



THE UNIVERSITY OF
WESTERN AUSTRALIA
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Understanding Community Preparedness & Responses to Bushfire Emergencies

David Morrison, Patrick Dunlop, Petra Buergelt, Illy McNeil &
Carmen Lawrence



Study Aims

To determine:

- What community factors predict differences in individual and community preparedness for bushfires;
- The possible mechanisms through which such factors influence preparedness;
- How and to what extent local government activities influence the preparedness of individuals and communities.



Community Preparedness

Examples of preparedness activities:

- Fire plans
- Equipment
- Collaboration
- Education

Human capital	SOCIAL FOUNDATION	Social capital
Landscape	Agency involvement	Cultural capital

Foundations of preparedness

Jakes et al., 2007.



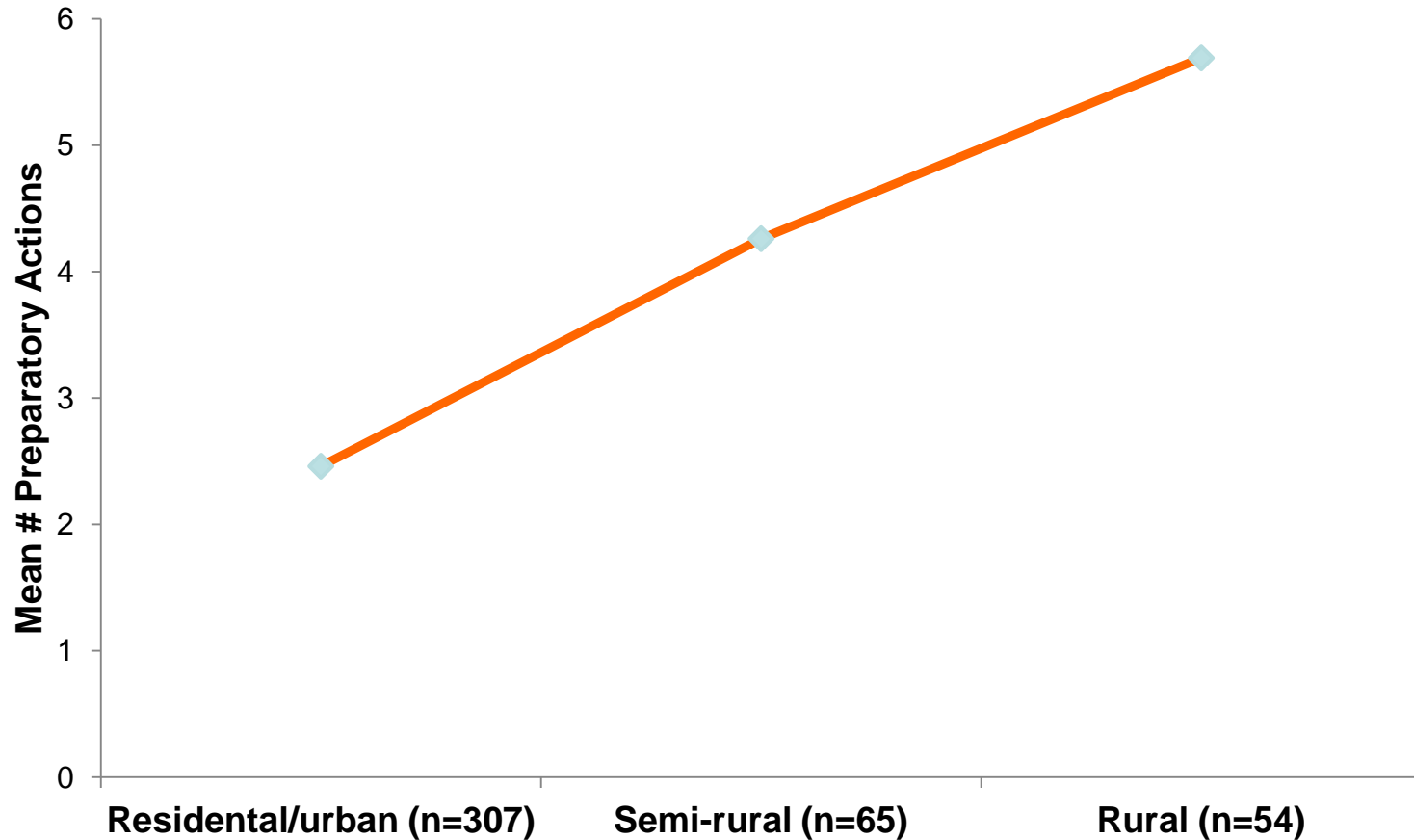
Important questions:

Evidence of apparently large differences in preparatory actions at the community level – little systematic, quantitative analysis of:

- The nature and extent of differences between communities in preparedness;
- The organisational and community level factors which appear to account for these differences;
- The processes by which community factors influence individual and household perceptions of fire risk and the willingness of community members and organisations to undertake fire mitigation actions.



Differences between communities in reported preparedness: Data from surveys conducted after bushfires in W.A.



$F(2, 423) = 93.7, p < .01$

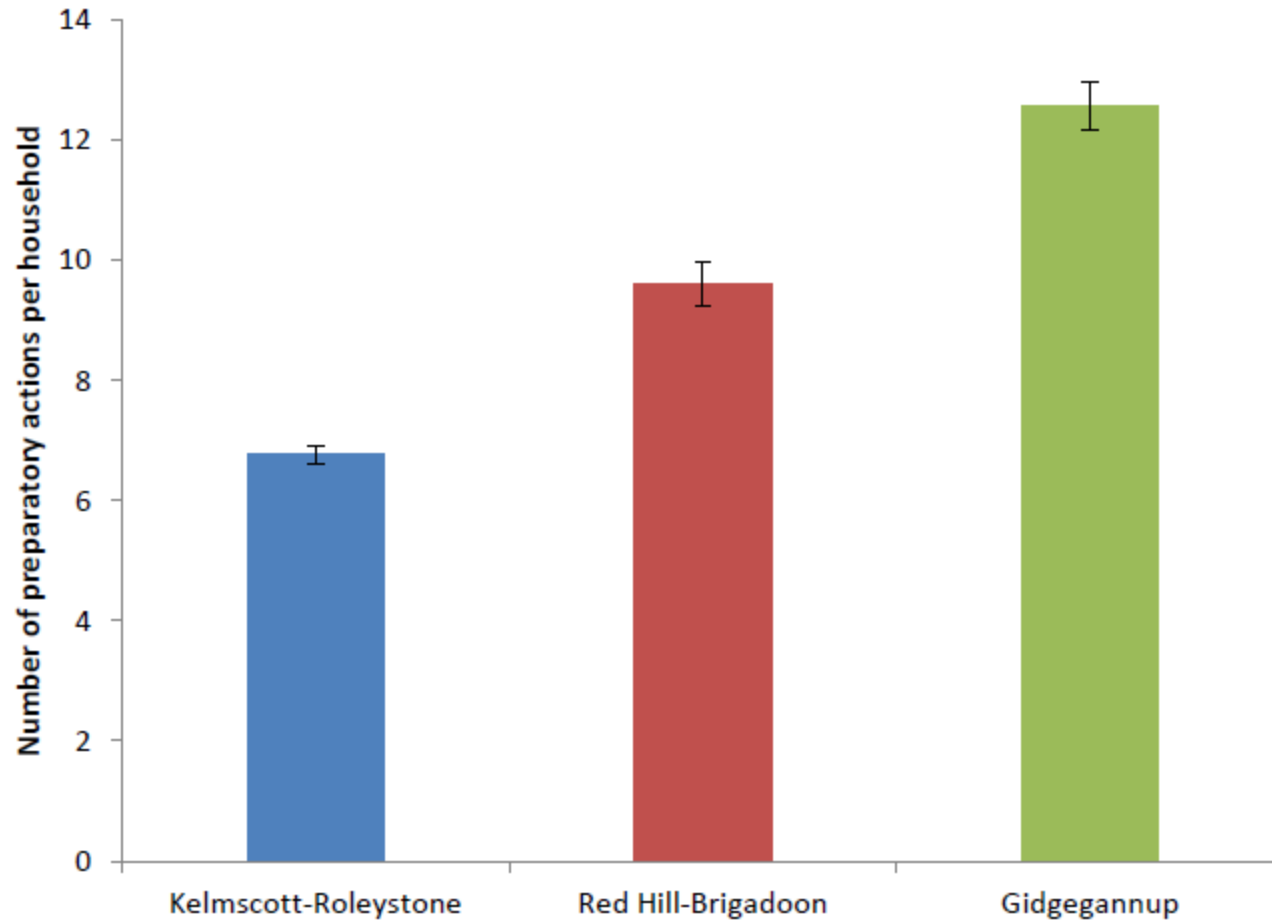


Figure 19. Number of preparatory actions per household across different regions.



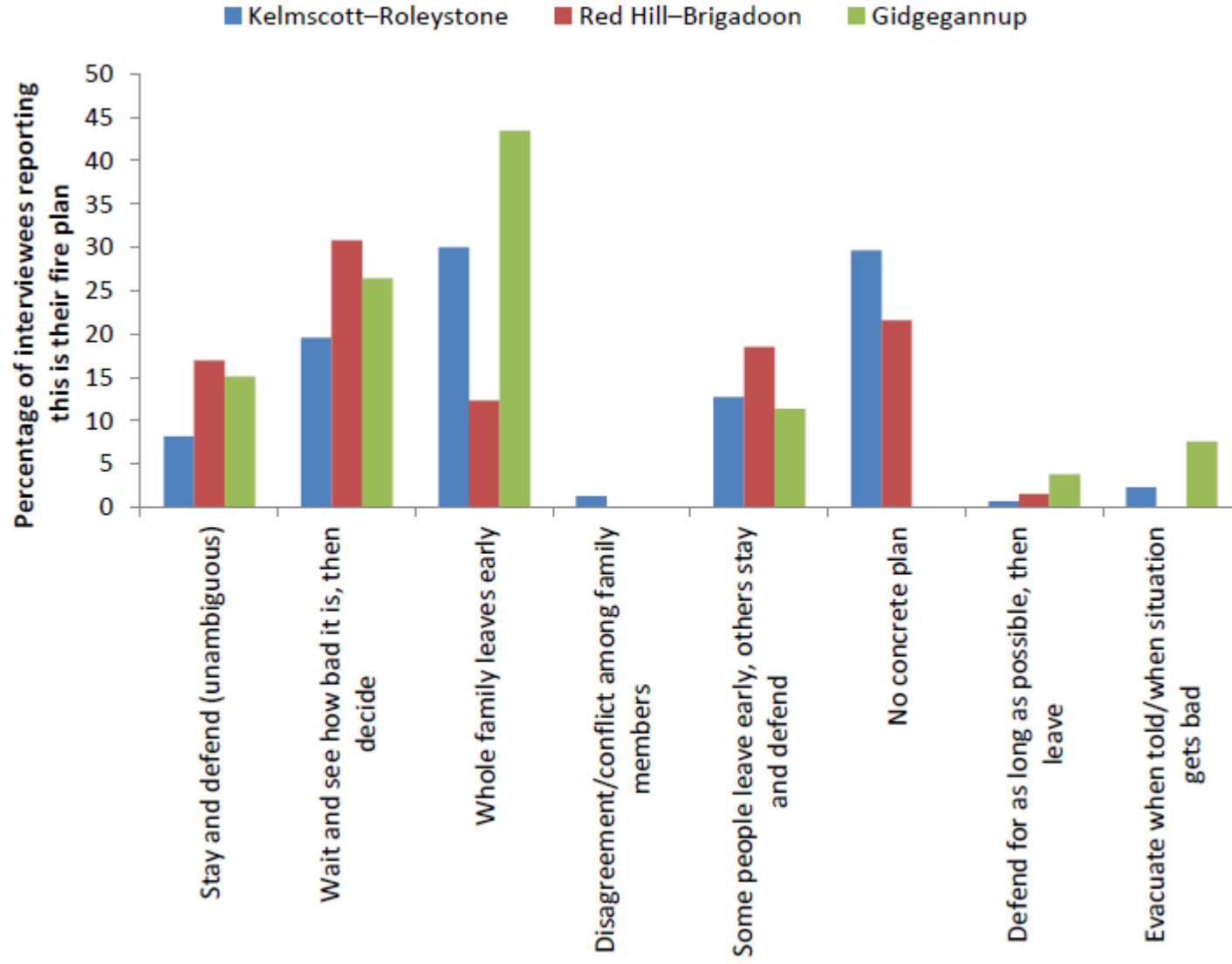
1. Assessment of community differences in preparedness: Individual and community measures

- Research questions required identification of well and poorly prepared communities;
- After preliminary investigation, obvious that objective data on actual levels of preparedness within communities were not readily available;
- No central data base on householder/ community preparedness and/or compliance with legal requirements; fire mitigation actions by LG; partial data in LG;
- Decision to undertake systematic survey of local governments.



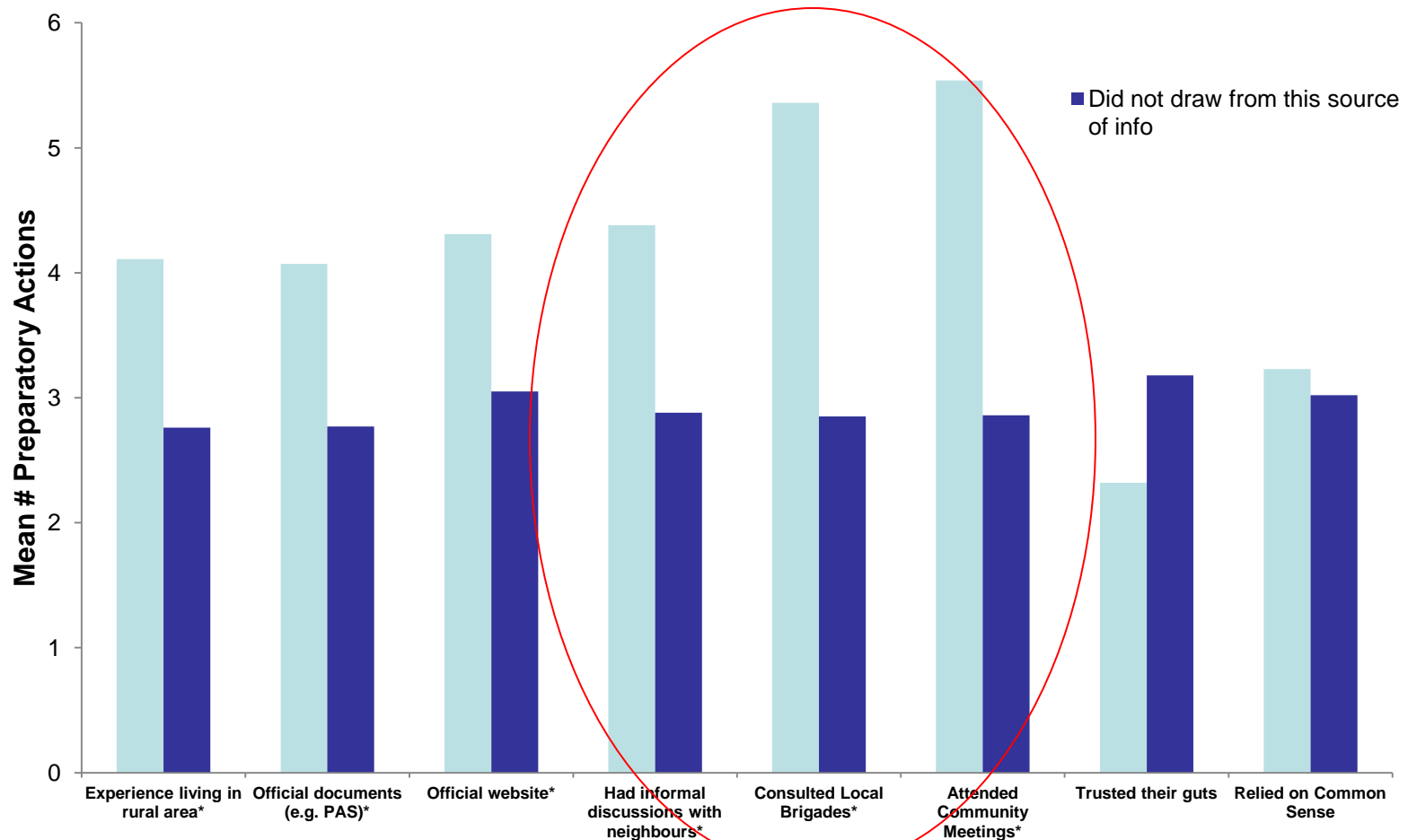
2. Community characteristics related to preparedness – development of measures

- Data from post-fire questionnaires and recent surveys conducted by Dunlop & McNeil;
- Preliminary qualitative analysis of interviews in selected fire-prone communities;
- Literature search;
- Construction of questionnaires for both community members and leaders to measure characteristics likely to influence preparedness;



Community involvement & preparedness

Higher levels of preparedness were reported by people who reported community level information sources

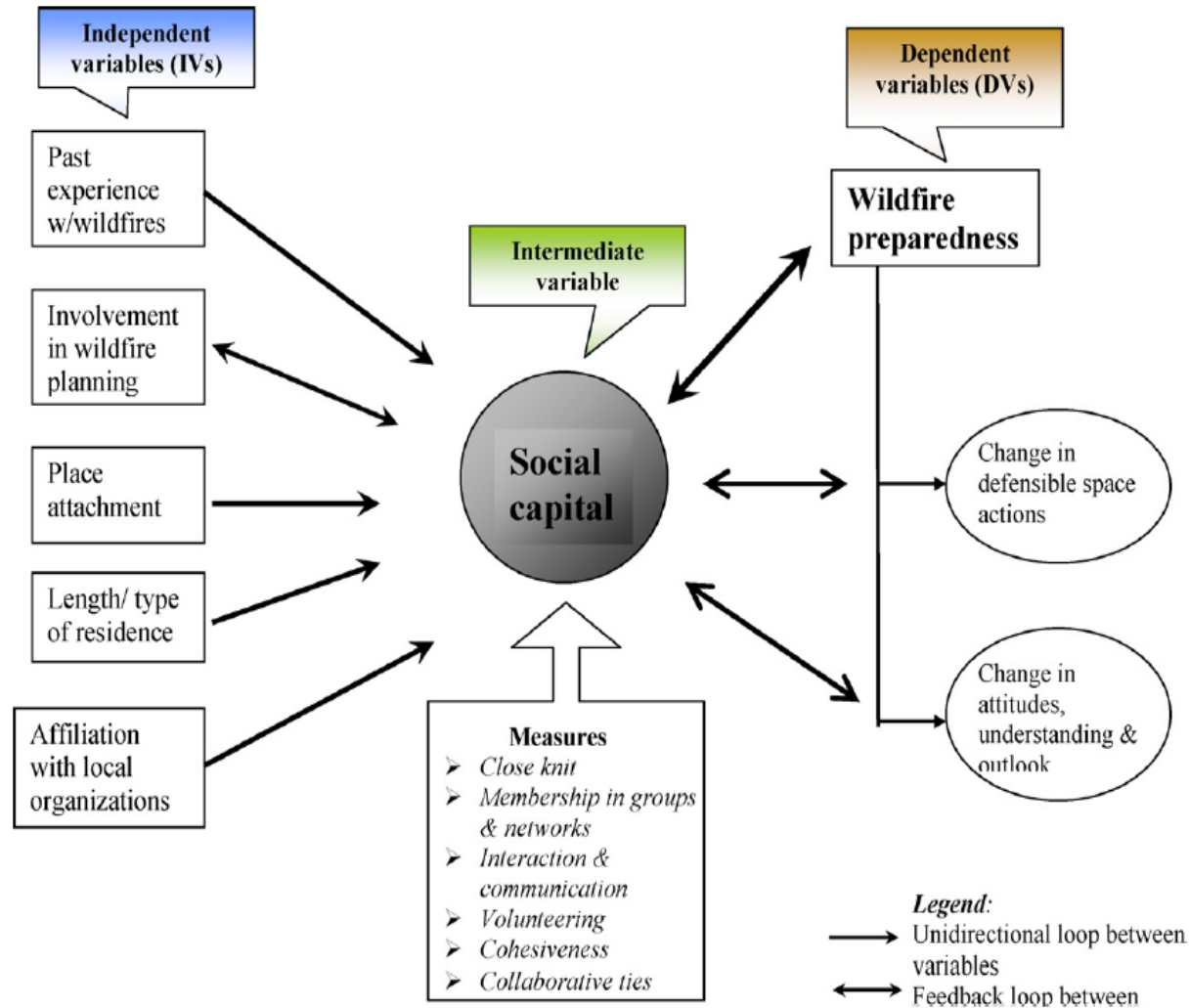


* = $p < .05$



Community characteristics identified as relevant:

- quality of community leadership
- place attachment/ attachment to community
- embeddedness of responsible agencies
- community cohesion
- community participation
- density of social networks
- community norms
- trust in community organisations/ leaders
- empowerment and collective efficacy





Measuring preparedness

- Physical preparedness: surveys by Dunlop & McNeil of 6 W.A. communities;
- Ph.D project - Jess Stacey – examining the psychometric properties & validity of measures of physical preparedness and psychological preparedness and the relationship between them.
- Ph.D project – Charis Anton – examining the relationship between place/community attachment and preparedness.



Local Government Surveys

- The role of local government in education about and enforcement of fire mitigation;
- Local government influence on communities' perceptions of risk and their willingness and capacity to act to reduce fire risk.
- Local government preparedness – capacity and engagement.
- Data will guide selection of well and poorly prepared communities.



Local government surveys

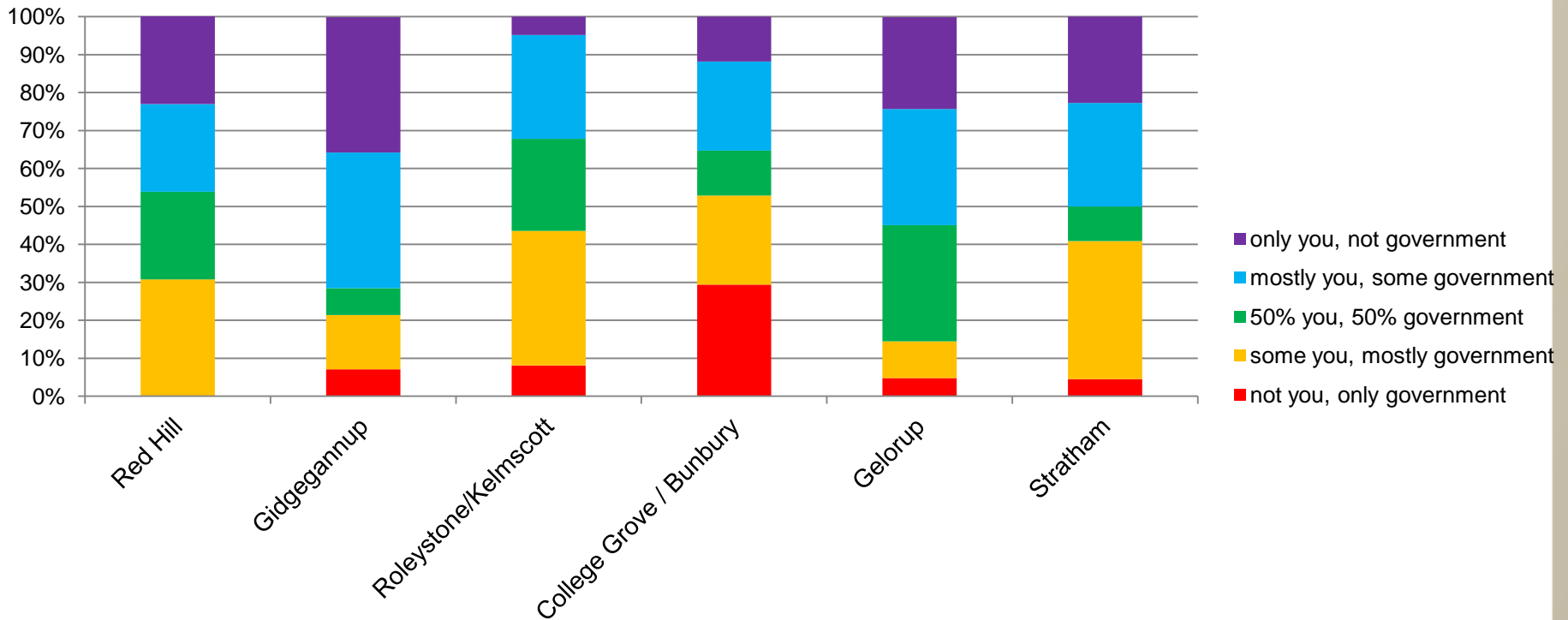
- Open-ended interviews - local government and other emergency services officers in fire prone areas in country WA and on the Perth urban fringe were undertaken during 2011-12.
- Using this information and expert sources, standardised questions on fire prevention information programs, property inspections, compliance activities and community engagement in preventive and preparatory activities have been developed and will be distributed to fire prone local government areas throughout Western Australia.



Community surveys



If a fire threatened your community and/or household, who would ultimately be responsible for saving your house? In other words, who would be to blame in the case of a bad outcome?





If a fire threatened your community and/or household, who would ultimately be responsible for saving your life/lives? In other words, who would be to blame in the case of a bad outcome?

