

Research Infrastructure Improvement (RII) Track-1 Awards
ANNUAL and FINAL REPORT GUIDELINES
Version 3.3 - February 2019

As of February 28, 2019, annual and final reports on NSF EPSCoR RII Track-1 awards will be expected to conform to the following revised guidelines. These guidelines include only minor changes from the prior version (Version 3.2, dated February 2018). Most notable is a revision in Section C.1 to note the expectation that RII Track-1 projects in their first year will submit a detailed external evaluation plan rather an external evaluation report. Future updates to the Report Guidelines will be based on the observations of NSF EPSCoR Program Officers (POs) and feedback from the NSF EPSCoR community, and will be intended to improve the clarity of the reporting expectations and to comply with legislation regulating NSF.

A) Annual and Final Report deadlines

A.1. Annual progress reports are due at NSF 90 days before the anniversary date of the award start date as specified in the NSF Award Document. The reporting period for each annual report is defined as beginning at the award start date or the submission date of the prior annual report, whichever is later. Reports must be approved by the managing PO within the 90-day window prior to the award's anniversary date. Reports take approximately five weeks on average to process and approve, and often take longer if NSF EPSCoR requires revisions. If the report is not approved by the anniversary date, it will be classified as overdue. Overdue reports will delay all pending NSF actions with which the Principal Investigator (PI) and Co-PIs are associated as PIs or Co-PIs.

A.2. The reporting period for the final report is defined as beginning on the submission date of the prior annual report. Final reports become due on the award end date and become overdue 90 days after the award end date. Overdue reports will delay all pending NSF actions with which the PI and Co-PIs are associated as PIs or Co-PIs.

A.3. If it is anticipated that a No-Cost Extension will be required to extend the award end date, PIs are encouraged to contact their managing PO to discuss this process and its impacts on your report deadline. This is particularly important in cases where a new RII Track-1 proposal is pending during this period.

B) Preparing and submitting your report

B.1. The "Products" and "Participants/Organizations" sections of your report will continue to be entered on the research.gov website using RPPR formats (see <http://www.nsf.gov/bfa/dias/policy/rppr/>). Note that for projects based on proposals submitted in January 2016 or later, final "Published" journal articles derived from NSF support must be uploaded to the NSF Public Access Repository. The upload mechanism is now built into the RPPR system. Journal publications with other statuses ("Submitted", "Accepted", "Under Review", etc.) should still be entered using the research.gov interface.

B.2. A narrative report should be submitted as a single pdf-format file as an attachment within the RPPR system (file sizes are limited to 5MB, so it may be necessary to split larger documents into sections). Within the text box in RPPR for the project's Major Goals, the following text should be entered: *"In accordance with the instructions provided in the NSF EPSCoR Research Infrastructure Improvement Annual Reporting Guidelines document, the Annual Project Report has been submitted as a pdf-format attachment and includes the content specified in the Guidelines."* All other text boxes within RPPR for the sections on Accomplishments, Impacts, Changes/Problems, and Special Requirements may be left blank or filled in with the text *"Nothing to Add."* This guidance has been developed to be consistent with the instructions provided in the General Programmatic Terms and Conditions (PTCs) for your award; if you believe there are discrepancies between this guidance and your PTCs, contact your managing PO for assistance.

NSF EPSCoR stresses that the primary purpose of narrative report is to provide a clear, specific, and succinct summary of the progress achieved for the project's research and other elements during the current reporting period. It should describe the current status of the project with respect to its overall goals and objectives. This information will be used by the managing PO to evaluate all aspects of the project's implementation and make a recommendation on continued funding, based on a comparison between what was planned to be done in the project year (as detailed in the proposal and current, approved strategic plan) with what was actually accomplished. The report must be a coherent and carefully edited narrative, rather than an amalgamated "copy and paste" document. It should refrain from lengthy justification of the project's value and importance, as well as from general statements that are unsupported by specific information or evidence. Specific and detailed descriptions of results should be included. The use of jargon should be avoided as much as possible, and the language in general should be comprehensible to scientists and engineers from outside the specialized discipline under study. Use of bulleted and numbered lists should be minimal. Whenever available and appropriate, quantitative data should be included. If the report is not clear and comprehensive, it will be returned for revisions, delaying approval.

The report must contain the following sections, corresponding to the NSF solicitation under which the award was made. All reporting requirements of your project's General PTCs must be addressed in your report.

Heading

Identify the award number and title, awardee institution, PI, award start date, report submission date, and reporting period dates.

Overview

In this section, state the vision, mission, and goals of the project, including a discussion of how these fit within the context of the disciplinary field(s) at large. Identify the major participating institutions and their specific roles. Provide a brief summary of key accomplishments achieved during the reporting period, addressing the NSF criteria of intellectual merit and broader impacts. Briefly describe any significant problems, novel

opportunities, and/or changes in strategy during the reporting period. Further details will be provided in subsequent sections.

Research and Education Program

Describe the major accomplishments and research findings during the current reporting period, organized by the major goals or focus areas of the project, as put forth in the original proposal and approved strategic plan. Discuss the significance of these accomplishments and findings in the context of the disciplinary field(s) involved, how the results influence future directions for the current project and, when appropriate, how they suggest potential directions for future projects. Describe problems, unexpected results, and novel opportunities encountered and your response to them. The narrative should be based on the specific research goals and objectives and refer to the included progress tables (see below) consistent with the strategic plan. Objectives, milestones, and outcomes should be mentioned, and it should be clearly stated whether the project is ahead of, on, or behind schedule for each. In cases where the project is behind schedule, the reason(s) for the delay and plans to get back on schedule should also be discussed.

Emphasize especially significant, potentially transformative results. Report on how research and education have been integrated through the project, including quantitative information on the involvement of students, post-docs, and junior faculty in each research thrust, as well as outreach and dissemination efforts to make the results more widely known. Refrain from re-descriptions of the end objectives and focus on specific accomplishments and findings during the reporting period. Identify the principal researchers and institutions responsible for each major accomplishment, as well as significant collaborations within and between institutions. A reasonable number of figures may be included in this section, as needed to assist in reporting.

Solicitation-Specific Project Elements

Describe your progress and achievements with respect to each of the additional project elements identified in the solicitation under which your award was made, such as Workforce Development, Diversity, Partnerships and Collaborations, etc. As with the Research and Education section above, provide quantitative information when available and appropriate, describe problems and opportunities encountered and your response, and summarize products. Evidence of linkages, coordination, and collaboration with other NSF-funded programs should be provided where appropriate. Refrain from re-descriptions of the end objectives and focus on specific accomplishments. Identify the principal individuals and institutions responsible for each major activity/accomplishment, as well as significant collaborations. A reasonable number of figures may be included in this section, as needed to assist in reporting.

Broadening Participation

As required by the Programmatic Terms and Conditions, reports should provide the total number of participants in the activities funded by this award, including faculty, staff, students, and members of all external advisory boards. In addition, reports should indicate the numbers of women and groups underrepresented in STEM that participated in project activities. These data must be reported in aggregate for the project and for each

participating institution. Demographic data by race, gender, and disability should be provided in addition to education level (postdoctoral, graduate, undergraduate, K-12). NSF EPSCoR acknowledges that provision of demographic information by participants is voluntary. Data must be collected in adherence to federal laws as well as the laws of the jurisdiction.

Expenditures and Unobligated Funds

As required by the Programmatic Terms and Conditions, reports should include an update on project spending and specifically an estimate of the funds expected to remain unobligated at the end of the current support period. If that estimate is greater than 20% of the current year award amount, the PI also must provide a plan and timeline for expenditure of those funds.

If more than 20% of the current year award amount continues to remain unobligated by the yearly anniversary date of the award, approval to carry forward that amount must be granted by NSF EPSCoR. The awardee's Sponsored Projects Office should prepare the request, which must include a plan and timeline for expenditure of the funds, and submit the request via email to the managing NSF PO.

Special Conditions

Include in the report specific information relating to: any outstanding actions taken or planned during the current reporting period in response to Jurisdiction-Specific Programmatic Terms and Conditions placed on the project at the time of the award; recommendations made through the Reverse Site Visit and Site Visit processes (if applicable); and any other actions required by NSF EPSCoR. Your external evaluation report or plan should be separately provided (C.1, below), but any significant changes to project activities implemented in response to external evaluator or advisory board recommendations may also be described in this section.

Tabular/Graphic representation of progress to date

Include table(s) showing progress to date relative to all of the goals and objectives of the project as stated in the strategic plan. The table(s) should indicate milestones and specific outcomes and include an easily interpretable representation (e.g., a green/yellow/red “stoplight” color scheme, or other preferred format) of whether items have been accomplished, are on schedule, or are behind schedule. The tabular representations should be referenced in the aforementioned narratives and be fully consistent with the strategic plan. It may be most convenient to use the same tabular format found in the strategic plan.

C) Other materials required under separate email to NSF EPSCoR managing PO

There are several additional pieces of information that NSF EPSCoR requires before your reporting is considered complete. The following materials should NOT be submitted through the Research.gov system. Instead, they should be submitted as email attachments to the managing PO.

C.1 Evaluation and Assessment (submitted as a pdf-format file)

Send to the managing PO any evaluation report produced during the reporting period, along with your detailed response to the report. This may be done by email at any time during the project year, but all relevant documents for the reporting period should be submitted no later than the annual report due date. Similarly, if any external advisory body has provided a report to the project team during the reporting period, that report should also be submitted along with the project's response. Projects in their first year are expected to submit a detailed external evaluation plan rather than an external evaluation report. Those projects will then be expected to submit an external evaluation report that covers the first two project years along with their Year-2 annual report.

C.2. Tables A through H (supplied as an Excel file)

Email Tables A through H to the managing PO when you submit your narrative report on Research.gov. Guidelines for completing each Table (in Excel format) are included below and in footnotes in the Table templates, which are attached to these guidelines as a separate Excel file.

C.2.a Table A – Salary Support

Complete the Salary Support table (Table A) by entering project participants at the faculty level and equivalent. Each participant entered in the table should also be included as a participant within the RPPR system. In Table A, indicate the time (in person-months) they expended on the RII Track-1 project as well as their salary support from the RII Track-1 project ONLY. This table identifies RII Track-1 salary support both directly to faculty and faculty-level participants (left side of the table), and to member(s) of their groups (right hand side of the table).

C.2.b Table B – Participants

Complete the Participants table (Table B) by entering the total number and demographics of participants in the activities funded by this award, including faculty, staff, postdocs, students, and members of external advisory boards. An RII Track-1 participant is an individual in the awardee jurisdiction who is actively involved in the project, whether or not they receive funding. All project members who receive funding are by definition participants, but not all participants are funded. The data should be reported for each participating institution as shown in the table, and also reported in aggregate for the project.

Please note that the definition of "Participant" used in Table B is more inclusive than that used in RPPR. When completing the RPPR section on Participants, use the RPPR definition of participant (one who has worked one person-month or more for the project reporting period). In the Participants table (Table B), include individuals who have worked one person-month or more during the reporting period, and also those that worked for less than one person-month (for example, a person who planned and led a two-day workshop on a topic related to the RII Track-1 research).

C.2.c Table C – Collaborations

Complete the Collaborations table (Table C) by entering current data on collaborations, including the number of organizations and number of individuals from the organizations.

C.2.d Table D – External Engagement

Complete the External Engagement table (Table D) by entering the numbers of individuals in different demographic groups that participated in outreach activities.

C.2.e Table E – Outputs

Complete the Outputs table (Table E) by providing quantitative data on new hires recruited and retained, publications, patents, proposal submissions, award success rates, and the number of students and postdocs involved in the project.

C.3.f Tables F, G, and H – Expenditures, Cost Sharing, and Leveraged Support

Complete the Expenditures table (Table F), the Cost Sharing table (Table G), and the Leveraged Support table (Table H) to report details of the expenditures. Please note that these tables should include completed expenditures and obligations projected to the end of the reporting period. Comments may be made on these Tables and in the discussion of unobligated funds in the narrative report.

C.3 EPSCoR Highlights (mix of file formats are required and specified below)

An EPSCoR Highlight is a crisp, one-page summary with an interesting and informative image highlighting the NSF-funded work. Include a title, a list of authors with affiliation(s), an appropriate color image (avoid graphs), and an acknowledgement of support with award number(s) for each highlight. NSF EPSCoR uses these highlights to illustrate the work that the program supports. They might be used in NSF documents and presentations or posted on NSF web pages, for example. The text and graphics should capture the essence of the activity you wish to highlight. The graphics are particularly important and can include images or photographs. The text and graphics should be at the level of a press release, explaining briefly and in non-technical language what has been accomplished and why it is significant.

Projects are required to submit three EPSCoR Highlights each year along with their annual report. At least one highlight should relate to the project's research, and at least one should describe a non-research project element (e.g., education, outreach, workforce development, broadening participation). Highlights should be submitted to the managing PO via email, and must use the template provided by NSF EPSCoR for the text and header information. Each highlight submission should include an appropriate high-resolution image as a separate file. Be sure to send [NSF Form 1515](#), granting NSF permission to use the images. The annual report will not be approved until the highlights are received by NSF EPSCoR.

Definitions and Examples Related to the RII Track-1 Project

Collaborator - An RII Track-1 collaborator is an individual affiliated with the RII Track-1 program that does not meet the involvement level of a RII Track-1 participant.

External Collaborator - An external collaborator refers to a member of an institution or organization outside of the jurisdiction that is involved with RII Track-1 project activities and events but that has no contractual relationship.

Education, or more specifically, science, technology, engineering and math (STEM) education, includes those activities performed by the RII Track-1 project faculty, staff, and students with the objective of increasing the knowledge and understanding of science and engineering among students or other audiences.

Educational Activities may be directed toward various audiences, including kindergarten, elementary, secondary, undergraduate, graduate, or postdoctoral students as well as the general public. These populations, in turn, may be interested in scientific career preparation, general knowledge of scientific principles, or more general educational objectives.

Educational activities oriented toward graduate and undergraduate education can take many different forms. Graduate education activities may include new required or elective graduate courses, new graduate degree programs, mentoring programs, or graduate student internships in industrial, Federal, foreign, or other collaborating laboratories. Undergraduate education may include new required or elective major undergraduate courses, new general education courses for non-majors, new undergraduate degree programs, summer programs similar to NSF Research Experiences for Undergraduates (REU) programs, or mentoring programs. General educational activities may include science fairs, collaborations with teachers, museum exhibits, Web pages, development of textbooks, software, and science kits, as well as special programs for underrepresented groups or the general public.

Impacts are similar to outcomes but are less tangible and may not be directly measurable; they may include anticipated outcomes beyond the duration of the project. All project goals that are achieved should have impacts (though not all project impacts will necessarily be related to the stated goals).

Knowledge Transfer refers to the exchange of scientific information, in either direction, between the RII Track-1 project and industry or Federal, State or independent agencies and/or laboratories, with the objective of applying the knowledge to the operations or activities of the institution receiving the information. Technology transfer is one type of knowledge transfer.

Knowledge Transfer Activities may be accomplished in various ways, including the involvement of industrial or other non-academic specialists on the RII Track-1 advisory committee, partnership with institutions, faculty consulting relationships with industry,

visiting instructorships by industrial scientists, and other approaches. The following illustrate various approaches that an RII Track-1 project might undertake:

Domestic research collaborations may include work with individual companies, industrial consortia, Federal laboratories, independent laboratories, other universities, or other scientific organizations.

International research collaborations may include work with individual foreign companies, international industrial consortia, foreign government laboratories, foreign independent laboratories, foreign universities, or other international scientific organizations.

Industrial development activities may include the creation of spin-off companies, participation in jurisdictional industrial development initiatives, or various types of cooperative agreements.

Leadership exchanges may include industrial representation on the RII Track-1's Advisory Committee or participation of RII Track-1 faculty and staff on industrial boards, advisory committees, Federal laboratory advisory associations, or international organization advisory associations.

Personnel exchanges may take place through RII Track-1 faculty or staff working in industrial laboratories, industrial staff working in RII Track-1 labs, RII Track-1 faculty or staff working in Federal labs, or Federal laboratory staff working in RII Track-1 labs.

Continuing education for technical professionals may include seminars or lecture series on current research, short courses, workshops, or semester-length courses.

Public policy outreach can include participation in advisory committees to government or other advisory groups.

Professional activities such as participation in the development of industrial or technical standards, presentations at professional meetings, and representation at industrial conventions or trade shows may qualify as knowledge transfer activities.

Professional publications and information dissemination, including articles in scientific journals, RII Track-1 working papers series, RII Track-1 technical reports, a regular RII Track-1 newsletter, books and monographs, and Internet professional activities may qualify as knowledge transfer activities.

Mission Statement is a sentence that defines the fundamental purpose of the project and what will be done to achieve the vision. The Mission explains why the project exists.

Outreach - The term outreach is distinguished from education in the RII Track-1 program. Outreach involves the active efforts undertaken by the staff of the RII Track-1 project to make other institutions and individuals aware of the activities of the RII Track-1 project

and to inform them as to how they might participate in or cooperate with the RII Track-1 project and EPSCoR in general. As such, outreach is a process or effort that may apply to research, education, knowledge transfer, and other activities equally. In addition, outreach is intended to increase STEM literacy in the general public and to spur their interest in STEM.

Outreach Activities may be directed toward: scientists and students within or beyond the universities involved in the RII Track-1 project; institutions and teachers that provide instruction in science or engineering, whether conducted in elementary or secondary education systems, institutions of higher education, museums, or other learning settings; private firms; Federal, State, or independent laboratories; and/or the general public. The mechanisms can be quite diverse, and examples include:

Collaboration with teachers may include: in-service courses, workshops, and symposia for K-12 teachers; pre-service teacher training; lab and field research experiences for teachers; and long-term support for professional development.

Development of educational tools for teachers and students may be part of outreach, including but not limited to new curricula, science kits, software, and videos. Another example is the use of RII Track-1 equipment by K-12 teachers.

Development of student programs may be part of outreach, including interactive programs and field trips, science fairs, research experiences for high school students, talks from prominent scientists, and mentoring programs.

Collaboration on K-12 education projects may include: work with statewide, regional, rural, and urban educational initiatives; local education improvement projects; and projects with other universities, local or regional science education associations, or school districts.

Outreach to underrepresented groups may include targeting graduate, undergraduate, high school, middle school, or elementary school students to participate in a variety of activities.

Work with larger science education initiatives may involve: statewide, urban, and rural initiatives; local improvement projects; and liaison activities with other universities, local or regional science education associations, and school districts.

Community initiatives for the general public may include: exhibits or shows at museums, planetariums, aquariums, or zoos; public lectures, publications, or online information; radio or TV programming; and other social media such as YouTube or Facebook.

Outcomes are changes or benefits produced by the activities, usually observable once specific objectives have been met. Research outcomes include discoveries and new applications. A workforce development outcome might include the inclusion of a new

education module in the classroom or the development of a new course or curriculum as a result of the project activities (the module would be an output, but its use would be an outcome). Outcomes also include measurable changes in behavior, such as increasing enrollment of students in STEM degree programs as a result of REU-like experiences. Outcomes are related to project objectives and must be measurable. New, awarded proposals catalyzed by the project are also examples of outcomes.

Outputs are tangible products produced by the activities that can be quantified (counted). Examples of research outputs include published papers and distributed or disseminated data. Number of students graduated is an example of an education output.

Participant - An RII Track-1 participant is an individual in the RII Track-1 jurisdiction who is strongly involved in the project, whether or not they receive funding. All project members who receive funding are by definition participants, although not all participants are funded.

External Participant - An external RII Track-1 participant is an individual outside the RII Track-1 jurisdiction who is strongly involved in the project.

Publications are journal articles, textbooks, monographs, chapters in books, conference proceedings, technical reports, abstracts, or other formal written documents, in both print and electronic media.

Research refers to the scholarly or scientific investigation conducted with the objective of increasing knowledge about a phenomenon. The term includes theoretical, experimental, empirical, or simulation activities conducted by the scientists, engineers, and technical support staff and their RII Track-1 project teams.

RII Track-1 Faculty or Equivalent - RII Track-1 faculty or equivalent are defined as faculty or senior staff members at any participating university, college, or community college who devote part of their professional activities to one or more of the research areas of the RII Track-1 project, or to tasks related to the RII Track-1 project's education, outreach, or knowledge transfer missions. This may include senior professional or research staff as appropriate.

RII Track-1 Graduate Student - RII Track-1 graduate students are defined as students enrolled in a graduate degree program at one of the RII Track-1 project's participating universities or colleges, who devote part of their research and educational activities to one or more of the research areas of the RII Track-1 program under the supervision of an RII Track-1 faculty or staff member. This category includes both students who are financially supported by the RII Track-1 funds and those without direct support but who contribute to the RII Track-1 project.

RII Track-1 Support

Primary RII Track-1 Support - Primary RII Track-1 support means that RII Track-1 funds were largely used to support the project, and its related outcomes are within or closely related to the intellectual scope of the RII Track-1 proposal.

Partial RII Track-1 Support - Partial RII Track-1 support may include projects and related outcomes, use of equipment acquired by the RII Track-1 award, or other similar activities that are related to the intellectual scope of the RII Track-1 project, but that were also supported through other funds.

RII Track-1 Undergraduate Student - RII Track-1 undergraduate students are defined as students enrolled in an undergraduate degree program at one of the RII Track-1 project's participating universities, colleges, or community colleges, who are participating in one or more of the research areas of the RII Track-1 project under the supervision of a RII Track-1 faculty member. This category includes both students who are financially supported by the RII Track-1 funds and those without direct support but who contribute to the RII Track-1 project.

Underrepresented Groups - Underrepresented groups in STEM include all individuals from underrepresented minority groups (described below) as well as women and persons with disabilities. It is also acceptable to use this term somewhat more broadly to include, for example, first-generation college students, or persons from rural or economically depressed areas. Given the potential breadth of the term, it is advisable to define what groups are included when it is used.

Underrepresented Minorities Underrepresented minorities are individuals whose representation in STEM fields is less than their representation in the population: Blacks or African Americans; Hispanics; and Native Americans, including American Indians, Alaskan Natives, Native Hawaiians and other Pacific Islanders. Specific reporting tables may have more precise definitions as needed in their notes.

Workforce Development - Workforce development may include activities targeted to students at all levels, teachers, and the general public to increase the jurisdiction workforce capacity in STEM fields, and especially in the research focus areas of the RII Track-1 project. Examples of professional workforce development include student participation in conferences, internships, entrepreneurship courses, intellectual development activities outside of the students' main research area, teacher training, and other activities.

Vision Statement is a sentence stating the long-term view of the project. The Vision is the ideal, desired state that the project aims to contribute to. It is usually something more utopian versus realistic; there is no expectation that it would be achieved solely through the project activities.