# Building the Future:

# Amplifying Industry Impact Through Dynamic Innovation and Research Funding Introduction

One pillar of the ACI Foundation's Strategic Plan is to increase industry impact through concrete research and innovative initiatives. Because the ACI Foundation has limited resources to use, the Trustees desire a proactive and strategic approach in identifying, prioritizing, and funding critical items that help solve industry challenges and update ACI work products. Additionally, the ACI Foundation Trustees aim to increase the potential for collaboration and strategic partnerships with ACI committees and industry stakeholders outside of the ACI community to leverage its resources.

To accomplish these objectives, the ACI Foundation has changed its process for identifying and funding research and innovation. The new process will provide the following:

- Balanced support for defined and undefined research;
- Wider input to identify ACI and industry needs; and
- Prioritized solutions and projects.

The ACI Foundation is interested in projects that advance the knowledge and use of concrete materials, structures, and construction, as well as new technologies and innovations that provide solutions to industry issues. The ACI Foundation will approach prioritizing the ideas strategically and can provide funding or support in a variety of ways, such as hosting stakeholder meetings, funding a road map, business plan, document development, research, or even large-scale interdisciplinary projects and visionary topics. The ACI Foundation welcomes co-funding and collaboration with other organizations.

# Process

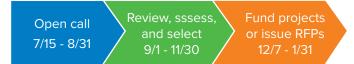
The new process is an annual program with four stages:

- 1. Ideation: Gather research needs and problem statements from ACI and the global concrete industry. This includes input from ACI technical committees, ACI chapters, the ACI Technical Activities Committee (TAC), ACI engineering staff, ACI Foundation Councils, and the concrete community exclusively through an online submission form. It is important to note that the submission form will accept research needs, problem statements, and project ideas, not proposals.
- 2. Assessment: A steering committee will qualitatively review the ideas and prioritize the submissions according to pre-determined criteria. The steering committee, staff, ACI Foundation Councils, and working groups are required to comply with the ACI Foundation's confidentiality and conflict of interest policies.
- 3. Definition: The highest-priority ideas will be developed

into potential projects that are either directly funded or posted as requests for proposals. Project scopes can be small, large, or multi-year.

**4. Execution:** All projects will be managed through a written contract that defines the project deliverables, timeline, funding, stakeholders, and advisory team.

Ideas may be submitted any time during the year, but review, assessment, and funding decisions will occur on the following annual schedule:



The submission form also accounts for projects with deadlines that fall outside of the listed schedule. Simply answer "yes" to having a deadline and detail the reason; for example, finishing research to meet a code cycle or a deadline for securing co-funding. ACI Foundation staff will be notified of the deadline and can schedule a review meeting as needed.

# Assessment

There are two rounds of review and assessment. If a submission is of interest, the ACI Foundation may initially, at its discretion, ask for additional information. All submissions will be qualitatively assessed by the Strategic Innovation and Research Committee (SIRC) and ranked by priority:

# Qualitative assessment (criteria equally weighted)

- **Impact on the concrete industry**—will the impact be large, small, narrow, or broad?;
- Solution to an industry problem or challenge—will the idea bridge an industry gap, change a practice, or update a standard or guide?;
- Urgency to complete the work—is there a code deadline? Will the project solve a current issue?;
- Relevancy to the industry—will the project improve industry growth, efficiency, productivity, or safety?; and
- Impact on ACI—does the work advance an ACI code, specification, or guide?

Top-priority ideas will be assigned to the respective ACI Foundation Council, either the Concrete Research Council (CRC) or the Concrete Innovation Council (CIC), for further project development. Councils will work with ACI committees, industry stakeholders, the submitter of the idea or project, and staff to vet the viability of the project and develop estimates of scope, cost, timeline to complete, and expertise needed.

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Once potential projects have been further defined, they will go back to SIRC for final ranking and recommendation for funding. The number of projects funded each year will depend on the annual ACI Foundation budget for research and innovation and the budget and scope of the selected projects. The timeline from the end of the official call for ideas to selecting projects is approximately 3 months.

The ACI Foundation may request a proposal from the original submitter or post an open request for proposal (RFP) on the topic. If a topic is chosen for an open RFP, the submitter will be notified and given the opportunity to submit a response.

# Quantitative assessment of proposals received from an RFP

Each proposal in response to the RFP will have at least three reviewers. Reviewers must comply with the ACI Foundation's confidentiality and conflict of interest policy. Proposals will be assessed by the following weighted criteria:

- Relevancy and potential impact of the project (10-pt weight)—is there potential for the project to advance ACI codes and standards or the state of the concrete industry? Could it improve current products, construction, or systems, or provide growth into new markets? Is it innovative?;
- Supplemental support (5-pt weight)—are there significant co-funding sources identified for the proposed project and/or what is the potential for additional external funding?;
- Overall quality (5-pt weight)—is the proposal well written? Are the objectives and scope clearly identified? Is there a well-detailed plan, timeline, and budget? Can the project be accomplished within the budget?; and
- Capability of the researcher or project manager (5-pt weight)—is the researcher or project manager experienced in the subject matter? Are there suitable facilities and equipment available to perform the proposed work? If the researcher or project manager received previous funding from the ACI Foundation, their past performance regarding timely communications and meeting milestones and deliverables will also be considered.

# Questions

Additional process information and instructions are available on the ACI Foundation's new solicitations webpage at **www.acifoundation.org/research/solicitations**, including the new submission form for all project and research ideas. For questions about the new process or the online submission form, contact Ann M. Masek, ann.masek@acifoundation.org, or Tricia G. Ladely, tricia.ladely@acifoundation.org.

# Constraints

- A principal investigator or project manager may have one funded project at a time;
- Projects resulting in proprietary end products will not be funded; and
- Limit of 15% of indirect costs (university overhead); organizations must waive the remainder of the indirect costs (IDCs) above 15%. Examples:
- Project 1: 50,000 USD project + 7500 USD IDC (15% of 50,000 USD) = 57,500 USD awarded; or
- Project 2: 100,000 USD project + 15,000 USD IDC (15% of 45,000 USD) = 115,000 USD awarded.

# **RFPs Procedure**

RFPs will be developed by the CRC, CIC, and staff, based on the details gathered during the assessment. The RFPs are meant to encourage creativity, defining the desired outcome; not how to get there. RFPs will be posted to the ACI Foundation's solicitations webpage and will be announced through email blasts, press releases, and LinkedIn posts. Each issued RFP will be open for 60 days.

# SIRC

The committee's objectives are to prioritize and recommend funding projects to the ACI Foundation Trustees for final funding approval. Members will serve a 3-year term. Terms will be staggered to retain collective knowledge of the processes and will rotate among all members of both councils.

# **Membership**

- Three CIC members;
- Three CRC members;
- ACI Senior Managing Director of Technical Operations;
- ACI Foundation Executive Director (ex-officio, non-voting); and
- ACI Foundation Assistant Director (SIRC staff liaison, non-voting).

Members will be selected by staff and Council Chairs to reflect a balanced industry perspective and expertise. Final approval of the roster is by the ACI Foundation Trustees.