

**BURDEN DISCLOSURE NOTICE**  
**FEMA FORM 080-0-3b**

Public reporting burden for this form is estimated to average 2.5 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and submitting the form. This collection of information is required to obtain or retain benefits. You are not required to respond to this collection of information unless it displays a valid OMB control number. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing the burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 500 C Street, SW, Washington, DC 20472, Paperwork Reduction Project (1660-1660-0054) **NOTE: Do not send your completed form to this address.**

**Request Details – Research and Development**

**Note: You may apply for up to three projects. For each program, attach an additional sheet.** You must answer all of the project specific questions and specify at least one budget item. The cost figures you provide do not have to be firm quotes from your vendors, but they should be estimated based on research of current prices (i.e., check with at least two vendors for your estimates) before you list your estimated costs. Only whole dollar amounts should be provided (no cents please). You are limited to three projects however many budget items can be requested to support the project. **Fire Departments/Districts are not eligible to apply in this area.**

**Note:** Fields marked with an \* are required.

Research and Development	
* 1. Project:	
* 2. Provide an abstract that includes the following headings: Purpose and Objectives (with rationale), Study Design and Methods, Results (projected), and Conclusions (projected).  (limited to 4,000 characters)	
*PI Name:	
*PI Phone:	
*PI Email:	

**Note:** Additional contact information for CO-PI's can be listed within the narrative.

## Add Budget item (Request Details) – Research and Development

Please provide the following information about the program you want funded. **You must have at least one budget item for each program.**

**Note:** For each budget item, attach an additional sheet.

**Note:** Fields marked with an \* are required.

<b>* Item:</b>	
Select Object Class: (see page 6 for definitions)	<input type="radio"/> Personnel <input type="radio"/> Fringe Benefits <input type="radio"/> Travel <input type="radio"/> Equipment <input type="radio"/> Supplies <input type="radio"/> Contractual <input type="radio"/> Construction <input type="radio"/> Indirect Charges <input type="radio"/> Other
If you selected “Other” above, please specify:	
<b>* Number of units:</b> (whole number only)	
<b>* Cost:</b>	\$ First 12-Month Period of Your Grant
	\$ Second 12-Month Period of Your Grant
	\$ Third 12-Month Period of Your Grant
<b>Description:</b> The space to the right can be used to provide further clarification on the costs (i.e. personnel costs: number of hours/rate/staff; or meeting costs: number of meetings/days/attendees). Budget justification should be included in the project narrative. (maximum 800 characters, attach additional sheet if necessary)	

## Research and Development Budget

Please total the individual budget items on the previous pages.

**Note:** Fields marked with an \* are required.

Budget Object Class				
	First 12-Month Period	Second 12-Month Period	Third 12-Month Period	Total
Personnel	\$	\$	\$	\$
Fringe Benefits	\$	\$	\$	\$
Travel	\$	\$	\$	\$
Equipment	\$	\$	\$	\$
Supplies	\$	\$	\$	\$
Contractual	\$	\$	\$	\$
Construction	\$	\$	\$	\$
Other	\$	\$	\$	\$
Indirect Charges	\$	\$	\$	\$
<b>Indirect Cost Details</b> (complete this section only if you have a Federally approved Indirect Cost Rate agreement). Please note you must add the Indirect Costs as a line item within the Request Details section as they are not automatically calculated.				
Agency Indirect Cost Agreement with				
Indirect Cost Rate (whole numbers only)	%			
Agreement Summary (attach an additional sheet if necessary)				
<b>Total Federal and Applicant Share</b>				
Federal Share (Application <b>cannot</b> exceed \$1,000,000 in Federal Share)	\$			
Applicant Share	\$ 0			
Federal Rate Sharing (%)	100/0			

(continued on next page)

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<b>* Non-Federal Resources</b> (The combined Non-Federal Resources must equal the Applicant Share)	
a. Applicant: (whole dollar amounts only)	\$
b. State: (whole dollar amounts only)	\$
c. Local: (whole dollar amounts only)	\$
d. Other Sources: (whole dollar amounts only)	\$
If you entered a value in Other Sources other than zero (0), include your explanation below. You can use this space to provide information on the project, cost share match, or if you have an indirect cost agreement with a federal agency.	
<b>Total Budget</b>	\$

## Research and Development Narrative

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The narrative portion of the application should contain supporting information that allows for evaluation of your project(s). If you are applying for a grant in the **Research and Development** Activity, your Narrative Statement must address the evaluation elements outlined in the Program Guidance:

### Technical Evaluation Process - Research and Development Activity

For R&D applications, a panel of reviewers will be assigned who have an area of expertise based on the subject matter of the proposal. Reviewers will assess each application's merits with respect to the detail provided in application, addressing specifically each criterion listed in the "Review and Selection Process" section below.

The panel of reviewers will independently score each application and if necessary discuss the merits or shortcomings of the application in order to reconcile any major discrepancies identified by the reviewers. A consensus is not required. The highest ranked applications, based on the average score, will receive further technical review to assess their strengths and weaknesses, how readily weaknesses may be resolved, and the likely impact of the proposed R&D project to enable improvement in firefighter safety, health, or wellness.

#### Evaluation Criteria:

The characteristics listed below will be used as the guidelines in making funding decisions. The extent to which projects reflect these characteristics will be assessed in the technical evaluation using the weighted evaluation criteria (items 1-8) to score the application. These scores will impact the likelihood that a project will be funded. In addition, other considerations are indicated (items 9-10) in the list below:

**1) Project purpose(s), goals and objectives, and specific aims (15%):** Applicants need to address how the results of a successful project will improve firefighter safety, health and wellness, particularly in the short term. For multi-year projects, greater detail should be given for the first year. Also describe the specific goals and objectives for the second and third years.

**2) Literature Review (10%):** With reference to the project's goals, objectives, and specific aims, provide a literature review that includes citations in the text and references at the end of the narrative. The review should be in sufficient depth to make it clear that the proposed project is necessary, adds to an existing body of knowledge, is different from current studies, and offers a unique contribution.

**3) Project Methods (20%):** This is a description of how the project will be carried out including demonstration of the overall scientific and technical rigor and merit of the project. This provides the operations to accomplish the purpose, goals and objectives, and the specific aims previously stated. Plans to recruit and retain human subjects, where applicable, should be described. Where human subjects are involved in the project, describe plans for submission to the Institutional Review Board (IRB) (see Appendix 1 for further guidance and requirements).

**4) Project Measurements (10%):** This includes specification of measurement methods, including instruments, procedures, and standards used in the project. Data are collected to evaluate the performance of methods, technologies and products proposed to enhance firefighter safety, health, and wellness. Measurement methods and equipment selected for use should be appropriate and sufficient to the project objectives.

**5) Project Analysis (10%):** Indicates the planned approach for analysis of the data obtained from measurement, questionnaires or computations. Specify within the plan, what will be analyzed, the statistical methods that will be used, the sequence of steps, and interactions, as appropriate. It should be clear that the R&D team has the expertise available to perform the planned analysis and defend the results in a peer review process.

**6) Resources - People and Facilities (15%):** Describe the strengths of the PI, the lead scientists, and other staff of the research and development team especially with regard to similar R&D activities, or studies involving the fire service, and successful completion of prior grant funded research and development. Also describe the institutional resources (e.g., labs, experimental facilities) to be used to support and carry out the proposed project. Emphasis should be given to unique people and facilities that contribute substantially to the project.

**7) Partners (10%):** Describe the fire service partners that will support the ongoing project efforts from design through dissemination and implementation (of successful results). The specific roles and contributions of the partners to the project should be described. Partnerships may be formed with local and regional fire departments and national fire-related organizations. Because AFG R&D grants aim to improve the safety, health, and wellness of firefighters, having strong partnerships with the fire service is essential to the likely relevance and effectiveness of the project. Letters of commitment to actively participate in the project are encouraged and may be submitted in the Appendix.

**8) Dissemination and Implementation (10%):** Indicate dissemination plans for scientific audiences (such as plans for submissions to specific peer review publications) and for Firefighter audiences (such as via websites, magazines, and conferences). Also, assuming positive results and where applicable, indicate future steps that would support dissemination and implementation throughout the fire service. These are likely to be beyond the current study. All applicants should specify how the results of the project, if successful, might be disseminated and implemented in the fire service to improve firefighter safety, health and wellness, especially in the short term. It is expected that successful R&D (Activity II) projects may give rise to future programs including Fire Prevention and Safety (Activity I) projects.

**9) Cost vs. Benefit (additional consideration):** Cost vs. benefit in this evaluation element refers to the costs of the grant for the research and development project vs benefits that are projected for firefighters who would have improved safety, health, and wellness. Projects will be evaluated on the extent to which they demonstrate a high benefit for the cost incurred.

**10) Financial Need (additional consideration):** Applicants should provide in their narrative details on the need for Federal financial assistance to carry out the proposed project(s).

- Attach your narrative and appendix for each project submitted. Each page must also include a header or footer with the University or Institution name, the Project Title, and page number. The appendix for each project may include data collection instruments, data tables, illustrations and specifications for product designs. Curriculum Vitae (CV's) for Project Investigators (PI) and lead scientists should also be included in the appendix but are limited to a maximum of two pages (2) per CV. A sample of the biographical sketch format for CV's is available in the Program Guidance Appendix 2. The sum number of pages for each attachment is limited to 20 pages (12pt font, Times New Roman or other standard font, 1" margins). All files should be printed in MS Word, MS Excel or as a PDF. Each project is limited to one narrative and one appendix attachment.

**PLEASE NOTE:** This narrative section is for the details of your **Research and Development** Activity only. The information for Fire Prevention and Safety Activities should be included in the Fire Prevention request details section. Any information on Fire Prevention Activities in this narrative area will not be given consideration during the application review.

**Research and Development Narrative Statement**