

SIDEBAR

Sidebar: Citizen Science in Federal Agencies and Departments

Learning by doing is a way for innovation to occur through practical activities. By allowing individuals to participate in organized science activity, knowledge is transferred to the lay public to use. Citizen science is a form of open collaboration in which individuals or organizations participate as volunteers in scientific progress. Approximately 10% of U.S. adults say that they have taken part in citizen science in the past year, and just over a quarter (26%) say that they have participated in citizen science within their lifetime (Thigpen and Funk 2020). The forthcoming *Indicators* report “[2022] Science and Technology: Public Perceptions, Awareness, and Information Sources” covers this topic from the perspective of participating individuals and public perceptions of science. Here, the focus is on how federal science agencies support citizen science. Data collected from the U.S. federal government website, citizenscience.gov, provide the number of citizen science projects per agency and the tasks in which citizen scientists engage.

In 2020, there were 268 citizen science projects sponsored by U.S. federal agencies and departments and reported on citizenscience.gov (Table INV-A). With 174 projects, the National Park Service leads federal agencies and departments in sponsoring citizen science projects, followed by the National Science Foundation (NSF) at 77 and National Oceanic and Atmospheric Administration at 60 (Table INV-A).

Table INV-A**Federally sponsored citizen science projects on citizenscience.gov, by federal department or agency: 2020**

(Number)

Sponsor	Number
National Park Service	174
National Science Foundation	77
National Oceanic and Atmospheric Administration	60
U.S. Environmental Protection Agency	47
U.S. Geological Survey	44
U.S. Department of Agriculture	37
National Aeronautics and Space Administration	28
U.S. Forest Service	21
U.S. Fish and Wildlife Service	16
Smithsonian Institution	14
National Institutes of Health	12
Department of Energy	8
U.S. Department of the Interior	8
Centers for Disease Control and Prevention	7
Bureau of Land Management	4
All other U.S. federal projects	22

Source(s):

citizenscience.gov, tabulated by SRI International, February 2021.

Science and Engineering Indicators

Beyond those identified as sponsored by the federal government, in 2020, more than 4,000 such projects were listed on citizen science websites and databases (SRI International 2020). There are now citizen science associations in the United States, the European Union, and Australia (Heigl et al. 2019). Compared with patenting activity (as described in the Invention Indicators: Protecting Useful Ideas section of this report) and the completion of advanced degrees in

science (NSB 2020), participation by men and women is more balanced. According to a Pew Research Center survey, roughly half of citizen science participants in the United States are female (Thigpen and Funk 2020). See the forthcoming *Indicators* report “[2022] Science and Technology: Public Perceptions, Awareness, and Information Sources” for more discussion about Americans’ participation in citizen science activities and their perception of it.