6.6 Annual Report

The Annual Report presents a comprehensive picture of the strategic scope of the research, education, and inclusive ecosystem for interdisciplinary and industrial collaboration and innovation at the ERC. The report includes details about individual research projects and how each is integrated with the center's vision, as well as information on milestones achieved and future plans. Data is collected and benchmarked against other ERCs in multiple sectors and national diversity statistics are referenced. The process of writing the report can be a useful exercise, since all ERC participants are involved and the report serves as a foundation for the upcoming Site Review, but it is definitely a major undertaking. Keep in mind that there are multiple audiences for the report including NSF personnel (ERC program officers and staff); external reviewers; institutional administration, faculty, and staff; ERC personnel; and industrial and advisory board members.

Key reference documents are available in the ERCWeb library. The Guidelines for Preparing Annual Reports and Renewal Proposals and the Guidelines to ERCWeb Data Entry are updated yearly on October 1 and contain information regarding data that needs to be collected and the tables and figures that will be produced for the Annual Report.

Production of the Annual Report requires extensive and detailed project planning and is a year-round, ongoing activity. The report consists of two volumes and specific requirements for each are detailed in the guidelines. It is important to thoroughly read and understand these guidelines, use the glossary, and then devise a project plan.

6.6.1 Project Planning

Many ADs find it useful to create their own outline of required components after studying the guidelines. The next step is to develop a timetable and production schedule and then assign responsibilities. Project management software can be very useful, if there's time to train key users. An alternative is to create a spreadsheet or Word document to develop the project management plan that can be shared with the management team.

In setting up a schedule, be sure to set reasonable deadlines and notify all authors of the general plan. Be clear about assignments and share relevant guidelines with all contributors. It's important to strike the right balance with the amount and type of communication; be as concise and efficient as possible. Allow time to validate information and also for integration, editing, review, and proofreading. The Annual Report is complicated to produce, since the time between the end of the Reporting Year and the due date is very short. There are multiple contributors and all will want to present the very latest results, which means that authors will resist deadlines. Be sure to have reliable administrative collaborators at each institution to help collect data and drafts.

Consider the sequence: Volume II project summaries provide research detail, so these can inform the Volume I narrative sections. Stand-alone documents such as "Current and Pending Support" and "Biographical Sketches" are low-hanging fruit, so collect these as early as possible. It is smart to complete the ERCWeb data entry immediately following the Reporting Year end date, since these metrics will help to tell the center's story. The ERCWeb tables and figures are referred to and explained in the Volume I narrative, so they need to be complete and accurate before writing begins. Certifications need multiple signoffs, so they too should be among the first tasks.

***Tip**: Give the many contributors time (24 hours) for one final review of the entire report, to ensure that there are no major errors and to get their sign-off and buy-in on the report. Allow access to a non-editable pdf, and stress that only critical errors will be corrected in this final draft.*

6.6.2 ERCWeb Data Collection

Gather information continuously and systematically all year round. Refine processes and systems as the center evolves, but try to limit new or complicated ways of doing things. Documentation of any data submitted to ERCWeb must be procured and maintained for audit purposes. Be sure to allow plenty of time for entering and validating data, as there is a significant amount of finely detailed information that is input to multiple screens. Expenditure Budgets as well as Functional Budgets must be prepared and it is sometimes tricky to validate all the numbers.

Note that the lead institution is responsible for reporting and obtaining certifications for the entire center. Begin gathering this information early in the process since some require multiple signoffs at each partner institution. The Authorized Organizational Representative (AOR) is usually the Director of Sponsored projects at the lead institution. A scanner will be needed.

***Tip**: Try entering some initial financial data early in the process to test how the different tables validate.*

Key Definitions

Award Year – A 12-month period that begins on the date that the ERC first receives NSF funding, which is the official “award date.” The Award Year start and end dates remain constant throughout the life of the center.

Reporting Year – The ERC Reporting Year is a 12-month period established by the ERC Program Officer and the Center Director when the NSF Cooperative Agreement is awarded.

Fiscal Year – The Federal fiscal year runs from 10/1 to 9/30. Each partner institution’s fiscal year and state fiscal year can differ.

The term “year” may also refer to the calendar year or the term of an industrial partnership. These differences will have a profound impact on management and reporting of budgets, revenues, and expenses. You will need to understand the ERC reporting requirements and your University’s financial system in order to generate reports for specific time periods.

6.6.3 ERCWeb Data Categories

Below are the categories of data submitted to ERCWeb which produce the ERCWeb Tables and Figures that are inserted in the Annual Report:

- **Support** – financial and in-kind support from the National Science Foundation (including but not limited to the ERC program), other federal agencies, organizations such as industrial\practitioner members, innovation partners, funders of sponsored and associated projects, contributing organizations, state and local agencies, and other sources.
- **Academic Institutions** – name, location, and additional detail on those academic institutions and diversity alliances executing ERC research, tech transfer, and education programs.
- **Personnel** – demographic and occupational data on those individuals directly involved in executing activities funded by the center.
- **Research** – research effort reported in terms of project, thrust, and cluster.
- **Budgets** – annual expenditures, functional and educational budgets.
- **Outputs and Impact** – quantifiable outputs such as publications, technology transfer (invention disclosures, patents, and licenses), and educational outputs of the center.

6.6.4 Data Collection Challenges

Faculty – Most Administrative Directors agree that collecting information from faculty is a significant challenge during the early years of a new center. Remember that faculty time is a scarce resource and most center participants are highly accomplished experts with multiple commitments. Start by gathering what is already known, and request updates to that information. It's helpful to get to know assistants, post-docs and grad students; these people are VIPs in the administrative network. Multiple strategies will be required; use the online system, email, voicemail, texts and in person visits. Peer pressure is a strong motivational strategy. Remind participants that their contribution to this prestigious project is valued and needs to be showcased in the group report.

Tech Transfer – Work closely with the center Industrial Liaison Officer to collect technology transfer data. Develop a strategy for capturing information on company visits, student and faculty time at companies, technology transferred, success stories, technical and economic challenges affecting your industries, as well as the required data elements listed in the Guidelines to ERCWeb Data Entry.

Demographics – It can be difficult to capture information on diversity (gender, ethnicity, race, citizenship, and disability status) from a busy, dispersed group of individuals who may be reluctant to share this information. Develop a standard format (online, distributed by email, or paper) that all ERC personnel can use to voluntarily self-disclose this demographic data. The center is not authorized to make judgments about where a person fits in these categories. Emphasize to users that the data will be reported only in the aggregate to NSF, when encouraging them to share this information.

Students – Keep track of program alumni at graduate, undergraduate, REU, and RET levels from day one. It will be important to know what happens to them, where they go, and how to reach them throughout the life of the center and beyond. Design the information collection process to capture information on alumni systematically at the end of each university term. Get to know the department staff responsible for processing graduating students, since they can be an invaluable source of information. Have a plan for how to communicate with alumni, and do so at least two or three times each year. It is effective to use resources such as Facebook or LinkedIn to keep up with students.

6.6.5 Annual Report Volume I

The Center Director/Principal Investigator is the person responsible for the Annual Report, yet many authors contribute content. Each Director will approach this task differently, but presenting a cohesive narrative is always the goal. Progress in the current year toward achieving the center's vision in comparison with state of the art advances external to the center should be clearly indicated by milestones achieved and by key barriers overcome along critical path activities. . These milestones constitute "Highlights of Significant Achievement and Impact" which are especially important, so all should be aware of the guidelines and requirements for writing these.

Advances in thrust area research that overcome critical gaps in the field should be linked strategically to the center vision and calibrated vs. state of the art as well as vs. testbed-driven needs, using quantitative metrics. It is important to emphasize synergies from interdisciplinary and cross-institutional interactions that support metrics and milestones and deliverables anticipated by the center in its lifetime. A professional document with self-consistent, accurate, up-to-date data reflects the high quality and standards of the work performed by all members of the center, so take the time to set up templates and design style guidelines. Determine how to share document drafts and encourage all ERC personnel to participate in the development and production of the report

***Tip**: Allow time to format the ERCWeb generated Tables. They must be readable and it can take considerable time to tweak the format and integrate the ERCWeb tables into the report.*

6.6.6 Annual Report Volume II

Volume II is comprised of the following components:

1. Table of Contents
2. List of ERC Projects
3. Project Summaries
4. Associated Project Abstracts
5. Data Management Plan
6. Biographical Sketches
7. Current and Pending Support (only required for renewal proposals)

The Project Summaries make up the bulk of the Volume and typically are drafted by grad students, project leaders, and thrust leaders. Allow time in the schedule for writing, editing, and formatting, as information in these summaries will be used to write the Volume I narrative. The data management plan, associated project abstracts, biographical sketches, and current and pending support forms usually just need updating rather than original content, so it's smart to collect them early.

***Tip**: Provide online or word templates which will minimize the formatting time needed during final production.*

6.6.7 Renewal Proposals

Renewal proposals have all the same requirements as Annual Reports, but include additional detail regarding plans for the future and multi-year budgets.

6.6.8 Annual Report Production and Submission

Formatting and compiling all the report components is a time-intensive activity. Bring in temporary help and utilize all resources as the deadline approaches. Work with a printer to create a timetable for submitting files, draft review, and final editing. Time for mailing the printed copies should also be built into the schedule.

There is detailed information in the guidelines regarding submitting the report electronically to Research.gov, the NSF ERC program staff, and to the reviewers. Five printed copies are also required. One additional important step is to certify Cost Share in Fastlane. This is a task for the lead institution's Sponsored Programs Office. The center needs to gather accurate certified information from all the subcontractors in a format that will allow the lead institution to submit this information, so it's important to work this out ahead of time.