

Highlights of GAO-23-106338, a report to congressional committees

Why GAO Did This Study

Small businesses are important drivers of economic growth, but they can face challenges accessing capital to fund research and development. Through the SBIR and STTR programs, agencies provide awards to small businesses to spur technological innovation, among other goals. For these awards, agencies release solicitations that include topics. Small businesses submit proposals with technical solutions to problems. Under open topics, the small businesses define the problems, whereas under conventional topics, agencies define the problems.

The SBIR and STTR Extension Act of 2022 includes provisions for GAO to review agencies' use of open topics. This report examines, among other things, (1) the extent to which agencies have used open topics, (2) how open and conventional topic awards compare, and (3) agency considerations about which topic type to use.

GAO compiled and analyzed data from multiple sources, including the 11 participating agencies and the Small Business Administration (SBA). The scope of the review covers fiscal years 2019 through 2021, because SBA award data for fiscal year 2022 were not yet available at the time of GAO's review. GAO also reviewed agency documentation and interviewed officials from the 11 participating agencies and SBA.

View GAO-23-106338. For more information, contact Candice N. Wright at (202) 512-6888 or wrightc@gao.gov.

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SMALL BUSINESS RESEARCH PROGRAMS

Most Agencies Allow Applicants to Define Needs and Propose Solutions

What GAO Found

Seven of 11 federal agencies participating in the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs used open topics from fiscal years 2019 through 2021. In response to solicitations with open topics, small businesses submit proposals that both define research needs and propose solutions to address them. The remaining four agencies only used conventional topics. For these topics, agencies define needs and small businesses propose solutions. Officials from the 11 agencies said they expect to continue their existing use of topic types in future years.

Over the 3-year period, open topic awards accounted for about 40 percent of all awards and \$4.1 billion. The percentage of awards originating from open topics increased from 36 percent in 2019 to 40 percent in 2020 and 46 percent in 2021.

Open and conventional topic awards differed in terms of small business participation from fiscal years 2019 through 2021, according to GAO analysis of award data. Based on several GAO analyses, businesses receiving conventional topic awards tended to receive multiple awards, which could indicate that open topics promote a more competitive environment.

Number of Businesses Receiving Open and Conventional Topic Awards in Small Business Research Programs, Fiscal Years 2019–2021



Source: GAO analysis of information from the Small Business Administration and the 11 Small Business Innovation Research and Small Business Technology Transfer agencies. | GAO-23-106338

Open topic awards also went to a higher percentage of small businesses owned by veterans and individuals from socially and economically disadvantaged groups, compared to conventional topic awards, but additional factors could explain this difference. For example, one agency stated that nontraditional businesses are less prevalent in certain fields, such as physics. This could contribute to lower proportions of nontraditional businesses receiving awards from agencies working in physics, regardless of the agencies' use of open topics.

In deciding whether to use open or conventional topics, agencies reported considering their goals for using the SBIR/STTR programs and available resources. For example, agencies aiming to meet the goal of increasing applicant competition may consider using open topics, according to officials. Additionally, agencies consider the availability and expertise of proposal reviewers, which is especially important given the greater variation in the types of technologies covered in research proposals for open topics.

United States Government Accountability Office