

BROOKINGS

Report

Reforming federal procurement and acquisitions policies

Darrell M. West Monday, April 3, 2023

Executive summary

The federal government purchases around \$665 billion in goods and services each year from outside contractors, which is 10% of its \$6.5 trillion budget. This includes items such as building and construction, office furniture and supplies, industrial products, professional services, information technology, defense equipment, security systems, transportation, logistical support, travel, meals, and lodging, among other things. Such expenditures represent a huge driver of economic activity in the United States and a vehicle for achieving important national and international priorities.

There is so much money going to external sources that the number of contract and grant-funded workers totals 3.3 million, 35.9% of all national government workers. Indeed, if one takes out active duty military and postal service workers, there are 2.6 times as many outside employees as federal employees (see Table 1).

Table 1. Number of federal government workers (2019)

Contract employees	4.1 million
Federal employees	2.1 million
Active duty military personnel	1.3 million
Grant employees	1.2 million
Postal service employees	500,000
Total workers	9.2 million

Source: Kristin Tate, “The Sheer Size of our Government Workforce is an Alarming Problem,” The Hill, April 14, 2019

Given the magnitude of the external money and workforce, it is important that there be fairness, transparency, and equity in federal awards. But the government procurement process is not easy to navigate, especially for businesses without experience in submitting bids or understanding agency requirements and processes. There are paperwork barriers, geographic disparities, poorly trained officials, and racial and gender inequities.

In this report, I propose a number of reforms to national procurement policies and processes. Among my suggestions include the following:

- 1) Broadening the geographic distribution of contracts awarded;
- 2) Ensuring fairness, equity, and transparency in the process;
- 3) Providing better access for small businesses and historically disadvantaged firms;
- 4) Improving the training of government procurement officers;
- 5) Increasing accountability by empowering end-users;
- 6) Using technology and machine learning software to analyze text and data;
- 7) Limiting the time period and criteria for legal challenges;
- 8) And learning from reforms in other countries.

How current processes work

There are a number of rules and regulations governing federal procurement processes. For businesses wishing to sell goods or services to agencies, the General Services Administration has created an integrated site called the System for Award Management (SAM), and businesses need a Unique Entity Identification Number from the Federal Service Desk website located at www.FSD.gov. Registration involves submitting information and documentation on legal status, organizational structure, tax identification, and finances and getting recognized as an official business or nonprofit organization.

Once registered, businesses can search for federal contract opportunities through www.SAM.gov, www.SBA.gov, or specific agency websites. Among other things, bids must document the materials, proposed price, sourcing, experience, organizational capacity, and compliance capabilities. Submissions also must comply with the domestic content requirements of the [Buy America Act](#) and the [Trade Agreements Act](#).

With digital products, there are particular issues in selling computer software or hardware to government agencies. Some departments may have security requirements that go beyond those in off-the-shelf commercial products, and companies must show how their items meet those standards. Given the [cybersecurity risks](#), it is important for companies to provide information regarding the safety of their components and supply chains. With many items having materials that come from abroad, federal agencies require assurances that the final product is safe, secure, and meets the health, safety, and environmental standards of the United States.

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This is especially the case with items made in or sourced from adversarial nations. There are import and export rules governing materials made from adversarial countries or places that do not have trade agreements with the United States. For example, special requirements have been imposed on some electronics and pharmaceuticals made in China given the suspicions that exist between the two nations.

As documented in recent public opinion polls, there has been a dramatic drop in [U.S. trust in China](#). In a 2021 Pew Research Center poll, 89% of Americans view China as a competitor or an enemy, and 67% report “cold feelings” towards China, up from 46% in 2018. U.S. government agencies want to make sure foreign-made products have no spyware, malware, or chip modifications that could endanger national security.

Complaints regarding federal procurement and acquisitions policies

There are a number of complaints about current acquisitions policies. This includes issues related to paperwork, geographic distribution, government training, and inequity. These problems make it difficult for companies to contract and create barriers for commercial firms.

Paperwork and problems for small businesses

Red tape long has been a complaint from businesses dealing with the government. There have been many efforts over the years to reduce paperwork while still maintaining appropriate safeguards for health, safety, and accountability. But businesses vary quite a bit in their experience and dealings with the federal government. Some have lengthy track records of selling products to public agencies and know what kind of material is required to submit bids and comply with contracting rules, while others do not.

Small businesses often complain that they lack the time or staff to deal with government paperwork. It is hard for them to comply with procurement requirements because of their limited workforce and inexperience with contracting rules. They may have an administrative staff composed of only a few people and therefore do not have the time to learn all the processes and procedures.

The Small Business Administration and General Services Administration have created portals that offer assistance to small businesses, minority-owned firms, veteran-owned firms, and women-owned enterprises. These portals provide specific advice for applying for grants and counseling for specific companies.

Yet despite these efforts, three quarters of federal contracts go to large businesses due to their greater scale and expertise. In fiscal year 2021, for example, the federal government made awards of \$145.7 billion to small businesses, which was around 22% of total contracts. That represented an increase of \$13 billion over the preceding year but did not alter the long term trend of the bulk of funding going to large firms.

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Interestingly, this small business figure is nearly identical to that in the United Kingdom. That nation spends around 300 billion pounds on government contracts annually and 26.9% of that money goes to small- and medium-sized enterprises.

The small percentage of money going to small businesses is not surprising given the fact that most of the substantial government contracts go to large, publicly traded firms. For example, big military contracts mainly go to well-known companies because they are the ones with the skills and workforce that can build tanks, planes, ships, and submarines. It is always going to be hard for small businesses to compete for those kinds of contracts that require high levels of technical expertise.

Geographic disparities

There are substantial geographic disparities in the distribution of U.S. government contracts. In general, firms on the East and West Coast reap the lion’s share of federal spending. Table 2 lists the top states in terms of federal contracting, and most are on the East Coast with a few on the West Coast or in the South. Much of the heartland receives less than a third of federal contracts.

Table 2. Top states in terms of federal contract funding (FY21)

Virginia	\$72 billion
Texas	\$55 billion
California	\$52 billion
Maryland	\$36 billion
District of Columbia	\$31 billion

New York	\$31 billion
Florida	\$25 billion
Massachusetts	\$23 billion
Connecticut	\$18 billion
Pennsylvania	\$17 billion
Arizona	\$16 billion
Washington State	\$16 billion

Source: FedSched, “Which States Captured the Largest Share of Federal Contracts,” June 7, 2022.

It often is hard for firms in the Midwest, Southwest, and Rocky Mountain area to compete because they may not have ready access to government officials or have companies with experience in competing for federal contracts. Those issues put those firms at a disadvantage and result in relatively few federal dollars going to those areas.

Hollowing out government and poorly trained procurement officials

A number of studies have reported that federal agencies have been hollowed out in recent years as the number of retirements has increased and leaders have outsourced jobs and relied on outside contractors for basic services. Table 3 shows the retirement figures for 2015 to 2022 and the number has risen from 99,710 in 2015 to 114,505 in 2022, a 15% increase.

Table 3. Number of federal government retirements, 2015-2022

2015	99,710
2016	99,242
2017	96,459
2018	109,850
2019	109,991
2020	99,529
2021	96,956

Source: U.S. Office of Personnel Management, "Retirement Statistics," 2023

The result of this hollowing out of the permanent workforce and reliance upon external contractors has been a lack of expertise within departments on how to handle procurement and evaluate business expertise. This is particularly a problem with small businesses, which may not be known to federal officials and therefore are hard to judge in terms of their ability to deliver quality products. It is often easier to go with well-known national brands with previously existing reputations than risk contracts with lesser-known companies.

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There are additional challenges in selling software and hardware to the government as opposed to items such as paper clips and hammers. With digital products having proprietary software or millions of lines of code, it is difficult to assess product quality and reliability. Evaluating computer services requires technical knowledge as well as understanding of the requisites of cybersecurity, privacy, accessibility, and discrimination. In that situation, there may be limited effectiveness and accountability in the procurement process.

Racial and/or gender inequities

There are concerns about racial, economically disadvantaged, and/or gender inequities in federal government contracting. Outside observers fear that minority firms don't fare very well and aren't very successful at winning federal contracts. According to Small Business Administration data, disadvantaged firms garnered 4.28% of the funds in FY 2021. In

disaggregating data by race and ethnicity, though, only 1.7% of funding went to Black-owned businesses, 1.8% went to Hispanic firms, and 2.8% went to Asian-American companies.

In addition, there are gender inequities. While 20% of small businesses are owned by women, female-owned firms have garnered only 4.85% of federal contracts. This suggests a need to prioritize equity in federal contract awarding to make sure all firms have a fair opportunity to compete on and win government grants.

Reforms of federal procurement and acquisitions policies

There are a number of reforms which could make a difference in the efficiency, effectiveness, and equity of government contracting. This includes improvements in the processes and outcomes related to business bids. Enacting these suggestions would address several of the complaints that people have about the current situation.

Broadening the geographic distribution of contracts awarded

There needs to be a broader geographic distribution of government contracts. As documented earlier, 59% of federal contracts (\$392 billion of \$665 billion) go to a dozen states. The other 38 jurisdictions fight over a relatively small portion of the financial pie and are not very successful at winning government contracts. That breeds cynicism and mistrust in the public sector, which reverberates politically and economically.

Geography needs to be incorporated as a serious factor in awarding government contracts in order to improve the equity of the process. Having a large amount of federal money concentrated on the East Coast is not reasonable from a fairness or justice point of view.

Improving fairness, equity, and transparency in the process

Agencies also must ensure basic fairness and equity in the contracting process from the standpoint of race, gender, and ethnicity. Minority-owned firms get a relatively low percentage of federal contracts and well below their percentages in the overall population or among the number of established firms.

In addition, there needs to be better access for small disadvantaged businesses (SDBs). In order to promote that goal, the Biden administration has set a new and ambitious goal of allocating 11% of Small Business Administration contract spending for SDBs. That is almost triple the current level. In addition, it has asked federal agencies to award 5% of funding to women-owned businesses to start to bring them closer to the 20% figure of businesses owned by women. Making progress in each of these areas would improve the equity of the current system.

One way to make progress in this area is to create mechanisms for small businesses to compete for subcontracts from large firms. Given the dominance of big enterprises in military, defense, cybersecurity, and cloud services, it is always going to be hard to raise the percentage of funds going to small businesses unless they can get a share of the large-firm subcontracts. GSA and SBA should mandate that a fair percentage of subcontracts go to small businesses, especially those that are women and/or minority owned.

Issuing reports each year summarizing the number of applications, awards, and subcontracts by geography, race, ethnicity, gender, and veteran status would help with transparency. If people can see the results of the process in terms of who bids and what their backgrounds are and what the ultimate awards are, then it would be easier to compute success rates by category and see whether the problems are with the applicant or award pool. There would be different remedies depending on where the bottleneck occurs.

Increasing the training of government procurement officers

Lesley Field of the White House Office of Federal Procurement Policy has argued that improved training and certification are important for system efficiency. She notes the importance of lifelong learning and points out that people need training at various stages of their careers. Government agencies need to provide professional development opportunities and funding to get people the expertise they need to manage and evaluate government contracts. This is especially the case with complicated technical products or AI and machine learning software that is very elaborate. Unless procurement officers understand how digital products work, it would be hard for them to evaluate bids or supply chain sourcing.

Improving accountability by empowering end-users

Researchers long have complained that public procurement sometimes generates products that do not work very well. They argue that one of the biggest challenges is that government officials have little data from the end-user and typically do not know whether particular products operate effectively and meet the needs of those using them.

For this reason, Abraham Young argues that agencies should establish electronic marketplaces that allow users to choose from a range of products and that government authorities can count on people to select products that work for them. Incorporating e-commerce mechanisms combined with data on user satisfaction can enhance product selection by providing accountability tools for agency officials.

The GSA has moved in this direction by setting up a commercial marketplace whereby agency officials can purchase needed items directly from several major e-commerce platforms. That allows users to pick the products they want and make sure those items satisfy their needs. Once fully implemented, GSA expects federal government sales to total \$6 billion each year and hopes to save money and improve procurement at the same time.

Using AI, machine learning, and data analytics to study text and data

Digital technologies can help agencies cope with the volume of bids it receives for government contracts. Using tools such as AI, machine learning, and data analytics, officials can spot trends, analyze data, and identify possible irregularities. AI for fraud detection is common in financial institutions and can help overseers spot invoices, contracts, transactions, or bid protests that are unusual or irregular. Those items then can be referred to human evaluators, who can take a more in-depth look to see if there are serious problems in applications, materials, sourcing, or awards.

Limiting the time period and criteria for legal challenges

With the huge amount of money available through government contracts, it is not surprising that the bidding process sometimes generates lawsuits. One of the most widely publicized legal challenges came in regard to the cloud computing contract for the

Department of Defense. It was a \$10 billion contract, so the stakes, understandably, were quite high. Firms that lost the contract challenged the procurement decision and filed a lawsuit. Ultimately, DOD withdrew its original award and split the contract among four large firms.

Regardless of the merits of that particular lawsuit, it is not a good idea for lengthy lawsuits to tie up procurement awards. It disrupts agency operations and creates uncertainty over products and services that are needed by government offices. Norway has a 30-day time limit for filing suits in cases where the evidence shows that procurement processes were followed. It has a longer time period for situations where the complainant argues proper procedures were not followed.

Learning from reforms in other countries

A number of foreign countries has experimented with procurement reforms designed to improve government contracting. Many nations have experienced similar problems in terms of grants and contracts and have instituted various measures designed to streamline the process.

One example comes from Germany, which wanted to improve procurement of innovation-related products in its government agencies. Based on federal legislation, it specified innovation as an important evaluation criterion for choosing contractors. Research undertaken several years after that law went into effect found the reform improved innovation and led to a broadening of the types of products used in the public sector.

Norway found a similar result in regard to sustainability. When it elevated that factor in bid selection and gave procurement officers tools for assessing environmental impact, agencies moved toward more sustainable results. Government officials realized that if they managed contracts from a sustainability standpoint, companies got more serious about compliance and more effective in their project implementation.

In general, researchers have found that elevating “green public procurement” in award decision-making substantially improves the adoption of sustainable practices and products. One study analyzed European Community data and found that altering the

selection criteria increased the use of environmental materials by 20 percentage points. The authors found this was particularly the case with small businesses, which need to adhere to specific selection priorities in order to win contracts.

Note: I would like to thank Jack Malamud for his excellent research assistance and Elaine Kamarck for her helpful suggestions on this project.