

AMERICAN ACADEMY
OF ARTS & SCIENCES



PERCEPTIONS OF SCIENCE IN AMERICA

A REPORT FROM
THE PUBLIC FACE OF SCIENCE INITIATIVE

APPENDIX A: Methodology of Data Sources

NORC General Social Survey (GSS)

The GSS is conducted using primarily in-person interviews and targets adults aged 18 and over living in households in the United States. Starting in 2006, the GSS interviews were conducted in Spanish in addition to English. Samples are determined by area probability design in order to scientifically select a representative sample of U.S. residents. Each survey takes approximately 90 minutes; starting in 2002, interviewers began using computer-assisted personal interview techniques instead of printed questionnaires. For information on the methodology, visit gss.norc.org, and for interactive trends, visit gssdataexplorer.norc.org. Standard error for the 2016 GSS data shown on page 4 is +/- 1.4 percent (military), +/- 1.28 percent (scientific community), +/- 0.83 percent (banks and financial institutions), +/- 0.73 percent (press), and +/- 0.57 percent (Congress).

National Science Board Science and Engineering Index (NSB SEI)

All 2016 data from the 2018 SEI used in this report were acquired through a National Science Foundation (NSF)/National Center for Science and Engineering Statistics-funded science and technology module on the GSS. However, the source and acquisition methods for the longitudinal data have changed over time. Since 2006, when the contract with NORC began, the survey methodology has been the same as the NORC GSS. In 2004, these questions were conducted using a phone survey as part of the University of Michigan Survey of Consumer Attitudes. From 1979–2001, data were acquired through the NSF *Survey of Public Attitudes Toward and Understanding of Science and Technology*, a single-purpose telephone survey. Information on data usage and margins of error can be found in the 2018 SEI, available at <https://www.nsf.gov/nsb/sei/>.

Pew Research Center

The samples for the Pew report *Americans, Politics and Science Issues* were acquired through landline and cell random digital dial (RDD) to obtain a national sample of adults aged 18 and over in all fifty U.S. states. The 2,002 interviews were conducted live from August 15–25, 2014, in English and Spanish. For results based on the full sample, the margin of error was +/- 3.1 percentage points.

The survey samples for *With Budget Debate Looming, Growing Share of Public Prefers Bigger Government* were obtained through

landline and cell RDD to acquire a national sample of adults aged 18 and over in all fifty U.S. states. The 1,501 interviews were conducted live from April 5–11, 2017, in English and Spanish. Data on page 8 are based on 755 interviews with a margin of error of +/- 4.1 percentage points.

For the three reports *The Politics of Climate*, *Vast Majority of Americans Say Benefits of Childhood Vaccines Outweigh Risks*, and *The New Food Fights: U.S. Public Divides Over Food Science*, a combination of landline and cell RDD surveys in English and Spanish were used to recruit members of the Americans Trends Panel (ATP). ATP participants are a nationally representative sample of U.S. adults living in households who were asked to respond to monthly surveys over the Internet or by mail. The data were collected between May 10 and June 6, 2016, in English and Spanish. Most of the results in these reports use survey data from more than 1,450 respondents. Margins of error are included in the source information for each figure.

ScienceCounts

ScienceCounts' "Raising Voices for Science: Exploratory and Benchmarking Survey" was designed by Edge Research and conducted using the Web-enabled KnowledgePanel®, a probability-based panel designed to be representative of the U.S. population. Initially, participants were chosen scientifically by a random selection of telephone numbers and residential addresses. Panelists then received unique login information for accessing surveys online and were sent emails inviting them to participate in research. Data were collected from 2,021 participants in October 2015.

Research!America

For *America Speaks: Volume 17* and *Public Perception of Clinical Research*, Research!America commissioned Zogby Analytics to conduct an online survey of 1,005 U.S. adults from January 16–17, 2017 (*America Speaks: Volume 17*) and 1,000 U.S. adults from July 14–16, 2017 (*Public Perception of Clinical Research*). Thousands of adults were randomly invited to participate in this interactive survey. Using information based on Census data, voter registration figures, CIA Factbooks, and exit polls, Zogby used complex weighting techniques to best represent the demographics of the population being surveyed.

For additional information on all polling methodologies, margins of error, and statistical analyses, refer to the original data source. The potential for survey conditions and wording to influence responses and introduce additional error or bias should be considered when interpreting opinion polling.