Funding Agency Requirements for Broader Impacts

While a variety of funding agencies require researchers to address **how proposed research will benefit the nation**, the National Science Foundation (NSF) has made broader impacts a significant emphasis. The *NSF Grant Proposal Guide* now requires the project summary, narrative, and the Prior NSF Support section to contain a discussion of the broader impacts accomplished:

- through the research itself,
- through the activities that are directly related to specific research projects,
- through complementary activities that are supported by the project.

The “societally relevant outcomes” valued by NSF include but are not limited to:

- full participation of women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM);
- improved STEM education and educator development at any level;
- increased public scientific literacy and public engagement with science and technology;
- improved well-being of individuals in society;
- development of a diverse, globally competitive STEM workforce;
- increased partnerships between academia, industry, and others;
- improved national security;
- increased economic competitiveness of the United States;
- enhanced infrastructure for research and education.

Two recommended reads from the Office of the Vice President for Research website can help clarify this requirement for you:

1. *NSF Merit Review FAQs* from January 2013  
   http://www.nsf.gov/bfa/dias/policy/merit_review/mrfaqs.jsp#3
2. Centers for Ocean Sciences Education Excellence (COSEE)’s excellent document *Broader Impacts 2.0*  
   http://www.cosee.net/files/coseenet/B1%202_0%20FAQs%20Tankersley_Bourexis%20May%202013.pdf

For tips on building broader impact activities into your proposal, consult our **Steps** guide on reverse side.
Steps to Leveraging Campus Resources for Broader Impacts

**Networking**

**Step 1**

Network Prior to Identifying Any Proposed Project

- Become familiar with Purdue infrastructure and existing programs that may complement your research.
- Attend campus symposia, workshops, educational showcases, and poster sessions on campus.
- Consider the OVPR virtual Rolodex of potential broader impact, education, and outreach partners.

**Understanding Funding Opportunity**

**Step 2**

Know if You Need Large-Scale Educational Research or Broader Impact Activities

- Identify if this is a larger, perhaps center-level proposal requiring educational components that:
  - build on a theoretical framework,
  - include rigorous assessment,
  - create new pedagogical knowledge?

- Yes: Identify educational researchers who can be full partners in developing a customized and integrated research plan.
- No: Move to Step 3, “Identifying Broader Impacts”

**Identifying Broader Impacts**

**Step 3**

Be Targeted, Intentional, and Creative

- Identify any broader impacts intrinsic to the research itself, e.g. new tools for your research community, practitioners, or policy makers.
- Identify potential high-quality, innovative education and outreach activities that fit your interests and can bring benefits of your research to a wider audience.

- Go beyond the normal requirements of your faculty job and do more than develop new courses.
- Think about your goal. For example, do you want to develop the STEM pipeline in your area? Increase diversity of participation? Help provide workforce training?

**Partnering**

**Step 5**

Build Your Education and Outreach Team

- Begin conversations with campus program representatives. Talk about your project goal, budget for activities, and timeframe.
- Work together to tailor initiatives to your project and determine appropriate metrics for success.

**Writing**

**Step 6**

Expert Contributions to Text

Your broader impact partner can be a great source for compelling information on:

- rationale for activities,
- track record of success for initiatives,
- description of relevant expertise, and
- program implementation details.