



**National Park Service
U.S. Department of the Interior**

NOTICE OF INTENT TO AWARD

This Funding Announcement is not a request for applications. This announcement is to provide public notice of the National Park Service's intention to fund the following project activities without full and open competition.

ABSTRACT	
Funding Announcement	P13AS00147
Project Title	Educational Models of Four Significant Truss Designs in Wooden Truss Evolution: Burr, Town, Long, and Howe
Recipient	John Hopkins University
Principle Investigator / Program Manager	Benjamin Schafer
Total Anticipated Award Amount	\$60,000.00
Cost Share	None
New Award or Continuation?	Continuation. This is a Task Agreement under Cooperative Agreement H227009017
Anticipated Length of Agreement	From date of award to June 30, 2017
Anticipated Period of Performance	From date of award to June 30, 2017
Award Instrument	Cooperative Agreement
Statutory Authority	16 USC 1g & 16 USC 461-467
CFDA # and Title	15.945 Cooperative Research and Training Programs – Resources of the National Park System
Single Source Justification Criteria Cited	(2) Continuation
NPS Point of Contact	June Zastrow 303-987-6718, june_zastrow@nps.gov

OVERVIEW

Cooperative Agreement Number H227009017 was entered into by and between the Department of the Interior, National Park Service, (NPS), and Johns Hopkins University, Department of Civil Engineering (JHU-CE) for the purpose of promoting the study of the history, preservation, and interpretation of historic engineering sites, structures, and objects, and to support related training, documentation, publication, and technical and public information efforts in the United States.

A typical engineering education begins in the freshman year with the core courses of calculus, physics, and chemistry. While critically important to producing competent engineers, these courses do not expose young engineering students to the less technical sides of engineering design including aesthetics, innovation, and history. Often, these are the lessons that inspire students to become engineers and motivate students through the first two years of core courses. In 1974, David Billington, Professor Emeritus of Civil and Environmental Engineering at Princeton University, developed such a course for engineering, architecture, and liberal arts students. Drawing inspiration from Professor Billington's course, and incorporating much of his lecture material directly, a similar course was developed and is now taught by Benjamin Schafer, Professor of Civil Engineering at Johns Hopkins, and Sanjay Arwade, Associate Professor of Civil Engineering at the University of Massachusetts, Amherst. This class is called *Perspectives on the Evolution of Structures*, and in addition to Johns Hopkins and UMass Amherst, is now taught at Bucknell University and Virginia Tech. Faculty at several other prestigious universities are developing similar courses.

RECIPIENT INVOLVEMENT

JHU-CE agrees to:

Develop plans and scale models of four truss designs commonly used in historic covered bridges for educational purposes: a Burr Truss (Pine Grove Bridge), a Town Lattice (Brown Bridge), a Long Truss (Eldean Bridge), and a Howe Truss (Pine Brook Bridge).

NATIONAL PARK SERVICE INVOLVEMENT

Substantial involvement on the part the National Park Service is anticipated for the successful completion of the objectives to be funded by this award. In particular, the National Park Service will be responsible for the following:

NPS agrees to:

Provide JHU-CE with architectural plans created as part of the National Covered Bridges Recording Project necessary to construct the models

SINGLE-SOURCE JUSTIFICATION

DEPARTMENT OF THE INTERIOR SINGLE SOURCE POLICY REQUIREMENTS

Department of the Interior Policy (505 DM 2) requires a written justification which explains why competition is not practicable for each single-source award. The justification must address one or more of the following criteria as well as discussion of the program legislative history, unique capabilities of the proposed recipient, and cost-sharing contribution offered by the proposed recipient, as applicable.

In order for an assistance award to be made without competition, the award must satisfy one or more of the following criteria:

- (1) Unsolicited Proposal – The proposed award is the result of an unsolicited assistance application which represents a unique or innovative idea, method, or approach which is not the subject of a current or planned contract or assistance award, but which is deemed advantageous to the program objectives;
- (2) Continuation – The activity to be funded is necessary to the satisfactory completion of, or is a continuation of an activity presently being funded, and for which competition would have a significant adverse effect on the continuity or completion of the activity;
- (3) Legislative intent – The language in the applicable authorizing legislation or legislative history clearly indicates Congress' intent to restrict the award to a particular recipient of purpose;
- (4) Unique Qualifications – The applicant is uniquely qualified to perform the activity based upon a variety of demonstrable factors such as location, property ownership, voluntary support capacity, cost-sharing ability if applicable, technical expertise, or other such unique qualifications;
- (5) Emergencies – Program/award where there is insufficient time available (due to a compelling and unusual urgency, or substantial danger to health or safety) for adequate competitive procedures to be followed.

The National Park Service did not solicit full and open competition for this award based the following criteria:

(2) CONTINUATION

Single Source Justification Description:

THIS IS A NOTICE OF INTENT TO AWARD

This is a Task Agreement (P13AC00945) under Cooperative Agreement H227009017 in the amount of \$60,000.00 with a period of performance from date of award until 06/30/2017.

STATUTORY AUTHORITY

16 U.S.C. §1g authorizes the NPS to enter into cooperative agreements that involve the transfer of NPS appropriated funds to state, local and tribal governments, other public entities, educational institutions, and private nonprofit organizations for the public purpose of carrying out National Park Service programs.

This section provides broad authority for NPS to enter into cooperative agreements with most recipients for a public purpose. Although broad, this authority must be read in conjunction with the Federal Grant and Cooperative Agreement Act of 1977 and other authorities that prescribe whether a particular relationship should be a procurement contract or a cooperative agreement. Thus, in making this determination, one must always consider whether the principal purpose of the work is to acquire goods and/or services for NPS's direct benefit in furtherance of its mission or for a public purpose.