



SUBMISSION TO THE PRODUCTIVITY COMMISSION INQUIRY - NATURAL DISASTER FUNDING ARRANGEMENTS











CONTENTS

TABLE OF CONTENTS

Executive Summary	3
Introduction	4
Insurance Australia Group	5
Economic costs of natural disasters	6
The role of disaster funding	7
The role of the insurance industry in building community resilience	9
Signal risk levels	9
Educate communities	10
Cross sector partnerships and collaboration	10
Share expertise and understanding of risk	11
Factors impacting community management of risk	13
Relief and recovery payments	13
Limitations in risk data	14
Insurance premium market adjustments	14
Taxes	15
Raising community awareness	17
Getting the balance right	18
Increased funding for prevention	18
Reformed framework for distributing funds	18
Impact of mitigation and resilience measures on insurance premiums	20
Recommendations	22
Appendix	23
FMA sponsorship	23
CGU strata building inspections	23
Proposed South Rockhampton flood levee: analysis of flood insurance premi	um impact25

Cover image: (c) NASA www.fotosearch.com Stock Photography

EXECUTIVE SUMMARY

- IAG believes a co-ordinated national framework for disaster resilience, response and recovery funding is required to enable strategic, long term investment in community resilience building measures. For funding at all levels of government to remain sustainable in the long term, we support more balanced spending on disaster mitigation and resilience measures as against recovery and reconstruction after an event.
- Natural hazard data should be publicly available to inform individual and community wide risk management decisions. This will require co-ordination at a national level.
- Australian Government funding arrangements should facilitate and encourage personal risk management and maximise the uptake and efficacy of available private and community resources.
- Funding decisions should aim to foster strong partnerships between government agencies, the
 private sector and community organisations to develop a culture of natural disaster resilience
 and integrate the reduction of community vulnerability to natural disasters into policies and
 planning.
- In addition to the primary role of risk transfer, the insurance industry can play a greater role in community risk management by sharing our expertise to assist with prioritisation of funding and risk management decision making including land use planning. Potential impacts on insurance premiums should be part of this analysis. This will help the community make an informed choice, understanding the trade-offs for living in particular areas.
- IAG argues that there is a clear social and economic case for eliminating or at least reducing State insurance taxes. This case is based on recognition of the essential benefits of insurance to the economy and community generally and of the role of the tax system in encouraging insurance coverage.

INTRODUCTION

Insurance Australia Group (IAG) welcomes the opportunity to make a submission to the Productivity Commission Inquiry into Natural Disaster Funding.

This Inquiry provides Australia with an opportunity to develop a more sustainable and comprehensive national approach to the complex issue of funding and managing natural disasters. While other sectors may be better placed to recommend specific reforms to government funding arrangements, we are able to comment on the limitations of the existing framework, and on the principles which underpin an effective and sustainable disaster funding approach.

We look forward to working with the government and other stakeholders on the development of the most appropriate options to achieve the social and economic policy objectives, and to support a move towards an effective disaster funding framework.

INSURANCE AUSTRALIA GROUP

IAG is the parent company of a general insurance group with controlled operations in Australia, New Zealand, Thailand and Vietnam, employing over 13,500 people (8,759 are in Australia). IAG has more than 762,000 shareholders. IAG's share register is the fourth largest in Australia. IAG is a top 30 ASX-listed company.

IAG's current businesses underwrite approaching \$10 billion of gross written premium (GWP) per annum, selling insurance under many leading brands including NRMA Insurance, CGU, SGIO, SGIC and Swann (Australia); NZI, State and AMI (New Zealand); Safety and NZI (Thailand); and AAA Assurance (Vietnam). IAG also has interests in general insurance joint ventures in Malaysia, India and China. Standard & Poor's has assigned a 'Very Strong' Insurer Financial Strength Rating of 'AA-' to the Group's core operating subsidiaries.

Across IAG's portfolio of brands IAG insurers 8.4 million cars, 2.9 million homes, 103,000 farms, 123,000 employers and 408,900 businesses. IAG had more than 16.1 million policies in force in financial year 2013.

At 30 June 2013 the Group's overall investment allocation remained conservatively positioned, with 86% of total investments in fixed interest and cash (rates of 'AA' or higher). At that date, the Group had:

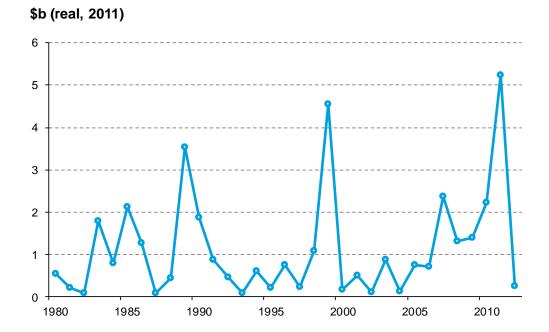
- 1. total investments of \$13.6 billion;
- 2. technical reserves of \$9.4 billion backing insurance liabilities, invested in fixed interest and cash; and
- 3. shareholders' funds of \$4.2 billion

ECONOMIC COSTS OF NATURAL DISASTERS

In Australia, there has been an upward trend in natural disaster costs, particularly since 2000 (Figure 1). At present, the total economic costs of natural disasters in Australia are estimated to average around \$6.3 billion per year. In real terms, this total is forecast to grow by 3.5% annually. This is primarily due to the likely impact of further population growth, concentrated infrastructure density, and the effect of internal migration to particularly vulnerable regions. With this growth rate, the annual total economic cost of natural disasters in Australia is expected to double by 2030 and reach \$23 billion in real terms by 2050¹.

Importantly, there are a number of factors contributing to the increased economic and community impact of natural perils. We are seeing marked increases in population density, especially in areas that are prone to natural disasters (particularly around coastal areas), leading to more damage and a rise in the quantum of damage. The increasing value of building and contents and sub-par building standards, also contribute to a rise in the cost of natural disasters.

Figure 1: Australian insured costs of natural disasters, 1980-2012



Source: Australian Business Roundtable for Disaster Resilience and Safer Communities commissioned Deloitte Access Economics Report "Building Our Nations Resilience to Natural Disasters" (2013).

The growing social and economic costs of natural disasters appear to be due to a number of interdependent factors that are contributing to greater vulnerability to natural hazards nationally.

Australian Business Roundtable for Disaster Resilience and Safer Communities commissioned Deloitte Access Economics Report "Building Our Nations Resilience to Natural Disasters" 20 June p 19

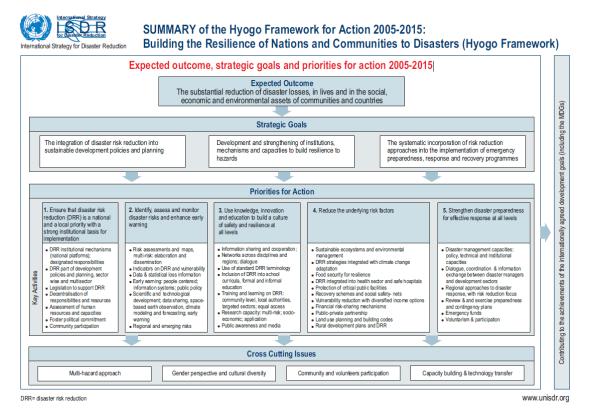
THE ROLE OF DISASTER FUNDING

The Productivity Commission's Report on Barriers to Effective Climate Change Adaptation recognised the shared role that all levels of government, business and households play in reducing the impact of climate change and extreme weather events.

Natural disasters are everyone's business and impact communities at every level. We believe disaster risk management should be integrated into policy across all sectors of government rather than as a 'stand alone' function. Natural hazards must be taken into account in public and private sector decision-making in the same way that economic and social impact assessments are currently required, so that disaster risk reduction is embedded in every-day decision-making.

The International Strategy for Disaster Reduction framework below (Figure 2) illustrates the interdependence of public policy decision making involved in building a disaster resilient community.

Figure 2: The International Strategy for Disaster Reduction Hyogo Framework



Source: Hyogo Framework for Action 2005-2015: International Strategy for Disaster Reduction International Strategy for Disaster Reduction www.unisdr.org/wcdr

Of note is the integration of disaster risk reduction into development policies and planning, as well as the importance of community participation and information sharing and cooperation.

THE ROLE OF DISASTER FUNDING (CONTINUED)

In Australia, funding arrangements should align with the Council of Australian Governments (COAG) National Disaster Resilience Strategy. We believe the role of Government is to provide a framework that builds the capacity of individuals, communities and businesses to prepare for, withstand and recover from extreme weather events. This involves funding measures that support and supplement - not substitute - existing mechanisms to manage risks. Governments need to avoid interventions that promote dependence on government assistance and reduce incentives for self-reliance and personal responsibility.

The uptake of risk management measures available and being taken out by asset owners remains sub-optimal suggesting that further policy measures are necessary to encourage personal risk management. Non-insurance and under insurance continues to be a widespread problem in the community. A 2012 study indicated around 9% of home-owners were without at least one of building or contents insurance and around 39% of non-homeowners do not have contents insurance^{2.} Even most recently, in the October 2013 bushfires in NSW, 35% of affected residents in the Blue Mountains were underinsured³.

Dr Richard Tooth (2012), Sapere Research Group - Australian Household Insurance: Understanding and Affordability, February 2012.

NRMA Insurance claims data

THE ROLE OF THE INSURANCE INDUSTRY IN BUILDING COMMUNITY RESILIENCE

As identified in the *Issues Paper*, the primary role of insurers in risk management is to provide a service that enables individuals and businesses to manage their <u>residual</u> financial risk. The most significant contribution of insurance is the provision of risk sharing, risk transfer abilities and loss prevention measures. General insurance products, such as home and motor policies allow residents to avoid the financial burden of incurring damage resulting from a specified event. Insurance cannot prevent loss but merely compensate for loss of property (not emotional or physical harm that often accompanies a natural disaster) to facilitate a return to financial stability.

However, we believe the insurance industry can and does have a responsibility to provide input into and play a role in resilience building outside of its primary role of financial risk management.

Signal risk levels

Insurance plays an important role in identifying, assessing and communicating risk. The price of insurance premiums provides an important signal that can help individuals and communities understand their exposure to a range of risks and provide an incentive to implement preventative and protective measures to reduce their vulnerability.

Significant improvements in data availability and interpretation capability now allow insurers to assess an individual customer's personal circumstances to ensure their premium reflects the risk. This takes into consideration a property's exposure to events like cyclones and flood. Household pricing recognises customers as individuals, each with their own risk profile, instead of treating them as a postcode, demographic group or risk factor. This means pricing is increasingly more granular and accurate. Insurance premiums therefore send a price signal (at times the only sign) to property holders regarding the level of risk they are exposed to. An example of individual household risk assessment is detailed in Figure 3 below.

Figure 3



Source: IAG

THE ROLE OF THE INSURANCE INDUSTRY IN BUILDING COMMUNITY RESILIENCE (CONTINUED)

Risk based premiums for home insurance can assist in ensuring the potential impact of natural hazards and other risks are a priority consideration in planning and development decisions.

Educate communities

Building a comprehensive education/awareness program is widely recognised as a key plank in developing more resilient communities. IAG through its NRMA Insurance business recently piloted a flood awareness seminar in partnership with local councils, the Floodplain Management Authority (FMA) and NSW State Emergency Service (SES). The pilot aimed to offer comprehensive information on insurance cover, disaster preparedness and recovery and flood plain management to empower residents to take steps to manage their personal risk.⁴

Insurance education can also help address the problem of underinsurance by promoting the value of insurance. IAG businesses have been involved in a number of education initiatives including You Tube videos, seminars for non-English speaking customers, a web-based learning resource for high school students on disaster preparedness and insurance through the Australian Financial Review online platform as well as to the Queensland Government's Get Ready Campaign.

Cross sector partnerships and collaboration

The National Strategy for Disaster Resilience advocates partnerships across governments, business, the not-for-profit sector and the community to create a well informed co-ordinated approach to increasing disaster resilience.

Community partnerships

At IAG, we have developed effective partnerships that promote safety and resilience at home, in business and on the road. NRMA Insurance is the major corporate supporter of the State Emergency Services (SES) in ACT, NSW and QLD. We work together with each of our SES partners to run programs aimed at helping communities equip themselves to reduce the impact of adverse weather. During the annual storm season, for example, we help residents to get storm ready through community initiatives aimed at reducing the impact of the summer storm season. Our Community Grants program, which has been running for over a decade, also supports grassroots initiatives that aim to build resilience in at risk communities.

Floodplain Management Association sponsorship

Established in 1961 to support and promote best practice in floodplain management across NSW, the Floodplain Management Association (FMA) now provides an independent, authoritative and increasingly national voice on flood resilience. The FMA has a membership of over 100 local governments, catchment authorities, consultants, businesses and individuals from NSW, Queensland, Victoria and Tasmania.

Singh, G (2014, May). Personalising Flood Risk: A Financial Planning Approach to Community Engagement. Paper presented at the 54th Floodplain Management Association Conference, Deniliquin, NSW.

THE ROLE OF THE INSURANCE INDUSTRY IN BUILDING COMMUNITY RESILIENCE (CONTINUED)

In January 2014 IAG, through its NRMA Insurance brand, entered into a five year sponsorship of the FMA Floodplain Management Project of the Year Award. The Award publicly recognises the outstanding contribution of an organisation towards flood mitigation initiatives, including measures to reduce flood impacts, management of flood incidents or the restoration of communities after a flood event. Our sponsorship of this award reflects our desire to promote the value of investment in proactive flood risk management and the positive work of FMA members and other stakeholders.

As announced on 22 May 2014, Gold Coast City Council won the Award in its inaugural year with projects entered by Balonne Shire Council (QLD), Lake Macquarie City Council (NSW) and Launceston Flood Authority (TAS) also being Highly Commended (Refer to Appendix for more detail).

Cross-sector and Government Engagement

The National Resilience Disaster Strategy also identifies the need to build better links between government and the private sector as a particular priority. Between October 2013 and February 2014 NRMA Insurance consulted with over 35 Local councils and 30 State Members of Parliament and 20 Federal Members of Parliament in substantial flood risk locations in NSW. Meetings focussed on explaining our approach to assessing and pricing risk and identifying opportunities to understand and collaborate on reducing risk.

Further, cross-sectoral platforms such as disaster risk reduction task forces or networks can promote a collaborative process for the creation, implementation and dissemination of risk awareness and risk reduction education programs and strategies. This was the impetus behind IAG's collaboration with Investa Property Group, Munich Re, Optus, Australian Red Cross, and Westpac Group, to form *The Australian Business Roundtable for Disaster Resilience and Safer Communities*. The members of the Roundtable came together to champion the need for a more sustainable, coordinated national approach to make our communities more resilient and our people safer.

Share industry expertise and understanding of risk

As an organisation IAG has invested considerably in our understanding of risk. We see potential in even greater participation in national resilience building by using our expertise to contribute to understand of risk as well as assisting with mitigation and infrastructure prioritisation and decision making.

Governments have a range of options available to address intolerable risk of extreme weather events including land-use planning, development controls and infrastructure such as levee systems and flood gates. The viability of these options depend on factors such as whether there is existing development, environmental impacts, impact on property values and building costs and the availability of funding. Robust cost-benefit analysis of these options is clearly important and we believe that the potential impact on insurance premiums should be part of this analysis. This will help the community make an informed choice, understanding the trade-offs for living in particular areas.

Insurers are able to inform mitigation decision making and prioritisation by analysing the likely impact of proposed resilience building measures on insurance premiums. Case studies best illustrate the potential impact flood mitigation can have on flood premiums by manipulating the frequency of flooding and damage curves which provide the relationship between flood depth and the extent of damage to the property. The damage curve will differ according to the location of the property, the type of flooding it experiences and the characteristics of the dwelling. IAG recently assisted Rockhampton Regional Council with an analysis on the likely impact of the proposed Rockhampton

THE ROLE OF THE INSURANCE Y RESILIENCE

flood levee on the flood component of home insurance premiums (see below and Appendix for further detail).

CGU/Strata Unit Underwriting (SUU) has recently commenced a strata building resilience project in North Queensland that focuses on improving building resilience to severe weather so that customers can receive sustainable premium reductions.SUU has been able to provide up-front premium relief in the range of 12.5% to 15% for several of the properties that have been assessed so far. These premium discounts could not be offered earlier because the insured was not in a position to identify the building risks that have been identified in the assessments. SUU is currently circulating to bodies corporate recommendations or requirements on building works that can be undertaken so that further sustainable premium reductions can be achieved (Refer to Appendix for more detail).

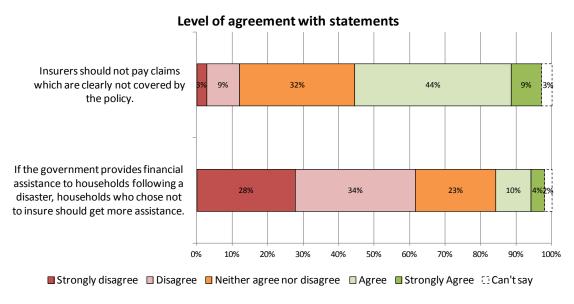
FACTORS IMPACTING COMMUNITY MANAGEMENT OF RISK

Relief and recovery payments

Significant post-disaster relief and recovery payments may discourage investment in risk mitigation by both individuals and communities and more generally, reduce incentives to take up insurance. We note that since December 2010 the Federal Government has spent over \$800 million on post-disaster recovery payments to individuals including the Australian Government Disaster Recovery Payment (AGDRP). In contrast the 2012-13 Federal Budget allocated only \$39 million to disaster mitigation under the NPA for the 2014-15 financial year with no increase in the forward estimates. The eligibility criteria for the AGDRP are broad and not sufficiently targeted. The payments overlap with personal hardship grants and other support jointly funded by the States and Federal Government under the NDRRA. Further, the payment cannot, and is not intended to, compensate those who have been most severely impacted by a disaster.

Research commissioned by IAG in 2012 showed that about 62% of people were against additional financial assistance to those who chose not to insure.

Details are below.



Full Sample. Population weights used.

Source: IAG commissioned research - Sapere Research Group – Australian Household Insurance: Understanding and Affordability (2012).

The existing funding arrangements also do not offer sufficient incentives to both individuals and State and Local Government to rebuild in a more disaster resilient way. In their current form the NDRRA are not explicitly linked to the National Strategy for Disaster Resilience adopted by COAG in February 2011. The NDRRA's betterment provisions, which seek to encourage disaster resilience in rebuilding or replacing disaster damaged public infrastructure, are poorly understood and rarely used.

FACTORS IMPACTING COMMUNITY MANAGEMENT OF RISK (CONTINUED)

Limitations of risk data

Currently insufficient funding is allocated to collecting and sharing risk information to increase the capability of communities to respond to risks appropriately. Inaccurate or incomplete data on natural perils risks can limit the ability of a community to manage its risk in a number of ways.

To improve personal responsibility and accountability for risk management, the public needs to be able to be able to access and understand risk information. In our experience, many customers underestimate or are sceptical about the risks they are exposed to. In NSW, 40% of NRMA Insurance customers elect to remove flood cover from their home insurance policies, despite living in a location at risk of flooding, sometimes for a saving of as little as \$50 a year. If a flood were to occur, these people would not be covered.

Comprehensive data would also assist local councils in making decisions about mitigation measures, planning and building standards and ensure consumers were more aware of the likely impact of their geographical location on costs such as land value and insurance premiums. Where insurers have access to the same data as those who are responsible for mapping and managing the impact of flooding – which, in NSW, is primarily local councils, we can help educate the community on the risk they have.

Access to risk data also has implications for granular pricing referred to above. Accurate risk information will enable insurers to reduce premiums in low risk locations.

Insurance premium market adjustment

Over the past three years, the shift toward data driven risk pricing combined with other factors has generated significant and rapid premium increases for home and building contents insurance (as well as strata insurance) for some consumers in specific geographic locations across Australia.

In the years immediately following the series of major disasters of 2010-11, industry wide premiums increases were seen across the market. These were largely driven by insurers responding to increased cost pressures such as reinsurance, natural hazards claims costs and claims inflation that occur after significant weather events. This also coincided with the extension of flood cover throughout the market in 2011 and 2012 and various insurers reassessing their exposure in and level of appetite for certain markets particularly those exposed to natural hazards.

For some consumers, the confluence of these events saw premiums rise at a speed and to a level that was both unprecedented and unexpected. For some consumers, higher premiums have acted as a deterrent to taking up insurance cover. A limited awareness of natural perils risks in local communities as previously noted may cause consumers to question the value of purchasing a now more expensive product. In select locations, premiums may be prohibitively high because of the nature or risk the area. In these situations, a failure to mitigate at a community level presents a barrier to insurance uptake.

The following diagram provides an indicative example of the impact various factors have had on home building insurance premiums in areas vulnerable to flooding.

FACTORS IMPACTING COMMUNITY MANAGEMENT OF RISK (CONTINUED)

RISKS General Example only General Example only RISKS QUAKE \$1875 QUAKE PREMIUM HAIL HAIL FIRE \$1105 REINSURANCE FIRE PREMIUM REINSURANCI STORM COSTS COSTS STORM RISKS THEFT THEFT LIABILITY CAPITAL LIABILITY FLOOD APITA OTHER TAXES TAXES COSTS COSTS OTHER MARGIN FSL MARGIN FSL STAMP 2 TAX STAMP SEA LEVEL RISE SEA LEVEL RISE GST NOTCOVERED GST NOT CONSIDERED IN PREMIUM

Figure 4: Components of home building insurance premiums in flood risk locations

Source: Insurance Council of Australia

Taxes

State taxes represent a significant proportion of the cost of insurance. A Paper (Justin Douglas, Matt Bowditch, Adam Ni, 2013, Affordability of Natural Disaster Insurance) indicates that taxes "represent just over 10 per cent of the cost of household insurance premiums in Queensland and more than one quarter of premiums in NSW, All states currently apply insurance stamp duties. The main reason for the different proportions for taxes between NSW and Queensland is that a large proportion of NSW's emergency services are funded by emergency services levies on insurers".

IAG believes the current regimes for the taxation of insurance are inconsistent upon the generally accepted taxation principles of simplicity, efficiency and equity. These tax regimes are inappropriate, regressive and based on historical circumstances rather than equity. These regimes contribute to under-insurance and non-insurance, with consequential negative fiscal impacts when the public purse is inevitably called upon in times of climate related disasters.

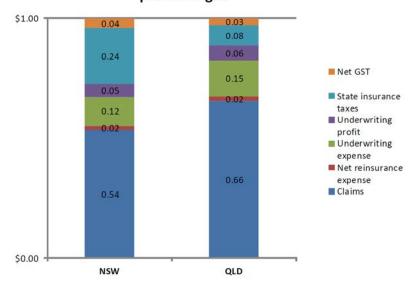
IAG argues that there is a clear social and economic case for eliminating or at least reducing State insurance taxes. This case is based on recognition of the essential benefits of insurance to the economy and community generally and of the role of the tax system in encouraging insurance coverage.

Details of the impact of taxes on home building insurance premiums are detailed in the figure below.

FACTORS IMPACTING COMMUNITY MANAGEMENT OF RISK (CONTINUED)

Figure 5

Where does \$1 of home building insurance premium go?



Source: J, Douglas, M.Bowditch, A.Ni, Affordability of Natural Disaster Insurance (2013).

RAISING COMMUNITY AWARENESS

A key element of effective risk management by private individuals, businesses and Government is an understanding of the risks faced. This submission has examined the various implications the availability of risk information has on resilience building.

Accurate information should be available to the public in a form which allows individuals to easily understand their level of risk. This level of transparency is essential to reduce confusion and encourage people to take steps to manage their risk (such as understanding the flood risk of a property they are buying and purchasing appropriate insurance cover).

We believe the Australian Government has a responsibility to make national hazard information available and accessible to enable informed decision making by all sectors of society. The collection, availability and dissemination of disaster information is currently inhibited by ownership and licensing issues, lack of standardisation, varied quality of data and the absence of a central depository.

There is no national framework for co-ordinating data collection and related activities. Currently a number of agencies are actively engaged in natural hazard data research in the public and private sector. As outlined in the *Australian Business Roundtable for Disaster Resilience and Safer Communities* submission to this Inquiry, what is needed is an integrated information system across government, business and community. We recommend that the roles, responsibilities, co-ordination arrangements and funding sources are reviewed to identify gaps and duplication in the roles of relevant bodies.

Ultimately, the goal is to ensure that communities, planners, emergency services, individuals, property owners and insurers understand the natural peril risks that they face, and that effective risk mitigation measures can be undertaken. Without access to critical data inputs and research findings, communities, business and government cannot make informed decisions on how to target these investments to achieve the greatest impact.

Therefore measures need to be put in place to ensure accessibility and uptake by the broader community. Funding should be conditional on the provision of risk information in a form that is easily available and understood by the general public.

Additionally, there are a number of parties who have a commercial interest in accessing natural hazard information. For example, IAG has invested heavily in sourcing quality data and researching flood risk to accurately understand all the factors involved in flood risk. We have derived data from a large range of diverse and independent sources; and employ publicly available and off-the-shelf technology as well as our own programs to utilise this information. Governments should attempt to attract the investment of companies who currently pay commercial providers to collect and provide data by offering useful data on a user pays basis.

Case study: Our investment in LiDAR

The LiDAR (Light Imaging Detection and Ranging) system uses aircraft mounted lasers to acquire a DEM (digital elevation model) by determining the distance between the sensor and the ground or other targets including water. Elevation information is essential for an accurate understanding and assessment of flood risk faced by individual properties.

IAG has already purchased derived LiDAR data in every other Australian state from either private or public suppliers. In NSW however, we found it more affordable to purchase this data from a

RAISING COMMUNITY AWARENESS (CONTINUED)

commercial supplier than from the NSW State Government. Subsequently we have invested over \$500,000 in a custom LiDAR program provided by a commercial supplier that covers 86 key population centres across inland NSW where we have no high quality elevation data.

Greater access to quality data would assist IAG and other insurers to accurately price flood and other natural hazards. Having this data means we will be less likely to overprice and/or underprice flood insurance premiums.

In addition to the community awareness benefits outlined above, comprehensive, up to date national data will be essential to assess the value and prioritise resilience building measures.

GETTING THE BALANCE RIGHT

Increased funding for prevention

The expected future costs of natural disasters highlight the need for governments to invest further in resilience measures. *Building our Nation's Resilience to Natural Disasters* shows that the budgetary impact of responding to and recovering from natural disasters could potentially be significantly reduced through carefully considered and directed investment in pre-disaster resilience.

Governments have not allocated sufficient funds for mitigating weather related risks.

As outlined in the Australian Business Roundtable for Disaster Resilience and Safer Communities submission to this Inquiry despite the impact of these effects on our communities and economy, our nation has invested an estimated \$50 million each year in mitigation measures to improve our communities' resilience to natural disasters.

In contrast, \$560 million has been the average annual spend on recovery measures. So, for every \$10 spent on post-disaster recovery, only \$1 is spent on measures to improve the safety of our communities prior to disasters.

Importantly, the policy response to building our nation's resilience to natural disasters must focus on prevention. All levels of government – led by the Australian Government – must place greater emphasis on building community resilience to extreme weather events and significantly boost their investment in natural hazard mitigation infrastructure that will protect assets like homes and businesses, and lower the cost of risk.

This requires a sustained, coordinated and collaborative national approach based on shared responsibility among all stakeholders including Government at local, State and Federal level underpinned by:

- improved understanding of natural hazard risk ensuring vulnerable communities have contemporary information, making it publicly accessible and using it to inform decision making. This information has significant economic value, as it reduces risk, will benefit planning authorities, developers, banks and financiers and allows insurers to underwrite the risks with maximum certainty;
- greater risk sensitivity of land use planning risk appropriate new development in high-risk areas and addressing legacy issues through coherent and well-funded relocation and other strategies;
- Increased resilience of our buildings through building codes, retro-fitting and other mechanisms; and
- boosting investment in mitigation infrastructure to address residual risk that cannot be addressed through land use planning and where the benefit outweighs the potential cost to the community.

Reformed framework for distributing funds

In addition to increasing funding for disaster mitigation, the framework for distributing these funds must be reformed to encourage strategic investment in priority mitigation infrastructure projects.

The National Partnership Agreement on Natural Disaster Resilience (NPA) funding allocation by competitive grants programs means there is very little, if any, capacity for this funding to be directed

GETTING THE BALANCE RIGHT (CONTINUED)

toward larger scale disaster mitigation infrastructure projects of local, state or national significance. Further it is arguable that this arrangement encourages a piece-meal approach to disaster mitigation rather than one that focuses on long-term, strategic priorities.

Mitigation and investment options should be prioritised based on economic value and risk assessment and informed by analysis of research, information and data sets. Mitigation activities should enable key investment decisions to be taken at all levels of government.

For example, the \$27 million per annum allocated for mitigation works under the National Partnership Agreement on Natural Disaster Resilience (the NPA) in the 2013-2014 Budget is inadequate when considering the cost of flood mitigation works such as the Launceston Flood Levee Scheme in Tasmania (approximately \$57 million) and the Carnarvon Flood Mitigation Works in Western Australia (approximately \$55 million).

Further cuts were made in the 2014-2015 Budget with the cancellation of the previous Government's National Insurance Affordability initiative. This initiative committed \$100m over two years, but only \$17m for Ipswich and Roma have been retained; of concern is the withdrawal of \$50m in funding to support flood mitigation in the Hawkesbury-Nepean.

Additional funding is needed to allow additional protective works including barrages for unusual tides, levee banks, sea walls, properly maintained fire breaks and access trails, improved drainage and dams. Schemes such as voluntary house purchasing and house raising would also benefit from greater funding. Infrastructure investment has the double advantage of being a down-payment for future resilience and an economic generator.

Impact of mitigation and resilience measures on insurance premiums

Queensland Flood Mitigation Programs

Recent government investment in flood mitigation programs in Queensland towns repeatedly flooded between 2009 and 2013 (including Roma, St George and Charleville) demonstrates the potential outcomes of targeted funding. Federal, State and local governments have committed over \$32 million in flood mitigation programs for these three towns which include both flood levees and other mechanisms such as house raising. In these towns where flood mitigation projects (e.g. building of flood levees) have been completed, insurers are now able to reduce their premiums to reflect the reduced risk exposure in those areas. More importantly, these communities will be less exposed to the social and economic disruption caused by flooding and there will be less and less frequent, public expenditure on rebuilding these communities after an event. In a community rated market, this action may not have been taken.

Proposed South Rockhampton Flood Levee

IAG has analysed the likely impact of the proposed Rockhampton Flood Levee on home and contents insurance premiums, based on information provided by Rockhampton Regional Council and Council's engineering consultant.

The proposed levee would offer protection from flood events up to approximately the 1-in-200-year flood, where some properties could currently be impacted by flood events as small as the 1-in-20-year flood.

GETTING THE BALANCE RIGHT (CONTINUED)

Our analysis (using pricing for the NRMA Insurance Home Building and Contents QLD product) indicates that the levee would decrease insurance premiums for approximately 1,250 properties in Rockhampton, Port Curtis, Depot Hill and Allenstown. The proposed levee would impact the flood component of the premium for protected properties, depending on the existing vulnerability of the property to flooding. From the analysis we expect over 800 properties would see a large saving of over \$3000 on their home buildings and contents premium. (For more detail on this case study please refer Appendix).

Cyclone building codes

An analysis of structural damage to buildings following cyclone Yasi indicated that buildings correctly designed and constructed to the standards/requirements introduced in the 1980s sustained a much lower incidence of damage.⁵ Our current cyclone premium for post-1980 buildings subsequently has a discount applied.

Boughton et al (2011) Tropical Cyclone Yasi: Structural damage to buildings, Cyclone Testing Station Technical report No. 57, James Cooke University

RECOMMENDATIONS

- A national framework should be developed for natural hazard data collection and related activities. Accurate information should be available and accessible to the public in a standardised format.
- 2. Disaster funding for resilience activities should be increased and distributed based on appropriate economic value and risk assessment.
- Government funding should be structured to support the contribution of the private and non-forprofit sector in risk management. Government policy should not undermine or create barriers to this contribution or to any other form of personal risk management.
- 4. Disaster risk management and resilience building should be nationally co-ordinated and integrated into all levels of policy decision making.
- 5. The expertise of the insurance industry should be utilised to identify and assess the economic impacts of risk as well as inform decision making regarding avoiding, mitigating or transferring risk.

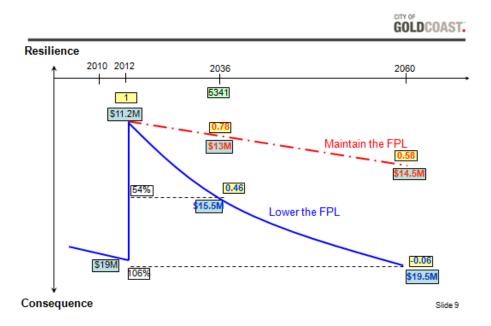
APPENDIX

FMA Sponsorship

Gold Coast City Council's (GCCC) FMA NMRA Insurance Excellence Award winning project aimed to reduce the impact of current and future floods within the Nerang River system and ultimately challenged conventional thinking on flood planning in Australia.

Following the raising of the Hinze Dam wall in 2012, the Council was expected to comply with traditional flood planning laws by lowering flood planning levels downstream of the Dam. GCCC wanted to ensure the resilience gained by raising the dam wall was not lost in the following years and conducted research which revealed the long term benefits in keeping planning levels as they were. GCCC also developed a Resilience Index to better explain and communicate their findings (see figure below).

Through the use of evidence-based research and community consultation, the Council gained the support of the community, who chose not to lower flood planning levels. By showing leadership and engaging with the community, the flood protection offered to the communities surrounding the Nerang River will extend beyond 2060. Had planning levels been lowered, the benefit of raising the dam would have been relatively short-lived.



CGU Strata Building Inspections

CGU/SUU has rolled out a strata building resilience project in North Queensland to enhance resilience and address insurance affordability in NQ. The project focuses on improving building resilience to severe weather so that customers can receive sustainable premium reductions. The assessments cover risks such as building construction type and method, exposure to direct wind-driven rain, as well as other hazards and possible defects. Following completion of each assessment, CGU/SUU is revisiting its pricing and reducing premiums where possible.

Recommendations from the assessments are being provided to strata property owners and managers on repairs that can be made to improve the property's resilience and risk rating, enabling the properties to potentially be re-rated so that customers receive sustainable premium discounts. Should the body corporate wish to have the remedial works carried out, SUU could facilitate a detailed quote either through the building manager's preferred trades people or local businesses.

There is potential for the project to be developed further. CGU is exploring options to further assist policy holders, so that the repairs can be undertaken at the earliest opportunity and our customers can experience the full benefits of this work. To offset possible funding challenges, SUU has commenced discussions with a major financial institution to facilitate access to finance for bodies corporate wishing to make the recommended repairs. CGU is also in discussions with the ICA about how the project can complement the James Cook University (JCU) initiative on strata building assessment methodologies.

CGU hopes the project will further embed sustainable pricing focused on risk as well as having important benefits for human safety from flying debris, and improved property values. If the bodies corporate carry out the works required to increase resilience this would also result in a lowering of premiums together with an improvement in personal and asset safety, improving the capital value of the assets.

Early results from the building assessments have been encouraging. SUU has been able to provide up-front premium relief in the range of 12.5 to 15 percent for several of the properties that have been assessed so far. These premium discounts could not be offered earlier because the insured wasn't in a position to identify the building risks that have been identified in the assessments. SUU is currently circulating to bodies corporate recommendations or requirements on building works that can be undertaken so that further sustainable premium reductions can be achieved.

CGU has offered to share the findings of the building assessments with government, councils and other interested stakeholders, to improve knowledge and awareness of building codes, materials, and other mitigation, which all impact on insurance premiums. For example, the findings of the building assessment reports could be useful for local councils with a view to making changes to building codes so that they include weather resilience. This would help address affordability issues over the longer term as new buildings should be built to withstand extreme weather. The longer term impact of all of these initiatives will not only help the affordability issue but will also likely increase the value of assets in the region. It is also fair to say that a more sustainable insurance environment would lead to an increase in competition within the area.

IAG believes this work is best undertaken by the private sector. For example, once a body corporate undertakes a survey, what do they do — there are only two strata insurers in the market, and there is no-one to co-ordinate remedial works if the body corporate is not already insured with a strata insurer committed to working with its customers. For those bodies corporate currently struggling to obtain cover, surveys could highlight more issues than the body corporate can afford to address. Moreover, short of the creation of costly bureaucratic arrangements, a government-run scheme couldn't assist with providing concessional finance to bodies corporate.

Proposed South Rockhampton flood levee: analysis of flood insurance premium impact

Key Messages

- NRMA Insurance and CGU Insurance offer flood cover as a standard inclusion in their home and contents insurance policies.
- Insurance premiums for flood-prone properties are comprised of a standard premium plus an additional flood component, which is calculated based on the expected flooding frequency (how often a property is likely to be flooded) and depth (how high the flood will be) at each individual address.
- Our analysis shows the levee would decrease the flood component of premiums for approximately 1,250 properties in Rockhampton, Port Curtis, Depot Hill and Allenstown;
- The potential premium reductions are greater for those homes currently at higher risk ie protection from the most damaging and frequent floods;
- NRMA Insurance customers could see reduction to the flood component of their premium of between 11 per cent to 76 per cent;
 - Low flood risks could see 11.5 per cent reduction in flood premiums
 - Medium flood risks could see between 30 to 35 per cent reduction in flood premiums
 - High or extreme flood risks could save between 58 to 76 per cent of flood premiums
- These risk assessments and premium reduction estimates are based on the best available information as at 19 May 2014. There are other factors that contribute to premium values apart from flood. As such, not all NRMA Insurance customers would necessarily see a reduction in their total premium.

Detailed analysis

Indicative Changes to Home and Contents Insurance Premiums

IAG has analysed the likely impact of the proposed Rockhampton Flood Levee on home and contents insurance premiums, based on information provided by Rockhampton Regional Council and Council's engineering consultant.

The proposed levee would offer protection from flood events up to approximately the 1-in-200-year flood, where some properties could currently be impacted by flood events as small as the 1-in-20-year flood.

Our analysis (using pricing for the NRMA Insurance Home Building and Contents QLD product) indicates that the levee would decrease insurance premiums for approximately 1250 properties in Rockhampton, Port Curtis, Depot Hill and Allenstown.

Insurance premiums for flood-prone properties are comprised of a standard premium plus an additional flood component, which is calculated based on the expected frequency and depth of flooding at each individual address.

The proposed levee would impact the flood component of the premium for protected properties, depending on the existing vulnerability of the property to flooding. The examples below (assuming a sum insured of \$355,000 building and \$75,000 contents) outline the expected changes to the flood component of the insurance premium:

- At the extreme end of the flood risk spectrum, a high-risk property with a current flood premium component of \$6000 could see this component reduced to between \$1400 and \$2500 (median \$1900). There are approximately 600 properties in this high-risk premium band.
- In the middle of the flood risk spectrum, a medium-risk property with a current flood premium component of \$2000 could see this component reduced to approximately \$1300-1400.
- At the low end of the flood risk spectrum, a low-risk property with a current flood premium component of \$1300 could see this component reduced to approximately \$1150.

These reductions would only apply to the flood component of the premium. Properties not currently at risk of flooding would not see a reduction as a result of the levee.

From the analysis we expect over 800 properties would see a large saving of over \$3000 on their home buildings and contents premium. The breakdown of the impact home and contents premium is shown in the table below.

REDUCTION IN HOME AND CONTENTS PREMIUM	APPROXIMATE NUMBER OF PROPERTIES
\$1 to \$50	200
\$50 to \$200	150
\$200 to \$3000	95
More than \$3000	800
Total	1245

Assumptions and Limitations

An insurance premium is individual to a property, and based on a large number of factors. All insurers calculate insurance premiums differently, and individual insurers price differently between different product offerings.

To simplify the analysis, we have made a number of assumptions around key factors such as sum insured, property floor levels, and the hydraulic effects of the levee outside the protected area. Key assumptions are listed below:

- This analysis is based on the premium pricing used by NRMA Insurance's "Home Building and Contents Insurance QLD" product, which currently caps the flood premium component at \$6,000 for a combined building and contents policy. This pricing strategy is under review as NRMA Insurance moves toward more accurately reflecting the cost of the risk in our premiums.
- All assessed premiums were based on an assumed sum insured of \$355,000 for the building and \$75,000 for contents;
- Surveyed floor levels for individual properties were not provided and are not considered in this
 analysis. Property floor levels have been assumed based on the digital elevation model and a
 standard assumption on the height of floor above ground level;
- The hydraulic model results for the "post-levee" scenario had not yet been finalised at the time of analysis. Any increases in flood levels which may result from construction of the levee have therefore not been taken into consideration. AECOM indicated on 9/5/2014 that any such increases were likely to be localised and minor, so this assumption is not expected to have a significant bearing on the analysis.

This analysis is current as at May 2014, however pricing changes frequently and for many reasons – this information should therefore be considered as indicative and for information only, and should not be relied on or construed as a binding agreement to alter insurance premiums.

Data Sources

- Property location data is generally based on the Geocoded National Address File (August 2013), with minor adjustments;
- Flood hazard data, elevation data and the alignment of the proposed levee were based on hydraulic modelling files provided by Council and AECOM on 9/5/2014.