

INDICATORS OF DISASTER RESILIENCE FOR THE AUSTRALIAN NATURAL DISASTER RESILIENCE INDEX



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THE AUSTRALIAN NATURAL DISASTER RESILIENCE INDEX (ANDRI) WILL ASSESS THE STATE OF DISASTER RESILIENCE IN AUSTRALIA. THE INDEX INCORPORATES A SET OF EIGHT THEMES THAT CAPTURE THE COPING AND ADAPTIVE CAPACITIES FOR DISASTER RESILIENCE THROUGHOUT AUSTRALIA. INDICATORS WITHIN EACH THEME ARE USED TO DETERMINE RESILIENCE TO NATURAL HAZARDS ALONG A LOW-HIGH CONTINUUM. BELOW WE SUMMARISE THE INDICATORS THAT WILL BE USED IN THE INDEX.

COPING CAPACITY

THEME 1 - SOCIAL CHARACTER

The social and demographic factors influencing the ability to prepare for and recover from natural hazard events.

Indicators*

Immigration status	Sex
Internal migration	Age
Language proficiency	Education
Need for assistance	Employment
Family composition	Occupation
Household composition	

Data sources

ABS 2011 Census

THEME 2 - ECONOMIC CAPITAL

The economic factors influencing the ability to prepare for and recover from natural hazard events.

Indicators*

Home and car ownership
Income
Employment diversity
Economic diversity
Population growth or decline
Local government financial status

Data sources

ABS 2011 Census

THEME 3 - INFRASTRUCTURE AND PLANNING

Preparation for natural hazard events using legislation, plans and codes to protect people and infrastructure.

Indicators*

Land use planning for hazards
Status of emergency management plans
Building codes
Dwelling type

Data sources

Analysis of planning schemes and emergency management plans
ABS 2011 Census

THEME 4 - EMERGENCY SERVICES

Health and emergency service workforce presence and capability.

Indicators*

Health response workforce
Emergency response workforce
Emergency service expenditure
Remoteness

Data sources

Australian Institute of Health and Welfare
ABS 2011 Census
Productivity Commission (ROGS)
Regional Australia Institute
AFAC

THEME 5 - COMMUNITY CAPITAL

The features of a community that facilitate coordination and cooperation for mutual benefit.

Indicators*

Household support	Volunteering
Access to services	Place attachment
Wellbeing	Crime and safety
Jobless families	

Data sources

Social Health Atlas
State crime data
ABS 2011 Census

THEME 6 - INFORMATION AND ENGAGEMENT

Availability and accessibility of information and community engagement about natural hazards.

Indicators*

Broadband access
Mobile phone coverage
Emergency service expenditure on community engagement
Community engagement strategies

Data sources

Department of Communications and the Arts
Telstra
Emergency service organization reports & budgets

ADAPTIVE CAPACITY

THEME 7 - GOVERNANCE, POLICY & LEADERSHIP

The capacity and flexibility within organizations to learn, adapt and transform.

Indicators*

Research and development
Institutional character
Policy and legislation

Data sources

Regional Australia Institute
Analysis of legislation, policy, plans, reports and budgets

THEME 8 - SOCIAL AND COMMUNITY ENGAGEMENT

The capacity and flexibility within communities to learn, adapt and transform.

Indicators*

Skills for learning
Social engagement and trust
Life satisfaction

Data sources

ABS 2011 Census
Regional Wellbeing survey
NATSEM
AURIN

WHAT'S NEXT?

- ▶ The project has been focusing on collecting data for all the indicators. We have collected over 50 indicators, with about 20 to complete.
- ▶ The next step is statistical analysis. This statistical work will consider data standardization, indicator compensability and correlation, methods of index calculation, validation and examination of index distribution along a continuum of lower to higher resilience.
- ▶ Once the index results are known we will start designing and framing the *State of Disaster Resilience Report*.

* Indicators have been grouped here for brevity but each group may be comprised of several indicators. For example, home and car ownership is made up of home ownership outright, home ownership with mortgage, population renting, median rent, income to mortgage differential and car ownership.



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