



THE BACKBONE OF REGIONAL AND RURAL ECONOMIES: SMALL BUSINESS AND COMMUNITY RESILIENCE

A REPORT FOR IAG

November 2021





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CEO Forward

IAG – through our leading brands NRMA Insurance, CGU, WFI, SGIO and SGIC – has been providing insurance protection to people and businesses around Australia for more than 160 years.

Helping our customers when a natural disaster strikes – from bushfires and cyclones to storms and flooding – is what we do best. We see first-hand the devastating impact these events have on Australians, their businesses and communities, and this is why we have been studying the changing climate for nearly two decades.

We use our data and expertise to contribute to climate science, advocate for greater investment in disaster resilience and help people and communities prepare and adapt for extreme weather.

Natural disasters impact small business acutely – especially those in our regional and rural areas – and this can have lasting effects on the economic and social well-being of the communities in these areas. In this report, we look at how natural disasters affect small business and

the critical role insurance plays in supporting their recovery – and the community’s recovery. We know that small business took the biggest economic hit following the Townsville floods and Black Summer bushfires in 2019 and 2020, but we also know that small businesses with insurance were able to recover faster.

We’re always on the ground after a disaster to support customers face-to-face and we also try to support those communities impacted beyond insurance claims by using local tradespeople and suppliers, where we can, to carry out repairs and help rebuild.

Severe weather is becoming more frequent and intense, and this report demonstrates how important it is for business to prepare and become more resilient. Small business plays a vital role in Australia’s economy and is essential to the health and prosperity of our regional and rural areas.



Nick Hawkins

Managing Director and CEO

IAG

Executive summary

Bushfires, floods, and storms are a part of the Australian experience. In recent years they have become more common and the impacts, more intense. Moreover, in the future, climate change will mean that extreme events will become more frequent and intense. This presents a challenge to communities that are exposed to natural hazards.

Insurance is key for individuals, businesses, and communities to enable a rapid process of recovery after disaster strikes. However, a large portion of businesses located in hazardous zones are not adequately insured and in some cases without insurance. This poses an economic threat to regional communities as their underinsurance may leave businesses and the wider economy struggling to recover.

This report focuses on the impacts of natural disasters on small businesses and the role insurance plays in economic recovery.

Small businesses are a vital part of the Australian economy. In 2018-19, small businesses contributed \$418 billion to GDP, making up just short of a third of total GDP. Furthermore, employing over 4.7 million people, small businesses are Australia's largest employer.

Small businesses play an even more vital role in regional and remote communities within Australia, making up the largest portion of businesses. They contribute economically in terms of goods and services, employment opportunities, the local tax base, opportunities for local investment, and entrepreneurship.

Furthermore, small businesses play a role in social and community cohesion as they promote community activity and local identity, and support neighbouring businesses.

This report focusses on the Townsville floods in 2019 and the 'Black Summer' Bushfires in 2019-20 to assess the impact of natural disasters to small businesses as well as the role that insurance plays in the economic recovery of the regions. Both disasters caused immense damage to the Australian economy. Townsville experienced monsoonal rainfall declaring many parts of Queensland as disaster zones. Similarly, the 2019-20 bushfires saw unprecedented levels of bushfires spanning multiple states across Australia.

With the help of insurance payouts, the affected economies as well as small businesses were able to recover at a faster rate and return to previous levels of economic activity. SGS has modelled two scenarios to demonstrate this. The first scenario assumes the stimulus of insurance claims and recovery activity flowed through the economy and the second scenario assumes there was no stimulus. This approach allows the impact of insurance to be isolated for each case study. By comparing the two cases, it shows the importance of small business insurance in terms of speed of recovery and the depth of economic impact.

Small business impacts and the role that small businesses have in the local economy and impact of disaster is determined using a combination of ABS datasets on Australian businesses and industry value add, and regional GDP data along with insurance claims payout data to determine the impact of insurance on recovery of small businesses and the local economy.

On average, between 65% and 72% of total economic impact on businesses from the floods and bushfires is attributed to small businesses. This highlights the importance of small businesses having adequate insurance cover. Furthermore, insurance payouts enabled hard hit areas including

Townsville, Gippsland East and Shoalhaven to shorten the period needed to return to pre-disaster levels of economic activity by years.

The analysis shows that households and businesses should acquire an adequate level of insurance. Businesses need to have a comprehensive understanding of the risks they face under their individual circumstances. For small businesses this is especially important as they often do not have the means to withstand periods of reduced customers or staff unavailability.

Small businesses are often un- or under-insured, and aren't always aware of their risk exposure. Also, they do not always realise that apart from direct damages, the costs of business interruption may be as high or even higher than the direct damages.

Being prepared for extreme events is increasingly important. For Government it is a priority to inform and educate businesses and households about present day and future risk exposure to natural hazards, and what they can do to protect themselves. In addition, and this was also highlighted as part of the Royal Commission into the 2019-20 bushfires, there is a need to ramp up investment in risk mitigation. This helps in reducing the exposure of businesses and households to natural hazards and helps in reducing and preventing damages and interruption.

With a changing climate and growing population, more Australian communities are being exposed to more intense and more frequent extreme events. Insurance plays a vital role but investing in preparedness will be essential. Overall, reducing emissions will contribute to reducing risk in the very long term.



01 Introduction

01 Introduction

1.1 Background

Bushfires, floods, storms, and tropical cyclones are part of the Australian experience. But natural disasters are happening more frequently and with more intensity. With climate change and population growth, this exposure will only increase if nothing is done to manage these risks.

Regional communities can be particularly exposed to natural disasters. The typically smaller rural and regional councils often have limited ability to adequately protect against natural hazards without external support.

Small businesses form the backbone of rural and regional communities. In 2018-19, small businesses contributed \$418 billion to GDP, making up just short of a third of Australia's GDP. Employing over 4.7 million people, small businesses are Australia's largest employer. In regional and remote communities, small business is even more prevalent.

Natural disasters can have a devastating impact on regional and remote communities, and their ability to recover may be jeopardised.

Insurance payouts play a vital role in the economic recovery after disaster

strikes. Small businesses are not always appropriately insured for the risks they are exposed to.

However, small businesses often do not have insurance or have incomplete coverage. For example, a survey of Townsville small business in June 2019 found that 9 per cent of small businesses did not have any of the insurance types to deal with the flooding event. Of the small businesses without flood cover insurance, two thirds believed their business was not in a flood zone, while another 20 per cent chose not to have it because the business did not operate out of the ground floor or basement. 27 per cent said it was too expensive to obtain the insurance. Furthermore, a report by the Victorian Government found that only 46% of Victorian households were adequately insured against the potential impacts of disasters, with 28% being underinsured and 26% uninsured.

Using two case studies, the Townsville floods of 2019 and the 'Black Summer' Bushfires of 2019-20, this study assesses the impact of natural disasters to small businesses, as well as the role that insurance plays in the economic recovery of the regions.

1.2 Method

In modelling the impacts that insurance has had on the affected economies, SGS has created two scenarios of GDP for the regions impacted by these disasters in its analysis. The first scenario assumes the stimulus of insurance claims and recovery activity flowed through the economy and the second scenario assumes there was no stimulus. This approach allows the impact of insurance to be isolated for each case study. By comparing the two cases, the importance for small businesses in having adequate insurance is made clear through the differences in recovery speed and depth of damage following a natural disaster.

Small business impacts from natural disasters and the role that small businesses have in the local economy are determined using a combination of ABS datasets on counts of Australian businesses by industry, regions, and grouped by the number of employees, and using ABS industry value added data by business size and industry.

For small businesses, the analysis focuses on the year the natural disaster occurred, which is 2019 for the Townsville floods and 2020 for the 'Black Summer' bushfires. The reason for this is that the months immediately following the disaster are when small businesses will bear the greatest economic loss from damage caused by the natural disaster.



02 The importance of small business in regional communities

02 The importance of small business in regional communities

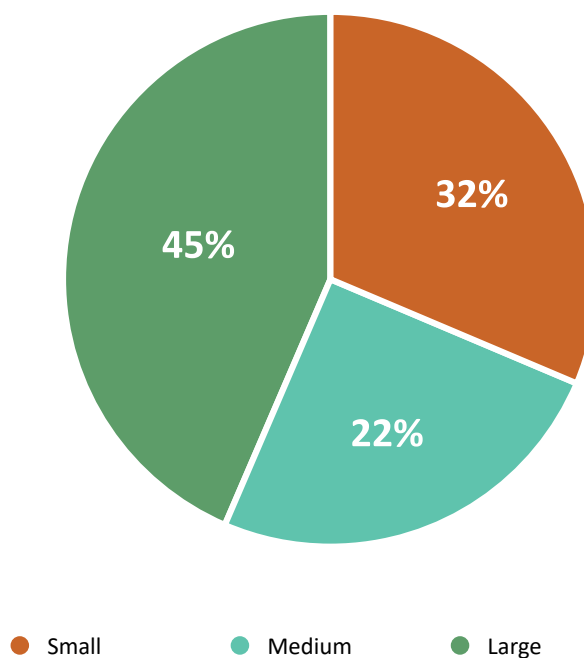
2.1 Economic contribution of small business

Small businesses are a key component in the Australian economy, with a greater role in sustaining regional and remote communities. The Australian Bureau of Statistics (ABS) defines small businesses as 'all entities that are independent and privately owned, are managed by an individual or a small number of persons and have less than 20 employees'. SGS has applied this definition of small business throughout this report.

SMALL BUSINESSES IN AUSTRALIA

Small businesses make a significant contribution to the Australian economy. In 2018-19 small businesses contributed almost \$418 billion to Australia's GDP, making up just short of a third of total GDP in that financial year – as shown in Figure 1.

FIGURE 1: CONTRIBUTION TO GDP BY BUSINESS SIZE, 2018-19

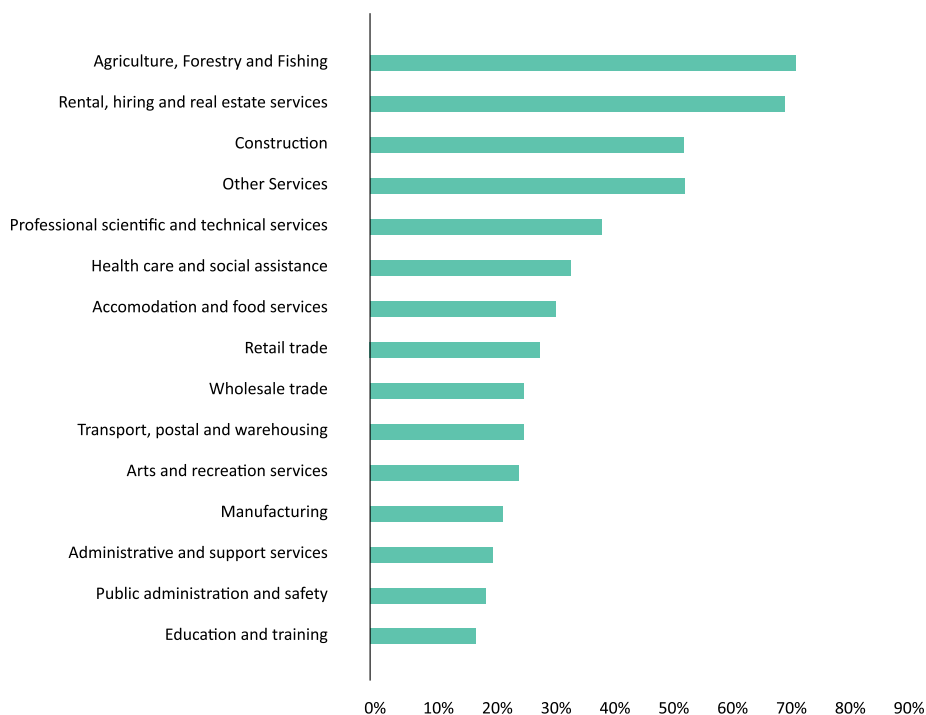


Source: Australian Small business and Family Enterprise Ombudsman - Small Business Counts 2020¹

¹ Australian Small business and Family Enterprise Ombudsman – Small Business Counts 2020, <https://www.asbfeo.gov.au/sites/default/files/ASBFEO%20Small%20Business%20Counts%20Dec%202020%20v2.pdf>

In certain industries, small businesses also contribute significantly more to GDP relative to other business sizes. There were greater contributions in 2018-19 from the Agriculture, Forestry and Fishing sector, as well as the Rental, Hiring and Real estate services, and the Construction sector. Other services and Professional Scientific and Technical services also have a higher than average representation of small business. Their contributions, along with other industries, are shown in Figure 2.

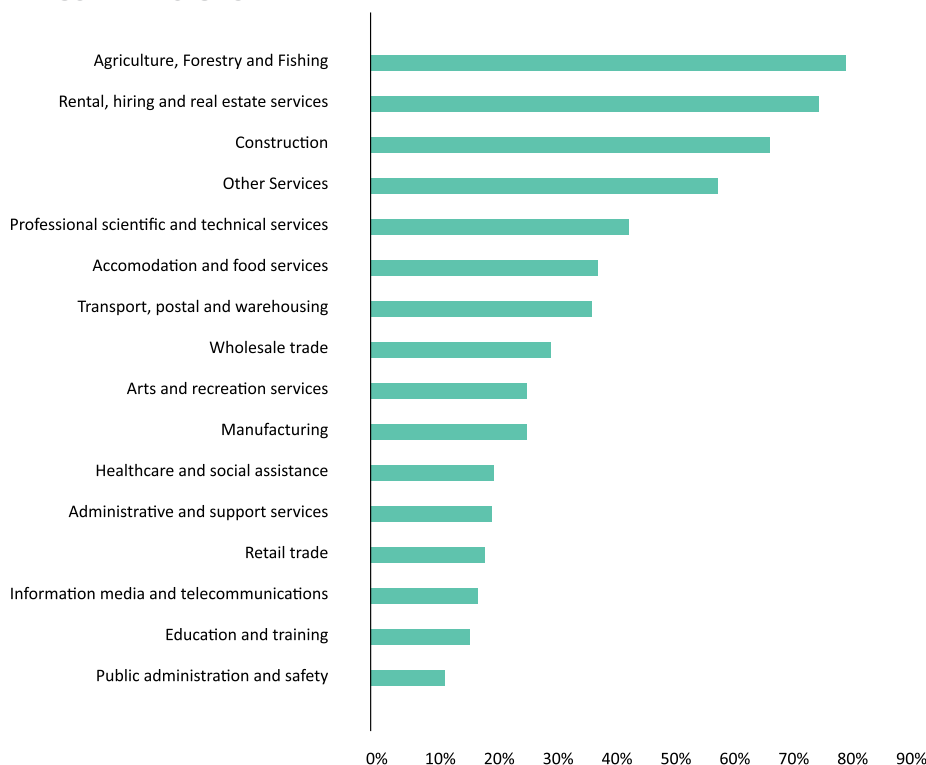
FIGURE 2: SMALL BUSINESS CONTRIBUTION TO GDP BY INDUSTRY - 2018-2019



Source: Australian Small business and Family Enterprise Ombudsman – Small Business Counts 2020

Small businesses also make up a significant portion of Australia’s employment, employing over 4.7 million people, making it Australia’s largest employer.

FIGURE 3: PORTION OF EMPLOYMENT MADE UP BY SMALL BUSINESS BY INDUSTRY – 2018-19



Source: Australian Small business and Family Enterprise Ombudsman – Small Business Counts 2020

SMALL BUSINESS IN REGIONAL AUSTRALIA

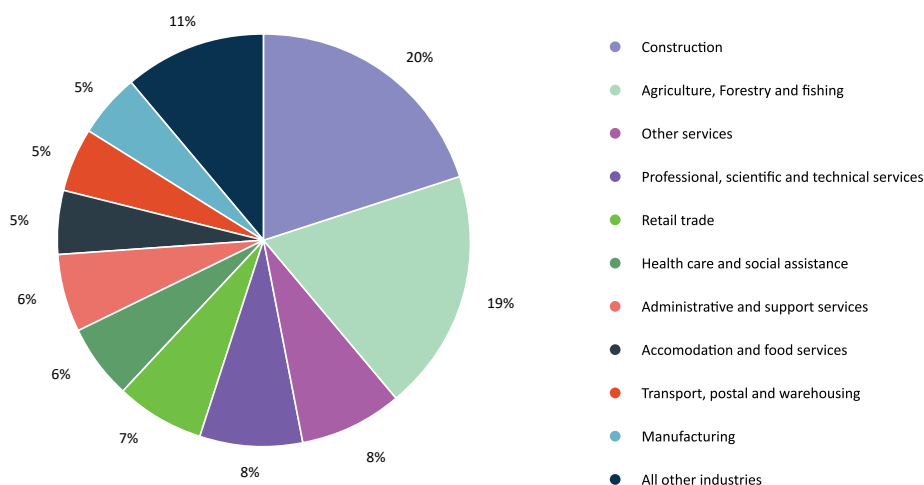
The 2016 Australian Census provides data regarding small businesses in Australia. SGS uses includes the following ABS classifications in our definition of 'regional Australia':

- Inner Regional Australia²
- Outer Regional Australia³
- Remote Australia⁴
- Very Remote Australia⁵

Small businesses in regional Australia are dominated by two sectors: Construction, and Agriculture, Forestry and Fishing. These two industries together make up close to 40% of all small businesses in regional Australia – as shown in Figure 4. In addition, Other services, and Professional, Scientific, and Technical services are relatively important. Industries with a very low share of small business employment (i.e. less than five per cent) have been excluded from this figure⁶.

Figure 5 illustrates the occupational breakdown of small regional businesses in 2016. The most common types of occupations are managers, technicians and trades workers, and professionals in that order. Other categories had a similar level of employment and were relatively lower than the top three occupations.

FIGURE 4: SMALL REGIONAL BUSINESS EMPLOYMENT BREAKDOWN BY INDUSTRY 2016



Source: ABS Census, 2016

FIGURE 5: OCCUPATION BREAKDOWN OF SMALL REGIONAL BUSINESSES 2016



Source: ABS Census, 2016

² Inner Regional Australia is defined in the remoteness structure as those areas where geographic distance imposes some restriction upon accessibility to the widest range of goods, services and opportunities for social interaction e.g. Tamworth, Ballarat, Rockhampton

³ Outer Regional Australia is defined in the remoteness structure as those areas where geographic distance imposes a moderate restriction upon accessibility to the widest range of goods, services and opportunities for social interaction e.g. Broken Hill, Horsham, Cairns

⁴ Remote Australia is defined in the remoteness structure as those areas where geographic distance imposes a high restriction upon accessibility to the widest range of goods, services and opportunities for social interaction e.g. Cobar, Cooktown, Port Lincoln

⁵ Very Remote Australia is defined in the remoteness structure as those areas where geographic distance imposes the highest restriction upon accessibility to the widest range of goods, services and opportunities for social interaction. Parts of Australia classified to Very Remote include the far west parts of New South Wales and Queensland, northern South Australia and Western Australia, most of the Northern Territory and Flinders and King Islands in Bass Strait (Tasmania)

⁶ These industries have not been included in figure 4 below and include: Electricity gas, water and waste services, Public administration and safety, Mining, Information media and telecommunications, Financial and insurance services, Wholesale trade, Arts and Recreation Services, Rental, hiring and real estate services & Education and training.

IMPORTANCE OF SMALL BUSINESSES IN REGIONAL AUSTRALIA

Small businesses are a vital part of Australia’s regional communities. They are essential to the local economy and contribute in the following ways:

- Providing goods and services
- Providing employment opportunities
- Sustainable local investment cycle
- Increasing the local tax base
- Encouraging entrepreneurship

The importance of small businesses in the regional economy is reflected in their role in providing goods and services to those rural and remote areas where it may not be so feasible for large businesses to do so due to logistical reasons. For example, a large supermarket such as a Coles or Woolworths is unlikely to open to service a low-density neighbourhood

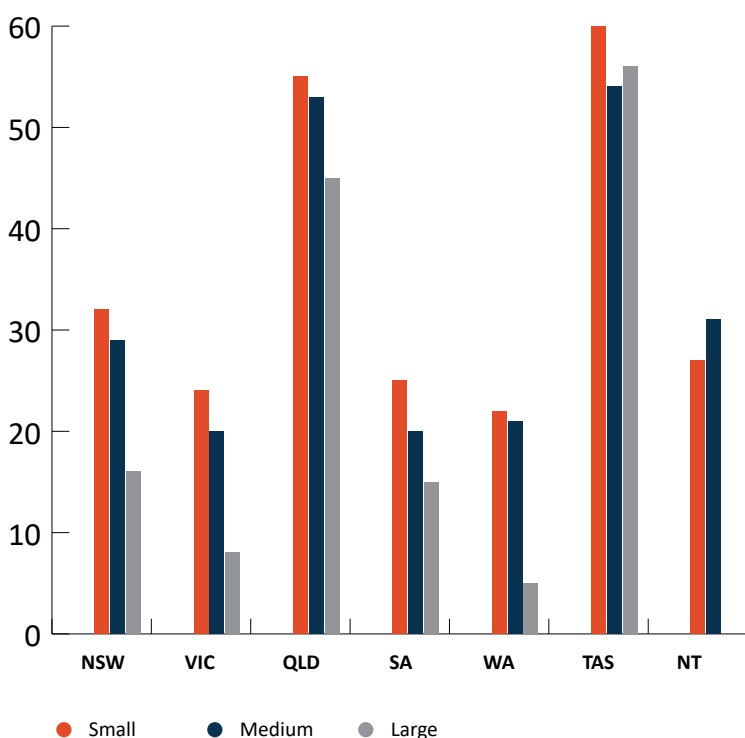
whereas a small business can meet this demand more efficiently. For this reason, small businesses tend to make up the largest portion of businesses in regional and remote areas – reflected in Figure 6 below.

As a significant portion of regional businesses are made of small businesses (as reflected in Figure 6), much of the local employment is made up by this business size. In this way small businesses play a vital role in their local economies by providing employment opportunities to the local economy. In that regard, regional small businesses help prevent families moving to cities and support the long-term sustainability of regional communities. Small business investment in regional areas is typically part of a sustainable economic cycle where profits and income are reinvested. This is because small businesses are typically owned and operated by local people, and therefore investment and the returns

of investment remain in regional communities. Research by US firm Civic Economics found that 48% of each purchase at local independent stores was reinvested into the local economy as opposed to only 14% of purchases at larger chain stores⁸. The spending from local workers to local businesses translates into revenue. This revenue is used to pay wages of local people, cover inputs which could be sourced from other local businesses, and is reinvested back into the business to expand and enhance operations. It is clear that small, locally owned businesses have a stake and incentive in the success of their local communities.

Locally owned businesses pay local taxes, thereby increasing the ability of communities to afford public spending on community infrastructure such as roads, community services, waste collection and public spaces. Small businesses act as a medium to transfer part of the expenditure from local residents into the benefit of public goods and services.

FIGURE 6: SHARE OF BUSINESSES IN REGIONAL AREAS (BY SIZE, AS AT JUNE 2013)



Source: Australian Bureau of Statistics, 2015⁷

⁷ Australian Bureau of Statistics, 2015, accessible at <https://www.rba.gov.au/publications/confs/2015/nicholls-orsmond.html>

⁸ The Local Multiplier Effect (2012), How independent local businesses help your community thrive – American Independent Business Alliance – available at: <https://amiba.net/wp-content/uploads/2020/08/Local-multiplier-effect-whitepaper.pdf>

2.2 Social and community contribution

Apart from the economic contributions, small businesses in regional areas also play a vital role in community building, relationship strengthening, and local identity. Examples of how small businesses make this social contribution include:

- Participating in community activity
- Establishing a local identity, and
- Mutual support among businesses.

Small businesses are often interested and active participants and supporters of a local community. For example, local businesses sponsor local sporting and community groups which help to strengthen the social capital of communities. This social capital helps to enhance the resilience of the communities when disasters strike. Small business owners live and work in their community and have a stake in community improvements. Supporting local communities is a mutually beneficial act as it provides support to local community members while at the same time promoting their own business.

Locally owned small businesses contribute to the local identity through the types of stores, products and services sold and designed. For example, communities are identified by the types of crops and meat they produce and this in turn can attract visitors (vineyards in the Barossa Valley, apples and cherries in the Huon Valley and dairy from Gippsland). Owners are proud to sell local products and to showcase local talent and craft. In this way the personality of a community and their skills can be showcased to the neighbouring locals and visitors. This means small businesses act as an expression of a local area's identity.

Small businesses in regional areas often aim to support other neighbouring businesses. For example, a restaurant may require cleaning services, legal assistance, or an accountant. Recommending friends and neighbouring businesses creates a strong community bond that provides a sense of mutual support amongst businesses. Research conducted by NMSC regarding the recovery process from COVID-19 revealed that those businesses which were located in close proximity were able to co-ordinate and support each other and subsequently, deal with the crisis more effectively⁹. Ensuring that businesses maintain this relationship is important during down times as this can be the difference between small businesses continuing or going out of business.

2.3 Vulnerability of Small Businesses

Small business often run on slim profit margins and modest cash reserves. As a result, they are vulnerable to changing conditions and often not able to withstand periods of slower economic activity. The business impacts of a COVID-19 survey conducted by the ABS found that small businesses were almost twice as likely to report that they found it very difficult to meet financial commitments compared to large businesses¹⁰. This means they are especially reliant on insurance payouts following a disaster to get their business back into operation. Without insurance support they would be more likely to cease operation.

The ACCC conducted a survey¹¹ in June 2019 on the extent of non-insurance for small businesses in the flood affected areas of Townsville. The results revealed that forty percent of businesses did not have any flood cover. As small businesses operate on small profit margins, the cost and affordability of insurance may be a particular concern

for small businesses. As a result, many small businesses are underinsured or in some cases, uninsured.

Additionally, small business might not fully understand the risk they face from natural perils and how to select the most appropriate insurance coverage. The inquiry conducted by the Royal Commission into Australia's natural disasters found that insurance is a cause for confusion amongst Australians. Individuals responded that they did not understand what their insurance policies covered or what they were able to do to reduce their premiums¹².

This places them at greater risk of natural peril. Support from Government and the industry can be useful in helping small business to understand these issues.

In comparison, larger businesses are often less vulnerable as a result of;

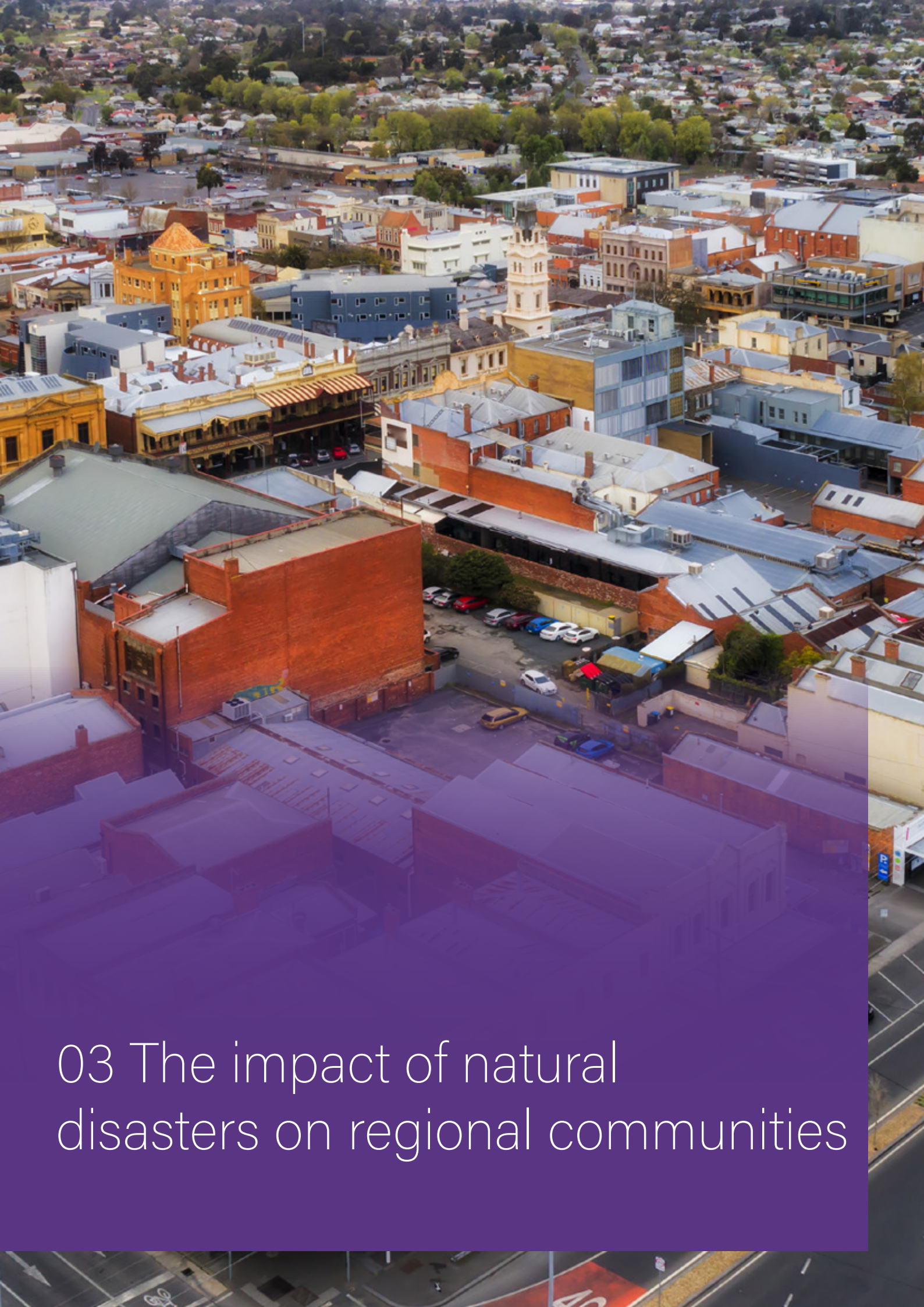
- Operating across locations and types of activities and services, their risk exposure is diversified and distributed. The chance of all their operations being exposed to the same extreme events is lower (COVID-19 may be an exception to this).
- Reserves are more significant and therefore better able to withstand negative shocks
- Business governance is more professional (large businesses are often directed by a professional board with non-executive directors) and this ensures better decision-making, risk management and compliance.

⁹ Proximity doesn't benefit just big cities – it's helping rural communities weather the economic crisis too, Powe, M & Love, H. (2020) – available at: <https://www.brookings.edu/blog/the-avenue/2020/10/08/proximity-doesnt-benefit-just-big-cities-its-helping-rural-communities-weather-the-economic-crisis-too/>

¹⁰ A third of businesses will face challenges paying bills (2020) – ABS Media Release – available at: <https://www.abs.gov.au/media-centre/media-releases/third-businesses-will-face-challenges-paying-bills>

¹¹ Northern Australia Insurance Inquiry report (2019) – ACCC – available at: https://www.accc.gov.au/system/files/Northern%20Australia%20Insurance%20Inquiry%20second%20interim%20report%202019_0.PDF

¹² The Royal Commission into National Natural Disaster Arrangements Report (2020) – Royal Commission – available at: <https://naturaldisaster.royalcommission.gov.au/publications/royal-commission-national-natural-disaster-arrangements-report>



03 The impact of natural disasters on regional communities

03 The impact of natural disasters on regional communities

Natural disasters are a part of the Australian experience. In recent years we have seen the devastating impacts that these have had on our communities through bushfires and floods. The following section explores the 2019 Townsville floods and the 2019-20 'Black Summer' bushfires. There is discussion surrounding the human and broader community impacts as well as the economic impact that these events had on Australian communities.

3.1 Townsville Floods

OVERVIEW

Between the 27th of January to the 8th of February 2019, Townsville saw one year's worth of rain inundating the town. Rainfalls hit a record high of 1,391mm at the Townsville Airport weather station. Townsville is located on natural floodplains of the lower reaches of Bohle and Ross River and is an area which has experienced 20 major events since the 1860s. However, the 2019 flooding has been regarded as the worst natural disaster event to impact the region to-date. The event was labelled as a once in one hundred years event (1% AEP¹³).

This was not an isolated monsoonal event as 39 local government areas (LGAs) across Queensland experienced sustained monsoonal rainfall. The 1-in-100-year flood event saw many parts of Queensland declared as disaster zones with thousands of residents evacuated.

During the monsoonal rain event, the Ross River Dam (RRD) received 850,000 mega litres of rainfall. The RRD capacity peaked at 43m at 247 per cent capacity, which was determined through a hydrological analysis to be a one-in-1,000-year event. Authorities were required to urgently discharge water from the dam into the Ross River at the rate of 1,900 m³/s to prevent the dam from failing. This large and quick expulsion of water inundated Townsville's suburban area with significant damage particularly in Rosslea, Hermit Park and Idalia.

HUMAN AND BROADER COMMUNITY IMPACTS OF DISASTERS

The floods resulted in four fatalities, with two bodies discovered in flood waters, and two lives lost from melioidosis (a bacterial infection). One person remains missing since this event transpired. In addition, there were at

least ten people hospitalised due to bacterial infections.

An estimated 3,300 properties were damaged. Around 2,000 properties had minor damage and 1,100 properties experiencing moderate damage, and the remaining 135 suffered severe damages. A total of 30,000 insurance claims were filed, equating to an estimated \$1.24 billion of damages¹⁴. Roughly 75 per cent of total claims were residential properties, 15 per cent were domestic motor claims, with commercial claims making up the remaining 10 per cent.

There were also impacts on local infrastructure. There was severe erosion along the banks of the Ross River, with structural damage to pathways and boardwalks.

The extent of flooding was substantial and extended across the regions surrounding Townsville such as Ayr, Charters Towers, Cairns, Whitsundays, Mackay and Outback QLD. This impacted day to day business activities, destroyed crops and it was estimated that 500,000 cattle perished in the flood water in the areas to the west of Townsville.

¹³ AEP = annual exceedance probability

¹⁴ <https://disasters.org.au/current-catastrophes/2019/11/19/townsville>

IMPACT ON ECONOMIC ACTIVITY

In 2019, the economic impact of the Townsville floods was estimated to be a \$2.5 billion reduction in GDP¹⁵. This represents a 0.8 per cent decrease in GDP of the areas impacted by the Townsville floods, including the surrounding regions. The impact felt by small businesses was estimated to be a \$1.5 billion reduction in GDP. This is the result of disruption of normal economic production, loss of crops and delayed mineral exports, transfer of household and business expenditure from other uses to disaster recovery and the loss of economic infrastructure.

The majority of this economic impact occurred in the Townsville urban area (SA3), where the economic impact amounted to a 22 per cent decrease in GDP in 2019, with small businesses making up 61% of this impact. Figure 7 shows the economic impact of the Townsville floods by SA3 for small businesses, highlighting the impacts felt across QLD.

The ACCC conducted a survey¹⁶ in June 2019 on extent of non-insurance for small businesses in the flood affected areas of Townsville and the reasons for this. A survey of 75 small businesses within a 100-kilometre radius of Townsville was commissioned.

While noting the sample size of the survey was small, there are some important findings:

- Forty per cent of businesses did not have flood cover
- Only forty-four per cent of businesses with flood cover for damages, also had cover for business interruption
- Sixty eight per cent of businesses were impacted by the floods
- The most important impact was business interruption
- The cost of insurance is an important barrier

Of the small businesses with insurance but not flood cover, most explained they believed their business was not in a flood zone (67 per cent), while another 20 per cent chose not to have it because the business did not operate out of the ground floor or basement. More than one-quarter (27 per cent) said it was too expensive.

The survey found that 68 per cent of small businesses in the Townsville area were impacted by the floods. The most common impact was business interruption. Over 60 per cent of those businesses impacted needed to close or reduce operation, and 28 per cent had to close for over three months. A third of small businesses reported physical damage to their building or contents.

TABLE 1: TOWNSVILLE SMALL BUSINESS' DURATION OF BUSINESS INTERRUPTION

DURATION OF CLOSURE/REDUCTION IN TRADING	%
Interrupted for less than 2 weeks	28
Interrupted for 2 to 4 weeks	17
Interrupted for 1 to 3 months	28
Interrupted for 3 to 6 months	2
Will remain interrupted for further 3 to 6 months (approx. Sept. 2019 to Dec. 2019)	2
Will remain interrupted for further 6 to 12 months (approx. Dec. 2019 to June 2020)	20
Will remain interrupted for further 12 months or more (approx. June 2020)	4

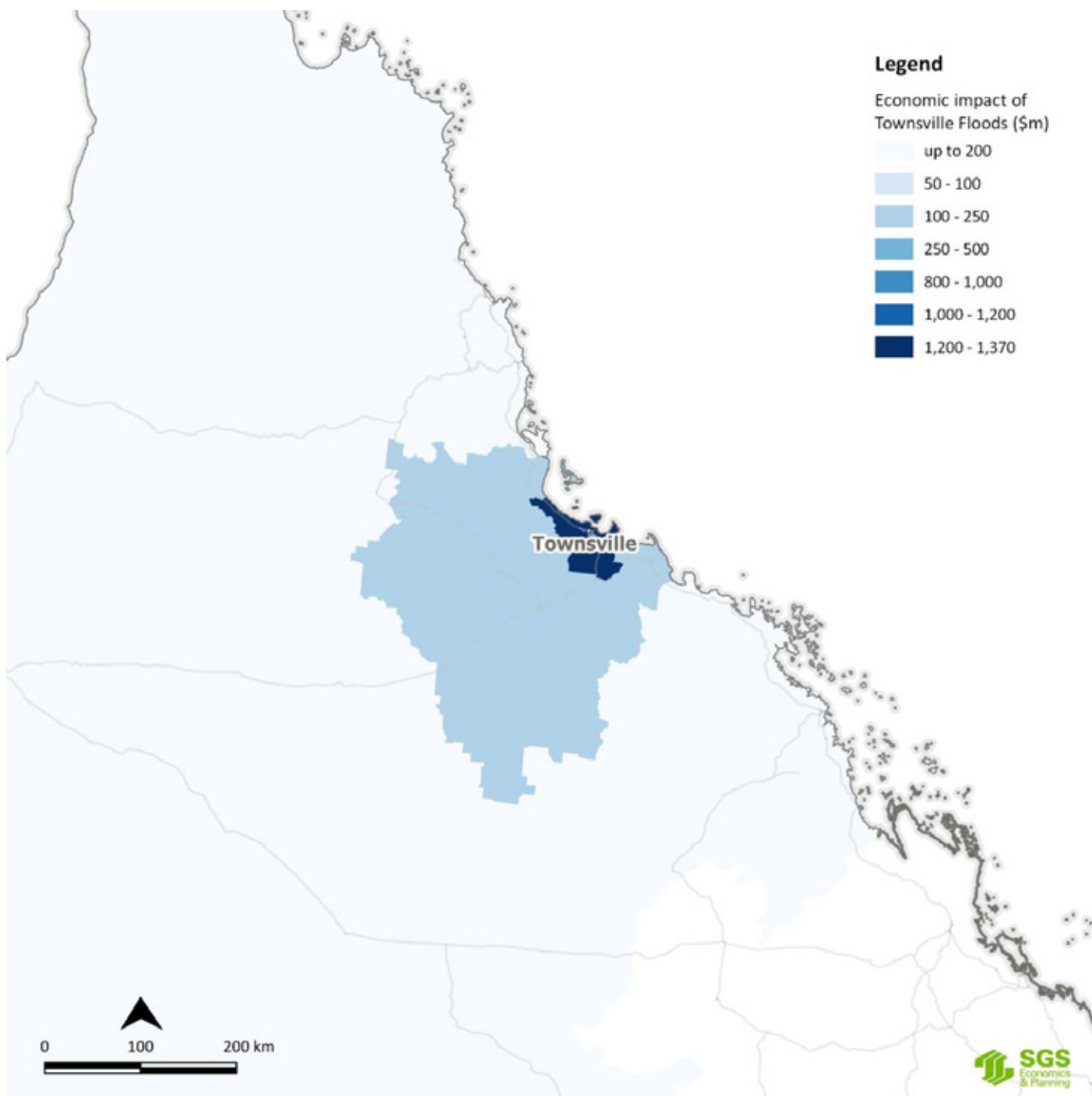
Source: ACCC Commissioned Research, June 2019

Base: Respondents who suffered business interruption (N=46)

¹⁵ Calculated by SGS Economics & Planning, using IAG claims data for the event benchmarked to Industry wide insurance data, and SGS Small Area GDP

¹⁶ Northern Australia Insurance Inquiry report- ACCC (2019) – available at: https://www.accc.gov.au/system/files/Northern%20Australia%20Insurance%20Inquiry%20second%20interim%20report%202019_0.PDF

FIGURE 7: ECONOMIC IMPACT OF TOWNSVILLE FLOODS ON GROSS DOMESTIC PRODUCT FROM SMALL BUSINESSES IN 2019 (\$ MILLION)



Source: SGS Economics and Planning, 2021

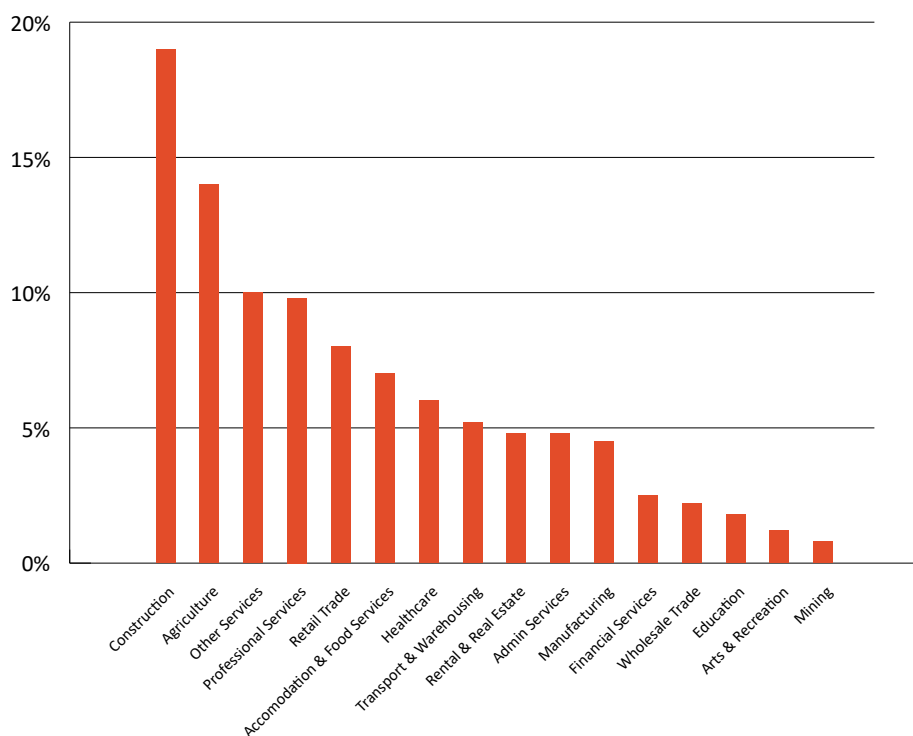
60 per cent of affected small businesses with insurance reported having flood cover, however only 44 per cent of these businesses had business interruption insurance, though most of those affected by the floods were impacted in just this way. Almost two-thirds of businesses said they had never considered business interruption insurance.

The floods had quite an impact on affected businesses, with 44 per cent of affected businesses saying they found it very or extremely difficult to recover financially from their loss, regardless of whether they held insurance or not.

A breakdown of the small businesses affected by industry is shown below in Figure 8. Construction and Agriculture were the most common, with the two industries making up just under 20% and 15% respectively of small businesses affected.

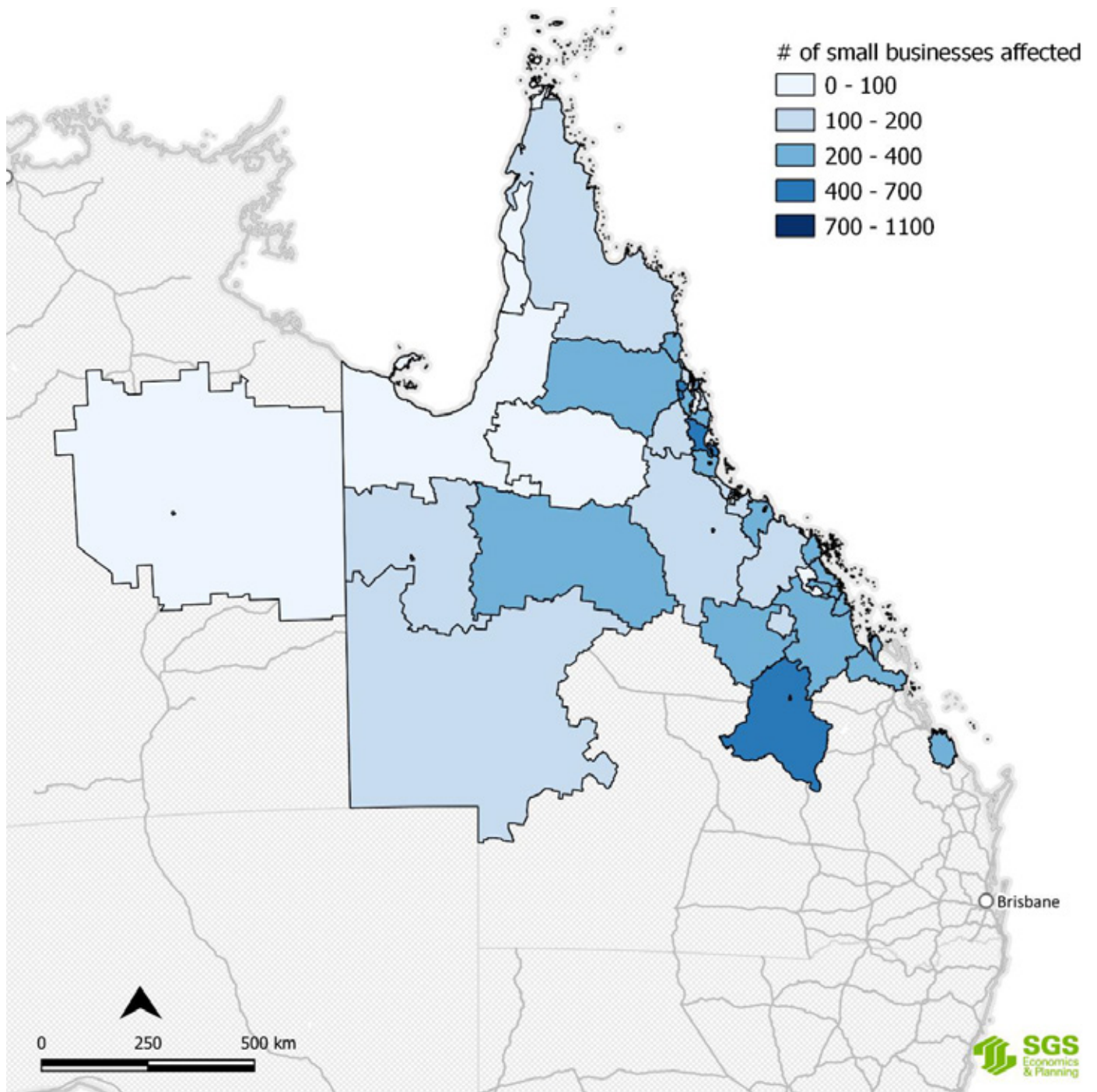
A picture of the location of impacted businesses can be seen through Figure 9 on the next page which presents the number of small businesses affected by the Townsville floods, broken down by ABS Statistical Area Level 2 (SA2). SA2's along the Queensland coast were impacted more heavily with some SA2's having up to over 1,000 businesses impacted. Moving further inland saw a reduction in the number of impacted businesses.

FIGURE 8: INDUSTRY BREAKDOWN OF SMALL BUSINESSES IN SA2S AFFECTED BY FLOODING, TOWNSVILLE FLOODS (2019)



Source: SGS based on ABS Counts of Australian Businesses, 2021.

FIGURE 9: NUMBER OF SMALL BUSINESSES AFFECTED BY FLOODING BY SA2



Source: SGS Economics and Planning, 2021.

3.2 Black Summer Bushfires

OVERVIEW

The 2019-20 Australian bushfire season was a period of unprecedented and intense bushfires across large parts of Australia. Leading into the 2019-20 bushfire season there were already many warning signs. In fact, leading bushfire experts had written a letter to the Prime Minister in April 2019 to raise awareness about the upcoming disastrous season and the need to increase preparedness¹⁷. The experts were largely ignored. 2019 was classified as Australia's warmest year on record, and broke records for average mean temperature and mean maximum temperatures. Spring was also the driest spring in Australia's record and the fifth warmest.

95 per cent of the country had a Forest Fire Danger Index (FFDI) that was much higher than average. 60 per cent of the country showed a record high in the FFDI, which indicated a high risk of fire danger in Australia's forests. A combination of high temperature, rainfall deficits and prolonged drought increased fuel availability which triggered a series of bushfires around Australia.

The bushfire season started in September 2019 and by March 2020, the black summer fires had burnt almost 19 million hectares and destroyed over 3,000 houses and took the lives of 33 people. The bushfire season peaked during December 2019 to January 2020.

HUMAN AND BROADER COMMUNITY IMPACTS OF DISASTERS

New South Wales bushfires burnt through the largest area of any fire season within the last 20 years. There were a total of 10,520 fires across the state, burning a total of 5.5 million hectares, with 2,475 houses and 25 lives lost. Two mega-blazes were created in New South Wales, which included the Gospers Mountain fire. The Gospers Mountain fires burned through approximately 512,626 hectares of land and were recorded as one of the largest fires in Australia's history. The second mega-fire burned through 895,744 hectares and was created by three fires on the border of New South Wales and Victoria.

In Victoria, there were a total of 3,500 fires recorded during the Black Summer bushfires which contributed

to 1.5 million hectares of land burnt, 396 houses destroyed, and five lives lost. The most destructive fire was the Mallacoota fire which transpired from a small fire 30km east of town on the 29th of December.

An iconic tourist destination, by Christmas, Mallacoota's population of 1,000 residents had increased by 8-fold due to an influx of tourists. Emergency Management Victoria announced that it was too late for the tourists and residents to evacuate on the 30th December. By the 31st of December, the fire was burning the outskirts of Mallacoota. On the 2nd of January, Victoria declared a state of disaster for the first time in history. The roads to Mallacoota were blocked for over a month due to bushfires and fallen trees, which required the people to be evacuated on naval vessels. There were at least 300 homes lost to these fires.

Sydney and Melbourne were also affected indirectly by the bushfires. In Sydney, there were 81 days of poor or hazardous air quality in 2019. From the shutdowns and the disruptions caused by the smoke, Sydney lost approximately \$12-50 million of GDP each day¹⁸.

Case Study

A woman who lost her home in Kinglake, northeast of Melbourne, in the 2009 Black Saturday fires explained that although she believed she was adequately insured, the actual costs of rebuilding were no match to what she was insured for.

The woman had roughly half a million dollars' worth of insurance on her house and \$120,000 for contents. However, following the reconstruction of her home she was left with a \$700,000 mortgage.

Construction costs spiking following disasters as well as banks claiming insurance payments as mortgage payments contributed to this woman's additional costs.

Having a proper assessment of the risks and costs that homes and businesses located in potential disaster areas may face is of great importance as highlighted by the Kinglake resident.

Key Takeaway

The Kinglake resident's example highlights the importance for households and businesses to have a proper assessment of the risks that they face and subsequently, a wide-ranging insurance policy. Businesses should ensure that their insurance is able to cover them under a variety of unforeseen circumstances.

Source: ABC News, 2020¹⁹

¹⁷ <https://www.theguardian.com/australia-news/2019/apr/09/former-fire-chiefs-warn-australia-unprepared-for-escalating-climate-threat>

¹⁸ The economic cost of bushfires on Sydney revealed up to \$50 million a day and rising, Sydney Morning Herald (2019) – available at: <https://www.smh.com.au/national/nsw/the-economic-cost-of-bushfires-on-sydney-revealed-up-to-50-million-a-day-and-rising-20191212-p53jbq.html#:~:text=%22Sydney%20generates%20around%20%241.2%20billion,%2D%2450%20million%20each%20day,%22>

¹⁹ A crisis of underinsurance threatens to scar rural Australia permanently (2020 – ABC News – available at: <https://www.abc.net.au/news/2020-01-07/crisis-of-underinsurance-threatens-to-scar-rural-australia/11844992>

South Australia had 1,324 bushfires that saw 286,845 hectares of land burned, 186 homes destroyed, and three lives lost. The worst bushfires started from a succession of lightning strikes. Three days after the fires were announced as contained, a further cycle of lightning caused additional fires. This merged with existing fires and created the catastrophic Kangaroo Island Fires.

The Kangaroo Island Fires burned for more than three weeks and burned more than 210,000 hectares. There was a significant loss of livestock and the fires burned between \$100-900 million worth of plantation timber. This saw the loss of 89 homes and hundreds of

buildings, most with links to tourism such as the world-renowned Southern Ocean Lodge.

The Adelaide Hills fires also destroyed valuable infrastructure and stock. These fires burnt through world-famous viticulture and winery areas and reached the capital city.

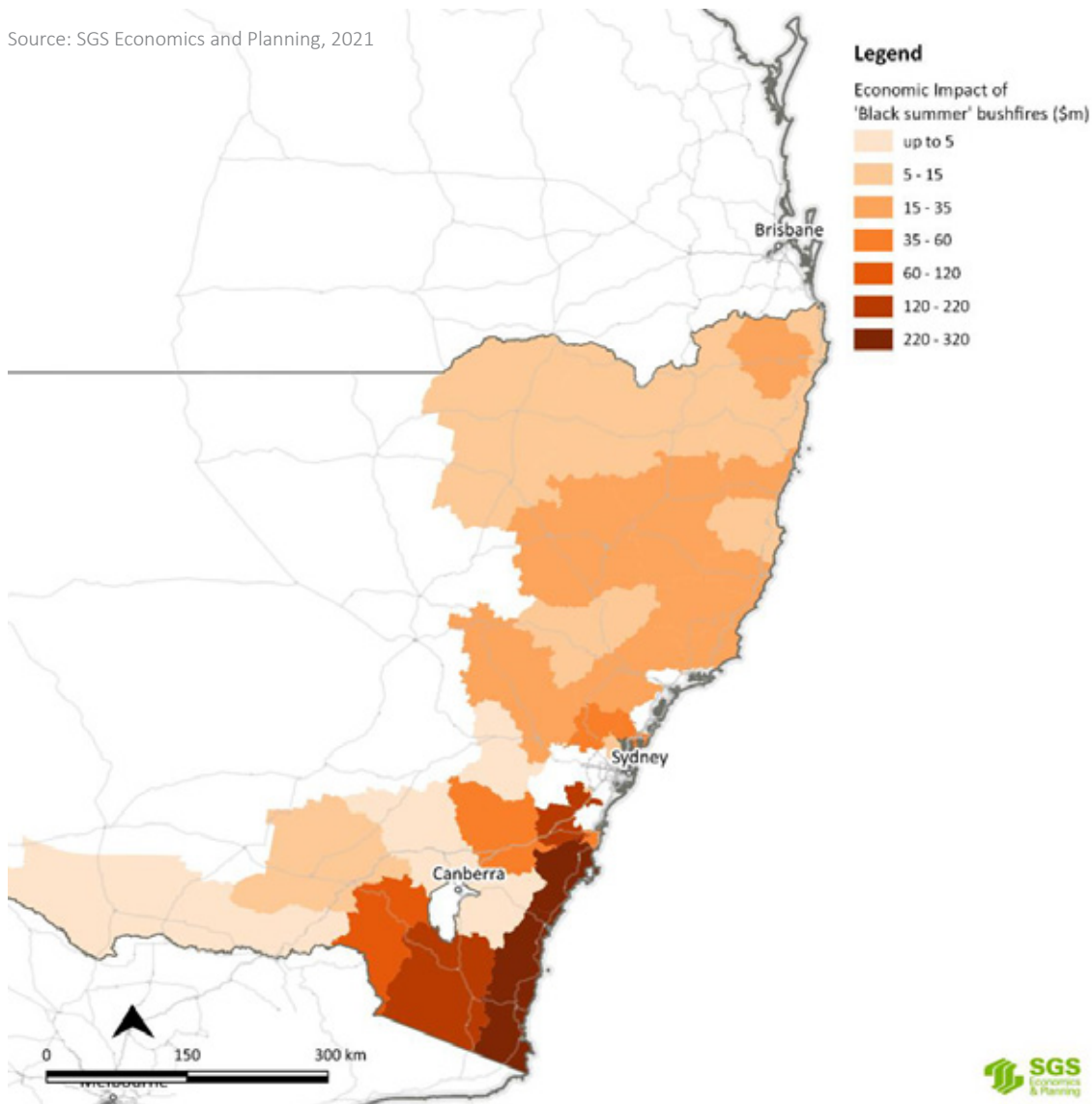
Not only did the bushfires impact Australia, but confronted the world with the accelerating danger of climate change, with the smoke travelling to other countries and continents through a full circumnavigation around the globe. This signalled significant concerns from the effects of more

frequent and intense bushfires in the future, not only for Australia but globally.

IMPACT ON ECONOMIC ACTIVITY

In 2020, the economic impact of the summer bushfires was estimated to be a \$2.7 billion reduction in GDP in NSW²⁰. This represents a 1.8 per cent decrease in GDP of the areas impacted by the bushfire. The impact felt by small businesses was estimated to be a \$1.8 billion reduction in GDP. The effect on local economies varied across the state, with greater impacts felt in southern NSW. Figure 10 maps out the economic impact for small businesses by different regions.

FIGURE 10: ECONOMIC IMPACT OF 'BLACK SUMMER' BUSHFIRES ON GROSS DOMESTIC PRODUCT FROM SMALL BUSINESSES IN 2020, NSW (\$ MILLION)



²⁰ Calculated by SGS Economics & Planning, using IAG claims data for the event benchmarked to Industry wide insurance data, and SGS Small Area GDP

South Eastern NSW was the hardest hit area in NSW with the economic impact totalling to up to \$1.15 billion in those regions. Much of the heavily affected regions in the North Eastern parts of Victoria and South Eastern parts of NSW are dominated by small tourist towns. The bushfires saw dire circumstances for these businesses as the state of emergency meant that little to no visitors came to those areas over the new year, a time when business is usually booming.

A survey released by NAB indicated that two in three small to medium sized

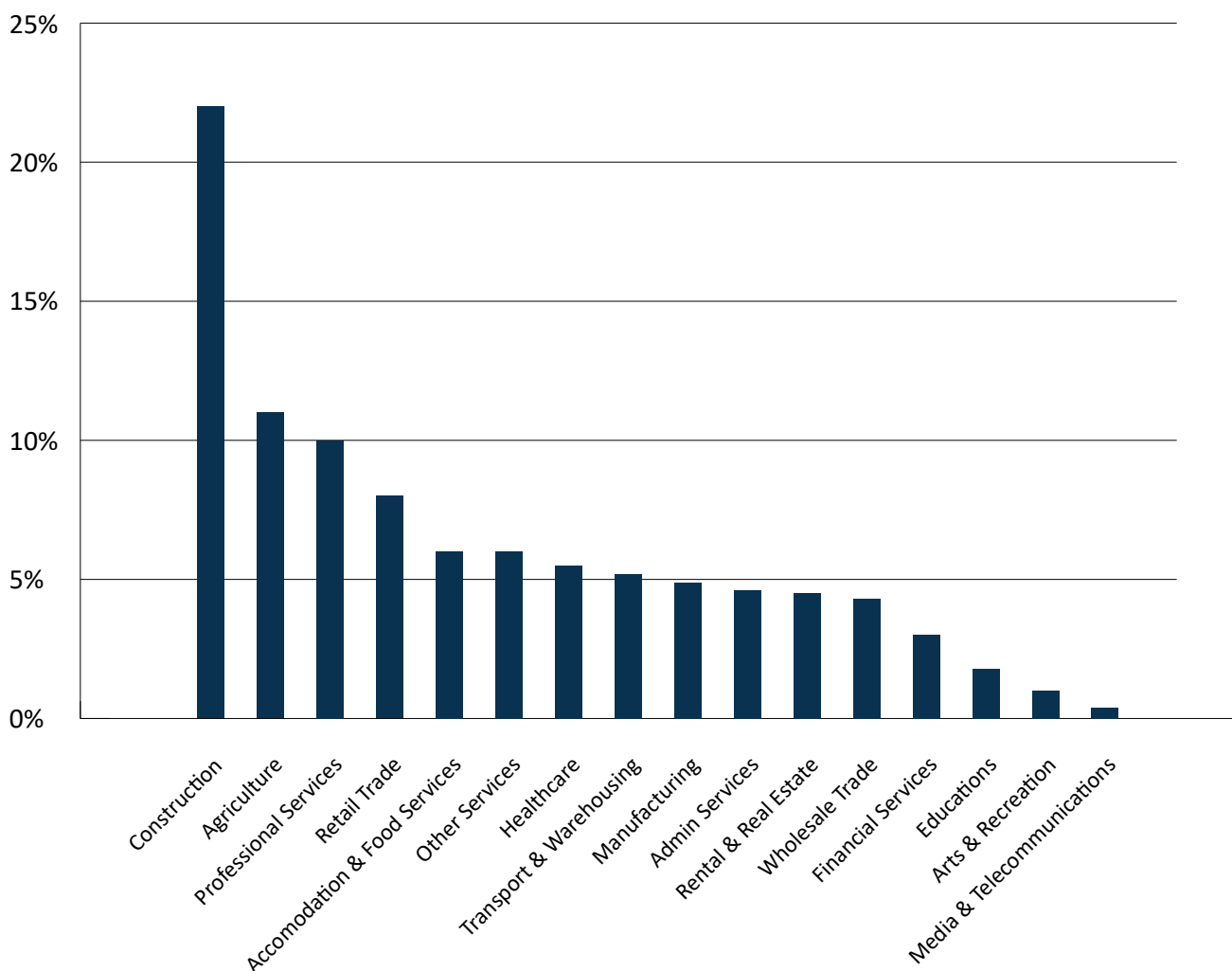
businesses had been either directly or indirectly affected by the 2019-20 Australian bushfires²¹. The impacts have not been limited to 2020 as recovery to previous levels of economic activity is expected to take multiple years. More than 60% of affected small businesses stated that it would affect them throughout 2021.

Figure 11 illustrates the breakdown by industry of those small businesses impacted by the bushfires. Construction businesses were the most heavily impacted by the bushfires, representing

over 20% of all affected small businesses. Agriculture and Professional services followed, each representing over ten per cent of all small businesses affected.

Figure 12 illustrates where the 2019-20 bushfires impacted small businesses the hardest, presenting the number of small businesses affected by SA2. The South Eastern parts of New South Wales felt the extent of the impacts the most, with some SA2s having over 1500 businesses affected.

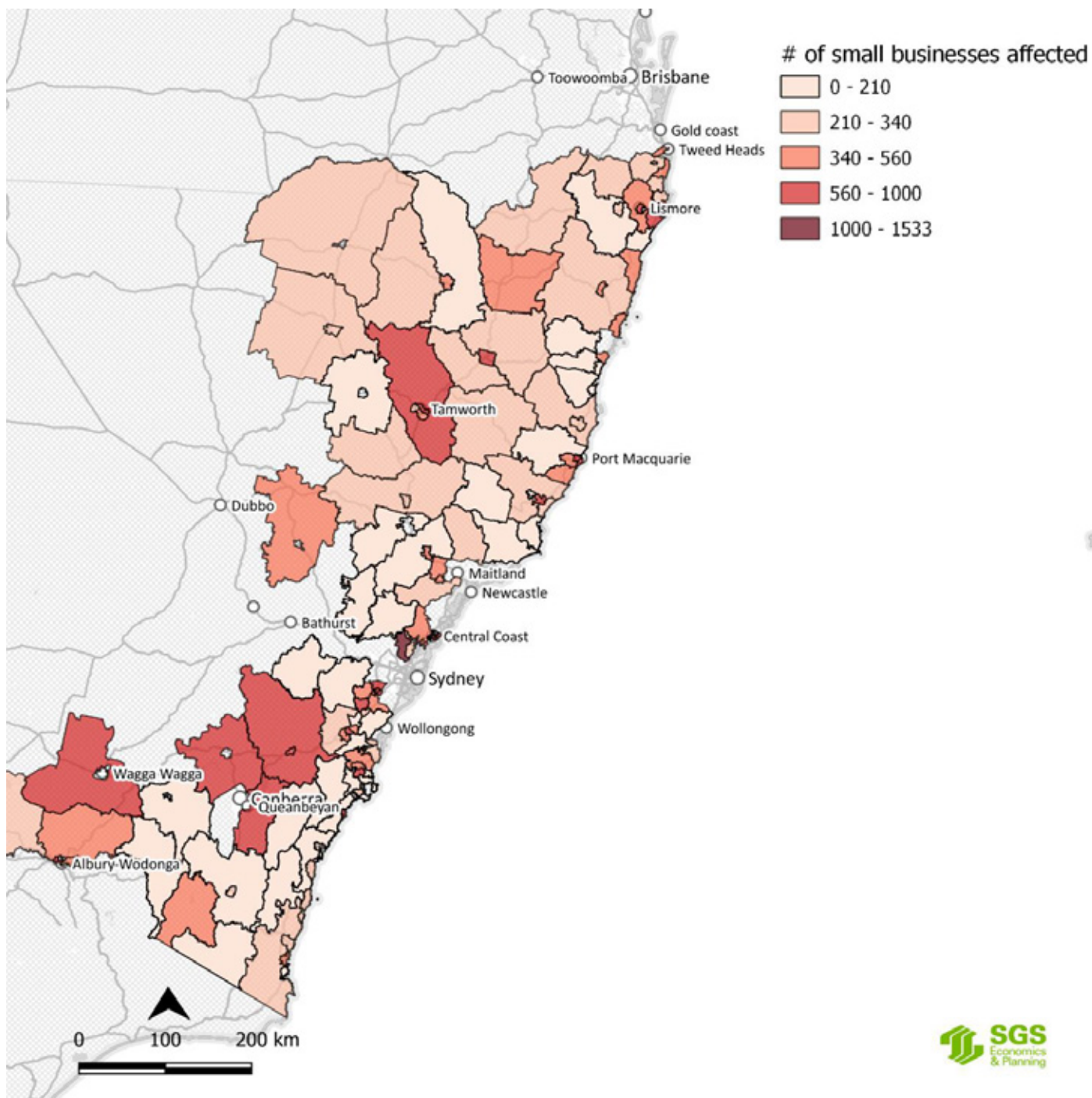
FIGURE 11: INDUSTRY BREAKDOWN OF SMALL BUSINESSES IN SA2S AFFECTED BY BUSHFIRES, 2019-20



Source: SGS, 2021, based on ABS Counts of Australian Businesses, 2019

²¹ NAB SME Bushfire Impact Survey – Part 1 – Impact of Bushfires on business to date and potential to impact going forward (2020) – NAB – Available at: <https://business.nab.com.au/wp-content/uploads/2020/03/NAB-SME-Bushfire-Impact-Survey-Part-1.pdf>

FIGURE 12: NUMBER OF SMALL BUSINESSES AFFECTED BY BUSHFIRES BY SA2



Source: SGS Economics and Planning, 2021.





04 The role of insurance in helping communities rebuild

04 The role of insurance in helping communities rebuild

Insurance is an important component in helping regional communities' recover from a natural disaster. Natural disasters destroy the productive capacity of economies, which in turn can force residents and businesses to leave impacted regions.

A successful recovery is measured by the ability of communities to rapidly regain what they have lost and catch up to where they could have progressed to. Insurance payouts for claims and recovery activity provide an economic stimulus that speeds up the rate of recovery for regional economies and limits further losses of economic activity.

Small businesses play an important role in regional economies, with an average contribution to GDP of 75% in the 'Black summer' bushfire affected areas, and 65% in the Townsville flood affected areas. In terms of insurance claims, they represent the majority of the commercial claims. This highlights the heavy impact natural disaster can have on the local economy, the important role insurance can play to help rebuild small businesses following natural disasters, and how important this is for the overall regional economy on the road to recovery.

4.1 Disaster recovery

Natural disasters are a traumatic experience for the affected community. A community's recovery pathway following a natural disaster depends on the scale of the natural disaster, the resilience of the community and the speed of the recovery process.

Following a natural disaster, there are three main stages of recovery:

- **Emergency Response** – takes place immediately after the disaster.
- **Restoration** – work begins on the restoration of basic services and rubble and debris are cleared, buildings and the built environment are made safe. Assessments are made of the damage and insurance claims are lodged.
- **Reconstruction** – Management of insurance claims and associated reconstruction begins.

Insurance is an important component in natural disaster recovery. Natural disasters can destroy the productive capacity of economies and slow economic recoveries, and can drive residents and businesses to leave impacted regions. A successful recovery is measured by the ability of communities to rapidly regain what they have lost and catch up to where they could have progressed to. Insurance payouts for claims and recovery activity provide an economic stimulus that speeds up the rate of recovery for regional economies and limits further losses of economic activity.

4.2 Impact of insurance

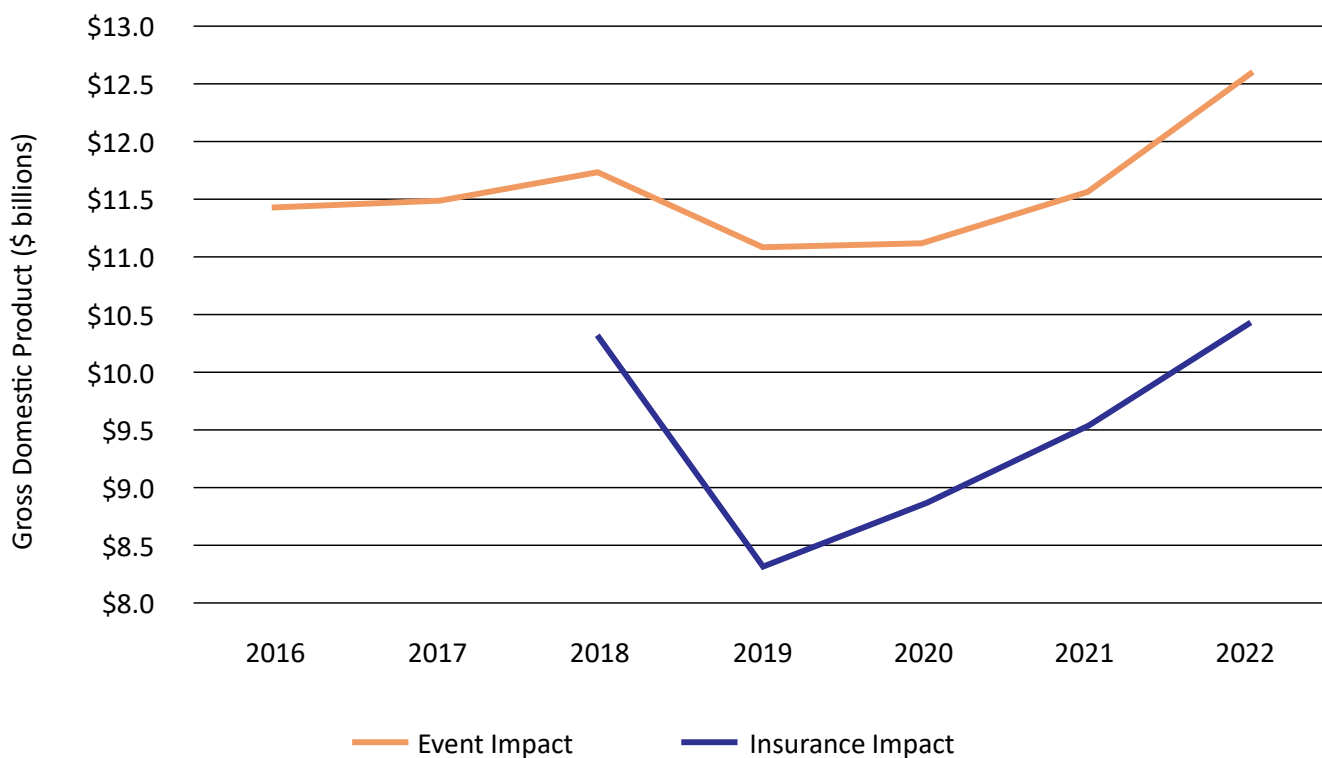
TOWNSVILLE FLOODS

In 2019, the economic impact of Townsville Floods was estimated to have caused a \$2.5 billion²² reduction in expected GDP, and of that \$1.5 billion were attributable to small businesses. This is equivalent to around 62 per cent of the impact attributable to small businesses, highlighting the significant role small businesses have in contributing to economic growth for the Townsville region. This statistic greatly reinforces the importance for small businesses to have insurance in place to help them recover faster and become more resilient to recovery following natural disasters.

Figure 13 compares Townsville's GDP under two scenarios, one illustrating the economic impact of the event on the local economy (event impact) and the other, the economic impact of insurance (insurance impact). The comparison reveals the sharp decline in GDP that would have occurred without insurance. With insurance payouts the decline in GDP was reduced (insurance impact) and the economy is expected to return to the long-term trend by 2021/22.

Whilst this analysis applies to all businesses, given the significant percentage of GDP that is attributable to small businesses, it illustrates the important role insurance payouts have on lessening the impact for local communities reliant on local businesses for employment, and in ensuring small businesses have the resources required to rebuild faster.

FIGURE 13: ECONOMIC IMPACT OF TOWNSVILLE FLOODS ON GDP – TOWNSVILLE SA3



Source: SGS Economics & Planning 2021, including claims data supplied by IAG, 2021

²² The GDP impact estimates in this report exclude the intangible costs, with lower and more conservative multipliers chosen for this analysis.

'BLACK SUMMER' BUSHFIRES

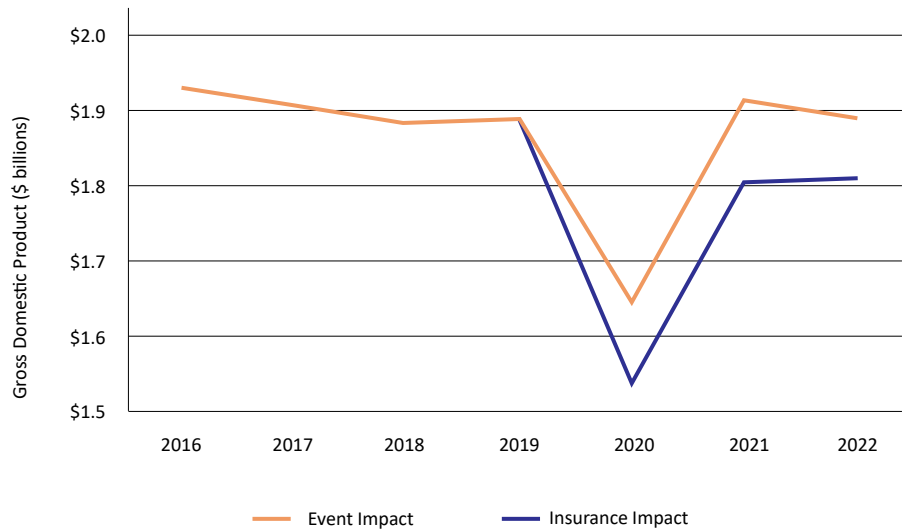
As with the Townsville floods, the 'Black summer' bushfires have had a significant impact on the economy, and in particular on those local economies affected by the bushfires. In 2020, the total economic impact of the 'Black summer' bushfires on the NSW economy was \$2.7 billion²³ and of that \$1.8 billion was attributable to small businesses. This is equivalent to around 67 per cent of the impact attributable to small businesses, highlighting the significant role small businesses have in contributing to economic growth for these regions.

Figure 14 illustrates the sharp decline in GDP, representing the impact of the natural disaster event, that would have occurred without insurance (the event impact), for one of the hardest hit areas of eastern Gippsland. With the contribution of insurance payouts, the decline in GDP was lessened, with a softening of the sharp 'V' shown in the figure below, recovery to pre bushfire levels sooner, and the economy is expected to return to the long-term trend by 2021/22.

In some areas such as Shoalhaven, on the NSW south coast, the economy is expected not only to recover to pre bushfire levels, but also continue to grow. Figure 15 illustrates that with insurance, the economy is expected to recover faster than without insurance.

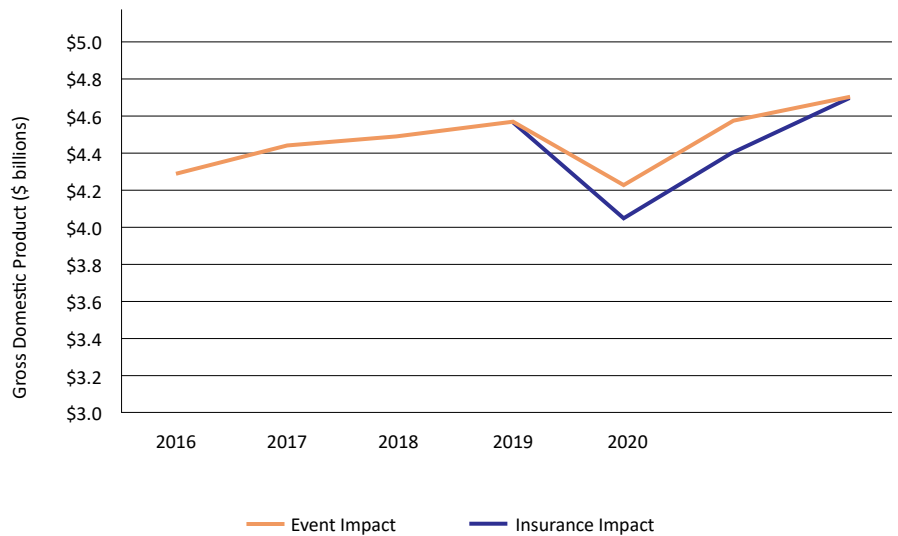
Whilst this analysis applies to all businesses, given the significant percentage of GDP that is attributable to small businesses, with small businesses contributing to approximately 56% of GDP in the Shoalhaven region, it illustrates the important role insurance payouts have on lessening the impact for local communities reliant on local businesses for employment, and in ensuring small businesses have the resources required to rebuild sooner.

FIGURE 14: ECONOMIC IMPACT OF BLACK SUMMER BUSHFIRE - GIPPSLAND-EAST SA3



Source: SGS Economics & Planning 2021, including claims data supplied by IAG, 2021

FIGURE 15: ECONOMIC IMPACT OF BLACK SUMMER BUSHFIRE - SHOALHAVEN SA3



Source: SGS Economics & Planning 2021, including claims data supplied by IAG, 2021

²³ The GDP impact estimates in this report exclude the intangible costs, with lower and more conservative multipliers chosen for this analysis.

4.3 Case studies of the impact of natural disasters

FLOODS IN TOWNSVILLE

ACCC research and surveys²⁴ identified that during the 2019 floods in Townsville, 68 per cent of local businesses in the area were affected and more than 60 per cent were forced to close or reduce operation due to flooding. From this survey, "Forty-four per cent of affected businesses [said] they found it very or extremely difficult to recover financially from their loss, regardless of whether they held insurance or not".

A local grocer in Townsville said an immense amount of their food stock was lost during the floods due to power outages and lack of accessibility at the time. The local grocer did not have flood insurance cover and noted that if they "Didn't have a second store, [they] probably financially would have gone bankrupt."

FIGURE 16: LOCAL BUSINESSES CLEANING UP AFTER TOWNSVILLE FLOODS



Source: Content API, 2021²⁵

CYCLONE DEBBIE

Many local businesses in Lismore, New South Wales, were severely affected by cyclone Debbie in 2017. Like other businesses in the region, a local café owner was uninsured due to high costs, even though Lismore is in a natural flood zone. Due to a lack of insurance cover, the local business owner stated "We don't go during floods...you need to be on site to hose the mud out, otherwise it sets like concrete".²⁶ As a result of the cyclone "About a metre of water came into the shop [resulting in] \$30,000 to \$50,000 worth of damage" which the local business owner was forced to cover as they did not have insurance assistance. The cyclone further destroyed all food stock in the shop, which added to the costs already associated with shop damage.

FIGURE 17: IMPACT OF CYCLONE DEBBIE ON LOCAL BUSINESSES



Source: Content api, 2021²⁷

²⁴ ABC 2019, High Premiums driving uninsured homes in Northern Australia, <https://www.abc.net.au/news/2019-12-21/high-premiums-driving-uninsured-homes-in-northern-australia/11819814>

²⁵ Content api, 2021, accessible from <https://content.api.news/v3/images/bin/487aa5db0efff5228c112f9311be1f2d>

²⁶ Daily Telegraph, Cyclone Debbie Aftermath, <https://www.dailytelegraph.com.au/news/nsw/cyclone-debbie-aftermath-lismore-floods-tear-heart-out-of-city-business-zone/news-story/90b578312ce2ab830ae8fc6b3a1bd2ef>

DROUGHT IN WULGULMERANG

Farming businesses in the Victorian Wulgulmerang district, which is regularly affected by drought, have failed to reinsure assets or knowingly underinsure due to the high cost of comprehensive insurance²⁸. Reasons for this include competing priorities of feeding livestock throughout the drought compared to maintaining a high level of insurance cover. A local farmer noted that they did not insure their fences as they needed the money for feeding livestock.

The consequence of underinsurance has resulted in businesses turning to personal loans to repair damaged livelihood assets, or accepting the losses and minimising their business, which places increased pressure on households. This is comparable to the 'ratchet effect' of underinsurance which means that once businesses are impacted, there are fewer assets to insure in the future, thus a greater share of income will most likely be diverted away from households and contribute to economic disadvantage.

FIGURE 18: DROUGHT AFFECTED FARMLAND



Source: ABC, 2021²⁹

²⁸ Whittaker, J., Handmer, J. & Mercer, D. (2012). Vulnerability to bushfires in rural Australia: A case study from East Gippsland, Victoria. *Journal of Rural Studies*, 28 161-173.

²⁹ ABC news, 2021, accessible at <https://www.abc.net.au/cm/rimage/10829892-16x9-xlarge.jpg?v=4>



05 Policy implications and recommendations

05 Policy implications and recommendations

The following section discusses the policy implications and recommendations in response to natural disaster events. Based on the analysis, insurance plays a key role in the process of recovery following natural disasters. As such it is critical for households and businesses to be aware of the risks they face and acquire adequate insurance cover. Governments also play a key role in providing information about present day and future risk exposure to natural hazards. Furthermore, there is a need for government to shift the focus from recovery and reconstruction to mitigation and prevention.

5.1 Importance of mitigation

Natural disasters are events that cannot be prevented. As a result, the damaging impacts cannot be completely removed. However, they can be reduced, and this is the premise behind mitigation strategies. Mitigation acknowledges the inevitable nature of these events and focuses on ensuring that when disaster strikes, communities are in the best position to deal with its impacts.

In practice, mitigation can be actions such as relocating property located in flood plains, modifying structural components of buildings, and improving traffic access to at risk zones. At a higher level, land use planning and community education are also a part of mitigation. Identifying hazardous zones and creating policies that aim to reduce construction of homes and businesses in those areas is an effective strategy. Providing information to those who are located in hazardous zones regarding what they can do before and when a disaster strikes is also beneficial.

The analysis completed in section 4 of this report illustrates the damaging effect that natural disasters have had on the Australian economy. Adequate insurance has ensured that those communities affected have felt less of an impact from the disaster as well as to recover at a faster speed.

Mitigation takes this one step further by taking as many steps as possible to prevent damage occurring in the first place. By doing so, the potential damage felt by those communities is drastically reduced. From an economic standpoint, this is critical as it improves the chances that those local economies can continue in operation, providing the income needed for local residents. Furthermore, this reduces the indirect costs of disasters including family violence, mental health impacts, alcohol and drug use and crime.

An important step going forward is to focus on not only ensuring that communities are adequately insured, but that mitigation strategies are a priority as well. Helping communities throughout the recovery process is extremely important, but what will become increasingly important is taking planned and thought-out steps in preventing the extent of damages.

5.2 Implications for businesses

Natural disasters can have damaging impacts to businesses. They affect almost all aspects of a business including assets and facilities, clients and customers, and supply chains.

The disruption often leaves scars on businesses as some struggle to return to pre-disaster levels of activity. This is especially apparent for small businesses as they often do not have the means to recover and deal with serious disruptions to business.

Because of this potential threat, it is important for businesses to gain a complete understanding of the risks that they may be facing. In doing so, businesses can then best prepare by conducting a business impact analysis and develop a disaster recovery plan.

A key component of the disaster recovery plan includes insurance. Section 4 has demonstrated the reduced impact that insurance can create following a disaster. Ensuring that businesses understand the risks they face in their respective locations and acquiring an adequate policy for those risks is critical for businesses, especially for those that are smaller in size.

Businesses that are located in more hazardous zones are more likely to face reduced income levels due to periods of potential closure or lower number of customers. A proper understanding and acknowledgement of the likelihood of this risk is needed to take out insurance that will adequately support this business in times of disaster. There may be increased expense from the premium, but for a business that is facing those risks, it is a worthy investment.

Another consideration that businesses may also need to take into account is the location of their employees' residency. If they are in a high-risk area, there is potential that a natural disaster may prevent the workforce from being able to reach the workplace. This has the potential to cause disruptions to the business as a reduced workforce will likely mean that the business will not be able to function, which is especially the case for small businesses. Again, acquiring an adequate insurance policy to cover costs and revenue for periods of staff being unable to access the workplace would be a worthwhile investment.

An understanding and more importantly an acknowledgement of the risks that businesses located in hazardous zones face is key for continued operation following a natural disaster. This will allow businesses to take out the appropriate insurance cover. This is especially important for small businesses who generally will not be able to recover on their own due to the smaller size of their business operations.

5.3 Implications for households

Although households will have varying levels of ability to manage risks from natural disasters, there are steps that they can take. Gaining an understanding of the environment in which they live is a critical first step. This information provides households with a broader picture of the risks they face, and the options that are available to deal with them. The realisation that an individual's home is located in a hazardous zone and subsequently relocating outside of this area is an example of this.

However, this is not always practical for some households. An alternative solution would be to purchase adequate levels of insurance. A comprehensive understanding and acknowledgment of the risks that households face is key in acquiring cover that is appropriate

for each individuals' circumstances. Section 4 illustrated the difference that having insurance had by comparing GDP scenarios with and without insurance. This highlights the importance of attaining the appropriate level of insurance coverage as it not only increases the rate of recovery, but also reduces the extent of damage to GDP as well.

Households may also take into consideration the threat of natural disasters when choosing where to live and how they should build their homes. Furthermore, households may also need to regularly re-assess the dangers of their environment as rising temperatures and changing landscapes may bring risk towards areas that were previously not considered hazardous.

5.4 Implications for governments

This report has illustrated the detrimental impacts that natural disasters have on Australian communities. With a changing climate and a growing population, the impacts are likely to be more severe into the future. As a result, economic activity and taxation revenue are likely to reduce in those communities located in hazardous zones.

As natural disasters cannot be prevented, the aim for governments should be to reduce the extent of damages that these events can have. A key action for governments at all levels in doing so, is to not only look at recovery and reconstruction, but to also focus on mitigation.

The Productivity Commission Inquiry Report³⁰ stated:

“Governments overinvest in post-disaster reconstruction and underinvest in mitigation that would limit the impact of natural disasters in the first place. As such, natural disaster costs have become a growing, unfunded liability for government”

The Australian government spent 3% of what it spends on post disaster recovery and reconstruction on mitigation, which highlights this disproportionate spending³¹. Mitigation strategies are generally not as costly as what recovery and reconstruction total to be. Research suggests that a dollar spent on mitigation can have save at least two in recovery and reconstruction costs³². Furthermore, this has been argued to be a conservative estimate.

The flood mitigation works in Lismore are an example of mitigation of being a cost saving investment. With the completion of a levee in 2005, Lismore was able to save an estimated \$15 million in recovery costs³². These savings were attributed to minimised flooding in future years and highlights the return on investment that can be achieved by focusing on mitigation and prevention.

Governments can reduce the impacts of natural disasters by supporting individuals and businesses to make informed decisions regarding disaster management. Households and businesses can be unaware of the risks that they face. The ACCC survey into non-insurance for small businesses in the flood affected areas of Townsville reported 67% of small businesses without flood cover³³. This was because they believed they were not in a flood zone. Governments may be able to provide such information on exposure to natural disaster risks in an easily accessible and understandable format.

³⁰ Productivity Commission (2014) Natural Disaster Funding Arrangements Inquiry Report, page 2, available at: <http://www.pc.gov.au/inquiries/completed/disaster-funding/report>

³¹ Australian Business RoundTable for disaster Resilience and Safer Communities (2016) Overview Investing now to reduce the future cost of recovery – available at: <http://australianbusinessroundtable.com.au/the-challenge>

³² McClelland, R. (2011) Address on climate change to the James Cook University School of Law- available at: <http://www.austlii.edu.au/au/journals/JCULawRw/2011/1.pdf>

³³ Northern Australia Insurance Inquiry report- ACCC (2019) – available at: https://www.accc.gov.au/system/files/Northern%20Australia%20Insurance%20Inquiry%20second%20interim%20report%202019_0.PDF

Furthermore, the Royal Commission's report into natural disaster revealed that there is confusion from individuals regarding what insurance policies cover and what they could do to reduce their insurance premiums³⁴. Additionally, the Australian Small business and family enterprise ombudsman found that small businesses are unaware of all commissions, fees and taxes that make up a significant portion of their insurance premiums³⁵. Again, governments can play a role in educating individuals in this regard.

A key finding from the Insurance Inquiry Report conducted by the Australian Small business and family enterprise ombudsman found that small businesses found it difficult to acquire a range of insurance policies and for the policies available these were at prohibitive prices³⁵. For example, businesses reported being unable to obtain natural disaster insurance, as well as public liability and professional indemnity insurance. Furthermore, mining, and remote areas have been unable to obtain insurance due to their industry and location.

Regulatory, geographic and industry factors have contributed to the low supply of comprehensive and affordable insurance policies. Governments have a role to play in improving the availability and affordability of insurance for small businesses.

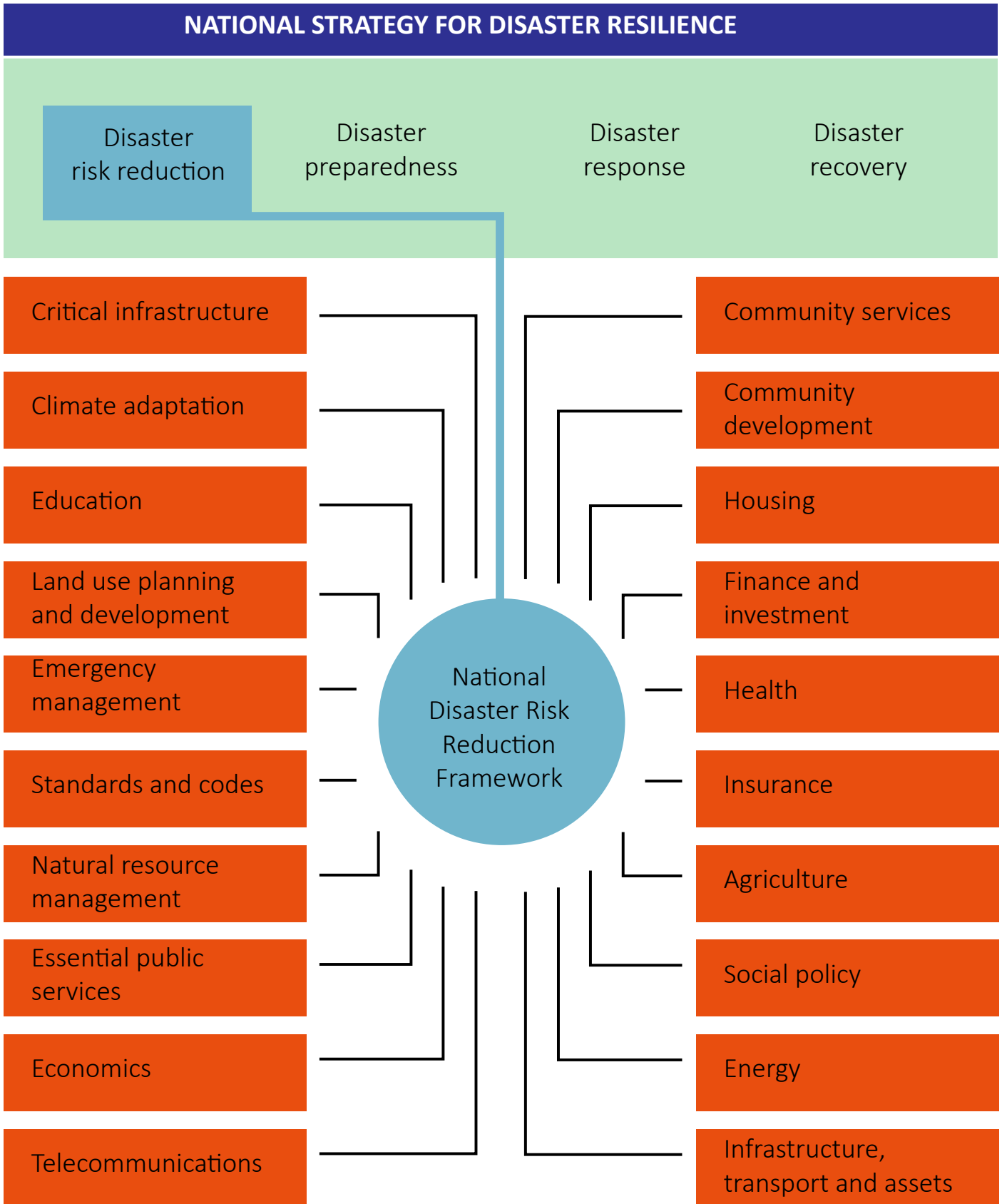
Another form of mitigation that governments can play a role in shaping is through land use planning. Undertaking a suitability and natural disaster assessment of all land prior to commercial release will become increasingly important and has been recommended by the Australian Small Business and family Enterprise Ombudsman³⁵. As our climate changes, hazardous zones may spread to areas that were previously considered low risk. Areas previously thought of as non-risky may not remain that way in the foreseeable future as the spread of risk widens as climate and landscapes change. By introducing a required assessment, controls are in place to prevent infrastructure as well as households and businesses from building in hazardous zones.

Governments can draw upon the National Disaster Risk Reduction Framework in their approach to mitigating the impacts of natural disasters - Figure 19 on page 36 illustrates the framework. A key takeaway from the framework is that national disaster management is not completed by any single approach. There are several components to be addressed and various organisations that are required to co-ordinate with one another. Although disaster management is a shared responsibility, it is not shared equally. Governments have a greater role in leading a co-ordinated effort in reducing the impacts of natural disasters in Australia. The co-ordinated approach has been a recommendation of the Royal Commission as well as suggesting that a national approach to disaster management will be the way forward. This will be critical as the acceleration of climate change will mean more severe and a greater number of disasters for Australia.

³⁴ Royal Commission (2020), Royal Commission into National Natural Disaster Arrangements Report – available at <https://naturaldisaster.royalcommission.gov.au/publications/royal-commission-national-natural-disaster-arrangements-report>

³⁵ Australian Small Business and Family Enterprise Ombudsman (2020), Insurance Inquiry Report December 2020 – available at: https://www.asbfeo.gov.au/sites/default/files/Final%20Insurance%20Report_0.pdf

FIGURE 19: NATIONAL DISASTER RISK REDUCTION FRAMEWORK



Source: National Disaster Risk Reduction Framework, Home Affairs (2018)
 – accessible at <https://www.homeaffairs.gov.au/emergency/files/national-disaster-risk-reduction-framework.pdf>



06 Conclusion

06 Conclusion

This report has examined two recent natural disasters in Australia: the 2019 Townsville floods, and the 2019-20 Black Summer bushfires. These disasters have caused serious disruptions to many Australians by damaging homes, businesses, and infrastructure. The 2019-20 'Black Summer' bushfires saw over 3,000 homes destroyed, over 24 million hectares burnt and tragically the loss of 33 lives.

Events of this kind are becoming increasingly common and present a real challenge for communities across the country. A warmer climate and expected population growth into the future will mean that these events will be more severe and affect a greater number of people.

As these types of events cannot be prevented, the focus is on reducing the impact that it has to our communities. Insurance provides a way to mitigate the adverse economic impact of natural disasters. The income from insurance payments helps to stabilise the economy following the initial shock from the disaster, and the economic stimulus from claims payments promotes a more rapid return to normal economic activity.

Without insurance, it is possible that economies, and especially those in regional and remote areas, may never fully recover from a natural disaster, as damage leads in some cases to a permanently impaired productive capacity in the long term.

This is particularly the case in regional areas which have a narrow economic base.

This is particularly damaging to small businesses in those regional areas as they often operate on smaller profit margins and as such may not have the means to continue operation following extended disruptions. Furthermore, it is concerning for regional communities as small businesses are a vital part of those areas as they provide income, employment, and play a social role in the community as well.

The analysis, through comparing scenarios with and without insurance, has shown the economic impact of disasters. On average, between 65% and 72% of total economic impact from the floods and bushfires is attributed to small businesses. The large percentage that small businesses make up highlights the importance for these businesses to acquire adequate insurance.

Small businesses should be aware of the risks they face under their individual circumstances. Recent events have shown that it is important to be prepared for extreme circumstances. As such, small businesses should acquire adequate insurance to cover for the risks that they face.

Governments have a role to play in addressing the impacts of natural disasters. Governments should provide clear information to businesses and households regarding their risk and

exposure to natural hazards and subsequently what they can do to protect themselves.

Although the importance of insurance has been discussed extensively, it is also worth consideration of the value of mitigation. Mitigation actions are those that take place before disaster events strike and can reduce the damage significantly. It has been argued that for every dollar spent on mitigation it can save at least double that in recovery cost. Governments have a major role to play in the process of mitigation.

However, mitigation is not limited to the government, with households, businesses, insurers, and service providers having a part to play. Whether this is households relocating, insurers providing clearer information or governments implementing a co-ordinated disaster management strategy, all levels can contribute to this mitigation process and reduce the damage of future natural disasters.

As Australia becomes more at risk to these disasters, the role of insurance will become increasingly important. This is especially important for regional Australia and the small businesses that dominate this area as these locations are likely to face significant increases in the level of risk.

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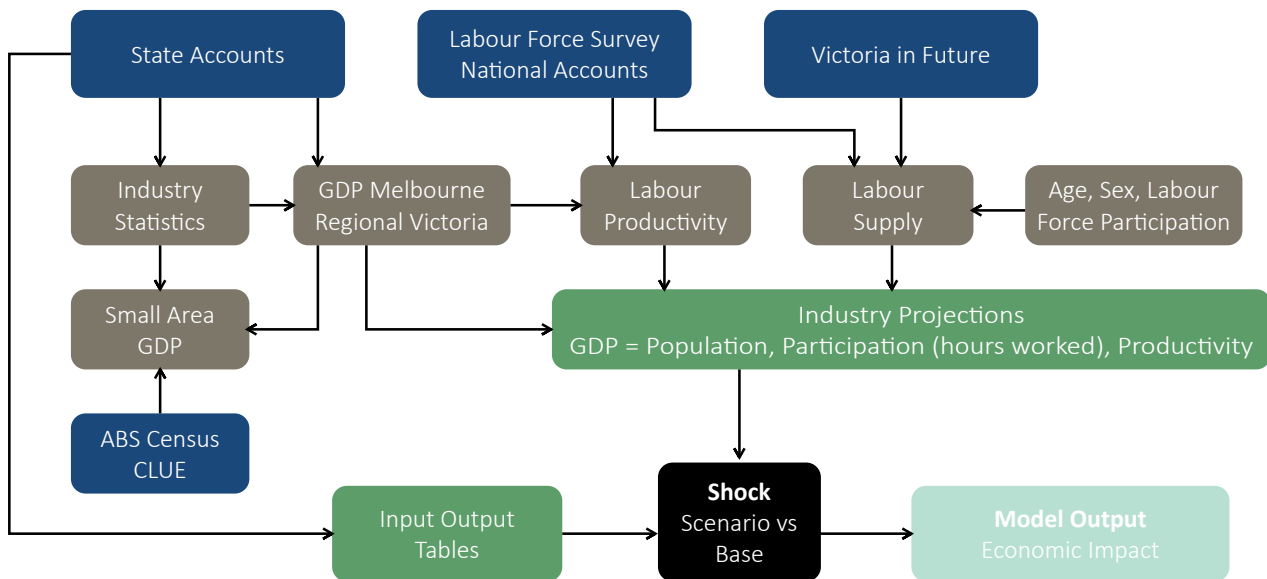
Appendix: Further Detail

Small Area Gross Domestic Product Methodology

This section outlines the method used to estimate Gross Domestic Product for small areas across Australia. These estimates have been used in the two scenarios outlined in Section 4 of this report.

SGS Economics and Planning has developed estimates of economic activity for each major capital city, along with the regional balance of each state. These statistics provide improved insights into the relative economic performance of each of Australia's major capital cities (Sydney, Melbourne, Brisbane, Adelaide and Perth), the Northern Territory, Tasmania and the Australian Capital Territory.

FIGURE 20: OVERVIEW OF MODELLING FRAMEWORK



Source: SGS Economics & Planning, 2021

Each major capital city, along with the regional balance of each state, is broken down into Statistical Area 2. To produce estimate of Gross Domestic Product at the Statistical Area 2 level, estimates are made for each industry. Industries are divided into five categories:

- Primary production – Agriculture, forestry & fishing and Mining. Information on the location of farms and mines is used to distribute regional totals. Head office operations in these industries are accounted for using an average hourly wage rate method;
- Capital Intensive – Manufacturing, Electricity, gas, water & waste services, Wholesale trade and Transport, Postal & Warehousing. Detailed 2-Digit industry gross value added per worker is combined with the number of workers is used to distribute regional totals;
- Labour Intensives – All other industries. An average hourly wage rate multiplied by total hours worked in each city is used to distribute regional totals;
- Ownership of dwellings. Number of houses in the city and average rents are used to distribute State level totals to each city; and
- Taxes less subsidies. The State level total is distributed in line with the total industry gross value added for the SA2.

This is done using a range of data sources including:

- ABS Agricultural Commodities, Australia, 2018-19 (Cat. No. 7121.0);
- 2016 Census of Population and Housing, Place of Work data;
- ABS Labour Force, Australia, Detailed, Quarterly (Cat. No. 6291.0.55.003);
- ABS Australian Industry, 2018-19 (Cat. No. 8155.0); and
- ABS Australian System of National Accounts (Cat. No. 5204.0).

Economic modelling

Economic modelling has been used to estimate the size of the economic impact due to natural disasters and the economic benefit of insurance provided by IAG.

It is important to understand the difference between insurance losses and economic loss. Insurance losses related to natural disasters capture the losses accruing to insured assets (e.g. homes, motor vehicles and business premises).

Economic losses relate to the loss of economic production because of natural disasters. For example, businesses forced to close will miss out on daily takings, workers cannot reach their workplace, and factories are idle without raw materials. Depending on the scale of the natural disaster, people may choose to leave a region rather than rebuild. This loss of population then impacts the economy in the longer term.

This section briefly outlines the economic modelling used to estimate the size of the economic impact of the natural disasters and the economic benefit of insurance provided by IAG. It should be noted that other benefits such as improved mental health outcomes, reduced alcohol and drug use and changes to school academic outcomes are not included in the economic modelling.

The first input is insurance claims and recovery activity data from IAG. This is provided for each disaster Case Study and broken down into the following categories:

- Home Insurance
- Motor Vehicle Insurance
- Commercial Insurance (split into motor vehicle and other commercial insurance)

The data was provided at the post code level and was then aggregated to the Statistical Area 3 level. The date at which the insurance is paid has also been provided for each disaster.

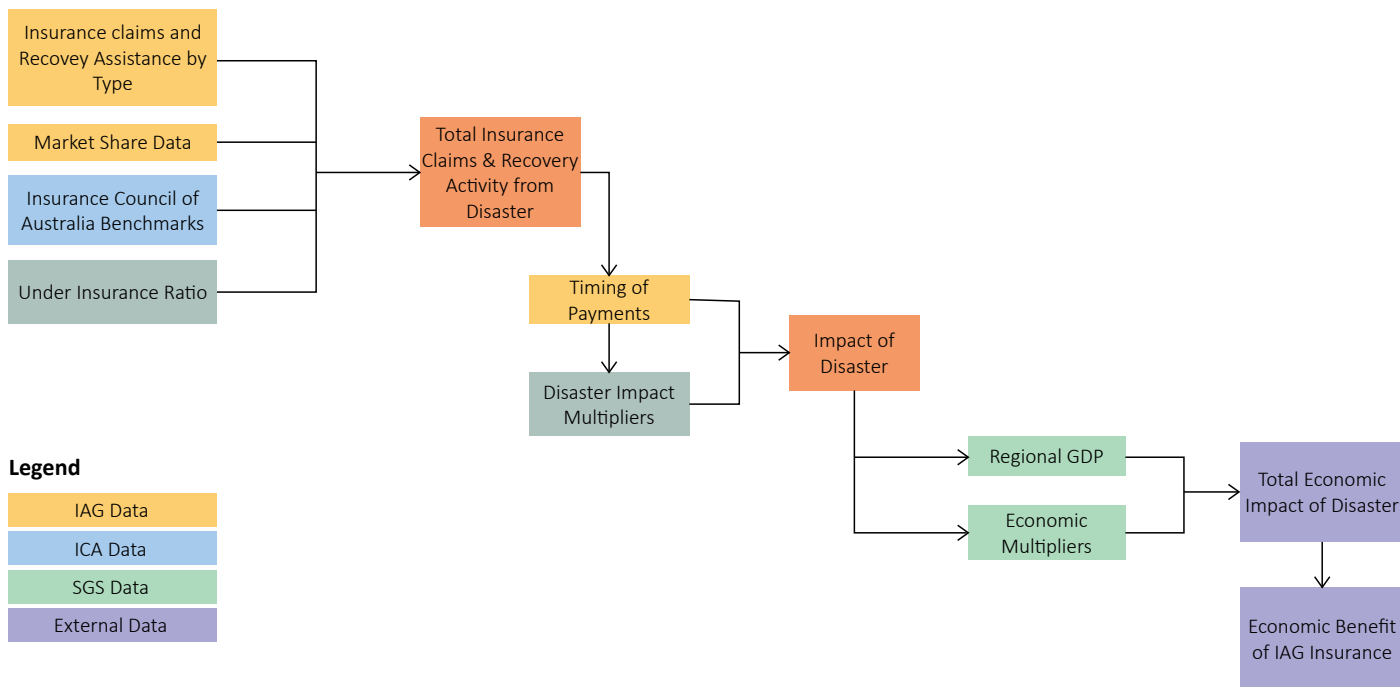
IAG's insurance claims and recovery activity data are based off actual claims data for each natural disaster period for all IAG brands. Estimates of total insurance payout for claims and recovery assistance figures for an event are based off IAG insurance and market share data combined with benchmark data from the Insurance Council of Australia for total insurance payouts. An adjustment is then made to account for households and businesses who are self-insured. There is a lack of data on the level of self-insurance. After conversations with the Insurance Council of Australia, SGS assumed that 10 per cent of households / businesses are self-insured.

Previous research undertaken by the Bureau of Infrastructure, Transport and Regional Economics³⁶ and Deloitte Access Economics³⁷ has examined the relationship between insurance payouts and the loss of economic production. This research produced disaster multipliers which can be used to convert insurance payouts to economic loss. Figure 22 describes three types of costs that make up **total economic cost** of natural disasters. Direct tangible costs related to damage to properties and infrastructure, part of which is covered by insurance. Indirect tangible costs are created from the flow on effects of the disaster, including business and network disruptions. The final cost is Intangible costs, which are those direct and indirect costs that are not easy to value, such as death and injury, and social costs.

³⁶ Economic Costs of Natural Disasters in Australia', BITRE (2001) https://www.bitre.gov.au/sites/default/files/report_103.pdf

³⁷ Building resilience to natural disasters in our states and territories', Deloitte Access Economics (2017) <https://www2.deloitte.com/au/en/pages/economics/articles/building-australias-natural-disaster-resilience.html>

FIGURE 21: ECONOMIC MODELLING OVERVIEW



Source: SGS Economics & Planning, 2021

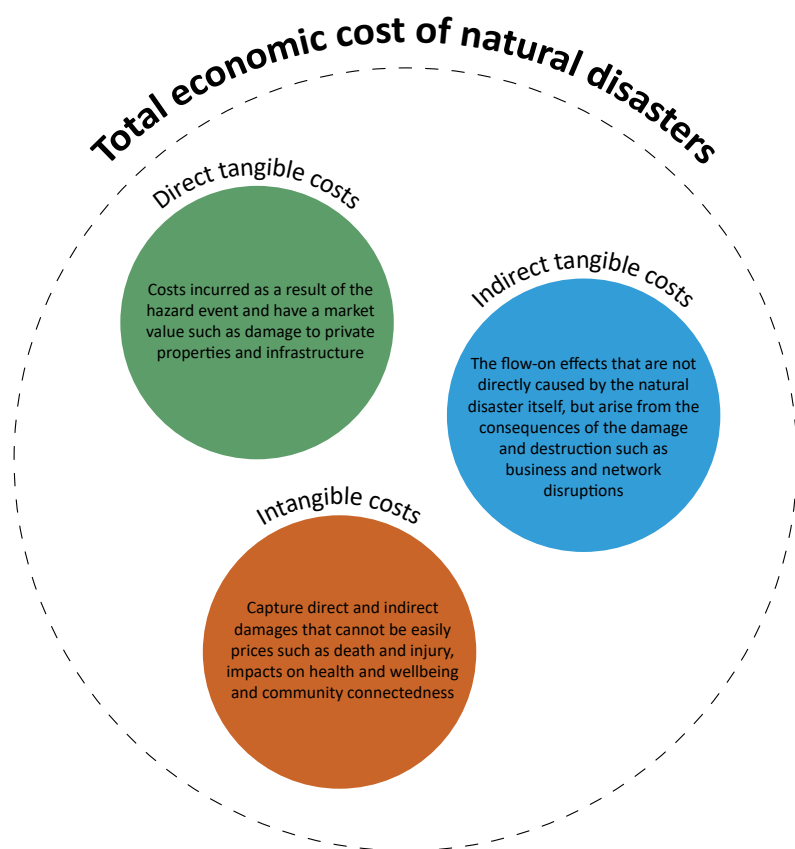
2015 report by Deloitte Access Economics found that the intangible costs of disasters – including increased family violence, mental health impacts, chronic disease, alcohol and drug use, short and long term unemployment, changes to school academic outcomes, and crime – are at least equal to, if not greater than, tangible costs.

TABLE 2: DISASTER ECONOMIC MULTIPLIERS

Disaster Type	Average multiplier used	Lower Bound	Upper Bound
Townsville Flood	2	2	10
'Black Summer' bushfire	3	3	5.3

Source: SGS Economics & Planning and Deloitte Access Economics

FIGURE 22: TOTAL ECONOMIC COST OF NATURAL DISASTERS



Source: Deloitte Access Economics, 2017, 'Building resilience to natural disasters in our states and territories' report

TABLE 3: REGIONAL ECONOMIC MULTIPLIERS FOR EACH INSURANCE PAYMENT TYPE

Region	Building	Motor Vehicle
Greater Sydney	1.34	0.75
Rest of NSW	1.20	0.54
Greater Brisbane	1.29	0.72
Rest of QLD	1.18	0.56
Greater Hobart	1.09	0.59
Rest of Tasmania	1.09	0.59
Greater Melbourne	1.30	0.72
Rest of Victoria	1.13	0.47

Source: SGS Economics & Planning

For example, if insured losses of a bushfire were estimated at \$1 million and the estimated multiplier is 3 then total economic cost would be estimated at \$3 million.

Table 1 on the next page presents the multiplier used for each of the Case Study disasters. Also presented is the upper and lower bounds provided in the previous research.

The economic stimulus from IAG’s insurance claims and recovery activity categories (buildings, motor vehicle) are allocated to different expenditure categories with different economic multipliers that vary by region (as shown in Table 2).

These reflect supply chains within each region and how much expenditure is lost from the local area. Cities have higher multipliers than regional areas because they capture more stimulus and motor vehicles have multipliers below one because cars are imported from overseas and therefore have a reduced impact on an economy.

The GDP impact estimates in this report exclude the direct tangible and

intangible costs, with lower and more conservative multipliers chosen for this analysis.

A Gross Domestic Product scenario without insurance was estimated for each SA3 impacted by the Case Study disasters. Given each disaster occurred roughly in the middle of the year, the financial year estimates of Gross Domestic Product were converted to calendar year estimates. This allows the better assessment of the economic impact to be made, rather than presenting an impact for one or two months at the end of the financial year.

Based on insurance claims from ICA and IAG, the economic impact was estimated. Two scenarios, one with the stimulus of insurance claims and recovery activity flowing through the economy and the second with no stimulus, allows the impact of IAG insurance to be isolated.

Small business impact on GDP

The methodology to determine the proportion of GDP that is created by small businesses in regional areas uses a combination of ABS datasets. These include:

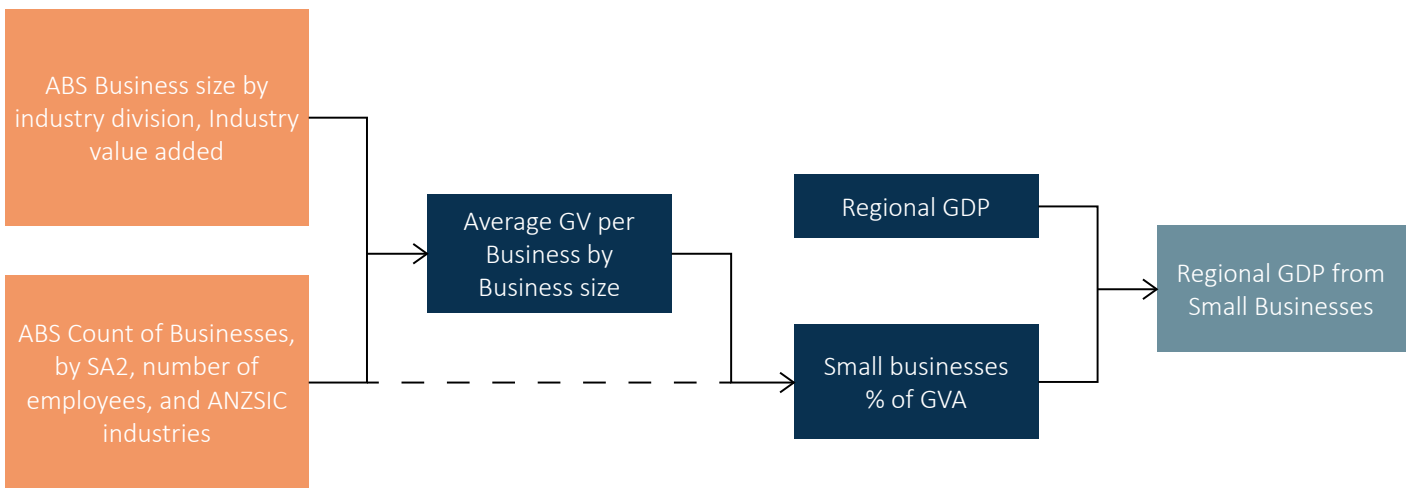
- Counts of Australian Businesses for ANZSIC 1-digit industries, by SA2 and number of employees, 2019

- Australian Industry- Business size by industry division, Industry value added, 2018-19

Small area GDP is calculated by SA2 for 2019 base year by ANZSIC 1-digit industries in the disaster affected areas. The share of GDP that comes from small businesses, notably those with zero to four employees, and those with five to 19 employees, are calculated using those shares of GVA using the above ABS datasets. The total for all small business with zero to 19 employees are combined and aggregated to SA3 geography in disaster affected areas.

The share of gross value add to GDP from small businesses is then used to determine the impact that natural disasters cause on GDP coming from small businesses in the year following the natural disaster event.

FIGURE 23: METHODOLOGY TO PRODUCE REGIONAL SMALL BUSINESSES GDP



Legend

- SGS Data
- External Data

Source: SGS Economics & Planning



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