Call for Expressions of Interest

May 1 2017

1. THE CHALLENGE

Disasters such as storm, flood, fire, cyclone, earthquake and tsunami expose human, infrastructure and institutional vulnerabilities, and subject the Australian community to considerable impact and loss. Such events make headlines when they cause injury, death and widespread damage. However, their full impacts often remain poorly quantified, but will be felt through long-term consequences for individuals, communities, infrastructure, the landscape and the economy.

The Bushfire and Natural Hazards CRC has established a Tactical Research Fund to provide a source of funding for short-term, end-user focussed projects, addressing strategic issues for the sector having national significance supporting the development of a more disaster resilient Australia.

2. ABOUT THE CRC

The Bushfire and Natural Hazards Cooperative Research Centre was established on 1 July 2013. The CRC is a partnership involving federal and state governments, emergency management and services agencies, non-government organisations the private sector and research institutions. Approximately 20 universities and 30 government bodies are formal partners in the CRC. Detailed information regarding the CRC may be found at www.bnhcrc.com.au.

3. DEVELOPING THE CRC TACTICAL RESEARCH PROGRAM

In January 2017 a call for proposals went out to the end user partners of the CRC seeking proposals for application of the Tactical Research Fund.

Following the completion of that process, the CRC is seeking expressions of interest from research providers to undertake projects in the following areas:

- Strategic Analysis of Preventable Residential Fire Fatalities
- AIRSNAT (the Australian Incident Reporting System) Data Analysis

This call for expressions of interest seeks research providers to address these areas. The detailed project statements are provided in Appendix 1. The areas will be addressed in two stages.

Stage 1 – to be completed by 31 May 2017

Stage 1 encompasses the production of high level capability statements in accordance with the format prescribed in Attachment 2.

Expressions of interest will be reviewed and those selected to go forward for further refinement will be notified by June 14 2017.

Interested research participants will work with end-user representatives during June and July 2017 to further develop and refine plans to address the identified areas. During this time there will be opportunity to clarify and fine-tune the problems under examination and shape the research to be done.

Proposals are to be submitted via email to office@bnhcrc.com.au
no later than midnight (AEST) ***Wednesday 31 May 2017***
Proposals must be submitted in the format specified in Attachment 1

Stage 2 – to be completed by 1 August 2017

The final project plans will be further developed from the work undertaken in Stage 1. There will be a requirement for all participants to produce detailed project plans and budgets for the full term of the CRC.

4. THE APPLICATION PROCESS

Those interested in submitting an expression of interest are encouraged to read these guidelines and follow the processes outlined. Stage 1 of the process encompasses the following:

1. Call for Expressions of Interest – submissions due **31 May 2017**
2. Proposals evaluated and successful applicants notified – **June 14 2017**

Successful applicants from Stage 1 will be invited to progress to Stage 2 and participate in a workshop with end-users to refine the project plans.

1. End-user and researcher workshop – **June/July 2017**
2. Project plans finalised – **July 1 2017.**
3. Contracting completed and commencement **August 1 2017.**

Who can apply? Austalian research institutions or consortia of institutions are able to make a submission to the CRC for consideration. However, CRC Guidelines only allow the funding of direct costs to non-Australian organisations.

How and when to apply? Expressions of interest must be lodged via email and submitted no later than midnight (AEST) **Wednesday May 31 2017,** in the format as specified using the template guide as included as **Attachment 1.**

Email: **office@bnhcrc.com.au**

Acknowledgement: All proposals received will be deemed "Commercial-in-Confidence" and treated as such by the CRC. Applicants will be provided with an acknowledgement of receipt of their submission within two business days.

What support is available?

The CRC will be monitoring the CRC email address to respond to any questions or clarifications as required. If you require further information or wish to discuss this Call for Expressions of Interest further, please contact us via email at **office@bnhcrc.com.au** with your query, and include phone / email contact details.

5. EVALUATION OF PROPOSALS

All proposals will be evaluated by an evaluation panel. The criteria by which expressions of interest are judged are:

Criterion	Comment	% Weighting
Research Experience, Expertise and International Leadership	• A demonstrated and recent track record of industry aligned research including, delivery, quality, partnerships and collaboration. • Demonstrated professional standing, background and experience, including national and international journal publication, invitations to present and collaborate.	40
Project Scoping: Applicants are required to describe a potential research project for funding	• The clarity and conciseness of the approach to addressing the project area, demonstrating a sound understanding of the stated problems, the impact and benefit to be potentially derived from the research. • Demonstration of relevant expertise.. • Realistic budget and project plan.	40
Institutional Support	• Ability to leverage extra funds, physical, in-kind, % staff commitment equivalent to at least the cash funding sought to support the project. • For estimation purposes, Project Leaders/Key Researchers are valued at $280,000 p.a., Researchers at $220,000 p.a. and Technical Support Staff at $180,000 p.a. per FTE. CRC funded post-doctoral fellows can be counted as $70,000 p.a. as an institutional in-kind contribution covering facilities, equipment and administration.	10
Research to Utilisation Experience	• Track record in building capacity, partnering with industry / government, and supporting research utilisation.	10
Institutional endorsement	• All expressions of interest must indicate that the proposal, including budget, has been reviewed and approved by the research provider's institutional Research Office or equivalent.	Mandatory

Proposals that do not meet the criteria specified will not be funded regardless of whether funds are available.

The evaluation process will be concluded by **June 14 2017,** with successful applicants notified shortly thereafter.

> The Bushfire and Natural Hazards CRC reserves the right to not award all available funding if insufficient proposals of appropriate quality, end user support or alignment to priority areas are received. The Bushfire and Natural Hazards CRC reserves the right to sole source proposals from selected research providers.

Appendix 1: Project Areas

Strategic Analysis of Preventable Residential Fire Fatalities

Budget guidance – approximately $100,000 ex GST

Aim: The primary aim of this project is to develop a deeper understanding about the victims of preventable residential fire fatalities in Australia through identifying socio-demographic characteristics and the common linkages that different groups of victims may have to government funded programs and services.

While previous research has included some demographic analysis of fire victims, this has usually been limited to age and gender. In this study a broader range of socio-demographic factors will be collected and analysed to identify commonality, comorbidities, shared risks and potential trends. It will also include a projection of future socio-demographic changes in groups in the community that are most at-risk of dying in a residential fire and the potential impact on fire services.

Background: In 2005 AFAC, in collaboration with Queensland Fire and Emergency Service, released the report *Accidental Fire Fatalities in Residential Structures - Who's At Risk?*

Nearly eight years ago MFB identified an emerging trend in preventable residential fire fatalities through the examination of victim socio-demographic characteristics. Older victims were more often community care clients at the time of their death from fire. To further understand this trend MFB developed the *Preventable Fire Fatalities Involving Older People and People with Disabilities* study. This identified that older people and people with disability were 3.7 and 4.2 times respectively, more likely to be the victim of a fire fatality than the general population. Significantly, the victims were predominately recipients of State and Commonwealth funded community care programs.

This knowledge provided MFB with an impetus to increase its focus and capacity in relation to this risk cohort by developing new approaches to mitigating the identified risk.

A further study developed by MFB, *A Review of Residential Risk Referrals 2016*, examined individuals identified as being at ongoing risk by both MFB firefighters and external stakeholders. A key finding of this study was that affected people living in areas identified as advantaged in the *Australian Bureau of Statistics Socio- Economic Indexes for Areas* resided in pockets of disadvantage within the same area.

MFB's research into the link between risk and socio-demographics has been limited to the Metropolitan District within Victoria. It has also only involved older people and people with disability. It is important that this research be extended to a national focus as the research conducted by MFB to date may be representative of a larger national trend which will provide all Australian fire services an opportunity to work more consistently and collaboratively, and importantly target their efforts to risk more effectively.

Additionally there is the potential to identify if there are other demographically linked trends to other groups represented in preventable residential fire fatalities which are currently unidentified.

Approach: This project is envisaged as a comprising three stages.

Stage 1: An analysis of National Coronial Data Base/ Coronial Reports/ Coroners findings to identify the socio-demographic characteristics of all victims of preventable residential fires that have occurred in Australia in the recent past.

Key questions for this stage of the project are:

- What socio-demographic characteristics of fire victims can be ascertained from Coronial sources?
- How consistently is this information captured?
- Are their variations between States and over time?

Appendix 1: Project Areas

- Are Coronial sources consistently noting any links that fire victims have with government funded services related to community aged care, disability, housing, mental health, alcohol and other drugs and child protection and family services?
- Are there key characteristics that are not ascertainable from Coronial sources?

Stage 2: Sophisticated analysis of data from stage one along with additional data such as Socio Economic Indexes For Areas (Australian Bureau of Statistics) index and Census data with the aim of categorising fire victims into "at-risk groups" that have similar characteristics. Identifying existing relationships to government funded services related to community aged care, disability, housing, mental health, alcohol and other drugs and child protection and family services will be of particular importance.

Key questions at this stage of the project are:

- What socio-demographic characteristics can be used to categorise fire victims in to risk groups?
- Can the data be analysed in different ways to reveal new ways of identifying and mitigating risk?
- Does the data at a national scale support the findings from MFB's previous research, or are there significant differences between States/ Territories or across other variables (e.g. urban/ rural)?

Stage 3: Using the data from stage two, project future socio-demographic changes in groups in the community that are most at-risk of dying in a residential fire and the potential impact on fire services.

Key questions at this stage of the project are:

- At a population scale, what is the likelihood that cohorts that are most at-risk of dying in a residential fire are increasing or declining? Are there variations between States?
- What are the implications for fire services seeking to mitigate risks with limited resources?

Potential additional stage: Analysis at stage one of the project may reveal that there is limited information available about victims' links to government funded services related to community aged care, disability, housing, mental health, alcohol and other drugs and child protection and family services through Coronial sources. In this case the research provider will need to investigate what other sources these links can be obtained from.

Other information: We are seeking proposals from research providers with a strong track record in the social sciences. In particular a deep understanding of Australia's government funded services related to community aged care, disability, housing, mental health, alcohol and other drugs and child protection and family services is required. While the research requires a reasonably sophisticated analysis of demographic and statistical data, it is essential that the researcher is able to uncover the links between fire victims and government funded services which have supported them that can be further explored by fire services.

To facilitate close collaboration with MFB as the lead support agency, it is preferred that the research provider is Melbourne/ Victoria based.

Expected Deliverables: The research provider will be required to deliver:

- A research report documenting all stages of the research
- A shorter report or a series of short reports accessible to a non-research audience to facilitate evidence based policy development.
- Recommendations for the AFAC Community Engagement Technical Group (CETG) to facilitate the development of AFAC Doctrine on residential fire fatalities.
- A database containing all the fire fatalities investigated and the socio-demographic characteristics that were categorised.
- A user manual or process to enable fire services to collectively update the database into the future.

This project needs to be completed by the June 30 2018.

Appendix 1: Project Areas

AIRSNAT (the Australian Incident Reporting System) Data Analysis

Budget guidance: approximately $35,000 ex GST

Aim: The aims of this project are twofold;

- to discover what can be learned through detailed analysis of existing incident data
- identifying potential enhancements to the data collected that might enable deeper analysis in order to maximise its value to AFAC, its members and their communities.

Background: For almost 20 years AFAC has been conducting an annual collection of a specified set of incident data from ten of its member agencies, aggregating this data in a national database (AIRSNAT) of which it is custodian. Deeds of agreement with these ten contributing members have recently been renewed. Several more of AFAC's members have expressed an interest in contributing data, making it imperative to address the issues with the current system. There is a strongly felt need by users at all levels to expand the national data set to include non-response data.

It is considered timely to undertake a detailed analysis of the existing data within AIRSNAT, and use this analysis to guide further developments of AIRSNAT to ensure its benefits to the industry are maximised.

AIRSNAT is an MS-SQL 2008 R2 database accessed directly via SQL queries. There is no graphical or web based front end to the system. The data for each incident is recorded in a number of tables, linked via an incident number and includes information such as:

- Details of the incident (e.g. type of incident, action taken, number of vehicles attending)
- Particulars of attendance (e.g. details of each appliance attending the incident)
- Hazmat (e.g. hazard materials involved, environmental impact)
- Specific information on bushfire and structure fire related incidents as applicable.

Approach: This project will involve two parallel streams of enquiry.

Stream 1: To determine what can be learned through the current data set and assess its quality, completeness and comparability. By involving an expert data analyst we expect to gain an understanding of what can be done with existing data.

Stream 2: Investigation not only how this current data set can inform business decisions and be of benefit to AFAC's members and the industry as a whole, but also to examine the business questions which need to be asked but for which we currently do not have the required data. A skilled business analyst will be able to identify these gaps and provide direction as to their rectification, thus providing the insights necessary to progress industry-wide aims, such as those outlined in the Strategic Directions for Fire and Emergency Services in Australia and New Zealand 2017-2021.

Deliverables:

Two reports with recommendations to be presented to both the Business Intelligence Group and AIRS User Network, with expected completion October 1 2017.

Appendix 2: Application Form

FORMAT OF PROPOSALS – TEMPLATE GUIDE (create your own document from this guide)

Responses to this Call for Expressions of Interest should use the following table as a template guide. All proposals should be submitted in MS Word (preferred) or PDF.

Project Title:
Lead Researcher *(Contact Details, key areas of expertise and qualifications)*
Research Team (*including institutions and key areas of expertise and qualifications)*
Research Objectives
Research Experience and Expertise (Maximum 1 page – including information above) • A demonstrated and recent track record of industry aligned research including delivery, quality, partnerships and collaboration. • Demonstrated professional standing, background and experience, including national and international journal publication, invitations to present and collaborate. • Demonstration of expertise relevant to the project area.
Project Scoping (Maximum 2 pages) • The clarity and conciseness of the approach to addressing the identified issue, demonstrating a sound understanding of the stated problems, the impact and benefit to be potentially derived from the project. • Realistic budget and project plan.
Institutional Support (Maximum 0.5 pages) • Ability to leverage extra funds, physical, in-kind, % staff commitment equivalent to at least the cash funding sought to support the project. • For estimation purposes, Project Leaders/Key Researchers are valued at $280,000 p.a., Researchers at $220,000 p.a. and Technical Support Staff at $180,000 p.a. per FTE. CRC funded post-doctoral fellows can be counted as $70,000 p.a. as an institutional in-kind contribution covering facilities, equipment and administration.
Research to Utilisation Experience (Maximum 0.5 pages) • Track record in building capacity, partnering with industry / government, and supporting research utilisation.
Biographies of Key Research Team Members ***of no more than one page each***.

NOTE: Project proposals longer than five pages, excluding biographies, will not be reviewed.

Submission to be emailed to:
office@bnhcrc.com.au no later than **midnight (AEST) May 31 2017.**