

Who's in most danger?

We probably know about the elderly couple at the end of our road, but who else is at risk in an emergency?

This resource will help you to use data to understand which parts of our community need extra attention in your disaster planning. It will guide you through the process of identifying 'at risk' cohorts and communities using data from the Australian Bureau of Statistics, the Australian Disaster Resilience Index website and the Bushfire Management Area Plans.

Why is this useful?

Because you can find out how many people in your community:

- Don't speak English at home (and therefore may not understand disaster advice or emergency messages)
- Are elderly (and might not be able to take action to stay safe without help)
- Don't have a vehicle (and can't leave in an emergency)
- Have moved to the area recently (and don't know how things work in your community)
- Live alone (and may be missing out on information that comes in through families and their social networks)
- Need assistance with core functions (and may have a severe disability that limits their ability to respond without help)
- May not have access to phone or internet at home
- Live in locations that are high risk for fire or flood or other emergency events

Your community disaster plans should factor in all of these groups.

Australian Bureau of Statistics and the Census

Australia conducts a Census every five years, with the most recent in 2021. Data from each Census is released in the months following the Census and is available on the ABS website (www.abs.gov.au/census). There are a number of ways of accessing this data, but we're assuming that keen analysts are already onto the detail, so this section provides an introduction for those who are new to this resource.

Search by area or map

www.abs.gov.au/census/find-census-data/search-by-area

The *Search Census data* page has two options for searching, both give you a choice of Census year:

Search by area name:

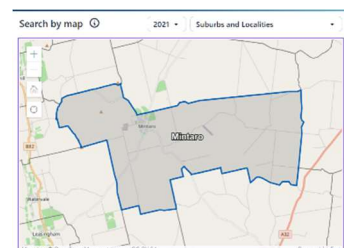
You can use postcode, suburb/locality name, or council area.

Search by area name ⓘ

2021 ▾ Mintaro

Search by map:

The drop-down list allows you to choose a geographical area (e.g. suburb/locality, postal district), then click on the area you want to examine.



Community Disaster Preparation

Using data to identify 'at risk' communities

www.communitydisasterprep.com.au

This project is funded under the Disaster Risk Reduction Grants Program funded by the Australian Government and the South Australian Government.

NYLGA
NORTHERN & YORKE
LOCAL GOVERNMENT ASSOCIATION

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Once you've selected the geography, scroll down to Search results where you can choose QuickStats (which won't go to the level of detail we need), or View Community Profiles (which will).

So click on View Community Profiles and download and save the excel file:

To download an Excel Community Profile spreadsheet of this area, select one of the following profile types:

General Community Profile [Download XLSX](#) [1 MB]

Search results

View QuickStats ⓘ

View Community Profiles ⓘ

All persons

Community Profiles

Selected area Mintaro (Suburbs and Localities)

Selected Census year 2021

Have a look at the tabs along the bottom of the spreadsheet:

 **Australian Bureau of Statistics**

List of tables

G01 Selected person characteristics by sex	G32 Total family income (weekly) by family composition
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G15 Type of education institution attending (full-time/part-time student status by age) by sex	G46 Labour force status by age by sex
G16 Highest year of school completed by age by sex	G47 Labour force status by sex of parents by age of dependent children for couple families
G17 Total personal income (weekly) by sex	G48 Labour force status by sex of parents by age of dependent children for couple families

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Choose the *List of tables* tab, and you'll see that each tab is described and the tab number will link you straight to that data set.

We're interested in:

- G01 Selected person characteristics
- G13 Language used at home (G13a for males and G13b for females)
- G18 Core activity need for assistance
- G23 Voluntary work
- G34 Number of motor vehicles
- G35 Household composition
- G44 Place of usual residence 1 year ago

Using data to identify 'at risk' communities

Using the data

Let's have a look at **G01**. There are a few different measures in this tab, but the ones that are most useful for this purpose are:

- The number of people aged 75 years and over. In the Mintaro example there are 20 people in this category. That's 20 elderly people we need to make sure are safe and accounted for on days of catastrophic fire danger, or if there's a flood or a heatwave or lengthy blackout. Our disaster planning should include finding out who they are and whether they have assistance in an emergency. If not, they're on our 'to do' list.
- We can also see that there are 4 people who speak a language other than English at home. This needs a bit more investigation ...

G13 'languages used at home' shows that none of the 4 people who speak another language at home stated that they speak English "not well or not at all". This is unusual in an Australian community – if we look at the same statistics for other communities, we are likely to find a few people with English language barriers and we'd need consider how to ensure they know about and understand our disaster preparation and what to do in an emergency.

G18 'core activity need for assistance' tells us how many people have a disability that requires assistance with daily activities like self-care, mobility and communication. In Mintaro there are 13 people who require a high level of assistance so we'd need to make sure they and their carers are included in our planning, especially if they have mobility issues and need special transport.

G23 'voluntary work for an organisation or group' tells us how many people are engaged in voluntary work. Mintaro has 67 people who volunteer, with a quarter of these in the 65 and over age group. This is great news, with 31% of the Mintaro community volunteering compared to 17% of the South Australian population. Volunteers are usually well-connected in their communities, so our challenge is how we get information to the 196 people (15 years and over) who are not volunteering and are possibly less connected to social networks.

G34 'number of motor vehicles' shows that no *households* in Mintaro were without a motor vehicle, hardly surprising in a rural town without a supermarket! This doesn't mean that all vehicles will be available, especially as there were 31 households with one vehicle and that vehicle could be elsewhere when an emergency is unfolding.

G35 'household composition' has 13 people living in single-person households. The data doesn't tell us the age of these people, but isolation is a risk factor – both in terms of knowing about disaster preparation and what they should do, and in finding out about an emergency as it happens.

G44 'place of usual residence one year ago' (prior to the Census) shows that three people moved within the same SA1 – i.e. the Gilbert Valley area (excluding the town of Clare), 5 relocated from Queensland and 11 relocated from other parts of South Australia. That's 16 people who aren't familiar with the Mintaro area and are possibly from cities that have a very different disaster profile than rural areas that are more likely to be exposed to bushfire and flooding. Our disaster preparation should actively engage these people to make sure they know how to prepare for, and look after themselves during an emergency.

Using data to identify 'at risk' communities

Bushfire Management Area Plans and CFS Safer Places

Bushfire Management Area Plans (BMAP) consist of an online map, text document and risk and treatment register and were developed in 2017 as part of a project funded by the Natural Disaster Resilience Program in partnership with the Commonwealth and State Government of South Australia. BMAPs have been developed for Adelaide and the Mount Lofty Ranges, Fleurieu, Flinders Mid-North and Yorke, Kangaroo Island, Limestone Coast, Lower Eyre Peninsula, Upper Eyre Peninsula and Murray Mallee- see <https://sbcc.sa.gov.au/bushfire-management-area-plans/>.

The BMAP text documents describe the process of developing the Plans; the Treatment Register is a spreadsheet that identifies assets (e.g. emergency services infrastructure, communications towers, historic buildings) along with their risk status (low to extreme); the interactive map shows the assets in the spreadsheet in spatial format and clicking on each asset provides information about property ownership and risk rating.

In the Flinders Mid-North and Yorke area, over 3,000 assets are listed, 234 in the extreme risk category (e.g. including schools, private dwellings, water supply and industrial and commercial premises).

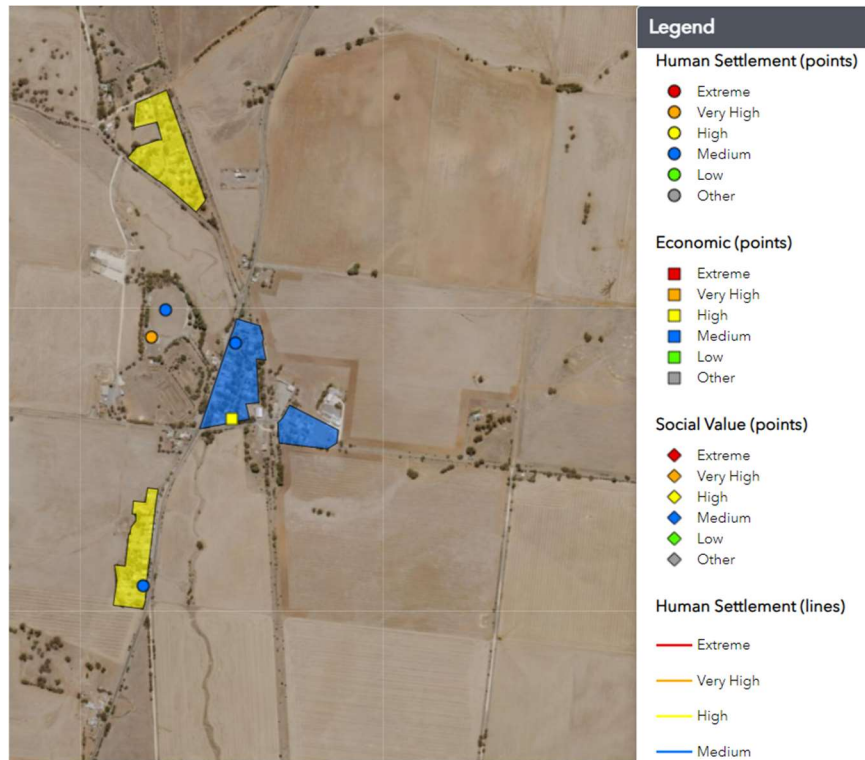
If we stay with the Mintaro example used for the Census, 31 assets are listed with Sports Club and Water Pumping Station in the 'very high' risk category, while the Mintaro Institute building is in the low risk category.

This information – together with CFS Bushfire Safer Places and Last Resort Refuge maps (<https://www.cfs.sa.gov.au/plan-prepare/before-a-fire-be-prepared/bushfire-safer-places/>) helps us to know what parts of our town (if any) are safest in a bushfire.

Mintaro, being small and well vegetated is not a designated 'safer place' and Last Resort Refuges are just that – they offer little protection but may provide a central gathering point if all other options aren't available.

When we combine the BMAP information (i.e. the Sports Club is a high-risk asset and the Oval is a last resort refuge), we can focus on preparing less risky sites (in this case the Institute building), but may be better off helping our community make bushfire preparation plans that include leaving early on catastrophic fire danger days for Bushfire Safer Places in Clare, Riverton, Saddleworth or Burra.

CFS Regional Engagement Officers provide free community planning programs. CFS expertise, knowledge and experience is essential for community disaster planning.



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Australian Disaster Resilience Index

The ADRI is a snapshot of community capacities for disaster resilience that uses eight themes (based on more than 77 separate indicators) to better understand our ability to prepare for, absorb and recover from natural hazards (coping capacity) and to enable learning, adaptation and problem solving (adaptive capacity). The Index is provided at SA2 level (suburbs or rural towns and their catchments).



How to generate a report for your area:

1. Go to the <https://adri.bnhcrc.com.au/> website
2. Click on the Disaster Resilience Factors image
3. In the 'areas of interest' list on the left: **clear all**
4. Select Local Government Area
5. Click on your state (SA)
6. Tick the box for your council area
7. Click on Generate Report
8. To see the ADRI chart, click on Graphs
9. Each SA2 with all or part of its boundary in the chosen Local Government Area is shown in a separate graph (noting that SA2 boundaries are not the same as council boundaries)

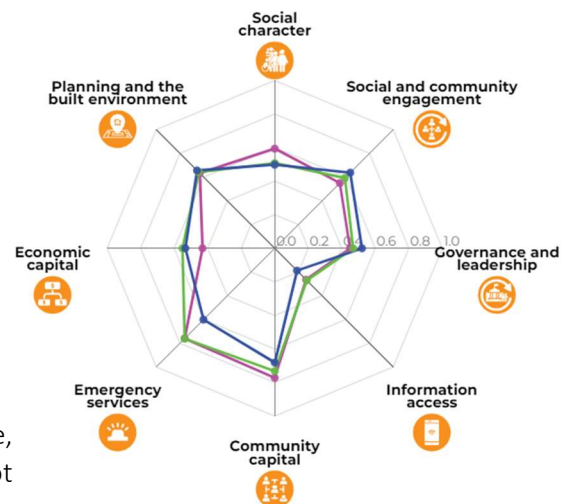


If we stick with the Mintaro example, the town is in the Gilbert Valley SA2 (i.e. all of the Clare & Gilbert Valleys council area *except* Clare) and is in Group 2 (inner regional). The purple line shows the capacity of this SA2 for each of the 8 themes, as well as a comparison to other Group 2 SA2s in the state and nationally. ADRI's summary for this SA2 shows all themes as strengths except information access, which is: *The potential for communities to engage with natural hazard information. Telecommunication and internet access is vital to information sharing before, during and after natural hazard events. Community engagement activities benefit communities through capacity building, social connectedness, self-reliance, training, awareness of risk and psycho-social preparation.*

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SA2 Name	Gilbert Valley
Group	2
Remoteness	Inner regional

		
Gilbert Valley	State Median	National Median



How do we use ADRI in disaster planning?

It encourages us to consider the barriers to resilience, in this case *information access*. While there might not be much we can do about mobile phone or internet coverage (and we probably know the black spots without ADRI's input), it reminds us to set up other forms of communication. If people don't have phone or internet, will they know that a flood or bushfire is happening? What can we put in place to overcome this barrier?

This is where ADRI loops back to our Census data. We know that this little community has 20 elderly people, 13 people with high-care disability, 31 households with only one motor vehicle, 13 single-person households and 16 people who are new to the area (some people may fit into more than one category). These people are more likely to have less access to telecommunications (especially if the emergency is compounded by blackouts) and limited ability to respond quickly.

Our disaster planning may have come up with a number of issues, but this data helps us to understand some of the 'hidden challenges' and to factor those into our priorities and preparations.