SYM-AM-24-039

Excerpt from the Proceedings

of the

Twenty-First Annual Acquisition Research Symposium

Acquisition Research:
Creating Synergy for Informed Change

May 8–9, 2024

Published: April 30, 2024

Prepared for the Naval Postgraduate School, Monterey, CA 93943.

The research presented in this report was supported by the Acquisition Research Program at the Naval Postgraduate School.

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Policy Options to Improve Small Business Participation in the Industrial Base: An Analysis of the Competitiveness Demonstration Program of 1988 and of Small Business Act Authorities

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Abstract

In 2023, officials from the Department of Defense stated that unless small business participation improves, "[w]e risk losing mission-critical domestic capabilities, innovation and strong supply chains" and that the Department must work, "to strengthen our small business supply chains, increase competition and attract new entrants." However, analysis based on the Department's FY 2021 Industrial Capabilities Report to Congress suggests that small business utilization is not fully supporting the needs to the Department. To that end, it is worth examining the lessons learned from the Small Business Competitiveness Demonstration Program (Comp Demo), established by the Small Business Competitiveness Demonstration Program Act of 1988 (Comp Demo Act). Comp Demo attempted to realign small business spending from industries where small businesses were winning large shares of contracts to those where small businesses were underrepresented. This program was terminated by the Small Business Jobs Act of 2010, P.L.111–240.

The Small Business Act requires that the government assure, "that a fair proportion of the total purchases and contracts for goods and services of the Government in each industry category" be awarded to small businesses (15 USC 644(a)). However, within the last 10 years, amendments have been made to the Small Business Act that allows the Small Business Administration (SBA) to create new size standards within or outside of the existing system of North American Industrial Classification System (NAICS) codes, "due to unique Federal buying patterns or requirements." Additionally, the annual report on small business goals was amended to require that small business participation be tracked by NAICS. The SBA has not acted upon either. By examining the successes and failures of the Comp Demo program, and the opportunities created by the changes to the Small Business Act, the author expects to identify opportunities to provided targeted assistance to small businesses in underrepresented industries, specifically those businesses providing advanced and emerging technologies.

The Current State of Small Business in the Industrial Base

The Small Business Act has long recognized that small business participation in federal procurement is of crucial importance, requiring that small businesses "shall receive any award or contract if" the award is, in the determination of the SBA and contracting agency, "in the interest of (A) maintaining or mobilizing the full productive capacity of the United States; (B) war or national defense programs; or (C) assuring that a fair proportion of total purchase or contracts for goods and services of the Government in each industry category . . . are awarded to small business concerns" (15 USC 644(a)).

To that end, Congress established prime and subcontracting goals for small business utilization. Since 1997, the Small Business Act has mandated a governmentwide goal of awarding at least "23% of the total value of all prime contract awards for each fiscal year" (15 USC 644(g)(1)(A)(i)). As part of the National Defense Authorization Act (NDAA) for FY 2016, this provision was amended to add the requirement that "[i]n meeting this goal, the Government shall ensure the participation of small business concerns from a wide variety of industries and from a broad spectrum of small business concerns within each industry.” The goaling provisions were concurrently amended to require that the annual goaling report include: “(C) The number of small business concerns, small business concerns owned and controlled by service-disabled veterans, qualified HUBZone small business concerns, small business concerns owned and controlled by socially and economically disadvantaged individuals, and small business concerns owned and controlled by women awarded prime contracts in each [NAICS] code during the fiscal year and a comparison to the number of awarded contracts during the prior fiscal year, if available.”

If success is measured by sheer dollars awarded to small businesses, this program has been a success. According to the Federal Procurement Data System (FPDS), in every year since 2000, the government has awarded at least 21% of prime contracts to small businesses. Since 2013, the lowest percentage awarded to small businesses was 23.39%, and in the past five years a minimum of 25% of prime contracts were awarded to small businesses. However, SBA has not published the required data on the number of companies winning contracts nor the distribution amongst NAICS codes.

Within the Department of Defense (DoD), the dollars to small business paint a similar picture: in each of the past six fiscal years, the DoD has exceeded the 23% goal, often topping even 25%. Yet the number of entities winning contracts at the DoD has dropped significantly. According to SBA’s Small Business Data Hub, in 2009 there were 73,409 unique companies winning work with the Department, and 60,042 of those were small businesses. In FY 2022, the total number of businesses had dropped to 37,896 and the number of small businesses had fallen to 29,991. This makes the industrial diversification of these businesses increasingly important.

According to the standard FPDS Total Actions by NAICS report, in FY 2023 the DoD spent about $456 billion through prime contracts.[1] Of this, $91.7 billion, or 20.1%, was awarded to small businesses. This spending occurred across 980 distinct NAICS codes. As illustrated in Table 1, small businesses dominate the base in a substantial number of these industries. In 322 NAICS, small businesses received more than 80% of prime contract dollars awarded by the DoD, accounting for nearly $11.4 billion of the DoD’s small business spend. In 160 of these NAICS, all spending was with small businesses. In 662 NAICS—about two thirds of the industries where the DoD makes purchases—small businesses received at least 23% of the dollars. While these 662 industries account for just under 42% of the DoD’s total outlays, they account for nearly 82% of its small business spending. Small businesses received only between 10% and 23% of spending in 94 NAICS and between 5% and 10% of spending in 38 NAICS. However, there were 169 NAICS where small businesses received less than 5% of all DoD spending, even though these NAICS accounted for $153 billion, or over a third of the DoD’s total spend for the year. In 125 NAICS, small businesses received less than 1% of dollars.

[1]When the FPDS goaling rules were applied, this number dropped to $362 billion in small business eligible spend, and $91.2 billion in actual spend, for a result of 25.18% to small business. However, for purposes of this analysis the more inclusive set of contracts is used.

Table 1. Distribution of Small Business Spending Across NAICS in FY 2023 DoD Spending

	# of NAICS	$ Spent in Subject NAICS	SB Spend in Subject NAICS	% of All DoD Spend	% of SB Spend
Small business received more than 80% of dollars	311	$12.0 b	$11.4 b	2.6%	12.4%
Small business received between 60% and 80% of dollars	127	$10.0 b	$7.1 b	2.2%	7.8%
Small business received between 40% and 60% of dollars	125	$54.2 b	$25.9 b	11.9%	28.2%
Small business received between 23% and 40% of dollars	99	$114.9 b	$30.6 b	25.2%	33.3%
Small business received between 10% and 23% of dollars	94	$71.9 b	$11.7 b	15.8%	12.7%
Small business received between 5% and 10% of dollars	38	$39.8 b	$2.9 b	8.7%	3.2%
Small business received less than 5% of dollars	169	$153.0 b	$2.2 b	33.6%	2.4%

Source: FPDS

While this distribution raises questions, it is more important to look at how small businesses are faring in industries most important to the Department. The DoD's FY 2021 Industrial Capabilities Report to Congress (2021 ICR) identified sector challenges around kinetic capabilities, energy storage and batteries, castings and forgings, and microelectronics. It also highlights challenges for aviation, biomanufacturing, ground system electrification, and the submarine industrial base. However, it is often difficult to map these sectors to specific NAICS. For example, the ICR specifies that for energy storage and batteries, they are focusing on "high-capacity batteries, with a particular focus on lithium batteries." Batteries actually have a series of NAICS devoted to them—NAICS 335910, 35911, and 335912 cover battery manufacturing, storage battery manufacturing, and primary battery manufacturing. The challenges presented in the ICR suggest that it is also necessary to include NAICS 212290, other metal ore mining and NAICS 212390, lithium mineral mining. Lithium compound manufacturing is in NAICS 325180, other basic inorganic chemical manufacturing. All of these receive awards recorded in FPDS, but the last three include items that may not meet the needs of this sector. Likewise, NAICS 335999 includes semiconductor and other battery charging manufacturers, but it also includes the manufacture of bells and gongs. This makes it difficult to identify these segments of the industrial base using FPDS.

Instead, I analyzed the top 10 NAICS codes by dollars at the DoD, and the top 10 NAICS codes for small businesses at the DoD. As shown in Table 2, this yielded 17 industries, of which 10 implicated at least one of the ICR Sectors. Of the seven industries not included in the ICR, five were among the top 10 NAICS for small businesses but not in the top 10 for overall DoD spending. Of the two remaining NAICS that did not implicate an ICR sector, one was health insurance, and the other was commercial construction. The top 10 NAICS accounted for 56% of all DoD contract dollars last year, with just under 6.6% going to small businesses. When only looking at the top 10 NAICS that supported an ICR sector, those numbers fall to 48% and 4.6% respectively.

Table 2. NAICS Codes Accounting for the Greatest Spend at DoD in FY 2023

NAICS Code (Description)	Rank By Total Dollars at DoD	Rank By SB Dollars at DoD	Total Dollars	Small Business Dollars	% Small Business Dollars	ICR Sector
336411 (Aircraft Manufacturing)	1	23	$59.9 b	$0.7 b	1.25%	Aviation
541330 (Engineering Services)	2	2	$37.1 b	$8.8 b	23.69%	Multiple
541715 (Research and Development, Physical, Engineering & Life Sciences (Except Nanotechnology and Biotechnology))	3	3	$28.7 b	$6.8 b	23.69%	Multiple
336611 (Ship Building & Repairing)	4	13	$25.5 b	$1.8 b	7.21%	Multiple
336414 (Guided Missile & Space Vehicle Manufacturing)	5	118	$23.1 b	$0.08 b	0.35%	Multiple
236220 (Commercial & Institutional Building Construction)	6	1	$21.7 b	$9.0 b	41.58%	none
334511 (Search, Detection, Navigation, Guidance, Aeronautical, & Nautical System & Instrument Manufacturing)	7	25	$16.4 b	$0.7 b	4.29%	Multiple
336413 (Other Aircraft Parts & Auxiliary Equipment Manufacturing)	8	12	$15.9 b	$1.9 b	12.11%	Multiple
524114 (Direct Health & Medical Insurance Carriers)	9	707	$14.1 b	$0.0001 b	0.0009%	none
336412 (Aircraft Engine & Engine Parts Manufacturing)	10	91	$13.6 b	$0.1 b	0.83%	Multiple
324110 (Petroleum Refineries)	11	10	$11.9 b	$2.3 b	19.11%	none
561210 (Facilities Support Services)	12	8	$10.7 b	$2.7 b	25.22%	none
541519 (Other Computer Related Services)	13	4	$8.5 b	$5.1 b	59.68%	none
237990 (Other Heavy & Civil Engineering Construction)	15	9	$8.0 b	$2.3 b	29.1%	Multiple
541712 Research and Development, Physical, Engineering & Life Sciences (Except Biotechnology))	18	7	$7.4 b	$2.8 b	38.33%	Multiple
339999 (All Other Miscellaneous Manufacturing) [2]	23	5	$3.7 b	$3.5 b	93.49%	none
423850 (Service Establishment Equipment and Supplies Merchant Wholesalers)	26	6	$3.1 b	$3.1 b	99.99%	none

Source: FPDS

All small businesses spending in non-ICR categories detailed in Table 2 account for 28% of all the dollars the DoD spent with small businesses that year. This should not suggest that there isn't value in having small construction contractors or facility support services providers. Rather, it is to raise the question of whether such a substantial portion of the DoD's small

[2] According to NAICS.com, this includes the manufacturing of amusement machines, artificial flower arrangements, atomizers, beach umbrellas, bone novelties, candles, non-orthopedic canes, Christmas trees and ornaments, cigarette holders, lighters, and lighter flints, coin- or card-operated amusement machines (except jukeboxes), decalcomania work (except on china, glass), electronic cigarettes, feather dusters, feathers for use in apparel and textile products, fire extinguishers, artificial flowers, fly swatters, frames, mirror and picture, artificial fruits, garden umbrellas, globes, hair nets, hairpieces, hat blocks, mannequins, marionettes, anatomical models, music boxes, novelties, parasols, shoe patterns, pinball machines, pipe cleaners, potpourri, puppets, sewing and mending kits, shell novelties, slot machines, theatrical scenery, tinsel, tobacco pipes, toupees, artificial trees, wreaths, and plants, and wax figures.

business spending should be in areas where the small business is passing through items. Indeed, in just these NAICS codes, $8.2 billion was spent where the small business is the wholesaler/distributor.

Table 3. NAICS Codes Accounting for the Greatest Spend at DoD in FY 2013

NAICS Code (Description)	Rank By Total Dollars at DoD	Rank By SB Dollars at DoD	Total Dollars	Small Business Dollars	% Small Business Dollars
336411 (Aircraft Manufacturing)	1	11	$46.0 b	$0.9 b	1.93%
541330 (Engineering Services)	2	3	$25.0 b	$3.8 b	15.17%
336611 (Ship Building & Repairing)	3	13	$15.4 b	$0.8 b	5.26%
541712 (Research and Development, Physical, Engineering & Life Sciences (Except Biotechnology))	4	2	$15.4 b	$4.1 b	26.48%
561210 (Facilities Support Services)	5	5	$11.3 b	$1.8 b	15.88%
336413 (Other Aircraft Parts & Auxiliary Equipment Manufacturing)	6	8	$10.8 b	$1.1 b	10.47%
324110 (Petroleum Refineries)	7	6	$10.6 b	$1.5 b	14.52%
336414 (Guided Missile & Space Vehicle Manufacturing)	8	479	$10.6 b	$2.5 b	0.02%
236220 (Commercial & Institutional Building Construction)	9	1	$10.5 b	$4.6 b	43.84%
524114 (Direct Health & Medical Insurance Carriers)	10	942	$9.7 b	$8.6 b	0.00%
541519 (Other Computer Related Services)	13	4	$5.2 b	$1.9 b	37.10%
237990 (Other Heavy & Civil Engineering Construction)	15	7	$4.4 b	$1.2 b	26.67%
541512 (Computer Systems Design Services)	19	9	$3.5 b	$1.0 b	30.84%
562910 (Remediation Services)	31	10	$2.0 b	$1.0 b	53.02%

Source: FPDS

While the 2023 numbers certainly suggest challenges with where the DoD spends with small businesses, it is worth looking at them on as part of a trend. In FY 2013, the Department spent $309.3 billion, including $49.3 billion with small businesses. First, this means that the dollars awarded to small business have substantially increased, both by absolute amounts and by percentages in the past 10 years. Actual dollars to small businesses increased by over $40 billion. In 2013, small businesses received only 6% of the spend in the top 10 NAICS, while last year it was 6.5%. Additionally, the small business share of the top 10 NAICS has grown—in FY 2013 small firms received 15.9% of prime contract dollars, as opposed to 20.1% last year.

However, funding is now further concentrated in a few NAICS—in 2013, half of all DoD spending took place in 10 industries categories, while last year it was over 56%. About 45% of all small business spending occurred in 10 NAICS in 2013, while in 2023 it was 50.6%. In 2013, aircraft manufacturing—a top ICR category—was the top NAICS by dollar for all businesses, and the eleventh for small businesses. By 2023, while it remained the top overall spending category and grew by about $14 billion, it had fallen to the 23rd most valuable NAICS for small firms, and small firm spending had dropped by about $200 million. Additionally, in 2013 the top 10 small business industries did not include any wholesalers or manufacturers of miscellaneous items, suggesting that the 2013 spending had more actual small business production.

While dollars are an important measure of the base, another important factor is the number of firms. In FY 2013, there were 73,422 unique vendors doing business with the DoD, and 24,294 of those were small businesses. By 2023, the total had dropped to 48,352 firms including 15,668 small businesses.

Table 4. Total Number of Businesses and Small Businesses by NAICS

NAICS Code (Description)	Total Number of Firms 2013	Total Number of SB 2013	Total Number of Firms 2023	Total Number of SB 2023
336411 (Aircraft Manufacturing)	664	494	759	556
541330 (Engineering Services)	2257	1439	4269	2999
541715 (Research and Development, Physical, Engineering & Life Sciences (Except Nanotechnology and Biotechnology))	1827	1390	3841	2939
336611 (Ship Building & Repairing)	521	401	800	491
336414 (Guided Missile & Space Vehicle Manufacturing)	47	8	62	10
236220 (Commercial & Institutional Building Construction)	2069	1807	2220	1669
334511 (Search, Detection, Navigation, Guidance, Aeronautical, & Nautical System & Instrument Manufacturing)	1286	840	1333	808
336413 (Other Aircraft Parts & Auxiliary Equipment Manufacturing)	2372	1904	2330	1539
524114 (Direct Health & Medical Insurance Carriers)	1	0	17	1
336412 (Aircraft Engine & Engine Parts Manufacturing)	688	507	702	451
324110 (Petroleum Refineries)	312	246	546	303
561210 (Facilities Support Services)	892	722	955	664
541519 (Other Computer Related Services)	1437	1069	1434	965
237990 (Other Heavy & Civil Engineering Construction)	725	581	625	441
541712 Research and Development, Physical, Engineering & Life Sciences (Except Biotechnology))	2759	2027	496	286
339999 (All Other Miscellaneous Manufacturing)	901	734	522	647
423850 (Service Establishment Equipment and Supplies Merchant Wholesalers)	26	22	16	12

Source: SBA Small Business Data Hub and FPDS

As Table 4 illustrates, in FY 2013 small businesses accounted for 75% of the firms winning awards in the top NAICS codes, but by FY 2023 that number had dropped to 70% of these 10 industries. However, the total number of firms grew by 4,601 overall and 2,673 small businesses in these top NAICS. The vast majority of the growth occurred in the top four NAICS—Aircraft Manufacturing, Engineering Services, Research and Development, Physical, Engineering & Life Sciences (Except Nanotechnology and Biotechnology), and Ship Building & Repairing. These four industries alone added 4,400 firms, including 3,261 small businesses. However, this also reflects that in 10 of the 17 industries, including some of the largest for small businesses, small businesses lost firms.

For the NAICS supporting the ICR challenges, the report acknowledges the need to better engage small businesses, and offers five recommendations. These are: (1) increasing access to the defense marketplace, using the Office of Small Business Programs and Procurement technical assistance centers; (2) implementing a more unified management structure and resourcing for the DoD's small business programs; (3) updating and executing the Department's small business strategy to identify barriers to entry; (4) measuring and scaling the effect of current DoD programs such as mentor protégé and SBIR; and (5) increase small business participation by addressing credits under category management and developing market intelligence tools.

While all of these have merit, they ignore that in 2023 a substantial portion of small business dollars were going to industries where small businesses received the vast majority of the work. If we analyze broader industry categories such as a three-digit NAICS and then exclude areas where the DoD spends less than $10 million annually or where small businesses receive less than 50% of prime contract dollars, it leaves 23 industry categories. If we further exclude hospitals, accommodation, and real estate, which are location driven, it takes us to 20 industry categories in Table 5.

Table 5. Three Digit NAICS with More Than $10 Million in FY 2023 DoD Spend and Greater Than 50% of Dollars to Small Businesses

Industry Category	Sum of Total Dollars	Sum of SB Dollars	% SB
115 (SUPPORT ACTIVITIES FOR AGRICULTURE AND FORESTRY)	$21,182,624	$20,698,892	98%
211 (OIL AND GAS EXTRACTION)	$26,069,210	$17,026,143	65%
212 (MINING (EXCEPT OIL AND GAS))	$66,285,506	$59,817,553	90%
238 (SPECIALTY TRADE CONTRACTORS)	$2,864,967,393	$1,530,956,708	53%
315 (APPAREL MANUFACTURING)	$1,402,801,686	$714,597,927	51%
316 (LEATHER AND ALLIED PRODUCT MANUFACTURING)	$127,022,844	$106,558,004	84%
321 (WOOD PRODUCT MANUFACTURING)	$86,530,114	$63,856,955	74%
327 (NONMETALLIC MINERAL PRODUCT MANUFACTURING)	$93,053,746	$80,997,837	87%
331 (PRIMARY METAL MANUFACTURING)	$141,946,826	$109,099,299	77%
337 (FURNITURE AND RELATED PRODUCT MANUFACTURING)	$468,161,084	$351,077,075	75%
339 (MISCELLANEOUS MANUFACTURING)	$4,085,519,908	$3,749,623,536	92%
423 (MERCHANT WHOLESALERS, DURABLE GOODS)	$5,354,929,245	$3,825,319,459	71%
443 (ELECTRONICS AND APPLIANCE STORES)	$180,084,767	$107,899,686	60%
444 (BUILDING MATERIAL AND GARDEN EQUIPMENT AND SUPPLIES DEALERS)	$12,695,530	$7,948,717	63%
512 (MOTION PICTURE AND SOUND RECORDING INDUSTRIES)	$27,996,855	$20,758,357	74%
523 (SECURITIES, COMMODITY CONTRACTS, AND OTHER FINANCIAL INVESTMENTS AND RELATED ACTIVITIES)	$15,914,861	$16,038,353	101%
562 (WASTE MANAGEMENT AND REMEDIATION SERVICES)	$3,490,167,195	$1,914,900,216	55%
624 (SOCIAL ASSISTANCE)	$91,032,183	$85,712,466	94%
712 (MUSEUMS, HISTORICAL SITES, AND SIMILAR INSTITUTIONS)	$19,185,788	$11,158,102	58%
713 (AMUSEMENT, GAMBLING, AND RECREATION INDUSTRIES)	$19,036,212	$12,058,809	63%

Source: FPDS

At first glance, the high number of manufacturing sectors suggests that small businesses are active in the manufacturing industry. Under the non-manufacturer rule found at 13 CFR 121.406, small businesses must either manufacture a product itself or deliver the product of another small business. However, an exception to this exists if SBA deems that there is no domestic small business manufacturing the product, in which case the small business may provide a product produced by another manufacturer. Unfortunately, FPDS does not allow for an easy way of querying whether items purchased in the above referenced industries were subject to waivers.

Interestingly, 13 CFR 201 states that NAICS groups 423, 443, and 444 “shall not be used to classify Government acquisitions for supplies. They also shall not be used by Federal Government contractors when subcontracting for the acquisition for supplies. The applicable manufacturing NAICS code shall be used to classify acquisitions for supplies. A Wholesale Trade or Retail Trade business concern submitting an offer or a quote on a supply acquisition is categorized as a nonmanufacturer and deemed small if it has 500 or fewer employees and meets the requirements of the nonmanufacturer rule.” This raises substantial questions about how approximately $5.5 billion in purchases were classified under NAICS codes that weren’t permitted under the SBA’s rules, especially with small businesses winning over 60% of these dollars. In any case, it is clear that within industry sectors, the prime contractors are passing through products rather than producing the items, adding little more than distribution capacity to the industrial base.

In the past, Congress sought to take sectors where small businesses were winning the majority of dollars and redirect some portion of that spend to industries where small businesses were underperforming. In 1988, Congress found that previous Congressional reforms intended to “implement the mandate for small business participation in a fair proportion of Federal Procurements” as required by section 15 of the Small Business Act had resulted in:

> (A) a concentration of procurement contract awards in a limited number of industry categories, often dominated by small business concerns, through the use of set-asides, for the purpose of assuring the attainment of the agency’s overall small business contracting goals; and
>
> (B) inadequate efforts to expand small business participation in agency procurements of products or services which have historically demonstrated low rates of small business participation despite substantial potential for expanded small business participation. (Comp Demo Act at § 702)

Consequently, Congress enacted the Comp Demo program. Under the direction of the Office of Federal Procurement Policy (OFPP), the SBA was supposed to test whether small businesses in certain industries could successfully compete for prime contracts without relying on small business set asides, although other types of socio-economic set asides and sole source awards such as 8(a) contracts were still permitted. At the time, the small business prime contracting goal was 20%, but Comp Demo established a 40% small business goal in four “Designated Industry Groups” (DIGs) industries: (1) construction (excluding dredging); (2) refuse systems and related services; (3) architectural and engineering services (including surveying and mapping) (A&E); and (4) non-nuclear ship repair (Comp Demo Act at § 717).[3] For these industries, small businesses were to compete without small business set asides at the DoD and nine other agencies.[4] The law provided that if the annual dollars going to small businesses in those industries fell to 40% within that agency, the agency should reimplement set asides for

[3] Construction was originally defined as (1) Major Group 15 (Building Construction—General Contractors and Operative Builders), (2) Major Group 16 (Construction Other Than Building Construction—General Contractors and Dredging), and (3) Major Group 17 (Construction—Special Trade Contractors). Refuse was defined as standard industrial classification codes 4212 or 4953. A&E was defined as standard industrial classification code 7389 (if identified as pertaining to mapping services), 8711, 8712, or 8713. The law further created a segmentation of the shipbuilding and ship repair industries into: (1) nuclear shipbuilding and repair; (2) non-nuclear shipbuilding; and (3) non-nuclear ship repair, which shall be further segmented by, at least, East Coast and West Coast facilities. By 2009, the Federal Acquisition Regulation had assigned the following codes to these industries: Construction, except dredging, included NAICS Codes 236115, 236116, 236117, 236118, 236210, and 236220; Heaving and Civil Engineering Construction included NAICS 237110, 237120, 237130, 237210, 237310, and 237990; Specialty Trade Contractors included NAICS 238110, 238120, 238140, 237150.

[4] These included the Departments of Agriculture (USDA), Energy, Health and Human Services (HHS), Interior, Transportation, and Veterans Affairs (VA) as well as the General Services Administration (GSA), Environmental Protection Agency (EPA), and National Aeronautics and Space Administration (NASA).

components failing to meet the 40% goal.[5] Each of these agencies were also supposed to identify targeted sectors where that individual agency would make an effort to increase small business participation. While originally designed as a three-year pilot program, Comp Demo was reauthorized in 1992, 1996, 1997, and then made permanent at the end of 1997 (1997 Emergency Supplemental Appropriations Act; Omnibus Consolidated Appropriations Act for 1997; Small Business Credit and Business Opportunity Enhancement Act of 1992; Small Business Reauthorization Act of 1997). While technical corrections and changes to reporting cadences were made throughout the years, the only major change came in 2004 when landscaping and pest control services were added to the list of DIGs (NDAA for FY 2004).

In 2005, an effort was made to restrict the use of Comp Demo within the DoD. When considering the FY 2006 appropriations bill, Representative Nydia Velázquez offered an amendment prohibiting the use of appropriated funds to implement Comp Demo (Congressional Record for June 20, 2005). While the amendment failed, the rationale presented Rep. Velázquez is important given that she has served as either the Chair or Ranking Member of the House Small Business Committee since 1997. Noting that as of 2005, the federal government had failed to meet its 23% small business goal for the prior four years, the Congresswoman reasoned that this meant small businesses had lost out on $15 billion in contracts. Further, she reasoned that if the DoD had been allowed to set aside work in the "industries where small businesses excel" then the DoD could have awarded an additional $4.3 billion to small firms. In support of her argument, she pointed to a request by the DoD to "eliminate the [CompDemo] program altogether in the DoD's legislative package for 2006." However, the Department's request does not cite any challenges meeting the small business goals, but instead states that "[t]he re-establishment of small business set-aside procedures will encourage small business concerns to participate in DoD prime contracting requirements." Indeed, the request states that the experience "gained by small business in the prime contracting arena generally supports those small businesses in their efforts to become subcontractors," suggesting that the true goal is not more small business primes in these industries. Finally, the request states that there would be administrative advantages to repealing Comp Demo, noting that it would "streamline and simplify DoD contract data collection and reporting requirements and reduce the administrative effort necessary" to comply with Small Business Act.

While only Congresswoman Velázquez spoke in favor of the amendment, it was opposed during debate by three Republican members of leadership: Bill Young, Chairman of the House Appropriations Committee; Tom Davis, Chairman of the Committee on Government Reform and Oversight; Don Manzullo, Chairman of the House Small Business Committee. Rep. Danny Davis, a Democratic member of the House Small Business Committee, also spoke in opposition. While Mr. Young's objections were procedural, the other members offered substantive defenses of the program. Chairman Davis argued that reinstating set asides in industries where "they are going to win anyway" would keep small businesses from penetrating other parts of the federal market. Chairman Manzullo pointed out that the Small Business Act required that small businesses receive a fair proportion of government contracts in each industry rather than just a few, and stated that prior to Comp Demo, "small businesses were relegated to industries dominated by small businesses" where "Federal agencies could say they met their overall small business goals while not doing much to provide more contracts to small businesses in more higher-end, higher-paying industries" (Congressional Record for June 20, 2005).

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[5] The Comp Demo Act directed that no more than 50% of clothing and textile purchases were to be set aside, and that the small business goals for prime and subcontracts for dredging services were to increase to 30% by 1992, with 10% of total dollars to "emerging small businesses" (§ 721–722). These emerging small businesses were defined as "a small business concern whose size is no greater than 50% of the numerical size standard applicable to the standard industrial classification code assigned to a contracting opportunity." No reliable data is available for the emerging small businesses nor the textile provisions.

While Comp Demo survived in 2005, it was quietly repealed by the Small Business Jobs Act of 2010. The Committee report for the underlying bill—H.R. 5297—fails to mention the Comp Demo program in any way. A related Senate bill, S. 2989, the Small Business Contracting Revitalization Act of 2010, sought to repeal the provision. In conference, this repeal was adopted. However, the report accompanying S. 2989 only states “the Committee believes that it is time to end the [Comp Demo] Program. Accordingly, this legislation repeals this program” (Report Accompanying S. 2989). After reviewing Congressional hearing transcripts from the same period, the only negative reference to Comp Demo is from a roundtable held by the Senate Small Business and Entrepreneurship Committee, where an SBA official suggests repealing the program but provides no context (Roundtable). In the House, despite holding 75 hearings during the 110th Congress, the only transcript to mention Comp Demo spoke positively about the program (*Small business participation*). However, the DoD-proposed NDAA language again suggested repeal, providing the only analysis. In addition to the prior arguments about administrative savings for the Department, this time the proposal suggested that “in an acquisition environment that is dominated by large businesses, it is counterproductive to eliminate any potential advantage for small business”(DoD, 2010).

Based on this argument, one would expect to see the small business share of each DIG drop after implementation of Comp Demo, and then increase again after the repeal of the program. However, this is not always the case—as the data below will show, the DoD almost always performed worse in these NAICS in the five years after the repeal of Comp Demo. Unfortunately, Comp Demo data is very sparse prior to the transition from the Federal Procurement Data Center (FPDC) to the FPDS in FY 2004. While FPDS does provide Comp Demo reports from 1989, the data in these reports is not reliable.[6] Prior to 2004, the best data is from a 1992 hearing before the Senate Committee on Small Business, the transcript of which includes Comp Demo results for calendar year 1991. As this data was released at the same time agencies were beginning to implement the 1988 law, it serves as an imperfect baseline (S. Hrg 102-1055).

The Effects of Comp Demo

To examine the effects of Comp Demo on the designated industry groups, this paper looked first at how small businesses fared overall under Comp Demo versus after its repeal. It then looks at the performance of small businesses at the 10 covered agencies during those periods. Next, it looks at more granular elements of performance for each DIG at the covered agencies, comparing performance in each of the original DIGs in 1991, FY 2009,[7] FY 2015, and FY 2023. As there are more complete records around Landscaping and Pest Control Services, those results are analyzed from FY 2003 through FY 2010, and in FY 2015 and FY 2023. In each DIG, the questions posed for each agency are whether small businesses received a greater proportion of work: (1) in the baseline year than in the last year of Comp Demo; and (2) post repeal of Comp Demo than in the last full year of the program; and (3) how small businesses are faring in those DIGs today.

The State of Small Business Under Comp Demo and Post Repeal

First, the general question must be asked as to whether small businesses writ large did better under Comp Demo or after its repeal. Unfortunately, government contracts records from before 2004 are not uniformly available, because they were manually input and kept by the FPDC. According to the Government Accountability Office (GAO), its analysis of FPDC data

[6] For example, for FY1992–FY2003, FPDS has two Comp Demo records from USDA, 10 from VA, and 27 from DOT. While FPDS reports that the DoD had 3,995 actions in that period, that would suggest that only about 330 transactions occurred each year.
[7] While the legislation repealing the program was signed by President Obama on September 27, 2010, the FAR was updated on December 30, 2010, effective January 31, 2011.

“shows that small businesses have received between 25% and 28% of [prime contract dollars] between fiscal years 1993 and 1999” (GAO, 2001a) This would be supported by Congress’ decision to raise the small business prime contract goal from 20% to 23% in 1997 (Small Business Reauthorization Act of 1997). A later GAO report established that in 2000, 22.26% of prime contract dollars were awarded to small business (GAO, 2001b). Finally, an article in the *Journal of Public Procurement* reports that in FY 2002, “small businesses were awarded 22.62% of direct federal contracts” which “amounted to $53.6 billion being awarded to small businesses.” Further, it noted that in “FY 2003, federal agencies exceeded the 23% small business contracting goal by awarding 23.6%, or $65.5 billion, of federal contracting dollars to small businesses.” So while granular data is not available from the 1988 start of Comp Demo, small businesses were receiving at least 20% of prime contracts prior to 1997. FPDS data shows that during the last five years of Comp Demo, small businesses received between 20.5% and 23.4% of all prime contract dollars.

In the five years after the program’s repeal, small businesses received between 21.6% and 25.7% of dollars, suggesting that repeal helped the federal government do more with small businesses. However, it is worth noting that between 2005 and 2010, dollars to small businesses increased by nearly $23 billion, whereas between 2011 and 2015 they fell by almost $766 million.[8] Therefore, it unclear whether the repeal of Comp Demo resulted in more opportunities for small businesses, or if agencies had simply not figured out how to adjust to the rapid increase in spending during the part of the Global War on Terror, but were able to better allocate opportunities to small businesses once the spending patterns were better established.

When we look at mean and median percentages of dollars awarded to small businesses under Comp Demo and after its repeal, no clear pattern emerges. Energy, Interior and EPA all saw declines in their small business percentages, with Interior’s small business share declining by over 30%. GSA, Transportation, and HHS did substantially better post-Comp Demo. The remaining agencies saw minor fluctuations in their results, as illustrated in Table 6.

Table 6. Average Percentage Awarded to Small Businesses by Subject Agencies During and Post Comp Demo

	FY05–10 Mean % to Small Business	FY05–10 Median % to Small Business	FY11–16 Mean % to Small Business	FY11–16 Median % to Small Business	Change to Mean % Post Comp Demo	Change to Median % Post Comp Demo
USDA	52.68%	53.20%	53.29%	53.38%	0.61%	0.18%
DoD	19.64%	20.02%	21.88%	21.84%	2.24%	1.82%
Energy	5.86%	6.02%	5.40%	5.36%	-0.46%	-0.65%
HHS	22.76%	21.54%	37.97%	38.46%	15.21%	16.92%
Interior	53.64%	53.81%	22.89%	23.07%	-30.75%	-30.74%
Transportation	40.49%	40.07%	46.00%	45.00%	5.51%	4.93%
VA	31.30%	32.32%	33.52%	34.25%	2.22%	1.93%
EPA	39.55%	41.94%	41.42%	40.80%	1.87%	-1.14%
GSA	31.52%	31.89%	56.82%	56.62%	25.30%	24.73%
NASA	15.77%	15.61%	18.41%	17.95%	2.65%	2.34%

Source: FPDS

[8] In contrast, from 2017 until 2022, small business contracting increased by over $48 billion, while consistently exceeding a 25% share.

The State of the DIGS Under Comp Demo and Post Repeal

Small Business Performance in Construction

After looking at small business performance at each subject agency, it is necessary to further explore small business performance in each of the DIGs. Table 7 begins by looking at the three construction related DIGS.

Table 7. Percentage of Dollars Awarded to Small Business in Each Construction DIG

	Construction of Buildings				Heavy and Civil Engineering Construction				Specialty Trade Contractors			
	CY 91	FY 09	FY 15	FY 23	CY 91	FY 09	FY 15	FY 23	CY 91	FY 09	FY 15	FY 23
USDA	100	84	94	93	97	96	98	87	99	93	85	95
Defense	64	53	45	41	57	53	11	31	81	53	50	80
Energy	86	10	100	92	60	94	55	80	86	95	98	88
HHS	47	41	63	59	57	99	91	100	68	93	71	93
Interior	80	65	50	81	57	74	76	46	85	92	84	68
Transportation	56	27	80	67	67	46	69	54	83	92	96	57
VA	13	74	84	92	92	80	74	99	90	96	84	93
EPA	93	100	97	100	100	100	0	100	74	99	99	57
GSA	13	20	43	52	96	95	61	71	63	72	83	69
NASA	42	57	52	97	28	97	90	99	71	57	71	60

Source: CY 1991 Data from Senate Small Business Committee Hearing; All other data from FPDS.

As seen in Table 7, the Construction DIG was divided into three clear categories: construction of buildings, heavy and civil engineering construction, and the specialty trade contractors. For the construction of buildings, small businesses fared better at 60% of the agencies in 1991 than they did under Comp Demo in 2009. After Comp Demo was repealed, 70% of agencies saw an increase from 2009 to 2015, and 50% did better last year than in FY 2009. Overall, at 80% of agencies, small businesses are receiving a higher percentage of awards for construction of buildings than they did in 1991. The USDA and DoD are the two outliers, but at the USDA small businesses received all prime contracts in 1991, but only 93% last year. However, the DoD has seen awards to small business decline in each period, dropping from 64% in 1991 to 53% in 2009, then to 45% in 2015, and now to 41%.

For awards in heavy and civil engineering construction, small businesses fared better at 60% of the agencies in 1991 than they did under Comp Demo in 2009. However, only three agencies improved their small business performance from 2009 to 2015, and 60% of agencies performed better in 1991 than they did last year. The DoD, Energy, EPA, and GSA each awarded a higher percentage of heavy and civil engineering dollars to small businesses under Comp Demo than they did in 2009 or 2023.

Within the specialty construction trades, 70% of agencies awarded more to small businesses under Comp Demo than they did in 1991, but only half did better in 2009 than they did in 1991, and only 40% awarded a greater percentage to small businesses in 2023 than they did in 1991. When compared with their 2009 results, in 2015 only four agencies improved small business participation, and that number drops to three agencies by 2023.

However, the percentage of contracts going to small businesses in each DIG is not the only measure of the health of the small business industrial base. Even if small businesses were receiving all of the work in an industry, if the number of companies successfully competing for work was falling, it would signal that the sector was at risk. Therefore, this paper next examines what the effects of Comp Demo and its repeal were on the size of the small business industrial base in each DIG. It does so by looking at the number of small businesses winning awards at each covered agency in FY 2004 and comparing it to FY 2010.[9] This tells us whether the number small businesses winning contracts increasing or decreasing under Comp Demo. Next, it compares FY 2004 and FY 2015, to examine whether more small businesses won awards after Comp Demo was repealed. Third, it compares FY 2004 with FY 2023, to see if there has been any change in the number of small businesses successfully competing in the past 20 years. Finally, it looks at the change in successful small business participation from FY 2010 to FY 2023.

Table 8. Change in the Number of Small Businesses Receiving Awards for the Construction of Buildings

	Construction of Buildings				
	FY04–FY10	FY04–FY15	FY04–FY23	FY10–FY15	FY10–FY23
USDA	135%	102%	98%	75%	73%
Defense	138%	114%	92%	83%	67%
Energy	133%	152%	133%	114%	100%
HHS	163%	218%	261%	134%	160%
Interior	112%	84%	102%	75%	91%
Transportation	1550%	1550%	2983%	100%	192%
VA	239%	186%	123%	78%	51%
EPA	525%	425%	425%	81%	81%
GSA	115%	102%	74%	89%	65%
NASA	135%	158%	153%	117%	113%
All Covered Agencies	142%	119%	100%	84%	71%

Source: FPDS

For the construction of buildings, the number of small businesses winning contracts increased at every agency between 2004 and 2010. Within all covered agencies there were about 42% more small businesses winning contracts by 2010 than there were in 2004. However, within five years of Comp Demo's repeal, six agencies saw a decline of 11% to 25% in the number of small firms winning contracts, with Interior declining to 84% of the number of firms participating in 2004. Within all the covered agencies, this was still nearly a 20% increase in the number of small businesses from 2015 over 2004, but a drop of 16% from 2010 to 2015. By 2023, six agencies had substantially fewer firms winning contracts than did in 2004, with VA falling to only 51% of the total number of successful small businesses it had in 2004. Overall, there were the same number of small businesses winning contracts in 2023 as there were in 2004, but only because some agencies had enough growth to offset the loss of more than 700 prime contractors at the DoD.

[9] While it would have been preferable to compare 1991 data with FY 2010 data, this data is not available.

Table 9. Change in the Number of Small Businesses Receiving Awards for Heavy and Civil Construction

	Heavy and Civil Engineering Construction				
	FY04–FY10	FY04–FY15	FY04–FY23	FY10–FY15	FY10–FY23
USDA	202%	96%	96%	47%	47%
Defense	111%	86%	71%	78%	64%
Energy	65%	121%	79%	186%	123%
HHS	172%	246%	226%	143%	131%
Interior	135%	83%	65%	61%	48%
Transportation	296%	281%	293%	95%	99%
VA	486%	312%	269%	64%	55%
EPA	80%	20%	20%	25%	25%
GSA	157%	143%	34%	91%	22%
NASA	114%	90%	33%	79%	29%
All Covered Agencies	146%	98%	84%	67%	57%

Source: FPDS

Among contracts for heavy and civil engineering work, the number of small prime contractors increased by nearly 50% from 2004 to 2010. Three agencies doubled the size of their small business base, with Transportation nearly tripling the number of successful small firms participating and VA almost quintupling its small business base during this period. Energy and EPA were the only two agencies where the base declined under Comp Demo. Once the program was repealed, the total number of firms returned to 2004 levels. While Energy and HHS saw the number of firms increase between 2010 and 2015, this served to balance the losses experienced by all other agencies lost contractors. Notably, EPA fell to only one small business receiving a prime contract in 2015, a trend that continued in 2023. As of last year, the overall number of firms had fallen 16% since 2004, 43% since 2010. Transportation maintained the growth it saw in its small business base under Comp Demo through 2015 and 2023, while Energy and HHS saw slight improvements between 2010 and 2023. The latter two combined added a total of 25 companies to their small business base over 20 years. At the remaining seven agencies, small firms fared worse than they had in 2004, 2010, or 2015. Of note, the DoD lost more than 700 small prime contractors between 2010 and 2023.

Table 10. Change in the Number of Small Businesses Receiving Awards for Specialty Trade Contractors

	Specialty Trade Contractors				
	FY04–FY10	FY04–FY15	FY04–FY23	FY10–FY15	FY10–FY23
USDA	367%	268%	192%	73%	52%
Defense	128%	90%	58%	70%	45%
Energy	93%	127%	60%	137%	65%
HHS	1386%	1879%	1486%	136%	107%
Interior	334%	249%	165%	74%	49%
Transportation	1146%	1008%	1221%	88%	107%
VA	714%	440%	392%	62%	55%
EPA	689%	178%	144%	26%	21%
GSA	170%	138%	44%	81%	26%
NASA	200%	158%	74%	79%	37%
All Covered Agencies	199%	145%	97%	73%	48%

Source: FPDS

Within the specialty trades, the number of small businesses nearly doubled from 2004 to 2010. Nine agencies saw significant growth in their small business industrial between 2004 and 2010—only Energy saw a decline of four firms. The DoD added nearly 1,400 small prime contractors during this period, which was the smallest growth rate by percentage (128%). Among the other agencies, growth rates were as high as nearly 1400%. When Comp Demo was repealed, eight agencies lost small business prime contractors, and the overall number of companies fell by more than 3,400 firms (27%). As with the Heavy and Civil DIG, only Energy and HHS saw any growth between 2010 and 2015; EPA lost 75% of its small prime contractors while losses at the other agencies range from 12% to 38%. As of last year, the total number of small firms across the designated agencies was about 220 firms less than in 2004, and about 6,500 less than in 2010.

Thus, when looking at the Construction DIGs, in general the percentage of dollars awarded to small firms increased when Comp Demo was repealed, but the number of small firms receiving awards fell. While there are some outliers, this suggests that under Comp Demo more small businesses chose to compete even though there were no set asides, but that many of those businesses exited these DIGs when Comp Demo was repealed.

Small Business Performance in Non-Nuclear Ship Repairs

Non-nuclear ship repairs especially relevant, since they also fall within a sector highlighted by the IRC for special focus. However, because the sector is so focused on the DoD, it is more difficult to extrapolate from civilian agency results.

Table 11. Percentage of Dollars Awarded to Small Businesses for Non-Nuclear Ship Repairs

	Non-Nuclear Ship Repair			
	CY 1991	FY 2009	FY 2015	FY 2023
Defense	64	40	16	22
Interior	100	100	100	100
Transportation	92	92	63	0

Source: Source: CY 1991 Data from Senate Small Business Committee Hearing; All other data from FPDS.

As seen in Table 11, only the DoD, Interior, and Transportation have been active in this space. Interior has continued to award all its work to small business regardless of the Comp Demo program. Transportation awarded the same percentage of work to small businesses in 1991 and 2009, indicating that Comp Demo itself did not affect these awards. However, when Comp Demo was repealed, Transportation's spend with these companies fell to 63% in FY 2015, and in FY 2023 it awarded all its contracts to large firms. The DoD saw a substantial drop in awards to small business after the implementation of Comp Demo, but repealing Comp Demo triggered an improvement. Instead, the FY 2015 number was less than half the percentage awarded in FY 2009, and the FY 2023 results were still only 55% of the market share under Comp Demo.

Table 12. Change in the Number of Small Businesses Receiving Awards for Non-Nuclear Ship Repair

.	Non-Nuclear Ship Repair				
	FY04–FY10	FY04–FY15	FY04–FY23	FY10–FY15	FY10–FY23
Defense	47%	34%	50%	72%	106%
Interior	57%	14%	86%	25%	150%
Transportation	180%	340%	120%	189%	67%
All Covered Agencies	49%	38%	51%	78%	105%

Source: FPDS

The number of small firms active in the non-nuclear ship repair DIG dropped dramatically under Comp Demo, and never recovered. The DoD accounts for almost all of the firms in this space. In FY 2004, the DoD awarded contracts to 311 in this DIG, but by FY 2010 the number had fallen to only 145 firms. While it rebounded to 154 firms last year, this is a mere fraction of the 718 companies receiving prime contracts in 2005. While Interior and Transportation have far fewer small business primes in this DIG—each had only 6 last year—Interior has begun to add new firms since 2010. Transportation grew under Comp Demo only to decline since 2015.

Given that both the percentage of dollars and numbers of firms dropped for the DoD under Comp Demo, this should be treated as a cautionary tale. While correlation is not causation, the ongoing challenges for market share and new entrants suggests that applying Comp Demo to an industry critical to the industrial base did not provide agencies with enough flexibility to nurture this critical industry.

Small Business Performance in A&E Contracting

Table 13. Percentage of Dollars Awarded to Small Businesses for A&E Contracting

	Architectural and Engineering Services (Including Surveying and Mapping)			
	CY 1991	FY 2009	FY 2015	FY 2023
USDA	99	33	41	95
Defense	35	29	27	22
Energy	2	20	4%	88
HHS	28	93	66	14
Interior	55	23	32	31
Transportation	44	13	45	33
Veterans Affairs	82	41	59	100
EPA	6	78	75	25
GSA	43	28	47	37
NASA	17	28	45	33

Source: Source: CY 1991 Data from Senate Small Business Committee Hearing; All other data from FPDS.

Table 13 shows how small businesses fared in the case of A&E contracts. From 1991 to 2009, 60% of agencies reduced the percentage of A&E contracts awarded to small businesses. However, there were dramatic increases during this period—at the EPA small businesses grew from 6% to 78%, HHS increased by 65% points, and at Energy the small business share was 10 times higher under Comp Demo than it was previously. Post repeal, six of the 10 agencies saw an increase in small business share by 2015, which grew to seven agencies by 2023. Unfortunately, only four agencies were doing better in 2023 than they were in 1991. Of the agencies that declined after the repeal of Comp Demo, EPA had dropped back to 25% last year, HHS was at 14%, and the DoD was at only 22%.

Table 14. Change in the Number of Small Businesses Receiving Awards for A&E Contracting

	Architectural and Engineering Services (Including Surveying and Mapping)				
	FY04–FY10	FY04–FY15	FY04–FY23	FY10–FY15	FY10–FY23
USDA	127%	110%	112%	87%	89%
Defense	72%	75%	86%	104%	119%
Energy	120%	180%	240%	150%	200%
HHS	168%	216%	136%	129%	81%
Interior	75%	70%	139%	92%	184%

Transportation	107%	104%	74%	97%	69%
Veterans Affairs	219%	16%	100%	7%	46%
GSA	200%	75%	175%	38%	88%
EPA	141%	112%	66%	79%	47%
NASA	55%	70%	42%	128%	78%
All Agencies	100%	78%	96%	78%	96%

Source: FPDS

In terms of the number of firms, A&E contracting delivers another unusual pattern as seen in Table 14. Overall, the number of small prime contractors grew by only seven firms from 2004 to 2010, and fell by just over 400 firms (22%) from 2010 to 2015, and then regained all but 91 of those firms by last year. However, within agencies the swings were far more dramatic. The DoD is still 15% below where it started in 2004, but that is an increase from its lowest point in 2006. The GSA has only 42% of the small prime contractors it had in 2004, but the agency had its best years from 2008 to 2010. The VA doubled the number of small primes it had between 2004 and 2010, only to lose 20% of them by 2015, and over half of them as of last year.

Small Business Performance in Refuse Systems and Related Services

Table 15. Percentage of Dollars Awarded to Small Businesses for Refuse Contracting

	Refuse Systems and Related Services[10]			
	CY 1991	FY 2009	FY 2015	FY 2023
USDA	88	87	98	68
Defense	82	62	60	56
Energy	100	96	57	71
HHS	89	67	47	95
Interior	97	69	100	66
Transportation	98	87	95	17
Veterans Affairs	67	35	71	85
GSA	89	67	49	79
NASA	56	94	75	100

Source: Source: CY 1991 Data from Senate Small Business Committee Hearing; All other data from FPDS.

Waste and Refuse contracts, as seen in Table 15, had the clearest drop in small business participation with the implementation of Comp Demo. From 1991 to 2009, eight agencies declined, with only NASA improving its performance by a noteworthy 38 percentage points. However, when the program was repealed, only four agencies improved from FY 2009 to FY 2015. Four agencies fell again from FY 2015 to FY 2023, and six agencies performed worse last year than they did in 1991. DoD small business participation declined in each interval.

Table 16. Change in the Number of Small Businesses Receiving Awards for Refuse Contracting

	Refuse Systems and Related Services				
	FY04–FY10	FY04–FY15	FY04–FY23	FY10–FY15	FY10–FY23
USDA	221%	179%	124%	81%	56%
Defense	99%	93%	78%	94%	79%
Energy	63%	68%	32%	108%	50%
HHS	220%	400%	260%	182%	118%
Interior	118%	113%	95%	95%	81%

[10] As the EPA only awarded contracts in this DIG in FY 2009, it is excluded from this analysis.

Transportation	67%	100%	100%	150%	150%
Veterans Affairs	431%	438%	477%	102%	111%
GSA	68%	84%	42%	123%	62%
NASA	400%	200%	100%	50%	25%
All Covered Agencies	120%	115%	95%	96%	79%

Source: FPDS

As shown in Table 16, the number of successful refuse small businesses contractors increased by 20% from 2004 to 2010, only to drop by 21% as of last year. This represents a total loss of 24 firms from 2004 to 2023, but 123 fewer firms from 2010 to last year. However, these trends were not consistent across agencies. Under Comp Demo, three agencies saw a decline of about a third, and the DoD remained constant. Post-repeal, three agencies saw significant growth, five remained essentially the same, and two saw sizeable drops. As of last year, Energy had lost over two-thirds of the small firms it had in 2004, and the DoD was down 22%, but the VA had nearly five times as many small prime contractors.

Small Business Performance in Landscaping and Pest Control

Unlike all of the other DIGs, FPDS has a fairly complete history of small business performance in landscaping and pest control. This DIG was statutorily added to Comp Demo on October 28, 2004, and the FAR amended in March 2005, so FY 2006 is the first full year when Comp Demo applied to this industry. This makes FY 2004 the perfect baseline for the program.

Table 17. Landscaping and Pest Control DIG—Percentage of Awards to Small Businesses

	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 15	FY 23
USDA	89	91	95	78	76	33	36	62	72
Defense	79	47	44	63	75	74	77	67	62
Energy	73	79	75	53	75	44	79	17	41
HHS	92	35	8	69	78	91	94	87	37
Interior	85	82	77	70	58	61	66	65	96
Transportation	86	88	95	91	86	86	72	89	76
VA	91	80	73	79	89	80	82	83	92
EPA	100	96	81	83	84	80	81	83	20
GSA	87	76	95	86	88	90	85	57	78
NASA	12	12	30	25	83	94	95	100	100

Source: FPDS

When comparing small business achievements in FY 2004 and FY 2006, half of the agencies saw their performance decline, but half saw an improvement. The most dramatic shift was at HHS, which saw its small business performance fall from 92% to 8% percent. The DoD saw a drop from 79% to 44%. At agencies that saw a growth in small business contracting during this period, the increases ranged from 2 to 18 percentage points.

From 2006 to 2010, there are three distinct patterns, and one outlier. First, there are agencies that continue to see their small business percentages decline. These include USDA, which falls from 95% to 36%, and Transportation, which declines from 95% to 72%. Second, there are agencies that saw an initial decline only to then improve in the latter years of the program. These include the DoD, HHS, Interior, and NASA. It is worth noting that NASA and HHS ended up performing better in 2010 than in 2004, and the DoD was only 2 percentage points below its 2004 results. Despite some fluctuation in the first years of Comp Demo, VA, EPA, and GSA each ended up awarding a consistent 79% to 90% of work to small businesses from FY 2007 to 2010. Energy was the true outlier, fluctuating by 20 to 30 percentage points each year.

When Comp Demo ended in 2010, seven of the agencies were performing at a level below their 2004 achievements, although NASA notably grew from 12% small business in 2004 to 95% small business in 2015 and every agency except the USDA was awarding at least 66% of its prime contracts to small businesses. By 2015, half of the agencies had improved from 2010, but half had declined. The greatest changes were at Energy, which fell from 79% to 17%, and the GSA which fell from 85% to 57%. Six agencies were above the 66% threshold. By 2023, while six agencies were doing worse than they did in 2004, eight were still awarding at least 40% of dollars to small businesses.

Table 18. Landscaping and Pest Control DIG—Number of Small Businesses Prime Contractors

	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 15	FY 23
USDA	38	80	115	128	139	220	306	277	246
Defense	61	135	709	856	855	916	975	871	709
Energy	7	11	17	20	20	24	20	22	20
HHS	7	11	15	14	13	23	27	37	39
Interior	106	116	117	115	131	222	272	212	263
Transportation	8	7	11	20	22	26	33	82	75
Veterans Affairs	57	66	83	91	139	184	210	240	225
EPA	2	6	6	9	10	8	12	11	4
GSA	80	82	96	95	110	114	115	121	73
NASA	4	5	3	3	5	4	4	7	5
All Covered Agencies	370	519	1172	1351	1444	1741	1974	1880	1659

Source: FPDS

Instead of presenting the percentage changes, Table 18 instead shows the actual number of small prime contractors each year of Comp Demo as well as in 2015 and 2023. When examining the covered agencies, the total number of small primes increases each year of Comp Demo, from 370 firms in 2004 to a high of 1,974 by 2010, representing growth of 534%. NASA was the only agency that did not experience growth, never exceeding seven firms over the past 20 years. However, when Comp Demo was repealed, four agencies began to see a decline in the number of small prime contractors, and by last year, half of the agencies were doing worse than they had in 2010. At the DoD, there were 27% fewer prime contractors last year in this DIG than there were in 2010. Even with these declines, every agency except for the GSA performed better in 2023 than they did in 2004.

Conclusions on Comp Demo

Comp Demo did not exist in a vacuum, and other policy changes affected small businesses both during and post Comp Demo. For example, from 1991 until 1999, and again post-2014,the Department of Energy has been allowed to count first tier subcontracts awarded by its Management and Operations contractors towards the department's prime contracting goal, which has caused substantial fluctuations on Energy's small business goaling reports (Consolidated Appropriations Act of 2014).[11] Likewise, in 2016, the Supreme Court's decision in

[11] Section 318 of the Consolidated Appropriations Act of 2014 ("CAA"), (Public Law 113-76)

Kingdomware Technologies v. United States required the VA to apply the rule of two to SDVOSBs and VOSBs before any other awards could be made.[12] The Biden Administration has increase goals for small disadvantaged businesses each year since 2021. All of these changes serve to increase the prime contracting dollars reported for small businesses.

While it is important not to attribute all changes to small business contracting in the DIGs to Comp Demo, some conclusions may be drawn. In each DIG other than A&E Services, the number of small businesses winning contracts increased under Comp Demo, which supports a healthy industrial base in those areas. Further, based on the statutory language, Comp Demo started with the goal of awarding at least 40% of prime contract dollars to small businesses for each DIG at each agency. In FY 2009, this goal was met about 83% of the time, whereas in the baseline year it was met 86% of the time. In 2015, the 40% goal was met about 88% of the time, and last year it was met 80% of the time. This suggests that Comp Demo did roughly as well as set asides in maintaining a substantial level of small business participation in the DIGs, even if it did not match the same percentage of total dollars awarded in each agency. Under Comp Demo small businesses exceeded 20% of prime contract dollars for each DIG within each agency 97% of the time, which is better than these firms fared in the base line years or in the years since Comp Demo was terminated. Indeed, when comparing the various time frames studied, small businesses consistently received above 60% of the dollars in each DIG at each agency between 60% and 65% of the time, suggesting that 60% awards to small business may have been a better goal. The lack of transparency on how small businesses outside of the DIGs fared under Comp Demo poses a significant challenge in judging the merits of the program, but the fact that the average dollars to small business saw only minor changes at the majority of agencies post repeal suggests that under Comp Demo contracting agencies had to carefully structure contracts within the DIGs so that they remained suitable for small businesses, and had to focus on creating opportunities for small businesses in other industries.

Application to Current Procurements

The analysis of the ICR and current contracting trends at the DoD suggest that the issue Congress was trying to address with Comp Demo remains unsolved. Specifically, substantial small business dollars are spent in areas where small businesses are winning all or almost all of the procurements. As noted earlier, there are 169 industries where small businesses receive less than 5% of dollars, even though these industries account for more than a third of the DoD’s total spend. In contrast, small businesses receive more than 80% of awards in 322 industries, and while these industries account for just 2.6% of the DoD’s total contract dollars they account for about 12.5% of the small business dollars. This suggests that the current goaling system is not fulfilling the statutory requirement to insure “that a fair proportion of total purchase or contracts for goods and services of the Government in each industry category . . . are awarded to small business concerns” (15 USC 644(a)). More important even that the concept of equity however is that of readiness, and this division further suggests that the current system is not using small businesses to effectively “maintaining or mobilizing the full productive capacity of the United States [or its] war or national defense programs” (Id.).

One of the challenges is that the current NAICS system does not adequately capture the DoD’s needs. NAICS were designed to allow for industrial comparisons across North America, and are revisited every five years by the United States, Canada, and Mexico. While a substantial improvement to the prior SIC system, the 2022 version of the NAICS codes still does not have a code for cyber, and cloud and platform as a service are listed as the same NAICS as data entry and diskette conversion services (518210). Artificial intelligence (AI) is only included under research and development, and in the same NAICS as aerospace research, fisheries

[12] Kingdomware Technologies, Inc. v. United States, 136 S. Ct. 1969 (2016).

research, and experimental farming (541715). Given that NAICS are a primary method vendors use to search for contract opportunities, and they are a relatively easy way to track procurement trends and breakdowns, this poses challenges. First, it means that we are not accurately measuring the work the federal government does in these industries. Consequently, it follows that we are failing to track which vendors, small and large, are participating in these important segments. It also means that how we identify a firm as small is not tailored to the specific industry. Conflating the size of a company that duplicates floppy disks and CDs with a company that provides cloud services does no favors to either industry.

Congress has already recognized this issue, and provided SBA with the ability to create new industry codes and size standards in order to better measure and incentivize participation in areas where the government has a defined need or operate differently than the private or commercial sectors. General size standard authority is provided to SBA in section 3 of the Small Business Act, which defines a small business as “one which is independently owned and operated and which is not dominant in its field of operation” (15 USC 631(a)(1)). The agency is then given the authority to establish size standards by industry, so long as the “size standard varies from industry to industry to the extent necessary to reflect the differing characteristics of the various industries and consider other factors deemed to be relevant” by the SBA (15 USC 631(a)(3)). However, when discussing the role of small business in federal procurement, SBA is told that it may “limit an industry category to a greater extent than provided under” the NAICS codes if SBA receives “evidence indicating that further segmentation of the industry category is warranted . . . due to unique Federal buying patterns or requirements; or to recognize a new industry” (15 USC 644(a)(2)).

This authority has existed since 2016, but SBA has not exercised it. This creates an opening for the DoD to use the data it has collected in the ICR and similar reports to approach SBA with requests for new industry categories. This would permit the two agencies to tailor their authorities in a manner that would respond quickly to the challenges exposed by the Comp Demo program, and to proceed more strategically in areas where the DoD needs better visibility into its industrial base and wished to attract new participants.

For example, in addition to kinetic capabilities, energy storage and batteries, castings and forgings, and microelectronics, the priority defense sectors the ICR highlights challenges for aviation, biomanufacturing, ground system electrification, and the submarine industrial base. The ICR specifies for energy storage and batteries, they are focusing on “high-capacity batteries, with a particular focus on lithium batteries.” Batteries actually have a series of NAICS devoted to them—NAICS 335910, 35911, and 335912 cover batter manufacturing, storage battery manufacturing, and primary battery manufacturing. The challenges presented in the ICR suggest that it is also necessary to include NAICS 212290, other metal ore mining and NAICS 212390, lithium mineral mining. Lithium compound manufacturing is in NAICS 325180, other basic inorganic chemical manufacturing. All of these receive awards recorded in FPDS, but the last three include items that may not meet the needs of this sector. Likewise, NAICS 335999 includes semiconductor and other battery charging manufacturers, but it also includes the manufacture of bells and gongs. This makes it difficult to identify these segments of the industrial base, and to attract small businesses or non-traditional businesses to the base.

Recommendations

1. The DoD should work with SBA to develop industry codes and size standards that would allow it to attract, utilize, and measure critical sectors of its industrial base. This would allow the DoD to target at risk and developing segments of its industrial base.
2. The SBA should, in accordance with the FY 2016 NDAA, report annually on the “number of small business concerns, small business concerns owned and controlled by service-

disabled veterans, qualified HUBZone small business concerns, small business concerns owned and controlled by socially and economically disadvantaged individuals, and small business concerns owned and controlled by women awarded prime contracts in each North American Industry Classification System code during the fiscal year and a comparison to the number of awarded contracts during the prior fiscal year" (Sec. 868). This information would provide contracting officers and policy makers with useable information. It would quickly signal changes in the industrial base, including when agencies are not attracting enough new entrants or when consolidation threatens a segment. It would also provide information on how to structure procurements to reach more small firms. Finally, it would give Congress and agencies quick feedback should they every attempt to create a program similar to the Comp Demo program, or wish to revisit the treatment of retailers and wholesalers under the Small Business Act.

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