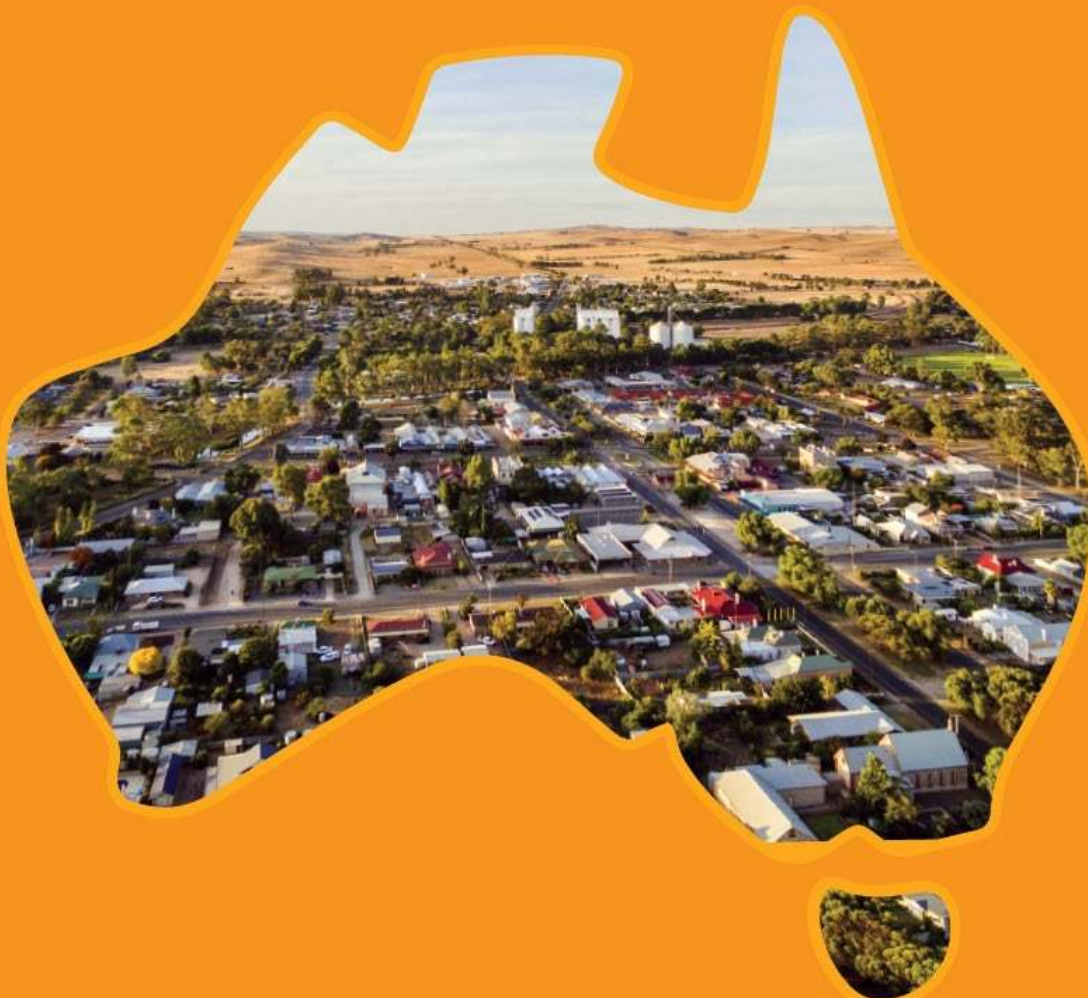


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THE AUSTRALIAN NATURAL DISASTER RESILIENCE INDEX VOLUME II – INDEX DESIGN AND COMPUTATION

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ABOUT THIS VOLUME

The Australian Natural Disaster Resilience Index project comprises two volumes.

Volume I – State of Disaster Resilience Report

Volume I assesses the state of disaster resilience in Australia, using the Australian Natural Disaster Resilience Index. Volume I gives a brief overview of the design and computation of the index, then assesses the state of disaster resilience in Australia at different levels: overall disaster resilience, coping and adaptive capacity, and the eight themes of disaster resilience. Volume I also presents a typology of disaster resilience that groups areas across Australia that have similar disaster resilience profiles.

Readers interested in the results of the assessment of disaster resilience in Australia should focus on Volume I.

Volume II – Index design and computation

Volume II (this volume) describes in detail the computation of the Australian Natural Disaster Resilience Index. This includes resilience concepts, literature review, index structure, data collection, indicators, statistical methods, detailed statistical outputs, sensitivity analysis and uncertainty analyses.

Readers interested in the technical aspects of the Australian Natural Disaster Resilience Index should also consider Volume II. Volume II is comprised of six chapters:

- Chapter 1** Design of the Australian Natural Disaster Resilience Index
- Chapter 2** Indicators
- Chapter 3** Computation of the Australian Natural Disaster Resilience Index
- Chapter 4** Statistical outputs: ANDRI, coping capacity and adaptive capacity
- Chapter 5** Statistical outputs: disaster resilience themes
- Chapter 6** Uncertainty and sensitivity analysis

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THE AUSTRALIAN NATURAL DISASTER RESILIENCE INDEX VOLUME II – INDEX DESIGN AND COMPUTATION

Chapter 1 – Design of the Index





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CHAPTER 1 – DESIGN OF THE AUSTRALIAN NATURAL DISASTER RESILIENCE INDEX

In this chapter

- Section 1.1 Presents the conceptual basis of the Australian Natural Disaster Resilience Index.
- Section 1.2 Describes the structure of the index, including its hierarchical structure, and the themes of disaster resilience.
- Section 1.3 Outlines the spatial resolution and areas of Australia included in the index.

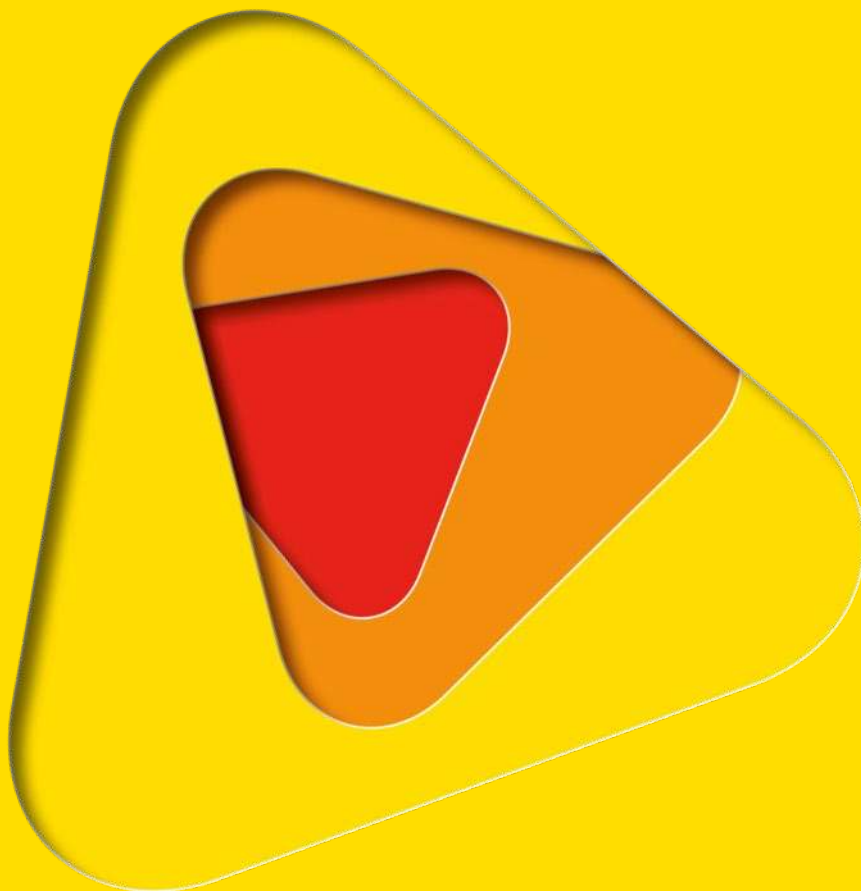




TABLE OF CONTENTS

1.1	Conceptual basis of the Australian Natural Disaster Resilience Index	6
1.1.1	Disaster resilience	6
1.1.2	Assessing disaster resilience using a composite index	8
1.2	Structure of the Australian Natural Disaster Resilience Index	11
1.2.1	Indicator themes	12
1.3	Spatial resolution of the Australian Natural Disaster Resilience Index	14
1.4	References	47

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THE AUSTRALIAN NATURAL DISASTER RESILIENCE INDEX VOLUME II – INDEX DESIGN AND COMPUTATION

Chapter 2 – Indicators





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CHAPTER 2 INDICATORS

In this chapter

- Section 2.1 Describes the method used to identify and select indicators for the Australian Natural Disaster Resilience Index.
- Section 2.2 Lists the indicators used in the index themes, including the source of each indicator and how it was calculated.
- Section 2.3 Justifies the relationships between indicators and disaster resilience for each theme in the index, using a literature review.
- Section 2.4 Describes the method used to disaggregate the indicators to an SA2 resolution.

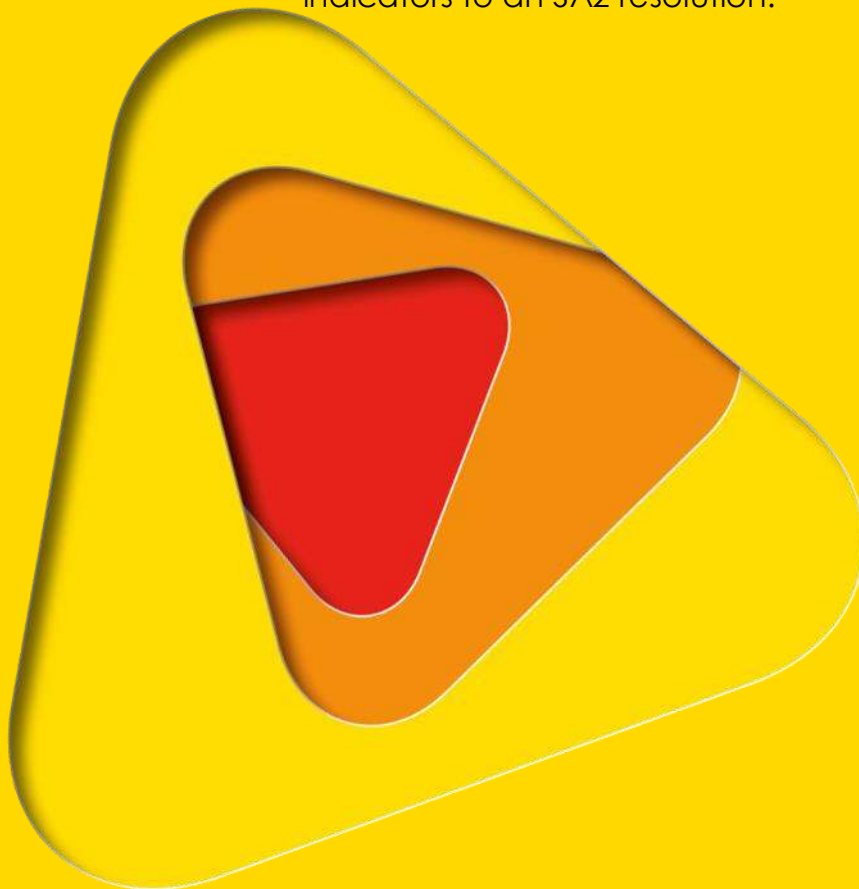




TABLE OF CONTENTS

2.1	Indicator identification and selection	7
2.1.1	Indicator identification and selection methods	7
2.1.2	Data gaps	12
2.2	Indicators used in the Australian Natural Disaster Resilience Index	13
2.2.1	Social character	14
2.2.1.1	Social character indicators used in index computation	14
2.2.1.2	Social character indicators collected but not used in index computation	17
2.2.1.3	Social character indicator resilience directions	18
2.2.2	Economic capital	20
2.2.2.1	Economic capital indicators used in index computation	20
2.2.2.2	Economic capital indicators collected but not used in index computation	23
2.2.2.3	Economic capital indicator resilience directions	24
2.2.3	Emergency services	26
2.2.3.1	Emergency services indicators used in index computation	26
2.2.3.2	Emergency services indicators collected but not used in index computation	28
2.2.3.3	Emergency services indicator resilience directions	29
2.2.4	Planning and the built environment	31
2.2.4.1	Planning and the built environment indicators used in index computation	31
2.2.4.2	Planning and the built environment indicators collected but not used in index computation	33
2.2.4.3	Planning and the built environment indicator resilience directions	34
2.2.4.4	Planning and the built environment – methods for derived indicators	35
2.2.5	Community capital	45
2.2.5.1	Community capital indicators used in index computation	45
2.2.5.2	Community capital indicators collected but not used in index computation	49
2.2.5.3	Community capital indicator resilience directions	50
2.2.6	Information access	52
2.2.6.1	Information access indicators used in index computation	52
2.2.6.2	Information access indicators collected but not used in index computation	53
2.2.6.3	Information access indicator resilience directions	54
2.2.6.4	Information access – methods for derived indicators	55
2.2.7	Social and community engagement	58
2.2.7.1	Social and community engagement indicators used in index computation	58
2.2.7.2	Social and community engagement indicators collected but not used in index computation	60
2.2.7.3	Social and community engagement indicator resilience directions	63
2.2.8	Governance and leadership	64
2.2.8.1	Governance and leadership indicators used in index computation	64
2.2.8.2	Governance and leadership indicators collected but not used in index computation	65
2.2.8.3	Governance and leadership indicator resilience directions	66
2.2.8.4	Governance and leadership – methods for derived indicators	67
2.3	Relationships between indicators and disaster resilience: a literature review	71
2.3.2	Social character	71
2.3.3	Economic capital	76
2.3.4	Emergency services	78
2.3.5	Planning and the built environment	82
2.3.6	Community capital	84
2.3.7	Information access	87
2.3.8	Social and community engagement	90
2.3.9	Governance and leadership	91
2.4	Disaggregation	95



2.5 References

185

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THE AUSTRALIAN NATURAL DISASTER RESILIENCE INDEX VOLUME II – INDEX DESIGN AND COMPUTATION

Chapter 3 – Computation of the Australian Natural Disaster Resilience Index





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CHAPTER 3 – COMPUTATION OF THE AUSTRALIAN NATURAL DISASTER RESILIENCE INDEX

In this chapter

- Section 3.1 Reviews the development and use of composite indexes and methods for computing composite indexes.
- Section 3.2 Describes the rationale for, and the statistical computation of, the Australian Natural Disaster Resilience Index.
- Section 3.3 Describes the methods used to compute the typology of groups of SA2s with similar disaster resilience profiles.

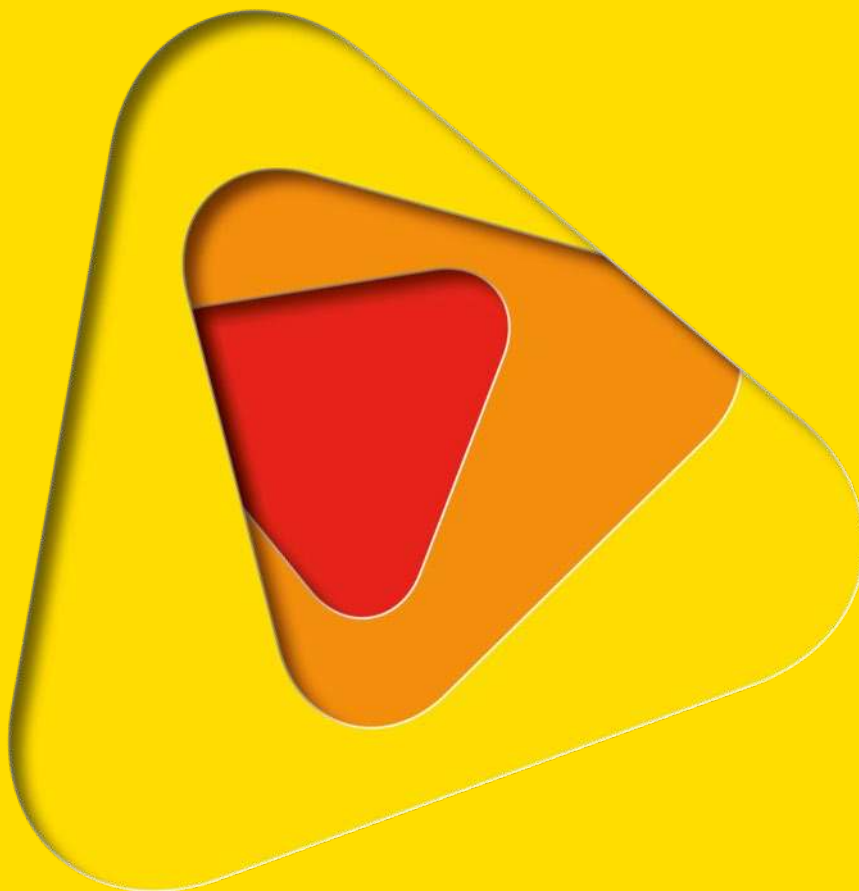




TABLE OF CONTENTS

3.1	Review of composite index use and methods	6
3.1.1	History of composite indices	6
3.1.2	Methodological issues	7
3.1.2.1	Functional form, construct validity and content validity	8
3.1.2.2	Populations, samples and outliers	8
3.1.2.3	Transformations of indicators – normalising	10
3.1.2.4	Transformations of indicators – rescaling	15
3.1.2.5	Indicator reversal	17
3.1.2.6	Correlation between indicators	17
3.1.2.7	Weighting and aggregation	21
3.1.3	Uncertainty and sensitivity analysis	24
3.1.4	Conclusions	25
3.2	Index calculation	27
3.2.1	Context	27
3.2.2	Functional form	27
3.2.3	Spatial coverage	28
3.2.4	Missing values	28
3.2.5	Indicators and concordance to SA2s	28
3.2.6	Normalisation	29
3.2.7	Rescaling	31
3.2.8	Indicator reversals	31
3.2.9	Indicator redundancy, correlation and compensability	31
3.2.9.1	Structural redundancy	32
3.2.9.2	Correlation and compensability	32
3.2.10	Indicator aggregation	34
3.2.10.1	Evaluation of aggregation functions	34
3.2.10.2	Choice of aggregation strategy	38
3.2.10.3	Parameters for control of compensatory effects in aggregation - OWA	41
3.2.10.4	Parameters for control of compensatory effects in aggregation – discrete Choquet integral	43
3.2.10.5	Validation of aggregation choices	45
3.2.10.6	Weighting for correlation in aggregating sub-indices	47
3.3	Derivation of typology groups	48
3.3.1	Cluster analysis	48
3.3.2	Choice of clustering method	52
3.4	References	55

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THE AUSTRALIAN NATURAL DISASTER RESILIENCE INDEX VOLUME II – INDEX DESIGN AND COMPUTATION

Chapter 4 – Statistical outputs: ANDRI, coping capacity
and adaptive capacity





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CHAPTER 4 – STATISTICAL OUTPUTS: ANDRI, COPING CAPACITY AND ADAPTIVE CAPACITY

In this chapter

- Section 4.1 Presents the statistical outputs and results for the overall Australian Natural Disaster Resilience Index.
- Section 4.2 Presents the statistical outputs and results for the coping capacity index.
- Section 4.3 Presents the statistical outputs and results for the adaptive capacity index.

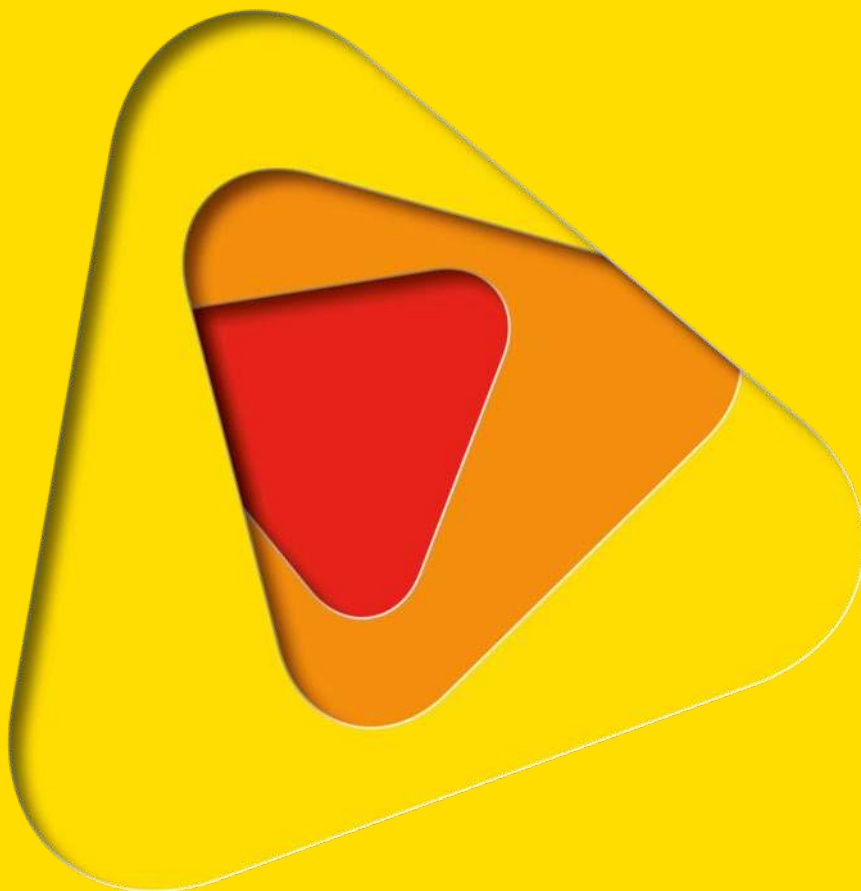




TABLE OF CONTENTS

4.1 Statistical results for the Australian Natural Disaster Resilience Index	6
4.1.1 Transformation	6
4.1.2 Correlation	6
4.1.3 Measurement model	6
4.1.4 Aggregation	7
4.1.5 Mapped Australian Natural Disaster Resilience Index	8
4.1.6 Sub-index relationships with composite index	9
4.1.6.1 National level	9
4.1.6.2 Regional level	10
4.2 Statistical results for the coping capacity sub-index	11
4.2.1 Transformation	11
4.2.2 Correlation	11
4.2.3 Measurement model	13
4.2.4 Aggregation	13
4.2.5 Mapped coping capacity index	15
4.2.6 Sub-index relationships with composite index	16
4.2.6.1 National level	16
4.2.6.2 Regional level	16
4.3 Statistical results for the adaptive capacity sub-index	19
4.3.1 Transformation	19
4.3.2 Correlation	19
4.3.3 Measurement model	19
4.3.4 Aggregation	20
4.3.5 Mapped adaptive capacity index	21
4.3.6 Sub-index relationships with composite index	22
4.3.6.1 National level	22
4.3.6.2 Regional level	23
Appendix 4A – Australian Natural Disaster Resilience Index transformation details	24
Appendix 4B – Maps: Australian Natural Disaster Resilience Index values by state/territory and metropolitan areas	28
Appendix 4C – Coping capacity sub-index transformation details	37
Appendix 4D – Maps: Coping capacity sub-index values by state/territory and metropolitan areas	50
Appendix 4E – Adaptive capacity sub-index transformation details	59
Appendix 4F – Maps: Adaptive capacity sub-index values by state/territory and metropolitan areas	64

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THE AUSTRALIAN NATURAL DISASTER RESILIENCE INDEX VOLUME II – INDEX DESIGN AND COMPUTATION

Chapter 5 – Statistical outputs: disaster resilience themes





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CHAPTER 5 – STATISTICAL OUTPUTS: DISASTER RESILIENCE THEMES

In this chapter

Each section presents the statistical outputs and results of one disaster resilience theme.

- Section 5.1 Social character.
- Section 5.2 Economic capital.
- Section 5.3 Emergency services.
- Section 5.4 Planning and the built environment.
- Section 5.5 Community capital.
- Section 5.6 Information access.
- Section 5.7 Social and community engagement.
- Section 5.8 Governance and leadership.

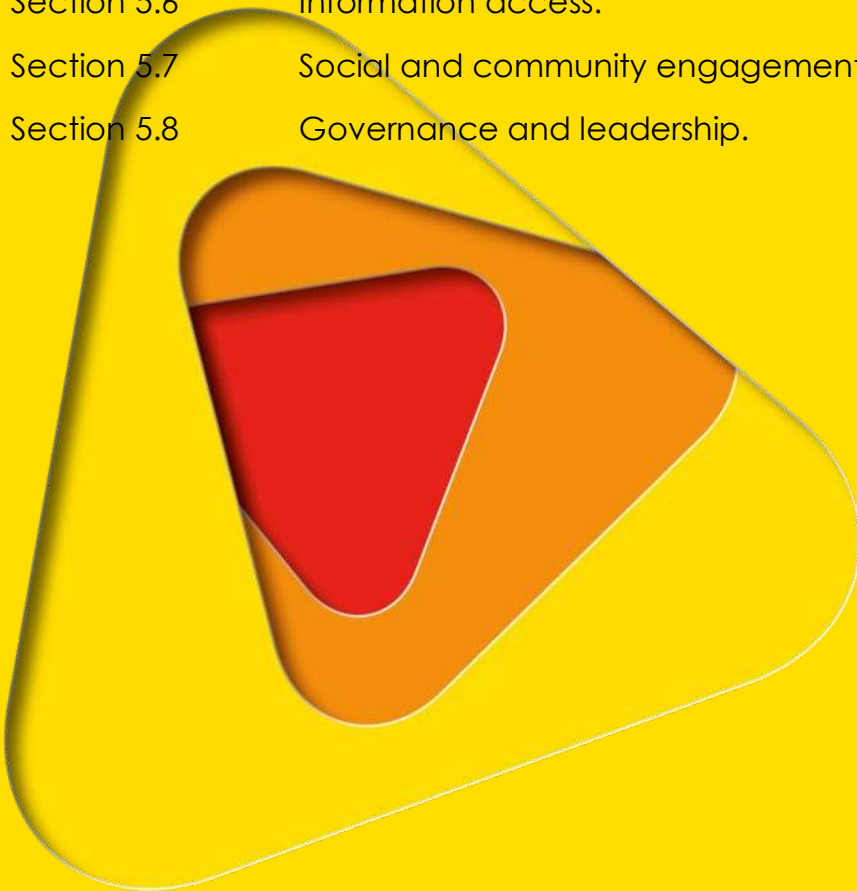




TABLE OF CONTENTS

5.1 Social character	11
5.1.1 Transformation	11
5.1.2 Correlation	12
5.1.3 Measurement model	15
5.1.4 Aggregation	15
5.1.5 Mapped social character sub-index	17
5.1.6 Indicator relationships with composite index	18
5.1.6.1 National level	18
5.1.6.2 Regional level	22
5.2 Economic capital	27
5.2.1 Transformation	27
5.2.2 Correlation	28
5.2.3 Measurement model	31
5.2.4 Aggregation	31
5.2.5 Mapped economic capital sub-index	34
5.2.6 Indicator relationships with composite index	35
5.2.6.1 National level	35
5.2.6.2 Regional level	39
5.3 Emergency services	44
5.3.1 Transformation	44
5.3.2 Correlation	46
5.3.3 Measurement model	48
5.3.4 Aggregation	48
5.3.5 Mapped emergency services sub-index	50
5.3.6 Indicator relationships with composite index	51
5.3.6.1 National level	51
5.3.6.2 Regional level	55
5.4 Planning and the built environment	57
5.4.1 Transformation	57
5.4.2 Correlation	58
5.4.2.1 Data adjustments	58
5.4.2.2 Final correlation	63
5.4.3 Measurement model	65
5.4.4 Aggregation	65
5.4.5 Mapped planning and the built environment sub-index	68
5.4.6 Indicator relationships with composite index	68
5.4.6.1 National level	68
5.4.6.2 Regional level	71
5.5 Community capital	74
5.5.1 Transformation	74
5.5.2 Correlation	75
5.5.3 Measurement model	77
5.5.4 Aggregation	77
5.5.5 Mapped community capital sub-index	79
5.5.6 Indicator relationships with composite index	80
5.5.6.1 National level	80
5.5.6.2 Regional level	84



5.6 Information access	87
5.6.1 Transformation	87
5.6.2 Correlation	87
5.6.3 Measurement model	88
5.6.4 Aggregation	88
5.6.5 Mapped information access sub-index	92
5.6.6 Indicator relationships with composite index	93
5.6.6.1 National level	93
5.6.6.2 Regional level	93
5.7 Social and community engagement	95
5.7.1 Transformation	95
5.7.2 Correlation	96
5.7.3 Measurement model	97
5.7.4 Aggregation	97
5.7.5 Mapped social and community engagement sub-index	100
5.7.6 Indicator relationships with composite index	100
5.7.6.1 National level	100
5.7.6.2 Regional level	101
5.8 Governance and leadership	104
5.8.1 Transformation	104
5.8.2 Correlation	104
5.8.3 Measurement model	105
5.8.4 Aggregation	106
5.8.5 Mapped governance and leadership sub-index	107
5.8.6 Indicator relationships with composite index	108
5.8.6.1 National level	108
5.8.6.2 Regional level	110
Appendix 5A – Social character transformation details	111
Appendix 5B – Maps: Social character sub-index by state/territory and metropolitan areas	142
Appendix 5C – Economic capital transformation details	151
Appendix 5D – Maps: Economic capital sub-index by state/territory and metropolitan areas	184
Appendix 5E – Emergency services transformation details	193
Appendix 5F – Maps: Emergency services sub-index by state/territory and metropolitan areas	220
Appendix 5G – Planning and the built environment transformation details	229
Appendix 5H – Maps: Planning and the built environment sub-index by state/territory and metropolitan areas	258
Appendix 5I – Community capital transformation details	267
Appendix 5J – Maps: Community capital sub-index by state/territory and metropolitan areas	290
Appendix 5K – Information access transformation details	299
Appendix 5L – Maps: Information access index by state/territory and metropolitan areas	306
Appendix 5M – Social and community engagement transformation details	315
Appendix 5N – Maps: Social and community engagement sub-index by state/territory and metropolitan areas	328
Appendix 5O – Governance and leadership transformation details	337



Appendix 5P – Maps: Governance and leadership sub-index by state/territory and metropolitan areas

346

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THE AUSTRALIAN NATURAL DISASTER RESILIENCE INDEX VOLUME II – INDEX DESIGN AND COMPUTATION

Chapter 6 – Uncertainty and sensitivity analysis





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CHAPTER 6 – UNCERTAINTY AND SENSITIVITY ANALYSIS

In this chapter

- Section 6.1 Explains the role of uncertainty and sensitivity analysis in composite index construction.
- Section 6.2 Describes the uncertainty analysis applied to the Australian Natural Disaster Resilience Index.
- Section 6.2 Describes the sensitivity analysis applied to the Australian Natural Disaster Resilience Index.

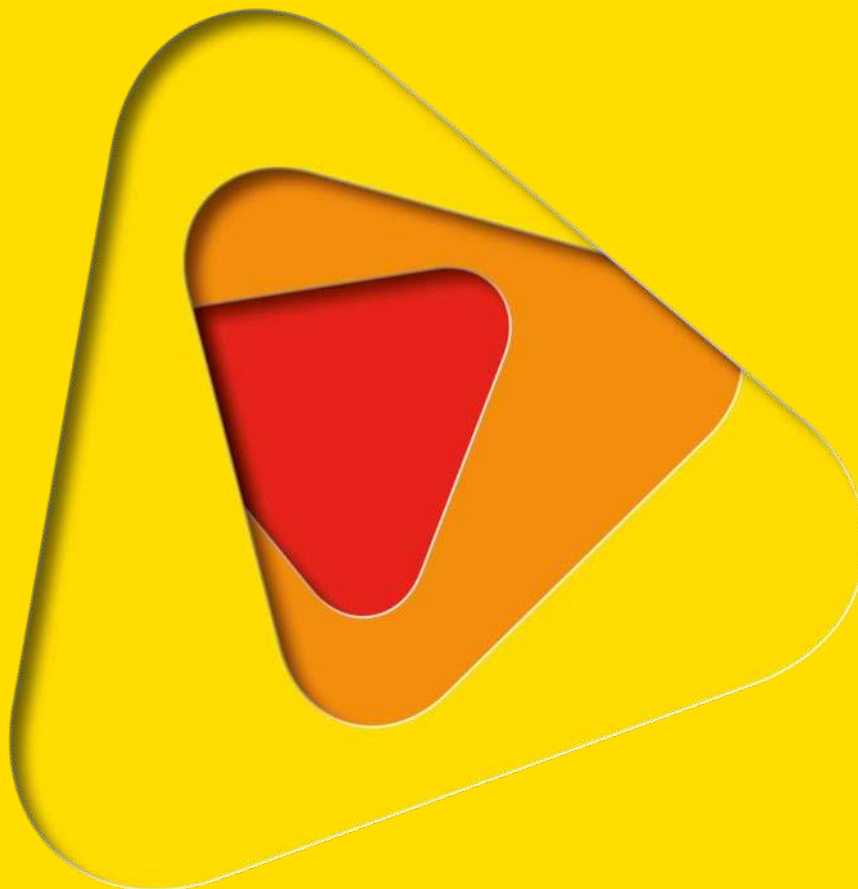




TABLE OF CONTENTS

6.1	Introduction	6
6.2	Uncertainty analysis	7
6.2.1	Indicator uncertainty	7
6.2.1.1	Random perturbation in Census data	7
6.2.1.2	Evaluative uncertainty from document analysis	10
6.2.1.3	Other indicator uncertainties	12
6.2.2	Methodological uncertainty	12
6.2.2.1	Disaggregation uncertainties	13
6.2.2.2	Orness uncertainties	22
6.3	Sensitivity analysis	26
6.3.1	Methods of sensitivity analysis	26
6.3.2	Sensitivity analysis - Morris Elementary Effects method	27
6.3.3	Sensitivity to Census data over time	29
6.4	Conclusions	36
6.4.1	Data quality summary	37
6.5	References	39
	Appendix 6A – 5-95 inter-percentile range: ABS confidentialising procedure	43
	Appendix 6B – 5-95 inter-percentile range: evaluation of planning and policy documents	52
	Appendix 6C – 5-95 inter-percentile range: indicator disaggregation	61
	Appendix 6D – 5-95 inter-percentile range: orness values	70
	Appendix 6E – Indicator codes and aggregation parameters used in the Morris 79 Elementary Effects method	79
	Appendix 6F – Maximum 5-95 inter-percentile range	81



FIGURES

Figure 6.1: 5-95 inter-percentile range for the effect of ABS confidentialising procedures on the social character theme sub-index.	9
Figure 6.2: Effect of uncertainties in policy document evaluation shown as a sequence plot for simulated Australian Natural Disaster Resilience Index values.	11
Figure 6.3: 5-95 inter-percentile range for the uncertainty in the Australian Natural Disaster Resilience Index caused by uncertainty in the evaluation of planning and policy documents.	12
Figure 6.4: Schematic example of the disaggregation of an indicator (% single families) from four source LGAs to one target SA2.	14
Figure 6.5: Example probability density functions for indicators with transformed rescaled values of 0.2 (top row), 0.5 (middle row) and 0.8 (bottom row).	16
Figure 6.6: Effect of uncertainties in disaggregation shown as a sequence plot for simulated Australian Natural Disaster Resilience Index values.	21
Figure 6.7: 5-95 inter-percentile range for the uncertainty in the Australian Natural Disaster Resilience Index caused by uncertainty in disaggregated indicator values.	22
Figure 6.8: Effect of uncertainties in orness values shown as a sequence plot for simulated Australian Natural Disaster Resilience Index values.	25
Figure 6.9: 5-95 inter-percentile range for the uncertainty in the Australian Natural Disaster Resilience Index caused by uncertainty in the orness values used in the aggregation procedure.	25
Figure 6.10: Scatter plot of the mean absolute effect and standard deviation of effects.	28
Figure 6.11: SA2 boundary changes between the 2011 and 2016 Census.	30
Figure 6.12: Relationship between % lone person households from the 2011 and 2016 Census, with the 2016 values adjusted to 2011 SA2 boundaries by population weighting where necessary.	32
Figure 6.13: Distribution of the change in the social character theme sub-index from 2011 to 2016.	33
Figure 6.14: Scatter plot comparing values of the social character theme sub-index derived from 2011 and 2016 Census data.	34
Figure 6.15: Map of change in the social character theme sub-index between 2011 and 2016 Census data. SA2s in white experienced boundary changes in 2016 and were excluded from analysis.	35
Figure 6.16: Maximum 5-95 inter-percentile range for the uncertainty in the Australian Natural Disaster Resilience Index caused by evaluation, orness and disaggregation uncertainties in the calculation of the index.	38

TABLES

Table 6.1: Indicators for which the SA2 values were arrived at by disaggregation from other geographies.	18
Table 6.2: Orness values used in the aggregation procedures for the construction of the Australian Natural Disaster Resilience Index.	24
Table 6.3: List of the indicators with the least effect on the Australian Natural Disaster Resilience Index.	29
Table 6.4: Mean indicator values for the 2011 SA2s that experienced no boundary change in 2016, and those 2011 SA2s that did experience a boundary change.	31