



28 April 2020

National Natural Disaster Arrangements Royal Commission
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Re: Royal Commission into National Natural Disaster Arrangements

The Australian Business Roundtable for Disaster Resilience & Safer Communities (ABR) welcomes the opportunity to make a submission to the *Royal Commission into National Natural Disaster Arrangements*.

The ABR was formed in December 2012 by business and organisational leaders with a shared vision to ensure that communities across Australia are better able to prepare for, respond to and recover from natural disasters.

Current members, leaders from Australian Red Cross, IAG, Munich Re, Optus and Westpac Group, represent a cross section of the Australian economy. Each member organisation of the ABR plays a crucial role in community planning or disaster recovery and all support customers and communities affected by floods, storms, and bushfires.

The ABR's primary objective is to make Australian communities safer by improving disaster resilience and climate change preparedness. We do this by expanding knowledge, collaborating and leading by example to help influence decisions made by governments, businesses and communities.

Increasing costs of natural disasters

Australian communities are exposed to just about every natural hazard, from earthquakes to storms and cyclones, to bushfires and devastating floods¹.

The ABR has commissioned five independent research White Papers providing clear evidence of the increasing costs of these disasters and specific recommendations that, if implemented, would minimise the devastation and costs of natural disasters and make Australian communities more resilient.

The 2017 ABR estimate of the total tangible and intangible economic costs of natural disasters was \$18.2 billion per year and forecast to rise to \$39 billion per year by 2050². Including these intangible costs showed our previous analysis of the economic costs of disasters underestimated the true costs by at least 50 per cent³.

These estimates do not include the likely additional costs as a result of changing climatic conditions. If included this estimated \$39 billion per year by 2050 figure would certainly rise.

The changing climate has begun to have a major influence on the frequency and severity of weather-related disasters. These impacts can dramatically alter an area's risk. The impacts of weather-related

¹ Bruyère, C., Holland, G., Prein, A., Done, J., Buckley, B., Chan, P., Leplastrier, M., Dyer, A. (2019). *Severe weather in a changing climate*. Insurance Australia Group (IAG). doi: <http://dx.doi.org/10.5065/nx7j-0s96>

² Australian Business Roundtable for Disaster Resilience & Safer Communities (ABR) commissioned [report](#): *Building Resilience in Our States and Territories* (2017), p. 20.

³ Australian Business Roundtable for Disaster Resilience & Safer Communities (ABR) commissioned [report](#): *The Economic Cost of the Social Impact of Natural Disasters* (2016A), p. 13.



disasters are becoming more devastating and expensive for communities around the world, due to the increasing concentration of populations in locations with exposures to natural disasters⁴.

A clear need for a coordinated approach

The recent bushfire season as well as other disasters across Australia have generated a national discussion of how we may reduce our vulnerability to natural hazard threats. It also highlighted the need to develop a more sustainable and comprehensive national approach to the complex issue of managing weather related risks.

The ABR believes that all Australians have a role in ensuring we are optimally prepared for severe natural hazards. More than nine million Australians were impacted by a natural disaster between 1987 and 2017⁵. All levels of government should collaborate with communities, businesses and the not-for-profit sector to improve Australia's preparedness, resilience, response and recovery to natural disasters. This is a national challenge that requires everyone to develop and deliver solutions⁶.

All levels of Government in Australia have a role in improving Australia's resilience. The Australian Government has a key role as a leader, policymaker, legislator and funder to improve Australia's preparedness, resilience, response and recovery to natural disasters. It also has a critical role developing and sharing appropriate information, developing high-level awareness of risks and responding to market and regulatory failures that prevent effective and efficient natural disaster risk management⁷. A central policy response supports consistency and avoids duplication across jurisdictions.

However, with many of the levers to drive resilience in their hands, including social policy, building controls, infrastructure and land use planning, emergency management, data collection and provision and support for community awareness, State and Territory governments, agencies and departments also have key roles to play in preparation and planning for bushfires⁸.

The ABR commissioned report, *Building Resilience in Our States and Territories (2017)*, details the role of states and territories in building resilience (pgs. 48-57) and provides lessons from their initiatives (pgs. 58-94) around governance arrangements, funding for resilience, collaboration between the public and private sector and barriers to building resilience. Key recommendations from the report for all levels of government include: mainstreaming resilience across policy and decision making; shifting funding priorities from recovery to resilience by considering the broader economic and social benefits that result; supporting consistent, publicly available data that improves understanding of risks and costs to society; and collaborating with the private sector and communities to build resilience and address the long-term costs of natural disasters⁹. The coordination challenge is large and requires a comprehensive approach¹⁰.

It is important to acknowledge that natural disasters transcend the scope of state and territory jurisdictional responsibilities. Natural hazards often spill across state borders, requiring coordination and cooperation between states with different economic abilities and constraints. As such, it is efficient to provide a policy response centrally.

We commend the Australian Government on the establishment of the National Resilience Taskforce, the subsequent creation of the National Disaster Risk Reduction Framework (the Framework) and contribution to other guidance materials around vulnerability. The Framework provides a robust guide

⁴ IAG and SGS Economics & Planning (2018). [At What Cost? Mapping Where Natural Perils Impact Economic Growth and Communities](#).

⁵ ABR (2017), p. iii.

⁶ ABR (2017), p. iii.

⁷ Australian Business Roundtable for Disaster Resilience & Safer Communities (ABR) commissioned [report](#): *Building Our Nation's Resilience to Natural Disasters* (2013), p. 53.

⁸ ABR (2013), p. 53.

⁹ ABR (2017), p. 9-10.

¹⁰ ABR (2013), p. 53.

for national, whole-of-society efforts to proactively reduce disaster risk to minimise the loss and suffering caused by disasters¹¹.

We acknowledge the Australian Government is working across sectors, and with state and territory governments, to finalise the first National Action Plan (NAP) under the Framework and that all state and territory emergency management ministers have committed to finalise the NAP as soon as possible¹². There is a risk that the ambitious outcomes of the Framework will not be met if this inaugural plan does not include agreed initiatives across all stakeholders recognised in the Framework, clear accountabilities, expected outcomes and a robust measurement approach.

Recommendations for improving Australia's preparedness, resilience and response to natural disasters across government

We cannot prevent extreme weather events from occurring, but we can harness the evidence, best practice and experience available to build more resilient and safer communities better able to withstand the extreme and unpredictable forces of nature.

The ABR has listed below a series of recommendations for the Government to consider and suggests the Australian Government explore the implementation of recommendations in partnership with business and community groups who are part of and have excellent knowledge of their local communities.

1. Investment in mitigation is the first priority.

The ABR advocates for community resilience and mitigation against known risks as the first priority for reducing the impact of natural hazards. In this context, mitigation includes multiple policy options and is defined as measures taken before a disaster aimed at decreasing or eliminating its impact on society and the environment¹³.

The ABR's commissioned White Paper (2013) *Building our Nation's Resilience to Natural Disasters* found that a simple cost-benefit analysis demonstrates how government funds would be saved over the longer term by placing a greater level of investment in pre-disaster resilience measures. The paper demonstrated that carefully targeted resilience investments of \$250 million per annum have the potential to generate budget savings in the order of \$12.2 billion for all levels of government (or \$9.8 billion when looking at the Australian Government budget only). If successfully implemented, it could see Australian and state government expenditure on natural disaster response fall by more than 50% by 2050¹⁴.

The second, or double benefit, of mitigation targeting resilience are 'co-benefits' that accrue even in the absence of a disaster. Such co-benefits support economic growth and social capital in Australian communities and are an important driver of regional investment decisions. They may include: short-term employment, regional growth associated with investment, lower insurance premiums, more connected communities, improved business and consumer confidence, more reliable services or higher levels of skills and technical expertise¹⁵.

There are also the direct and indirect employment benefits and opportunities for innovation that arise from these local investments. Thus, this combination of avoided losses and co-benefits yields a 'double dividend' from resilience investment¹⁶. These are all benefits that are realised in the present¹⁷.

¹¹ Department of Home Affairs (2018). [National Disaster Risk Reduction Framework](#), p. 6.

¹² Statement by the Minister for Agriculture, Drought and Emergency Management, the Hon David Littleproud MP Disaster Risk Reduction, 26 February 2020.

¹³ COAG (2011). [National Strategy for Disaster Resilience](#).

¹⁴ ABR (2013), p. 21.

¹⁵ ABR (2017), p.8.

¹⁶ ABR (2017), p.8.

¹⁷ ABR (2017), p. 30.

The ABR supports disaster recovery efforts, acknowledging that funding is essential for communities to recover and rebuild post disaster. However, our research shows the clear economic and social benefits of also funding disaster mitigation and resilience before a disaster strikes.

The ABR's 2017 White Paper found Australian and state government spending on direct recovery from disasters is around \$2.75 billion per year. In contrast, funding natural disaster resilience is only approximately \$100 million per year¹⁸.

Consistent with the findings and recommendations of the ABR, the Productivity Commission's 2015 Natural Disaster Funding Report recommended "an overhaul of the natural disaster funding arrangements in the form of a coherent policy package across recovery and mitigation funding, budget treatment of recovery costs, and accountability requirements for state and local governments¹⁹."

For this reason, the ABR recommends the government consider the Productivity Commission's recommendation (Recommendation 3.5) to increase its funding to the state and territory governments for mitigation²⁰.

2. Governments at all levels need to embed resilience across all aspects of policy and decision-making²¹.

Disaster resilience is built through a broad set of mitigation measures and policies. Resilience should be mainstreamed across portfolios beyond emergency management. Embedding resilience in planning, land use and building portfolios presents the biggest opportunity to embed resilience at the state level. Critical infrastructure planning is a significant opportunity at the federal level. Greater economic benefits result from considering resilience in development phases, rather than retrofitting after disasters have occurred.

Embedding resilience is part of the National Disaster Risk Reduction Framework's Priority 2, accountable decisions, acknowledging that "greater understanding of disaster risk has limited value unless actively applied²²." Responsibilities should be clearly outlined across state and federal committees to ensure resilience is considered and integrated across all the levers are used to mitigate disaster impacts.

The ABR commissioned report *Building Resilience in Our States and Territories* (2017) provides examples that demonstrate the case for embedding and building resilience across physical and community measures. Physical measures influence land use, infrastructure and building development, impacting where people live and asset exposure. For example, Launceston City Council in Tasmania upgraded its flood levee system to protect against a one in 200-year flooding event; benefits of avoided damage from the 2016 flood outweighed the cost of the project fourfold. Community measures include awareness raising and preparedness programs that help the community to withstand, adapt and respond to disasters. The Victorian Country Fire Authority's Community Fireguard program is a bottom-up approach that encourages community responsibility for fire safety by increasing awareness of hazards, scenario planning and mitigation activities; communities build resilience, reduce disaster costs and reap social benefits²³.

Government should work with and through business and not-for-profit groups who are experts in their communities and their business continuity and social needs. Engaging business and community groups earlier allows more cohesive policy development and decision making.

¹⁸ ABR (2017), p. 30.

¹⁹ Productivity Commission (2014). [Natural Disaster Funding Arrangements Inquiry Report](#), p. 15.

²⁰ Productivity Commission (2014), p. 39.

²¹ ABR (2017), p. 9.

²² Department of Home Affairs (2018), p. 14.

²³ ABR (2017), p. 30-44.

3. Governments and businesses need to improve resilience of critical infrastructure.

Resilient infrastructure plays a critical role in supporting communities to withstand, respond to and recover from disasters. Investment in resilient infrastructure can deliver cost savings and additional benefits not captured in the value of rebuilding costs²⁴.

A major share of the costs associated with disasters arises from damage to critical infrastructure including roads, bridges, telecommunications, power and water supply, railways and hospitals. Repairing, rebuilding or replacing these assets after a disaster is often a costly exercise which also can exacerbate the suffering of the community during the recovery process.

More than \$450 million per year has been spent by Australian governments on restoring essential public assets following extreme weather events between 2002-03 and 2010-11, or 1.6 per cent of total public infrastructure spending²⁵. Thus, roads, bridges and other critical infrastructure should be built or repaired to withstand natural disaster risks²⁶.

Case studies (pgs. 46-62) in the ABR commissioned report *Building Resilient Infrastructure* (2016) show that inconsistent approaches to considering resilience can have major economic and social implications when natural disasters occur.

For example, the Emile Serisier Bridge in NSW demonstrates the need to thoroughly analyse the natural disaster risks associated with new infrastructure. Situated at a low level on the flood-prone Macquarie River, the bridge has been flooded multiple times since it was built in 1987. During a one-in-10-year flood, the bridge is more than two metres under water and can last weeks. Traffic must be diverted to the LH Ford Bridge, which can withstand a one-in-50-year flood, creating a significant bottleneck with only two lanes and usually at 90% capacity during peak hours. During the 2010 flood, a trip across the river that typically takes 10 minutes took two hours. Congestion imposed significant costs to Dubbo residents, visitors and through traffic. Disruptions impacted hospital services, school and university classes, selected local businesses including a major tourism operator; residents commuting lost valuable work or leisure time; and emergency services' response times declined. Determining which resilience measures are appropriate before a natural disaster and before infrastructure is built is complex and requires detailed ex-ante risk assessments and analysis of possible resilience options²⁷. ABR research suggests that investment decisions would change if disaster resilience were considered during the planning process²⁸.

Building resilience into critical infrastructure supports improved preparedness and resilience measures. Resilience needs to be integrated into government and industry decision-making, and policy changes must be made to improve incentives for resilience. Finally, the technical capacity of workers in the building sector to understand and account for disaster resilience needs to be strengthened²⁹.

Further information, including guidance for practitioners and specific principles for infrastructure planning can be found in *Building Resilient Infrastructure* (2016).

4. Governments, businesses and communities need to invest in community resilience programs that drive learning and sustained behaviour change³⁰.

Physical resilience measures can significantly reduce disaster impacts but they cannot stop them from happening. The remaining impacts, however, can be lessened by community measures (including social and psychological measures)³¹. This includes community awareness, education and engagement programs that enhance social capital by building social networks and connections and

²⁴ ABR (2017), p. 10.

²⁵ Australian Business Roundtable for Disaster Resilience & Safer Communities (ABR) commissioned [report: Building Resilient Infrastructure](#) (2016B), p. 2.

²⁶ ABR (2017), p. iv.

²⁷ ABR (2016B), p. 53-56.

²⁸ ABR (2017), p. 63-68.

²⁹ ABR (2016B), p. 81.

³⁰ ABR (2016A), p. 62.

³¹ ABR (2017), p. 41.

enable communities to work together to better manage the risks they confront. This promotes communities that are better able to withstand and recover from a crisis³².

Community measures for preparation and resilience include awareness activities that enable individuals, businesses and governments, including emergency services, to be better prepared when a disaster occurs, such as:

- Early warning systems,
- Community education sessions,
- Emergency and evacuation planning and kits and
- House and property maintenance³³.

While these preventative measures require up-front funding, they yield a return on investment by lessening the overall impact of a disaster on individuals, businesses, governments and communities.

These programs should be designed in consultation with communities to ensure a tailored approach to the specific community's challenges.

5. Governments should commit to long term annual consolidated funding for mitigation projects that are prioritised with consideration of their double dividend potential³⁴.

Enhanced investment is another Framework Priority Area, with investment in disaster risk reduction and resilience intended to deliver an outcome of limiting future disaster recovery³⁵. The ABR recommends governments at all levels commit to an increase in funding for mitigation works to make communities safer and more resilient for the long-term.

While governments budget for emergency response, most other recovery costs are an unfunded liability that must be met when a disaster occurs. This is usually at the expense of other planned activities. Avoiding future disaster costs provides governments with greater fiscal stability³⁶.

Governments face competing budget priorities and funding constraints, so mitigation investment must be prioritised to where it can be most effective. Shifting the funding balance from recovery to mitigation involves smarter planning and investment. The process of prioritisation should consider an investment's potential to deliver co-benefits, including economic growth and community connectedness³⁷.

6. Government, business, and the community should collaborate for an enhanced approach to natural disaster risk information.

Consistent and publicly available data on disaster risks, costs, impacts and on public investment in recovery and resilience would improve awareness and planning.

The ABR's commissioned report, *Building an Open Platform for Natural Disaster Resilience Decisions* (2014) provided an overview of natural disaster data and research in Australia, and reinforced the need for better coordination and transparency of disaster risk and resilience information³⁸.

There has been improvement in data for some hazard types, such as state-wide flood maps in Queensland and NSW. However, there are still limitations associated with the availability, consistency and usability of data relevant to natural disaster risks.

³² ABR (2017), p. 96.

³³ ABR (2017), p. 96.

³⁴ ABR (2017), p. 96.

³⁵ Department of Home Affairs (2018), p. 16.

³⁶ ABR (2017), p. 31.

³⁷ ABR (2017), p. 30-31.

³⁸ Australian Business Roundtable for Disaster Resilience & Safer Communities (ABR) commissioned [report](#): *Building an Open Platform for Natural Disaster Resilience Decisions* (2014).

Further while the variability and volatility of natural disasters makes fiscal planning difficult, greater visibility around data and expenditure is needed so governments can better manage recovery costs and capitalise on the savings associated with resilience investment.

Governments, businesses and the community should consider how to make information available to the general public to assist in own community planning. Where data cannot be provided on an open platform, efforts should be made to improve the transparency and availability of relevant data and research.

7. State and territory governments should consult communities, consider updating land management and land use planning practices and share effective approaches.

Land use planning is state and territory governments' strongest tool to mitigate natural hazard risk. However, use and development of land in areas that are continuously affected by natural hazard events continues³⁹. Planning frameworks should identify land with vulnerabilities, ensure these risks are considered in decisions, excluding certain activities and no-build zones in high-risk areas. Such decisions have a big impact on where communities live and work and, thus, how exposed they are to future disasters.

Greater attention should be directed towards specifying risk tolerance, how data will underpin planning outcomes, which modelling or mapping techniques should be used, and how these relate to zoning classifications. A threshold for risk tolerance is needed for risk-based decision making. This should be consistent across the community and drive cost-benefit analysis of mitigation infrastructure as well as land use planning. A consistent framework for data collection and provision of regionally and locally relevant and accurate information is essential for land use planning and development decisions which promote effective pre-disaster resilience. A national framework for data collection and management, established in consultation with the state and territories would be of assistance in implementing pre-disaster resilience in land development processes⁴⁰.

Planning reform and enhanced building codes are an important element of reducing risk, yet they only affect new and renovated homes. The greatest impact of resilience measures but arguably the biggest coordination challenge, lies with existing residential buildings (retrofit, compliance and relocation). It is often more technically difficult and costly to retrofit an existing property to be disaster resilient⁴¹.

The ABR has long argued for national land use planning criteria that prohibits inappropriate land use and to modernise the Building Code of Australia to include minimum standards for the durability of property to natural hazards.

Over time resilience measures may deteriorate (e.g. clearing vegetation around homes in bush fire risk areas) and so the property and surrounding environment must be appropriately maintained to ensure ongoing resilience and effective land management. This is challenging as it requires sustained and consistent localised management⁴². Government should collaborate with communities, encourage cross-sector partnerships and share best practices that consider local needs.

8. For more effective recovery, governments, businesses and communities should commit to rebuild infrastructure and communities stronger and better able to mitigate against the impacts of future hazards⁴³.

Recovery is a partnership across sectors. Individuals, businesses, governments and communities all feel the social and economic impacts of disasters. These impacts are complex and touch all levels of government and cross all portfolios, from infrastructure and planning to health and education⁴⁴.

³⁹ ABR (2013), p. 32.

⁴⁰ ABR (2013), p. 32.

⁴¹ ABR (2016B), p. 16.

⁴² ABR (2013), p. 16.

⁴³ ABR (2016A), p. 14;61. ABR (2016B), p. 36.

⁴⁴ ABR (2016B), p. 14.

It is essential that both physical infrastructure and communities are rebuilt stronger and better able to mitigate against the impacts of future disasters. While it is important to invest in recovering physical infrastructure, there is also a need to consider community and social infrastructure and psychosocial support when making decisions about post-disaster funding⁴⁵.

Pre- and post-disaster funding directed towards social and psychological preparedness has potential to mitigate impacts of disasters. This includes community development programs and support for areas such as health and wellbeing, employment and education⁴⁶. The ABR's commissioned research reports outline a cohesive approach for effective and prioritised pre-disaster investments across the country and highlight the importance of integrated information and activity across government, business and community.

Enclosed for the Commissioner's consideration are the following ABR commissioned reports as referenced throughout this submission:

- Australian Business Roundtable for Disaster Resilience & Safer Communities commissioned report: [*Building Resilience to Natural Disasters in Our States and Territories*](#) (2017).
- Australian Business Roundtable for Disaster Resilience & Safer Communities commissioned report: [*The Economic Cost of the Social Impact of Natural Disasters*](#) (2016).
- Australian Business Roundtable for Disaster Resilience & Safer Communities commissioned report: [*Building Resilient Infrastructure*](#) (2016).
- Australian Business Roundtable for Disaster Resilience & Safer Communities commissioned report: [*Building an Open Platform for Natural Disaster Resilience Decisions*](#) (2014).
- Australian Business Roundtable for Disaster Resilience & Safer Communities commissioned report: [*Building Our Nation's Resilience to Natural Disasters*](#) (2013).

By pursuing key recommendations of the ABR reports, economic costs can be materially reduced, as well as relieving long-term pressures on government budgets. More importantly, a safer Australia can be created through building resilience against the trauma and loss of life that all too frequently confronts many of our communities when extreme weather hits.

Should you require further information please do not hesitate to contact Shauna Coffey, Manager, Australian Business Roundtable for Disaster Resilience & Safer Communities on (02) 9292 3888 or shauna.coffey@iag.com.au.

Yours sincerely,



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⁴⁵ ABR (2016B), p. 49.

⁴⁶ ABR (2016B), p. 65.