

NOTICE OF FUNDING OPPORTUNITY (NOFO) Enabling Federal Technology Transfer Program (EFTT)

EXECUTIVE SUMMARY

- **Federal Agency Name:** National Institute of Standards and Technology (NIST), United States Department of Commerce (DoC)
- **Funding Opportunity Title:** Enabling Federal Technology Transfer Program (EFTT)
- **Announcement Type:** Initial
- **Funding Opportunity Number:** 2019-NIST-TPO-02
- **Assistance Listing (CFDA Number):** 11.620: Science, Technology, Business and/or Education Outreach
- **Dates:** Applications must be received at [Grants.gov](https://www.grants.gov) no later than 11:59 p.m. Eastern Time, Friday, August 16, 2019. Applications received after this deadline will not be reviewed or considered. Paper applications will not be accepted.

Applicants should be aware, and factor in their application submission planning, that the Grants.gov system is expected to be closed for routine maintenance at the following times. Applications cannot be submitted when Grants.gov is closed:

From 12:01 A.M. Eastern Time Saturday	To 6:00 A.M. Eastern Time Monday
June 15, 2019	June 17, 2019
July 20, 2019	July 22, 2019

NIST expects to complete its review, selection of successful applicants, and award processing by October 2019. NIST expects the earliest start date for awards under this NOFO to be October 2019.

Applicants are strongly urged to read Section IV.2.b. Attachment of Required Documents of this NOFO with great attention. Applicants should carefully follow the instructions and recommendations regarding attachments and use the [Download Submitted Forms and Applications](#) feature on Grants.gov 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.3.a. of this NOFO.

When developing the submission timeline, please keep in mind that: (1) all applicants are required to have current registrations in the electronic System for Award Management ([SAM.gov](https://sam.gov)) and Grants.gov; (2) the free annual registration process in the SAM.gov (see Section IV.3. and Section IV.7.a.(1).(b) of this NOFO) generally takes between three and five business days but can take more than two weeks; and (3) applicants will receive e-mail notifications over a period of up to two business days as the application moves through intermediate systems before the applicant learns via a validation or rejection notification whether NIST has received the application. (See [Grants.gov](https://grants.gov) for full information on application and notification through Grants.gov). 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.

- **Application Submission Address:** Applications must be submitted using Grants.gov.
- **Funding Opportunity Description:** NIST, on behalf of the Federal Laboratory Consortium (FLC) Executive Board, is soliciting applications for a cooperative agreement to enable Federal technology transfer. Under the Enabling Federal Technology Transfer (EFTT) Program, members of the FLC's Executive Board, including NIST, will collaborate with academia and industry on the development of outreach and educational programs, tools, and best practices that will enhance the ability of the academic and private sectors to engage with Federal Laboratories in technology transfer and research commercialization. Specifically, the awardee will collaborate with the Federal Laboratory Consortium's Executive Board, including NIST, in the areas of technology transfer and research commercialization by: developing the necessary tools and services to promote the utilization of Federal intellectual property, user facilities, and other R&D resources by non-Federal partners; creating a suitable education and training infrastructure in technology transfer for the relevant stakeholders; and engaging the industry, academic, and state and local government communities to facilitate access to Federal R&D collaborations and Federal technology transfer opportunities on both a regional and a national level.
- **Anticipated Amounts:** NIST anticipates approximately \$3,200,000 per year may be made available to award approximately one (1) multi-year award in fiscal year 2020 (FY20) to an eligible applicant. This award would be for up to five (5) years. NIST anticipates a total of approximately \$16,000,000 may be available over the five (5) year period.
- **Funding Instrument:** Cooperative Agreement

- **Eligibility:** Eligibility for the program listed in this NOFO is open to all non-Federal entities organized and operated in the United States and its territories. Eligible applicants include accredited institutions of higher education; non-profit organizations; for-profit organizations incorporated in the United States; and state, local, territorial, and Indian tribal governments. Please note that individuals and unincorporated sole proprietors are not considered “non-Federal entities” and are not eligible to apply under this NOFO.

NIST will only consider one application per applicant; however, an applicant entity may be proposed as a sub-recipient, contractor, or unfunded collaborator within applications submitted by other entities.

- **Cost Sharing Requirements:** Non-Federal cost share is not required for awards issued pursuant to this NOFO.
- **Public Website, Frequently Asked Questions (FAQS) and Webinar**

NIST TPO has a public website, <https://www.nist.gov/tpo/EFTT>, that provides information pertaining to this Funding Opportunity¹. NIST plans to maintain and update a “Frequently Asked Questions” section and/or other resource materials on the website as needed to provide additional guidance and clarifying information that may arise related to this Funding Opportunity. Any amendments to this NOFO will be announced through Grants.gov.

Applicants must submit all questions pertaining to this funding opportunity in writing to Courtney.Silverthorn@nist.gov with ‘2019-NIST-TPO-02’ in the subject line. Questions submitted to NIST may be posted on <https://www.nist.gov/tpo/EFTT>. Alternatively, applicants may ask questions during the informational public webinar as described in the next paragraph.

NIST will host a webinar to provide general information regarding this NOFO, offer general guidance on preparing applications, and answer questions related to this funding opportunity. Proprietary technical discussions about specific project ideas will not be permitted, and NIST staff will not critique or provide feedback on specific project ideas while they are being developed by an applicant or brought forth during the webinar or at any time before the deadline for all applications. However, general questions about the EFTT program, eligibility requirements, evaluation and selection criteria, selection process, and the characteristics of a competitive application can be addressed at the webinar and by e-mail to Courtney.Silverthorn@nist.gov as described in the previous paragraph. There is no cost to attend the webinar, but participants must register in advance. Participation in the webinar is not required and will not be considered

¹ Refer to Section VII. of this NOFO, Federal Awarding Agency Contacts, Programmatic and Technical Questions, if more information is needed.

in the application review and selection process. Additional information on the EFTT program and webinar is available at <https://www.nist.gov/tpo/EFTT>.

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FULL ANNOUNCEMENT TEXT

I. Program Description

The statutory authority for Enabling Federal Technology Transfer Program is 15 U.S.C. 15 U.S.C. § 3706 and § 3710(e)(7).

1) Background Information

The Federal Government invests approximately \$150B in research and development (R&D) each year. Of this, approximately \$50B is spent at nearly 300 Federal laboratories² across the country and a roughly equal amount is spent at public and private universities (typically through research grants). Universities and the Federal government both require private sector partners for the results of this research to be fully utilized and made available to the public through new products and services.

Technology transfer (T2) includes the process by which (a) non-Federal partners enter into formal collaborations with Federal laboratories to gain access to unique capabilities and facilities and/or to advance the development of a technology, or (b) the results of Federal research efforts are transferred to a private sector entity for commercialization and ultimately, public use. Both universities and Federal laboratories have T2 offices staffed with professionals who complete the T2 activities (i.e. patenting, licensing, establishing formal research collaborations,

² “Federal laboratory’ means any laboratory, any federally funded research and development center, or any center established under section 3705 or 3707 of this title that is owned, leased, or otherwise used by a Federal agency and funded by the Federal Government, whether operated by the Government or by a contractor.” 15 U.S.C. § 3703(4).

etc.), in ways that support each university's or agency's mission. On the university side, the professional organization for T2 is the Association of University Technology Managers (AUTM)³. On the Federal side, the professional organization for T2 is the Federal Laboratory Consortium for Technology Transfer (FLC).⁴

Both AUTM and the FLC were originally self-organized bodies created in the mid-1970s. The FLC was later formally chartered by the Federal Technology Transfer Act of 1986⁵ to strengthen and promote Federal T2 nationwide. As a quasi-governmental organization, the FLC was envisioned by the Congress as a body that cooperated with both Government-Owned, Government-Operated (GOGO) and Government-Owned, Contractor-Operated (GOCO) Federal laboratories and the private sector to facilitate communication and coordination, educate the T2 community, and serve as a clearinghouse for technology requests, among other activities. Because the ultimate goal of Federal technology transfer is to benefit the public through increased access to unique Federal resources and increased commercialization of Federal technologies, many tools and services of the FLC are focused on enabling the public to engage with FLC members⁶ and access information about Federal intellectual property and facilities. FLC member laboratories work directly with non-Federal parties as well as engaging in T2 activities through Partnership Intermediary Agreement (PIA) partners⁷.

The activities of the FLC, and NIST's role as the "host agency" for the FLC, are outlined in 15 U.S.C. § 3710(e). The specific goals and objectives of the FLC are determined by a volunteer Executive Board, consisting of both appointed and elected members from GOGO and GOCO Federal labs. The Executive Board guides the direction and provides input on the specific activities of the FLC, subject to the FLC Bylaws⁸, which define the operations and duties of the Executive Board, rules and procedures for elections and Executive Board meetings, and other organizational governance. NIST holds one permanent seat on the FLC Executive Board as the Host Agency Representative, and as a Federal laboratory member of the FLC, has frequently held additional elected and appointed roles on the FLC Executive Board.

³ <http://autm.net>

⁴ <http://www.Federallabs.org>

⁵ Public Law 99-502 (Oct. 20, 1986); see 15 U.S.C. § 3710(e).

⁶ FLC membership consists of all Federal Laboratories with 200 or more full-time equivalent scientific, engineering and related technical positions, whether operated by the Federal Government (GOGO) or a contractor (GOCO); any other Federal Laboratories that choose to join the FLC; and the parent agencies of the member laboratories.

⁷ A partnership intermediary is "an agency of a State or local government, or a nonprofit entity owned in whole or in part by, chartered by, funded in whole or in part by, or operated in whole or in part by or on behalf of a State or local government, that assists, counsels, advises, evaluates, or otherwise cooperates with small business firms ... or educational institutions ... that need or can make demonstrably productive use of technology-related assistance from a Federal laboratory". 15 U.S.C. § 3715(c).

⁸ <https://www.federallabs.org/flc-policies/flc-bylaws>

2) Enabling Federal Technology Transfer Program (EFTT)

NIST, on behalf of the Federal Laboratory Consortium (FLC) Executive Board, is soliciting applications for a cooperative agreement to enable Federal Technology Transfer (the EFTT Program) in which members of the FLC's Executive Board, including NIST, collaborate with academia and industry on the development of outreach and educational programs, tools, and best practices that will enhance the ability of the private sector to engage with Federal Laboratories in T2 and research commercialization. The goals of the EFTT Program encompass three primary areas:

- (1) development of the necessary tools and services to promote the utilization of Federal intellectual property, user facilities, and other R&D resources by the non-Federal sector;
- (2) creation and implementation of a suitable education and training infrastructure in T2 for the relevant stakeholders; and
- (3) engagement with FLC stakeholder communities⁹ to facilitate access to Federal R&D collaborations and Federal T2 opportunities.

Examples of activities that may occur under the EFTT Program to support the program goals may include, but are not limited to:

- (1) Enable the implementation of the long-term vision and mission of the FLC through direct collaboration with the FLC Executive Board, including NIST.
- (2) Develop and implement online resources that stakeholders may access to search for available technologies, user facilities, and other data that will enable them to engage with Federal labs, including a centralized FLC website.
- (3) Develop and implement resources that will enable Federal T2 professionals to improve their laboratory's or agency's T2 activities and engagements with stakeholders.
- (4) Develop and implement education, training, and workforce development courses and materials, to enhance T2 capabilities both within agencies and for the public.
- (5) Conduct outreach and engagement with stakeholder groups through individual meetings, showcases, conference attendance at other stakeholder groups' annual meetings (for example, the Association of University Technology Managers, the Licensing Executives Society, etc. or similar), and other in-person or electronic contacts.

⁹ The FLC stakeholder communities include public and private academic institutions, for-profit businesses, non-profit organizations, state and local governments, economic development organizations, PIA partners, and professional membership bodies that represent the aforementioned groups.

(6) Increase the recognition of Federal T2 activities and successful collaborations with the private sector through internal awards, success stories and case studies, technical or trade publications, and creation/distribution of other materials.

(7) Facilitate the sharing of best practices, both within the Federal T2 community and, where appropriate, with the industry and academic communities, through in-person and/or electronic means, including at the Annual FLC Meeting and regional FLC meetings.

(8) Develop public reports¹⁰ and other printed and/or digital materials about the activities and impacts of the FLC.

Under the EFTT Program, it is envisioned that the awardee will collaborate closely with the members of the FLC Executive Board, including NIST, through a national committee structure focused on achieving broad FLC goals and a regional network structure focused on enabling non-Federal stakeholders to engage with specific Federal laboratories or economic development clusters¹¹. As part of the EFTT program, NIST and other members of the FLC Executive Board will collaborate with the awardee to plan and execute the FLC Annual Meeting and up to six annual FLC regional meetings for the FLC and other stakeholder communities, to enable the sharing of technology transfer best practices as described in item 7 above. Awardees will be required to send sufficient personnel to assist with the successful execution of the FLC annual and regional meetings. These meetings should be included in project timelines and budgets. Costs for attending this meeting and any other travel must be included in the budget form SF-424 (R&R) (see Section IV.2.a.(1) of this NOFO) and described in the budget narrative (see Section IV.2.a.(8)(D) of this NOFO).

NIST therefore invites applications from eligible applicants to facilitate the promotion of Federal T2 and engagement with non-Federal stakeholders. The awardee will work in conjunction with the FLC Executive Board, including NIST, to develop and implement specific programmatic activities that achieve the aims of this NOFO.

Wherever possible, the results of the program should generally be made available to the public. The Department of Commerce Financial Assistance Standard Terms and Conditions dated April 30, 2019, accessible [here](#), will govern any award made under this NOFO. Pursuant to 2 C.F.R. § 200.315(b), NIST will reserve a royalty-free, nonexclusive and irrevocable right to reproduce,

¹⁰ To include assistance in preparing required annual reporting on FLC activities as listed in 15 U.S.C. § 3710(e)(6).

¹¹ Clusters are industry-led geographic concentrations of companies in related businesses, specialized suppliers, service providers, and associated entities that are present in geographic area. Such clusters develop because commercial entities increase their overall productivity with symbiotic relationships and economies of scale, and thus are more able to compete nationally and internationally. See Porter, Michael E. "[Reshaping Regional Economic Development: Clusters and Regional Strategy.](#)"

publish, or otherwise use the materials for Federal purposes, and to authorize others to do so.

Federal Award

NIST, as the Host Agency for the Federal Laboratory Consortium, is seeking applications from eligible applicants to develop and implement the tools, programs, and activities necessary to promote Federal technologies and related resources to the private sector community, educate T2 professionals, and facilitate access to Federal technologies and user facilities. Research proposals must support the goals and objectives of the FLC¹² as well as align with existing NIST TPO programs and goals¹³, to the extent that they also reflect the aims of the FLC through their role as the Host Agency.

II. Federal Award Information

1. Funding Instrument

The funding instrument that will be used is a cooperative agreement. The nature of NIST's "substantial involvement" will generally include collaboration with the recipient organization in developing and implementing the approved scope of work.

2. Funding Availability

In FY2020, NIST anticipates making one (1) award in the range of approximately \$3,200,000 per year for up to five years, consistent with the multi-year funding policy described in Section II.3. of this NOFO. Proposed funding levels must be consistent with project scope. NIST will consider applications with lower funding amounts.

¹² Goals and objectives of the FLC for 2015-2019 are outlined in the FLC Strategic Plan; <https://www.federallabs.org/flc-policies/flc-strategic-plan>. Strategic planning efforts are currently underway for 2020-2024 but will continue to align with the specific goals of this cooperative agreement as outlined in Section I.2. of this NOFO.

¹³ TPO builds and sustains technology partnering activities between the NIST laboratories and industries in the United States, local, state and federal agencies, and the general public. TPO, in accordance with its mission, enables technology transfer to promote U.S. competitiveness, both for NIST and as across the Federal government for the Department of Commerce. <https://www.nist.gov/tpo/about-technology-partnerships-office>

3. Multi-Year Funding Policy

When an application for a multi-year award is approved, funding will usually be provided for only the first year of the project. If a project is selected for funding, NIST has no obligation to provide any additional funding in connection with that award. Continuation of an award to increase funding or extend the period of performance is at the sole discretion of NIST. Continued funding will be contingent upon satisfactory performance, continued relevance to the mission and priorities of NIST, and the availability of funds.

III. Eligibility Information

1. Eligible Applicants

Eligibility for all programs listed in this NOFO is open to all non-Federal entities. Eligible applicants include institutions of higher education, non-profit organizations, for-profit organizations, state and local governments, Indian tribes, and hospitals. Please note that individuals and unincorporated sole proprietors are not considered “non-Federal entities” and are not eligible to apply under this NOFO.

NIST will only consider one application per applicant; however, an applicant entity may be proposed as a subrecipient, contractor, or unfunded collaborator within applications submitted by other entities.

2. Cost Sharing or Matching

Matching funds are not required.

IV. Application and Submission Information

1. Address to Request Application Package

The application package is available at [Grants.gov](https://www.grants.gov) under Funding Opportunity Number 2019-NIST-TPO-02.

2. Content and Form of Application Submission

a. Required Forms and Documents. The Application must contain the following:

(1) SF-424 (R&R), Application for Federal Assistance. The SF-424 (R&R) must be signed by an authorized representative of the applicant organization.

For SF-424 (R&R), Items 5, 14, and 19, use the Zip Code + 4 format (##### - ####) when addresses are called for.

For SF-424 (R&R), Item 17, the list of certifications and assurances is contained in the SF-424B (item (3) below).

SF-424 (R&R), Item 18. If the SF-LLL, Disclosure of Lobbying Activities form (item (6) below) is applicable, attach it to field 18.

Instructions for filling in the SF-424 (R&R) can be found in the 2019-NIST-TPO-02 Application Instructions document found on Grants.gov, as well as at [Instructions SF-424 \(R&R\), Application for Federal Assistance](#).

- (2) Research & Related Budget (Total Fed + Non-Fed).** The budget should reflect anticipated expenses for the full term of the project, considering all potential cost increases, including cost of living adjustments.

The budget should be detailed in these categories:

- A. Senior/Key Person;
- B. Other Personnel;
- C. Equipment Description;
- D. Travel;
- E. Participant/Trainee Support Costs;
- F. Other Direct Costs;
- G. Direct Costs (automatically generated);
- H. Indirect Costs;
- I. Total Direct and Indirect Costs (automatically generated);
- J. Fee (not relevant to this competition);
- K. Total Costs and Fee (automatically generated);
- L. Budget Narrative and Justification document (item (8) below) should be attached to field L.

A separate detailed R&R Budget must be completed for each budget period during the proposed award (e.g. annual basis). To add additional budget periods (e.g. year 2), click “Add Period” embedded at the end of the form. Instructions for completing the Research & Related Budget (Total Fed + Non-Fed) form can be found in the 2019-NIST-TPO-02 Application Instructions document on Grants.gov, as well as at [Instructions Research & Related Budget \(Total Fed + Non-Fed\) – Budget](#).

- (3) SF-424B, Assurances – Non-Construction Programs.** The SF-424B is required for all applicants that have not updated their System for Award Management (SAM.gov) entity registration since February 2, 2019 to include the Federal financial assistance certifications and representations. If an applicant has updated their SAM.gov entity registration since

February 2, 2019 to include the certifications and representations, then the SF-424B is not required.

(4) CD-511, Certification Regarding Lobbying. Enter “2019-NIST-TPO-02” in the Award Number field. Enter the title of the application, or an abbreviation of that title, in the Project Name field.

(5) Research and Related Other Project Information. Answer the highlighted questions and use this form to attach the Project Narrative (item (7) below), the Indirect Cost Rate Agreement (item (9) below), and the Data Management Plan (item (10) below). Instructions for completing the Research and Related Other Project Information can be found in the 2019-NIST-TPO-02 Application Instructions document on Grants.gov, as well as at [Instructions Research and Related Other Project Information](#). Please note that the Project Summary/Abstract field, which has a place to attach an optional Project Summary/Abstract, is not relevant to this competition.

(6) SF-LLL, Disclosure of Lobbying Activities (if applicable).

(7) Project Narrative.

The Project Narrative is a word-processed document of no more than twenty-five (25) pages (double-spaced between lines), which is responsive to the program description (see Section I. of this NOFO) and the evaluation criteria (see Section V.1. of this NOFO). The required format is:

- a. Executive Summary.** An executive summary of the proposed approach, consistent with the evaluation criteria (see Section V.1. of this NOFO). The executive summary should include information indicating how each evaluation criterion and its sub-factors are addressed. A table can be helpful in providing this information. The executive summary should not exceed two (2) pages.
- b. Project Approach.** A description of the applicant’s approach to clearly address the program goals (see Section I. of this NOFO). This section should address the Problems, Solutions, and Technical Approach and Success Metrics evaluation criterion (see Sections V.1.a. and V.1.d. of this NOFO).
- c. Statement of Work.** A complete statement of work covering all aspects of the project, including a schedule of measurable events and milestones as well as measurable performance objectives that can be used to determine the success of the project. This section should address the Statement of Work and Potential Impact of the Results evaluation criterion (see Section V.1.b. of this NOFO).

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- d. **Qualifications.** A description of the qualifications of the key personnel, the time commitments of the key personnel, and how the project staff qualifications will enable them to conduct the project work. This section should address the Qualifications and Experience of Key Personnel and Resources Availability evaluation criterion (see Section V.1.c. of this NOFO).
- e. **Resumes of Key Personnel** must be included. Resumes are not included in the page count of the Project Narrative. Resumes included as part of the application must be a maximum of two pages each. Additional pages beyond the two pages per resume will not be considered during the evaluation of the application.

(8) Budget Narrative and Justification.

This section will be evaluated in accordance with the Budget Narrative evaluation criteria (see Section V.1.e. of this NOFO). It will also be reviewed to determine if all costs are reasonable, allocable, and allowable under 2 C.F.R. Part 200 Subpart E, Cost Principles.

There is no set format for the Budget Narrative and Justification; however, further explanation must be provided for the specific cost categories and line items identified in the [Instructions Research & Related Budget \(Total Fed + Non-Fed\) – Budget](#), as well as any other information you deem necessary for NIST’s consideration. The Budget Narrative and Justification must be attached to the Research & Related Budget (Total Fed + Non-Fed).

The written justification should include the necessity and the basis for the cost. Proposed funding levels must be consistent with the project scope, and only allowable costs should be included in the budget. Information on cost allowability is available in the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 C.F.R. Part 200 (<http://go.usa.gov/SBYh>), which apply to awards in this program.

Information needed for each category is as follows:

A. Senior/Key Person – At a minimum, the budget justification should include the following: name, job title, commitment of effort on the proposed project in terms of average number of hours per week or percentage of time, salary rate, total direct charges on the proposed project, description of the role of the individual on the proposed project and the work to be performed.

Fringe benefits should be identified separately from salaries and wages and based on rates determined by organizational policy. The items included in the fringe benefit rate (e.g. health insurance, parking, etc.) should not be charged under another cost category.

B. Other Personnel - Data is requested at the project role level, and not at the individual level for Other Personnel. The budget justification should include the following: job title, commitment of effort on the proposed project in terms of average number of hours per week or percentage of time, salary rate, total direct charges on the proposed project, description of the role of the position on the proposed project and the work to be performed.

Fringe benefits should be identified separately from salaries and wages and based on rates determined by organizational policy. The items included in the fringe benefit rate (e.g. health insurance, parking, etc.) should not be charged under another cost category.

C. Equipment Description – Equipment is defined as an item of property that has an acquisition cost of \$5,000 or more (unless the organization has established lower levels) and an expected service life of more than one year. The budget justification should list each piece of equipment, the cost, and a description of how it will be used and why it is necessary to the successful completion of the proposed project. Please note that any general use equipment (computers, etc.) charged directly to the award should be allocated to the award according to expected usage on the project. Applicants should provide at least two (2) quotes, if available, for equipment costing \$25,000 or more. If two (2) quotes are not available, please provide a statement as to why two (2) quotes are not available.

Any items that do not meet the threshold for equipment can be included under the Materials and Supplies line item in Section F, Other Direct Costs.

D. Travel - For all travel costs, required by the recipient to complete the project, including attendance at any relevant conferences, the budget justification for travel should include the following: destination; names or number of people traveling; dates and/or duration; mode of transportation, lodging and subsistence rates; and description of how the travel is directly related to the proposed project. For travel that is yet to be determined, please provide best estimates based on prior experience. If a destination is not known, an approximate amount may be used with the assumptions given for the location of the meeting.

As is described in Section I.2. of this NOFO, the awardee will be required to send sufficient personnel to assist with the successful execution of the

FLC annual and regional meetings. The Annual meeting is typically three days in length and is typically held in April; regional meetings are typically 1-2 days in length and are typically held in the Summer and Fall. Exact dates and location of future meetings have not been determined yet; all meetings will be held in the continental United States. Applicants should factor in the cost for attending these events in their budget narrative and Research & Related Budget (Total Fed + Non-Fed) form.

E. Participant/Trainee Support Costs – Participant support costs are stipends, subsistence allowances, travel, and registration fees paid to or on behalf of participants or trainees, who are not employees of your organization, for conferences or training projects. The budget justification should indicate the names or number of participants or trainees, a description and calculation of costs per person, a description and date of the event, and a description of why the cost is necessary for the successful completion of the proposed project.

F. Other Direct Costs – For costs that do not easily fit into the other cost categories, please list the cost, and the breakdown of the total costs by quantity or unit of cost. Include the necessity of the cost for the completion of the proposed project. Only allowable costs can be charged to the award.

Each subaward or contractual cost should be treated as a separate item in the Other Direct Costs category. Describe the services to be provided and the necessity of the subaward or contract to the successful performance of the proposed project. Contracts are for obtaining goods and services. Subawardees perform part of the project scope of work. For each subaward, applicants must provide budget detail justifying the cost of the work performed on the project.

H. Indirect Costs – Commonly referred to as Facilities & Administrative Costs, Indirect Costs are defined as costs incurred by the applicant organization that cannot otherwise be directly assigned or attributed to a specific project. For more details, see Section IV.2.a.(9) of this NOFO.

(9) 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, dated April 30, 2019.](#)

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 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.

- (10) Data Management Plan.** Consistent with NIST Policy 5700.00¹⁴, *Managing Public Access to Results of Federally Funded Research*, and NIST Order 5701.00¹⁵, *Managing Public Access to Results of Federally Funded Research*, applicants must 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 Foundation¹⁶ or the National Institutes of Health¹⁷).

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/or 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.

The inclusion of the DMP will be considered as part of the administrative review (see Section V.3.a. of this NOFO); however, the DMP will not be evaluated against any evaluation criteria.

¹⁴ <https://www.nist.gov/sites/default/files/documents/2017/05/09/Final-P-5700.pdf>

¹⁵ https://www.nist.gov/sites/default/files/documents/2017/05/09/Final-O-5701_0.pdf

¹⁶ <http://www.nsf.gov/bfa/dias/policy/dmp.jsp>

¹⁷ http://grants.nih.gov/grants/policy/data_sharing/data_sharing_guidance.htm

- (11) Subaward Budget Form.** The Research & Related Subaward Budget Attachment Form is required if sub-recipients and contractors are included in the application budget.

Instructions for completing subaward budget forms are available by visiting the [R & R Family section](#) of the Grants.gov Forms Repository and scrolling down to the R & R Subaward Budget Attachment(s) Form and selecting “Instructions.”

- (12) Current and Pending Support Form.** Any application that includes investigators, researchers, and key personnel must identify all sources of current and potential funding, including this proposal. Any current project support (e.g. Federal, state, local, public or private foundations, etc.) must be listed on this form. The proposed project and all other projects or activities requiring a portion of time of the Principal Investigator (PI), co-PI, and key personnel must be included, even if no salary support is received. The total award amount for the entire award period covered, including indirect costs, must be shown as well as the number of person-months per year to be devoted to the project, regardless of the source of support. Similar information must be provided for all proposals already submitted or that are being submitted concurrently to other potential funders.

Applicants must complete the Current and Pending Support Form, using multiple forms as necessary to account for all activity for each individual identified in the PI, co-PI and key personnel roles. A separate form should be used for each identified individual.

Applicants must download the Current and Pending Support Form from the NIST website at <https://www.nist.gov/oaam/grants-management-division/current-and-pending-support> and reference the guidance provided as it contains information to assist with accurately completing the form.

b. Attachment of Required Documents

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.

Item IV.2.a.(6), the SF-LLL, Disclosure of Lobbying Activities form, is an optional application form which is part of the standard application package in Grants.gov. If item IV.2.a.(6), the SF-LLL, Disclosure of Lobbying Activities form is applicable to this proposal, attach it to field 18 of the SF-424 (R&R), Application for Federal Assistance.

Item IV.2.a.(7), the Project Narrative, should be attached to field 8 (Project

Narrative) of the Research and Related Other Project Information form by clicking on “Add Attachment”.

Item IV.2.a.(8), the Budget Narrative and Justification, should be attached to field L (Budget Justification) of the Research and Related Budget (Total Fed + Total Non-Fed) form by clicking on “Add Attachment”.

Items IV.2.a.(9), the Indirect Cost Rate Agreement, IV.2.a.(10), the Data Management Plan, and IV.2.a.(12), the Current and Pending Support Form must be completed and attached by clicking on “Add Attachments” found in item 12 (Other Attachments) of the Research and Related Other Project Information form.

Item IV.2.a.(11), the Subaward Budget Form(s), if applicable to the submission, should be attached to the Research & Related Subaward Budget (Total Fed + Non-Fed) Attachment(s) Form in the application package.

Following these directions will create zip files which permit transmittal of the documents electronically via Grants.gov.

Applicants should carefully follow specific Grants.gov instructions at [Grants.gov](https://www.grants.gov) to ensure the attachments will be accepted by the Grants.gov system. A receipt from Grants.gov indicates only that an application was transferred to a system. It does not provide details concerning whether all attachments (or how many attachments) transferred successfully. 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.

Applicants are strongly advised to use Grants.gov’s “[Download Submitted Forms and Applications](#)” option to check that their application’s required attachments were contained in their submission. If any, or all, of the required attachments are absent from the submission, resubmit the application, and verify the submission of the required attachments.

If assistance is needed, please visit the [Grants.gov Online Help](#) page or contact the Grants.gov Help Desk immediately. If calling from within the United States or from a U.S. territory, please call 800-518-4726. If calling from a place outside the United States or a U.S. territory, please call 606-545-5035. E-mails should be addressed to support@grants.gov. 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.

Applicants may use the [Track My Application](#) page at Grants.gov to view the status of their submitted applications. 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) Paper, Email, and Facsimile (fax) Submissions.** Will not be accepted.
- (2) Figures, Graphs, Images, and Pictures.** Should be of a size that is easily readable or viewable and may be landscape orientation. Any figures, graphs, images, or pictures will count toward the page limits for the Project Narrative.
- (3) Font.** Easy to read font (10-point minimum). Smaller type may be used in figures and tables but must be clearly legible.
- (4) Page Limit.** The Project Narrative is limited to twenty-five (25) pages double spaced, noting the limit of two (2) pages for the Executive Summary. The Budget Narrative and resumes of key personnel are not included in the page count of the Project Narrative. If resumes are included, resumes must be a maximum of two (2) pages each.
- (5) Page Limit Exclusions:**
 - SF-424 (R&R), Application for Federal Assistance;
 - SF-424B, Assurances – Non-Construction Programs;
 - CD-511, Certification Regarding Lobbying;
 - SF-LLL, Disclosure of Lobbying Activities;
 - Budget Narrative;
 - Indirect Cost Rate Agreement;
 - Data Management Plan;
 - Subaward Budget Form;
 - Current and Pending Support Form
- (6) Page Layout.** The Proposal must be in portrait orientation.
- (7) Page size.** 21.6 centimeters by 27.9 centimeters (8 ½ inches by 11 inches).
- (8) Page numbering.** Number pages sequentially.
- (9) Application language.** All documents must be in English, including but not limited to the initial application, any additional documents submitted in response to a NIST request, all reports, and any correspondence with NIST.

(10) Typed document. All applications, including forms, must be typed; handwritten forms will not be accepted.

- d. Application Replacement Pages.** Applicants may not submit replacement pages and/or missing documents once 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.** Pre-applications will not be accepted 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 are required to: (i) be registered in SAM before submitting its application; (ii) provide a valid unique entity identifier in its application; and (iii) continue to maintain an active SAM registration with current information at all times during which it has 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

Applications must be received at Grants.gov no later than 11:59 p.m. Eastern Time, Friday, August 16, 2019. NIST will consider the date and time recorded by Grants.gov as the official submission time. Applications received after this deadline will not be reviewed or considered. Paper applications will not be accepted.

Applicants should be aware, and factor in their application submission planning, that the Grants.gov system is expected to be closed for routine maintenance at the following times. Applications cannot be submitted when Grants.gov is closed on these dates:

From 12:01 A.M. Eastern Time Saturday June 15, 2019	To 6:00 A.M. Eastern Time Monday June 17, 2019
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When developing the submission timeline, please keep in mind that: (1) all applicants are required to have current registrations in the electronic System for Award Management (SAM.gov) and Grants.gov; (2) the free annual registration process in the SAM.gov (see Sections IV.3. and IV.7.a.(1).(b). of this NOFO) generally takes between three and five business days but can take more than two weeks; and (3) applicants will receive e-mail notifications over a period of up to two business days as the application moves through intermediate systems before the applicant learns via a validation or rejection notification whether NIST has received the application. (See [Grants.gov](https://www.grants.gov) for full information on application and notification through Grants.gov.). 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.

5. Intergovernmental Review

Applications under this Program are not subject to Executive Order 12372.

6. Funding Restrictions

Applications for product development and/or commercialization are not considered responsive to this NOFO. Profit or fee is not an allowable cost.

7. Other Submission Requirements

a. Applications must be submitted electronically.

(1) Applications must be submitted via Grants.gov at [Grants.gov](https://www.grants.gov).

- (a) Applicants should carefully follow specific Grants.gov instructions to ensure that all 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 questions regarding applying electronically for the 2019-NIST-TPO-02 announcement, contact Grants.gov Support at 1-800-518-4726.
- (b) 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 to five business days. If problems are encountered, the registration process can take up to two 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 (SAM.gov), as explained on the Grants.gov Web site (also

see 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, except for Federal holidays. Help Desk service will resume at 7:00 a.m. Eastern Time the day after Federal holidays. For assistance using Grants.gov, the applicant may also contact support@grants.gov.

- (c) To find instructions for submitting an application on Grants.gov, Applicants should refer to the “Applicants” tab in the banner just below the top of the 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.

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 leading up to 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 the 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 the 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 e-mail or may request copies by e-mail from Courtney.Silverthorn@nist.gov.

V. Application Review Information

1. Evaluation Criteria

The evaluation criteria that will be used in evaluating applications and assigning weights are as follows:

- a. Problems, Solutions and Technical Approach. (0-45 points, sub-criteria below receive equal weight).** Reviewers will evaluate the extent to which the applicant’s proposed approach clearly addresses the program goals (see Section I. of this NOFO) and the likelihood and extent to which the proposal will result in efficiently and effectively conducting the following activities:
 - developing the necessary tools and services to promote the utilization of Federal intellectual property, user facilities, and other R&D resources by the private sector;
 - creating a suitable education and training infrastructure in T2 for the relevant stakeholders; and
 - engaging the industry, academic, and state and local government communities to facilitate access to Federal R&D collaborations and Federal T2 opportunities.

- b. Statement of Work and Potential Impact of the Results. (0-20 points).** Reviewers will evaluate the appropriateness, quality, reasonableness and completeness of the applicant’s statement of work, including the plans to manage the project tasks, timeline, and work of all project staff, and the potential impact of the project results as described, to ensure realization of the project goals and objectives.

c. Qualifications and Experience of Key Personnel and Resources

Availability. (0-15 points). Reviewers will evaluate the appropriateness, quality and extent of the qualifications and experience of the project leader and proposed staff, to assess the likelihood of achieving the objectives of the project. If access to necessary equipment is limited or not available and the applicant plans to purchase equipment, proposed equipment purchases will be evaluated according to the Budget Narrative evaluation criteria (see Section V.1.e. of this NOFO). In particular, for key personnel, past experience with the following will be evaluated for their adequacy and the extent to which they are likely to contribute to the overall success of the project:

- coordinating the promotional, educational, and/or outreach activities of a large (400-600 member) professional organization;
- facilitating technology commercialization or performing clearinghouse functions for technology-related data;
- website and/or database development and maintenance
- engagement and outreach to Federal laboratories, academia, the private sector, non-profits, and/or state and local government institutions;
- knowledge of Federal T2 processes and Federal laboratories;
- technology commercialization, technology-based economic development, stakeholder outreach, educational material development, or database development (if the key personnel lack expertise in these disciplines, the reviewers will evaluate the feasibility and likelihood of success of the applicant's plan to obtain such expertise to meet the objectives of this NOFO); and
- achieving positive outcomes in endeavors with program objectives that are similar to those described in Section I. of this NOFO.

d. Success Metrics. (0 to 10 points). Reviewers will evaluate the clarity and quality of proposed metrics and mechanisms for evaluating the effectiveness of outputs and impacts from the EFTT Program, including the engagement, education, training, and utilization of the developed tools by the greater T2 and stakeholder communities.

e. Budget Narrative. (0-10 points). Reviewers will assess the budgeted costs against the proposed activities to determine the practicality of the proposed budget with respect to developing and implementing the proposed project.

2. Selection Factors

The Selecting Official, the Director of the Technology Partnerships Office, shall generally select and recommend the most meritorious application for an award based upon the final adjectival ratings prepared by the Evaluation Panel and one or more of the selection factors listed below. The Selecting Official also retains

the discretion to select and recommend an application out of order (i.e. from a lower adjectival category) based on one or more of the following selection factors:

- a. Results of the merit reviewers' evaluations.
- b. The availability of funding.
- c. Alignment with the NOFO objectives and TPO priorities, including those reflecting NIST's role as the Host Agency for the FLC.

3. 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, or non-Federal personnel who have entered into conflict of interest and confidentiality agreements covering such information, when applicable.

a. Initial Administrative Review of Applications. Applications received by the deadline will be reviewed to determine eligibility, completeness, and responsiveness to this NOFO and to the scope of the stated program objectives (see Section I. of this NOFO). Applications determined to be ineligible, incomplete, and/or nonresponsive 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 absence of which may easily be rectified during the review process.

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 process below:

(1) Merit Review. At least three (3) objective reviewers, who may be Federal employees or non-Federal personnel, with appropriate professional and technical expertise relating to the topics covered in this NOFO, will evaluate and score each eligible, complete, and responsive application based on the evaluation criteria (see Section V.1. of this NOFO). While every application will have at least three (3) reviewers, applications may have more than three (3) reviewers if specialized expertise is needed to evaluate an application. During the review process, the reviewers may discuss the applications with each other, but scores will be determined on an individual basis. Applications will be ranked by averaging the scores of all reviewers for each application.

(2) Evaluation Panel. Following the merit review, an evaluation panel consisting of NIST staff and/or other Federal employees with the

appropriate technical expertise will conduct a panel review of the ranked applications. The evaluation panel may contact applicants via e-mail to clarify contents of an application. The evaluation panel will provide a final adjectival rating and written evaluation of the applications to the Selecting Official (see Section V.2. of this NOFO) for further deliberation, considering:

- (a) All application materials.
- (b) Results of the merit reviewers' evaluations, including scores and written assessments.
- (c) Any relevant publicly available information.
- (d) Any clarifying information obtained by e-mail from the applicants.

The adjectival ratings are:

- Fundable, Outstanding
- Fundable, Very Good
- Fundable
- Unfundable

For decision-making purposes, applications receiving the same adjectival rating will be considered to have an equivalent ranking, although their review scores may not necessarily be the same.

- (3) Selection.** The Selecting Official will make the final award recommendation to the NIST Grants Officer. The Selecting Official shall generally select and recommend the most meritorious application for an award based on the final adjectival ratings prepared by the Evaluation Panel and one or more of the selection factors listed in Section V.2. of this NOFO. The Selecting Official retains the discretion to select and recommend an application out of order (i.e., from a lower adjectival category) based on one or more of the selection factors.

NIST reserves the right to negotiate the budget costs with any applicant selected to receive an award, which may include requesting that the applicant removes certain costs. Additionally, NIST may request that successful applicants modify objectives or work plans and 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. NIST may select some, all, or none of the applications, or part(s) of any application. 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 (FAPIS). An applicant may, at its discretion, review and comment on information about itself previously entered into FAPIS 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 FAPIS 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.

4. Anticipated Announcement and Award Date

Review of applications, selection of successful applicants, and award processing is expected to be completed by October 2019. The earliest start date for awards under this NOFO is expected to be October 2019.

5. Additional Information

- a. Safety.** Safety is a top priority at NIST. Employees and affiliates of award recipients who conduct project work at NIST will be expected to be safety-conscious, to attend NIST safety training, and to comply with all NIST safety policies and procedures, and with all applicable terms of their guest research agreement.
- b. Notification to Unsuccessful Applicants.** Unsuccessful applicants will be notified by e-mail and will have the opportunity to receive a debriefing after the opportunity is officially closed. Applicants must request within 10 business days of the email notification to receive a debrief from the program office. The program office will then work with the unsuccessful applicant in arranging a date and time of the debrief.

- c. **Retention of Unsuccessful Applications.** Unsuccessful applications will be retained in accordance with the [General Record Schedule 1.2/021](#).

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 to each award in this program, the Financial Assistance Standard Terms and Conditions in effect on the date of award. The current version, dated April 30, 2019, is accessible [here](#). Refer to Section VII. of this NOFO, Federal Awarding Agency Contacts, Grant Rules and Regulations, if 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, for more information.
 - d. **Funding Availability and Limitation of Liability.**

Funding for the program listed in this NOFO is contingent upon the availability of appropriations. NIST or the Department of Commerce will not be responsible for application preparation costs, including but not limited to if this program fails to receive funding or is cancelled because of agency priorities. Publication of this NOFO does not oblige NIST or the Department of Commerce to award any specific project or to obligate any available funds.

- e. **Collaborations with NIST Employees.** If an applicant proposes collaboration with NIST, the statement of work should include a statement of this intention, a description of the collaboration, and prominently identify the NIST employee(s) involved, if known. Any collaboration by a NIST employee must be approved by appropriate NIST management and is at the sole discretion of NIST. Prior to beginning the merit review process, NIST will

verify the approval of the proposed collaboration. Any unapproved collaboration will be stricken from the application prior to the merit review. Any collaboration with an identified NIST employee that is approved by appropriate NIST management will not make an application more or less favorable in the competitive process.

- f. Use of Federal Government-Owned Intellectual Property.** If the applicant anticipates using any Federal Government-owned intellectual property to carry out the work proposed, the applicant should identify such intellectual property. This information will be used to ensure that no government employee involved in the development of the intellectual property will participate in the review process for that competition. In addition, if the applicant intends to use Federal Government-owned intellectual property, the applicant must comply with all statutes and regulations governing the licensing of Federal government patents and inventions, described in 35 U.S.C. §§ 200-212, 37 C.F.R. Part 401, 2 C.F.R. §200.315, and in Section C.03 of the Department of Commerce Financial Assistance Terms and Conditions dated April 30, 2019.

Any use of Federal Government-owned intellectual property by a recipient of an award under this announcement is at the sole discretion of the Federal Government and will be negotiated on a case-by-case basis if a project is deemed meritorious. The applicant should indicate within the statement of work whether it already has a license to use such intellectual property or whether it intends to seek one.

If any inventions made in whole or in part by a Federal Government employee arise in the course of an award made pursuant to this NOFO, the United States government may retain its ownership rights in any such invention. Licensing or other disposition of the Federal Government's rights in such inventions will be determined solely by the Federal Government and include the possibility of putting the intellectual property into the public domain.

- g. Research Activities Involving Human Subjects, Human Tissue, Data or Recordings Involving Human Subjects Including Software Testing.** Any application that includes research activities involving human subjects, human tissue/cells, or data or recordings from or about human subjects, must satisfy the requirements of the Common Rule for the Protection of Human Subjects ("Common Rule"), codified for the Department of Commerce at 15 C.F.R. Part 27. Research activities involving human subjects that fall within one or more of the classes of vulnerable subjects found in 45 C.F.R. Part 46, Subparts B, C and D must satisfy the requirements of the applicable subpart(s). In addition, any such application that includes research activities on these subjects must be in compliance with all applicable statutory requirements imposed upon the Department of Health and Human Services (DHHS) and

other Federal agencies, all regulations, policies and guidance adopted by DHHS, the Food and Drug Administration (FDA), and other Federal agencies on these topics, and all Executive Orders and Presidential statements of policy on applicable topics. (Regulatory Resources: <http://www.hhs.gov/ohrp/humansubjects/index.html> which includes links to FDA regulations, but may not include all applicable regulations and policies).

NIST uses the following Common Rule definitions for research and human subjects research:

Research: A systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute research for purposes of this policy, whether or not they are conducted or supported under a program which is considered research for other purposes. For example, some demonstration and service programs may include research activities.

Human Subject: A living individual about whom an investigator (whether professional or student) conducting research obtains data through intervention or interaction with the individual or identifiable private information.

- (1) *Intervention* includes both physical procedures by which data are gathered and manipulations of the subject or the subject's environment that are performed for research purposes.
- (2) *Interaction* includes communication or interpersonal contact between investigator and subject.
- (3) *Private information* includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator associated with the information) in order for obtaining the information to constitute research involving human subjects.

See 15 C.F.R. § 27.102 (Definitions).

- 1) Requirement for Federalwide Assurance.** If the application is accepted for [or awarded] funding, organizations that have an Institutional Review Board (IRB) are required to follow the procedures of their organization for approval of exempt and non-exempt research activities that involve human subjects. Both domestic and foreign organizations performing non-exempt

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research activities involving human subjects will be required to have protocols approved by a cognizant, active IRB currently registered with the Office for Human Research Protections (OHRP) within the DHHS that is linked to the engaged organizations. All engaged organizations must possess a currently valid Federalwide Assurance (FWA) on file from OHRP. Information regarding how to apply for an FWA and register an IRB with OHRP can be found at <http://www.hhs.gov/ohrp/assurances/index.html>. NIST relies only on OHRP-issued FWAs and IRB Registrations for both domestic and foreign organizations for NIST supported research involving human subjects. NIST will not issue its own FWAs or IRB Registrations for domestic or foreign organizations.

2) Administrative Review. The NIST Human Subjects Protection Office (HSPO) reserves the right to conduct an administrative review¹⁸ of all applications that potentially include research involving human subjects and were approved by an authorized non-NIST institutional entity (an IRB or entity analogous to the NIST HSPO) under 15 C.F.R. § 27.112 (Review by Institution). If the NIST HSPO determines that an application includes research activities that potentially involve human subjects, the applicant will be required to provide additional information to NIST for review and approval. The documents required for funded proposals are listed in each section below. Most documents will need to be produced during the proposal review process; however, the Grants Officer may allow final versions of certain required documents to be produced at an appropriate designated time post-award. Research involving human subjects may not start until the NIST Grants Officer issues an award explicitly authorizing such research. In addition, all amendments, modifications, or changes to approved research and requests for continuing review and closure will be reviewed by the NIST HSPO.

3) Required documents for proposal review. All applications involving human subject research must clearly indicate, by separable task, all research activities believed to be exempt or non-exempt research involving human subjects, the expected institution(s) where the research

¹⁸ Conducting an “administrative review” means that the NIST HSPO will review and verify the performing institution’s determination for research not involving human subjects or exempt human subjects research. In addition, for non-exempt human subjects research, the NIST HSPO will review and confirm that the research and performing institution(s) are in compliance with 15 C.F.R. Part 27, which means HSPO will 1) confirm the engaged institution(s) possess, or are covered under a Federalwide Assurance, 2) review the research study documentation submitted to the IRB and verify the IRB’s determination of level of risk and approval of the study for compliance with 15 C.F.R. Part 27, 3) review and verify IRB-approved substantive changes to an approved research study before the changes are implemented, and 4) review and verify that the IRB conducts an appropriate continuing review at least annually.

activities involving human subjects may be conducted, and the institution(s) expected to be engaged in the research activities.

a. Not research determination. If an activity/task involves human subjects as defined in the Common Rule, but the applicant participant(s) indicates to NIST that the activity/task is not research as defined in the Common Rule, the following information may be requested for that activity/task:

- (1) Justification, including the rationale for the determination and such additional documentation as may be deemed necessary by NIST to review and/or support a determination that the activity/task in the application is not research as defined in the Common Rule.
- (2) If the applicant participant(s) used a cognizant IRB that provided a determination that the activity/task is not research, a copy of that determination documentation must be provided to NIST. The applicant participant(s) is not required to establish a relationship with a cognizant IRB if they do not have one.

NIST will review the information submitted and may coordinate further with the applicant before determining whether the activity/task will be defined as research under the Common Rule in the applicable NIST financial assistance program or project.

b. Research not involving human subjects. If an activity/task is determined to be research and involves human subjects, but is determined to be *not human subjects research* (or *research not involving human subjects*) under the Common Rule, the following information may be requested for that activity/task:

- (1) Justification, including the rationale for the determination and such additional documentation as may be deemed necessary by NIST to review and/or support a determination that the activity/task in the application is not research as defined in the Common Rule.
- (2) If the applicant participant(s) used a cognizant IRB that provided a determination that the activity/task is research not involving human subjects, a copy of that determination documentation must be provided to NIST. The applicant participant(s) is not required to establish a relationship with a cognizant IRB if they do not have one.

c. Exempt research determination with no IRB. If the application appears to NIST to include exempt research activities, and the performer of the activity or the supplier and/or the receiver of the biological materials or data from human subjects **does not** have a

cognizant IRB to provide an exemption determination, the following information may be requested during the review process so that NIST can evaluate whether an exemption under the Common Rule applies (see 15 C.F.R. § 27.101(b), (c) and (d)):

- (1) The name(s) of the institution(s) where the exempt research will be conducted.
- (2) The name(s) of the institution(s) providing the biological materials or data from human subjects.
- (3) A copy of the protocol for the research to be conducted; and/or the biological materials or data from human subjects to be collected/provided, not pre-existing samples (i.e., will proposed research collect only information without personal identifiable information, will biological materials or data be de-identified and when and by whom was the de-identification performed, how were the materials or data originally collected).
- (4) For pre-existing biological materials or data from human subjects, provide copies of the consent forms used for collection and a description of how the materials or data were originally collected and stripped of personal identifiers. If copies of consent forms are not available, explain.
- (5) Any additional clarifying documentation that NIST may deem necessary in order to make a determination whether the activity/task or use of biological materials or data from human subjects is exempt under the Common Rule.

d. Research review with an IRB. If the application appears to NIST to include research activities (exempt or non-exempt) involving human subjects, and the proposed performer of the activity has a cognizant IRB registered with OHRP, and linked to their Federalwide Assurance, the following information may be requested during the review process:

- (1) The name(s) of the institution(s) where the research will be conducted.
- (2) The name(s) and institution(s) of the cognizant IRB(s), and the IRB registration number(s).
- (3) The FWA number of the applicant linked to the cognizant IRB(s);
- (4) The FWAs associated with all organizations engaged in the planned research activity/task, linked to the cognizant IRB.
- (5) If the IRB review(s) is pending, the estimated start date for research involving human subjects.
- (6) The IRB approval date (if currently approved for exempt or non-exempt research).

- (7) If any of the engaged organizations has applied for or will apply for an FWA or IRB registration, those details should be clearly provided for each engaged organization.

If the application includes research activities involving human subjects to be performed in the first year of an award, additional documentation may be requested by NIST during pre-award review for those performers, and may include the following for those research activities:

- (1) A signed (by the study principal investigator) copy of each applicable final IRB-approved protocol.
- (2) A signed and dated approval letter from the cognizant IRB(s) that includes the name of the institution housing each applicable IRB, provides the start and end dates for the approval of the research activities, and any IRB-required interim reporting or continuing review requirements.
- (3) A copy of any IRB-required application information, such as documentation of approval of special clearances (i.e., biohazard, HIPAA, etc.) conflict-of-interest letters, or special training requirements.
- (4) A brief description of what portions of the IRB submitted protocol are specifically included in the application submitted to NIST, if the protocol includes tasks not included in the application, or if the protocol is supported by multiple funding sources. For protocols with multiple funding sources, NIST will not approve the study without a non-duplication-of-funding letter indicating that no other Federal funds will be used to support the tasks proposed under the proposed research or ongoing project.
- (5) If a new protocol will only be submitted to an IRB if an award from NIST is issued, a draft of the proposed protocol.
- (6) Any additional clarifying documentation that NIST may request during the review process to perform the NIST administrative review of research involving human subjects. (See 15 C.F.R. § 27.112 (Review by Institution)).

This clause reflects the existing NIST policy and requirements for Research Involving Human Subjects. Should the policy be revised prior to award, a clause reflecting the policy current at time of award may be incorporated into the award.

If the policy is revised after award, a clause reflecting the updated policy may be incorporated into the award.

For more information regarding research projects involving human subjects, contact Anne Andrews, Director, NIST Human Subjects

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Enabling Federal Technology Transfer (EFTT)
Notice of Funding Opportunity

June 14, 2019

Protection Office (e-mail: anne.andrews@nist.gov; phone: (301) 975-5445.

3. Reporting

a. Reporting Requirements. The following reporting requirements described in Sections A.01, Reporting Requirements, of the Department of Commerce Financial Assistance Standard Terms and Conditions dated April 30, 2019 apply to awards in this program:

(1) Financial Reports. Each award recipient will be required to submit an SF-425, Federal Financial Report on a semi-annual basis for the periods ending March 31 and September 30 of each year. Reports will be due within 30 days after the end of the reporting period to the NIST Federal Program Officer, Grants Officer and Grants Specialist named in the award documents. A final financial report is due within 90 days after the end of the project period.

(2) Research Performance Progress Report (RPPR). Each award recipient will be required to submit a RPPR to the Federal Program Officer, NIST Grants Officer and Grants Specialist named in the award documents on a semi-annual basis for the periods ending March 31 and September 30 of each year. Reports will be due within 30 days after the end of the reporting period. The RPPR shall conform to the requirements in 2 C.F.R. § 200.328 (<http://go.usa.gov/xkVgP>) and Department of Commerce Financial Assistance Standard Terms and Conditions, Section A.01.

A final RPPR shall be submitted 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 (DMP) has changed since their last submission of a technical progress report, the recipient must include their revised DMP in the next technical progress report following the revision to the DMP. The revised DMP must include all the requirements described in Section IV.2.a.(10). of this NOFO.

(3) Patent and Property Reports. From time to time, and in accordance with the Uniform Administrative Requirements (see Section VI.2. of this NOFO) and other terms and conditions governing the award, the recipient may need 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. The Department of Commerce Financial Assistance Standard Terms and Conditions, Section D.01, and 2 C.F.R. Part 200 Subpart F, adopted by the Department of Commerce through 2 C.F.R. § 1327.101, require any non-Federal entity (i.e., including non-profit institutions of higher education and 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. Additionally, unless otherwise specified in the terms and conditions of the award, entities that are not subject to Subpart F of 2 C.F.R. Part 200 (e.g., for-profit commercial entities) that expend \$750,000 or more in DOC funds during their fiscal year must submit to the Grants Officer either: (i) a financial related audit of each DOC award or subaward in accordance with Generally Accepted Government Auditing Standards; or (ii) a project specific audit for each award or subaward in accordance with the requirements contained in 2 C.F.R. § 200.507. 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 (Public Law 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:

Subject Area	Point of Contact
Programmatic and Technical Questions	Courtney Silverthorn Phone: 301-975-4189 E-mail: Courtney.silverthorn@nist.gov with '2019-NIST-TPO-02' in subject line
Technical Assistance with Grants.gov Submissions	grants.gov Phone: 800-518-4726 E-mail: support@grants.gov
Grant Rules and Regulations	Dean Iwasaki Phone: 301-975-8449 Fax: 301-975-6368 E-mail: dean.iwasaki@nist.gov

VIII. Other Information

1. **Personal and Business 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, and also by Federal agents and contractors, and/or by non-Federal personnel, all of whom enter into appropriate conflict of interest and confidentiality 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 safeguard 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 Federal Funding Opportunity may be subject to requests for release under the Act. If 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. Public Website, Frequently Asked Questions (FAQS) and Webinar

NIST TPO has a public website, <https://www.nist.gov/tpo/EFTT>, that provides information pertaining to this Funding Opportunity¹⁹. NIST anticipates that a “Frequently Asked Questions” section or other resource materials will be maintained and updated on the website as needed to provide additional guidance and clarifying information that may arise related to this Funding Opportunity. Any amendments to this NOFO will be announced through Grants.gov.

Applicants must submit all questions pertaining to this funding opportunity in writing to Courtney.silverthorn@nist.gov with ‘2019-NIST-TPO-02’ in the subject line. Questions submitted to NIST may be posted on <https://www.nist.gov/tpo/EFTT>. Alternatively, applicants may ask questions during the informational public webinar as described in the next paragraph.

NIST will host a webinar to provide general information regarding this NOFO, offer general guidance on preparing applications, and answer questions related to this funding opportunity. Proprietary technical discussions about specific project ideas will not be permitted and NIST staff will not critique or provide feedback on specific project ideas while they are being developed by an applicant or brought forth during the webinar or at any time before the deadline for all applications. However, questions about the EFTT Program, eligibility requirements, evaluation and selection criteria, selection process, and the general characteristics of a competitive application can be addressed at the webinar and by e-mail to Courtney.silverthorn@nist.gov as described in the previous paragraph. There is no cost to attend the webinar, but participants must register in advance. Participation in the webinar is not required and will not be considered in the application review and selection process. Additional information on the EFTT Program and webinar is available at <https://www.nist.gov/tpo/EFTT>.

¹⁹ Refer to Section VII. of this NOFO, Federal Awarding Agency Contacts, Programmatic and Technical Questions, if more information is needed.