



Leslie Marshall, Ph.D.
Interim Executive Director
SFPE Foundation
9711 Washingtonian Blvd., Suite 380
Gaithersburg, MD 20878
foundation@sfpe.org

2026 Request for Proposals

Climate Impacts on Fire Protection Engineering

Description

As part of our commitment to addressing the research priorities identified in the [SFPE Research Roadmap](#) and the SFPE Foundation's [Grand Challenges Initiative](#) (GCI), we invite proposals that address the impact of climate on fire engineering design. The GCI white paper, "[Grand Challenges in Climate Change: A 10-Year Plan for Strategic Cooperation in Research and Education to Advance Fire Engineering](#)," established the urgent need for the fire engineering community to adapt its practices for a changing world.

The fundamental environmental conditions that have long served as a baseline for fire engineering design are changing. Shifting weather patterns, changes in vegetation and fuel loads, and the introduction of new building technologies (among other factors) are creating a new reality where historical data may no longer be sufficient for ensuring fire safety and resilience. This impact manifests as a direct alteration of fire hazards, which are expected to increase in severity or frequency, while new hazards are likely to appear in regions of the world that were previously considered immune. Adapting professional fire engineering methods requires a foundational understanding of these evolving risks.

However, a significant gap exists between acknowledging these impacts and integrating them into daily fire engineering practice. Before fire engineering design can evolve and adapt, the effects of climate on fire behavior, engineering practice, and design must be systematically identified, assessed, characterized, and quantified. This research is needed to provide engineers with the updated data and methodologies required to design safe and resilient structures in the 21st century.

To meet this challenge, the SFPE Foundation, with the support of the GCI Climate Change Working Group, envisions a multi-year research initiative consisting of two sequential projects:

1. **Project 1 (this RFP) - Landscape Analysis & Hazard Quantification:**
 - a) Perform a broad landscape analysis of existing research on the impact of climate on fire engineering design principles and methodologies, including a description of underlying assumptions and potential cascading impacts.
 - b) Systematically assess and quantify how specific climate factors (e.g., higher temperatures, prolonged droughts, higher winds, electrification, etc.) are altering (and will alter) fire hazards relevant to the built environment.



Leslie Marshall, Ph.D.
Interim Executive Director
SFPE Foundation
9711 Washingtonian Blvd., Suite 380
Gaithersburg, MD 20878
foundation@sfpe.org

- c) Systematically assess and quantify how specific climate adaptations (i.e., sustainability efforts such as electrification, green facades, etc.) are altering (and will alter) fire hazards relevant to the built environment.
2. **Project 2 (future RFP*) – Framework Development & Design Integration:** Using findings and recommendations from Project 1:
- a) Develop fire protection engineering frameworks and methodologies that address the identified changes in the fire hazard landscape. regulators (i.e identify potential updates to existing prescriptive codes, develop new performance-based design approaches, adapt risk assessment methodologies, etc).
 - b) Provide actionable recommendations tailored to the relevant stakeholders (practitioners, research institutions, codes and standards, regulatory agencies, etc.).

***Note:** The scope of any future projects may evolve pending the results of the first project funded under this specific RFP.

This Request for Proposals is specifically for Project 1. The outcomes of Project 1 will directly inform Project 2, making them complementary arcs within a multi-year effort. Respondents will be differentiated by their proposed approaches to the required elements above. We envision this project as an exploratory endeavor that will establish future directions for research and educational funding based on the needs identified by the selected research team and the potential impact that additional projects could have in addressing fire safety design challenges in the context of a changing climate. Furthermore, for this proposal, ***we require that the respondent team includes a member with climate science expertise on the project team, or defines clear collaboration with climate science experts in some form as part of their proposal.***

Please note: The above action items are meant to encompass fire hazards in the broadest possible sense. While we acknowledge that wildland and wildland-urban interface (WUI) fires are a part of this issue, they are not the only component, and we are asking that proposals be as broad as possible so as not to limit the scope only to wildland and/or WUI fires. RFPs unique to the WUI/wildland fire issue are expected to be issued separately. Indeed, we specifically welcome proposals that focus on the implications of a changing climate for fire protection engineering design in the built environment, and that only secondarily consider WUI fires as an instance of how changing climate conditions may affect the WUI fire hazard.

Additionally, proposals should not be limited in geographic scope. We seek broad geographic representation and expect respondents to address this in their proposals. We welcome proposals from groups or individuals, though we strongly encourage collaborative proposals that leverage the strengths of multiple researchers and/or organizations working together. Up to \$30,000 (USD) may be awarded for Project 1.



Leslie Marshall, Ph.D.
Interim Executive Director
SFPE Foundation
9711 Washingtonian Blvd., Suite 380
Gaithersburg, MD 20878
foundation@sfpe.org

Project Goals & Objectives

Proposals should clearly indicate what the outputs and outcomes of the research project will be. Strong proposals will draw clear linkages between the proposed research and the needs identified in the GCI Climate Change white paper [Grand Challenges in Climate Change: A 10-Year Plan for Strategic Cooperation in Research and Education to Advance Fire Engineering](#). Successful applicants will be able to articulate the potential impact of the research on the field of fire safety science and fire protection engineering.

Project Deliverables

1. Detailed work plan (including proposed approach and timeline to completion) that accounts for all proposed objectives and tasks. This should include an initial planning meeting + one mid-term check-in + a post-project debrief meeting with Foundation staff.
2. This project is expected to involve input and feedback from an External Advisory Panel of 5-10 individuals outside of the SFPE Foundation Board of Governors (selected with input from the Foundation's Technical Committee, SFPE and SFPE Foundation staff, and other stakeholders) with expertise in the subject area under study. For this project, we will be soliciting additional funding support from industry partners, each of whom will be invited to have one representative serve on the External Advisory Panel. The project team is expected to be in contact with this group as needed for input and feedback on the study (about monthly), including during the midterm and final reporting phases.
3. Draft final report and internal presentation for SFPE Foundation and External Advisory Panel review and input.
4. Final revised report incorporating SFPE Foundation and External Advisory Panel feedback and properly formatted for public dissemination. SFPE Foundation staff will provide a template and guidance on formatting.
5. Access to any tools or research materials produced as part of the project.
6. Evidence of student engagement in the research process.
7. Proposed method(s) for packaging and communicating the information produced throughout the research process to best meet the needs of relevant stakeholders.
8. Presentation on research findings (to be recorded) at a future SFPE or SFPE Foundation conference, webinar, or other event.
9. Completed "Grant Report" (due to SFPE Foundation staff no more than 30 days after project completion). A template will be provided to the grantee covering topics such as budgetary expenditures, ease of implementation, and an opportunity to provide feedback to the SFPE Foundation.

Intellectual Property



Leslie Marshall, Ph.D.
Interim Executive Director
SFPE Foundation
9711 Washingtonian Blvd., Suite 380
Gaithersburg, MD 20878
foundation@sfpe.org

The SFPE Foundation will retain the rights to the final report and any tools developed in conjunction with the scope of this research project. We may make the final deliverables publicly available via the SFPE Foundation website and/or affiliated online platforms, and research products may be used, shared, or referenced at future SFPE Foundation-affiliated events.

Cost and Duration

The proposed research project should be completed no more than *twelve months* after initiation. The Technical Committee may consider projects of a longer duration, although this needs to be explicitly named and justified in the proposal. Applicants may request up to \$30,000 USD.

How to Respond

All responses must be submitted via the SFPE Foundation's online portal. **Note:** We are using a new application system that requires you to make an account. If you do not already have a Blackbaud account, click the link to create an account.

Late applications will not be accepted under any circumstances. Plan ahead to allow sufficient time to set up your account in our system and complete all required components. Incomplete applications will not be reviewed.

Required Elements: All applicants will be prompted to answer a series of questions in the online application and to upload a PDF file containing their proposal.

The PDF containing the proposal should not exceed 7 pages single-spaced (not including the cover page, bibliographic references, Conflict of Interest Disclosure Form, or Research Integrity Agreement). Any proposals that exceed the 7-page limit will not be considered.

The proposal document should include the following elements:

1. Cover Page (does NOT count towards the page limit), including:
 - Full names, titles, affiliations, and contact information (email, phone, mailing address) for all research team members named in the proposal.
 - Title of the proposal.
 - Total amount requested (up to \$30,000 USD).
 - Description of any prior financial support germane to the research project being proposed.
2. Scientific Merit (counts toward the page limit)
 - Proposed project and approach.
3. Achievability (counts toward the page limit)



Leslie Marshall, Ph.D.
Interim Executive Director
SFPE Foundation
9711 Washingtonian Blvd., Suite 380
Gaithersburg, MD 20878
foundation@sfpe.org

- Proposed timeline for project completion.
 - This should include an initial project launch meeting with SFPE Foundation staff; one midterm check-in presentation to the External Advisory Panel, SFPE Foundation staff, and the Technical Committee; a draft final presentation to the External Advisory Panel, SFPE Foundation staff, and the Technical Committee; and any other relevant project milestones.
4. Project Impact (counts toward the page limit)
- How does the proposed work align with SFPE Foundation’s mission to “enhance the scientific understanding of fire and its interaction with the social, natural, and built environments?”
 - If executed as planned, how will this project help the SFPE Foundation deliver on its Strategic Goals (including, but not limited to, student engagement; innovation; and global reach)? (Please refer to the [2022-2025 SFPE Foundation Strategic Plan](#).)
 - What kind of impact (e.g., on the fire engineering community, on fire engineering practice, on fire safety, on the world as whole, etc.) do you expect the proposed project to have?
5. Project Value (counts toward the page limit)
- Total amount requested and budget justification.
 - This must include a description (i.e., “Budget Justification”) accounting for each expenditure in the proposed budget and any other funding sources (including amounts) that will be used to support the work (including in-kind support).
 - If in-kind contributions are included as part of the budget, then the proposal needs to clearly outline where those contributions are coming from, how they are funded, and explain how the research team would be able to verify and/or document those in-kind contributions, if selected for funding.
 - Note: The SFPE Foundation does not have a specific policy regarding overhead or other indirect costs.
6. Team Qualifications (1 page maximum) (counts toward the page limit)
- Qualifications and experience for all relevant team members.

Applicants will also be required to complete the following elements in the online submission portal (does not count toward the page limit):

- Conflicts of Interest Disclosure (**required**, complete the COI Form available here and upload in the submission portal). All members of the research project team named in the proposal must download, complete, and sign a copy of this form.
- Research Integrity Agreement (**required**, complete the form available here and upload in the submission portal)



Leslie Marshall, Ph.D.
Interim Executive Director
SFPE Foundation
9711 Washingtonian Blvd., Suite 380
Gaithersburg, MD 20878
foundation@sfpe.org

Applicants are permitted to submit multiple proposals. Proposals will be reviewed based on the following criteria: *Scientific Merit (30%), Achievability (25%), Project Impact (20%), Project Value (15%), and Team Qualifications (10%).*

Deadline for Submittals: October 14, 2026, 11:59 pm Eastern Time

Direct inquiries to Dr. Leslie Marshall, SFPE Foundation Interim Executive Director, at foundation@sfpe.org. No phone calls, please.

Contractor Selection

Proposals will be evaluated by the SFPE Foundation Technical Committee and GCI Climate Change Working Group representatives based on the proposal elements listed above. *The project will proceed only upon receipt of a proposal deemed acceptable to the Foundation's Board of Governors.*