

Mapping communities at risk

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Putting the community first when designing and delivering fire prevention and preparedness services requires us to have a deep understanding of the composition of our communities. We need to know their strengths, their needs, who is more at risk of fire, where and why. This knowledge should be grounded in evidence and local, lived experience.

The Country Fire Authority (CFA) undertook a literature review in 2021 to develop a body of demonstrable evidence around the social factors that put communities in country areas of Victoria more at risk from bushfire and residential fire. The literature review was designed to complement local knowledge of emergency services volunteers in developing ‘community profiles’ that support service delivery planning to increase community resilience and reduce fire risk.

The literature review collated research on the hazard, risk, social vulnerability and proactive actions associated with bushfire and residential fire risk. The review included a selection of the extensive literature on hazard, exposure, vulnerability and risk in the contexts of bushfire and residential fire. Insights from other disaster contexts were included in instances where there were transferrable insights.

Findings from the literature review indicated that household decisions around mitigation are influenced most powerfully by social vulnerability, place-dependency and a host of complexly interacting contextual factors. Uniquely complex considerations are present in conceptualising bushfire risk in the Australian context. The key outcomes of this project were the improved integration of research and evidence on social vulnerability and application of this evidence within local contexts.

In practice, the findings of the literature review are being used to inform the development of community profiles. The profiles are brigade-specific, showing the brigade response area as a map, which indicates areas of highest concentration of fire hazard, exposure and social vulnerability within the communities that live in,

work and visit the area. The profiling visually shows CFA members where the most ‘at risk’ community members are located. The profiles also include information on the attributes in those specific communities that increase their risk of bushfire or residential fire fatality and injury. This risk intelligence allows brigade members to match CFA services and resources to community members at greater risk, so it delivers the right services to the right people in the right place at the right time.

Due to data accessibility limitations, some metrics were unable to be captured in the first iteration of the profiles. However, as more data becomes available on the listed social factors, they will be incorporated.

CFA’s approach to mapping communities most at risk could be replicated and tailored by organisations delivering resilience services to communities, as the factors identified in this literature review that make a person more at risk of residential fire or bushfire are likely to be common to other natural hazards and disasters.

The concept of developing an evidence base that can be used to tailor community engagement plans, products and programs, supports person-centred fire risk management in a way that is most meaningful to people at greatest risk of fire fatality and harm.

The full report on *Developing Community Profiles for Community Engagement A Review of Existing Evidence* (Country Fire Authority 2022) is available on the Australian Institute for Disaster Resilience Knowledge Hub.