



U.S. Manufacturing Innovation Fund

Third Request for Proposals

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Deadline for LOI submissions: August 25, 2016

Introduction

Walmart, the Walmart Foundation, and the United States Conference of Mayors ("USCM") are pleased to release a third Request for Proposals ("RFP") for 501(c)(3) organizations and public universities that are instrumentalities of a state government (herein "eligible organizations") interested in receiving support for applied research from the Walmart U.S. Manufacturing Innovation Fund (the "U.S. Manufacturing Innovation Fund"). The U.S. Manufacturing Innovation Fund, a collaboration among Walmart, the Walmart Foundation and USCM, is focused on the development of U.S. manufacturing, with the specific goal of making it more feasible and competitive to make consumer goods in the U.S. Advancing this goal is congruent with Walmart's pledge, announced January 2013, to buying an additional \$250B in U.S. products by 2023, and will serve to benefit the country as a whole. Together, these initiatives represent a significant investment accelerating U.S. manufacturing.

The U.S. Manufacturing Innovation Fund is designed to provide grants in support of applied research projects advancing innovative solutions to key challenges that have the potential to lower the cost of making consumer products in the U.S. ("Projects" or, singularly, "Project"). More specifically, Projects should advance the fundamental research, development, and commercialization of science and technology solutions to key challenges faced by companies interested in manufacturing their products in the United States. The U.S. Manufacturing Innovation Fund hopes to help jumpstart a more far-reaching revitalization of U.S. manufacturing, driving job creation and a stronger U.S. economy. This is part of Walmart's and the Walmart Foundation's broader commitment to investing in American jobs, including the company's commitments to hiring veterans and offering unprecedented career opportunities for our Associates, and the Foundation's funding of programs that support veterans and employment opportunity and training for low-income individuals.

The U.S. Manufacturing Innovation Fund expects to award grants to selected eligible organizations that are pursuing Projects and have the endorsement of the mayor of a USCM member city ("Recipients" or, singularly, "Recipient")¹. Upon contract negotiation and execution, Recipients will receive grants of at least \$100,000 for award periods of at least one year, and up to three years, (see eligibility below). We expect to provide \$10M in funding for Projects over the five years. \$4M has already been provided through an RFP in 2014 and \$2.84 M was provided through an RFP in 2015. Most awards will be given to Recipients for Projects aligned with one of the U.S. Manufacturing Innovation Fund's selected manufacturing focus areas, announced at the beginning of each grant cycle. Applications for Projects addressing other manufacturing processes relevant to making consumer products in the U.S. are also welcomed, though priority will be given to those addressing the U.S. Manufacturing Innovation Fund's stated focus areas.

¹ Letters of support from mayors will only be required for full proposals. Organizations are not required to seek letter of support for LOIs.

Eligibility

This is an open RFP. Grants will be awarded on a competitive basis to eligible organizations as further described below. Collaborative proposals submitted by two or more eligible organizations will be considered. If selected, grantees will receive funding for up to three years, to be distributed in annual installments contingent upon review and acceptance of a satisfactory report of work outlined in the proposal. Walmart and the Walmart Foundation encourage organizations to leverage resources through cost-sharing, with a specific emphasis on financial matches, but proposals will be evaluated based on their individual merit relative to potential project outcomes. Funding for the match can be leveraged from the United States government, foreign governments, non-governmental organizations, foundations, community or private sources, and others.

The grant will be awarded to applicants working on Projects and who satisfy the following minimum eligibility requirements:

- Applicant organization must be a (i) tax-exempt public charity under Section 501(c)(3) of the United States Internal Revenue Code of 1986 (other than a Type III supporting organization), or (ii) public university that is an instrumentality of a state government or any political subdivision thereof or the District of Columbia, including city and community colleges, for exclusively public purposes.
- At least 50% of project teams must be based in the U.S., with U.S.-based management
- Applicants must have the endorsement of a mayor of a USCM member city when submitting full proposals
- Projects should address a technological innovation that can advance U.S. manufacturing, specifically those listed in the “Focus Area” section below
- Projects must have a budget exceeding \$100,000 per year
- Overhead costs must not exceed 10% of total budget
- Applicants should demonstrate a proven ability to execute the proposed Project via expertise and/or past experience.

Objectives and Focus Area

Many companies are interested in making their products in the U.S. but face various manufacturing hurdles that currently prevent them from doing so. Through working with interested companies, we've identified a number of key manufacturing challenges that currently lessen the attractiveness of the U.S. as a location for manufacturing due to cost and other considerations. Solving these challenges would greatly ease the ability of companies to manufacture in the U.S. Though this is not an exhaustive list of possible challenges, the U.S. Manufacturing Innovation Fund has selected a list of manufacturing focus areas that hold significant potential to turn the tide in favor of U.S. manufacturing for many consumer products.

The U.S. Manufacturing Innovation Fund will provide grants in support of Projects advancing innovative solutions to key challenges that have the potential to:

- Lower the cost of making consumer products in the U.S.

- Lead to broader innovation for overall manufacturing processes, with an emphasis on sustainability
- Jumpstart innovation leading to commercialization of new manufacturing technologies in selected focus area industries
- Ultimately drive job creation within the U.S.

The U.S. Manufacturing Innovation Fund has prioritized textile manufacturing activities for funding in 2016-2017. The obstacles prioritized by the U.S. Manufacturing Innovation Fund for the current cycle are as follows:

Weaving

Weaving yarn into fabric is an important step in the value chain for textile products. Though weaving operations make use of automated looms and other machinery, the process involves several steps. Setting up the machinery and transferring the material between steps can drive labor intensity, making low labor-cost countries more attractive than the U.S. Further automating the weaving process would bring costs down and make weaving a more attractive proposition in the U.S.

Fabric dyeing

Fabric is dyed before being transformed into a final product. Current dyeing techniques are water and energy intensive, and produce wastewater that needs to be treated before being discharged. Walmart and the Walmart Foundation would like to promote the development of environmentally aware dyeing alternatives that make the process viable and cost-effective in the U.S. while satisfying regulatory and legal requirements. This approach is consistent with Walmart's and the Walmart Foundation's commitment to sustainability as well as investing in American jobs.

Cut and sew

Companies currently rely mostly on manual cut-and-sew processes to turn fabric and other components into textiles and apparel. Because these processes are relatively complicated, and because individual products feature unique designs and therefore require flexibility in manufacturing, there are limitations on the extent to which existing technologies can automate the process. The introduction of more sophisticated, flexible automation technologies would make it more cost-effective to cut and sew these products in the U.S.

Proposal Process and Timeline

Process

This RFP will be conducted in two stages. During this first stage, interested applicants are requested to only submit an LOI. All LOIs submitted will be evaluated and only the most promising ones will be invited to submit a full proposal.

LOIs must be submitted through the online application portal. To access the application, interested organizations should go to

(http://www.cybergrants.com/pls/cybergrants/quiz.display_question?x_gm_id=2797&x_quiz_id=5988&x_order_by=1.) Applicants must register and create usernames and passwords. The system allows for multiple logins and different users, provided the correct username/password combination is used.

If an applicant wishes for more than one person to access the system, we suggest no personal information be used for the usernames and/or passwords. The online system does allow for information to be pasted, although formatting will be lost. Incomplete applications can be saved, but will not be reviewed unless they are submitted. All submissions are final.

Timeline

7/25/2016	System is open for LOIs
8/04/2016	Q&A on LOIs
8/25/2016	Final LOIs due
Week of September 12th	Notifications sent out (and invitations for Phase III)
11/03/2016	Final proposals due

LOI Review principles

Overarching principles

LOIs will be evaluated with the following overarching principles:

- The U.S. Manufacturing Innovation Fund is dedicated to the development of U.S. manufacturing, with the specific goal of making it more feasible and competitive to make consumer goods in the U.S.
- Projects supported by the fund should contribute substantively to advancing the state of manufacturing technologies and processes in the U.S., with an emphasis on sustainability
- Grants made by the U.S. Manufacturing Innovation Fund should, in total, provide support for applied research projects that address processes appropriate to a wide range of consumer products, therefore increasing the overall feasibility of U.S. manufacturing

Review methodology

Reviewers will evaluate each letter of inquiry using 5 core criteria, assigning scores based on the following scale:

4 – Excellent

- Project exhibits strong potential to successfully advance the feasibility of U.S. manufacturing for consumer products; no concerns or clarifications identified.
- The reviewer strongly believes the project should move on to Phase II of the application process.

3 – Superior

- Project exhibits potential to successfully advance the feasibility of U.S. manufacturing for consumer products; would be helpful to address some minor concerns or clarifications.
- The reviewer believes the project should move on to Phase II of the application process.

2 – Adequate

- Project exhibits limited potential to successfully advance the feasibility of U.S. manufacturing for consumer products; at least one major concern or clarification should be addressed.

- The reviewer believes the project should not move on to Phase II of the application process.

1 – Weak

- Project does not exhibit potential to successfully advance the feasibility of U.S. manufacturing for consumer products; several major concerns or clarifications render the project untenable.
- The reviewer strongly believes the project should not move on to Phase II of the application process.

Review criteria

Letters of intent to the U.S. Manufacturing Innovation Fund will be evaluated using five (5) core criteria. In some instances, however, the Fund will employ additional criteria as appropriate to accommodate specific elements of certain proposals.

The core criteria for individual projects will be as follows below.

Potential application to U.S. consumer product manufacturing (20 %)

Potential application reflects the relevance of the project's intended outcome to the manufacturing of consumer products in the U.S. The following elements should be considered:

- Is the focus area of the project clearly stated and described? Is the project focus area one identified as a prioritized focus area for the grant or another manufacturing process or component?
- Is the project's objective clearly stated and described, and does it contribute to scientific or technological advancement in its focus area? Is the project not targeted at workforce training, capital investment, or other non-scientific aspects of the focus area?
- Is the project's potential application to consumer product manufacturing clearly stated and described? Are the consumers products potentially impacted tangible and specific, and is the project applicable to a broad range of such products?
- Does the focus area of the project represent a key manufacturing process or component in the consumer products to which it is applicable?

Scientific merit and degree of innovation (20 %)

The scientific merit of the project reflects the ability of the project to build upon and contribute to previous work in its focus area. Degree of innovation encompasses the degree of transformation or change the project will bring to current manufacturing processes if successful. The following elements should be considered:

- Does the project draw upon previous research findings for support? Is previous research clearly described and documented, with ample data and encouraging results that show the project is likely to succeed?
- Does the project build on previous research logically and substantively, drawing compelling next steps from prior findings? Does the project extend previous work in an original and creative way?
- Is the current technology or manufacturing process of the project's focus area clearly stated and described, along with relevant challenges to US manufacturing? Would the

project, if successful, significantly improve on current processes by advancing the quality, speed, cost effectiveness, or other facets of manufacturing?

- Would the project, if successful; contribute an innovative, disruptive change to current manufacturing technology and processes, not incremental improvement?

Environmental sustainability (20%)

Environmental sustainability is central to Walmart's business model, and likely to be a key driver of innovations in the manufacturing sector in the future. Degree of innovation should also meet the need of a particular process, and the environmental impact of current practices. The following elements should be considered²:

- Will the proposed activities optimize water use reduce effluent?
- Will the proposed activities reduce the use of chemicals and potentially hazardous materials which pose health or environmental risks?
- What are the expected environmental benefits the proposed research effort or activities will provide?

Stage of development and commercial viability (20%)

Stage of development reflects the maturity of the project from initial research (initial stage) to commercialization (late stage), with a view of the likely timeline for research outcomes to reach implementation. The following elements should be considered:

- Is the project's current stage of development clearly stated and described? Are project objectives appropriate for the current stage of development? Grantees should reference the Department of Defense's Manufacturing Readiness Level (visit http://www.dodmrl.com/MRL_Definitions_2010.pdf), to describe the readiness of the proposed activities. The Walmart Foundation expects to support project in the MRL5-MRL9 levels.
- Is the project's path forward to commercial application clearly stated and described? Does the project demonstrate clear potential for commercialization and, if successful, would it have viable industry applications to consumer product manufacturing?
- Is the project timeline clear? Would success of the next stage of the project significantly advance its progress toward commercialization? Is commercialization anticipated to occur in the near term (within 2-3 years) of project start date?

Qualifications and expertise of research institution and team (20%)

Expertise of the research institution and team is a consideration when evaluating the team's previous accomplishments in the proposed focus area, as well as the resources available to the team at its host institution. The following elements should be considered:

- Is the project's research team profiled thoroughly, with background in the focus area described clearly? Is the team's background relevant to the project?
- Have members of the research team made significant contributions to the project's focus areas in the past, and have they demonstrated the requisite expertise to successfully carry out the project?

² Since on-shoring is expected from all projects under this RFP, the transportation benefits should not be elaborated on further.

- Is the research institution clearly introduced, and does it have the capacity and resources to support the project?
- Is the research institution's previous support of the project's focus area clearly described, with demonstrated prior achievements in the field?

Elements not explicitly described in proposal evaluation, but that are required for all LOIs include:

- Existence of or lack of industry partners for the project
- Existence or lack of cost-sharing with other project stakeholders
- Existence or lack of plans to publish and/or share research findings broadly

Final review and selection criteria for full proposals; will only be shared with those organizations that participate in the second stage of this RFP.

Thank you again for your interest in the U.S. Manufacturing Innovation Fund. Please note that submitting a proposal in no way guarantees receipt of funding, or financially obligates the Fund in any manner. The Fund has no obligation to award funds to selected applicants until completion of a negotiated and signed grant agreement.

If you have questions about submission or review of proposals, please contact WMFDRFP@walmart.com. If you have questions about the CyberGrants system please contact https://www.cybergrants.com/pls/cybergrants/ao_support.support?x_gm_id=2797&x_source_flag=&x_style_id=&x_proposal_type_id=33718&x_language_code=en-US.