised by the following statement:

"VTIC have been integral to supporting our business throughout COVID-19 with their ongoing communications; guidance and advocacy work".

#### Collaboration

In addition to gaining knowledge from business networks, collaboration with these connections during a crisis may contribute to organisational resilience. Table 30 presents the planned and adaptive resilience scores of businesses that collaborated with or sought ideas from other business owners or business associations during the pandemic. A t-test was also conducted to compare the mean difference between those who collaborated and those that did not collaborate.

The results show that for Victorian tourism businesses that engaged in collaboration, both their planned and adaptive resilience scores are higher than those who did not collaborate. Moreover, the t-tests indicate that there is a significant difference in the adaptive resilience mean score between collaborating businesses and non-collaborating businesses. Businesses that have a higher adaptive resilience (3.93) than non-collaborating businesses (3.73). This result, therefore, confirms the crucial importance of collaboration to organisational resilience.

<sup>&</sup>lt;sup>13</sup> An ordered probit regression is carried out to examine the role of each type of connection.

Table 30 Resilience and Collaboration

	Collaboration	n	Mean	SD	Mean difference	
Planned Resilience	Collaborated	110	3.89	0.76	Significant	
	Not collaborated	nted 124 3.76		0.80	(p = 0.195)	
Adaptive Resilience	Collaborated	109	3.93	0.69	Significant	
	Not collaborated	123	3.73	0.87	(p= 0.059*)	

Note: \* statistically significant at 90% confidence level

In support of the quantitative findings, many respondents stated in the free text section of the survey that collaboration with other tourism operators has had substantial benefits to their business through sharing of information, knowledge, and ideas on innovation. For example, some businesses in the accommodation industry stated that,

"Through collaborating with the local motels and tourism we were able to run a well marketed BUY NOW, STAY LATER campaign, it gave us a sense of "doing something" which was the biggest win".

Collaboration also helped to extend the businesses. For example,

"a tour operator, brewery and other businesses with similar target markets to start a talk show and also a new product range (including wine boxes and pjs)".

Such collaboration created positivity for businesses to continue, provided mutual support and enabled problem-solving to overcome difficulties caused by the pandemic.

#### 3.6. Road to recovery

#### Resilience and recovery

The unprecedented circumstances and severe impacts of the COVID-19 pandemic have created major challenges to the survival and future growth of tourism businesses across the globe. As the pandemic continues, the ability of a tourism business not only to survive, but also to quickly bounce back from the pandemic and capture the opportunities to bounce forward is of critical importance. One of the key factors often cited as the driver of recovery is organisational resilience (Prayag, 2020). The following correlations were run to examine whether there is a link between organisational resilience and their speed of recovery.

Table 31 Correlation between Resilience and Recovery speed

Relationships	Coefficient	p-value	Relationship
Planned resilience – Recovery speed	0.188	0.005***	Positive
Adaptive resilience – Recovery speed	0.143	0.031**	Positive
Planned resilience – Adaptive resilience	0.506	0.000***	Positive

Note: \*\*\* statistically significant at 99% confidence level

The results reveal that both planned resilience and adaptive resilience have a significant and positive relationship with the speed of recovery. In addition, there is also a link between the two types of resilience, i.e., planned, and adaptive.

#### Speed of recovery

Previous work on resilience suggests that there are various factors that drive or hinder the business recovery. Thus, an ordered probit regression model was applied to explore the factors affecting the speed of recovery. Estimates of the model are presented in Appendix 3. The regression results reveal several factors that determine the speed of recovery.

Of the firm characteristics, **firm size and firm age** negatively affect the speed of recovery. The negative sign indicates that the smaller the size of the business, the quicker the business will recover from the crisis, and younger businesses are more likely to bounce back more quickly than older businesses. Such findings support the viewpoint that favours the behavioural advantage inherited by micro and small businesses, which suggests a smaller business size allows greater flexibility than larger firms. Their behavioural advantages, characterised by high flexibility, allow them to adapt quicker and more efficiently to changes in the business environment and promptly react to changes in markets or emerging customer needs. The capacity of organisations to quickly adapt to disturbances and seize opportunities emerging from the changed environment is the key for organisational resilience. The negative impact of firm age could be due to large capability adjustment costs that prevent long established firms from making changes, which arguably affects their speed of recovery. Younger firms, in contrast, have the flexibility to create new processes and pursue opportunities and are found to be more innovative than their older counterparts.

**Accreditation** is also found to have a positive and significant impact on the speed of recovery. The Quality Tourism Framework is a national business development program, providing a single online pathway for business development that incorporates online training, quality assurance, product development, digital distribution, risk management and market development. Quality Tourism accreditation is a means for encouraging professional development and continuous improvement of the tourism industry. The results reveal that tourism businesses accredited through the Quality Tourism Framework are more likely to recover more quickly than those without accreditation. The estimates show that the recovery mean score of businesses accredited by VTIC is 3.30 while for those without VTIC accreditation their score is just 3.18 (The higher score is associated with a faster speed of recovery)<sup>14</sup>.

 $<sup>^{14}</sup>$  Speed of recovery is measured by a scale representing how fast the revenue of the business is likely to return to the pre-COVID-19 levels, with 1 = Never recover, 2 = More than 2 years, 3 = More than 1 year but less than 2 years, 4 = 7 to 12 months, and 5 = 6 months or less.

**Multiple disasters** negatively affect tourism businesses in recovering. As discussed, most Victorian businesses experienced two major shocks in 2020 with bushfire from December 2019-January 2020, followed immediately by the COVID-19 pandemic starting from late January 2020. The estimates from the model reveal a significant and negative impact of multiple disasters on the speed of recovery. For tourism businesses experiencing multiple disasters, their speed of recovery is significantly slower than those facing only the COVID-19 pandemic.

The crucial role of proactive crisis or **risk management planning** for the speed and adequacy of recovery of tourism businesses post crises has been increasingly recognised (Adams, 2012; Peters & Pikkemaat, 2006). The econometric results of the survey confirm the importance of risk management for tourism businesses in the context of disaster. It is found that businesses having risk management plans are more like to recover quicker from the pandemic than those without a risk management plan in place. Almost one-third (29%) of Victorian tourism businesses did not have risk management plans.

Business connectedness: The data from the survey show that greater perceived connectedness with other tourism operators and local community, the quicker their predicted recovery will be. This result highlights the crucial role of business and local social networks (also called structural social capital) and feeling connected in times of crisis. Further, when asked how the various types of connections helped during the crises, many respondents described collaboration as well as emotional and knowledge sharing with their connections. This finding suggests that it is important to have existing connections in times of crises, especially other businesses, and communities and if they are good quality connections (high cognitive capital), that these connections are important for accessing external resources, knowledge, experience and practices shared by their collaborative partners and also assisting with innovation through collaboration. The qualitative findings also described the importance of business and community connections for emotional support during an extended, uncertain crises. Access to good quality existing business network and community connections and collaboration, therefore, may enable tourism business recovery.

#### Opportunities

The need for resilience is not simply about 'bouncing back' to a previous state of normality without change, but to 'bounce forward' as a stronger and renewed business or community (Matyas & Pelling, 2015). While crisis and disaster create loss and negative disruption, it can also create opportunities for resilient businesses to evolve through learning and innovation. Innovation has been internationally recognised as a prerequisite for tourism businesses to remain competitive in global tourism markets (Martin-Rios & Ciobanu, 2019) and as a key to building a more productive, adaptable and resilient tourism sector (OECD, 2020; Zenker & Kock, 2020). The following figure illustrates opportunities and changes tourism businesses have undertaken during the pandemic.

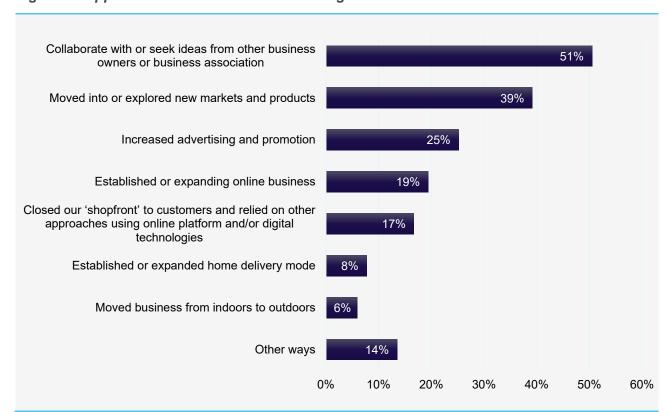


Figure 19 Opportunities that have arisen during the COVID-19 crisis.

More than half of 280 surveyed businesses reported that they have collaborated with or sought ideas from other business owners or business associations to overcome difficulties caused by the pandemic and together create business opportunities. A large proportion of respondents (39%) explored and entered new markets and introduced new products, suggesting that the pandemic has urged tourism businesses to innovate and to explore new ideas.

The role of marketing to retain and attract customers has been particularly emphasised during the pandemic. In the interests of recovery, it has been important to maintain a strong relationship with customers. A quarter of businesses increased advertising and promotion during the pandemic. Due to the long-lasting lockdown, having an online platform has become a necessity for business operations. Survey results showed that 19% of businesses established/expanded their online business, while 17% had to close their shopfront and relied on an online platform and digital technology for trading.

#### Information and communication technology

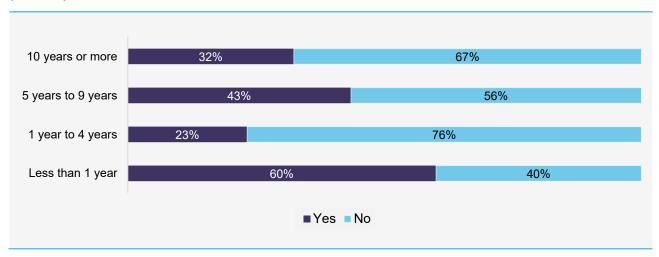
The rapid development of information and communication technology (ICT) has revolutionised the tourism industry (Buhalis, 2019). ICT enables the creation of new tourism products, provides new ways to access information, facilitates communication and extends marketing channels for promoting tourism products and services (Hall & Williams, 2019). As discussed, with an online platform being a necessity during the pandemic, tourism businesses have increasingly invested in improved ICT. Table 32 shows the information and communication strategies that Victorian tourism businesses implemented during the pandemic.

Table 32 Information and communication strategies

ICT	Frequency	% of businesses (n = 221)
Introduced or changed a digital business strategy	92	41.6%
Invested in new digital technologies or infrastructure	69	31.2%
Introduced new training programs to upskill staff	50	22.6%
Purchase of digital technology or services	39	17.6%
Measured the contribution of digital activities to overall business performance	31	14.0%
Upgraded cybersecurity software, standards, protocols	28	12.7%
Contracted external IT consultants	23	10.4%
Rewarded individuals/teams involved in the successful introduction of digital technologies or processes	5	2.3%

As shown in Table 32, 41.6% of respondents introduced or changed their digital business strategy. A further 31.2% of businesses also invested in new digital technologies and infrastructure and 17.6% purchased digital technology and/or services. With new ICTs being implemented, businesses also engaged in upskilling staff (22.6%). Other strategies included measuring the contribution of digital activities to overall business performance, upgrading cybersecurity software, standards or protocols and contracting external IT consultants.

Figure 20 Proportion of businesses that introduced or changed a digital business strategy (n = 221)



Analysis was also conducted to explore if there is a relationship between the age of the business and their ICT strategies<sup>15</sup>. The results show that there is a significant association between business age and ICT strategies. Results showed that the youngest business group aged 'less than one year' had the highest proportion of businesses (60%) introducing or changing digital strategy. This could imply that these young businesses did not have digital technologies ready before the pandemic. With the lockdown enforced, tourism businesses were urged to change their digital strategies to cope with changes in the business environment.

#### Skills

As a labour-intensive industry, the quality of human capital is critical to tourism businesses (Hall & Williams, 2019). International experience shows that human capital presents a major challenge to tourism businesses due to skill shortages and high staff turnover rates (Nieves & Quintana, 2018). Training and education have been suggested as ways to upgrade staff with necessary skills and enhance the stock of human capital (McGuirk, Lenihan, & Hart, 2015). A better understanding of skill needs is important to facilitate a closer alignment between the tourism industry and training and education providers to develop targeted training programs. Table 33 presents the key skills in need among tourism businesses.

Table 33 Skill needs of survey respondents.

Skill needs	Frequency	% of businesses (n = 236)
Connecting business and customer	116	49.2%
Digital and technical skills	93	39.4%
Adapting to change	86	36.4%
Leading a successful business	68	28.8%
Personal development	68	28.8%
Foundation business skills	49	20.8%
We already have all the above skills	43	18.2%
Others	15	6.4%

<sup>&</sup>lt;sup>15</sup> Chi-squared test was conducted. The test is significant at 95% confidence level (p = 0.035\*\*).

The skill identified by survey respondents as being most lacking was connecting business and customer (49.2%), which includes customer service, digital marketing, advertising, and negotiating skills. The capacity to engage in digital marketing was most commonly mentioned as a skill gap. Most respondents highlighted the need for government support to rebuild Australia and Victoria's international visitation when borders reopen. The second most important skill in need is digital and technical skills (39.4%) such as office IT skills, business systems, cyber-security, technology design and programming. With tourism activities being characterised as sensitive and vulnerable to crisis and disaster, adapting to change is a crucial skill emerged from the pandemic. This skill is related to business planning, business models, and risk management.

There are also 28.8% of businesses reporting (i) leading a successful business (e.g., critical thinking and innovation, building and growing teams, developing leadership, collaboration) and (ii) personal development (e.g., work-life balance, wellbeing, and mental health) as the two other important skills they need to improve. Finally, 20.8% of businesses also required foundation business skills such as sales, finance, business development, and staff management.

Only 18.2% of businesses were confident that they already have all the necessary skills. Given this, we conducted a statistic test<sup>16</sup> to explore if these skilled businesses are more resilient than the others. The result is presented in Table 34.

Table 34 Comparison of resilience in skilled and unskilled businesses

	Skilled business	n	Mean	SD	Mean difference
Planned Resilience	No	230	3.72	0.67	Significant
	Yes	43	3.91	0.54	(p = 0.071*)
Adaptive Resilience	No	228	3.72	0.63	Significant
	Yes	43	3.95	0.48	(p= 0.025**)

Note: \*\*, \*\*\* statistically significant at 95%, 99% confidence level respectively

The results reveal that skilled businesses are more resilient than those who still need to improve certain skills. Both planned resilience and adaptive resilience scores are significantly higher for skilled businesses as compared to the remaining businesses. This finding highlights the need to upskill staff to enhance organisational resilience. It was claimed that the quality of tourism and hospitality training programs has been of concern to many tourism businesses in Australia (Committee for Economic Development of Australia, 2017). Therefore, new training programs must be tailored to meet industry needs and to be accessible for tourism businesses, especially micro and small businesses who often encounter human resource disadvantages. Our results provide a practical direction for future training programs to address skill shortages in the Australian tourism sector.

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<sup>&</sup>lt;sup>16</sup> A t-test test was conducted to compare the resilience score between skilled businesses and those who still need to improve certain skills.

#### 3.7. Conclusion

This section summarises key impacts of the 2019/2020 bushfires and COVID-19 on a sample of 323 Victorian tourism businesses, examines factors that make tourism businesses more resilient to crises and explores the skill needs for businesses moving into the recovery phase after COVID-19. The results presented were obtained from a survey conducted during the COVID-19 pandemic, when there were ongoing border closures between Victoria and NSW.

The direct impacts of the bushfires were experienced by approximately 15% of businesses, but the indirect impacts were wide-spread and were felt by 60% of businesses surveyed.

The COVID-19 pandemic had enormous impacts on the tourism sector in Victoria, with approximately 60-65% of the businesses surveyed losing between 76 and 100% of their revenue for the months of June to September, 2020, primarily because of business closures (84% closed at least once during the pandemic), cancellations of bookings and cashflow. Of the businesses surveyed, 55% of them were worried about their business prospects in the next 12 months.

Significant workforce issues exist due to the pandemic and the pre-existing reliance on a primarily (48%) casual workforce. 46% of casual staff were laid off permanently, and only 30% of casual staff were eligible for Job Keeper (Vs 70% full-time staff). 42% of the businesses surveyed were worried about their prospects of attracting and retaining appropriately skilled staff in the next 12 months.

Poor mental health was also revealed. A large proportion of the businesses surveyed had mental health concerns for themselves (41%) and their staff (44%).

Key factors associated with resilience and having a faster predicted recovery were identified as follows:

- Being accredited- Fewer micro and small businesses were accredited.
- Smaller business also predicted they would recover faster.
- Having a risk management plan in place was linked to a faster predicted recovery however micro and small businesses were less likely to have one.
- Regional tourism businesses had overall higher planned and adaptive resilience.
- Sport, camping, outdoor related businesses tended to have significantly higher adaptive resilience scores than the other business sectors.

Businesses that were well connected with other businesses and their local community were more resilient and the most commonly adopted strategy used to assist with innovation by more than half the businesses was collaboration and seeking ideas from other business owners or business association.

The next section examines the findings from the vulnerability resilience assessments of the two case study destinations: Bright and Echuca-Moama

# 4. DESTINATION CASE STUDIES



#### 4.1. Introduction

Two types of destinations that have been particularly impacted by the recent crises are those in natural surrounds that were impacted by bushfire and border towns where state border closures disrupted the businesses and the communities that rely on free movement between states for their livelihoods.

Two such destinations are Bright, in North-East Victoria and Echuca-Moama located on the Murray River, two and a half hours drive from Melbourne. Both destinations were chosen to reveal the impacts of multiple disasters and which impacts are disaster or context specific. Bright was heavily impacted by the bushfires in 2019, with surrounding national and private forests being burned and the town being evacuated. The town is also situated approximately 100km from the NSW border and some businesses employ staff from both sides of the border.

Echuca, and the adjoining city of Moama straddles the Murray river and is the largest population and visitor centre in the Central Murray region. The twin towns were not directly affected by the bushfires but still suffered some impacts arising from reduced visitor movement compared to usual at that time of year. COVID-19 border closures, however, had a debilitating impact on the functioning of the conjoined towns that usually function as one. COVID-19 restrictions in Metropolitan Melbourne as well as regional Victorian lockdowns ceased all visitation to the area from Victoria, which is the key market. In addition, the community were deeply affected by border closures making travel across the river either impossible or incredibly time consuming. For example, acts of daily life like dropping children at school on the other side of the border could take approximately 3 hours return trip and many employees and business owners were unable to travel to work at all.

A total of 33 interviews were conducted in the two destinations, 17 in Bright and 16 in Echuca-Moama. Table 2 in Section 2.6 outlines the different stakeholder groups interviewed. The next section provides an overview of the context of the two destinations followed by the findings of each of the case studies.

#### 4.2. Impact of bushfires and COVID-19 nationally and in Victoria.

Research conducted by Tourism Research Australia (TRA), using the National Visitor Survey shows huge impacts of the bushfires and ongoing impacts of the COVID-19 pandemic for Australian visitation and tourism income in 2020. In the period between January and October 2020, domestic overnight tourism saw losses of \$31.8 billion (down 47%). The reduction was primarily (80%) due to reductions in interstate travel. Additionally, domestic day trips declined by \$8.1 billion (down 37%) (Tourism Research Australia, 2021a).

Analysis published in October 2020 showed that in general, domestic tourism across Australia was beginning to improve, due to the easing of restrictions and school holidays. Domestic overnight spend in October was \$4.8 billion, and there were 6.8 million overnight trips. These figures are down by 39% and 33% respectively compared to October 2019, the smallest monthly losses since the pandemic began. This was mostly due to long intrastate trips being taken during the school holidays; intrastate spending increased overall by 29% (Tourism Research Australia, 2021a).

In contrast, Victoria continued to experience restrictions and border closures and thus intrastate spend in the state was down by 73% in October (Tourism Research Australia, 2021a).

The COVID-19 crisis has continued to impact capital cities more heavily than regional destinations because of greater reliance on international visitors. In states other than Victoria at the time of writing, some regional areas were beginning to record increases in visitors, but capital cities of Sydney, Adelaide and Perth saw declines of 71%, 65% and 59% respectively (Tourism Research Australia, 2021a).

### 4.3. Case study 1: Bright

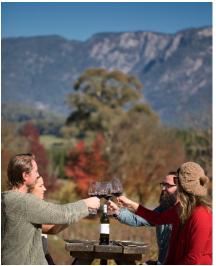


## Bright









#### The destination

Bright is marketed as the 'hero of the North East'. It has a population of approximately 2,475 (.ID community, 2020b) and is situated in the Alpine Shire, in Victoria's North Eastern High Country, approximately 300 NE of Melbourne and 70km South of Albury/Wodonga. The Shire has an area of 4790 square kilometres and also contains the towns Myrtleford, Mount Beauty, Harrietville and Dinner Plain as well as the Ovens River and the Alpine Resorts of Falls Creek and Mount Hotham. Only eight percent of the Alpine Shire is private land, with the rest being made up by parts of the Alpine National Park and all of Mount Buffalo National Park (Alpine Shire Council, 2019a).

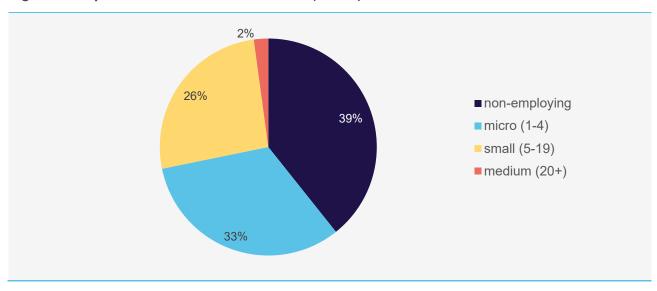
The Alpine Shire is the traditional home to the Dhudhuroa, Guna-Kurnai, Taungurong, Waywurru and Yaitmathang nations. The area was an important meeting place for aboriginal peoples who visited the Alps in the summer to hold ceremonies and gather Bogong moths (Alpine Shire Council, 2019b). Following colonisation, the area became well known as the home to Ned Kelly and the story of the Man from the Snowy River. In the 1850s, gold was mined heavily in the region and Bright (then known as the Ovens township) grew in population and economy – leading to an establishment of shops, hotels and banks. After the gold prospects declined in the region in the early 1900s, it has relied on agriculture - tobacco, hops, oats, maize, nuts and fruits (including grapes for wine) because of its rich soils. A post world-war two housing development boom led to an increase in demand of wood from the Alps leading to an improvement in infrastructure to move timber out of the region and opening the region to visitors (Alpine Shire, 2016).

The location of the town surrounded by natural resources gives the town strong natural focus. The five key product pillars of the region are cycle tourism, food, wine and beer, snow, nature-based activities, and arts and culture. Acknowledged as having the strongest cycle tourism credentials in Victoria, Bright builds its product strengths around three forms of cycling: road cycling, mountain biking and rail trails. This has been key to tourism growth as few cycling destinations have high quality infrastructure for all three cycling types. Bright also offers snow-based activities such as skiing and snowboarding, and other snow-based activities through its linkages with the Alpine Resorts. Other nature-based activities on offer in Bright are diverse walking options, fishing, boating and water sport activities, alpine trail running and other nature-based adventure activities. Food and beverage options in the area include wineries and cellar doors, world-class restaurants, rich local produce, cooking schools, craft breweries, distilleries and more.

The High Country region is reliant on domestic visitation (99%), which is derived predominantly from intrastate (79% domestic visitors were Victorian in 2019) and has seen considerable growth in recent years (Tourism North East, 2016; Tourism Research Australia, 2019b). In 2017, the High Country attracted more than \$1 Billion (\$1.015 Billion) in tourism spend and the following year saw 17% growth in visitation, accounting for 19% Gross Regional Product (GRP) and 21% employment. On average, visitors stayed 2.9 nights in 2019, and spent on average \$171 per night (Tourism North East, 2019).

#### Value of tourism in the Alpine Shire

Figure 21. Alpine Shire tourism businesses (n=280)



Tourism is the largest employer in the Alpine Shire, employing nearly 20% of the working population (2018/2019). More than 12% are directly employed by tourism businesses and 7.4% are indirectly employed by service businesses. The other two major employers in the region are health care (10.8%) and forestry and fishing (10.2%). There are 280 tourism businesses in the Shire, the majority of which are non-employing, micro, or small businesses (see Figure 21).

In 2019, the Shire attracted 786,000 visitors, who spent \$277 Million. The indirect plus direct output of tourism is \$162.97M, which amounts to 14.8% of the regional output (.ID Community, 2020a). The top international markets for the Shire are USA, UK and Germany. Friends or relatives travelling together (35%) and those who are between the ages of 35-54 (40%) make up the largest group of visitors to the Shire. Domestic visitors typically stay in caravan parks (23%) or "other accommodation" (e.g., holiday rental) (45%) (Tourism Research Australia, 2019a).

#### Impact of bushfire and COVID-19 on tourism in the Alpine Shire

Analysis of visitors to the Alpine region to September 2020 showed that 121,430 visitors had come to the area and spent \$66.875million, an 82% -83% reduction on the pre-pandemic forecasted values (Alpine Shire Council, personal communication (email), November 17, 2020). The losses over the progressive months of 2020 can be seen in the table below.

Table 35. Visitor economy losses for the Alpine Shire in FY 2020 compared to a business in usual year (BAU)

	Jan-Mar	April-June	July	August	Sept	Totals
Loss (%)	70%	85%	85%	100%	95%	
Visitation Loss	168,000	209,000	55,000	56,700	53,770	542,470
Visitor Economy Loss	\$78,400,000	\$146,200,00 0	\$29,495,000	\$18,700,000	\$43,130,000	\$315,925,00 0
Job Disruptions	3,100 total					
BAU*	Q1	Q2	July	August	Sept	YTD Totals
Visitors	240,000	246,000	64,600	56,700	56,600	663,900
Visitor Economy	112,000,000	\$172,000,00 0	\$34,700,000	\$18,700,000	\$45,400,000	\$382,800,00 0

<sup>\*</sup>BAU= Business as usual predicted for 2020 based on previous growth of 8% visitors, 12% income Per Year.

As discussed in Section 2.6, the case studies were informed by in-depth interviews with 33 stakeholders (seventeen from Bright and 16 from Echuca-Moama). Guided by the Vulnerability and Resilience Framework, interviews explored the multiple impacts of crises. Bright experienced financial, tourism landscape, environmental, business, and social impacts as a result of the bushfires and COVID-19. COVID-19 caused fewer environmental impacts than the bushfires. Table 36 details the key findings of the impacts of the bushfires and COVID-19 in Bright as identified by the stakeholders.

Table 36. Summary table of impacts identified by Bright tourism stakeholders in interviews

Impact	Description
Financial impacts	<ul> <li>Loss of revenue, businesses non-operational during lockdowns, reduced capacity of venues (COVID-19safety measures), insufficient financial support.</li> <li>Savings spent to survive during crises, which will reduce ability to undertake strategic growth works for businesses and resorts in future.</li> <li>Alpine Resorts: Failure of businesses (COVID-19/Bushfires) → risk of reduced visitation because fewer businesses →potential for cyclical downward spiral.</li> <li>Bushfires and COVID-19 have cost the Alpine Shire economy over \$100 Million through the loss of tourism, softwood plantations and wine grapes (Alpine Recovery Committee, 2021).</li> </ul>
Changing landscape of tourism post- COVID-19	<ul> <li>Permanent population of the town expected to grow (more people working from home during and after COVID-19, deciding to make "tree change").</li> <li>Some businesses for sale or closed.</li> <li>Fewer holiday properties available (forced sales due to lack of revenue to pay mortgage during COVID-19 pandemic).</li> <li>Shift away from booking sites (Airbnb, booking.com etc) to direct booking methods because of increased fees and workload to use sites. E.g., "Airbnb increased their charges to the owner from 3% to 15%" (BTOF01)</li> </ul>
Positive impacts	<ul> <li>Increased community connectedness.</li> <li>Increase in organic demand in domestic market following lockdowns. Furthermore, the Victorian Market have been limited to Victoria due to border closures (everybody wants to go on holidays).</li> <li>Diversification of businesses (e.g., creating an online market, product diversification, etc).</li> <li>Some sectors are booming as a result of lockdowns e.g., cycling.</li> </ul>
Bushfire impacts Governance	Local council staff being diverted from usual roles to emergency management places extra burden on the local government authorities.
Bushfire Impacts- Environmental	<ul> <li>Run-off after bushfires impacted drinking water quality.</li> <li>1/3 Alpine Shire was burned (private and public land – predominantly National parks, but also forestry land), infrastructure damaged (roads, drainage lines, signs, bridges, crossings), exposed soil.</li> <li>79 properties were impacted across the Shire. (Alpine Shire Council, 2020).</li> <li>6,000 hectares of private forested land burned → huge financial losses and will create challenges for timber supply moving forward.</li> <li>See (Alpine Shire Council, 2020) for further detail of bushfire impacts and recovery strategies.</li> </ul>

Impact	Description
Government impacts	<ul> <li>Alpine Resorts designation as a Statutory Authority has limited their ability to access baseline operational funding from grants or subsidies to assist financially during the pandemic.</li> <li>COVID-19 is a new type of crisis. New processes.</li> <li>State government faced challenges communicating to stakeholders due to blanket regulations around communication. All communications, even those not COVID-19-related, had to go through the ministerial advisors and DHHS for approval.</li> </ul>
Business impacts	<ul> <li>Employee redundancies.</li> <li>Increased cost of business insurance by 100-400%.</li> <li>Greater workload due to COVID-clean regulations (e.g., double the amount of laundering and cleaning in accommodation).</li> <li>Business closures (permanent and temporary).</li> <li>The temporary closure ski resorts during the pandemic led to decreased visitation to the area, thereby contributing to the vulnerability of businesses in Bright.</li> <li>Two speed economy occurring (some businesses bottoming out, some increased productivity and workload).</li> </ul>
Human and social	Mental health impacts – stressful bushfire period and evaluations followed by stress of long-term financial strain and business issues from lockdowns COVID-19; Mental health issues from social isolation etc.

Key findings of the vulnerability/resilience (V/R) assessment: Bright

# Specifying the risks

A scoping of the external risks for Bright's tourism system was conducted by identifying the major shocks and stressors (rapid vs slow onset) that Bright has experienced in recent years. In addition to the major shocks under consideration in this research (COVID-19 and bushfires), the other major shocks experienced by the destination are flooding and landslides. Stressors that were identified included the bushfire-triggered factors of poor water quality due to run-off following bushfires, sensationalized media coverage and generalisation in naming fires. In addition, general stressors are the underlying progression of climate change and associated changes such as bad snow seasons and increased risk of fire.

### Shocks and stressors

### SHOCKS:

### Bushfires (and smoke)

Bushfires threaten Bright and surrounding regions every three to four years. An interviewee recalled, "Since we moved here in 2000, 2003 was actually one of the first substantial fires that this area had. It was every three years until 2012." (BTOM02)

Analysis in this report is based on the impact of the most recent bushfires of 2019-2020 that started as 14 fires, ignited by lightening on 31 December 2019 in the King, Buffalo, Kiewa and Wongungarra River catchments. Five days later extreme weather conditions increased the size of the fires and they merged with five other fires burning in the Buffalo River and Buckland River catchments to form the Ovens Fire Complex and threatened Bright, Wandiligong, Myrtleford and Mount Hotham. The Ovens Fire Complex was declared contained on the January 5, 2020. The fires in the area led to the multiple evacuations of Bright and surrounding towns at the busiest time of the year. Tourists were strongly advised to leave the area and return home. It wasn't until January 23, that it was declared safe for visitors to return to the area (Alpine Recovery Committee, 2021).

In effect, 29% of the Alpine Shire footprint was burnt, most of which was in the national parks and forests. Six percent of the burnt area was private land (Alpine Recovery Committee, 2021). In addition, there was significant damage to physical infrastructure including 79 properties, roads, drainage lines, signs, bridges, crossings, sheds, cow yards and farmlands. The impact was not only on the visitor economy, but also on the agriculture economy. One plantation business lost approximately 6,000 hectares of forested land and were forced to salvage approximately a million tons of trees, which is about a whole year's cut.

In addition to the actual fires, a further stressor was the extended period of air-pollution from the smoke, which, in some sense, was worse than the fires as it lingered for weeks, causing health concerns to the community.

### Pandemics (COVID-19)

Only one case of COVID-19, was diagnosed in the Alpine Shire in June, 2020 (DHHS, 2020). Nonetheless, like other regions with low or non-existent infection rates, the region was subject to the control measures put in place to prevent the spread of the infection across Australia. The timing of the pandemic meant that bushfire recovery efforts were delayed or overshadowed: "COVID is sort of grander and bigger and more powerful and the bushfire has been pushed to the side." (BSGF06). Many businesses also believed they would have already financially recovered from the effects of bushfires if COVID-19 had not hit.

COVID-19 has been a more challenging shock for tourism in the region than the bushfires due to its unpredictable nature and limitation of visitor movement. Initially, key challenges were a lack of understanding about the virus or how best to manage risk which meant that there were few regulatory guidelines for businesses and cafes regarding COVID-safe operations. As the pandemic progressed, guidelines and advice changed rapidly. As regulations became clearer, businesses more easily implemented measures for social distancing (by managing the number of people in premises)and sanitation. The required measures were extensive, challenging and often costly to implement.

There was also widespread uncertainty about the future. The second wave of COVID-19 infections in Victoria brought a stricter set of lockdown rules across Victoria and increased the perception that future lockdowns and waves would occur in the future. Not being able to forecast the end of the crises generated business and personal stress and made it nearly impossible for businesses to plan. According to one interviewee,

"at least with a fire, you know that it's going to end...it may come, or just teeter around the edges and never impact a town, but eventually it goes. ...The floods that we've had, they're all done within 48 hours. With this thing (COVID-19), it's just not knowing." (BLGF03)

Even where businesses were receiving financial support from the government, there was also uncertainty about how long support would last.

### Floods and landslides:

Floods or flash floods are also common in the region and are increasing in frequency and intensity with climate change. Floods can also cause landslides, another risk for the town because roads can become blocked. Most of the towns have only one road in and out, posing serious challenges for evacuation during such an event.

Crisis management plans that are in place for floods, which would make management easier than less predictable shocks like COVID-19. There was a fear, however, that if a flood were to occur during the pandemic (as the bureau of meteorology was forecasting), normal emergency management processes would be difficult to implement. "Anyone who's evacuated (during floods) gets the opportunity to be put up overnight in a relief centre, but we've got COVID on top of that. So, we can't run a relief centre in the normal way that we can. ..... if we have a flood and people get evacuated, what are we going to do with these people?" (BLGM05)

### STRESSORS:

### Water quality

The quality of the river water deteriorates after bushfires because the burnt landscape has less capacity to hold the soil or earth in place during rain. An interviewee highlighted, "We have another risk in those areas that were burnt, with debris then coming down into silt and affecting our rivers." (BLGF03).

### Climate change

Climate change is likely to have a significant impact on tourism in the region in the long term. Globally, temperatures are warming, with Australia's temperatures rising by 0.1° per decade since 1950 and the trend is projected to continue (Harris, Remenyi, & Bindoff, 2016). The warming climate has already led to changes in weather patterns in the Alpine regions such as reduced snowfall and shorter ski seasons (Harris et al., 2016). Climate Futures for the Australian Alps projections, predict that in the Victorian Alps the number of extreme hot days will rise in the future by approximately 5 degrees by between 2070 and 2099 and very cold days will fall; snowfall on the mountains will fall by between 60% and 80% by the end of the century. This places the future of the Alpine Ski Resorts and surrounding regions at risk unless significant investment is made in snow-making equipment (Harris et al., 2016). According to an interviewee, "The worth of the snow industry to us is around about 90 million dollars every year. So, there's a huge risk if there's no snow." (BLGF03). There was very little snowfall during 2020, and the resorts were also forced to close due to the lockdown.

Increasing temperatures will also increase the risk for bushfire, drought and associated risks. An interviewee anticipated, "We could have a bushfire every year for the next 5 years" (BCOM08). Additionally, prolonged droughts can be a serious concern for forestry and agricultural businesses, of which there are a number in the region providing local jobs and supporting the economy.

### Naming of fires, media overhyping of crises

Informal information and updates about bushfires from social media platforms and the media (not government sources) have the potential to spread misinformation, causing angst and unnecessary stress in the community. Media sources have historically overhyped bushfire intensity and extent of damage (e.g., headlines reading "Australia Burns"), which discourages tourists from visiting some areas because they are uncertain where has been impacted.

# **Vulnerabilities and resilience factors in the Bright System**

This section describes in detail the vulnerabilities and resilience factors to crises for the tourism system in Bright that were identified when analysing the interviews and other secondary data such as reports on the region. A summary table of all the vulnerabilities and resilience factors for the destination can be found at the end of this section.

### **Vulnerabilities**

### **TOURISM SPECIFIC**

### Reliance on an unsustainably growing seasonal product

Seasonality in tourism was identified as one of the most important vulnerabilities for the destination. The peak season is between November to March every year. This busy window covers major events like Christmas, school holidays, Easter, and Australia Day. December through February contribute to about a quarter of the tourism income, and the entire summer season accounts for about one-third of the total yearly revenue of the tourism industry and the regional economy. Unfortunately, the peak-season coincides with the bushfire season, which is expected to increase in frequency, as a result of global warming.

Exponential growth in tourism to the region in recent years has exacerbated the problems associated with seasonality. Rising numbers of tourists visit the town during peak times places stress on the already constrained resources (e.g., parking, capacity in restaurants, staff etc). The growth has also led to a surge in real estate and rental prices because of high returns for rental accommodation, creating a shortage of affordable accommodation for seasonal tourism workers. This exacerbates skills and labour shortages and places more pressure on the businesses and existing staff.

The Alpine resorts in the region are also highly seasonal but depend on the winter season. Snow-related activities such as skiing and snowboarding attract about a quarter of the total yearly visitation. The Alpine resorts feed some tourists into surrounding towns like Bright and their income is an important economic driver for the Alpine Shire.

Since a lot of tourism businesses in Bright and the Alpine resorts are small accommodation and supporting service providers, the impact of missing one critical season can lead to business closures. Accommodation providers are more vulnerable because they have few options for diversification. This risk also means that the Alpine Resorts are considered high-risk investment opportunities and thus attracting new investment or businesses when others fail is nearly impossible. For example "in the resorts, if you have a business fail, it could be years until you can actually fill that, because you've got a really small window to make money, very high overheads to be up there...that's not an exactly, a really exciting private sector proposition." (BTOF09)

Increasingly extreme climate conditions will contribute to the decline of skiing as a visitor attraction over time, and thus reducing seasonal dependencies will become even more important for Bright to be able to attract tourists without relying on the Alpine Resorts as feeders.

### **ECONOMIC**

### Stretched Resources

A key vulnerability highlighted by interviewees from both public and private sectors is limited resources, which reduces emergency management capacity in the event of crises. Local governments have few human resources for emergency management and thus rely on existing staff to take responsibility for emergency service roles in addition to their normal jobs. For example, rubbish collection and roads maintenance staff being diverted to emergency management (e.g., evacuation centres). This places stress on the staff and the organization itself. Any shock or stressor of large scale, like bushfires and COVID-19, exacerbates the pressure on these financial and human resources.

According to interviewees, many businesses and especially those that are smaller, do not have formal risk management plans and operate on low profit margins. Crises such as the pandemic, place operators vulnerable to loss of all capital, including family homes, due to personal liability. This is not limited to small businesses – there is a preconceived notion that the Alpine resorts make large profits, however, the costs of operating, especially in the current environment are very high. Even if (northern) resorts like Mount Buller, Mount Hotham and Falls Creek make profits, almost all of it gets reinvested, leaving few reserves. This increases the possibility of business failures.

### Unavailability or high cost of business insurance

A growing problem (vulnerability) throughout the regions is being able to afford business insurance. Insurance is the most common means of 'sharing risk'. However, a state of emergency was declared in the region during the Victorian bushfires (2019-2020). As a result, existing insurance premiums have increased between 100% and 400%. High premiums make it difficult for businesses to afford insurance. Either business owners cannot access insurance at all, or liability limits have been capped at lower amounts. Such caps render insurance useless for larger businesses with multimillion dollar assets. According to an interviewee,

"My two biggest properties, one is worth \$20 million, and the other one is worth \$40 million, currently have no insurance."

Not being able to invest in business insurance might eventually determine the survival of some businesses during future crises.

### Savings used at the expense of planned future investment opportunities

A long-term vulnerability factor is the exhaustion of financial savings during multiple crises without income, which will limit future growth capability. For instance, a brewery used all of its savings during the COVID-19 lockdown which were intended to buy a canning line.

### **HUMAN AND SOCIAL**

# Anti-tourism sentiments in some part of the local community

The growth of tourism and related events has been beneficial for businesses, and some parts of the community have welcomed tourism growth and appreciate the importance of tourism for the destination. However, there are noticeable anti-tourism sentiments among remaining parts of the community, mostly elderly (retirees) looking for peaceful lifestyles, who are frustrated with busier roads, the lack of parking space, rubbish and crowding. These sentiments are so strong that development activities are sometimes assumed to be just for the tourists,

"We're building another bike trail, and of course everyone's saying, "Oh, you know, it's for the bloody tourists." So then you get into that conversation around, yes it is, but it's also for community, from a health and wellbeing point of view." (BLGF03)

COVID-19 restrictions have increased these divisions and exacerbated anti-tourism sentiment, which was partly fuelled by holiday house owners moving in during the first COVID-19 lock-down.

"So that was quite an interesting flip for me to see that within the community to go from such a welcoming community that recognises that tourism is so important. When COVID hit it became the reverse, it was like, we don't want anyone, what are you doing here? Because this is our area. This is our town." (BLGM05)

This has generated tensions surrounding the economic need for visitor spending against the fear of visitors increasing the risk of infections.

### Mental health challenges

The mental health challenges associated with the stress of the bushfires worsened during COVID-19 lockdowns, adding to business and employee vulnerability. Business owners and employees report being physically and emotionally exhausted from the uncertainty of the pandemic and the stresses of huge income losses, social isolation and home working and home schooling have exacerbated the problem. Community members who travel daily across the border to Albury for work, medical services and schools, have particularly suffered due to 50km travel limits and the border closure between Victoria and New South Wales. Compounding the problem is either an absence of, or lack of awareness of mental health services available for businesses and the community. Mental health services were provided through Bushfire Recovery (hubs), but during the COVID-19 lockdown, services were restricted. There are also concerns about the low uptake of services by businesses owners and the community. The community tends to be stoic when it comes to help seeking and particularly in relation to seeking mental health support.

### Complacency

Another important vulnerability identified is complacency. After past crises have passed, the lessons learned about crisis preparedness and management are quickly forgotten. This has different implications for different stakeholders. Because severe bushfires had been a 'long' time ago (seven years), many guests believed the fires were not serious and were hesitant to evacuate,

"it didn't really feel like there was a fire here. A lot of people did resist leaving because they thought, "We're safe, it's fine, and we can't see anything." (BTOF01)

At a business and community level, this complacent attitude has led to a lack of motivation toward risk planning and building resilience. This is evident by a decline in membership of the community resilience committee established following previous crises. Stakeholders interviewed believe that this complacency contributes to a lack of preparedness for crises and increases vulnerability to risk

### PHYSICAL AND ENVIRONMENTAL

### Barriers related to infrastructure

Inadequate medical services increase the vulnerability of the ageing population of Bright to crises. The closest hospital is in Albury which is in NSW, and Bright residents did not have access to this hospital during the NSW border closures during COVID-19. Bright does have a small hospital but does not contain an intensive care unit (ICU). In such cases, patients need to be transported to other hospitals, but transportation infrastructure can also be an issue.

With respect to other infrastructure, there is one main road through the destination, which poses a serious vulnerability in case of an emergency evacuation. The problem is aggravated if roads get blocked by bushfire, landslides etc.

Disruptions or failures in other essential infrastructure such as telecommunications towers, internet services and power supply also magnify vulnerabilities. Even normally, internet is slow and unstable, making work from home during COVID-19 very difficult, and there are spots without telephone services. During emergencies, damage to telecommunications and power infrastructure means being without power for days, which also means not being able to pump water or charge mobile phones. This not only effects daily activities, but hinders emergency response and firefighting capacity. Restoration activities for power and road blockages sometimes take days to weeks.

### Physical characteristics making the destination more prone to crises

Bright enjoys a beautiful natural environment, surrounded by forests and mountains. This unique geographical location, however, adds to the vulnerability to natural disasters.

### **GOVERNANCE**

# Challenges related to lack of communication, insufficient or inconsistent information and guidelines

A major governance vulnerability has been a lack of sufficient and timely information from the state and federal government, particularly in terms of the COVID-19 pandemic.

# COVID-19

Unlike other crises, the pandemic is unprecedented and so it has taken time for the development and communication of safety guidelines for businesses. Tourism businesses are diverse and often the guidelines were not relevant. Businesses were unsure about expectations by the government and their liabilities in case any guest contracted the virus at their property. As a result, many businesses initially had to adopt safety measures according to their own research. This led to the patchy implementation of safety measures while the community was relying on businesses to take appropriate measures to curb the spread of virus. Additionally, the agency delegated to monitor the use of COVID safe protocols was Victoria Police, who lacked knowledge and expertise on infection control. According to an interviewee who had engaged in a discussion with the Municipal Emergency Response Coordinator in the Victorian Police,

"I said to him, "So when you get to a café, what do you do?" And he said, "We just check the signage on the door. If they say that they can only have 10 people in there, there's only 10 people in there. There was nothing being done around, do people sanitize? Were they sitting down? You know, any of that stuff. Or how was that changeover at that table undertaken? None of it." (BLGF03)

Over the course of 2020, information and communication on COVID-19 protocols improved, but still lacked clarity and relevance for all sectors in the tourism industry, which caused stress and confusion. The information provided by the government on safety procedures were also seen as very general and open to interpretation. As one interviewee explained,

"We're all looking at the same documents to try and understand what the rules are with people being here or there and everyone has got their own interpretation of it. Information shouldn't be open for interpretation, it should be black and white. That's causing more stress in the community." (BTOF01)

Information was slow to be conveyed throughout the various phases of lock-down during the year. Regulations changed continuously and were announced at very short notice. It has been challenging for some businesses to hire staff and change operations or make orders with little notice. An interviewee expressed their concern in the following words,

"part of the problem is, an announcement gets made and then people go, "Okay. Well, how can I change my business? What do I have to do?" Then they're waiting and waiting for two weeks for the guidelines. Guidelines need to be there when the announcement is made so people can plan. If I'm a business and I've got to order cheese, it takes me 10 days to order cheese, but then if the gateway gets lifted everybody else is trying to order cheese at the same time." (BTAF04)

Government information about financial support for businesses and employees was also slow and inconsistent. Some businesses found it difficult to identify appropriate economic relief packages available. In many cases application processes were more complex than the value of the grant warranted, making many business owners not apply. There were stakeholders who believed that the support provided by the funders was patchy and often they were given conflicting advice and feedback on the application process. An example of this was the regional accommodation cancellation grant as described below.

"The regional accommodation grant that was offered by Business Victoria has been an absolute nightmare. I think it has left probably a lot of people worse off than they would have been if they hadn't done it. It was so poorly executed, and the communication in the messaging, and the lack of knowledge from customer service at Business Victoria has just spun the whole thing on its head, and the expectations of a lot of people were really high, and it hasn't come through. They also, through the whole process, made us give 100% refunds under the guise that we were thinking we were going to get a payment for every booking that was cancelled, because that's how it read." (BTOF01)

In addition to unclear messaging about this grant, feedback was inconsistent. For instance, about five business operators filled in grant applications the same way, only to get rejected as incorrect for different reasons. This resulted in a loss of trust in government authorities and information providers. The process of grant application was already complicated and tedious, where businesses were required to fill in a different form for each property, increasing the workload substantially, only for a total payment of about \$1000 which was much less than the expected payment of the real cost of each cancelled booking.

"There's a big issue at the moment about booking cancellations because of COVID. We thought it was \$1100 per booking and now its \$1100 **total.** So, some of the agencies have cancelled \$400,000 bookings and are looking at getting \$1000 back and that's not going to help." (BCOM08)

### **Bushfires**

Overall, communication and dissemination of bushfire related information was regarded as having been managed very well. The main issues identified were the provision of too much information and in some instances, the tone of bushfire management messages was thought to be too intense. Whilst this conveyed the seriousness of the situation, it also caused stress and fear for employees and panicked many visitors, who rushed out of the town at night, when it would have been safer to leave in the morning.

The use of technology for information delivery via the Vic Emergency App was seen as very useful and important. However, some glitches in the communication automation systems meant that there were inconsistencies in information delivery. One of the interviewees said,

"Sometimes there was different messages from different sources. You'd look at your phone and you could look at the website, the information on the Emergency Services, didn't always correspond."

Having local representatives in control centres assisted with management of information delivery from regional to local levels. Where this was not possible, it increased the chance of miscommunication, as information was passed on from regional to local level. One of the interviewees highlighted,

"It didn't seem to go so well with some of the communications from the regional emergency management team to the local ICC (incident control centres). There were some like Chinese whispers. We got alignment at a local level, and then the original emergency management team in Benalla, that seemed to have a, a totally different idea of what their priority was, or it was miscommunicated..." (BLGM05)

### Government's lack of understanding of the tourism sector, regions and border communities

Lack of government understanding of the tourism sector, regions and local communities is a further problem. Firstly, application of generic lockdowns despite no regional cases appeared unnecessary to many stakeholders.

Secondly, the border closure and 50km bubble policies that came with restrictions did not appear to have been formed considering the implications on interconnected border communities. For example, it is common for people in many regions to cross borders daily for work, education or other services, as with residents of the Alpine Shire who travel to Wodonga and Albury for normal interactions with family, friends and schools, yet it was outside 50km bubble, unnecessarily isolating the community.

Further, government policies on COVID-safe practices were inconsistent. For instance, national parks were completely closed to operators but not for improvement works, despite few issues maintaining social distancing. An interviewee described his experience,

"There is inconsistency, there are people working on tracks up there, building lookouts, so there are other operators up there doing things, but tour operators aren't actually allowed to go into Parks. And even to take photos and do thing for our website." (BTOM04)

Finally, insufficient financial assistance provided by government to businesses reflected government misunderstanding of the diversity of the tourism industry and how it works or the extent of the losses that had been attained by businesses.

"We had been putting up a bid for an Alpine stimulus package for the resorts, for businesses. It did get announced and it's up to \$20,000 per business on the mountain, but to put that into context, it will save some of the small businesses like the lodges but not my big commercial operators... our biggest one, their service charges through us, are \$670,000 a year. So, \$20,000 is not even going to scratch the surface." (BTOF09)

Staff from state Government agencies also recognised that their ability to appropriately assist destinations in their recovery and development efforts both in and out of a crisis is limited because they lack time to maintain adequate connectedness with the all the communities to keep up to date with their needs.

"I think the government is particularly bad at making sure the stakeholders are being funded for the projects they needed to be funded for. ........ we need to find a way to stay better connected. So, we can feed the right information into central government, so the right projects are funded." (BSGF06).

### **Business vulnerabilities**

### STAFFING CHALLENGES

The majority of businesses interviewed reported labor shortages and staffing challenges, attributed to several factors. First, the destination's high levels of seasonality and reliance on tourism together with workforce casualisation meant that businesses were not always able to access an appropriate talent pool during peak periods and they spend a significant amount of time training new staff each year, as seen in this business:

"Seasonally, we experience issues about having to recruit 25 to 30 people in November, train them ready for boxing day, keep them and then let them all go again in April.....that's not very good business. It's not great for employees 'cause you can't raise a family on five months work a year... You have succession and development and training and where are your managers going to come from when a big proportion of your workforce is leaving every year?" (BCOM08)

Second, Bright's popularity as a tourism hotspot made the destination vulnerable to inflated realestate prices. This, in turn, negatively impacted employees' ability to secure affordable housing in the area. Currently there are 47 families on the waiting list for rental housing for Bright (Alpine Shire Council, personal communication, 2020). The structural issue of housing is significant given that it requires strategies beyond the scope of businesses. Third, as exemplified in the quote below, income support payments (such as Job Seeker and Job Keeper) acted as a barrier to getting employees back to the workforce after the Pandemic.

"In as far as getting people back on, I know that some of our cafés have had troubles around getting people back on as a result of Job Keeper. With staff saying, "I'm better off just on Job Keeper and sit at home." "Why should I come back in?" (BLGF03).

# **EMPLOYEE VULNERABILITY**

There was some indication that casual workers were disproportionately affected by COVID-19 lockdowns. Reduction in business activities led to substantial workforce redundancies, particularly for casual workers. Unfortunately, these workers experienced acute financial, and in some cases, accommodation pressures.

More generally, employees with young families faced additional work-life balance challenges during lockdown. Homeschooling and caring for young children added additional responsibilities for workers who were adjusting to remote work.

### Resilience factors

### **UNDERSTANDING RESILIENCE**

Resilience is 'the ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organisation, and the capacity to adapt to stress and change' (IPCC., 2007, p. 880) and is a direct expression of the strength of a coupled human-environment system (Carpenter et al., 2001)

# TOURISM SPECIFIC (OVERLAPS WITH 'PHYSICAL AND ENVIRONMENTAL')

# A great place to live - natural surroundings

Bright is known for its stunning natural surroundings, where people usually move from other areas for a better lifestyle. Several interviewees were young entrepreneurs who had moved from the city and other jobs for a tree change. As a result, there is a higher level of education in the Alpine shire than the regional average (18.5% with undergraduate degree compared to the regional average of 14.5% (Australian Bureau of Statistics, 2016b)) This is likely to improve the ability of businesses in the region to innovate and improve leadership capacity for tourism in the region. The town also enjoys a reputation and a long history of being recognised as a 'hero' destination for tourists and a loyal intrastate consumer base.

With strong cycling credentials in Victoria, Bright was in a strong position during the various phases of the Pandemic, because cycling was a booming activity. In addition, being a strong cycling destination is good for economic growth because as stated by one interviewer "Data says cycle tourists spend more money." (BSGF06). In addition, it was identified that cycling is an activity that can be done all year round, and less weather dependent than other activities. Capitalising on this may assist in building resilience moving forward. The diverse offerings in the destination including access to ski resorts (winter season), various walking tracks and great food and wine also have the potential to reduce the impact of seasonality if capitalised on during off-seasons.

### **ECONOMIC**

### Savings and financial support provided by government

The resilience and survival of some businesses during the lockdown was attributed to their financial reserves in the form of emergency or future investment savings. In addition, financial relief including enabling postponement of mortgage and rental payments, and various grants has ensured many, including small businesses, could stay afloat. Many interviewees also acknowledged the importance of Job Keeper and Job Seeker programs in helping them retain employees that otherwise might be laid off.

"Job Keeper and Job Seeker have been a lifesaver for us here. We'd be in trouble if it weren't that." (BTOM01)

In addition to financial support from the government, some suppliers also extended credit terms which has been useful in staying afloat. This was made possible because of strong rapport and using the same suppliers over the long term.

### Investment in projects to build resilience.

Recognising the need to build long term resilience of different regions, the federal and state governments have been allocating funds to LGAs for recovery and development projects with a focus on infrastructure. An interviewee highlighted, "We got about a million dollars out of federal, and 1.225 out of state, for relief and recovery... for marketing stuff, there's training, there's event, event attraction. We've got some community, resilience stuff in there as well., and also just some community feel good... you know, bringing people back together type events." (BLGF03)

A number of government supported infrastructure projects in the region have been fast-tracked to support regional and rural economies and a number of these will benefit local tourism infrastructure in the long term.

### **HUMAN AND SOCIAL**

### Strong sense of community and collaboration

Bright has strong social capital with experience in responding to crises, high levels of volunteering and active community development programs in place. It is recognised that working together on recovery activities (during bushfires) has further strengthened this sense of community and belongingness.

At a business level, there was considerable collaboration between businesses as well as with the community during the pandemic, which was a source of resilience. Businesses have been able to come together as a community to help each other out with technology, filling of grant forms, or just sitting together to understand the guidelines provided by government, to make sense of it. An interviewee highlighted,

"We had a friend of mine, she put her hand up and she said, "I want to sit down with you guys, go through your books. You know, we can prepare for the future...And she just wants to offer her time free of charge. So there's plenty of help out there." (BTOM03)

There has also been a high level of collaboration between departments and private and public organisations during the pandemic and bushfires.

"The level of collaboration we've seen between the departments that most impact us, so tourism, regional development, and enviro, has been first class, it's been great. We've got far closer relationships now with those entities than we've ever had before. I feel like we've got a brave new world, in a really positive way." (BTOF09)

### Mental health services

To cope with mental health challenges faced by the community and businesses, several programs were initiated, aimed at providing mental health services and support. Mental health services have been provided through recovery hubs (bushfire) located in Bright, with outreach to other towns also. Information sessions providing financial guidance and mental health support have also been run but did not have a strong uptake, while other courses such as psychological first aid and others introduced later had full subscription. Additionally, some other organisations such as Anglicare have been active in providing financial, mental health and case support.

### **GOVERNANCE**

### Strong tradition of stakeholder engagement at a local level

The Alpine Shire Council and other government agencies have worked closely with the communities to form community recovery committees or resilience committees to manage crises that have occurred in the region in the past (especially bushfires). The committee comprises representatives from different businesses and communities across the region. It is involved in applying a collaborative and coordinated approach to preparedness and recovery processes in the region by identifying needs, strengths, priorities, and developing plans for recovery initiatives. This aids in ensuring recovery measures will be appropriate to the needs of all the destination's stakeholders.

### Communication

It was noted in the interviews that learning from past bushfires has led to significant improvements in public information, community warnings and advice relating to bushfires. The interviews highlighted the importance of offering a variety of different trustworthy sources of information such as the use of technology for rapid messaging in the Vic Emergency App, the use of other more traditional information sources such as community information sessions and daily video updates for LGA staff from the control centres was vital to tailor information to the diverse needs and preferences of the community. For example:

"That information (through bushfire app) was decisive, it was clear, they had the codes all set up, I think that was good the messages that they sent through, were good... Coordination of information (by authorities at different levels) was mostly fairly well streamed, we had information on emergencies themselves, from the emergency services and it was reiterated by the council if there was anything else there they communicated that quite well too." (BTOF02)

### And

"They ran a lot of sessions down at the football oval down here, I found it generally fairly informative." (BTOM01).

### And

"So, the Shire just follow the rules for the state. From a fire perspective it was really great. The daily updates from the guys in emergency control 10 minutes from a guy who is obviously from the sector, seeing something on the video was a really good way of getting the message across which is nice." (BCOM08)

Communication and information about COVID-19, however, was considered to be inadequate, inconsistent and initially slow. Further detail can be found in the vulnerabilities section of the report.

# Government responsiveness

Government organisations were acknowledged to have responded quickly to some requests and approving special licencing and grant applications during both the bushfires and COVID-19 that were needed to support business and enable them to pivot. An interviewee commented that,

"and under my (liquor) license I had no takeaway license. ... we had the takeaway license issued, basically within 24 hours. They said 72, I applied online and the next morning it was in. So, I think that was done well." (BTOF02)

### **Business and workforce**

### BUSINESS CONTINUITY THROUGH INNOVATION AND COLLABORATION

Businesses exhibited resilience characteristics through innovation, business continuity and adaptability. There were reports of certain businesses successfully pivoting to alternative markets (for example, distilleries moving from the production of alcoholic beverages to hand sanitizers) and engaging in virtual product offering and product diversification (for example, switching to take-away service by cafés and restaurants). Although innovation and transitioning to a virtual environment was not possible for all types of businesses and tourism offerings (such as accommodation products which are intangible in nature), the rapid pace of digitization during the pandemic heralds the motivation of businesses to build their digital visibility and capability. Of note, there was some indication that businesses with structural agility (e.g., those which had already established workfrom-home arrangements) were more confident in navigating COVID-19 restrictions.

Importantly, there was evidence of businesses engaging in collaborative destination marketing efforts. Businesses worked with each other to market high quality products representative of the destination through online channels. Overall, network engagement and cooperative relationships between key stakeholders (businesses, councils, industry associations and suppliers) were key factors contributing to business resilience.

... I couldn't actually understand half the stuff, it was just all this information that was incredibly confusing... but I'm also a member of VTIC and they were providing information for business within Victoria, so that gave you guidelines to look at in the tourism side of things. BTOM04:

### LEADERSHIP AND EMPLOYEE ENGAGEMENT

The interviews revealed many instances of strong leadership by business owners. For example, reports of business owners providing support and direction to their employees during the crises were common. Moreover, business owners were found to proactively seek information from other sources to construct a better understanding of the pandemic and response strategies. This was evident in the accommodation sector where business owners perceived guidelines issued by Australian authorities to be inadequate at the start of the crisis. Interestingly, it seemed that business owners' entrepreneurial behaviors and coping abilities were partly influenced by prior experiences with bush fires:

It wasn't that hard for us to step into action, and know what to do, and know how to recover from that as well... we've gone through it, and... I think the bush fires was kind of good training for our staff as well, to just pick up... we didn't have to think much about it (BTOF01).

Another factor that enabled business resilience pertained to employee engagement and organizational cultures based on values of trust, compassion and well-being. Organisations' employee-oriented philosophies were, for instance, observed when business owners prioritized vulnerable employees – such as skilled visa workers who were ineligible for government support – in work allocation. Employee commitment was also apparent from reports of employees opting for reduced hours or performing tasks outside of their job description to fulfil business needs.

Table 37. Summary table of vulnerabilities and resilience factors in Bright

Type of factor	Vulnerabilities	Resilience factors
Tourism specific	<ul> <li>Seasonality</li> <li>Economic reliance on tourism</li> <li>Unsustainable growth in tourism</li> <li>Rising real estate prices and rent</li> <li>Intangible nature of tourism products</li> <li>Alpine resorts are high risk private investment</li> </ul>	<ul> <li>A great place to live – natural surroundings</li> <li>Strong brand</li> <li>Loyal customers who want to support</li> </ul>
Economic	<ul> <li>Stretched resources</li> <li>Insurance - unavailability or high cost</li> <li>Savings used up at the expense of planned future investment opportunities</li> </ul>	<ul> <li>Savings</li> <li>Financial support by government (Job keeper and Job seeker)</li> <li>Investment in projects to build resilience</li> </ul>
Human and social	<ul> <li>Anti-tourism sentiment in some parts of the local community</li> <li>Mental health challenges</li> <li>Border closures - social isolation of border town communities</li> <li>Complacent attitude of the community</li> <li>High percentage of older adults in the community (vulnerable to COVID-19)</li> </ul>	<ul> <li>Strong sense of community</li> <li>People helping each other.</li> <li>Mental health services provided</li> </ul>
Physical and environmental	<ul> <li>Inadequate medical services</li> <li>One road in, one road out</li> <li>Inadequate public transport options</li> <li>Failures in telecommunication infrastructure and services</li> <li>Stretched resources causing delays in restoration of infrastructure (roads, power)</li> <li>Unique geographical location – caught between multiple fires</li> <li>Natural setting – surrounded on all sides by forest</li> </ul>	

Type of factor	Vulnerabilities	Resilience factors	
Governance	<ul> <li>Guidelines and information: absent, ambiguous, inconsistent, timeliness</li> <li>Lack of understanding of the tourism sector</li> <li>Alpine resorts statutory authority designation a disadvantage during a crisis</li> </ul>	<ul> <li>Progressive governance in region</li> <li>Good bushfire communication</li> <li>Regular updates from the premier</li> </ul>	
Business	Risk management – informal or no risk management or continuity plans	Adaptation/ innovation	
	Alpine Resorts –very small window to make money, high overheads;	Diversification	
	acts as a feeder to local towns and big enough to impact the regional economy	Collaboration/connectedness	
	Family commitments: work-life balance challenges	Business leadership and staff engagement (engaged and supported	
	Employees:	Past experience of crises	
	Difficult to get employees after COVID-19		
	Gig economy		

# Implications of the findings to Bright tourism system

A focus group was conducted with stakeholders who had be involved in the interviews to reflect on priorities for building resilience in Bright. The key areas that were identified are outlined below.

# Building a more sustainable destination

A strategic approach is required to reduce seasonal variation in visitation. This could be achieved by:

- **Product sustainability**: Consider offerings in the destination that are less weather reliant will resist the impacts of climate change and can be offered all year round. Cycling was one such product.
- **Products that can be accessed outside Bright**: during the pandemic, a number of businesses were able to generate income by selling products online or through special markets. The *Buy from Bright* site enables businesses to easily sell their products. Continuing to sell products outside the region will bring a more constant source of income to product-based businesses.
- Value over volume: Reduce the seasonal strain on the destination through a focus on high value markets and finding ways to encourage groups to stay longer and do more within the destination. For example, consider catering to tourist party/family group who aren't currently being engaged (e.g., family members not cycling or walking); and packaging more experiences.
- Packaging the experience of Bright more effectively: It was noted that the many
  experiences in Bright could be better promoted and packaged for visitors. Some businesses felt
  they lacked skills and knowledge to do this. Further discussion revealed that TNE offer industry
  development training in packaging and that they could arrange a packaging workshop in 2021.
- Spreading events more evenly during the year: A calendar is being set up by the Alpine Shire Council as part of the Events Strategy to enable better planning of events.

**Collaboration:** Collaboration between businesses in the destination was seen to be important and there were many examples given of strong collaboration (e.g., strong Chamber of Commerce). Efforts to encourage the local businesses to work together more collaboratively and rely less on the Council for leadership were identified as important in the future, especially when offering packages for visitors.

**Workforce challenges:** Given the challenges of retaining and recruiting staff and the reliance on a gig economy experienced by the destination, there is an opportunity for the development of a comprehensive workforce plan for the region covering infrastructure (housing) and supply of labour. Some possible solutions include the development of a staff accommodation complex. Currently there is an over reliance on temporary labour and a potential solution may be sharing of staff between Alpine Resorts and Bright in Winter/summer periods to reduce the need for short-term workers.

**Training:** Suggestions were made for skills development of businesses and employees in the destination. These included:

- Collaborative skill development for SMEs to share best practice.
- Risk management (e.g., financial risk, insurance). It was noted that yield management training is being developed by TNE and will be explored in further detail as an option for Bright.
- Training of visitor centre staff –the quality and currency of information to supply to tourists by the visitor centre staff is lacking and they often have to turn to business owners for help.

### **Behavioural considerations:**

- It is important to keep **risk management** at the forefront of businesses minds in the good times because take-up of risk management planning is usually lower in years when there are no crises, despite the importance of maintenance.
- There is a preference for 1:1 training and mentoring by many of the businesses.
- At present, many business owners are suffering mental overload from the stress of the pandemic and therefore attendance at training and development is low.

**Sustainable strategic plan for tourism growth:** This is currently being undertaken as part of the sustainable development strategy by the Council.

**Insurance:** affordable and accessible business insurance was identified as a major issue for businesses in the Alpine Shire and needs to be addressed as a matter of urgency.

**Funding**: a learning from this crisis is the importance of streamlined funding processes to ensure that people who are eligible and in need of the funding can access it quickly.

# 4.4. Case study 2: Echuca-Moama



# Echuca-Moama









### The destination

The Murray Region is a large tourism region and the only one in Australia that crosses two states (New South Wales (NSW) and Victoria, incorporating seven LGAs in NSW and six in Victoria. The Regional Tourism Organisation - Murray River Tourism, provides strategic direction for tourism in the region across the two states.

The focus of this case study are the twin towns of Echuca (Vic) and Moama (NSW), which straddle the Murray river and sit within Campaspe (Vic) and Murray River (NSW) LGAs in the Central Murray sub-region.

Echuca-Moama is the closest river destination to Melbourne, which is only two and a half hours away. Bendigo is the nearest regional centre and is approximately 90 kilometres away. The towns have the largest population and visitor centre in the Central Murray region, with around 14,500 in Echuca and 5,629 in Moama (Australian Bureau of Statistics, 2019). Echuca-Moama has an ageing population, with the median age of residents in Echuca being 43 and 46 in Moama (Victorian median = 37). In addition, 29% of the population in Echuca and 35% of the population in Moama are over the age of 60, which is significantly higher than the Victorian average (21%). The proportion of the resident population educated at university level or above in Echuca and Moama is 11.6%, which is lower than the average for regional Victoria (14.5%) (Australian Bureau of Statistics, 2020).

The Port of Echuca was once one of the busiest working ports, facilitating river trade up and downstream. A rail link installed in 1864 assisted with the growth of the town, making it the closest port on the Murray River to Melbourne. However, expansion of the rail infrastructure reduced the reliance on the Port, and it became defunct in the 1920s, and the region became more reliant on irrigated agriculture, manufacturing and food production. The primary agricultural product in the region is dairy, but in recent years the dairy industry has declined somewhat, due to the rising cost of water in the region (Aither, 2019). The region is also a major producer of fruit, nuts, vegetables, cereals, meat, wool and 80% of the wine grapes grown in Victoria come from irrigation regions on the Murray River (Victoria State Government, 2014). Despite its historical economic reliance on agriculture, it has been recognised that growth in transport and tourism are vital to maintain the town's future as a regional centre and in recent years tourism has become an increasingly important driver of the local economy and local jobs (Flowers, 2020; Victoria State Government, 2014). The region has the largest dollar value contribution to regional Victorian visitor economy Gross Regional Product and jobs in Victoria (Flowers, 2020). In 2017 the visitor economy in the region received \$2.9 billion from direct and indirect spend in tourism and there were 24,968 tourism related jobs (direct and indirect), which accounts for 20% of the total employment in the region (Ruzzene & Funtera, 2018). In recent years, employment growth has been strongest in roles related to tourism such as accommodation and food services. Conversely, employment in the traditionally larger employing sectors of manufacturing and agricultural sectors have declined and will continue to do so. This is because increasingly farms in the region are being amalgamated and technological advancements in manufacturing reduce the reliance on human capital. Therefore, the tourism industry will become an increasingly important employer for the area (Aither, 2019; The Regional Development Company, 2018).

The main product strengths of the Murray Region are water sports, food, wine and produce, fishing, houseboats and river cruises, golf, festivals and events (555 annual events attracting 833,00 attendees), history and heritage. The region also offers nature-based activities in the Barmah and Murray Valley, Gunbower, Hattah-Kulkyne Mungo and Murray Sunset National Parks. The Barmah National Park is the largest River Red Gum Forest in Australia. Additionally, the region has large capacity for hosting of business and other events.

With the growth in tourism in the region, Echuca-Moama has become a thriving tourism destination, with the Murray River and the Campaspe River its primary assets. The old Port of Echuca was restored, along with many original buildings and declared a historical precinct in 1975. The retention of these heritage assets gives the river towns a unique selling point. The Port is also home to the largest concentration of heritage paddle steamers in Australia and the world's largest fleet of operating riverboats. The river also supports water-based tourism; water skiing, cruising and fishing. The town is known for its riverside tourist parks and other popular camping spots.

# Value of tourism in Campaspe and Murray River Shires

Campaspe Shire, with a population of 37,622 has 473 tourism businesses, and Murray River Shire has a population of 12,118 and 143 tourism businesses (Tourism Research Australia, 2019). As shown in Figure 22, nearly all the tourism businesses (approximately 96%) in the Shires have less than 20 employees.

It has been estimated, based on tourism spending in the Murray region in 2017-2018 that the total number of jobs created by tourism in Campaspe and Murray River Shire combined is 2981, which is approximately 11.5% of jobs for both Shires that are directly related to the impact of Tourism spending (see Table 38. Estimated shares of total LGA jobs due to tourism spending in the Campaspe and Murray River Shire Council regions. Adapted from Flowers, 2020 (p 5).

Figure 22. Number of tourism businesses by size (n=216). Murray and Campaspe Shires combined

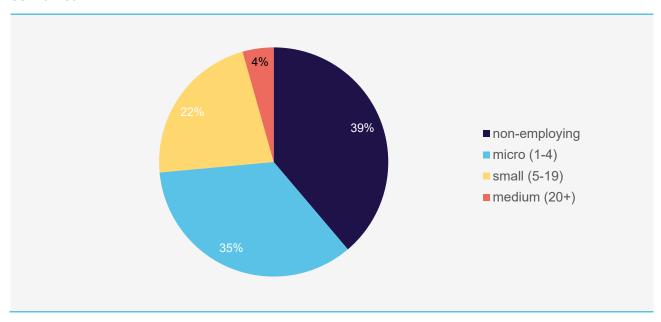
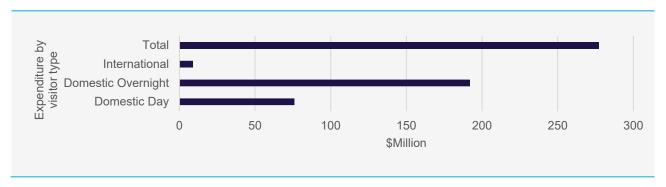


Figure 23. Visitor spend in Campaspe by Visitor origin (from (Tourism Research Australia, 2019).



The GRP of Campaspe was \$2.483 Billion in 2019. The Campaspe Shire attracted 1,148,000 visitors, with a total tourism spend of \$277 million in the same year (11% GRP), which came predominantly (97%) from domestic tourists (see Figure 23). Overnight visitors to the region most commonly stay with friends or relatives (34%), followed by 'other accommodation' (24%) then hotels or similar (23%), then caravan parks (20%). In Murray River Shire, 273,000 tourists visited (primarily domestic) and they spend approximately \$70 Million in the area. They typically visited on holiday (70%) or to visit friends or relatives (30%). The Port of Echuca generates approximately \$81 million in direct expenditure to the region, and 46% of visitors to Echuca are motivated primarily by a visit to the Port of Echuca (Insight Leisure Planning, 2018).

Table 38. Estimated shares of total LGA jobs due to tourism spending in the Campaspe and Murray River Shire Council regions. Adapted from Flowers, 2020 (p 5).

	Campaspe	Murray River Shire	CS and MRS Combined
Direct GRP \$M	98	30	128
Indirect GRP \$M	200	28	228
Total GRP \$M	200	58	258
Direct jobs due to tourism spend	1817	445	2262
Indirect jobs due to tourism spend	569	149	718
Total jobs due to tourism spend	2386	595	2981
Total LGA jobs (from ABS 2016 census)	15,945	4992	20937
Share of LGA jobs due to total impact of tourism spend.	13.10%	10%	

# Impact of bushfire and COVID-19 on Echuca-Moama tourism

### **Economic**

### **BUSHFIRES:**

Echuca- Moama was not in a region directly impacted by the bushfires. As a result, stakeholders in the interviews described mixed impacts of the bushfires. Some businesses saw an uplift to business as people changed plans from visiting a bushfire affected area to Echuca-Moama or people driving home from NSW through the towns because of road closures. Other businesses saw no change in visitation, and some saw a slight reduction, due to a general fear of travelling during the bushfire period. One produce business experienced significant supply chain disruptions due to the bushfires. After the fires, some visitation in the region was lost because the government was heavily advocating that tourists visit, and support bushfire affected areas.

### COVID-19

The economic impact of the COVID-19 pandemic in Echuca Moama was significant. As discussed earlier, tourism in the area was growing prior to the pandemic. However, international visitation has been non-existent in 2020 (down by 59% compared to 2019) and domestic tourism has also been curtailed by multiple lock downs and border closures. Travel statistics for the year ending June 2020 for the whole of the Echuca Moama region<sup>17</sup> estimate the number of overnight visitors declined by 19%, equating to a loss of \$318 Million, which is a loss of 6.2% compared to 2019 and domestic day trips fell by 1.2%. This equated to an overall reduction in visitors by 11% and a loss of \$411 Million or 4.7% compared to 2019 (Murray Regional Tourism, 2020).

Interview findings showed that the pandemic affected different tourism businesses differently but some of the key impacts are described below.

**Financial and business impacts.** As seen in the survey and other Victorian tourism data, businesses reported major losses in revenue due to reduced tourist movement and border closures. The financial impacts were very similar to what were seen in Bright. However, some businesses in the Port area noted that part of the lock down forced closures to their business during a typically quiet period (winter) and thus financial losses were not as bad as they expected because they could maintain their staff on job-keeper. Some of the businesses were forced to lay off staff, and others went into additional debt to keep their staff employed. In addition, all key events and festivals in the region had to be cancelled.

Border closures impacting daily lives of community. All stakeholders interviewed described challenges in undertaking tasks of daily living on the other side of the border such as shopping, seeing family, going to work and school, participating in sports as well as waiting an hour to cross the border to drop children in childcare or go to the doctor. It was also noted that whilst there are shopping facilities on either side of the border, there is only one cheap supermarket in the area, leading to financial stresses of having to shop at a more expensive supermarket.

"everyone was just so strung out, just so distressed and confused and worried and how am I going to get to school and I can't go to work and my husband has gone to work and can't get back home, and he's not at home for two weeks. And you know, my elderly parents are over the river and I need to get them their shopping and I'm not allowed to cross (ELGF02).

<sup>&</sup>lt;sup>17</sup> includes Campaspe Shire, Edward River Council and Murray River Council

### And

"they are already struggling for money and now they have to spend more on groceries" (ELGF02)

**Mental health impacts.** The majority of interviewees noticed low morale in the community and reduced mental health as a result of the financial strain, social isolation and uncertainty about the future. The closure of social spaces such as pubs and clubs meant that there were few opportunities to socialise and share frustrations was a stress factor, particularly in a local culture that prides itself on its stoicism and resistance to asking for help.

# Positive impacts of the crises.

There were a range of positive impacts of the crises noted by the interviewees including:

- having access to more domestic tourists and potentially new domestic markets amongst those who would normally holiday overseas.
- Business adaptation and innovation for the better (e.g., more efficient business models, online sales, table service in pubs leading to better customer interactions).
- Appreciation of the most important things in life (family, social connections, work-life balance), more time with family
- Learning the importance of planning for crises
- · Internet sales booming
- · More demand for agriculture and food products and wine during lockdowns
- Increased 'buy-local' mentality and support of local businesses.
- Better collaboration across borders between businesses because of the sense of shared struggles experienced during the pandemic.
- Improved relationships between management and staff in some cases
- Use of on-line meetings increasing productivity and reducing travel time.

Key findings of the vulnerability/resilience (V/R) assessment: Echuca-Moama

### Shocks and stressors

### **SHOCKS**

### **Fires**

Grass fires are more common than bushfire in the region due to its geography being primarily grassland and waterways. Grass fires can have a large impact on agriculture in the region and are relatively common.

# Pandemics (COVID-19)

There were 11 cases of COVID-19 in Campaspe in 2020. Three were diagnosed between March and April and contracted the virus from travel overseas. Four further cases between May and July and four between August and September were all contracted in Australia (DHHS, 2020). There were no cases of COVID-19 in the Murray River Council area in 2020.

### Other shocks in the destination 18

- Blue Green Algae: blooms of blue green algae (Cyanobacteria) occur sporadically in the Murray river and occurred in 2009 and 2016 (Murray Regional Tourism, 2018). They result from warm conditions in the river, slow river flow and specific nutrient build up in the river. These blooms make the river inhospitable for drinking and swimming. The algae can be dangerous for humans and animals and can cause skin and eye irritation if it makes contact with the skin, nausea and vomiting and cramps if swallowed and it is not recommended to enter the water during these periods (CSIRO, 2020). However, the understanding of blue green algae is mixed. Some locals do not heed medical advice about blue green algae and can give inaccurate advice to tourists, which causes confusion and risk. At the same time, the inaccurate advertisement of the location and extent of blooms by the media can lead to huge reductions in visitation because of the uncertainty of the location or impact of the blooms on people's holidays.
- **Flood (2011):** Approximately every 10 years there is a flood in the area, which impacts tourism because it makes the river dangerous and causes infrastructure damage. This is a shock that is typically prepared for by the community.
- **Drought** (2007-2009: whilst drought was a major shock in the region, tourism operators didn't necessarily prepare for a drought because the water management systems would typically keep the Murray River running. However, significant impacts of drought were noted by tourism producers (winery and pork produce) and they also felt there was less financial support during the drought than there has been for COVID-19 and thus it caused greater devastation to their businesses. Media misrepresentation of drought was also noted to lead to a reduction in tourist visitation.
- Extreme heat events: days hotter than 38 degrees (regularly).
- Insect plagues (mosquitos (2016), locust plague (2011))
- **Dust storms** (2013)
- Swine flu
- Murray Valley Encephalitis (2011/2012)

### **STRESSORS**

A number of stressors exacerbate the impacts of crises on the destination. Many of these were the same as identified in Bright (see section 4.3.4 for more detail), with the key difference being stressors relating to river degradation and water supply in the river-dependent destination. The stressors in Echuca-Moama include:

The progression of climate change and the increasing frequency and intensity of climate related extremes

As per Bright and see above shocks.

Sensationalist and misleading media of environmental shocks to the area

As per Bright and see shocks above.

River degradation and pollution incurred by recreational tourism

Use of the Murray and Campaspe Rivers for recreational tourism and transport has the potential to cause damage to the quality and integrity of the waterways and needs to be carefully managed. High powered vessels used for wakeboarding and water skiing are particularly problematic due to the large wakes they create in the water and large amount of fuel they consume. These issues are carefully monitored by the Roads and Maritime department of Transport NSW.

<sup>&</sup>lt;sup>18</sup> Dates for all these shocks were taken from (Murray Regional Tourism, 2018)

### Reliance on the river as a key asset in the context of the decentralisation of the water market

The Murray and Campaspe rivers are the key assets for tourism in the region. Although these rivers underpin the local tourism economy state and federal policy decisions and associated management give little weight to tourism use. The key factors that are considered in the allocation of water from the Murray Darling Basin are irrigation, urban water supply and conservation. Tourism, being a multi-faceted industry without a strong national lobby does not sit nicely within the realms of the water management system and thus can easily be overlooked or underrepresented even though its economic value to the region rivals irrigation. This is a key vulnerability for tourism in the region moving forward as the climate continues to warm and water resources become more scarce and hence more valuable.

# Vulnerabilities and resilience factors in the Echuca-Moama tourism system

This section describes in detail the vulnerabilities and resilience factors to crises for the tourism system in Echuca Moama that were identified when analysing the interviews and other secondary data such as reports on the region. A summary table of all the vulnerabilities and resilience factors for the destination can be found at the end of this section.

### **Vulnerabilities**

### **GOVERNANCE AND POLICY**

### **BORDER ISSUES**

Border issues were described by all the stakeholders as being the most significant vulnerability in the destination and are described below.

Lack of understanding/ appreciation/ consideration of border tourism communities at state/national level

There was clear consensus from all interviewees that Echuca-Moama was one community and residents and business owners worked together as one. Many community members rely on services on the other side of the border and the community in Echuca-Moama typically relies on Victorian tourists. However, there was a lack of recognition or understanding of the interconnected nature of border communities and cross-border connections have been recognised for many years as a challenge for the communities (The Regional Development Company, 2018). These challenges became more apparent in the hard borders imposed on Victoria during the second wave.

'it just highlights even more, that we are the one community." (ELGF02)

"But to just make the border there and not let anyone cross and not know anything about us or how we work or how we operate... was just so distressing, for the community," (ELGF02)

There were hard borders imposed at the Bridge across the Murray River between Echuca and Moama (and other border towns also such as Mildura and Swan Hill) and a permit system allowed some travel across the border. However, the restrictions caused major difficulties for the communities and businesses on both sides. Businesses lost intrastate and interstate visitors as well as Victorian locals who normally use facilities such as pubs and clubs in Moama (NSW). In addition, many businesses struggled to secure appropriate financial support because of their location. For example, the NSW government did not offer the same support to Moama businesses as their Echuca business counterparts received because NSW was not in lock-down, despite having similar or greater challenges than in Victoria.

"We've seen the same challenges with the two states operating differently. Different rules, different levels of support, different processes." (ETAM08)

Many interviewees felt that there was a lack of appreciation of the difference between typical regional towns and border towns and a lack of consultation with the stakeholders from the community.

"it's more about the lack of consultation and the lack of understanding how border communities work... we don't talk about Echuca and Moama or Albury and Wodonga. We call it Echuca Moama, Albury Wodonga." (EOM09)

Despite having cross border commissioners in place in NSW and Victoria, they did not have adequate decision-making power to influence the decisions regarding restrictions and border closures. They were not involved or consulted in decision making. Rather, they had to convey the information received from state governments and community stakeholders. A more direct line of influence from the border commissions would have been extremely useful during the pandemic to reduce border-related issues.

Through the interviews and reading reports from the LGAs and the regional tourism board, it was apparent that border issues did not only relate to the crisis but have been an ongoing issue for a long time. When describing successful negotiations that the commissioners had arranged about border issues with cross-state government officials and community representatives the lack of consideration of the wider reaching impacts of policies for border communities was emphasised.

"Some of those government people in that meeting room would've been embarrassed of what they were hearing.... it's probably 'cause they just didn't know. They designed their schemes in good faith, but just never thought about the implications at the border... And that's quite a common experience. Both that they don't know, but also that they'd never thought about all the implications. Things might be tested regionally but testing something regionally is not the same as testing it at the border. That's a distinction that I think is not well understood." (ESGM13)

It has been proposed that there needs to be a formalised policy making process to consider the needs of border communities, however, a key barrier is the distance from decision making centres.

Another important governance factor that is lacking is collaboration across borders (in government but also in regulators and tourism agencies) in times outside crises to enable rapid communication and decision making to occur when it is required. For example,

"we got some changes the other day, but it's been running for about two months, where the agencies... in this case it's the tourism agencies but it's also the boating regulators. If they had just had better standing connections with their counterparts, possibly could've headed this off a hell of a lot earlier. ..... it's another one of our general observations that's really played out here. The value of having those interstate connections. But, for the Melbourne-based agencies, to really keep those connections up with their boundary state counterparts, I think is so important. It just helps you jump on issues really quickly." (ESGM13)

**River governance**: The use of the river also became an issue with border closures. The border is the high-water mark on the Victorian side, so the River is owned by NSW. All paddle steamers and most house boats are moored in the Victorian side. A decision was made by the NSW government to disallow any movement on the river at all, which was very difficult for businesses.

"...there's just no justification behind it. You can come and sit beside the river and sit at the restaurant and have a table of 10... But you're not allowed to sit on the boat 20 meters away on the river on a table of 10." (ELGF02)

## State competition/funding models disadvantages border communities:

Tourism funding is inherently competitive with other states, which means that if it is possible that another state will benefit from funding a border project, the project will often not win a bid. There were multiple examples given in the interviews where this disadvantaged border tourism communities. For example

"in the case of the agencies, their success KPIs are very state based. So, they resist a little bit, in collaboration...if you promote Moama, you clearly promote Echuca... my concern is that because of that concern they tend to keep away from borders. So they say, "oh, well Bendigo's safe, I'll invest in Bendigo"., or Echuca, maybe, gotta be careful though, 'cause people might enjoy themselves in Moama." (ESGM13)

There are two other key examples of border-based funding disadvantage that were described in the interviews. The first is a Victorian golf strategy that was put out a few years ago, which listed a number of golf clubs along the Murray - one which was in NSW. When the club concerned applied for a grant, they were rejected, being told that they didn't qualify because they were from NSW. A second example is shown below.

# Moama Bowls club loses chance to hold national tournament because of state competition

"A few years ago, the Moama bowls club were trying to host the National Bowls Tournament. That's a big deal, that's a lot of visitation. A lot of players, spectators... so they went to the New South Wales government. They declined to support it because too much of the visitation and visiting rights were accrued in Victoria. They went to Victoria, and Victoria declined to support it because the event would be held in New South Wales. And yet at no point was the thought of, well why don't the two states get together?... but they won't... the state will say, big risk... So, it really just sends the signal to the border areas that they're worthless... Second classed citizens... that's just a continuous struggle you see over and over." (ESGM13)

# **Tourism specific**

The following findings relate to vulnerabilities that are specific to tourism.

### FRAGMENTED VISION/MISSION/STRATEGY FOR TOURISM IN THE DESTINATION

One of the key tourism-specific vulnerabilities for this destination is that despite being considered one tourist destination by the community and tourists and co-ordination between the towns is recognised as vital by the local councils on either side of the border, each council has a different vision and approach to tourism. This arises due to differing priorities and differences in jurisdictional policies. This lack of a cohesive planning framework represents a loss of opportunity for tourism growth and a disjointed experience for visitors. For example,

"instead of having two trails, visitors only want to pick up one thing and look at one trail. They don't want to pick up two things. And a lot of stuff just stops at the river here. And that's not a visitor experience. People ride across the river; they just want a whole destination experience. They don't want two shires. Visitors don't see boundaries." (ETAF04).

The state divisions and differing tourism priorities between the LGAs of the two towns makes strategic planning for the destination fragmented and reduces the opportunity for achieving the potential of the destination as a whole. As demonstrated below,

"We don't have a strategy for tourism...there's not even a strategic training program across the two shires, both shires run bits of programs and stuff... unless we can get a destination strategy together and we all pull together in some shape or form... we're not going to realize the potential." (ETAF04)

### **SEASONALITY AND HIGH RELIANCE ON TOURISM**

As mentioned previously, the region is highly economically reliant on tourism. However, visitation to the area is seasonal, usually starting from the Melbourne Cup weekend and runs through until Easter with very little visitation in the winter. For example, "I've worked hard to try and get a brand for the winter. The winter brand is about building capacity. You've got to build it, if we're going to be a cycling destination, you need to resource." (ETAF04). Given the reliance on the summer season, which has been lost to bushfires and COVID-19 in 2019-2020, rising temperatures or bushfires in the future due climate change pose serious challenges for the destination as a whole, with increased likelihood of key income generation periods being lost. This can be seen in the following quote:

"...as you turn the visitors off, the retail businesses realised that the market was external and not internal, predominantly. So, a lot of those businesses shut straight away, in the main street, as well as in the Port precinct. So, it really just shows how much this destination relies on the visitor economy." (ETAM08)

### LACK OF APPRECIATION OF THE REGIONAL VALUE OF TOURISM

Many of the stakeholders noted that there is an under appreciation of the value of tourism at both a political and the community level, due to the traditional focus on agriculture and other industries. Economic data shows that tourism value in the region is growing and employment opportunities in other sectors is falling. For example, the Campaspe Economic Development plan noted that manufacturing, agriculture, forestry and fishing both declined in their rates of employment by 4.7% and 20.3% respectively during the assessment period prior to 2011 (AEC Group, 2014). This trend is predicted to continue because of automation and climate changes leading to scarcity of water for irrigation (Aither, 2019). Despite tourism becoming increasingly important for the region, interviewees commented that parts of the community fail to recognise tourism and events as a key opportunity and economic driver of the town. This underpins community division and the risk of missing investment opportunities. An example occurred in 2020, when a \$3 million grant from the state government was not accepted because of mixed opinions about what should be Council priorities.

### **Business and workforce**

# SMALL BUSINESSES, ENTREPRENEURIAL ORIENTATION, AND INFORMAL RISK MANAGEMENT PROCESSES

There was evidence that small business owners experienced significant difficulties in adapting to the dynamic environmental changes brought about by COVID-19. This was partly because of their reluctance to seek professional help and connect with councils and industry bodies. As articulated by one business owner of a medium-sized enterprise:

"They (smaller businesses) won't reach out for help and smaller operators are sometimes the hardest ones to access... you can call a meeting of business owners to come and talk about something pretty important, and all the big guys are there but the small guys tend not to be... I think something that needs to change is that those support mechanisms that come through... cause small operators, as things get harder, they just work harder...they just bury themselves in their business." (ETOM05)

There were suggestions that small businesses' inability to strategically draw on industry networks and support during the pandemic may be related to business owners' lifestyle orientation. As a destination, Echuca-Moama consists of many small businesses with a lifestyle orientation and semi-retired older business owners. Lifestyle business owners have been said to be unwilling to contribute to destination marketing efforts:

"I don't know whether it's just our destination, but a lot of the operators tend to be kind of semi-retired people coming up from Melbourne, who think, let's just buy a motel and retire up there and, earn a bit of money while we're living... So, it is hard to engage those operators anyway." (ELGF02)

Business owners with lifestyle orientations appeared to lack confidence in engaging with technology and resisted online training programs. This lack of innovative thinking and digital capabilities further hinders the ability of resource-poor small businesses to bounce back from the COVID-19 crisis.

Furthermore, small businesses' preference for informal risk management processes contributed to business vulnerability. For example, discussions on how the lack of contingency plans acted as barrier to resilience unfolded as per comment below:

"Another issue is business continuity. There's an expectation that a lot of tourist operators and local businesses have got a fully implemented review business continuity plan. Well, it doesn't happen. And the slightest thing can be the telephone going down all of a sudden. Their ability to cope with the situation or have any resilience at all suffers... as soon as we have anything that slightly tips the balance on business continuity, local businesses tend to really suffer because they're just not, they're not geared up for it and they don't plan for it." (ELGM11)

### **WORK-LIFE BALANCE CHALLENGES**

It was noticeable that women, having to bear the brunt of family responsibilities, were excessively impacted by lockdowns and COVID-19 restrictions. As indicated by one business owner, his family was unable to access daycare services after disclosing that he travelled to Melbourne for work. This resulted in his wife having to reduce her workload and close-down her shop to look after their family. In the participant's own words:

"We told daycare that, I go to Melbourne. We've got a COVID safe environment, but they've excluded us which is painful for the business because... my wife, does all the accounts. She's not been able to do the accounts quite so much so we're on a bit of a budget at the moment... [My wife] is suffering because she can't do her work - she can't socialize... she's finding it a lot tougher than I am." (ETOM12)

### Social

### **MENTAL HEALTH**

Stress and declining mental health were evident in business owners and the community as a result of multiple periods of isolation, fear of the disease and financial strains during the pandemic. There were some examples of poor mental health and stress making businesses vulnerable to scams such as those offering fake services to assist in applying for grants. It was also noted that there was less engagement with training and capacity building as the pandemic progressed and less likelihood of business owners engaging in capacity building than during the first lock down. There were also concerns that reduced mental health of the tourism business owners and managers would negatively impact their ability to engage with visitors again once lock down ended.

"having the people that have got the capital to continue on if this lasts much longer, the social horsepower or the mental horse power for businesses to welcome back visitors as well... if everyone's so exhausted and then it turns on and they get busy, what's the visitor experience gonna be like?"

Some interviewees felt that the communication around mental health services could have been improved to assist the many people who are struggling with the crises find appropriate help.

## **CONSERVATIVE COMMUNITY**

Another vulnerability and challenge in being able to adapt to crises and move forward is the propensity to be conservative rather than innovative as a community. The level of innovation and uptake of technology seen in the town was quite low as a result. It was also noted that part of this is due to a lack of confidence and an underappreciation of the cultural and natural tourism offerings that the destination has to offer as well as a high number of older business owners who had hoped to retire but have now lost much of their savings due to the COVID-19 pandemic and now need to innovate. In addition to the conservatism preventing innovation, it was also identified as preventing engagement or asking questions in training for fear of looking vulnerable in front of peers.

This community stoicism and conservatism was also noted as an issue relating to accessing mental health support. People do not want to look vulnerable and thus may find accessing mental health services or asking for help very confronting. Having existing close business connections to talk to about business stresses was an important resource during this time.

### **Environmental**

### **INFRASTRUCTURE**

The town currently has poor, slow and irregular rail access, however \$91 million has been allocated to improving the rail link between Echuca-Moama and Bendigo in the near future.

ICT infrastructure in Echuca has also been documented to be slower than other regions, with the municipality lagging behind regional Victoria in terms of access to NBN, which makes internet in the area slow. This is a potential disincentive for tourism business investment in the region (Shire of Campaspe, 2015).

### Resilience factors

### **TOURISM SPECIFIC**

### LEADERSHIP AND PLANNING

Prior to 2012, the Murray regional visitation was declining, seeing a decline by 20,000 visitors between 2008 and 2012. A region wide destination management plan was implemented in 2012 and was reviewed independently in 2018. The review showed that the plan assisted in defining strategic targets for investment in the region and hence supported over \$372 million of investment in tourism related projects between 2012-2017. Between 2012 and 2017 the region grew, as demonstrated by an additional 557,000 overnight, 50,000 day trip visitors and 16,000 international visitors, which generated \$339 million in visitor expenditure and 4,569 more tourism related jobs (direct and indirect). The report showed that this improvement was fostered by the Regional Tourism Board of the area, Murray Regional Tourism, who provided strategic and collaborative direction for the progress (Ruzzene & Funtera, 2018).

### **Businesses**

### STAFFING AND LEADERSHIP

The data revealed mixed findings in relation to talent attraction and retention. On the one hand, some business owners were concerned that Job Keeper payments made the transition back to work unappealing for low-wage workers (who were earning significantly more on government support compared to their actual salaries). Businesses' reliance on seasonal workers and backpackers as staff also meant that those workers (who were not eligible for income support payments) had either moved on from the industry or from the area altogether. This appeared to exacerbate skill shortages for certain businesses.

At the same time, there were numerous accounts of business owners supporting their employees as a talent retention strategy. Support mechanisms uncovered by the data include salary payments to core employees who were not eligible for government support (such as international chefs), checking-in with workers and discussing mental health issues, empowering employees through flexible work choices and discretion to return to work when they are ready and nurturing strong employee relationships through meaningful work and compassionate leadership. Overall, these findings highlight regional differences in how tourism businesses respond to skills shortages in Bright and Echuca-Moama.

Community business leaders play an important role in making the town resilient, by motivating people and businesses around them, giving them hope and taking action. It was, however, noted that leaders such as this example are not common in the area, but that more are needed.

"Every time we have a council grant, you know, she is whipping in an application for each category, she's on the phone to everybody. She's ringing up the paper. She just-she's like a dog at a bone, and she gets stuff done. But a lot of people don't have that tenacity like that... that's what you need. You need people who are going to go, "why can't we be as good as Daylesford... You have to dare to dream big." (ELGF01)

### **INNOVATION AND STRATEGY**

Interestingly, the pandemic offered some businesses in Echuca-Moama the opportunity to revitalize their strategies and increase revenues by marketing new products (such as face masks) and using additional sales channels. As reported by one business owner, COVID-19 accelerated their decision to disinvest in ventures that were not profitable and instead focus on their core business (ECOM10). For another, the crisis reinforced the business's online presence and their domestic and international Chinese markets (ETOM05). A third business owner commented on how he has used the business shutdown to renovate the shop and business infrastructure (ETOM01).

### **Human and social**

### RESILIENT COMMUNITY

Stakeholders all agreed that the Echuca-Moama community is very resilient and typically supportive of each other. Even though divided by the state border, they are internally one single community. With a can-do attitude, they have an ability to easily get on with their lives despite crises or difficulties without complaining as seen here "But you know what country people are like. They're not about sort of sounding off... they just sort of get on with it" (ELGF01). However, this stoicism may pose challenges for recovery, and reduce help-seeking as described in the vulnerabilities section above.

Resilience has been partly built through previous transition phases they have been through and managed to successfully bounce back from, such as the closure of the Heinz factory in Girgarre in 2012 and the Murray-Goulburn dairy processing plant in Rochester in 2018. This experience, and an overall period of growth in the region, gives the community a sense of hope that they will be able to recover after the multiple crises in 2020. An interviewee appreciated,

"They are more resilient than others, they've got some great little communities like Girgarre, that had already been through a transition when Heinz left, and other small towns where some of the food manufacturers have closed or threatened to close, or jobs have gone. So, they've already had to bounce back in little pockets, but more broadly the Shire has been in a period of growth, both residential and visitor- visitor economy. So, you would hope that they were able to bounce back." (ESGF03).

### Governance

### **CROSS STATE COLLABORATION**

Cross border commissioners at both sides of the border (Victoria and NSW) are in place to advocate with the other state government on behalf of local border communities to make sure any restrictions or any ability to live and move across the border is logical and practical. The role of cross border commissioners is to be the "voice of the border" (ESGM13). NSW has had a border commissioner since 2014, but it took years of advocacy before a commissioner on the Victorian side was finally appointed two years ago (2018). Since then, many issues for border communities have been resolved through engaging key local stakeholders and decision makers from both sides of the border, such as the example below.

Example: The two-state responsible service of alcohol certificate requirements

"Previously, two Responsible Service of Alcohol (RSA) accreditations were required for staff who work on both sides of the NSW and Victorian border. This was a huge disincentive for working in the industry in a border community because of the cost of undertaking training twice, which in most cases was very similar (80-85%) except some legislative differences. This has recently been resolved with the assistance of the border commissioners whose approach was to engage community stakeholders as well as state decision makers from both states in a placed-based discussion about issues.

"... it sounds like the key for that was hearing the community impact and perspectives on the impact. [IV]

That's right, hearing it direct... and hearing the silliness of some of the stuff... one of the keys that when you do it at, you know, in Echuca-Moama or a place like that, it also sticks in their heads." (ESGM13)

### REGIONAL COMMUNICATION AND CRISIS MANAGEMENT

Another key resilience factor for tourism in the region is the presence of an "all hazards approach" crisis management plan for Murray Regional Tourism and a crisis-ready Tourism Crisis Management Group, which is made up of representative tourism stakeholders from MRT, state government, local government and the Regional Tourism Association (Murray Regional Tourism, 2018). This has enabled smooth implementation of strategies and communication plans during the crises as demonstrated below.

"I think everyone has done as much as they possibly could to communicate and get information out to businesses, visitors, in terms of now is not the right time to travel, or yes you can, et cetera. We've had a, a good structure across the region, in terms of making sure everyone's communicating. Our crisis management committee has been working well, we had a crisis management plan in place, which gives you base to work from. I suppose we'd had some other crises that we had learnings from, floods or other things." (ETAM08)

Whilst clear and timely information supply is a key resilience factor, there were notable differences between the satisfaction with communication from the state government during the bushfires and the pandemic. Communication received from multiple sources such as the emergency app and local council during bushfires was believed to be accurate, timely and helpful. In contrast, statewide communication of COVID-19 -related information was initially slow because of the novel and uncertain nature of the crisis, but has improved over the course of the pandemic,

"I suppose because everything was new and unknown...it seems to have improved as it's come along." (ETOM06).

The key vulnerabilities for the destination that can be prioritised for improvement as well as resilience factors that may be built on were identified in conjunction with the stakeholders who were interviewed in a focus group to suggest the priority foci for recovery and development of tourism in the destination. These priority areas are described in the next part of this report, after the summary table.

Table 39. Summary table of vulnerabilities and resilience factors in Echuca-Moama

Type of factor	Vulnerabilities	Resilience factors	
Tourism specific	<ul> <li>Fragmented vision/mission/strategy for tourism in the destination</li> <li>Seasonality</li> <li>Lack of community/ political recognition of importance and value of tourism for the towns</li> <li>Heavy reliance on tourism</li> <li>Quality of product (3 – 4*) lower price point- no room for decline of product</li> <li>Long period of growth → complacency/ lack of innovation</li> <li>Reliance on sales trade – post COVID-19 will decline due to online meetings</li> <li>Cross over in work/ funding bids of different tourism networks in the town</li> </ul>	<ul> <li>Leadership and planning: strategic and collaborative approach at regional level.</li> <li>Unique historic offerings in Port</li> <li>Great place to visit. Many offerings</li> <li>Self- contained</li> <li>Large capacity for events etc</li> </ul>	
Economic	BUSINESSES  Small businesses – lack of financial capital Financial reserves have been exhausted High running costs (insurance, utilities, rent) Personal liability for small business owners Challenges accessing support (border businesses)  OTHER  Potential future recession	Not solely economically reliant on tourism (there are also large agriculture, food processing and healthcare industries)	
Human and social	<ul> <li>Protential future recession</li> <li>Propensity to be a conservative community → harder to encourage innovation and possibly encourage to seek help post crisis</li> <li>Poor wellbeing as a result of pandemic stress (stress, low mood etc) has made businesses more vulnerable to scams and harder to engage in training/development</li> <li>Ageing population – many older business owners – harder to engage in development – need mentoring</li> <li>Less connected as a community than some smaller towns</li> </ul>	Very resilient/stoic community	

Type of factor	Vulnerabilities	Resilience factors
Physical and environmental	<ul> <li>Not many towns close on the NSW side – reliance on Victoria</li> <li>Infrastructure – slow rail access, poor internet</li> </ul>	
Governance	BORDER ISSUES	
	<ul> <li>Lack of collaboration across borders, competitive funding between states</li> <li>Tourism strategic direction and leadership at a local level is fragmented</li> <li>Poor tourism stakeholder engagement (state/national)— led to issues with information and support quality, speed and appropriateness during COVID-19</li> </ul>	Cross border collaboration
	<ul> <li>OTHER</li> <li>Poor lines of communication between tourism sectors, peak bodies and up to state government, made communication channels slow.</li> <li>Stretched resources at a local and state level – made responding to disaster more difficult (e.g., tourism staff stood down during COVID)</li> <li>Challenges in moving information because of privacy legislations</li> <li>State level pandemic plans in place as a result of previous pandemics (swine flu) but not tested or exercised</li> </ul>	Regional Communication and crisis management

Type of factor	Vulnerabilities	Resilience factors
Business – other	<ul> <li>Casual workforce</li> <li>Employees who are receiving Job Keeper or Seeker not wanting to return to work or moved to other more stable industries leading to skill shortages</li> <li>Risk management – informal or no risk management or continuity plans</li> <li>Rapid turnover of business ownership → New or lifestyle businesses - lack of experience to deal with or plan for crises</li> <li>Small businesses – hard to adapt, hard to reach to support and fewer support channels to find help</li> <li>Some inflexible/ unsupportive employers</li> </ul>	<ul> <li>Strategy and innovation – changes to hours, consolidation of businesses, online – but not all business</li> <li>Collaboration and connectedness between businesses</li> <li>Examples of supportive employers/ leaders</li> </ul>

#### Implications of the findings to Bright tourism system

A focus group was conducted with stakeholders who had be involved in the interviews to reflect on priorities for building resilience in Echuca-Moama. The key areas that were identified are outlined below.

#### Encourage more entrepreneurial behaviors of business owners\*

To survive during the ongoing COVID-19 pandemic, tourism businesses need to be able to transform their business models and product offerings to continue to make money when tourist visitation is decreased. The analysis showed that many businesses in the destination were resistant to or had trouble with innovation. An important resilience-building strategy moving forward will be finding ways to encourage these businesses, who were identified as being typically smaller, with owners who were older in age, to become more innovative.

A strategy that has had success in the past was identified as of celebrating the success of businesses who have innovated (possibly through newspaper articles, council website or business awards).

#### Enhance business collaboration\*

There are several tourism business networks in the destination and the ability for business owners to draw on these during the pandemic was seen as vital for support and information. However, it was suggested that there may be duplication of effort across groups, thus reducing their overall efficacy. A whole of destination strategy that includes an organisational structure and workplans for the various networks and councils and provides role clarity of the various tourism entities may reduce duplication of effort and enable all the relevant parties to work together more effectively.

#### Improve state/national recognition of border communities in policy \*

Some suggestions to achieve this were as follows:

- a. Ensure cross-border commissioners collaborate on documentation of the learnings from the pandemic for adoption in national recovery and future planning efforts. Such a review should be inclusive of the type of support structures and capabilities that are required to enhance readiness for future crises.
- b. Ensure that the diversity of cross-border communities is recognised and that nuanced policy responses are necessary for border communities. Each destination requires specific consideration.
- c. Undertake a review of the MOU between cross border commissioners to ensure relevance to crises management.
- d. Destination planning requires a holistic approach that is both inclusive of local stakeholders and also considers the destinations in a macro and global context. Explore strategic and information on crisis management as well as destination management in these destinations. Some examples are Tweed (Australia), USA Canada, Ireland Northern Ireland, Europe –where there are a lot of river border communities (very similar situation).

#### Cross border policy

- a. Undertake research on economic development structures that are in place in cross border tourism destinations worldwide.
- b. Prioritise the development of a whole of destination cross-border tourism strategy in order to improve the strategic cohesion of tourism planning.
- c. Contribute to the southern border recovery committee, which was established to escalate issues faced by border towns.

d. "The regional deal" in Albury Wodonga, is a project currently being undertaken looking at harmonization of cross-border towns. A recommendation of this project is to create a 'functional economic zone' with a centralised framework and council rather than two. It will be important to continue to examine the progress and outcomes of this project.

#### **Business Training**

a. While business training options are available, there is limited participation due to cost and relevance of the training on offer. Training providers are also limited in their capacity to deliver training due to small class sizes. Training needs and provision need to be considered as part of a 'whole of destination' tourism plan and delivered across borders.

#### 4.5. Case study comparison

Table 40 below compares the vulnerability and resilience characteristics of the two case study destinations.

The Table shows that there were many commonalities between the regions in terms of impacts, vulnerabilities and resilience characteristics. Vulnerabilities that were shared by both destinations relate to issues including:

- **Governance:** lack of clarity and consistency of COVID-related guidelines and information and a lack of specificity of this to the diverse tourism industry.
- **Tourism planning and marketing:** seasonality, economic dependence on tourism, skills and labour shortages.
- **Business management:** limited risk management and the depletion of financial reserves in businesses and destinations, which will reduce their ability to recover and grow following the crises.

Shared resilience factors identified in both destinations included being a great place to live, access to financial support from the government, the ability to innovate and the diversity of businesses. This was particularly enhanced by collaboration with other businesses and sharing knowledge and support with business networks. Strong and supportive leadership and engaged staff were also key features of resilient businesses, and those who had experienced crises in the past seemed to be more resilient.

At the same time, some clear distinctions could be seen due to geographic and environmental differences, the stocks of social, financial and cultural capital, the economic base of the region and most notably, the influence of being on a state border.

Table 40. Comparison of vulnerabilities for two destinations

Type of factor	Bright	Echuca-Moama
Tourism specific	<ul> <li>Seasonality</li> <li>Economic reliance on tourism</li> <li>Unsustainable growth in tourism</li> <li>Rising real estate prices and rent</li> <li>Intangible nature of tourism products</li> <li>Alpine resorts are high risk private investment.</li> </ul>	<ul> <li>Seasonality</li> <li>Heavy reliance on tourism</li> <li>Lack of community/ political recognition of importance and value of tourism for the towns</li> <li>Fragmented vision/mission/strategy for tourism in the destination</li> <li>Quality of product (3 – 4*) lower price point- no room for decline of product</li> <li>Long period of growth – complacency/ lack of innovation</li> <li>State-based tourism competition</li> <li>Reliance on sales trade – post COVID-19 will decline due to online meetings.</li> <li>Cross over in work/ funding bids of different tourism networks in the town</li> </ul>
Economic	<ul> <li>Savings used up at the expense of planned future investment opportunities.</li> <li>Potential future recession</li> <li>Insurance - unavailability or high cost</li> <li>Stretched resources.</li> </ul>	<ul> <li>Financial reserves all used up.</li> <li>Potential future recession</li> <li>High running costs (insurance, utilities, rent) - growing debt during pandemic with no revenue</li> <li>Small businesses – lack of financial capital</li> <li>Personal liability for small business owners</li> <li>Challenges accessing support (border businesses)</li> <li>Cost of water driving small dairies and local producers out of business</li> </ul>

Type of factor	Bright	Echuca-Moama
Human and social	<ul> <li>Anti-tourism sentiments in some parts of the local community</li> <li>Mental health challenges</li> <li>Border closures - social isolation of border town communities</li> <li>Complacent attitude of the community toward crises</li> <li>High percentage of older adults in the community (vulnerable to COVID-19)</li> </ul>	<ul> <li>Propensity to be a conservative community – harder to encourage innovation.</li> <li>Mental health (stress, low mood etc) has made businesses more vulnerable to scams and harder to engage in training/ development.</li> <li>Border closures - social isolation of border town communities</li> <li>Complacent attitude of the community toward crises</li> <li>Ageing population – many older business owners – harder to engage in development – need mentoring.</li> <li>Less connected as a community than some smaller towns</li> </ul>
Physical and environmental	<ul> <li>Inadequate medical services</li> <li>One road in, one road out</li> <li>Inadequate public transport options</li> <li>Failures in telecommunication infrastructure and services</li> <li>Stretched resources causing delays in restoration of infrastructure (roads, power)</li> <li>Natural setting – surrounded on all sides by forest.</li> </ul>	<ul> <li>Not many towns close on the NSW side – reliance on Victorian market.</li> <li>Old slow railway connections (being upgraded)</li> <li>Poor internet connectivity</li> </ul>

Type of factor	Bright	Echuca-Moama
Governance	<ul> <li>Guidelines and information: absent, ambiguous, inconsistent, untimely</li> <li>Lack of understanding of the tourism sector</li> <li>Stretched resources of local government made responding to crises challenging</li> <li>Alpine resorts statutory authority designation a disadvantage during a crisis</li> </ul>	<ul> <li>Issues with information and support quality, speed and appropriateness during COVID-19</li> <li>Poor tourism stakeholder engagement /understanding of tourism and border towns</li> <li>Stretched resources at a local and state level made responding to disaster difficult</li> <li>Border issues:         <ul> <li>Insufficient collaboration across borders, competitive funding</li> <li>Fragmented tourism strategic direction and leadership at a local level for whole destination</li> <li>Poor lines of communication between tourism stakeholders and government made communication channels slow</li> </ul> </li> <li>Challenges in moving information because of privacy legislations</li> </ul>
Business	<ul> <li>Family commitments: work-life balance challenges for all</li> <li>EMPLOYEES</li> <li>Difficult to get employees after COVID / employee and skills shortages</li> <li>Gig economy</li> <li>Risk management – informal or no risk management or continuity plans</li> <li>Alpine Resorts –very small window to make money and high overheads; downward spiral if businesses within it fail, acts as a feeder to local towns and big enough to impact the regional economy</li> </ul>	<ul> <li>Family commitments: work-life balance challenges for all</li> <li>EMPLOYEES</li> <li>Employees receiving Job Keeper or Seeker not wanting to return to work or moved to other more stable industries /skill shortages</li> <li>Casual workforce</li> <li>Risk management – informal or no risk management or continuity plans</li> <li>Rapid turnover of business ownership - New or lifestyle businesses - lack of experience to deal with or plan for crises</li> <li>Small businesses – hard to adapt, hard to reach to support and fewer support channels to find help</li> <li>Some Inflexible/ unsupportive employers</li> </ul>

Table 41. Comparison of resilience factors between two case study destinations

Type of factor	Bright	Echuca Moama
Physical and environmental	A great place to live natural surroundings	Great place to visit and live. Many offerings
Tourism specific	<ul> <li>Strong brand identity for the destination "Hero of the North East", cycling is huge</li> <li>Loyal customers who want to support destination.</li> </ul>	<ul> <li>Leadership and planning strategic and collaborative approach at regional level.</li> <li>Self- contained</li> <li>Large capacity</li> </ul>
Economic	<ul> <li>Financial support by government (Job keeper and Job seeker)</li> <li>Savings (financial risk management)</li> <li>Investment in projects to build resilience – e.g., sustainability plan for council. Bushfire recovery processes</li> </ul>	<ul> <li>Financial support by government (Job keeper and Job seeker)</li> <li>Not solely reliant on tourism (agriculture, healthcare)</li> <li>This is blank. Is something missing?</li> </ul>
Human and social	<ul> <li>Strong sense of community</li> <li>People helping each other</li> <li>Mental health services provided</li> </ul>	Very resilient community/ tourism business owners
Governance	<ul> <li>Progressive governance in region</li> <li>Good bushfire communication</li> <li>Regular updates from the premier during COVID-19</li> </ul>	Cross border commissioner who encourages stakeholder engagement and cross state collaboration

Type of factor	Bright	Echuca Moama
Business	<ul> <li>Adaptation/ innovation/ diversification</li> <li>Collaboration/connectedness</li> <li>Business leadership and staff engagement (engaged and supported</li> <li>Past experience of crises</li> </ul>	<ul> <li>Innovation – changes to hours, consolidation of businesses, online – but not all</li> <li>Collaboration and connectedness between businesses</li> <li>Many supportive employers/ leaders</li> <li>Past experience of crises</li> </ul>



## 5. DISCUSSION

The survey and case studies showed the devastating and varied impacts of the 2019-2020 bushfires and COVID-19 on Victorian tourism businesses and regional destinations. They both demonstrate the importance of considering each part of the tourism sector as distinct parts of one whole rather than just identical players in one system. The study also reveals that when understanding vulnerability and resilience to crises, tourism destinations are likely to share both commonalities and many distinct conditions and circumstances. This highlights the need for resilience planning to consider resilience factors and vulnerabilities at the destination level rather than policy made on a 'one-size-fits-all' basis.

The first aim of this research was to document the impact of the bushfires and COVID-19 pandemic on the Victorian Tourism Industry. This part of the discussion will describe the impacts on business revenue and the support they received followed by a description of impacts on staffing and lastly impacts on wellbeing.

#### 5.1. Business impacts

Sixty per cent of businesses were impacted by fire with only 15% in direct fire areas. The degree of impact was highly variable, but 39% of businesses were impacted by fire and suffered extreme losses in revenue. During the months of December 2019 - January 2020, 26% of businesses surveyed lost between 50 and 100% of their revenue. Other natural disasters such as storms, flooding or drought were also experienced by 18% of the businesses surveyed.

At the time of the survey, 84% of the tourism businesses had been forced to close at least once because of the COVD-19 pandemic restrictions. Between March and May 2020, approximately 55% businesses lost between 76% and 100% of their revenue, and this was irrespective of the size of business. The extent of the losses was similar in the months of June-July 2020 but after border closures were enforced in mid-July 2020, the extent of the impacts to businesses were more severe in the months of August and September, with approximately 65% of businesses, irrespective of business size, losing between 76% and 100% of their revenue. Businesses that had been affected by multiple disasters predicted that their recovery to original revenue levels would be significantly slower.

The study showed that other financial challenges included cashflow (71%), attracting and retaining customers (60%) and paying rent/utilities/staff and suppliers. Support provided by federal, state and local governments were perceived by businesses to be very important for businesses during the COVID-19 pandemic, with 89% receiving some form of support. Of those businesses who received support, Job Keeper (Federal) was the most accessed (91.4%), followed by Business Support funds (Vic Government – 73%). Other support packages were less frequently accessed. When looking to the next 12 months, 56% of businesses were worried about their business prospects, and small and medium-large businesses were significantly more worried about their business prospects than micro-sized businesses.

#### 5.2. Staff impacts

COVID-19 has had a severe impact on staffing which is potentially devastating for businesses long-term. Of the survey respondents, approximately 47% of the workforce were employed casually prior to COVID-19 and casual employees were the most affected by the pandemic. On average, 46% of the casual staff in the businesses surveyed were laid off permanently and 55% were furloughed temporarily. Only 30% of casual staff were on job keeper, compared to 70% of full-time staff. This translated into fears of attracting appropriately skilled staff in the survey, with only 30% of businesses feeling somewhat or very confident of their ability to attract and retain skilled staff in the next 12 months, which was echoed in the case studies. Analysis also showed that micro-sized business were significantly more confident than medium-large businesses in their ability to attract and retain staff in the next 12- months. This may have been related to these businesses typically relying less on casual staff. The case studies showed that this was a significant issue in the recovery period after COVID-19 restriction easing because many of the casual staff who were laid off moved onto other more stable, and potentially better paying industries or were not motivated or able to return because they were receiving either Job Keeper or Job Seeker. Destinations which are very seasonal and reliant predominantly on tourism had existing skills shortages and challenges in attracting skilled staff because of their 'gig economies' and these were exacerbated by the bushfires and COVID-19 pandemic. This means that there is currently a huge skilled labour shortage for the industry across the state, which needs to be addressed.

#### 5.3. Mental health

Poor mental health was another important impact seen in tourism businesses and the communities of the tourism destinations that were studied in this project. Nearly half the survey respondents (45%) had mental health concerns and 41% were concerned for their staff. The extent of the mental health issues is not only wide reaching but severe, with the average wellbeing score for the respondents using a World Health Organisation wellbeing scale, being 11.9, which would normally indicate further investigation of depression is required. This result is similar to another Australia-wide study conducted in March, when the population was in lock down (Dawel et al., 2020). Arguably, the results in the present study are more disturbing because they imply that in Victoria, tourism businesses and employees may have been experiencing significant mental ill-health for at least six months of the year. Research is already demonstrating worldwide mental health impacts of the pandemic due to social isolation, fear of spread of the disease, financial stress, not being able to be with loved ones when sick or dying (Otu, Charles, & Yaya, 2020). Disasters are known to have significant and long-lasting impacts on wellbeing and these can last anywhere from 2 years to 16 years or more (Luechinger & Raschky, 2009; Oishi et al., 2015).

This research also showed that respondents with low wellbeing also typically responded that their business had low planned and adaptive organisational resilience and vice versa. If nearly 50% of the businesses surveyed had mental health troubles then this may be linked to the ability of the business to adapt after the crises, which is a very important issue to address. Employee resilience has been shown to be associated with organisational resilience in other studies (Kuntz, Malinen, & Näswall, 2017; Prayag et al., 2020) and thus 41% of respondents worrying about their staff's wellbeing is also an important factor that needs to be addressed to assist businesses moving forward after these crises. It should be noted though that this is a correlation only and therefore impossible to determine which causes the other. It may be that the participants who had lower wellbeing were more likely to answer the resilience scale questions more pessimistically also. Longitudinal studies would be required to examine this in more detail. The findings above highlight the importance of adequate mental health services for tourism business owners and their employees to assist businesses in being able to adapt in the recovery phase following these crises.

The case studies also showed that whilst many were feeling overwhelmed and mentally strained, they did not all think they could access appropriate assistance. Two key barriers were lack of facilities and stoicism. There was some suggestion from the case studies that these services were not known about or that they did not exist in the regional areas that were studied. Poor health service infrastructure in regional areas is a known problem (Wakerman et al., 2008; Ziller, Anderson, & Coburn, 2010) and the COVID-19 pandemic has highlighted the importance of improving these services. Stoicism or not wanting to or feeling they could ask for help was described in both sets of case studies. This suggests that careful consideration of the availability, promotion and delivery of mental health services is required in the recovery period, especially in regional areas.

Another consideration in regional tourism destinations is to build personal resilience through a focus on building social capital. Communities with better social capital respond to crises more effectively with a less impact on wellbeing (Helliwell, Huang, & Wang, 2014), and this was also seen in the case studies where a number of business owners received support by their local community.

#### 5.4. Positive impacts of the crises

This study also explored the 'silver linings' or opportunities that businesses and destinations had identified as emerging as a result of the bushfires and COVID-19.

In the survey, more than half of the businesses had collaborated with or sought ideas from other businesses. The second most common identified opportunity was innovation. This was achieved through moving into or exploring new markets (39%) expanding online businesses (19%) as well as establishing or expanding home delivery (8%). 25% of businesses also spent time increasing their advertising and promotion. Some other benefits of the pandemic were identified in the case studies including spending more time with family, appreciating simple things in life and simplifying their business model.

## 5.5. Strategies for building organisational and destination resilience to future shocks

The second aim of this project was to explore strategies that may build resilience to future shocks. Because this study was conducted at one point during the COVID-19 pandemic rather than during and after it, we are unable to identify actual business factors that withstood the impacts of the crises more effectively than others. However, as an indication of the ability of the businesses to withstand the crisis and adapt we asked two types of questions. The first was a series of questions that informed two organisational resilience scores- planned resilience and adaptive resilience. These types of scale have been used in organisational resilience research in the past (Brown, Stevenson, Giovinazzi, Seville, & Vargo, 2015) and to some degree in tourism research (Prayag et al., 2020). Planned resilience is important for reducing impact of crises and adaptive resilience measures a business's adaptability, which is important for the recovery phase after a crisis. The second measurement taken was an assessment of predicted speed of revenue recovery, which is a proxy for combined impact and adaptability of the businesses assessed. In addition, factors that may make tourism businesses and destinations, as a whole, vulnerable or resilient to crises were examined in detail in the two regional cases studies. A discussion of key findings that have implications for future work, industry development, advocacy, governance and policy are discussed below.

#### Planning for crises

Planning for crises was shown to be a key issue that requires addressing at the business, destination and governance levels. At the business level, the survey and case studies confirmed that planned resilience (planning and testing risk management approaches and building collaborative relationships with other organisations) was related to the likely speed of financial recovery of tourism businesses but that some business types were less likely to employ such strategies than others. These included metropolitan business, sole traders, companies, and trusts (as opposed to not-for profit businesses), and all sector types were less likely than Government, tourism agencies and sport/camping and outdoor related businesses to have strong planning capacities. In addition, when asked specifically, the smaller the business, the less likely they were to have a risk management strategy in place.

The case studies gave insight into the planning strategies in regional tourism businesses and suggested that the higher degree of planned resilience seen in the survey in regional businesses may be associated with regional businesses being more likely to be impacted more regularly by crises due to their natural settings and thus are likely to have more strategies in place to cope with crises. However, it was also seen that often these are developed in the times immediately post crises when risk management is at the forefront of communities' minds but that with 'good times', they can become complacent.

Smaller businesses in the survey and the case studies were typically less likely to adopt formal risk management plans but those that did have them appeared more relaxed about their future prospects. The businesses interviewed that had risk management plans in place had typically been in the town during a previous major crisis. This experience meant that the importance of such strategies was understood as well as the need for having adequate financial reserves and maintaining good relationships with other businesses with whom they can share information. The smaller number of micro and small businesses with risk management strategies in place reflects what is seen in other literature and has often been attributed to their main resources typically being taken up by managing day-to-day issues, with little other capacity for preparedness planning or that crisis management strategies in tourism focuses on large businesses more than small ones (Cioccio & Michael, 2007). This was also seen in the case studies and additional factors that were barriers to risk planning were lack of knowledge or skills to plan and complacency, which was especially present a few years after a crisis. Given the benefits of risk management planning for resilience, it is important to address these barriers in the recovery phase after these crises and maintain impetus for planning in the years that follow.

Another important risk management strategy is having business insurance. The case studies identified that access to such insurance was a major problem following the bushfires because a state of emergency declaration had increased insurance premiums by between 100% and 400%, making it unaffordable for businesses. This is an issue that requires immediate resolution given the likelihood of future crises.

At the destination level, planning for crises was adequate but barriers to better planning included a lack of council resources as well as community complacency about risk management planning.

#### Adaptive capacity through skills development

The quality of the human capital in tourism businesses is vitally important for organisational resilience and the study indicated that various types of training will be a particularly important focus in the recovery period and to build future resilience (Gursoy & Chi, 2020; Caroline Orchiston et al., 2016; Prayag, 2020).

**Accreditation:** the study showed that businesses accredited through the VTIC Quality Tourism Framework are more likely to recover more quickly than those without accreditation. Whilst there is no internationally recognised accreditation program for improving resilience in tourism operators, such types of programs have been suggested as a means of ensuring that tourism businesses gain the skills necessary for coping effectively with crises, including business crisis management and preparedness, infrastructure and crisis protection systems. However, these suggestions were designed for large hospitality operators (Becken & Khazai, 2017).

Improvements in ICT have been a necessary investment as a result of the ongoing COVID-19 pandemic, with multiple periods of lock-down forcing business closures and halting tourist movement. ICT provides new ways to access information, facilitates communication and extends marketing channels for promoting tourism products and services (Hall & Williams, 2019). The results of the studies showed that many businesses upgraded digital strategies (42%), invested in new IT infrastructure (31%) and trained staff in IT Skills during the pandemic (23%). However, 39% of businesses still feel that they and their staff need additional training in digital and technical skills and the case studies highlighted that some businesses, especially micro businesses run by older people, were somewhat resistant to moving online and required mentoring and 1:1 training to assist with the transition.

Businesses were asked in the surveys what types of skills they felt they needed to develop. The skill that was lacking in nearly 50% of the respondents related to connecting more effectively with customers and included customer service, digital marketing, advertising, and negotiating service and marketing. The two other types of skills that were indicated highly were IT and digital skills, as mentioned previously, adapting to change (business planning, business models and risk management).

These findings suggest that when moving into the recovery phase and beyond, key areas of focus for training and development for tourism development are: training around risk management, which may be achieved through accreditation programs incorporating leadership, risk management and continuity planning; ICT training – with considerations for the most appropriate mode of delivery for different levels of expertise or confidence and marketing and connecting with customers.

#### Social capital, connections and collaboration

Tourism is characterised by its multifaceted nature, where interactions and collaboration with multiple stakeholders such as suppliers, intermediaries, or competitors (e.g., destination-wide marketing campaigns) and customers underpins the overall performance of the tourism value chain. Having access to networks of other tourism stakeholders as well as closer connections with other businesses allowing collaboration enables resource-constrained tourism firms to access knowledge and resources of their collaborative partners. It also facilitates the co-creation of new tourism products and marketing initiatives both inside and outside crises periods as well as the sharing of risks, which can maximise business innovation in times of crises (Ahangama et al., 2019; Chowdhury et al., 2019).

Various aspects of social capital were found to be important for organisational resilience in this study. The data from both studies show that greater perceived connectedness with other tourism operators and local community, as important for both planned and adaptive resilience and was a factor that contributed to a perceived faster recovery of revenue. In addition, collaborating with other businesses during the crises was strongly associated with planned and adaptive resilience. These results highlight the crucial role of feeling connected with business and local social networks (also called structural social capital (Nahapiet & Ghoshal, 1998) and also the importance of collaboration (which often comes about because of strong cognitive social capital or shared values and attitudes in times of crisis (Nahapiet & Ghoshal, 1998).

Further elaboration was given in the survey free response section and the case studies. When asked how the various types of connections helped during the crises, many respondents described collaboration with other businesses to innovate and adapt their businesses and offerings, sharing and comparing information when COVID-19 guidelines or support applications were uncertain as well as emotional support and feeling that they were not alone in their struggles. This occurred at a community level as well as with businesses in the destination and through online networks and membership of tourism associations like VTIC. This finding emphasises the importance of business connections and collaboration in times of crises, especially other businesses and the local community. It is important to develop these connections outside crises periods to ensure that they can be called upon when required.

#### Leadership and institutions

The survey and the case studies both found that strong leadership within tourism organisations, as well as at a destination and a governance level, were all extremely important factors that improved tourism business and destination resilience to crisis.

At the destination and state levels, there were many examples of vulnerabilities in leadership during the crises. The main problems related to delivery, consistency and relevance of pandemic information, guidelines and support for the tourism industry, which is multi-layered and diverse. The data suggests that this is due to insufficient stakeholder engagement with the tourism sector and border communities during the pandemic. Furthermore, inadequate collaborative working across the state agencies was also described as a factor contributing to the aforementioned problems. The following sections describe the issues in more detail.

Stakeholder engagement: The importance of stakeholder engagement is highlighted in the literature (Calgaro, Lloyd, et al., 2014) and specifically, in tourism research (Pyke, Law, Jiang, & de Lacy, 2018). Stakeholders are defined as 'any group or individual who can affect or is affected by the achievement of the organisation's objectives' (Freeman, 1984, p4). Tourism is a complex multistakeholder sector including tourists, industry, local community, government, special interest groups and educational institutions (Waligo, Clarke, & Hawkins, 2013). Many of the responses in the case studies identified fragmentated stakeholder communications, especially between tourism stakeholders and state and federal government departments, which resulted in a poor understanding of the requirements of the diverse tourism sector and across different tourism destinations. This then resulted in support and information that was not necessarily appropriate to the needs of the tourism sector and information that was not specific enough and too slow to arrive. Such fragmented engagement has been observed in the past (Pyke et al., 2018) and that improved engagement of the tourism stakeholders of a destination, improved risk management and recovery processes.

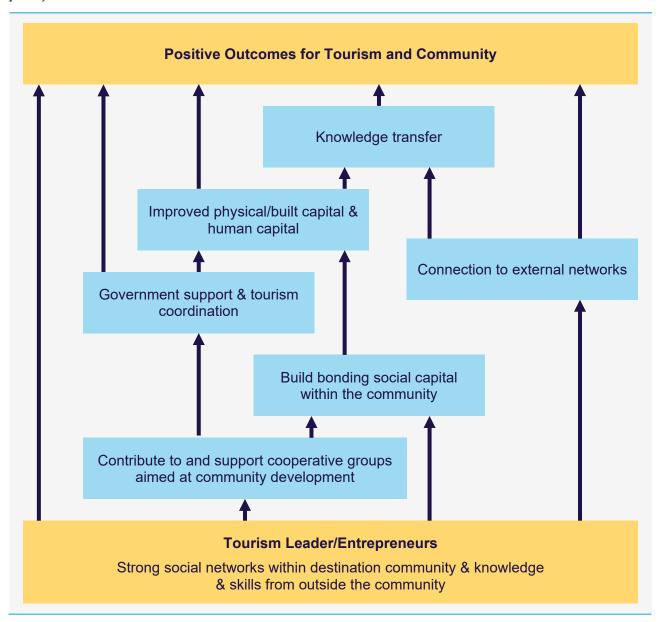
Cross- governance collaboration: There were a number of examples in the case studies highlighting that the weak collaboration between levels of government and government departments led to slow and sometimes inadequate information and support for tourism businesses. It has been recognised that cross-governmental collaboration is vital in times of crises and that maintaining relationships between different government stakeholders outside crises periods is imperative to enabling the trust that is required for collaboration to occur effectively (Deverell, Alvinius, & Hede, 2019). This was especially noted in the problems that arose with border closures, and poor collaboration between states. It was also noted that better collaboration between different state-based tourism organisations is important in the case of border tourism destinations.

**Tourism organisational leadership:** The survey showed that leadership was a vital element of business resilience and this was echoed in the case studies. Important leadership qualities that were recognised during the crises, and in particular the ongoing COVID-19 crisis, were having adequate skills and capacity to equip business for crises (planning (financial and risk), connecting with other businesses) and engaging and supporting staff. Being able to maintain staff during the COVID-19 crisis meant fewer issues with staff shortages after the crisis ended.

Destination strategic leadership is another key element that is vital for a resilience tourism destination and this includes a strategic vision for the destination, engagement and collaboration with all tourism stakeholders of the destination, and clear, concise and timely information during the event.

The findings from the case study are very similar to leadership factors that have been shown to be important for community development in a tourism setting. In an analysis of 47 case studies of tourism leadership and entrepreneurship in regional and rural tourism destinations, research has found that tourism leaders or community entrepreneurs had a positive impact on the wellbeing of the destination community (Moscardo, 2014). Leadership could come from tourism businesses or community development officers from local council. They tended to develop and use cooperative groups, empower others in the community to develop business opportunities, and use tourism as a tool for regional development. Leadership is a critical element in building social, human, cultural, and political capital. The study also identified that successful tourism leaders also required cooperative organisations and government support to function effectively. A diagram of effective tourism leaders from the study is displayed in the figure below (Moscardo, 2014).

Figure 24. Model of successful leadership in community tourism (From Moscardo, 2014, p364).



#### Climate change

Due to the reliance of tourism on the natural environment in tourism destinations across Victoria, climate change is a major stressor. For example, in Bright, visitation to the region is reliant on the operation of snow resorts and snow drought places the industry at risk. Unreliable snow seasons are already a major risk to the viability of the Alpine resorts. In addition, hotter temperatures lead to greater risk of bushfire and more severe weather events in the future which places further stress on these tourism destinations and increases the risk for the tourists who visit these areas. It is vital that tourism planning also considers measures for reducing its contribution to co2 emissions and is an active advocate in wider climate change policy development.



# 6. CONCLUSION AND IMPLICATIONS

The following two sections outline key recommendations for the case study destinations and the Victorian Tourism industry as a whole as the state moves into the recovery phase and 'COVID-normal'.

#### 6.1. Specific implications and strategies for case study destinations

Following the consolidation of the findings from the Victoria-wide survey and the case studies outlined in the discussion section (section 5), a number of recommendations are outlined below.

#### **Bright**

Tourism stakeholders in Bright were confident that tourists would return once restrictions eased. The major issues that need to be addressed to allow Bright to be more resilient to future shocks relate primarily to sustainable growth of tourism in the town, supporting mental health after COVID-19 and access to business insurance. Key foci for resilience building include:

- Workforce assessment: seasonality and rapid growth have led to challenges in attracting and
  retaining staff because of a scarcity of affordable accommodation and that most work is only
  offered on a temporary or seasonal basis. There is a need to explore affordable housing options
  coupled with strategies to support continuing employment opportunities. For example, job roles
  could be shared between ski-fields and Bright. A detailed workforce assessment is required for
  the region to address these issues to ensure labour supply to support recovery and tourism
  growth.
- Capacity building for businesses: Business operators need training in tourism product packaging to encourage greater spending and extended stays. Other capacity building programs include the need for risk and contingency planning and training of volunteers in the tourism information centres.
- A review of the accessibility and relevance of mental health services provision is required.
- **Insurance:** addressing unsustainable rise in insurance prices for businesses is vital to ensure business in the region are protected from future shocks.

#### Echuca-Moama

Stakeholders in Echuca were also quite confident that tourists would return following easing of restrictions but were concerned that depleted financial reserves may put the destination at risk of future disrepair. In addition, cross-border regulatory conditions are a major impediment to tourism development. A destination-wide tourism strategy is required to support tourism development and stronger industry collaboration both during and after the recovery phase to maximise the value of the combined destinations. Key foci for resilience building of tourism in Echuca-Moama are outlined briefly below.

- **Border issues:** Strategies for better collaboration between states are necessary to ensure that border tourism towns are not disadvantaged in terms of access to support in the future recovery periods and beyond. More detail of suggestions can be found in section 4, Case study 2.
- **Development of a long-term tourism strategy for Echuca-Moama:** This will require collaboration between Campaspe Shire and Murray River Councils. Examples of such strategies can be found for Albury Wodonga.
- Workforce shortages: the COVID-19 pandemic has led to workforce shortages across
  Victoria. A state-wide workforce assessment is recommended (see next section). Building
  capacity of business and engaging hard -to reach business owners in training and development
  (e.g., older business owners). It will be important to ensure that training offered can be
  collaborative across borders.
- Mental health: there is a need for accessible and relevant mental health services in the region.

#### 6.2. General implications for the visitor economy in Victoria

There were a number of state-wide vulnerabilities identified in this research and it is recommended that a Victorian recovery roadmap be developed to address short, medium and long-term priorities for the state to increase resilience to future crises. The key points to address are outlined briefly below:

#### Policy and planning

- Workforce shortages: Existing workforce shortages need to be addressed to support recovery and future tourism growth.
- Borders: The project identified that border issues are significant and not limited to Echuca-Moama.
   A significant project considering tourism issues for cross-border tourism towns is vital to support recovery in cross-border tourism destinations across Australia. To ensure that such a project is able to make meaningful change, decision makers from government agencies need to be involved.

#### Structural issues

- There is a need to assess existing mental health services, its relevance to the tourism industry, and ensure there is adequate provision to address state-wide mental health issues that have result from the COVID-19 pandemic. This is especially important in regional areas where there are lesser services.
- Appropriate support is required to enable businesses and destinations to maintain and develop tourism infrastructure. Most businesses and destinations will not have the financial capacity to do so as they have exhausted reserves to survive during lockdown. This process will require significant stakeholder engagement to ensure that it is appropriately scaled and accessible.

#### Business management /capacity building

- Collaboration and having access to business networks proved to be vital during the pandemic
  and development of opportunities to enable tourism businesses (especially those that are micro
  and small-sized) are necessary to build resilience for the future.
- There is a need across the industry, but particularly for micro and small businesses, to build digital capability.
- Resilience training in fields such as risk management, leadership and continuity planning, is currently offered through accreditation programs by industry associations such as VTIC. Efforts to increase small business access to this accreditation would be worthwhile.
- Consider and address behavioural barriers to partaking in capacity building or accessing assistance.

#### Research

- Diversity of tourism destinations: Each tourism destination in Victoria has its own unique context, vulnerabilities and resilience characteristics. The assessment of individual destinations would support tourism resilience and sustainability.
- There is little research investigating two crises occurring consecutively. Longitudinal research on the recovery process would increase the understanding of crisis resilience in tourism.

In conclusion, despite being heavily impacted by the 2019/2020 bushfires and the COVID-19 pandemic, the Victorian tourism industry has the potential to 'build back better' by addressing the vulnerabilities and strengthening the resilience factors in a systematic and strategic roadmap for short, medium and long-term priorities.



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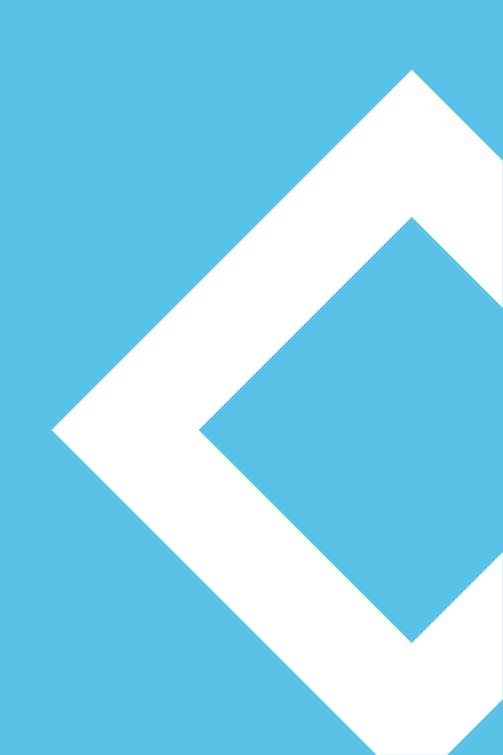
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#### **APPENDIX 1: TOURISM BUSINESS SURVEY**

#### Questionnaire

Building the resilience of tourism destinations to disasters: The 2020 Victorian bushfires and COVID-19

Dear tourism business owners,

The two unprecedented crises in 2020 – devastating bushfires and COVID-19 pandemic, have severely impacted the Victorian tourism industry. As part of our project "Building the resilience of tourism destinations to disasters: the 2020 Victorian bushfires and COVID-19 pandemic", led by Dr Joanne Pyke, we are inviting you to participate in our survey. The aims of this survey are to assess the vulnerability and resilience of Victorian tourism businesses, to understand what support has been useful, what is still needed and what approaches might be used to build resilience to risks and disasters in the future.

In delivering this project, Victoria University has partnered with the Victoria Tourism Industry Council (VTIC). The results will be shared with VTIC to assist them in their advocacy efforts to support the industry's pathway to recovery and to develop a crisis management strategy for the future.

All information provided will remain anonymous and confidential. The survey should take you approximately 10 minutes to complete. If you have any questions regarding the survey, please contact our project manager Dr Gabby Lindsay-Smith via gabrielle.lindsaysmith@vu.edu.au or VTIC representative Mr Chris Porter cporter@vtic.com.au for assistance.

#### Sincerely,

Victoria Tourism Industry Council & School for the Visitor Economy, Victoria University, Melbourne

By completing this survey I certify that I am at least 18 years old and that I am voluntarily giving my consent to my responses being used as part of the study: "Building the resilience of tourism destinations to disasters: The 2020 Victorian bushfires and COVID-19" being conducted at Victoria University by Dr Joanne Pyke and her team.

I agree to proceed to the questionnaire

End of Block: Block 6

## SECTION 1: BASIC BUSINESS INFORMATION

### Q1. Which tourism region does your business operate in?

Daylesford and Macedon Ranges

Geelong and the Bellarine

Gippsland

Goldfields (including Bendigo, Ballarat)

Grampians

Great Ocean Road

**High Country** 

Mornington Peninsula

Phillip Island

The Murray

Yarra Valley and Dandenong Ranges

Greater Melbourne

Multiple regions: Please specify

# Q1a. Please indicate the postcode(s) of your business (if you operate in multiple locations you can add up to three postcodes)

Postcode 1 <sub>.</sub>	
Postcode 2	
Postcode 3	

### What sector does your business operate in? (Mark all that apply).

Accommodation

Attractions

Food/Beverage

Tours/Transport

**Events** 

Retail

Other. Please specify

#### Number of persons working for your business before bushfires/COVID-19 (total number not FTE)

0 to 4 employees

5 to 19 employees

20 to 199 employees

200 employees or more

## As of August 2020, how many years had your business been in operation under current ownership?

Less than 1 year

1 year to 4 years

5 years to 9 years

10 years or more

### Which one of the following best describes your business type?

Sole trader

Partnership

Company

Trust

Government owned agency

Independently owned franchisee

Business is owned by a larger Australian or international business – such as part of a chain

Other please describe

In terms of accreditation and training programs, has your business ... (Mark all that apply)

been accredited by VTIC, through the Quality
Tourism Framework Program

completed other accreditations (not from VTIC). Please specify .....

completed business development training programs. Please specify .....

We haven't undertaken any programs

The following 3 questions displayed if "been accredited by VTIC, through the Quality Tourism Framework Program" was ticked

## Q1b. What type of Quality Tourism Accreditation do you hold? (Mark all that apply).

**Quality Tourism** 

Other Sustainable Tourism

Visitor Information Centre Accreditation

Camp and Adventure Activity

Unsure

Has your business completed "COVID-19 Clean Practicing Business" module?

Yes

No

Q6c How many years have you been accredited?

#### **SECTION 2: ORGANISATIONAL RESILIENCE**

Please indicate how much you agree or disagree with each of the following statements about your business capabilities.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
We are always mindful of how a crisis could affect us.					
We believe emergency plans must be practised and tested to be effective.					
We are able to shift rapidly from business-as-usual to respond to crises.				0	
We build relationships with organisations we might have to work with in a crisis					0
We give clear direction to our staff in a crisis.		0	_		
People in our organisation are committed to working on a problem until it is resolved.					
Our organisation maintains sufficient resources to absorb some unexpected change					0
If key people were unavailable, there are always others who could fill their role.					
There is good leadership within our organisation to deal with a crisis.		0			0
We are known for our ability to use knowledge in novel ways					0

#### Do you have a risk management plan for your business?

Yes

No

#### Thinking about the next twelve months, how confident do you feel about

	Extremely worried	Somewhat worried	Neither confident nor worried	Somewhat confident	Extremely confident
Your business prospects					
Attracting and retaining appropriately skilled staff					

#### **SECTION 3: BUSINESS OPERATIONS AND PERFORMANCE**

Before we move on to COVID-19, thinking of the last 12 months, did your business revenue suffer as a result of (Mark all that apply).

The bushfires

Storms, hail, or flooding

The ongoing drought

Other. Please specify

Our revenue was not affected.

The following options were only displayed if the respondent indicated that they had been impacted by the crisis.

Q1a Please rate how significant the revenue losses were as a result of the bushfires/ storms/ drought/other

Not at all

Slight

Moderate

High

Extreme

Did your business close for a period as a result of COVID-19?

Yes

No

The following question was displayed if the business closed as a result of COVID-19

Q1b Which one of the following statements best describes your business closures during the COVID-19 period?

We closed but have partially reopened

We closed but are now fully reopened

We have closed our business temporarily – but we plan to re-open when feasible

We have closed our business permanently due to COVID-19 situation

We have closed our business permanently – unrelated COVID-19

Other - specify

If businesses closed the following questions were asked:

For how long were you closed?

The following question was asked if the business had not closed:

Which one of the following statements best describes the operation of your business during the COVID-19 period?

We have maintained full capacity

We have stayed open but are trading at limited capacity

Other- specify .....

Compared to the same time last year, what do you estimate to be the percent reduction in revenue of your business.

	0%	1 - 24%	25 - 50%	51 - 75%	76 - 100%
Dec - Jan					
Mar - May					
Jun - Jul					
Aug - Sep					

How long do you think it will take for your revenues to return to pre-COVID-19 levels?

Less than 1 month

1 to 2 months

3 to 6 months

7 to 12 months

Up to 2 years

More than 2 years

Please answer the questions below about your staffing arrangements

	Casual	Part-time	Full-time
Number of staff prior to COVID- 19			
Number of staff permanently laid off or made redundant as a result of the COVID-19 crisis			
Number of staff temporarily laid off or furloughed as a result of the COVID-19 crisis			
Number of staff on Job-Keeper			

Do you have any other comments about staffing arrangements during Covid-19?

What are the challenges your business faces due the COVID-19 situation? (Mark all that apply).

Pay rent / utilities

Pay and support staff

Pay suppliers

Cashflow

Attract / retain customers

Cancellation of orders/bookings

Bank/credit provider has been unsupportive

Access to suppliers/stock

Mental health concerns, for you

Mental health concerns, for your staff

Fear of catching the virus at work

Other challenges? Please specify....

None of these

Did you receive government or state financial support during the COVID-19 crisis?

Yes

No

The Q17 was answered yes, the following questions were asked.

## Q1a What Federal Support package(s) did you receive? (Mark all that apply.)

**JobKeeper** 

Apprentices and Trainees

Bank Loan Repayment Deferrals

COVID-19 Relief and Recovery Fund

Coronavirus SME Guarantee Scheme

Credit and Loans

**Export Market Development Grant** 

Instant Asset Write-off

Sole Trader Relief

Others (please specify)

My business did not receive Federal Support.

What State Support package(s) did you receive?

(Mark all that apply.)

Business Support Fund (\$10k or \$5k)

Commercial Tenancy Relief Scheme

Regional Tourism Accommodation Support Program/ Accommodation Refund Scheme

Hospitality Grants

Land Tax Relief

Licensed Hospitality Venue Fund

Live Music Venues

Motor Vehicle Duty Relief

Night-time Economy Business Support Program

Outdoor Eating and Entertainment Package

Payroll Tax Relief

Seasonal Vehicle Registration

Sole Trader Support Fund

Test Isolation Payment

Others (please specify)

My business did not receive State Support.

How important was the support for your business?									
	Not Important	Of little importance	Of average importance	Very important	Extremely important	N/A			
Federal Support Package(s)					0				
State Support Package(s)					0				
Local Council Support Package(s)									
If no support had be What is the reason (select all tha	you have no	• .							
My business did not		y packages							
The application process was too complicated									
Too much time and effort to apply; amount of funding received is little									
Unclear instructions / guidelines to apply									
Others (Please specify)									

Please detail any support packages you have received from your Local Council (leave blank if you did not receive any support from your Local Council).

#### **SECTION 4: PREPARATION FOR THE FUTURE**

Please indicate how connected (networks/collaboration) you are to the following (sharing information, knowledge and resources):

	Not at all connected (1)	Somewhat connected (2)	Moderate (3)	Connected (4)	Strongly connected (5)
Industry associations (e.g., VTIC, Regional Tourism Board, Local Tourism Association , Visit Victoria)			0		
Victorian Chamber of Commerce and Industry					
Local Government					
Local community					
Other tourism operators/businesses		0			0

How did the above collaboration / connection assist your business during the crisis (e.g., providing support, direction, planning, sharing knowledge)?

During the COVID-19 pandemic, were any of the following information and communication strategies implemented? (Mark all that apply).

Introduced or changed a digital business strategy

Invested in new digital technologies or infrastructure

Introduced new training programs to upskill staff

Rewarded individuals or teams involved in the successful introduction of digital technologies or processes

Contracted external IT consultants

Purchase of digital technology or services

Upgraded cybersecurity software, standards or protocols

Measured the contribution of digital activities to overall business performance

None of these

In which of the following ways, if any, has your business changed to create new opportunities as a result of the COVID-19 situation? (Select all that apply).

Collaborate with or seek ideas from other business owners or business association

Moved into or explored new markets and products

Increased advertising and promotion

Closed our 'shopfront' to customers and relied on other approaches using online platform and/or digital technologies

Established or expanded home delivery mode

Moved business from indoors to outdoors

Established or expanding online business

Other ways? Please specify

None of these

**SECTION 5: ABOUT YOURSELF** 

What is your position?

Manager

**Business Owner** 

CEO

Other (please specify)

What is your age?

Less than 30 years old

30 to 39 years old

40 - 49 years old

50 to 59 years old

60 or more years old

What is your gender?

Male

Female

Prefer not to say

How long have you been working for the business?

Less than 3 years

3 to 5 years

6 to 10 years

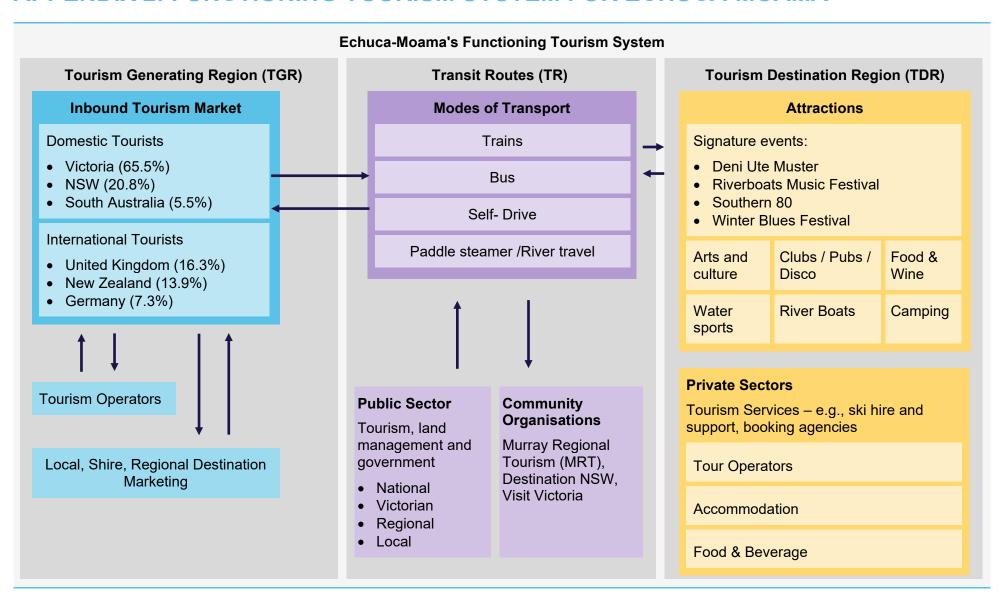
11 to 20 years

More than 20 years

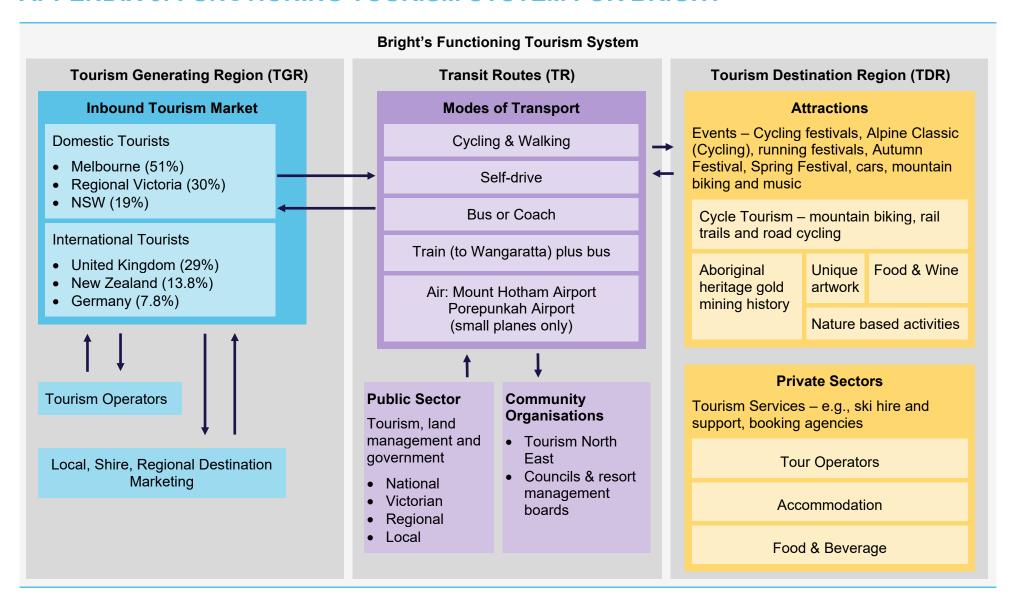
We are aware that recent COVID-19 restrictions have been very challenging for everyone, and especially business owners in Tourism. We would appreciate if you could complete the following 5 questions, which have been designed by the World Health "Please respond to each item by marking one box per row, regarding how you felt in the last two weeks."

	All of the time	Most of the time	More than half the time	Less than half the time	Some of the time	At no time
I have felt cheerful in good spirits	0			_		
I have felt calm and relaxed						
I have felt active and vigorous	0			0		
I woke up feeling fresh and rested	0					
My daily life has been filled with things that interest me		0	0	0		

#### APPENDIX 2: FUNCTIONING TOURISM SYSTEM FOR ECHUCA-MOAMA



#### **APPENDIX 3: FUNCTIONING TOURISM SYSTEM FOR BRIGHT**



Functioning tourism system for Bright

# APPENDIX 4: ORDERED PROBIT REGRESSION – FACTORS ASSOCIATED WITH SPEED OF RECOVERY (PART A)

Parameter		В	Std. Error	Hypothesis To			
				Wald Chi- Square	df	Sig.	Exp(B)
Threshold	[Speed of recovery =1]	-1.039	.4760	4.760	1	.029	.354
	[Speed of recovery =2]	369	.4684	.619	1	.431	.692
	[Speed of recovery =3]	.658	.4679	1.978	1	.160	1.931
	[Speed of recovery =4]	1.328	.4756	7.798	1	.005	3.774
	[Speed of recovery =5]	2.240	.4953	20.459	1	.000	9.395
Firm size		391	.1030	14.401	1	.000	.676
Firm age		192	.0832	5.322	1	.021	.825
Risk manag	ement	.501	.1782	7.902	1	.005	1.650
Good leadership		.211	.0995	4.486	1	.034	1.235
Local community		011	.0704	.026	1	.873	.989
Tourism op	erators/businesses	.080	.0764	1.085	1	.297	1.083
Accredited	by VTIC	.361	.1662	4.713	1	.030	1.434

# APPENDIX 5: ORDERED PROBIT REGRESSION – FACTORS ASSOCIATED WITH SPEED OF RECOVERY (PART 2)

Parameter		В	Std. Error	Wald Chi- Square	df	Sig.	Exp(B)
	[Speed of recovery =1]	984	.5710	2.967	1	.085	.374
	[Speed of recovery =2]	493	.5669	.755	1	.385	.611
Threshold	[Speed of recovery =3]	.533	.5674	.883	1	.347	1.704
	[Speed of recovery =4]	1.243	.5741	4.688	1	.030	3.466
	[Speed of recovery =5]	2.194	.5865	13.994	1	.000	8.972
Business size		442	.1713	6.670	1	.010	.643
Business age		207	.0868	5.681	1	.017	.813
Risk manage	ement	.523	.1897	7.609	1	.006	1.688
Multiple Disaster		392	.1670	5.515	1	.019	.676
Planned Resilience		.254	.1214	4.387	1	.036	1.289
Adaptive Resilience		.016	.1191	.018	1	.893	1.016
Collaboration with local community and tourism operators		.116	.0621	3.467	1	.063	1.123