Broader Impacts Worksheet
Questions to help guide your BI plan

The National Science Foundation's (NSF) Broader Impacts (BI) encompass the potential of proposed research to benefit society and contribute to the achievement of societally outcomes. All proposals submitted to the NSF must address the project's broader impacts. You can accomplish BI through the research itself, the activities that are directly related to the specific research project, or activities that are supported by but complementary to the project.

Outcomes 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; and
- Enhanced infrastructure for research and education.

Source: NSF Proposal and Award Policy and Procedures Guide

1. What societal need(s) does your research address, or how does your research benefit society?
2. Which specific outcome(s) (from the list above) would you like to achieve with your research or related BI activity?

3. What are your BI target audience(s) and/or population(s)?
    Audience types
        Government/Policy Makers
        Higher Education
        Industry
        K-12 Aged Children
        Educators (K-12 and Informal)
        Life-long Learners/ Hobbyists
        Public
        Other (e.g., healthcare providers, non-profits, etc.) _____
    Demographic groups
        Age group: _____
        Gender: _____
        Race/ethnicity: _____
        Underrepresented in STEM: _____
        Other _____

4. Why is it important to engage with this audience? Or, what is the rationale/need for engaging this audience? (Complete the sentence: "My research is important to <insert audience> because....")

5. Given your BI goals and audiences, what are the likely settings for your BI activities?

6. Given your BI goals, audience, and setting, how will you reach this audience? Do you need partners, and if so, who might your partners be? (UI partners? External partners?)

7. Do you have established relationships with programs or resources on campus or in community whose mission/goals align with this audience/activity? If so, what are they?

8. Are there existing programs or resources on campus or in the community with whom you would like to build a relationship to help with the delivery of this activity? If so, what are they?

9. How will your audience and partners benefit from participating in the BI activity?

Key Components of a Compelling Broader Impacts Activity
- ✓ Select an activity you are passionate about
- ✓ Show credibility that you can accomplish the activity
- ✓ Have a plan to assess progress toward achieving the activity
- ✓ Invest resources into making the activity a reality

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10. Given your research goals, BI goals, audience, settings, and partners, what are some potential BI activities?

11. Do you have experience conducting these types of activities? If yes, please describe.

12. What is your timeline for delivering the activity?

13. What resources will you need to commit to the activity to make it feasible?

"Meaningful assessment and evaluation of NSF funded projects should be based on appropriate metrics, keeping in mind the likely correlation between the effect of broader impacts and the resources provided to implement projects. If the size of the activity is limited, evaluation of that activity in isolation is not likely to be meaningful. Thus, assessing the effectiveness of these activities may best be done at a higher, more aggregated, level than the individual project."

Source: NSF Proposal and Award Policy and Procedures Guide

14. What do you wish to accomplish by engaging your target audience in this activity?

15. What outcome(s) do you expect – both at the conclusion of the activity and longer-term?

Evaluation Key Questions
- ✓ Was your BI activity successful? Were key goals and objectives met?
- ✓ Was the activity valuable for your audience? Were your activities appropriate for them?
- ✓ How did your audience change? In what ways - knowledge, attitudes, skills, and/or behaviors?

Source: Broader Impacts Wizard, https://aris.marine.rutgers.edu/wizard/index.php

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16. How will you measure the success of the activity?

17. Are there specific data/benchmarks you can use? (If you plan to work with an existing program/resource, is there an assessment mechanism in place to evaluate activity success?

18. What information will you need to gather to determine whether the intended outcome/impact has been achieved?

19. What approach will you use to gather a sample from your audience or population?

20. What evaluation design will you use? (e.g., participation metrics, pre/post surveys, interviews, focus groups, etc.)

21. What method of data collection will you use?

22. How will you analyze the data you collect?

23. How will you report your findings?