NOTICE OF FUNDING OPPORTUNITY (NOFO) Embedding MEP in Manufacturing USA Institutes Pilot Projects – Round Three

EXECUTIVE SUMMARY

- Federal Agency Name: National Institute of Standards and Technology (NIST), United States Department of Commerce (DoC)
- Funding Opportunity Title: Embedding MEP in Manufacturing USA Institutes
 Pilot Projects Round 3
- Announcement Type: Initial
- Funding Opportunity Number: 2017-NIST-MEP-EMUSA-02
- Catalog of Federal Domestic Assistance (CFDA) Number: 11.611,
 Manufacturing Extension Partnership
- Dates: Electronic applications in response to this NOFO must be received no later than 11:59 p.m. Eastern Time on Friday, June 2, 2017. Applications received after the deadline will not be reviewed or considered. The approximate start date for awards under this NOFO is expected to be in August 2017.

Applicants should be aware, and factor into their application submission planning, that the Grants.gov system is expected to be closed for routine maintenance from 12:01 Eastern Time, Saturday, April 15, 2017 until Monday, April 17, 2017 at 6:00 a.m. Eastern Time, and again from 12:01 Eastern Time, Saturday, May 20, 2017 until Monday, May 22, 2017 at 6:00 a.m. Eastern Time. Applications cannot be submitted when Grants.gov is closed.

Applicants are strongly urged to read Section IV.2.b., Attachment of Required Application Documents, found on page 17 of this NOFO. Applicants should carefully follow the instructions and recommendations regarding adding attachments to an application and using Grants.gov's Download Submitted Applications feature to check that all required attachments were contained in their submission. Applications submitted without the required documents will not pass the Initial Administrative Review, described in Section V.2.a. of this NOFO, which may result in the application not being considered for funding.

- Application Submission: Electronic applications must be submitted to <u>www.grants.gov</u>. See Section IV.7.a. in the Full Announcement Text of this NOFO.
- Funding Opportunity Description: NIST invites proposals from current MEP
 Centers to pilot test approaches to providing needed technology acceleration
 assistance to small and mid-sized U.S. manufacturers (hereinafter referred to as
 small U.S. manufacturers) through the establishment of meaningful and results
 oriented collaborations between the nationwide system of Centers operating as part
 of the NIST Hollings Manufacturing Extension Partnership (MEP) Program
 (hereinafter referred to as NIST MEP), and the public-private manufacturing
 innovation Institutes operating as part of Manufacturing USA (previously known as
 the National Network for Manufacturing Innovation (NNMI), and hereinafter referred
 to as Manufacturing USA Institutes).

The emphasis of these pilot projects will be to demonstrate ways to more fully leverage the assets and resources of the national MEP Program to provide assistance to small U.S. manufacturers in technology areas that are the focus of the Manufacturing USA Institutes.

NIST MEP previously made funding awards to MEP Centers in FY 2016 and FY 2017 to embed personnel in nine (9) of the fourteen (14) Manufacturing USA Institutes pursuant to Round One¹ and Round Two² of this pilot program. This NOFO is targeting the issuance of up to five (5) cooperative agreements to existing MEP Centers to embed personnel in the five (5) Manufacturing USA Institutes identified below:

- o Advanced Regenerative Manufacturing Institute (ARMI)
- o Advanced Robotics Manufacturing (ARM) Institute
- National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL)
- o Rapid Advancement in Process Intensification Deployment (RAPID) Institute
- o Reducing Embodied-energy and Decreasing Emissions (REMADE) Institute

Pilot projects awarded via this NOFO will focus on the cultivation of enduring collaborations among small U.S. manufacturers, Manufacturing USA Institutes, and MEP Centers for the benefit of all of these entities. The projects will accelerate the processes by which small U.S. manufacturers transition the latest and most compelling technological innovations into the manufactured goods needed by our

¹https://www.nist.gov/sites/default/files/documents/mep/MEP-Embedding-MEP-into-NNMI-Institutes-NOFO-4-19-16.pdf

²https://www.nist.gov/sites/default/files/documents/2016/10/17/mep_embedding_mep_into_nnmi_institute s_NOFO_final_10-17-16.pdf

Nation.

Applications submitted in response to this NOFO should clearly articulate approaches to MEP Center – Manufacturing USA Institute collaborations that are based upon the embedding of personnel from MEP Centers within Manufacturing USA Institutes in accordance with the requirements of this NOFO. Such personnel embedding must involve the placement of MEP Center representatives from one or more MEP Centers within residence on at least a one (1) FTE cumulative basis and at least a 0.5 FTE basis for any single embedded Center employee at the primary Manufacturing USA Institute for the entirety of the federal award period, which may not exceed two (2) years. All proposed pilot projects must involve the embedding of MEP Center personnel operating in residence (as defined in this NOFO in Section I. and Section IV.2.a.(6).(d). at one or more of the Manufacturing USA Institutes identified in Section I. and III.1. of this NOFO. In this connection, if an applicant proposes the embedding of MEP Center personnel in more than one Manufacturing USA Institute identified in Section I. and III.1. of this NOFO, the application must clearly designate the primary participating Manufacturing USA Institute and the applicant must meet the one (1) FTE minimum annual embedding requirement by embedding at least one (1) MEP Center personnel FTE at the designated primary participating Manufacturing USA Institute.

Specifically, the pilot projects proposed by applicants should:

- Develop innovative approaches for transferring technology from the Manufacturing USA Institutes to small U.S. manufacturers based on the technological needs of manufacturers;
- Create approaches for engaging small U.S. manufacturers in the work of the Manufacturing USA Institutes through hands-on assistance mechanisms and services, such as those that are currently, or that could be, offered by MEP Centers:
- O Develop and test business models by which MEP Centers and Manufacturing USA Institutes may viably and effectively serve the needs of small U.S. manufacturers in the technology areas of the Manufacturing USA Institutes, as well as facilitating knowledge and best practice sharing between the Manufacturing USA Institutes and MEP Centers; and
- Cultivate an enhanced nationwide network of partnerships among
 Manufacturing USA Institutes and MEP Centers for the benefit of small U.S.
 manufacturers.

Activities conducted as part of these MEP Center – Manufacturing USA pilot projects will be expected to take place in collaboration with local and regional stakeholders and other partners, including local, state, and/or regional advanced manufacturing and/or technology-based economic development organizations; industry and/or

professional associations; technical and community colleges; universities; industry-university partnerships, small U.S. manufacturers, and other manufacturing organizations. See Section I. of this NOFO for a detailed description of this funding opportunity.

- Anticipated Amounts: NIST anticipates funding up to five (5) pilot project awards at a level of approximately \$300,000 - \$600,000 per year for each award. The pilot projects awarded under this NOFO will have a budget and performance period of up to two (2) years. See Section II.2. of this NOFO for more information regarding the availability of NIST funding for this funding opportunity.
- **Funding Instrument:** Cooperative Agreement. See Section II.1. of this NOFO for additional information concerning the funding instrument for these awards.
- Who Is Eligible: Eligible applicants for this funding opportunity are MEP Centers receiving current cooperative agreement funding from NIST. To receive funding under this NOFO, an applicant MEP Center must form a collaboration, teaming arrangement, or other appropriate relationship with one (1) or more of the five (5) Manufacturing USA Institutes identified below. For purposes of this NOFO, the primary Manufacturing USA Institute is the one in which the MEP Center plans to embed at least one (1.0) MEP Center personnel FTE. The relationship must have been established at the time of application submission and must be documented with a letter(s) of commitment (see Section IV.2.a.(12). of this NOFO) from the Manufacturing USA Institute(s) with which the relationship has been established. These five (5) Manufacturing USA Institutes identified below are not currently hosting embedded MEP Center representatives in residence at their Institute locations as the result of either the 2016-NIST-MEP-ENNMI-01 funding opportunity³, or the 2017-NIST-MEP-EMUSA-01 funding opportunity⁴. These five (5) Manufacturing USA Institutes are⁵:
 - o Advanced Regenerative Manufacturing Institute (ARMI)
 - Advanced Robotics Manufacturing (ARM) Institute
 - National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL)
 - o Rapid Advancement in Process Intensification Deployment (RAPID) Institute
 - o Reducing Embodied-energy and Decreasing Emissions (REMADE) Institute

³https://www.nist.gov/sites/default/files/documents/mep/MEP-Embedding-MEP-into-NNMI-Institutes-FFO-4-19-16.pdf

⁴https://www.nist.gov/sites/default/files/documents/2016/10/17/mep_embedding_mep_into_nnmi_institute s_ffo_final_10-17-16.pdf

⁵ https://www.manufacturingusa.com/institutes

NIST encourages project proposals involving participation from multiple MEP Centers and multiple Manufacturing USA Institutes, as well as other collaborating entities such as local economic development organizations, universities, community colleges, technology incubator programs, and other organizations.

An MEP Center may serve as the MEP Center applicant on only one (1) proposal. There are no restrictions on the number of applications in which MEP Centers or Manufacturing USA Institutes can be proposed as collaborators, nor are there restrictions on MEP Centers receiving Round One or Round Two awards serving as applicants or collaborators on projects funded pursuant to this Round Three competition. See Section III.1. of this NOFO for more information regarding funding opportunity eligibility.

- Cost Sharing Requirements: Non-federal cost share is not required for awards
 issued pursuant to this NOFO. Applicants are encouraged to submit proposals with
 budgets that maximize the application of award funding to the performance of project
 tasking and other direct project costs. See Section III.2. of this NOFO for more
 information regarding cost sharing requirements.
- Webinar Information Session: NIST MEP will hold one or more webinar information sessions for organizations that are considering applying for or participating as a team member in this funding opportunity. The webinar(s) will provide general information regarding MEP and this funding opportunity and offer general guidance on preparing proposals. NIST MEP staff will be available at the webinar to answer general questions. During the webinar(s), detailed proprietary or technical discussions about specific project ideas will not be permitted. Also, NIST MEP staff will not critique or provide feedback on any specific project ideas during the webinar(s) or at any time before submission of a proposal to MEP. However, NIST MEP staff will provide information about potential participants, eligibility, evaluation criteria and selection factors, the selection process, program priorities and objectives, and the general characteristics of a competitive proposal during this webinar. It is expected that the webinar(s) will be held approximately within thirty (30) business days after posting of this NOFO. The exact date and time of the webinar(s) will be posted on the NIST MEP website at www.nist.gov/mep/embedding-mep-manufacturing-usa-institutes-pilot-projectsround-three. The webinar(s) will be recorded, and a link to the recording(s) will be posted on the NIST MEP website. In addition, the webinar presentation(s) will be available after the webinar(s) on the NIST MEP website. Organizations wishing to participate in the webinar(s) must register in advance by contacting NIST MEP by email at mepnofo@nist.gov. Participation in the webinar(s) is not required in order for an organization to submit an application pursuant to this NOFO.
- Frequently Asked Questions (FAQs). Questions from applicants pertaining to

NOFO eligibility, cost-sharing requirements, evaluation criteria and selection factors, selection process, and the general characteristics of a competitive proposal will not be considered on an informal basis. Applicants must submit all such questions in writing to mepnofo@nist.gov. Answers to such written questions submitted to NIST MEP may be made available to the public as part of an FAQ document, which will be periodically updated on the MEP website at www.nist.gov/mep/embedding-mep-manufacturing-usa-institutes-pilot-projects-round-three.

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FULL ANNOUNCEMENT TEXT

I. <u>Program Description</u>

The National Institute of Standards and Technology (NIST) invites applications from current MEP Centers to support efforts of the MEP Program to achieve its mission of improving productivity and technological performance in United States manufacturing. Proposals accepted for funding will conduct pilot projects that add capabilities to the MEP program by solving new or emerging manufacturing problems. Funded pilot projects will develop and enhance effective collaborative relationships involving MEP Centers and Institutes participating in the Manufacturing USA, which was known until September 2016 as the National Network for Manufacturing Innovation (NNMI).

To receive funding under this NOFO, an applicant MEP Center must form a collaboration, teaming arrangement, or other appropriate relationship with one (1) or more of the five (5) Manufacturing USA Institutes identified below. For purposes of this

NOFO, the primary Manufacturing USA Institute is the one in which the MEP Center plans to embed at least one (1.0) MEP Center personnel FTE. The relationship must have been established at the time of application submission and must be documented with a letter(s) of commitment (see Section IV.2.a.(12). of this NOFO) from the Manufacturing USA Institute(s) with which the relationship has been established. These five (5) Manufacturing USA Institutes are not currently hosting embedded MEP Center representatives in residence at their Institute locations as the result of either the 2016 NIST-MEP-ENNMI-01 funding opportunity⁶, or the 2017-NIST-MEP-EMUSA-01 funding opportunity⁷. These five (5) Manufacturing USA Institutes are⁸:

- Advanced Regenerative Manufacturing Institute (ARMI)
- Advanced Robotics Manufacturing (ARM) Institute
- National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL)
- Rapid Advancement in Process Intensification Deployment (RAPID) Institute
- Reducing Embodied-energy and Decreasing Emissions (REMADE) Institute

In addition to assisting MEP efforts related to the transfer of technology based on the technological needs of manufacturers and available technologies from the Manufacturing USA Institutes, the proposed Pilot Projects will also enhance the Manufacturing USA Institutes' ability to benefit the technological needs of small and mid-sized U.S. manufacturers (hereinafter referred to as small U.S. manufacturers).

It is the intent of NIST MEP for this funding opportunity that project activities be true and significant collaborations between the participating MEP Centers, Manufacturing USA Institutes, and small U.S. manufacturers be established to benefit technology advances in manufacturing, as described below.

Technology advances in manufacturing enable product and process innovations that lead to the more efficient production of sophisticated products and systems. Such manufacturing technology, in turn, enables the efficient operation of manufacturing supply chains. All of this results in higher value, without which U.S. manufacturers could not be globally competitive. NIST MEP, through this funding opportunity, seeks project activities to achieve such results by leveraging the assets and resources of the national MEP Program to assist the Manufacturing USA Institutes with enhancing their impact on small U.S. manufacturers.

⁶https://www.nist.gov/sites/default/files/documents/mep/MEP-Embedding-MEP-into-NNMI-Institutes-FFO-4-19-16.pdf

⁷https://www.nist.gov/sites/default/files/documents/2016/10/17/mep_embedding_mep_into_nnmi_institute s_ffo_final_10-17-16.pdf

⁸ https://www.manufacturingusa.com/institutes

The Manufacturing USA Institutes are working to create a competitive, effective, and sustainable advanced manufacturing research-to-manufacturing infrastructure. Their goal is to enable U.S. industry and academia to solve the "scale-up" challenges that are relevant to industry. The Manufacturing USA consists of multiple linked Manufacturing Innovation Institutes. Each has a unique technological concentration, but all are designed to accelerate U.S. advanced manufacturing as a whole. As nodes in Manufacturing USA, the Institutes complement each other's capabilities and benefit from shared approaches to matters such as intellectual property, contract research, and performance metrics. Each provides shared facilities to local start-ups and small U.S. manufacturers to help them scale up new technologies, accelerate technology transfer to the marketplace, and facilitate the adoption of innovation workforce skills. Each Manufacturing USA Institute is designed to foster innovation and deliver new capabilities that can stimulate the manufacturing sector on a large scale.

Through its nationwide network of MEP Centers operating in every U.S. state and Puerto Rico, MEP facilitates and accelerates the transfer of manufacturing technology in partnership with industry, industry and professional associations, educational institutions including universities and community colleges, state government, and NIST and other federal and non-federal research laboratories and agencies. MEP Centers provide direct, hands-on assistance to thousands of small U.S. manufacturers each year. The acceleration of new and emerging technology into the hands of these small U.S. manufacturers is critical to the MEP mission of enhancing the productivity and technological performance of U.S. manufacturers.

There are potentially powerful synergies that can be achieved for the benefit of small U.S. manufacturers through the broadening and deepening of Manufacturing USA Institute – MEP Center collaborations. As the basis for proposed collaborations involving MEP Centers and any of the Manufacturing USA Institutes, applications submitted in response to this NOFO should articulate approaches to build and establish collaborations between Manufacturing USA Institutes and MEP Centers that are based upon the embedding of MEP Center representatives within Manufacturing USA Institutes, and that build upon the collaboration framework as defined in the May 2015 Memorandum of Understanding (MOU) between NIST and the U.S. Department of Defense (DOD).⁹ The goals of that MOU are to enhance collaboration between MEP Centers and DOD-led Manufacturing USA Institutes and to engage small U.S. manufacturers more fully to optimize benefits and results from the public and private investments in these Institutes. While this framework was specifically intended for

⁹ Memorandum of Understanding between the U.S. Department of Defense Office of the Secretary of Defense Deputy Assistant Secretary of Defense for Manufacturing and Industrial Base Policy and the U.S. Department of Commerce National Institute of Standards and Technology Manufacturing Extension Partnership, May 2015: http://www.nist.gov/mep/about/upload/MOU-NIST-OSD-Signed-Executed2015.pdf

application to DOD-funded Manufacturing USA Institutes, it also broadly applies to MEP involvement with all Manufacturing USA Institutes, regardless of the funding federal agency for a particular Manufacturing USA Institute. Heretofore, Manufacturing USA Institutes have been established with federal funding from the DOD, the U.S. Department of Energy (DOE) and the U.S. Department of Commerce (DOC). This framework provides the foundation upon which MEP Centers and Manufacturing USA Institutes should approach their collaborations in response to this NOFO. Specifically, the framework provides the basis to define how Institutes and MEP Centers can work together to facilitate engagement of small U.S. manufacturers to:

- Increase small U.S. manufacturer awareness of Manufacturing USA Institute focus areas and resources;
- Ensure the involvement of small U.S. manufacturers in the processes and activities associated with informing and developing the research agendas of the Manufacturing USA Institutes;
- Increase small U.S. manufacturers' participation in Manufacturing USA Institute research; and
- Ensure the transition of Manufacturing USA Institute research results to small U.S. manufacturers for implementation.

As part of these MEP Center – Manufacturing USA Institute pilot projects, Manufacturing USA – MEP Center collaborations will be created that leverage relationships with other entities and include the embedding of MEP Center representatives within Manufacturing USA Institutes. The pilot projects funded through this NOFO will leverage the assets and resources of the national MEP Program to assist the Manufacturing USA Institutes as they strive to broadly and deeply enhance their impact on small U.S. manufacturers. The pilot projects also will expand MEP's ability to positively impact the competitiveness and growth of small U.S. manufacturers by developing expertise in the focus areas of the Manufacturing USA Institutes. Specifically, the pilot projects proposed by applicants should:

- Transfer technology from the Manufacturing USA Institutes to small U.S. manufacturers based on the technological needs of manufacturers;
- Create approaches to engaging small U.S. manufacturers in the work of the Manufacturing USA Institutes through hands-on assistance mechanisms and services such as those that are currently, or that could be, offered by MEP Centers;
- Develop and test business models by which MEP Centers and Manufacturing USA Institutes can viably and effectively serve the needs of small U.S. manufacturers in the technology areas of the Manufacturing USA Institutes;
- Facilitate knowledge and best practice sharing between the Manufacturing USA Institutes and MEP Centers; and

 Cultivate an enhanced nationwide network of partnerships among Manufacturing USA Institutes and MEP Centers for the benefit of small U.S. manufacturers.

Applicants are expected to propose pilot projects that involve different, creative, and new approaches to achieve the intended purpose and objectives of this NOFO – but all proposed pilot projects must involve the embedding of MEP Center personnel operating in residence (as defined in this NOFO in Section I. and Section IV.2.a.(6).(d). at one or more of the Manufacturing USA Institutes identified in Section I. and III.1. of this NOFO. Such personnel embedding must involve the placement of MEP Center representatives from one (1) or more MEP Centers within residence on at least a one (1) FTE cumulative basis and at least a 0.5 FTE basis for any single embedded Center employee at the primary Manufacturing USA Institute for the entirety of the federal award period, which may not exceed two years. In this connection, if an applicant proposes the embedding of MEP Center personnel in more than one Manufacturing USA Institute identified in Section I. and III.1. of this NOFO, the application must clearly designate the primary Manufacturing USA Institute and the applicant must meet the one (1) FTE minimum annual embedding requirement by embedding at least one (1) MEP Center personnel FTE at the designated primary Manufacturing USA Institute.

It is anticipated that embedded MEP Center personnel will become fully engaged experts in the technology focus areas for a particular Manufacturing USA Institute. This will enable the embedded MEP personnel to serve as a national MEP resource to facilitate meaningful and impactful MEP engagements with small U.S. manufacturers in these focus areas on a national scale. The pilot projects should create and test business models and service delivery mechanisms that allow small U.S. manufacturers to work with and benefit from the Manufacturing USA Institutes via connections and assistance provided to them through the nationwide network of MEP Centers. The awardees will document their approaches, successes, challenges, and other learnings. Examples of different approaches that may be proposed include, but are not limited to, the following:

- Training and other workforce development efforts in Manufacturing USA Institute technology focus areas to be developed and deployed for small U.S. manufacturers and/or MEP Center practitioners;
- Train-the-trainer programs in Manufacturing USA Institute technology focus areas to be developed and deployed for MEP Center practitioners; and
- Technical assistance projects to be conducted involving partnerships among small U.S. manufacturers, Manufacturing USA Institutes, and MEP Centers.

The examples provided above only represent a few possible approaches for conducting pilot projects. Applicants may propose other approaches, and applicants are encouraged to identify creative and new ways in which the relationships established

between the MEP Centers and Manufacturing USA Institutes through these pilot projects can achieve meaningful impact and significant benefit for small U.S. manufacturers on a broad, national scale.

Applications submitted in response to this NOFO must be from a current MEP Center as the applicant, and must include the clear identification of the Manufacturing USA Institute partnership(s), including which Manufacturing USA Institute is designated as the primary Manufacturing USA Institute. The relationship must be established at the time of application as described in Section I. and Section III.1. of this NOFO. Partnership(s) must be documented with letter(s) of commitment from the identified Manufacturing USA Institute(s), as described in Section IV.2.a.(12). of this NOFO. Applicants are encouraged to forge working relationships with the Manufacturing USA Institutes operating in the region where they are located, as well as with other Institutes in addition to one (1) or more of the five (5) listed in Section I. and Section III.1. of this NOFO and MEP Centers operating around the country and with other entities with which the Centers and Institutes regularly collaborate. These partnerships should be based upon and commensurate with the pilot project approach being proposed by the applicant.

Proposed approaches must fund the embedding of MEP Center representatives in residence at the primary Manufacturing USA Institutes at a total level of effort and time commitment equal to or greater than one (1) full-time equivalent (FTE) each year. The one (1) FTE requirement may be met via the embedding of multiple MEP staff members in the primary Manufacturing USA Institute, but any single MEP Center personnel must be embedded at a level of effort of 0.5 FTE staff year or greater to be counted toward the overall annual one (1) FTE requirement. The 1.0 FTE requirement for embedded MEP Center personnel represents the minimum level of effort, and embedding MEP Center personnel at levels of effort and time commitment totaling more than one (1) FTE each year are encouraged through the embedding of MEP Center personnel at the primary Manufacturing USA Institute and/or at other identified partnered Manufacturing USA Institutes, which may include those listed in this NOFO and any other Manufacturing USA Institute. A statement of embedded FTE(s) is required in the Technical Proposal as described in Section IV.2.a.(6).(d). of this NOFO. Appropriate relationships with the identified Manufacturing USA Institute(s) must be in place at the time of application and demonstrated with letters of commitment as described in Section IV.2.a.(12). of this NOFO. Again, importantly, if MEP representatives are embedded at multiple Manufacturing USA Institutes, MEP representatives must be embedded at the primary Manufacturing USA Institute at an annual level of at least one (1) FTE each year.

It is required that the embedded MEP Center personnel must operate in residence at the participating Institutes. For purposes of this NOFO, MEP Center personnel being embedded in residence at a Manufacturing USA Institute means the MEP embedded personnel are physically based at the Institute commensurate with the commitment identified in the project narrative and budget, utilizing Institute office space and interacting with Institute staff and members. This must be clearly stated and evidenced in the proposal, and the applicant must include a statement that there will be at least one or the equivalent of one (1) FTE in residence at a specified Manufacturing USA institute(s) and provide salary information in their proposal that is consistent with this statement as full-time in the proposed budget. Being embedded in residence also means that the embedded personnel are wholly focused on the pilot project tasking included in the proposed approach during the time while they're embedded at the Institute – versus being focused on customary MEP Center duties.

Subject to the requirements set forth in this NOFO, applicants may also propose approaches that involve the participation of multiple Manufacturing USA Institutes as well as multiple MEP Centers. Any application, however, must include participation from at least one (1) of the five (5) Manufacturing USA Institutes identified in Sections I. and III.1. of this NOFO.

The statutory authority for this program is 15 U.S.C. § 278k-1. This program is not a Federal research and development program.

Further information regarding the MEP Program is provided in the information packet that may be obtained at www.grants.gov, with additional background information provided at www.nist.gov/mep. Refer to Section VII. of this NOFO, "Federal Awarding Agency Contacts," "Grant Rules and Regulations", if you seek the information at this link or for any link in this NOFO, and it is either no longer working or you need more information.

II. Federal Award Information

- 1. Funding Instrument. The funding instrument that will be used for awards issued pursuant to this NOFO is a cooperative agreement. The nature of NIST's "substantial involvement" will generally be considered to be constituted as collaboration between NIST MEP and the recipient organization. This includes NIST MEP collaborating with the Recipient on evaluating its progress and making changes to the statement of work. Additional forms of substantial involvement that may arise are described in Final Office of Management and Budget (OMB) Guidance Implementing the Federal Grant and Cooperative Agreement Act, 43 Fed. Reg. 36860-65 (Aug. 18, 1978). Examples of NIST MEP involvement in cooperative agreements awarded pursuant to this NOFO may include activities such as, but not limited to:
 - Guidelines and assistance in developing scope of work;

- Approval of key personnel;
- Assistance, where possible, in accessing solutions to technical and managerial issues; and
- Assistance to the Recipient organization to define, understand, and resolve issues pertaining to the successful implementation of the pilot project.
- 2. Funding Availability. NIST anticipates funding up to five (5) cooperative agreement awards, with up to two-year periods of performance, in accordance with the multi-year funding policy described in Section II.3. of this NOFO. It is expected that funding for these awards will be between \$300,000 and \$600,000 per year, with total federal funding for the two-year award period being between \$600,000 and at no more than \$1,200,000. NIST anticipates up to \$6,000,000 in total federal funding being available for awards issued pursuant to this NOFO.
- 3. Multi-Year Funding Policy. When an application for a multi-year award is approved, funding in some cases will be provided initially for the first year of the project. The Recipient will be required to submit detailed budgets and budget narratives prior to the award or release of any continued funding. Continued funding for the remaining year(s) of the project will be awarded or released by NIST on a non-competitive basis, and may be adjusted higher or lower from year-to-year of the award, contingent upon satisfactory performance, continued relevance to the mission and priorities of the program, and the availability of funds. Continuation of an award to extend the period of performance and/or to increase or decrease funding is at the sole discretion of NIST.
- 4. Award Kick-Off Meeting. Each Recipient will be required to attend a kick-off meeting, which will be held within the first 30 days of the start of the project period, to ensure that the Recipient has a clear understanding of the program and project components. The kick-off meeting will take place at a location determined by NIST MEP.

The kick-off meeting will last no longer than one (1) day and must be attended by the project manager and appropriate key personnel who will play a significant role in managing and/or executing the award. The kick-off meeting for each award should involve appropriate personnel from the lead MEP Center recipient, the primary Manufacturing USA Institute, other participating Manufacturing USA Institute(s), other MEP Center(s) participating in the project, and may as necessary include personnel from other third party collaborating entities.

Applicants must include travel and related costs for the kick-off meeting as part of the budget for year one (1), and these costs should be reflected in the SF-424A. (See Section IV.2.a.(2). of this NOFO.) These costs must also be reflected in the budget table and budget narrative for year 1, which is submitted as part of the

budget tables and budget narratives section of the Technical Proposal. (See Section IV.2.a.(6).(e). of this NOFO.)

5. MEP National Network Meetings. NIST MEP typically organizes MEP National Network meetings up to four times per year to share best practices, and to discuss new and emerging trends, and additional topics of interest. These meetings are planned throughout the United States and typically involve 2-3 days of resource time and associated travel costs for each meeting. One (1) key representative from the lead MEP Center and one (1) representative from the primary Manufacturing USA Institute should attend these meetings.

Applicants must include travel and related costs for at least one representative from the lead MEP Center and one from the primary Manufacturing USA Institute to participate in the scheduled MEP National Network meetings in each of one (1) or two (2) project years (up to 4 meetings per year; up to 8 total meetings over up to a two-year award period). These costs must be reflected in the SF-424A (see Section IV.2.a.(2). of this NOFO). These costs must also be reflected in the budget tables and budget narratives for each of the project's years, which are submitted as part of the Technical Proposal. (See Section IV.2.a.(6).(e). of this NOFO). In the event that travel and related costs for the MEP Center representative are already accounted for under another MEP award, the applicant should note this in the budget narrative and should not include travel and related costs in the budget.

Representatives of pilot projects will be expected to actively participate during MEP National Network meetings and freely share lessons learned regarding the mechanisms of the pilot approach, and attributes conducive to transferring knowledge from the Manufacturing USA Institutes to MEP Centers for the benefit of small U.S. manufacturers, as well as information about the Manufacturing USA Institutes' technology focus areas.

Recipients will be required to provide detailed analysis of the lessons learned through this pilot project at the MEP National Network meetings. These analyses will include, but are not limited to: attributes, participant roles, planning of the intended approach, root cause for successes/failures, bases for selecting individual MEP Center staff for embedding in Manufacturing USA Institutes, recommendations for how the outcomes of the Pilot Project might inform expansion of the intended goals, and any plans for sustainment of the effort beyond the period of performance.

6. Indirect (F&A) Costs. NIST will reimburse applicants for proposed indirect (F&A) costs in accordance with 2 C.F.R. § 200.414. Applicants proposing indirect (F&A) costs must follow the application requirements set forth in Section IV.2.a.(7). of this NOFO.

III. Eligibility Information

- 1. Eligible Applicants. Eligible applicants for this program are MEP Centers receiving current cooperative agreement funding from NIST. An applicant MEP Center must form a collaboration, teaming arrangement, or other appropriate relationship with one (1) or more of the five (5) Manufacturing USA Institutes identified below. The relationship must have been established with the primary Manufacturing USA Institute as required in Section IV.2.a.(12). of this NOFO at the time of application submission and must be documented with a letter(s) of commitment from the Manufacturing USA Institute(s) with which the relationship has been established. These five (5) Manufacturing USA Institutes are not currently hosting embedded MEP Center representatives in residence at their Institute locations as the result of either the 2016-NIST-MEP-ENNMI-01 funding opportunity¹⁰, or the 2017-NIST-MEP-EMUSA-01 funding opportunity¹¹. These five (5) Manufacturing USA Institutes are ¹²:
 - o Advanced Regenerative Manufacturing Institute (ARMI)
 - Advanced Robotics Manufacturing (ARM) Institute
 - National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL)
 - o Rapid Advancement in Process Intensification Deployment (RAPID) Institute
 - Reducing Embodied-energy and Decreasing Emissions (REMADE) Institute

NIST encourages project proposals involving participation from multiple MEP Centers and multiple Manufacturing USA Institutes, as well as other collaborating entities such as local economic development organizations, universities, community colleges, technology incubator programs, and other organizations.

Applications submitted in response to this NOFO are required to clearly identify the lead MEP Center applicant, as well as the participating Manufacturing USA Institute (s), other MEP Centers, and other key organizations participating in the proposed project, including the specific teaming arrangements for each participating organization. All proposed pilot projects must involve the embedding of MEP Center personnel operating in residence (as defined in this NOFO in Section I. and Section IV.2.a.(6).(d). at one or more of the Manufacturing USA Institutes identified in Section I. and III.1. of this NOFO. Such personnel embedding must involve the placement of MEP Center representatives from one (1) or more MEP Centers within

¹⁰https://www.nist.gov/sites/default/files/documents/mep/MEP-Embedding-MEP-into-NNMI-Institutes-FFO-4-19-16.pdf

¹¹https://www.nist.gov/sites/default/files/documents/2016/10/17/mep_embedding_mep_into_nnmi_institutes_ffo_final_10-17-16.pdf

¹² https://www.manufacturingusa.com/institutes

residence on at least a one (1) FTE cumulative basis and at least a 0.5 FTE basis for any single embedded Center employee at a primary Manufacturing USA Institute for the entirety of the federal award period, which may not exceed two (2) years. In this connection, if an applicant proposes the embedding of MEP Center personnel in more than one Manufacturing USA Institute identified in Section I. and III.1. of this NOFO, the application must clearly designate the primary Manufacturing USA Institute and the applicant must meet the one (1) FTE minimum annual embedding requirement by embedding at least one (1) MEP Center personnel FTE at the designated primary Manufacturing USA Institute.

An MEP Center may serve as the MEP Center applicant on only one (1) proposal. There are no restrictions on the number of applications in which MEP Centers or Manufacturing USA Institutes can be proposed as collaborators, nor are there restrictions on MEP Centers receiving Round One or Round Two awards serving as applicants or collaborators on projects funded pursuant to this Round Three competition.

Eligibility for this program is contingent upon an applicant being a NIST MEP Center at the time of application, at the time of award, and for the entire period of performance for awards issued pursuant to this NOFO. NIST reserves the right to take appropriate action, which may include not making an award, or terminating an award or a portion thereof, should an MEP Center fail to maintain its eligibility at all required times. NIST further reserves the right to take appropriate action, including terminating an award or a portion thereof, if a Manufacturing USA Institute does not maintain its designation as such at any time during the period of performance for awards issued pursuant to this NOFO.

- 2. Cost Sharing or Matching Requirement. Non-federal cost share is not required for awards issued pursuant to this NOFO. Applicants are encouraged to submit proposals with budgets that maximize the application of award funding to the performance of project tasking and direct project costs.
- 3. No Double Charging Against other NIST/MEP or Institute Awards. Costs charged against awards issued pursuant to this NOFO may not also be charged as costs against any other NIST/MEP or Manufacturing USA Institute award (*i.e.*, no double-billing of costs). In addition, NIST/MEP funding provided by an MEP Center to a Manufacturing USA Institute or to another MEP Center may not be used by such Manufacturing USA Institute or MEP Center as a non-federal cost share contribution for a Manufacturing USA Institute or MEP Center award (*i.e.*, federal funds may not be used as cost share for other federal awards).

IV. Application and Submission Information

- 1. Address to Request Application Package. The standard application package, consisting of the standard forms, i.e., SF-424, SF-424A, SF-424B, SF-LLL, and the CD-511, is available at www.grants.gov. Applicants may also request an application package by contacting the point of contact for administrative, budget, cost-sharing, eligibility questions and other programmatic questions listed in Section VII. of this NOFO.
- **2. Content and Form of Application/Submission.** Set forth below are the required content and form of applications submitted pursuant to this NOFO.

a. Required Forms and Documents

(1) SF-424, Application for Federal Assistance. The SF-424 must be certified through www.grants.gov by an authorized representative of the applicant organization.

SF-424, Item 12, should list the NOFO number as 2017-NIST-MEP-EMUSA-02.

SF-424, Item 18, should list the total budget information for the full duration of the project.

The list of certifications and assurances referenced in Item 21 of the SF-424 is contained in the SF-424B.

SF-424A, Budget Information - Non-Construction Programs. The budget should reflect anticipated expenses for each year of the project, considering all potential cost increases, including cost of living adjustments. The budget should also include staff, travel and other costs associated with the Award Kick-off Meeting and the NIST/MEP National Network meetings for the MEP Center and the primary Manufacturing USA Institute as described in Sections II.4. and II.5., respectively, of this NOFO.

The applicant should reflect each year of the project, up to two (2) years, on the **SF-424A form.** Please carefully follow the directions found at http://www.grants.gov/web/grants/form-instructions/sf-424a-instructions.html when filling out this form.

These sections of the SF-424A should reflect funds for the first year of the award: Section A; Section B; Section C; and Section D. The budget estimate for the second year of the award should be entered in Section E, field 16, column (b).

The Grant Program Function or Activity on Line 1 under Column (a) should be entered as Manufacturing Extension Partnership. The Catalog of Federal Domestic Assistance Number on Line 1 under Column (b) should be entered as 11.611.

- (3) SF-424B, Assurances Non-Construction Programs.
- (4) CD-511, Certification Regarding Lobbying. For the Award Number, enter "2017-NIST-MEP-EMUSA-02". In the Project Name field, use the Descriptive Title of Applicant's Project from field 15 of the SF-424, or an abbreviation thereof.
- (5) SF-LLL, Disclosure of Lobbying Activities. (if applicable)
- (6) Technical Proposal. The Technical Proposal, with a period of performance of up to two (2) years, is a word- processed document not exceeding 25 pages that is responsive to the program description (see Section I. of this NOFO) and the evaluation criteria (see Section V.1. of this NOFO). The following is a suggested format that applicants may use for the technical proposal.
 - (a) Table of Contents. (Does not count toward the page limit).
 - **(b) Executive Summary.** The executive summary should briefly (usually no longer than two pages) describe the proposed project, consistent with the evaluation criteria (see Section V.1. of this NOFO).
 - **Please note**, if an applicant's proposal is selected for funding, NIST may use all or a portion of the Executive Summary as part of a press release issued by NIST, or for other public information and outreach purposes. Applicants are advised not to incorporate information that concerns business trade secrets or other confidential commercial or financial information as part of the Executive Summary. See also 15 C.F.R. § 4.9(c) concerning the designation of business information by the applicant. (Does not count towards page limit).
 - **(c) Project Narrative.** This section should provide a description of the proposed approach, sufficient to permit evaluation of the proposal, in accordance with details included in the proposal Evaluation Criteria (see Section V.1. of this NOFO).

The project narrative must identify the one (1) primary Manufacturing USA Institute identified in Section I. and III.1. of this NOFO with which the applicant has established a collaborative partnership. For purposes of this NOFO, the primary institute is the one in which the MEP Center plans to embed personnel at a level of at least one (1) FTE. While the MEP Center may have personnel embedded at more than one (1) Manufacturing USA Institute, the MEP Center must have at least one (1) FTE at the primary Manufacturing USA Institute. All proposed pilot projects must involve the embedding of MEP Center personnel operating in residence (as defined in this NOFO in Section I. and Section IV.2.a.(6).(d). at one (1) or more of the Manufacturing USA Institutes identified in Section I. and III.1. of this NOFO. Such personnel embedding must involve the placement of MEP Center representatives from one or more MEP Centers within residence on at least a one (1) FTE cumulative basis and at least a 0.5 FTE basis for any single embedded Center employee at the primary Manufacturing USA Institute for the entirety of the federal award period, which may not exceed two (2) years. In this connection, if an applicant proposes the embedding of MEP Center personnel in more than one (1) Manufacturing USA Institute identified in Section I. and III.1. of this NOFO, the application must clearly designate the primary Manufacturing USA Institute and the applicant must meet the one (1) FTE minimum annual embedding requirement by embedding at least one (1) MEP Center personnel FTE at the designated primary Manufacturing USA Institute.

The applicant is required to provide a statement of embedded FTE(s) as described in Section IV.2.a.(6).(d). below as part of the Technical Proposal and required to include a letter of commitment from the primary Manufacturing USA Institute and any other partnering Manufacturing USA Institutes as described in Section IV.2.a.(12). below.

The project narrative must identify tasks, measureable milestones, and outcomes resulting from the proposed approach, including the role of the embedding of MEP Center personnel in the participating Manufacturing USA Institutes, for each year of the proposed period of performance (Year 1 and Year 2). If an applicant proposes the embedding of MEP Center personnel in more than one Manufacturing USA Institute, the application must clearly designate one (1) of the five (5) Manufacturing USA institutes identified in Section I. and Section III.1. of this NOFO as the primary Manufacturing USA Institute and the applicant must meet the one (1) FTE minimum annual embedding requirement by embedding at least one (1) MEP Center personnel FTE at the designated primary participating Manufacturing USA Institute.

The project narrative should clearly identify the applicant's approach to developing, testing, and providing assistance for small U.S. manufacturers in the technology focus area(s) of the participating Manufacturing USA Institute(s). The project narrative should clearly indicate the service delivery mechanism(s) and business model(s) being developed and tested relating to MEP Centers and Manufacturing USA Institutes working together, and relating to MEP Centers and Manufacturing USA Institutes working with small U.S. manufacturers to provide small U.S. manufacturers the assistance they need. The applicant also should clearly explain how the proposed approach will accomplish one or more of the following:

- Increase small U.S. manufacturer awareness of Manufacturing USA Institute focus areas and resources:
- ii. Ensure the involvement of small U.S. manufacturers in the processes and activities associated with informing and developing the research agendas of the Manufacturing USA Institutes;
- iii. Increase small U.S. manufacturers' participation in the conduct of Manufacturing USA Institute research; and
- iv. Ensure the transition of Manufacturing USA Institute research results to small U.S. manufacturers for implementation.

The applicant should provide information that clearly indicates how the proposed MEP Center – Manufacturing USA Institute collaboration(s) and embedded personnel will result in increased impacts for small U.S. manufacturers, as well as the rationale for the selection and level of involvement of the particular Manufacturing USA Institute(s) and MEP Center(s) engaged in the proposal.

The business model descriptions proposed should clearly identify the revenue bases of the collaborations and service delivery models, including organizational contributions and how MEP Centers and Manufacturing USA Institutes will be able to collaborate on a sustainable basis, including beyond the period of performance of this program's funding awards. The business models should also clearly articulate the effects of the costs to small U.S. manufacturers for receiving services and the anticipated reimbursements from the small U.S. manufacturers for receiving the services.

Applicants should clearly identify and fully explain the elements of their collaborations intended to reach a broad base of small U.S. manufacturers, including, for example, outreach and assistance activities

for very small, start-up, and rural manufacturers in areas such as technology acceleration and workforce training.

The project narrative should clearly indicate how the proposed approach adds capabilities to the MEP Program, and the narrative should detail how the approach solves new or emerging manufacturing problems of small U.S. manufacturers relating to areas such as, but not limited to:

- the transfer of technology from the participating Manufacturing USA Institute(s) to small U.S. manufacturers for manufactured products and manufacturing processes;
- supply chain integration; and
- quality management.

Applicants are encouraged to propose collaborations between Manufacturing USA Institutes and the MEP Center(s) serving the manufacturers in the region where the Manufacturing USA Institutes are located to facilitate regional network building, as well as partnerships between Manufacturing USA Institutes and other MEP Centers located around the nation to facilitate national network building.

Applicants should clearly articulate:

- The nature of the network structure that's being developed or enhanced;
- Who the participants are;
- The roles, responsibilities and relationships to each other of all participating Manufacturing USA Institutes and MEP Centers (to include the lead MEP Center) and any other participating organizations; and
- The geographic scale of the proposed network activities, such as state, regional, or national scope.

Applicants should also provide details about approaches for sharing lessons learned and best practices resulting from the conduct of the project. This should include plans for sharing with the national network of MEP Centers, the national network of Manufacturing USA Institutes, and other organizations and entities involved with U.S. manufacturing, including but not limited to NIST, the other federal agencies providing funding for the Manufacturing USA Institutes, U.S. manufacturers, manufacturing trade associations, economic development organizations, and others.

It is anticipated that embedded personnel operating in residence at the Manufacturing USA Institutes will become national resources for the Manufacturing USA Institute and MEP Center Networks, and the plan by which this will occur should be clearly articulated in the proposal. Applicants should clearly indicate how the embedding of MEP Center personnel in residence at the Manufacturing USA Institute(s) will contribute to the proposed network building activities.

The applicant should clearly articulate how the proposed approach will enhance the impact of the efforts of the participating MEP Center(s) and Manufacturing USA Institute(s) for the benefit of small U.S. manufacturers in terms of measures such as, but not limited to job creation, employee training, technology transfer and commercialization, and improved manufacturer and supply chain competitiveness.

The specific embedding of personnel that will occur between the MEP Center(s) and Manufacturing USA Institute(s) should be fully set forth in the Project Narrative section. Appropriate relationships with the identified Manufacturing USA Institute(s) must be in place at the time of application and demonstrated with letters of commitment included in the application package. The applicant is required to provide a statement of embedded FTE(s) as described in Section IV.2.a.(6).(d). below as part of the Technical Proposal and required to include a letter of commitment from the primary Manufacturing USA Institute and all other participating Manufacturing USA Institutes as described in Section IV.2.a.(12). below.

Applicants should provide details about the ability of the key personnel and the applicant's proposed management structure, as described in Section V.1.d., to successfully conduct the project being proposed. Applicants should clearly articulate how proposed organizational structures and participating personnel from the MEP Center(s) and Manufacturing USA Institute(s) will be in position and ready to begin project operations upon receipt of funding award.

(d) Statement of Embedded FTE(s). It is required that the embedded MEP Center personnel must operate in residence at the participating primary Manufacturing USA Institute. For purposes of this NOFO, MEP Center personnel being embedded in residence at a Manufacturing USA Institute means the MEP embedded personnel are physically based at the Manufacturing USA Institute commensurate with the commitment identified in the project narrative and budget, utilizing Institute office space and interacting with Institute staff and members. This must be clearly

stated and evidenced in the proposal, and the applicant must include a statement that there will be at least one or the equivalent of one (1) FTE in residence at the designated primary Manufacturing USA Institute and provide salary information in their proposal that is consistent with this statement in the proposed budget. Being embedded in residence also means that the embedded personnel are wholly focused on project tasking included in the proposed approach during the time while they're embedded at the Institute – versus being focused on customary MEP Center duties.

Applicants may also propose approaches that involve the participation of multiple Manufacturing USA Institutes, as well as multiple MEP Centers. Any proposal, however, must include participation from at least one (1) of the five (5) Manufacturing USA Institutes identified in this NOFO.

The proposals must articulate the details of the administrative, financial, and other business parameters associated with the embedding of personnel from the participating MEP Centers in the participating Manufacturing USA Institutes.

(e) Budget Tables and Budget Narratives. In addition to the SF-424A form (see Section IV.2.a.(2). of this NOFO), applicants must provide a detailed budget table and budget narrative for the proposed period of performance, fully explaining and justifying all proposed project funding (both revenue and expenses) in accordance with applicable federal cost principles. The budget information submitted by an applicant will be evaluated in accordance with the Budget evaluation sub-criteria (see Section V.1.e.(i). and Section V.1.e.(ii). of this NOFO).

In the budget narrative, the Recipient should provide adequate information to support the costs identified in each category of the budget table. At a minimum, applicants must provide: the annual salary and the percentage of time dedicated to the project by personnel to demonstrate the total cost of that individual; the airfare, lodging, per diem, number of days and number of travelers for each proposed trip; and anticipated subaward/contract amounts and the related subawardees/contractors, to the extent known at the time of application, and a detailed description of the purpose of each subaward/contract. Applicants must also include for the applicant MEP Center and the primary Manufacturing USA Institute staff, travel and related expenses for travel to and participation in the required Award Kick-Off and National Network meetings described in Sections II.4. and II.5. of this NOFO in the budget tables and budget narratives. In the event that travel and related costs for the MEP Center

representative are already accounted for under another MEP award, the applicant should note this in the budget narrative and should not include travel and related costs in the budget. A suggested budget table and budget narrative template are available on the MEP website, www.nist.gov/mep/embedding-mep-manufacturing-usa-institutes-pilot-projects-round-three.

When preparing project budgets, applicants must be cognizant of the prohibition on double-billing costs against multiple federal awards and on the prohibition on using federal funding as non-federal cost share on any other federal award. See Section III.3. of this NOFO.

(7) Indirect Cost Rate Agreement. If indirect costs are included in the proposed budget, provide a copy of the approved negotiated agreement if this rate was negotiated with a cognizant Federal audit agency. If the rate was not established by a cognizant Federal audit agency, provide a statement to this effect. If the successful applicant includes indirect costs in the budget and has not established an indirect cost rate with a cognizant Federal audit agency, the applicant will be required to obtain such a rate in accordance with the Department of Commerce Financial Assistance Standard Terms and Conditions available at: http://go.usa.gov/hKbj. This does not count toward the page limit.

Alternatively, in accordance with 2 C.F.R. § 200.414(f), applicants that have never received a negotiated indirect cost rate may elect to charge indirect costs to an MEP award pursuant to a de minimis rate of 10 percent of modified total direct costs (MTDC), in which case a negotiated indirect cost rate agreement is not required. Applicants proposing a 10 percent de minimis rate pursuant to 2 C.F.R. § 200.414(f) should note this election as part of the budget portion of the application.

- (8) Table of Abbreviations and Acronyms. (This does not contribute to the total number of pages.) An alphabetical list of all abbreviations and acronyms, and their meaning, should be included.
- (9) Table of Funded Project Participants and Unfunded Collaborators. (This does not contribute to the total number of pages.) Provide a table that identifies all organizations that will participate in and contribute to the project, if funded, known at the time of the application submission. The table should consist of an alphabetically ordered list, by organization, of all Funded Project Participants and all Unfunded Collaborators. The table should include the organization's name, address, administrative role, scope of work (funded participants only) and proposed funding amount (funded participants only).

Administrative roles are: applicant, subrecipient, or contractor for funded participants; and third party contributor or collaborator if they will not receive funding.

- (10) Bibliographic List of References. (This does not contribute to the total number of pages.) A complete bibliographic listing of all references used within the application should be included.
- (11) Resumes of Key Personnel. (These do not contribute to the total number of pages). One-page resumes of no more than five key personnel from each participant organization may be included; these do not count toward the page limit. Key personnel resumes should include resumes for any personnel from MEP Centers who will be embedded at the Manufacturing USA Institutes. Any information beyond one page for each resume and any additional resumes submitted will not be considered.
- (12) Required Letters of Commitment. (These do not contribute to the total number of pages). Letters that commit specific resources (not funding) to the project in the event that the application is funded are required from all of the following that apply:
 - a) Each application must include a Letter of Commitment from an authorized representative of: (i) the MEP Center applicant; (ii) each Manufacturing USA Institute that will be participating in the project; and from (iii) other MEP Centers that will be participating in the project. Each letter should describe the submitting organization's commitment to and activities in support of the proposed project.
 - b) If the application includes subawards, contracts or other payments to known third parties, including Manufacturing USA Institutes and other MEP Centers, a draft copy of each subaward, contract or other funding vehicle must be included. The reviewers will consider the scope of each agreement and its relevance to the proposed project, but will not review the agreement for legal sufficiency or for the allowability of the proposed budget.
 - c) Letters of Commitment should not be letters submitted by non-proposing entities wishing to vouch for the applicant's (or entities associated with the applicant) knowledge, skills, and abilities or entities to conduct the proposed work. These should be in the form of a Letter of Interest (see Section IV.3.a.(13). of this NOFO).
- (13) Letters of Interest. (These do not contribute to the total number of pages.)

Optional letters may be included with an application that indicate willingness from any third party to help accelerate establishment of a new or strengthening of an existing industry-driven technology consortium and/or consortium project results. This may include letters from unfunded collaborators who will participate as unfunded team members, potential organizations involved across stages of the value chain, or strategic partners who can aid in any element of the plan to realize impact. Letters of Interest should outline the nature and importance of the collaboration or involvement being offered. Letters of Interest may also be from non-proposing entities wishing to vouch for the applicant's knowledge, skills, and abilities or entities to conduct the proposed work. All letters of interest must be included with the application and not sent separately to NIST.

(14) Data Management Plan. Consistent with the NIST Policy 5700.00,¹³

Managing Public Access to Results of Federally Funded Research, and NIST Order 5701.00,¹⁴ Managing Public Access to Results of Federally Funded Research, applicants should include a Data Management Plan (DMP).

The DMP is a supplementary document of not more than two pages that must include, at a minimum, a summary of proposed activities that are expected to generate data, a summary of the types of data expected to be generated by the identified activities, a plan for storage and maintenance of the data expected to be generated by the identified activities, and a plan describing whether and how data generated by the identified activities will be reviewed and made available to the public. As long as the DMP meets these NIST requirements, it may take the form specified by the applicant's institution or some other entity (e.g., the National Science Foundation¹⁵ or the National Institutes of Health¹⁶).

All applications for activities that will generate scientific data using NIST funding are required to adhere to a DMP or explain why data sharing and preservation are not within the scope of the project.

For the purposes of the DMP, NIST adopted the definition of "research data" at 2 C.F.R. § 200.315(e)(3) (available at http://go.usa.gov/3sZvQ). Reasonable costs for data preservation and access may be included in the application.

¹³https://www.nist.gov/sites/default/files/documents/data/Final-P-5700.pdf

¹⁴https://www.nist.gov/sites/default/files/documents/data/Final-O-5701 0.pdf

¹⁵ http://www.nsf.gov/bfa/dias/policy/dmp.jsp

¹⁶ http://grants.nih.gov/grants/policy/data_sharing/data_sharing_guidance.htm

The inclusion of the DMP will be considered as part of the administrative review (see Section V.2.a. of this NOFO); however, the DMP will not be evaluated against any evaluation criteria.

b. Attachment of Required Application Documents

When submitting the application electronically via Grants.gov, items IV.2.a.(1). through IV.2.a.(5). above are part of the standard application package in Grants.gov and can be completed through the download application process.

Items IV.2.a.(6). through IV.2.a.(14). must be completed and attached by clicking on "Add Attachments" found in item 15 of the SF-424, Application for Federal Assistance. This will create a zip file that allows for transmittal of the documents electronically via Grants.gov.

Applicants should carefully follow specific Grants.gov instructions at www.grants.gov to ensure the attachments will be accepted by the Grants.gov system. A receipt from Grants.gov does not provide details concerning whether all attachments (or how many attachments) transferred successfully. Applicants using Grants.gov will receive a series of e-mail messages over a period of up to two business days before learning whether a Federal agency's electronic system has received its application.

Applicants are urged to use Grants.gov's Download Submitted Applications feature to check that all required attachments were contained in their submission. Go to the *Grants.gov Online Users Guide available at the Grants.gov site* (http://go.usa.gov/cjaEh), choose Applicants, then Applicant Actions, then select the "Check My Application Status" option, click on the Download Submitted Applications feature, and follow the directions.

Applicants can track their submission in the Grants.gov system by following the procedures at the Grants.gov site (http://go.usa.gov/cjamz). It can take up to two business days for an application to fully move through the Grants.gov system to NIST.

NIST uses the Tracking Numbers assigned by Grants.gov, and does not issue Agency Tracking Numbers.

c. Application Format

- (1) E-mail submissions. Will not be accepted
- (2) Facsimile submissions (fax). Will not be accepted.

- **Figures, graphs, images, and pictures.** Should be of a size that is easily readable or viewable and may be landscape orientation.
- (4) Font. Easy to read font (11-point minimum). Smaller type may be used in figures and tables but must be clearly legible.
- (5) Line spacing. Single.
- (6) Margins. One (1) inch top, bottom, left, and right.
- (7) Paper copies. Will not be accepted. All submissions must be made via www.grants.gov.
- (8) Page layout. Portrait orientation only (except figures, graphs, and pictures (see Section IV.2.c.(3)).
- (9) Page Limit. Twenty-five (25) pages.
 - a) Page limit includes: Cover page, Technical Proposal (with the exception of the Executive Summary), figures, graphs, tables, images, pictures, and all other pages of an application, with the exception of the page limit exclusions listed below.
 - b) Page limit excludes: Table of Contents, Executive Summary, SF-424, Application for Federal Assistance; the SF-424A, Budget Information Non-Construction Programs form; SF-424B, Assurances Non-Construction Programs; SF-LLL, Disclosure of Lobbying Activities; CD-511, Certification Regarding Lobbying; Budget Tables and Budget Narratives; Indirect Cost Rate Agreement; Table of Abbreviations and Acronyms; Table of Funded Project Participants and Unfunded Informal Collaborators; Bibliographic List of References Resumes of Key Personnel; Required Letters of Commitment; Letters of Interest; and the Data Management Plan.
- (10) Page numbering. Number pages sequentially.
- (11) Paper size. 21.6 centimeters by 27.9 centimeters (8 ½ inches by 11 inches).
- (12) Application language. English.
- (13) Typed document. All applications, including forms, must be typed.

- **d. Application Replacement Pages.** Applicants may not submit replacement pages and/or missing documents after an application has been submitted. Any revisions must be made by submission of a new application that must be received by NIST by the submission deadline.
- **e. Pre-Applications.** NIST is not accepting pre-applications or white papers under this NOFO.
- f. Certifications Regarding Federal Felony and Federal Criminal Tax Convictions, Unpaid Federal Tax Assessments and Delinquent Federal Tax Returns. In accordance with Federal appropriations law, an authorized representative of the selected applicant(s) may be required to provide certain pre-award certifications regarding federal felony and federal criminal tax convictions, unpaid federal tax assessments, and delinquent federal tax returns.
- 3. Unique Entity Identifier and System for Award Management (SAM). Pursuant to 2 C.F.R. part 25, applicants and recipients (as the case may be) are required to: (i) be registered in SAM before submitting their applications; (ii) provide a valid unique entity identifier in their applications; and (iii) continue to maintain an active SAM registration with current information at all times during which they have an active Federal award or an application or plan under consideration by a Federal awarding agency, unless otherwise excepted from these requirements pursuant to 2 C.F.R. § 25.110. NIST will not make a Federal award to an applicant until the applicant has complied with all applicable unique entity identifier and SAM requirements and, if an applicant has not fully complied with the requirements by the time that NIST is ready to make a Federal award pursuant to this NOFO, NIST may determine that the applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant.
- **4. Submission Dates and Times**. Applicants must submit applications electronically through www.grants.gov. Electronic applications must be received no later than 11:59 p.m. Eastern Time on Friday, June 2, 2017. The approximate start date for the award made under this NOFO is expected to be in August 2017.

When developing your submission timeline, please keep in mind that (1) all applicants are required to have a current registration in the System for Award Management (SAM.gov); (2) the free annual registration process in the electronic System for Award Management (SAM.gov) (see Section IV.3. and Section IV.7.a.(2). of this NOFO) may take between three and five business days or as long as more than two weeks; and (3) electronic applicants are required to have a current registration in Grants.gov; and (4) applicants using Grants.gov will receive a series of e-mail messages over a period of up to two business days before learning whether a Federal agency's electronic system has received its application. **Please**

note that a federal assistance award cannot be issued if the designated recipient's registration in the System for Award Management (SAM.gov) is not current at the time of the award.

Applicants will find instructions on registering with SAM.gov as part of the Grants.gov process at:

http://www.grants.gov/web/grants/applicants/organization-registration.html.

The date and time recorded by www.grants.gov will be considered the official time that the application was received by NIST. Applicants are cautioned that the validation process may take up to two full business days after the application is submitted to Grants.gov.

NIST strongly recommends that applicants do not wait until the last minute to submit an application. NIST will not make allowance for any late submissions. The responsibility for ensuring a complete application is received by NIST by the deadline is the sole responsibility of the applicant. To avoid any potential processing backlogs due to last minute Grants.gov registrations, applicants are strongly encouraged to start their Grants.gov registration process at least four (4) weeks prior to the application due date.

NIST will not accept applications submitted by mail, facsimile, or by e-mail.

- **5. Intergovernmental Review.** Applications under this Program are not subject to Executive Order 12372.
- 6. Funding Restrictions. Construction activities are not an allowable cost under this program. In addition, a recipient or a subrecipient may not charge profits, fees or other increments above cost to an award issued pursuant to this NOFO. Pre-award costs under this NOFO are subject to the prior written approval of the NIST Grants Officer.

7. Other Submission Requirements

- a. Applications must be submitted electronically. Applications must be submitted via Grants.gov at <u>www.grants.gov</u> under announcement 2017-NIST-MEP-EMUSA-02.
 - (1) Applicants should carefully follow specific Grants.gov instructions to ensure the attachments will be accepted by the Grants.gov system. A receipt from Grants.gov indicating an application is received does not provide information about whether attachments have been received. For further information or questions regarding applying electronically for the 2017-NIST-MEP-EMUSA-

- 02 announcement, contact Christopher Hunton by phone at 301-975-5718 or by e-mail at grants@nist.gov.
- (2) Applicants are strongly encouraged to start early and not wait until the approaching due date before logging on and reviewing the instructions for submitting an application through Grants.gov. The Grants.gov registration process must be completed before a new registrant can apply electronically. If all goes well, the registration process takes three (3) to five (5) business days. If problems are encountered, the registration process can take up to two (2) weeks or more. Applicants must have a valid unique entity identifier number and must maintain a current registration in the Federal government's primary registrant database, the System for Award Management (https://www.sam.gov/), as explained on the Grants.gov Web site. See also Section IV.3. of this NOFO. After registering, it may take several days or longer from the initial log-on before a new Grants.gov system user can submit an application. Only individuals authorized as organization representatives will be able to submit the application, and the system may need time to process a submitted application. Applicants should save and print the proof of submission they receive from Grants.gov. If problems occur while using Grants.gov, the applicant is advised to (a) print any error message received and (b) call Grants.gov directly for immediate assistance. If calling from within the United States or from a U.S. territory, please call 800-518-4726. If calling from a place other than the United States or a U.S. territory, please call 606-545-5035. Assistance from the Grants.gov Help Desk will be available around the clock every day, with the exception of Federal holidays. Help Desk service will resume at 7:00 a.m. Eastern Time the day after Federal holidays. For assistance using Grants.gov, you may also contact support@grants.gov.
- (3) To find instructions on submitting an application on Grants.gov, Applicants should refer to the "Applicants" tab in the banner just below the top of the www.grants.gov home page. Clicking on the "Applicants" tab produces two exceptionally useful sources of information, Applicant Actions and Applicant Resources, which applicants are advised to review.

Applicants will receive a series of e-mail messages over a period of up to two business days before learning whether a Federal agency's electronic system has received its application. Closely following the detailed information in these subcategories will increase the likelihood of acceptance of the application by the Federal agency's electronic system.

Applicants should pay close attention to the guidance under "Applicant FAQs," as it contains information important to successful submission on Grants.gov, including

essential details on the naming conventions for attachments to Grants.gov applications.

All applicants should be aware that adequate time must be factored into applicants' schedules for delivery of their application. Applicants are advised that volume on Grants.gov may be extremely heavy on the deadline date.

The application must be both received and validated by Grants.gov. The application is "received" when Grants.gov provides the applicant a confirmation of receipt and an application tracking number. If an applicant does not see this confirmation and tracking number, the application has not been received. After the application has been received, it must still be validated. During this process, it may be "validated" or "rejected with errors." To know whether the application was rejected with errors and the reasons why, the applicant must log in to Grants.gov, select "Applicants" from the top navigation, and select "Track my application" from the drop-down list. If the status is "rejected with errors," the applicant may still seek to correct the errors and resubmit your application before the deadline. If the applicant does not correct the errors, the application will not be forwarded to NIST by Grants.gov.

Refer to important information in Section IV.4. Submission Dates and Times, to help ensure your application is received on time.

b. Amendments. Any amendments to this NOFO will be announced through Grants.gov. Applicants may sign up on Grants.gov to receive amendments by email or may request copies from Adelwiza Lequin by telephone at (301) 975-4395 or by e- mail to mepnofo@nist.gov.

V. <u>Application/Proposal Review Information</u>

- 1. Evaluation Criteria. The evaluation criteria, selection factors, and review and selection processes for this program are set forth below. Reviewers will evaluate how well the applicant's proposed approach will achieve the goals and objectives of this competition, and support the MEP mission, as described in Section I. of this NOFO. NIST will use the following evaluation criteria in evaluating applications and assigning weights, with a maximum score of 100.
 - Alignment with MOU Framework for MEP Manufacturing USA Institute Collaboration (30 points; sub-criteria will receive equal weight)
 - i. Reviewers will assess the extent to which the applicant's proposal aligns with the 4 elements of the NIST-DOD MOU (see Section I. of this NOFO), which defines the framework for how Manufacturing USA Institutes and MEP

Centers can work together to facilitate engagement of small U.S. manufacturers to:

- Increase small U.S. manufacturer awareness of Manufacturing USA Institute focus areas and resources;
- Ensure the involvement of small U.S. manufacturers in the processes and activities associated with informing and developing the research agendas of the Manufacturing USA Institutes;
- Increase small U.S. manufacturers' participation in Manufacturing USA Institute research: and
- Ensure the transition of Manufacturing USA Institute research results to small U.S. manufacturers for implementation.

Reviewers will evaluate how effective and thorough the proposed approach will be in accomplishing these framework elements. The quality and technical merit of the proposed approach will be evaluated, as well as the number of framework elements that are addressed.

- ii. Reviewers will evaluate the adequacy of the proposed business model and service delivery mechanisms, including the respective roles and responsibilities of the proposed team members and their proposed relationships to each other, the identified tasks, and measureable milestones and assess the likelihood that and the extent to which those models and mechanisms will be developed, tested, deployed, and implemented so as to best leverage available resources, add capabilities to the MEP Program, and enhance the impact of Manufacturing USA Institutes' efforts to benefit the technological needs of small U.S. manufacturers. The quality and technical merit of the applications will also be evaluated based upon the likelihood that and the extent to which the proposed approach will result in positive impacts for small U.S. manufacturers in terms of
 - new and retained sales;
 - jobs created or saved; and
 - new small U.S. manufacturers' investments in their businesses and small U.S. manufacturers' cost savings.
- b. Development of a Sustainable Manufacturing USA Institute MEP Collaboration to Benefit Small U.S. Manufacturers (10 points; sub-criteria will receive equal weight)
 - i. Reviewers will assess the viability of the proposed business models being developed and tested. Specifically, reviewers will evaluate the extent to which the proposed approach will be based upon a revenue model that is

aligned with, and can persist within, the operating parameters for participating MEP Center(s), Manufacturing USA Institute(s), and the small U.S. manufacturers to be served. Included here will be an assessment of the likelihood that and the extent to which the proposed model will be able to sustain the provision of cutting edge innovative manufacturing technological assistance to small U.S. manufacturers beyond the period of performance of an award under this announcement.

ii. Reviewers will also assess the likelihood that the proposed approach will attract small U.S. manufacturers on a large scale – potentially on the order of hundreds or more, annually, per participating Manufacturing USA Institute or MEP Center.

c. Manufacturing USA Institutes and MEP Network Building (20 points; subcriteria will receive equal weight)

- i. Reviewers will assess the extent to which the approach in the applicant's proposal cultivates network building across the national network of MEP Centers, as well as the national network of Manufacturing USA Institutes and other organizations and entities involved with U.S. manufacturing. Reviewers will assess the quality, merit, depth, and breadth of the network building being proposed by each applicant.
- ii. Reviewers will assess the extent to which proposals contribute to national network building and demonstrate achievable national scale benefits for U.S. manufacturing. Proposals contributing to national network building and national scale benefits for U.S. manufacturing will be evaluated higher than those whose impacts are assessed as more localized.
- d. Key Personnel and Organizational Structure. (20 points; sub-criteria will receive equal weight). Reviewers will assess the ability of the key personnel and the applicant's proposed management structure to successfully conduct the project being proposed.

All proposed pilot projects must involve the embedding of MEP Center personnel operating in residence (as defined in this NOFO in Section I. and Section IV.2.a.(6).(d). at one (1) or more of the Manufacturing USA Institutes identified in Section I. and III.1. of this NOFO. Such personnel embedding must involve the placement of MEP Center representatives from one or more MEP Centers within residence on at least a one (1) FTE cumulative basis and at least a 0.5 FTE basis for any single embedded Center employee at the primary Manufacturing USA Institute for the entirety of the federal award period, which may not exceed two years. In this connection, if an applicant proposes the embedding of MEP

Center personnel in more than one (1) Manufacturing USA Institute identified in Section I. and III.1. of this NOFO, the application must clearly designate the primary Manufacturing USA Institute <u>and</u> the applicant must meet the one (1) FTE minimum annual embedding requirement by embedding at least one (1) MEP Center personnel FTE at the designated primary Manufacturing USA Institute.

It is required that the embedded MEP Center personnel operate in residence at the participating Institutes. For purposes of this NOFO, MEP Center personnel being embedded in residence at a Manufacturing USA Institute means the MEP embedded personnel are physically based at the Institute commensurate with the commitment identified in the project narrative and budget, utilizing Institute office space and interacting with Institute staff and members. This must be clearly stated and evidenced in the proposal, and the applicant must include a statement that there will be at least one (1) or the equivalent of one (1) FTE in residence at the designated primary Manufacturing USA institute and provide salary information in their proposal that is consistent with this statement as full-time in the proposed budget. Being embedded in residence also means that the embedded personnel are wholly focused on project tasking included in the proposed approach during the time while they're embedded at the Institute – versus being focused on customary MEP Center duties.

Applicants may also propose approaches that involve the participation of multiple Manufacturing USA Institutes, as well as multiple MEP Centers. Any proposal, however, must include participation from at least one (1) of the five (5) Manufacturing USA Institutes identified in Sections I. and III.1. of this NOFO.

Reviewers will assess the significance of the effort being proposed in terms of amount of staff time being allocated to the embedding of personnel from MEP Centers within Manufacturing USA Institutes, in relation to the overall proposed effort.

Reviewers will also assess the quality, merit, and extent to which the following is evident when evaluating the qualifications of the applicant and the effectiveness of the proposed program management approach:

i. Proposed personnel identified from the MEP Center(s) to be embedded within the participating Manufacturing USA Institute(s) have the appropriate education, technical background, and experience assisting small U.S. manufacturers, especially in areas relating to technology acceleration and working with supply chains, to appropriately represent the involved MEP Center(s) to the involved Manufacturing USA Institute(s);

- ii. Key personnel are identified in the participating Manufacturing USA Institute(s), the participating MEP Center(s), and other participating organizations to appropriately support the activities of the proposed pilot project, including the embedding of personnel;
- iii. Proposed management structure and organizational roles are clearly defined and aligned to plan, direct, monitor, organize and oversee the implementation of the proposed approach to achieve project objectives, and the proposed organizational structure flows logically from the specified approach to the project deliverables; and
- iv. Proposed organizational structures and participating personnel from the MEP Center(s) and Manufacturing USA Institute(s) are ready to begin project operations upon receipt of funding award.
- e. Budget. (20 points; sub-criteria will receive equal weight). Reviewers will assess the suitability and focus of the applicant's budget for each year of the proposed Pilot Project, with a performance period of up to two (2) years. It is expected that the amount of project award funding that is applied to direct project activity costs, including salaries of embedded personnel, should be maximized. The reviewers will consider the extent to which the:
 - Proposed budget projections are reasonable and appropriate for the scale of effort to be undertaken by the applicant over each year of the proposed project plan; and
 - ii. The proposal's narrative explains the rationale for each of the budgeted items, including assumptions the applicant used in budgeting for the overall project, and the proposed budget is aligned to support the execution of the proposed project consistent with the objectives of the project, the objectives and expectations of this program, and to advance MEP system goals.

2. Review and Selection Process

Proposals, reports, documents and other information related to applications submitted to NIST and/or relating to financial assistance awards issued by NIST will be reviewed and considered by Federal employees, Federal agents and contractors, and/or by non-Federal personnel, all of whom enter into appropriate nondisclosure agreements covering such information.

a. Initial Administrative Review of Applications. An initial review of timely received applications will be conducted to determine eligibility, completeness, and responsiveness to this NOFO and the scope of the stated program objectives.

Applications determined to be ineligible, incomplete, and/or non-responsive may be eliminated from further review. However, NIST, in its sole discretion, may continue the review process for an application that is missing non-substantive information, the lack of which may easily be rectified or cured.

- **b.** Full Review of Eligible, Complete, and Responsive Applications. Applications that are determined to be eligible, complete, and responsive will proceed for full reviews in accordance with the review and selection processes below:
 - (1) Evaluation/Review and Ranking. All eligible, complete and responsive applications will be peer reviewed by at least three (3) independent, objective individuals with appropriate professional and technical expertise relating to the topics covered in this NOFO. Reviews will be limited to technical and cost matters, based on the evaluation criteria (see Section V.1. of this NOFO). A mix of Federal and non-Federal reviewers may be used. If non-Federal reviewers are used, the reviewers may discuss the applications with each other, but scores will be determined on an individual basis, not as a consensus. The reviewers may ask questions of some or all applicants in writing. Reviewers will assign each application a score, based on the application's responsiveness to the NOFO evaluation criteria, with a maximum score of 100.

Applicants whose applications receive an average score of 70 or higher out of 100 will be deemed finalists. If deemed desirable, all finalists will be invited to participate with reviewers (the reviewers who reviewed the applications) in separate conference calls and/or all finalists will be invited to participate in individual site visits that will be conducted by the reviewers at the applicant's location. Finalists will be reviewed and evaluated based on the same evaluation criteria, and reviewers may revise their assigned numeric scores based on the evaluation criteria as a result of the conference call and/or site visit.

A rank order will be prepared based on the average of the reviewers' scores and assigned adjectival ratings in accordance with the following scale:

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Fundable, Outstanding (90-100);
Fundable, Very Good (80-89);
Fundable (70-79); or
Unfundable (0-69).
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For decision-making purposes, applications receiving the same adjectival rating will maintain a rank order based on the average of the reviewers' scores – both within the particular adjectival ranking, as well as overall.

The Subject Matter Expert, who will be a NIST MEP federal employee, will review all of the reviewers' final scores, written technical comments and the final ranking of the proposals, and will provide a written recommendation to the Selecting Official concerning the funding of awards under this NOFO. The Subject Matter Expert may recommend to the Selecting Official that awards be made out of rank order (*i.e.*, from a lower adjectival category) based upon one or more of the selection factors described in section V.3 of this NOFO.

(2) Selection. The Selecting Official is the MEP Director or designee. The Selecting Official makes the final recommendation to the NIST Grants Officer regarding the funding of applications under this NOFO. The Selecting Official shall be provided all applications, all the scores and technical assessments of the reviewers, a written funding recommendation from the Subject Matter Expert, and all information obtained from the applicants during the evaluation, review and negotiation processes.

The Selecting Official will generally select and recommend the most meritorious applications for awards based on the technical comments and adjectival rankings, recommendation from the Subject Matter Expert, and/or one or more of the selection factors described in Section V.3. of this NOFO. The Selecting Official retains the discretion to select and recommend an application out of rank order (*i.e.*, from a lower adjectival category) based on one or more of the selection factors, or to select and recommend no applications for funding. The Selecting Official's recommendation to the Grants Officer shall set forth the bases for the selection decision.

As part of the overall review and selection process, NIST reserves the right to request that applicants provide pre-award clarifications and/or to enter into pre-award negotiations relative to programmatic, financial or other aspects of an application, such as but not limited to, the revision or removal of proposed budget costs, or the modification of proposed project activities, work plans or program goals and objectives. In this regard, NIST may request that applicants provide supplemental information required by the Agency prior to award. NIST also reserves the right to reject an application where information is uncovered that raises a reasonable doubt as to the responsibility of the applicant. The final approval of selected applications and issuance of awards will be by the NIST Grants Officer. The award decisions of the NIST Grants Officer are final.

c. Federal Awarding Agency Review of Risk Posed by Applicants. After applications are proposed for funding by the Selecting Official, the NIST Grants

Management Division (GMD) performs pre-award risk assessments in accordance with 2 C.F.R. § 200.205, which may include a review of the financial stability of an applicant, the quality of the applicant's management systems, the history of performance, and/or the applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-Federal entities.

In addition, prior to making an award where the total Federal share is expected to exceed the simplified acquisition threshold (currently \$150,000), NIST GMD will review and consider the publicly available information about that applicant in the Federal Awardee Performance and Integrity Information System (FAPIIS). An applicant may, at its option, review and comment on information about itself previously entered into FAPIIS by a Federal awarding agency. As part of its review of risk posed by applicants, NIST GMD will consider any comments made by the applicant in FAPIIS in making its determination about the applicant's integrity, business ethics, and record of performance under Federal awards. Upon completion of the pre-award risk assessment, the Grants Officer will make a responsibility determination concerning whether the applicant is qualified to receive the subject award and, if so, whether appropriate special conditions that correspond to the degree of risk posed by the applicant should be applied to an award.

- **3. Selection Factors.** The Selection Factors for this NOFO are as follows:
 - a. The availability of Federal funds;
 - b. Relevance of the proposed project to the program goals and policy objectives;
 - c. Reviewers' evaluations, including technical comments;
 - d. Ensuring appropriate geographic diversity in the award of MEP funding, as well diversity in awarding MEP funding to multiple MEP Centers and Manufacturing USA Institutes;
 - e. Ensuring appropriate diversity in targeted industry sectors and/or supply chains;
 - f. The selection factors contained in 15 U.S.C. § 278k-1(e)(3) and
 - g. Whether the project duplicates other projects funded by DoC or by other Federal agencies.
- **4. Anticipated Announcement and Award Date**. Review, selection, and award processing is expected to be completed by July 2017. The anticipated start date for awards made under this NOFO is expected to be in August, 2017.
- 5. Additional Information
- **a. Notification to Unsuccessful Applicants.** Unsuccessful applicants will be notified in writing.

b. Retention of Unsuccessful Applications. An electronic copy of each non-selected application will be retained for three (3) years for record keeping purposes. After three (3) years, it will be destroyed.

VI. Federal Award Administration Information

- **1. Federal Award Notices.** Successful applicants will receive an award package from the NIST Grants Officer.
- 2. Administrative and National Policy Requirements
- a. Uniform Administrative Requirements, Cost Principles and Audit Requirements. Through 2 C.F.R. § 1327.101, the Department of Commerce adopted Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 C.F.R. Part 200, which apply to awards in this program. Refer to http://go.usa.gov/SBYh and http://go.usa.gov/SBg4.
- b. Department of Commerce Financial Assistance Standard Terms and Conditions. The Department of Commerce will apply the Financial Assistance Standard Terms and Conditions dated December 26, 2014, accessible at http://go.usa.gov/hKbi, to this award. The Department of Commerce Financial Assistance Standard Terms and conditions may be updated by the time of award, and those in effect at the time of award will be applied to awards made under this NOFO. Refer to Section VII. of this NOFO, Federal Awarding Agency Contacts, Grant Rules and Regulations, if you seek the information at this link and it is no longer working or you need more information.
- c. Pre-Award Notification Requirements. The Department of Commerce will apply the Pre-Award Notification Requirements for Grants and Cooperative Agreements dated December 30, 2014 (79 FR 78390), accessible at http://go.usa.gov/hKkR. Refer to Section VII. of this NOFO, Federal Awarding Agency Contacts, Grant Rules and Regulations, if you seek the information at this link and it is no longer working or you need more information.
- d. Funding Availability and Limitation of Liability. Funding for the program listed in this notice is contingent upon the availability of Fiscal Year 2017 appropriations. NIST issues this notice subject to the appropriations made available under the current continuing resolution funding the Department of Commerce, the Further Continuing and Security Assistance Appropriations Act of 2017, Public Law 114-254 (December 11, 2016). NIST anticipates making awards for the program listed in this notice provided that funding for the program is continued beyond April 8, 2017, the expiration of the current continuing resolution. In no event will NIST or the

Department of Commerce be responsible for proposal preparation costs if these programs fail to receive funding or are cancelled because of agency priorities. Publication of this announcement does not oblige NIST or the Department of Commerce to award any specific project or to obligate any available funds.

e. Supporting Documentation. Following the issuance of an award, NIST may require recipients to provide copies of sub-tier agreements, including subawards and contracts over \$150,000, as well subrecipient performance monitoring plans.

3. Reporting

- a. Reporting Requirements. The following reporting requirements described in Sections A.01 Performance (Technical) Reports and B.02, Financial Reports of the Department of Commerce Financial Assistance Standard Terms and Conditions (December 26, 2014), http://go.usa.gov/hKbj apply to awards in this program (see Section VI.2.b. of this FFO):
 - (1) Financial Reports. The Recipient shall submit an SF-425, Federal Financial Report, into the MEP's Enterprise Information System (MEIS) on a semi-annual basis after the sixth and twelfth month of each operating year, unless other reporting intervals and/or due dates are identified by the NIST Grants Officer pursuant to a Special Award Condition. Reports will be due within 30 calendar days after the end of each semi-annual reporting period. The Recipient shall submit a final SF-425 within 90 days after the expiration date of the award.
 - (2) Performance (Technical) Reports. The Recipient shall submit a Technical Report (completing all required MEIS fields) on a semi-annual basis after the sixth and twelfth month of each operating year, unless other reporting intervals and/or due dates are identified by the NIST Grants Officer pursuant to a Special Award Condition. Reports are due in MEIS no later than 30 calendar days following the end of each reporting period. The Recipient shall submit a final Technical/Quarterly report within 90 days after the expiration date of the award, and publication citation information as well as links to publicly available data shall be submitted as soon as they become available.

If a Recipient's Data Management Plan has changed since their last submission of a technical report, the Recipient must include their revised plan in the next technical report following the revision to the plan. The revised plan must include all of the requirements described in Section IV.2.a.(14). of this NOFO.

Technical/Quarterly Report details are accessible on the MEIS website (https://meis.nist.gov/). Technical progress reports shall contain information as prescribed in the NIST MEP Reporting Guidelines (OMB Control Number 0693-

- 0032). For further information regarding the NIST MEP Reporting Process, you may download a copy of the NIST MEP Reporting Guidelines at http://nist.gov/mep.
- (3) Patent and Property Reports. From time to time, and in accordance with the Uniform Administrative Requirements set forth in 2 C.F.R. part 200 and in accordance with other terms and conditions governing the award, the recipient may be required to submit property and patent reports.
- (4) Recipient Integrity and Performance Matters. In accordance with section 872 of Public Law 110-417 (as amended; see 41 U.S.C. 2313), if the total value of a recipient's currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of an award made under this NOFO, then the recipient shall be subject to the requirements specified in Appendix XII to 2 C.F.R. Part 200, http://go.usa.gov/cTBwC, for maintaining the currency of information reported to SAM that is made available in FAPIIS about certain civil, criminal, or administrative proceedings involving the recipient.
- b. Audit Requirements. 2 C.F.R. 200 Subpart F, adopted by the Department of Commerce through 2 C.F.R. § 1327.101 requires any non-Federal entity (including non-profit institutions of higher education and other non-profit organizations) that expends Federal awards of \$750,000 or more in the recipient's fiscal year to conduct a single or program-specific audit in accordance with the requirements set out in the Subpart. Applicants are reminded that NIST, the Department of Commerce Office of Inspector General, or another authorized Federal agency may conduct an audit of an award at any time.
- c. Federal Funding Accountability and Transparency Act of 2006. In accordance with 2 C.F.R. Part 170, all recipients of a Federal award made on or after October 1, 2010, are required to comply with reporting requirements under the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. No. 109-282). In general, all recipients are responsible for reporting sub-awards of \$25,000 or more. In addition, recipients that meet certain criteria are responsible for reporting executive compensation. Applicants must ensure they have the necessary processes and systems in place to comply with the reporting requirements should they receive funding. Also see the Federal Register notice published September 14, 2010, at 75 FR 55663 available here http://go.usa.gov/hKnQ.

VII. Federal Awarding Agency Contacts

Questions should be directed to the following contact persons:

Subject Area	Point of Contact
Administrative, budget, cost-sharing,	Michael Simpson
eligibility questions and other	Phone: (301) 975-6147
programmatic questions.	Fax: (301) 963-6556
	E-mail: mepnofo@nist.gov
Technical Assistance with Grants.gov	Christopher Hunton
Submissions	Phone: (301) 975-5718
	Fax: (301) 975-8884
	E-mail: grants@nist.gov
	Grants.gov
	Phone: (800) 518-4726
	E-mail: support@grants.gov
Grant Rules and Regulations	Gilbert Castillo
	Phone: (301) 975-3726
	E-mail: gilbert.castillo@nist.gov

VIII. Other Information

1. Protected and Proprietary Information. The applicant acknowledges and understands that information and data contained in applications for financial assistance, as well as information and data contained in financial, performance and other reports submitted by applicants, may be used by the Department of Commerce in conducting reviews and evaluations of its financial assistance programs. For this purpose, applicant information and data may be accessed, reviewed and evaluated by Department of Commerce employees, other Federal employees, Federal agents and contractors, and/or by non-Federal personnel, all of whom enter into appropriate conflicts of interest and nondisclosure agreements covering the use of such information. As may be provided in the terms and conditions of a specific financial assistance award, applicants are expected to support program reviews and evaluations by submitting required financial and performance information and data in an accurate and timely manner, and by cooperating with Department of Commerce and external program evaluators. In accordance with 2 C.F.R. § 200.303(e), applicants are reminded that they must take reasonable measures to safequard protected personally identifiable information and other confidential or sensitive personal or business information created or obtained in connection with a Department of Commerce financial assistance award.

In addition, Department of Commerce regulations implementing the Freedom of Information Act (FOIA), 5 U.S.C. Sec. 552, are found at 15 C.F.R. Part 4, Public Information. These regulations set forth rules for the Department regarding making requested materials, information, and records publicly available under the FOIA. Applications submitted in response to this NOFO may be subject to requests for release under the Act. In the event that an application contains information or data that the applicant deems to be confidential commercial information that should be exempt from disclosure under FOIA, that information should be identified, bracketed, and marked as Privileged, Confidential, Commercial or Financial Information. In accordance with 15 CFR § 4.9, the Department of Commerce will protect from disclosure confidential business information contained in financial assistance applications and other documentation provided by applicants to the extent permitted by law.

- 2. Webinar Information Session: NIST MEP will hold one or more webinar information sessions for organizations that are considering applying for or participating as a team member in this funding opportunity. The webinar(s) will provide general information regarding MEP and this funding opportunity and offer general guidance on preparing proposals. NIST MEP staff will be available at the webinar to answer general questions. During the webinar(s), detailed proprietary or technical discussions about specific project ideas will not be permitted. Also, NIST MEP staff will not critique or provide feedback on any specific project ideas during the webinar(s) or at any time before submission of a proposal to MEP. However, NIST MEP staff will provide information about potential participants, eligibility, evaluation criteria and selection factors, the selection process, program priorities and objectives, and the general characteristics of a competitive proposal during this webinar. It is expected that the webinar(s) will be held approximately within thirty (30) business days after posting of this NOFO. The exact date and time of the webinar(s) will be posted on the NIST MEP website at www.nist.gov/mep/embedding-mep-manufacturing-usa-institutes-pilot-projectsround-three. The webinar(s) will be recorded, and a link to the recording(s) will be posted on the NIST MEP website. In addition, the webinar presentation(s) will be available after the webinar(s) on the NIST MEP website. Organizations wishing to participate in the webinar(s) must register in advance by contacting NIST MEP by email at mepnofo@nist.gov. Participation in the webinar(s) is not required in order for an organization to submit an application pursuant to this NOFO.
- 3. Frequently Asked Questions (FAQs). Questions from applicants pertaining to NOFO eligibility, cost sharing requirements, evaluation criteria and selection factors, selection process, and the general characteristics of a competitive proposal will not be considered on an informal basis. Applicants must submit all such questions in writing to mepnofo@nist.gov. Answers to such written questions submitted to NIST

MEP may be made available to the public as part of an FAQ document, which will be periodically updated on the MEP website at www.nist.gov/mep/embedding-mep-manufacturing-usa-institutes-pilot-projects-round-three.