

# Utilization of Women-Owned Businesses in Federal Prime Contracting

Report Prepared for the Women-Owned Small Business  
Program of the Small Business Administration

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## Introduction

The Small Business Administration (SBA) is responsible for implementing and administering the Women-Owned Small Business (WOSB)<sup>1</sup> Federal Contract Program, which went into effect on February 4, 2011. The purpose of the WOSB Program is to ensure that women-owned small business have an equal opportunity to participate in Federal contracting and to help attain the Federal government's goal of awarding five percent of its prime contract dollars to WOSBs.<sup>2</sup> The WOSB Program authorizes Federal contracting officers to restrict competition for an acquisition to WOSBs if there is "a reasonable expectation" that at least two WOSBs will submit offers that meet the requirements of the acquisition "at a fair and reasonable price" and if the acquisition is for a good or service in a North American Industry Classification System (NAICS) industry code in which SBA has determined that WOSBs are "substantially underrepresented." The Program also authorizes contracting officers to award sole source contracts to a WOSB if only one WOSB can be identified that can perform the contract at a fair and reasonable price. Prior to May 7, 2013, competitive contracts under the WOSB Program were capped at \$6.5 million for manufacturing contracts and \$4 million for all other contracts. SBA issued a rule effective May 7, 2013 that removed the caps on set-aside award size for which WOSBs and Economically Disadvantaged WOSBs (EDWOSBs) concerns are able to compete. EDWOSBs<sup>3</sup> can receive set-asides similar to those described above for WOSBs but in a broader set of industries where SBA has determined that WOSBs are "underrepresented" but not substantially so.

The five percent goal has never been attained (see figure 1), although the share of dollars awarded to WOSBs rose from 3.2 percent in FY 2005 to 4.0 percent in FY 2010 where it remained through FY 2012. The share increased sharply to 4.3 percent in FY 2013 and 4.7 percent in 2014.

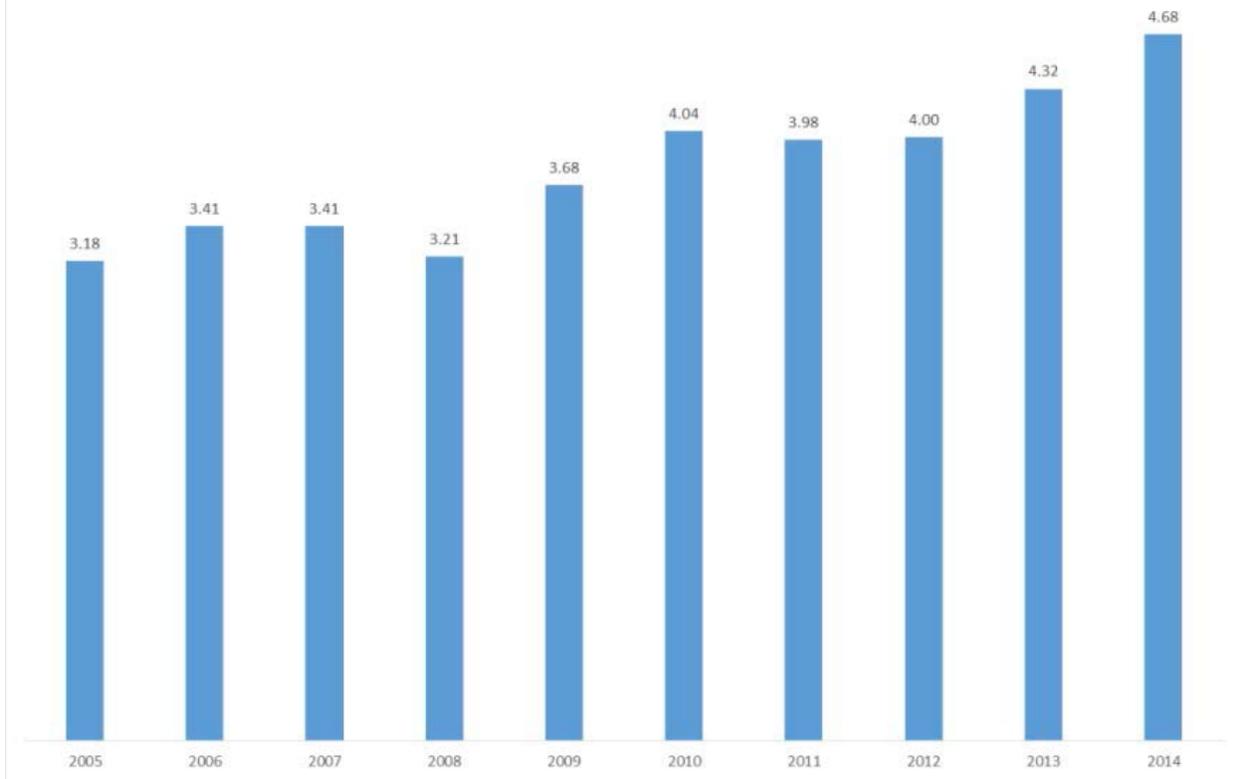
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<sup>1</sup> A WOSB is a small (as defined by SBA) business that is at least 51 percent owned and controlled by one or more women.

<sup>2</sup> See 13 CFR 127.100.

<sup>3</sup> EDWOSBs are WOSBs that are controlled by one or more women who are citizens and who are economically disadvantaged in accordance with SBA regulations.

Figure 1: Percent of Federal Prime Contracting Dollars Awarded to Women-Owned Small Businesses, FY 2005-2014



Source: [https://www.fpds.gov/fpdsng\\_cms/index.php/en/reports](https://www.fpds.gov/fpdsng_cms/index.php/en/reports)

Table 1 shows the breakdown of dollars obligated under contracts awarded to WOSBs and all firms (including WOSBs) in fiscal years 2012 through 2014. About 62-64 percent of dollars obligated under contracts to WOSBs were under various set aside programs, compared to about 13-15 percent for all firms. Roughly 56-58 percent of net dollars obligated to WOSBs was accounted for by small business set asides and the 8(a) business development program, compared to about 11-13 percent for all firms. Net dollars obligated under the WOSB program accounted for a small share for WOSBs (\$71 million or 0.4 percent in FY 2012, the first full year the WOSB program was in effect) but grew rapidly since then (to \$179 million or roughly one percent in FY 2014, of which \$72 million went to Economically Disadvantaged WOSBs and \$107 million to other WOSBs).

**Table 1: Dollars Obligated to WOSBs and All Firms under Set Aside Programs  
FY 2012-2014**

	FY 2012				FY 2013				FY 2014			
	WOSB		All Firms		WOSB		All Firms		WOSB		All Firms	
	\$Millions	Percent										
<b>Total</b>	16,180	100.0%	404,180	100.0%	15,365	100.0%	355,413	100.0%	17,177	100.0%	366,824	100.0%
<b>No Set-Asides</b>	6,130	37.9%	351,380	86.9%	5,633	36.7%	305,437	85.9%	6,177	36.0%	310,011	84.5%
<b>Small Business Set Asides</b>	4,745	29.3%	28,081	6.9%	5,162	33.6%	28,017	7.9%	6,042	35.2%	32,462	8.8%
<b>8(a) Sole Source</b>	2,307	14.3%	8,948	2.2%	1,890	12.3%	7,414	2.1%	2,068	12.0%	8,635	2.4%
<b>8(a) Competed</b>	1,979	12.2%	6,985	1.7%	1,739	11.3%	6,699	1.9%	1,838	10.7%	7,766	2.1%
<b>HUBZone Set Aside and Sole Source</b>	494	3.1%	2,034	0.5%	523	3.4%	1,768	0.5%	532	3.1%	1,683	0.5%
<b>Small Business Partial Set Aside</b>	242	1.5%	1,986	0.5%	104	0.7%	1,384	0.4%	155	0.9%	1,204	0.3%
<b>Service Disabled Veteran Owned Small Business Set-Aside</b>	186	1.1%	4,323	1.1%	195	1.3%	4,343	1.2%	169	1.0%	4,654	1.3%
<b>Economically Disadvantaged Women Owned Small Business</b>	39	0.2%	39	0.0%	61	0.4%	61	0.0%	72	0.4%	72	0.0%
<b>Women Owned Small Business</b>	32	0.2%	32	0.0%	40	0.3%	40	0.0%	107	0.6%	107	0.0%
<b>Service Disabled Veteran Owned Small Business Sole Source</b>	17	0.1%	255	0.1%	14	0.1%	176	0.0%	10	0.1%	121	0.0%
<b>Other</b>	7	0.0%	55	0.0%	1	0.0%	32	0.0%	6	0.0%	61	0.0%
<b>Veteran Set Aside and Sole Source</b>	2	0.0%	63	0.0%	3	0.0%	43	0.0%	2	0.0%	51	0.0%
<b>Memo: Total Under WOSB Program</b>	<b>71</b>	<b>0.4%</b>	<b>71</b>	<b>0.0%</b>	<b>100</b>	<b>0.7%</b>	<b>100</b>	<b>0.0%</b>	<b>179</b>	<b>1.0%</b>	<b>179</b>	<b>0.0%</b>
<b>Memo: WOSB share of total dollars</b>	4.0031%				4.3231%				4.6826%			

Note: "Small Business Set Asides" predominantly consists of net dollars obligated exclusively (as opposed to "partial" set asides) under the Small Business set aside program plus much smaller amounts under the Emerging Small Business and several other largely phased out small business set aside programs. "Other" includes net dollars obligated under the Buy Indian, Historically Black Colleges and Universities/Minority Institution, and Small Disadvantaged Business set aside programs. Sums may not be exact due to rounding.

Source: Federal Procurement Data System

Currently, SBA's designation of industries with underrepresentation or substantial underrepresentation of WOSBs is based on an analysis performed by the RAND Corporation that was published in a 2007 report.<sup>4</sup> In 2015, SBA asked the Office of the Chief Economist (OCE) of the U.S. Department of Commerce (DOC)<sup>5</sup> for assistance in conducting a new study on the WOSB Program, as required by statute, which would analyze data to help SBA determine those NAICS codes in which WOSBs are underrepresented and substantially underrepresented in Federal contracting. As discussed in more detail below, OCE looked at whether, holding constant various factors that might influence the award of a contract, the odds of winning Federal prime contracts by firms that were owned by women were greater or less than the odds of winning contracts by otherwise similar businesses.

## Overview of Results

Overall we find (as demonstrated in Table 5) that the odds of winning a contract for Woman-Owned Businesses (WOBs) are estimated to be roughly 21 percent lower relative to the odds of winning contracts by otherwise similar firms that were not identified as WOBs. In our analysis, we control for

<sup>4</sup> Reardon, Elaine, Nancy Nicosia, and Nancy Y. Moore. *The Utilization of Women-Owned Small Businesses in Federal Contracting*. The RAND Corporation. 2007.

([http://www.rand.org/content/dam/rand/pubs/technical\\_reports/2007/RAND\\_TR442.pdf](http://www.rand.org/content/dam/rand/pubs/technical_reports/2007/RAND_TR442.pdf))

<sup>5</sup> OCE is located in the Economics and Statistics Administration of the U.S. Department of Commerce.

the size and age of the firm; its membership in various categories of firms for which the Federal government has government-wide prime contracting goals; its legal form of organization; its level of government security clearance; and its Federal prime contracting past performance ratings.

We also looked at whether WOBs typically have significantly different experiences in winning contracts depending on their industry. We performed this analysis at the four-digit NAICS industry group level<sup>6</sup>, including each firm in our sample in an industry analysis if the firm had registered as being able to perform work in that industry or if the firm had won a contract assigned to that industry.

The industry-specific results on the odds of winning contracts vary considerably. We find (see Table 6) that in 109 industries (36 percent of the total) WOBs have statistically significant<sup>7</sup> lower odds of winning contracts, covering 62 percent of contracts and nearly two-thirds of dollars obligated under contracts awarded in FY 2013 or 2014. In an additional 145 (48 percent) of the 304 industries included in our study the odds of WOBs winning contracts were lower than those of otherwise similar non-WOBs but in these cases there is not a statistically significant difference between the odds of winning contracts for the two groups. Overall, the industries in which WOBs are less likely to win contracts account for about 85 percent of contracts and of dollars obligated in Fiscal Years 2013-2014 (which is the period in which our data originated). WOBs have *greater* odds (none statistically significant) of winning contracts than otherwise similar non-WOBs in only 16 percent of industries.

## Data

The goal of this report is to look at contracting outcomes among WOBs compared to other firms. In order to do this, we constructed a database of firms that might reasonably have been expected to be ready, willing and able to compete for Federal contracts, along with information on which of these firms actually won contract awards, over FY 2013-2014 (that is, the two year period from October 1, 2012 through September 30, 2014). In this database, we also have information on firm characteristics (such as size and age) as well as information identifying which firms belong to certain groups (in addition to ownership by women) for which the federal government has government-wide prime contracting goals. We also obtained information on past performance ratings of firms (reflecting the judgments of Federal contract officers) that have won federal prime contracts in the past.

### Data on Entities Registered to Compete for Federal Prime Contracts

Firms that wish to compete for Federal prime contracts generally must register as potential contractors. This involves filling out a form on-line using the System for Award Management (SAM) which is operated by the General Services Administration (GSA) of the U.S. Federal government.<sup>8</sup> Because there is no fee

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<sup>6</sup> NAICS is a hierarchical industry classification system in that as more digits are added to the code, the industry classifications become more narrowly defined and more sparsely populated by firms.

<sup>7</sup> By “statistically significant” we mean that the relationship is estimated precisely enough that one can say with a degree of confidence that the odds ratio is different from 1 (an odds ratio of 1 implies the odds of WOBs winning contracts is the same as the odds of other firms winning).

<sup>8</sup> More details about the SAM data are available at [www.sam.gov](http://www.sam.gov). We define a “firm” as a SAM registrant and use its DUNS number to identify it. A DUNS number is a unique business establishment identifier maintained by Dun & Bradstreet that registrants must obtain in order to register in SAM. Multiple establishments, each with their own DUNS number, can belong to a single parent company (with its own distinct DUNS number). Due to contractual agreements between Dun & Bradstreet and the General Services Administration, we were not able to obtain access to the parent company DUNS numbers. Therefore, we

it is a low-cost way for a firm to self-identify as being interested in competing for Federal contracts. Registration in SAM must be re-certified by the firm each year.

Firms that register in SAM must indicate the industries in which they are able to provide goods or services, using the six-digit North American Industry Classification (NAICS) codes. NAICS is a hierarchical classification system in that as more digits are added to the code, the industry classifications become more narrowly defined – and more sparsely populated. Below we use codes at the four-digit NAICS code level allowing us to have sufficient data in each industry grouping and to take into account the possibility that many firms can switch production of goods or services between the narrower six-digit industry categories encompassed by a four-digit industry category.<sup>9</sup> Firms can identify themselves as simultaneously operating (or having the potential to operate) in multiple NAICS codes, so when the data are analyzed on an industry basis, entities can appear in the data set multiple times.

The SAM data also include self-reported information from each registrant on its company's size both in terms of numbers of employees and average sales over the past three years. Based on this size information, SAM determines whether the firm is defined by the SBA as "small," which generally is defined as 500 or fewer employees in manufacturing industries and \$7.5 million or less sales revenues in service industries, but there are many exceptions.<sup>10</sup>

Since WOBs may also belong to other groups for which the Federal government has specific contracting dollar award goals (which may have impacts one way or another on the likelihood and size of winning contracts), it is important to control for membership in such groups when trying to estimate the odds of various groups winning contracts.

Table 2 summarizes the owner characteristics of WOBs and non-WOBs. As discussed below, the data used in this report contain information on more than 600,000 firms, of which about 20 percent are self-identified as women-owned. Virtually all (94 percent) WOBs are small as defined by SBA compared to 77 percent of non-WOBs. Small WOBs are more likely (52 percent) to report belonging to groups for which the Federal government has contracting goals compared to 38 percent of small non-WOBs.<sup>11</sup>

We extracted certain data elements from the SAM file, including NAICS codes, business start date, average number of employees, annual receipts, one or more "business types," type of organization (e.g., sole proprietorship, partnership, and corporation) and DUNS numbers. Business types are various categories of entities that registrants report they belong to, and for many business types (e.g., the minority group and gender of the firm owner), registrants can have multiple business types. Business types include government and non-profit entities; whether the registrant is a Small Disadvantaged Business; the race and ethnicity of the registrant; minority-ownership; woman ownership; service-

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did our analysis at the establishment level, effectively treating each establishment as if it were independent. Note that we use the terms "firm," "business," "company," and "registrant" interchangeably in this report.

<sup>9</sup> See <http://www.census.gov/eos/www/naics/> for more details about NAICS. In this report we use the term "four-digit NAICS code" or just "NAICS code" interchangeably with the term "industry" depending on context.

<sup>10</sup> The SBA size standards are summarized at <https://www.sba.gov/content/summary-size-standards-industry-sector> and are described in more detail at <https://www.sba.gov/content/small-business-size-standards>.

<sup>11</sup> We included small registrants that self-identified as "minority-owned" but not as Small Disadvantaged Businesses among the registrants we designated as belonging to business groups for which the federal government has contracting goals.

disabled veteran ownership; and other veteran ownership (a full list of business types reported in the SAM data is in Appendix C).<sup>12</sup> Business types identifying 8(a) and HUBZone firms were only available in the 2014 SAM data; SBA provided us with a dataset of 8(a) and HUBZone firms drawn from SBA's Dynamic Small Business Search database that we matched by DUNS number to identify these types of firms in the 2012 and 2013 SAM data.

Registrants with missing or zero annual receipts or employment were dropped because we didn't believe there was a reasonable way to impute their size. Registrants larger than the largest US company in 2014 (Wal-Mart) were dropped as well as registrants older than 300 years (because such data indicated a problem with the data, such as a typographical error when registrants entered the data into the SAM database.)<sup>13</sup>

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<sup>12</sup> Business types also identify if the registrant is only interested in grants and not contracts; located outside of the US; a government entity; and/or an international organization. All of the firms of these types were dropped from all datasets used in our analysis.

<sup>13</sup> The impact on our analysis was immaterial when we dropped the top five percent in sales revenue and employees of the remaining firms.

**Table 2: Ownership Characteristics of Women-Owned Businesses**

	WOB		non-WOB		All	
All Firms	117,249	100.0%	483,776	100.0%	601,025	100.0%
Not Small	7,301	6.2%	109,948	22.7%	117,249	19.5%
Small	<u>109,948</u>	<u>93.8%</u>	<u>373,828</u>	<u>77.3%</u>	<u>483,776</u>	<u>80.5%</u>
		100.0%		100.0%	100.0%	100.0%
Small:						
Not in other groups	52,641	47.9%	231,267	61.9%	283,908	58.7%
In other groups	<u>57,307</u>	<u>52.1%</u>	<u>142,561</u>	<u>38.1%</u>	<u>199,868</u>	<u>41.3%</u>
		100.0%		100.0%	100.0%	100.0%
In other groups:						
SDB not 8(a) only	17,998	31.4%	40,937	28.7%	58,935	29.5%
All 8(a)	1,960	3.4%	4,125	2.9%	6,085	3.0%
Minority only	11,799	20.6%	23,261	16.3%	35,060	17.5%
HubZone only	487	0.8%	1,204	0.8%	1,691	0.8%
Service-disabled Veteran only	817	1.4%	9,947	7.0%	10,764	5.4%
Non-service-disabled Veteran only	2,174	3.8%	23,725	16.6%	25,899	13.0%
In multiple groups	<u>22,072</u>	<u>38.5%</u>	<u>39,362</u>	<u>27.6%</u>	<u>61,434</u>	<u>30.7%</u>
		100.0%		100.0%	100.0%	100.0%
In multiple groups:						
In SDB not 8(a) and Minority only	16,740	75.8%	22,181	56.4%	38,921	63.4%
Other	<u>5,332</u>	<u>24.2%</u>	<u>17,181</u>	<u>43.6%</u>	<u>22,513</u>	<u>36.6%</u>
		100.0		100.0%		100.0

Percents may not sum to 100% due to rounding.

We combined data from three points of time (October 1, 2012, September 30, 2013, and September 30, 2014) in order to obtain the set of firms that were registered in SAM over the FY2013-14 period. Since registrants may have entered data about themselves more than once during that period, we needed to reconcile differences in data for the same registrant. We did this by choosing the maximum value for continuous variables such as firm size and firm age; and if a registrant belonged to a particular group in either year we designated the registrant as being in that group over the entire period.<sup>14</sup> Many firms were actively registered in SAM over the entire period, but some firms registered for the first time or did not renew their registration, so they were in the sample less than 100 percent of the period. Since one might expect that the probability a firm wins a contract increases the longer the firm is registered in SAM, we created an additional explanatory variable equal to the fraction (greater than zero but less than or equal to one) of the two year period that each firm was registered in SAM.

We also obtained from GSA a list of firms that were excluded from doing business with the federal government (current lists of such firms are also available for public download from [www.sam.gov](http://www.sam.gov)). We matched these firms by DUNS number to the other SAM data sets and dropped from the analysis the very small number of firms (667 or less than 0.1 percent) that were on the exclusions list.

<sup>14</sup> We also performed our analysis using the minimum values for continuous variables and designated group membership if the registrant had reported membership for both fiscal years, and we did not find a material difference between the two methods.

## Data on Contractors and Contract Awards

Data on prime contracts with estimated value of \$3,000 or more for goods and services purchased using appropriated funds and awarded by federal Executive Branch agencies generally must be reported in the Federal Procurement Data System (FPDS), which is administered by GSA.<sup>15</sup> These data provide two broad types of information. First, the data include contract action characteristics, such as the agency awarding the contract; the six-digit industry NAICS code of the product or service procured by the agency under the contract action; the dollars obligated (or de-obligated) under the contract action; and the place of performance. Second, the data include contractor characteristics (such as company name and DUNS number). Each record in the FPDS represents a single contract action. For purposes of this report, we define a firm as “winning” a contract in an industry in FY 2013 and FY 2014 if it had at least one newly awarded contract in either year.<sup>16</sup> SBA provided us with data on contract actions from the FPDS that allowed us to focus on the large subset of contracts that are covered by Federal government-wide prime contracting goals (but not necessarily won by firms belonging to groups for which the Federal government has contracting goals).<sup>17</sup>

## Past Performance Data

We obtained Past Performance Information Retrieval System (PPIRS) data from GSA, which consisted of ten datasets from legacy and current systems with ratings on many different aspects of contractor performance. For each performance rating for each firm, we calculated the median performance rating (unless there was an overall rating available), and then we calculated the median rating for each DUNS

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<sup>15</sup> For more details, see the Frequently Asked Questions about the FPDS available at [https://www.fpds.gov/wiki/index.php/FPDS-NG\\_FAQ](https://www.fpds.gov/wiki/index.php/FPDS-NG_FAQ).

<sup>16</sup> SBA advised us that the way to identify newly awarded contracts in a fiscal year is to (1) identify the first (chronologically) contract action record that had a Procurement Instrument Identifier (PIID) but no Indefinite Delivery Vehicle (IDV) PIID and with Modification Number equal to 0 and (2) extract all additional contract actions associated with same PIID in the IDV PIID field.

<sup>17</sup> The following categories of contracts are not included among contracts for which there are Federal goals:

- Javits-Wagner O'Day Program (JWOD, Sheltered Workshops)
- UNICOR or Federal Prison Industries
- American Institute in Taiwan
- Contracts awarded and performed outside the United States
- Acquisitions by Agencies on behalf of foreign governments or entities or international organizations
- Contracts funded predominately with agency generated sources, including the following government agencies:
  - o FDIC
  - o Postal Service
  - o Bureau of Engraving and Printing
  - o United States Mint
  - o Office of the Comptroller of the Currency
  - o Office of Thrift Supervision
  - o Transportation Security Administration
  - o Federal Aviation Administration
  - o Tennessee Valley Authority
  - o Defense Commissary Agency contracts are excluded because they are buying for resale in a military commissary.
  - o Quasi-government agencies operating with non-tax dollars (known as non-appropriated funds) that were not competed because the products they purchase are being bought to be resold. The money the agency gets from the sale fund the operation of the organization.”

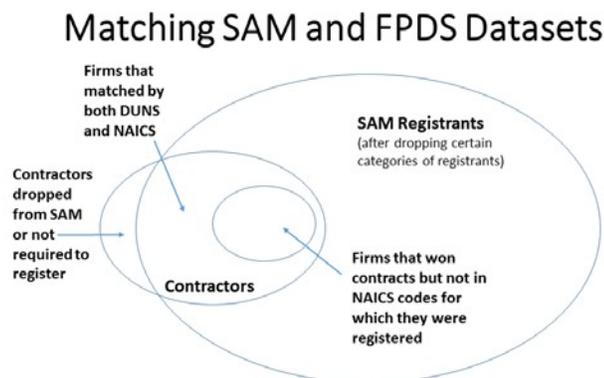
(“Frequently Asked Questions About FPDS-NG” [http://www.acquisition.gov/faqs\\_whataboutfpds.asp#q12](http://www.acquisition.gov/faqs_whataboutfpds.asp#q12))

number. Firms with median ratings of “very good” or “above average” or better were deemed to be “higher rated”; all other firms with past performance ratings were deemed to be “lower rated.”

### Analytical Dataset Construction

We merged the SAM and FPDS data sets by DUNS number and NAICS industry code.<sup>18</sup> Figure 2 provides a schematic description of the matching process. Firms were deemed “winners” of contracts if either they matched by both DUNS and NAICS codes or if they won contracts in NAICS codes for which the firm was not registered in SAM; all other DUNS/NAICS code entities were deemed “non-winners.” Past performance data was matched by DUNS number.

Figure 2



Since small firms (as defined by SBA) are one of the groups of firms for which the federal government has contracting goals, we wanted our analysis to control for whether a firm is small. Since SBA has separate definitions for small firms by six-digit NAICS industry codes, and because we were combining two fiscal years’ worth of data, we designated a company as “small” in each four-digit NAICS code if it was small in any of the corresponding six-digit NAICS codes for which it was registered in SAM at any point during FY 2013-14.<sup>19</sup>

<sup>18</sup> We dropped several industries as described in the table below:

NAICS Code	Description	Reason Dropped
521X	Monetary Authorities – Central Bank	This industry only consists of one entity – the Federal Reserve System – and no contracts were awarded in this industry.
814X	Private Households	No SBA small business definition.
921X-928X	Public Administration	No SBA small business definition.

<sup>19</sup> As noted above, we also performed our analysis by deeming a registrant as small if it was designated as such in both fiscal years; the difference in results was immaterial.

## Summary of Data

In this section we compare the characteristics of women-owned businesses to those of other businesses. As discussed below, women-owned businesses are less likely to win contracts. Furthermore, winners of contracts are larger and older than non-winners, even when focusing only on small businesses. And finally women-owned businesses are smaller and younger than other businesses – characteristics that are associated with the likelihood of winning contracts.

Table 3 shows by group in columns (such as all firms in the first column, WOBs in the second column, etc.) the mean value of the various indicator variables representing various firm characteristics (in rows) included in our analysis. Indicator variables take a value of one (1) if a firm has the characteristic and zero (0) if it does not, so the mean of these variables can be interpreted as the share of firms in each group with each characteristic. The first row shows the number of firms in each column. The second row shows that 21 percent of non-WOBs (column 3) won contracts compared to 17 percent of WOBs (column 2), which is equivalent to WOBs having about 22 percent lower odds of winning contracts before controlling for other factors related to winning contracts (as discussed in the next section of the report).<sup>20</sup> About one-third of WOBs are SDBs not in the 8(a) program or minority-owned (or both); non-WOBs are only half as likely to belong to these groups. WOBs are more likely to be sole proprietors than non-WOBs (22 percent vs. 14 percent, respectively) and less likely to be corporations (54 percent compared to 63 percent, respectively).<sup>21</sup> WOBs are slightly less likely to have higher past performance ratings than non-WOBs.

Columns 4 and 5 of Table 4 compare characteristics of firms that win contracts and those that do not. Winning firms are more likely to belong to some groups for which the Federal government has contracting goals (such as small and 8(a) firms) but less likely to belong to some other groups (WOB, SDB not 8(a), and Minority-owned) than non-winning firms.<sup>22</sup> Winning firms are more likely to be corporations and less likely to be sole proprietors or partnerships than non-winning firms.<sup>23</sup> As expected, winning firms are more likely to have security clearances and to have higher past performance ratings than non-winning firms. These patterns hold when looking separately at WOBs (columns 6-7) and non-WOBs (columns 8-9).

<sup>20</sup> The odds ratio =  $(\frac{P_{WOB}}{1 - P_{WOB}}) \div (\frac{P_{Non-WOB}}{1 - P_{Non-WOB}})$ , where  $P_{WOB}$  = probability of WOBs winning contracts and  $P_{Non-WOB}$  = probability of Non-WOBs winning contracts. Here  $P_{WOB} = 0.173$  and  $P_{Non-WOB} = 0.211$  and the resulting odds ratio is 0.783.

<sup>21</sup> About 14 percent of non-WOB corporations and about seven percent of WOB corporations self-identified as “non-profit.”

<sup>22</sup> In Table 3, firms can belong to one or more of these groups: WOB; Small; SDB not 8(a); 8(a); Minority; HubZone; Service-Disabled Veteran; and Other Veteran. However, firms can only belong to one type of organization: Sole Proprietor, Partnership, Corporation, or Other (not shown); one level of security clearance (the “no security clearance” category is not shown), and one level of past performance rating (the “no rating” category is not shown).

<sup>23</sup> About seven percent of corporations winning contracts were non-profit compared to 14 percent of non-winning corporations; only three percent of WOB corporations that won contracts were non-profits compared to seven percent of non-WOB corporations winning contracts.

**Table 3: Mean Values of Indicator Variables**

					WOB		Non-WOB		
	All	WOB	Non-WOB	Winner	Non-Winner	Winner	Non-Winner	Winner	Non-Winner
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
N	601,025	117,249	483,776	122,179	478,846	20,328	96,921	101,851	381,925
Winner	0.203	0.173	0.211	N/A	N/A	N/A	N/A	N/A	N/A
WOB	0.195	N/A	N/A	0.166	0.202	N/A	N/A	N/A	N/A
Small	0.812	0.938	0.782	0.867	0.798	0.975	0.930	0.846	0.764
SDB not 8(a)	0.203	0.339	0.170	0.191	0.206	0.318	0.344	0.166	0.171
8(a)	0.010	0.017	0.009	0.028	0.006	0.055	0.009	0.023	0.005
Minority	0.176	0.321	0.141	0.136	0.186	0.262	0.333	0.110	0.149
HubZone	0.008	0.012	0.007	0.016	0.006	0.029	0.009	0.013	0.005
Service-Disabled Veteran	0.040	0.026	0.043	0.041	0.039	0.024	0.027	0.044	0.043
Other Veteran	0.069	0.044	0.075	0.071	0.069	0.044	0.044	0.076	0.075
Sole Proprietor	0.160	0.224	0.145	0.147	0.164	0.217	0.226	0.133	0.148
Partnership	0.122	0.127	0.121	0.098	0.128	0.106	0.132	0.097	0.127
Corporation	0.612	0.539	0.630	0.677	0.595	0.602	0.526	0.693	0.613
Non-Classified Security Clearance	0.060	0.075	0.057	0.082	0.055	0.105	0.068	0.077	0.051
Confidential Security Clearance	0.008	0.012	0.008	0.012	0.007	0.016	0.011	0.012	0.006
Secret Security Clearance	0.020	0.021	0.020	0.035	0.016	0.038	0.017	0.034	0.016
Top Secret Security Clearance	0.024	0.022	0.025	0.036	0.021	0.039	0.018	0.035	0.022
Lower Past Performance Rating	0.024	0.018	0.026	0.067	0.013	0.055	0.010	0.070	0.014
Higher Past Performance Rating	0.032	0.027	0.033	0.092	0.016	0.097	0.013	0.091	0.017

Table 4 compares the distribution of continuous variables (which take values that range widely across firms), that is, it shows the values each variable takes at various percentiles for that variable. (For example, the 10<sup>th</sup> percentile age for all firms is 3 years, which means that 10 percent of firms are age 3 years or less; the median age, also known as the 50<sup>th</sup> percentile, is 14, which means half of firms are age 14 years or less.) Table 4 shows that WOBs are considerably smaller and younger than non-WOBs. The median annual revenues for WOBs is \$250,000, which is one-quarter that of non-WOBs (\$1 million), and the median number of WOB employees is one-third that of non-WOBs (three and nine, respectively). The median age of WOBs is 11 years compared to 15 for non-WOBs. At the median, WOBs and non-WOBs were both actively registered in SAM about one-half of the FY 2013-2014 period.

Table 4 also shows that contract winners are larger and older than non-winners. Contract winners' median annual revenues is about \$2.1 million, more than triple that of non-winners (\$0.6 million). Winners have more than double the median number of employees as non-winners (13 and 6, respectively), and the median age of winners is 18 years compared to 14 years for non-winners. Focusing only on WOBs, winning firms have quadruple the median revenues of non-winning WOBs (\$0.8 million compared to \$0.2 million); double the median number of employees (six compared to three); and have median age of 14 years compared to 10 years of age for non-winners. At the median, winners were actively registered over the entire FY 2013-2014 period compared to non-winners, which were actively registered for only half that period; this makes sense (all else equal, one would expect that the longer a firm is actively registered in SAM the greater its chances for winning contracts).

Finally, among firms that won contracts, WOBs and non-WOBs have very similar distributions of numbers of contracts and contract dollars awarded. Within each group, the median firm has two

contracts; the median dollars awarded was \$24,000 for WOBs, only 8 percent lower than the corresponding value for non-WOB winners.<sup>24</sup>

**Table 4: Distribution of Continuous Variables**

Variable	Group	10th Percentile	25th Percentile	Median	75th Percentile	90th Percentile
<b>Age</b>	All	3	7	14	28	45
	WOB	3	5	11	20	31
	Non-WOB	3	7	15	30	49
	Winner	4	9	18	32	53
	Non-Winner	3	6	14	27	43
	WOB Winner	3	7	14	25	36
	WOB Non-Winner	3	5	10	19	30
	Non-WOB Winner	4	9	19	34	56
	Non-WOB Non-Winner	3	7	15	29	47
<b>Employees</b>	All	1	2	7	31	300
	WOB	1	1	3	10	30
	Non-WOB	1	2	9	45	612
	Winner	1	3	13	60	617
	Non-Winner	1	2	6	25	240
	WOB Winner	1	2	6	18	50
	WOB Non-Winner	1	1	3	9	25
	Non-WOB Winner	1	4	16	83	1,164
	Non-WOB Non-Winner	1	2	7	35	500
<b>Sales Revenue</b>	All	\$5,000	\$100,000	\$800,000	\$5,000,000	\$54,000,000
	WOB	\$300	\$32,000	\$250,000	\$1,259,462	\$4,800,000
	Non-WOB	\$10,000	\$140,000	\$1,000,000	\$7,500,000	\$104,000,000
	Winner	\$30,000	\$300,000	\$2,055,900	\$11,900,000	\$121,000,000
	Non-Winner	\$2,500	\$80,000	\$600,000	\$4,000,000	\$40,000,000
	WOB Winner	\$10,000	\$100,000	\$800,000	\$3,010,193	\$10,000,000
	WOB Non-Winner	\$100	\$25,000	\$200,000	\$1,000,000	\$3,750,000
	Non-WOB Winner	\$40,000	\$400,000	\$2,750,000	\$15,300,000	\$212,000,000
	Non-WOB Non-Winner	\$5,000	\$100,000	\$850,000	\$5,900,000	\$84,900,000
<b>Share of FY 2013-2014 in Sample</b>	All	0.197	0.327	0.519	1.000	1.000
	WOB	0.193	0.321	0.515	1.000	1.000
	Non-WOB	0.197	0.329	0.519	1.000	1.000
	Winner	0.500	0.867	1.000	1.000	1.000
	Non-Winner	0.184	0.282	0.500	1.000	1.000
	WOB Winner	0.500	0.955	1.000	1.000	1.000
	WOB Non-Winner	0.181	0.281	0.500	1.000	1.000
	Non-WOB Winner	0.500	0.849	1.000	1.000	1.000
	Non-WOB Non-Winner	0.184	0.284	0.500	1.000	1.000
<b>Number of Contracts</b>	Winner	1	1	2	4	10
	WOB Winner	1	1	2	3	9
	Non-WOB Winner	1	1	2	4	10
<b>Dollars Awarded</b>	Winner	\$2,410	\$7,184	\$25,646	\$133,925	\$824,913
	WOB Winner	\$1,470	\$6,583	\$24,000	\$115,312	\$687,541
	Non-WOB Winner	\$2,501	\$7,300	\$26,157	\$137,957	\$857,644

<sup>24</sup> Note that dollars awarded and numbers of contracts reported in Table 4 are for contracts won in FY 2013 or FY 2014 and do not necessarily correspond to the total dollars awarded over the lifetimes of these contracts.

## Regression Model Specification and Results

### Regression Approach

The main question of interest here is whether the data show any difference in the odds that WOBs would win contracts relative to other businesses holding constant other factors that may influence the likelihood of winning a contract. Regression analysis is a tool used by economists to address this type of question. We start with a hypothesis about the relationship between a variable to be explained (the “dependent” variable) and one or more explanatory (“independent”) variables and estimate whether these variables are associated with each other in a way that is consistent with the hypothesis. There are many types of regression analyses, but the logit model<sup>25</sup> is widely used to analyze the odds of an event occurring, such as a firm being awarded a contract, and it is this type of model that is used in the analysis described here to address the main question of interest. The standard way to represent this model is:

$$Y = \exp(\beta * X + \epsilon) \quad (1)$$

In this example, Y, the dependent variable, is equal to the odds of winning a contract, X is one or more independent variables that influence the odds of whether or not a given firm wins a contract, and exp(.) is the exponentiation function.<sup>26</sup> The Greek letter beta ( $\beta$ ) is an unknown parameter or set of parameters that is to be estimated and gives the degree to which an independent variable is related to a dependent variable. The final term in the equation, represented by the Greek letter epsilon ( $\epsilon$ ), is known as the error term and represents the other elements that might influence the dependent variable but which are not explicitly included in the estimation. The error term “arises for several reasons, primarily because we cannot hope to capture every influence on an economic variable in a model, no matter how elaborate.”<sup>27</sup>

A key feature of a regression is that it allows the researcher to isolate the effects of one independent variable on the dependent variable separately from the other independent variables. In other words, the first  $\beta$  that is estimated in an equation represents the relationship between Y and the first X variable *holding constant* all the other independent variables. As an example, regression analysis could be used to examine how characteristics of a home affect its sales price. To do this, one might hypothesize that the value of a home depends on factors such as the number of bedrooms in a house, the number of bathrooms and the size of the lot on which the house is found. Then, the  $\beta$  that is associated with the number of bedrooms is a measure of how increasing the number of bedrooms affects the sales price holding constant the number of bathrooms and the size of the lot.

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<sup>25</sup> We used a variant of the logit model called the Firth method that adjusts for possible estimation biases for industries that have a very low contract win rate and in cases where winning or not winning a contract is perfectly or nearly perfectly equal to a linear function of one of the control variables (for example, in industries where no WOBs won any contracts). (See Firth, D. 1993, “Bias reduction of maximum likelihood estimates.” *Biometrika* 80:27-38; Heinze, G. and Schemper, M. 2002, “A solution to the problem of separation in logistic regression,” *Statistics in Medicine* 21:2409-19. We used the firthlogit Stata module written by Joseph Coveney to make these estimates (<http://econpapers.repec.org/software/bocbocode/s456948.htm>).

<sup>26</sup> In other words, the model is represented by  $Y = \exp(\beta * X + \epsilon)$ , where  $\exp(\beta * X + \epsilon) = e^{\beta * X + \epsilon}$  and e is approximately equal to 2.718, the base of the natural logarithm.

<sup>27</sup> Greene, William H., *Econometric Analysis*, Sixth Edition, Pearson Education, 2008 at p. 9.

Another key to estimating regressions successfully and to draw the proper inferences from the results is to make sure that the appropriate variables are included in the model. For example, it may often be the case that a house with more bedrooms is also likely to have more bathrooms. If a regression of housing prices only includes the number of bedrooms it may overstate the influence of this variable on prices as the estimate of the  $\beta$  associated with the number of bedrooms also will include the influence of the number of bathrooms on prices.

In the logit model used in this report,  $\exp(\beta)$  is called the “odds ratio” associated with an independent variable, and it indicates the odds of winning a contract associated with the presence of the corresponding independent variable relative to the odds of winning in the absence of that variable. Of special interest in this report, the odds ratio associated with the variable indicating whether a firm is woman-owned is interpreted as the odds of a women-owned business winning a contract relative to businesses not owned by women.

When estimating this model, as with the housing example discussed above, it is important to include other variables that might also influence whether a WOB wins a contract or not. For example, it might be the case that newer firms are less likely to win contracts, on average, than older firms. Thus, it would be important to include a measure of the age of the firm in the model to control for this fact. This is particularly important given that women-owned firms are more likely to be younger than other firms; in this situation, if the age of the firm is not included in the model, one might conclude that the odds of WOBs winning contracts is lower, on average, when, in fact, it is the odds of younger firms winning contracts that is lower.<sup>28</sup>

Here, the independent variables we use are the ownership of the firm (minority-owned, women-owned, and veteran-owned); the type of organization (that is, whether the firm is a corporation, a partnership or some other type); other characteristics of the firm (size, in terms of number of employees and revenues, level of security clearance of the firm, age of the firm, the proportion of time the firm was in the sample during FY13-14, and past performance ratings on recent contracts won by the firm); and whether the firm is small according to the SBA definition.

Table 5 lists estimates of the “odds ratios” of the independent variables described above, holding the other variables constant. Not surprisingly, we see a positive and significant increase in the odds of a firm winning a contract as the age of the firm and the size of the firm, measured either by sales or number of employees, increases. Firms with various levels of security clearance also had higher odds of winning contracts than firms that did not report having a security clearance level, with the largest effect resulting for those firms with “secret” clearance. Ownership structure can also influence the odds of a small firm winning a contract, with the odds of partnerships winning contracts being lower and the odds of sole proprietorships and corporations winning being higher than other forms of organization, holding all other factors constant. And as expected, firms with higher past performance ratings are more likely to win contracts than those with lower (or no) ratings, and the greater the proportion of time a firm was actively registered in SAM, the more likely it is to win contracts.

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<sup>28</sup> Why WOBs are younger or smaller is not part of what was studied in this report.

The main variable of interest, however, is whether the business is woman-owned (at the top of the table). Controlling for other factors, the odds of WOBs winning contracts were lower than otherwise similar non-WOBs; specifically, the odds of a WOB winning a contract is roughly 21 percent lower than other types of businesses.

**Table 5: Pooled Regression Results**

Dependent Variable:	Winner
Woman-owned	0.786*** (0.00767)
SDB not 8(a)	0.925*** (0.00899)
8(a) certified	2.921*** (0.0898)
Minority-owned	0.638*** (0.00746)
HubZone certified	1.202*** (0.0398)
Service-disabled veteran	0.872*** (0.0165)
Other veteran	0.926*** (0.0130)
log age	1.022*** (0.00431)
log employees	1.058*** (0.00242)
log sales revenue	1.021*** (0.00130)
Sole proprietor	1.480***
Omitted: other forms of organization	(0.0205)
Partnership	0.955*** (0.0138)
Corporation for profit	1.254*** (0.0139)
Corporation, nonprofit	1.281*** (0.0264)
Government non-classified	1.060***
(omitted: no security clearance reported)	(0.0146)
Government confidential	1.085** (0.0375)
Government secret	1.077*** (0.0239)
Government top-secret	0.761*** (0.0160)
Share of FY 2013-2014 in sample	21.83*** (0.306)
Lower past performance rating	3.070*** (0.0574)
Higher past performance rating	3.229*** (0.0542)
Small (SBA definition)	2.911*** (0.0422)
Constant	0.00548*** (0.000142)
Observations	601,025

Perhaps unsurprisingly, firms that participate in SBA's 8(a) business development program, a program in which firms are awarded contracts through restricted competitions or on a sole-source basis, had odds of winning contracts that were many times higher relative to the odds of winning contracts by other small businesses. Similarly, other types of firms that the federal government allows to participate in sheltered competition programs in prime contracting, such as those owned by service-disabled veterans or those located in Historically Underutilized Business Zones (HUBZones), also appear to have increased odds of winning contracts relative to the odds of firms without such characteristics.

These relationships, as in all regression models, are estimated with some degree of error. Thus, it is common practice to estimate whether the measured relationship is "statistically significant"; that is, given this degree of error, it is possible to distinguish the estimate from some fixed value (usually zero) with a high degree of certainty or whether it is just chance that makes the estimate different from this fixed value. With odds ratios, the estimate is statistically significant if it can be distinguished, with a high degree of certainty, from one (1.0), the point where the odds of the two groups compared (e.g. WOBs and non-WOBs) are the same (or to put it another way, otherwise similar members of the two groups are equally likely, on average, to win contracts). If we cannot distinguish the estimate from one with enough certainty, then we cannot say that the odds of winning a contract for one group are different than the odds of another group winning a contract.

Whether an estimate of a statistical relationship between two variables is significant is a function of two things – how close the estimate is to the value that would indicate no relationship (or, in this case, that represents the odds of winning being equal for two groups) and how precisely we can estimate this relationship. One of the key factors in the degree of precision is the number of observations we have to estimate our model; generally, the more observations, the more precise is the estimate.<sup>29</sup> The measures of precision are represented by the "standard errors" of the estimates, which in Table 4 are the numbers in parentheses below the estimates of the odds ratios.

Typically, when assessing statistical significance, we look at roughly two standard errors above and two standard errors below the relevant estimate to determine the range within which we are confident the true estimate lies (also known as the confidence interval). If 1.0 is in the confidence interval, then the hypothesis of the odds of winning a contract between two groups being the same cannot be rejected.

For the estimate of the WOB odds ratio in the full sample (shown in Table 5), the standard error is estimated to be 0.00767 so we are confident that the true value lies somewhere between 0.771 and 0.801 (0.786 plus or minus two times 0.00767). Therefore, we can say that the estimate of the odds of an WOSB winning a contract is significantly less than one (i.e. the fact that the odds of an WOSB firm winning a contract is estimated to be lower than odds for other firms is not due to chance.)

Table 6 provides a summary of the results when the same model is estimated separately for each four-digit NAICS code. Appendix A provides a more detailed list of the industry-by-industry odds ratio

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<sup>29</sup> To illustrate this point, if you flipped a coin 10 times and got 7 heads, you might think the coin is biased, but the number of observations prevent you from drawing that conclusion with certainty. If you flip the same coin 10,000 times and get heads 7,000 times, you can conclude that it is highly likely that the coin is biased.

estimates for WOBs and other industry-level data. Appendix B provides the full set of regression results. The industry-specific results on the odds of winning contracts vary considerably.

We find in Table 6 that in 109 industries (36 percent of the total) WOBs have statistically significant lower odds of winning contracts, covering 62 percent of contracts and nearly two-thirds of dollars obligated. In an additional 145 (48 percent) of the 304 industries included in our study the odds of WOBs winning contracts were lower than those of otherwise similar non-WOBs but in these cases there is not a statistically significant difference between the odds of winning contracts for the two groups. On the other hand, WOBs have greater odds of winning contracts in 50 industries (about 16 percent) than otherwise similar non-WOBs accounting for the same share of contracts and about 15 percent of dollars awarded; in none of these industries are the higher odds statistically significant.

**Table 6: Summary of Findings on Likelihood of WOBs Winning Contracts**

	Contracts		Awards		Industries	
	Number	Percent	\$millions	Percent	Number	Percent
Odds ratio less than 0.40 and statistically significant	2,813	0.3	\$442	0.3	8	2.6
Odds ratio 0.40-0.49 and statistically significant	20,577	2.2	\$2,079	1.5	13	4.3
Odds ratio 0.50-0.59 and statistically significant	106,672	11.5	\$4,150	2.9	21	6.9
Odds ratio 0.60-0.69 and statistically significant	88,164	9.5	\$26,085	18.4	27	8.9
Odds ratio 0.70-0.79 and statistically significant	160,809	17.3	\$23,831	16.8	30	9.9
Odds ratio 0.80-0.89 and statistically significant	197,691	21.2	\$35,813	25.3	10	3.3
Odds ratio 0.90-0.99 and statistically significant	0	0.0	\$0	0.0	0	0.0
<b>Subtotal: Odds ratio less than 1.0 and statistically significant</b>	<b>576,726</b>	<b>62.0</b>	<b>\$92,400</b>	<b>65.3</b>	<b>109</b>	<b>35.9</b>
Odds ratio less than 1.0 and not statistically significant	208,341	22.4	\$28,529	20.2	145	47.7
Odds ratio 1.0 or greater and not statistically significant	145,456	15.6	\$20,637	14.6	50	16.4
Odds ratio 1.0 or greater and statistically significant	0	0.0	\$0	0.0	0	0.0
<b>Total</b>	<b>930,523</b>	<b>100.0</b>	<b>\$141,567</b>	<b>100.0</b>	<b>304</b>	<b>100.0</b>
<i>Memo Subtotal: Odds ratio less than 1.0</i>	<i>785,067</i>	<i>84.4</i>	<i>120,930</i>	<i>85.4</i>	<i>254</i>	<i>83.6</i>

Percents may not sum to 100% due to rounding. Numbers of contracts and dollars awarded are for contracts that began in FY 2013 or FY 2014.

As mentioned above, how close the estimate of the odds ratio is to one and the sizes of the standard errors (which, in turn, depend largely on the number of observations used in a regression) are the key factors in determining the statistical significance of these ratios. Given the relatively large number of observations we have, the standard errors in Table 5 are all small relative to the size of the estimated odds ratios and, thus, all of the estimated odds ratios are statistically significant. In contrast, estimated odds ratios on an industry by industry basis are not statistically significant if they are estimated to be close to one or with very large standard errors. For example, in Appendix B, the WOB odds ratio in NAICS industry 1133 (Logging) is 0.935, which is relatively close to one and it is estimated with a relatively large standard error (0.320) thus rendering it statistically insignificant; the high standard error reflects at least in part the fact that the Federal government does relatively little contracting with firms in the logging industry.

## Comparison of DOC’s Methodology to the RAND Corporation Report Methodology

Table 7 summarizes the major differences between our methodology and that used by the RAND report, including an explanation about why we did some things differently.<sup>30</sup>

<b>Table 7: Comparison of RAND and DOC Methodologies</b>			
<b>Item</b>	<b>RAND approach</b>	<b>DOC approach</b>	<b>Why DOC took a different approach</b>
Time period covered by analysis	FPDS: FY 2005 SAM: 2006*	FPDS: FY 2013-2014 SAM: FY 2013-2014	We used two years’ worth of data for two reasons. First, we believe it is necessary to smooth out year-to-year differences in contracting activity and avoid our findings being driven by idiosyncratic activity in one year (e.g., variations in acquisitions by industry). Second, we wanted to have enough data to measure contracting disparities more precisely given our previous experience using one years’ worth of data to estimate disparities at the three-digit NAICS industry group level.
Disparity measurement method	Disparity ratios	Logistic regression	We chose to use logistic regression, a very widely used statistical method, so that we could control for firm characteristics associated with winning contracts other than whether a firm was a WOB. This allows us to avoid confounding effects on the odds of winning a contract due to, for example, firm age and size. The disparity ratio method used by RAND did not control for other factors related to winning contracts.
Linked FPDS and SAM data?	No	Yes	We did this in order to use regression analysis to control for firm characteristics other than WOB status. We believe linking the two data sets is generally much more informative about contracting outcomes than using unlinked data.
Method of assessing statistical precision	Power analysis	Statistical significance	We reviewed the statistics and economics literature on “retrospective” or “post hoc” power analysis of the kind RAND performed. Power analysis is appropriate in experimental work to prospectively determine the minimum size sample needed to attain a minimum degree of certainty about measuring the magnitude of a hypothesized effect. Much of the literature cautions against retrospective power analyses in non-experimental conditions (where there is no control over sample size) because it provides no additional information than statistical significance tests. <sup>31</sup>

\*RAND actually used data from the Central Contracting Registry which was a predecessor to the SAM database.

### Conclusion

We have also shown that women-owned businesses are less likely to win contracts. Furthermore, women-owned businesses are smaller and younger than other businesses, but this fact account for only part of the disparity in the likelihood of winning contracts; even when controlling for firm characteristics, including firm size and age, women-owned businesses are less likely to win contracts than otherwise similar businesses not owned by women. We find that in 109 industries (36 percent of

<sup>30</sup> Nothing in this section of our report should be construed as being critical or disparaging of the RAND report.

<sup>31</sup> See, for example, John M. Hoenig and Dennis M. Heisey, “The Abuse of Power: The Pervasive Fallacy of Power Calculations for Data Analysis.” *The American Statistician*. 55(1) February 2001, pp. 1-6 (available at [http://www.tc.umn.edu/~alonso/Hoenig\\_AmericanStat\\_2001.pdf](http://www.tc.umn.edu/~alonso/Hoenig_AmericanStat_2001.pdf)).

the total) WOBs have statistically significant lower odds of winning contracts, covering 62 percent of contracts and nearly two-thirds of dollars obligated under contracts awarded in FY 2013 or 2014. In an additional 145 (48 percent) of the 304 industries included in our study the odds of WOBs winning contracts were lower than those of otherwise similar non-WOBs but in these cases there is not a statistically significant difference between the odds of winning contracts for the two groups. Overall, the industries in which WOBs are less likely to win contracts account for about 85 percent of contracts and of dollars obligated in Fiscal Years 2013-2014 (which is the period in which our data originated). WOBs have *greater* odds (none statistically significant) of winning contracts than otherwise similar non-WOBs in only 16 percent of industries.

# Appendix A

## Sorted By NAICS Code

NAICS4	NAICS4 Title	Odds Ratio	Statistically Significant	Total Number of Firms	Number of WOBs	Number of Non-WOBs	Number of Winners	Number of WOB Winners	Number of Non-WOB Winners	Number of Contracts	Dollars Awarded
1111	Oilseed and Grain Farming	0.34		1,694	120	1,574	32	0	32	49	\$546,219
1112	Vegetable and Melon Farming	0.40		559	133	426	7	0	7	10	\$141,926
1113	Fruit and Tree Nut Farming	1.64		650	123	527	7	2	5	10	\$357,663
1114	Greenhouse, Nursery, and Floriculture Production	0.87		1,231	270	961	64	13	51	90	\$2,498,964
1119	Other Crop Farming	0.78		1,706	247	1,459	175	21	154	401	\$35,784,997
1121	Cattle Ranching and Farming	1.57		1,699	179	1,520	61	9	52	114	\$2,357,927
1122	Hog and Pig Farming	0.23		170	21	149	15	0	15	47	\$446,138
1123	Poultry and Egg Production	0.62		303	65	238	33	4	29	132	\$8,969,871
1124	Sheep and Goat Farming	0.48		204	61	143	10	2	8	12	\$133,340
1125	Aquaculture	1.00		493	108	385	37	5	32	68	\$1,967,900
1129	Other Animal Production	0.55		711	191	520	98	15	83	247	\$5,617,220
1131	Timber Tract Operations	0.64		981	169	812	26	2	24	70	\$1,097,676
1132	Forest Nurseries and Gathering of Forest Products	0.88		943	189	754	61	8	53	97	\$2,492,836
1133	Logging	0.93		2,263	374	1,889	76	11	65	106	\$9,851,695
1141	Fishing	0.60		418	63	355	36	3	33	52	\$1,298,495
1142	Hunting and Trapping	0.46		492	91	401	32	2	30	70	\$957,971
1151	Support Activities for Crop Production	0.72		2,934	562	2,372	231	31	200	380	\$18,047,897
1152	Support Activities for Animal Production	0.78		576	132	444	66	11	55	99	\$7,678,377
1153	Support Activities for Forestry	0.77	*	8,103	1,587	6,516	2,945	525	2,420	5,497	\$201,252,365
2111	Oil and Gas Extraction	0.53		414	73	341	64	6	58	95	\$17,329,405
2121	Coal Mining	0.34		150	22	128	7	0	7	12	\$15,386,209
2122	Metal Ore Mining	1.46		209	38	171	7	1	6	11	\$261,248
2123	Nonmetallic Mineral Mining and Quarrying	0.88		3,698	615	3,083	535	71	464	844	\$50,478,110
2131	Support Activities for Mining	1.12		3,687	666	3,021	242	39	203	376	\$44,250,481
2211	Electric Power Generation, Transmission and Distribution	0.85		6,276	936	5,340	284	27	257	440	\$24,036,281
2212	Natural Gas Distribution	0.66		1,259	192	1,067	161	8	153	708	\$114,876,302
2213	Water, Sewage and Other Systems	0.71	*	8,641	1,567	7,074	675	85	590	1,035	\$106,964,258
2361	Residential Building Construction	0.57	*	26,691	5,372	21,319	1,016	136	880	2,922	\$88,089,159
2362	Nonresidential Building Construction	0.88	*	38,890	7,465	31,425	3,289	632	2,657	8,547	\$13,005,918,992
2371	Utility System Construction	0.79	*	26,251	5,038	21,213	1,345	234	1,111	2,088	\$1,148,395,485
2372	Land Subdivision	1.37		5,600	1,246	4,354	7	2	5	7	\$3,883,666
2373	Highway, Street, and Bridge Construction	0.79	*	19,463	3,744	15,719	1,215	212	1,003	1,965	\$1,949,342,536
2379	Other Heavy and Civil Engineering Construction	0.66	*	18,733	3,464	15,269	1,037	169	868	1,738	\$5,252,358,987
2381	Foundation, Structure, and Building Exterior Contractors	0.71	*	31,590	6,720	24,870	1,550	292	1,258	2,328	\$671,838,664
2382	Building Equipment Contractors	0.73	*	46,213	8,949	37,264	6,064	973	5,091	11,686	\$1,565,700,847
2383	Building Finishing Contractors	0.71	*	28,787	6,942	21,845	1,718	356	1,362	2,664	\$161,529,530
2389	Other Specialty Trade Contractors	0.72	*	40,739	9,101	31,638	2,854	528	2,326	4,536	\$563,267,139
3111	Animal Food Manufacturing	0.73		392	74	318	90	10	80	416	\$14,402,696
3112	Grain and Oilseed Milling	0.82		523	118	405	108	15	93	909	\$647,939,106
3113	Sugar and Confectionery Product Manufacturing	0.53		267	87	180	12	1	11	42	\$35,503,993
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	0.42	*	1,004	235	769	217	22	195	2,801	\$1,252,270,006
3115	Dairy Product Manufacturing	0.84		505	90	415	136	14	122	652	\$612,510,302
3116	Animal Slaughtering and Processing	0.60		670	113	557	188	22	166	2,170	\$1,499,619,397
3117	Seafood Product Preparation and Packaging	0.64		233	59	174	34	6	28	104	\$82,796,496
3118	Bakeries and Tortilla Manufacturing	0.55	*	858	216	642	247	21	226	1,119	\$135,610,459
3119	Other Food Manufacturing	0.78		2,021	460	1,561	546	90	456	11,295	\$659,678,106
3121	Beverage Manufacturing	0.74		1,607	278	1,329	173	22	151	442	\$7,073,537
3122	Tobacco Manufacturing	0.99		47	11	36	2	0	2	2	\$266,642
3131	Fiber, Yarn, and Thread Mills	1.97		244	68	176	44	14	30	127	\$811,876
3132	Fabric Mills	1.00		1,348	359	989	259	53	206	635	\$43,617,813
3133	Textile and Fabric Finishing and Fabric Coating Mills	0.88		1,113	268	845	342	57	285	842	\$41,022,820
3141	Textile Furnishings Mills	0.54	*	1,261	430	831	226	51	175	442	\$14,578,109
3149	Other Textile Product Mills	0.79	*	4,176	1,236	2,940	928	193	735	3,800	\$201,735,873
3151	Apparel Knitting Mills	0.68		691	242	449	46	11	35	78	\$5,382,282
3152	Cut and Sew Apparel Manufacturing	0.82		2,799	964	1,835	395	95	300	999	\$196,446,805
3159	Apparel Accessories and Other Apparel Manufacturing	1.03		2,341	718	1,623	553	139	414	1,500	\$207,151,864
3161	Leather and Hide Tanning and Finishing	2.30		181	49	132	21	6	15	22	\$1,773,049
3162	Footwear Manufacturing	0.67		1,096	199	897	137	26	111	388	\$26,974,905
3169	Other Leather and Allied Product Manufacturing	1.02		1,180	375	805	170	47	123	279	\$7,496,563
3211	Sawmills and Wood Preservation	0.64		1,294	275	1,019	152	24	128	233	\$5,310,924
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	0.93		796	175	621	100	20	80	216	\$4,227,904
3219	Other Wood Product Manufacturing	0.91		5,086	1,167	3,919	583	120	463	1,009	\$65,560,629
3221	Pulp, Paper, and Paperboard Mills	0.90		969	286	683	132	33	99	382	\$15,408,547
3222	Converted Paper Product Manufacturing	1.12		3,407	988	2,419	591	146	445	1,599	\$29,179,951
3231	Printing and Related Support Activities	0.53	*	7,637	2,577	5,060	690	126	564	1,501	\$40,077,661

3241	Petroleum and Coal Products Manufacturing	0.65	*	2,636	430	2,206	788	90	698	2,743	\$8,150,305,066
3251	Basic Chemical Manufacturing Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing	0.95		2,777	422	2,355	751	103	648	2,656	\$239,601,180
3252	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	1.22		1,581	279	1,302	427	77	350	861	\$16,948,608
3253	Pharmaceutical and Medicine Manufacturing	0.80		863	181	682	166	30	136	443	\$9,197,024
3254	Paint, Coating, and Adhesive Manufacturing	0.87		3,040	399	2,641	993	90	903	7,632	\$5,952,127,832
3255	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	0.87		5,514	424	5,090	560	96	464	3,774	\$56,063,355
3256	Other Chemical Product and Preparation Manufacturing	0.86		1,921	537	1,384	255	57	198	607	\$7,421,533
3259	Plastics Product Manufacturing	0.93		4,029	928	3,101	987	178	809	2,585	\$238,005,982
3261	Rubber Product Manufacturing	0.85		8,087	1,691	6,396	1,456	273	1,183	4,626	\$109,646,304
3262	Clay Product and Refractory Manufacturing	0.99		3,830	609	3,221	992	174	818	4,111	\$134,781,906
3271	Glass and Glass Product Manufacturing	1.05		673	182	491	93	24	69	161	\$2,550,163
3272	Cement and Concrete Product Manufacturing	0.92		1,365	362	1,003	205	42	163	465	\$17,427,763
3273	Lime and Gypsum Product Manufacturing	0.71		2,179	389	1,790	307	40	267	467	\$64,735,258
3274	Other Nonmetallic Mineral Product Manufacturing	0.51		190	47	143	12	2	10	17	\$241,590
3279	Iron and Steel Mills and Ferroalloy Manufacturing	1.14		2,252	381	1,871	562	108	454	1,729	\$116,552,097
3311	Steel Product Manufacturing from Purchased Steel	0.71		1,034	235	799	323	62	261	927	\$16,828,410
3312	Alumina and Aluminum Production and Processing	0.89		2,692	567	2,125	741	129	612	2,885	\$49,332,357
3313	Nonferrous Metal (except Aluminum) Production and Processing	0.98		1,402	264	1,138	448	78	370	1,776	\$27,532,170
3314	Foundries	0.97		1,665	339	1,326	563	100	463	2,364	\$52,331,794
3315	Forging and Stamping	1.36		1,013	167	846	225	39	186	452	\$16,827,451
3321	Cutlery and Handtool Manufacturing	1.18		3,113	629	2,484	777	149	628	2,866	\$48,566,189
3322	Architectural and Structural Metals Manufacturing	1.08		2,616	488	2,128	728	149	579	2,133	\$78,900,457
3323	Boiler, Tank, and Shipping Container Manufacturing	0.77	*	12,958	2,605	10,353	2,048	333	1,715	4,284	\$431,771,759
3324	Hardware Manufacturing	0.81	*	4,576	904	3,672	1,120	192	928	3,527	\$1,439,441,543
3325	Spring and Wire Product Manufacturing	0.78	*	4,961	1,007	3,954	2,343	396	1,947	18,923	\$316,163,745
3326	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	1.03		2,828	571	2,257	926	167	759	3,160	\$54,288,310
3327	Coating, Engraving, Heat Treating, and Allied Activities	1.02		12,662	2,371	10,291	2,443	445	1,998	18,544	\$280,336,163
3328	Other Fabricated Metal Product Manufacturing	0.69	*	3,176	699	2,477	263	40	223	492	\$19,404,204
3329	Agriculture, Construction, and Mining Machinery Manufacturing	0.84	*	16,500	3,067	13,433	4,997	799	4,198	66,498	\$2,671,834,016
3331	Industrial Machinery Manufacturing	0.78	*	4,566	675	3,891	1,326	148	1,178	2,770	\$241,446,723
3332	Commercial and Service Industry Machinery Manufacturing	0.91		4,305	711	3,594	853	113	740	1,850	\$148,934,473
3333	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	0.92		7,681	1,371	6,310	2,389	366	2,023	8,080	\$721,485,074
3334	Metalworking Machinery Manufacturing	0.82	*	5,796	902	4,894	1,754	256	1,498	7,063	\$238,481,633
3335	Engine, Turbine, and Power Transmission Equipment Manufacturing	0.75	*	6,659	1,194	5,465	1,030	152	878	2,356	\$144,535,512
3336	Other General Purpose Machinery Manufacturing	0.99		4,657	692	3,965	2,050	307	1,743	16,545	\$586,489,756
3339	Computer and Peripheral Equipment Manufacturing	0.81	*	15,127	2,302	12,825	5,316	739	4,577	24,883	\$852,418,965
3341	Communications Equipment Manufacturing	1.07		8,097	1,618	6,479	2,525	464	2,061	10,179	\$799,255,170
3342	Audio and Video Equipment Manufacturing	0.89		11,289	1,930	9,359	3,591	527	3,064	14,494	\$1,824,391,498
3343	Semiconductor and Other Electronic Component Manufacturing	1.09		3,407	709	2,698	1,142	235	907	3,247	\$179,955,878
3344	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	1.10		11,043	1,826	9,217	4,193	633	3,560	41,613	\$1,254,953,823
3345	Manufacturing and Reproducing Magnetic and Optical Media	0.85	*	19,674	2,781	16,893	7,743	937	6,806	47,303	\$6,680,462,531
3346	Electric Lighting Equipment Manufacturing	0.72	*	2,523	569	1,954	802	109	693	1,379	\$64,481,501
3351	Household Appliance Manufacturing	0.89		3,939	880	3,059	993	183	810	3,619	\$77,842,146
3352	Electrical Equipment Manufacturing	0.83		1,156	275	881	298	59	239	569	\$15,441,781
3353	Other Electrical Equipment and Component Manufacturing	0.98		7,118	1,193	5,925	2,484	383	2,101	14,108	\$603,853,958
3359	Motor Vehicle Manufacturing	0.94		10,474	1,934	8,540	3,653	604	3,049	19,024	\$704,980,502
3361	Motor Vehicle Body and Trailer Manufacturing	0.80		1,506	202	1,304	315	31	284	698	\$113,881,681
3362	Motor Vehicle Parts Manufacturing	0.87		2,942	458	2,484	886	124	762	2,430	\$114,162,650
3363	Aerospace Product and Parts Manufacturing	0.80	*	5,705	889	4,816	1,807	258	1,549	15,290	\$517,747,537
3364	Railroad Rolling Stock Manufacturing	1.12		10,301	1,744	8,557	3,799	633	3,166	49,447	\$16,182,595,091
3365	Ship and Boat Building	0.54		687	49	638	32	2	30	54	\$13,114,457
3366	Other Transportation Equipment Manufacturing	0.87		3,816	563	3,253	1,845	227	1,618	6,363	\$5,854,636,066
3369	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	0.76	*	4,508	804	3,704	864	124	740	3,199	\$2,073,503,158
3371	Office Furniture (including Fixtures) Manufacturing	0.79	*	4,172	1,045	3,127	753	146	607	1,686	\$117,544,342
3372	Manufacturing	0.89		5,398	1,452	3,946	1,293	303	990	3,867	\$210,445,625

3379	Other Furniture Related Product Manufacturing	0.79	959	316	643	140	36	104	274	\$8,284,164	
3391	Medical Equipment and Supplies Manufacturing	0.59	*	12,543	2,107	10,436	5,849	777	5,072	81,087	\$1,980,724,576
3399	Other Miscellaneous Manufacturing	0.81	*	15,272	3,531	11,741	4,076	750	3,326	16,717	\$484,665,100
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	0.75	*	5,309	939	4,370	614	88	526	1,182	\$28,545,679
4232	Furniture and Home Furnishing Merchant Wholesalers	0.78		4,421	1,554	2,867	385	98	287	664	\$21,405,937
4233	Lumber and Other Construction Materials Merchant Wholesalers	0.77	*	6,287	1,572	4,715	518	95	423	845	\$35,726,145
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	0.72	*	25,993	6,005	19,988	5,619	920	4,699	24,502	\$745,297,697
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0.72		2,550	573	1,977	235	36	199	401	\$7,147,529
4236	Electrical and Electronic Goods Merchant Wholesalers	0.93		14,714	3,328	11,386	1,677	318	1,359	3,312	\$142,107,449
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	0.66	*	10,836	2,104	8,732	1,149	167	982	2,362	\$38,133,285
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	0.67	*	20,131	3,911	16,220	2,532	332	2,200	5,688	\$542,224,233
4239	Miscellaneous Durable Goods Merchant Wholesalers	0.62	*	9,074	2,231	6,843	746	127	619	1,384	\$39,082,503
4241	Paper and Paper Product Merchant Wholesalers	1.18		4,994	1,743	3,251	357	120	237	884	\$10,157,463
4242	Drugs and Druggists' Sundries Merchant Wholesalers	0.50	*	1,643	420	1,223	225	18	207	1,769	\$72,578,259
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	0.71		2,557	945	1,612	128	31	97	383	\$4,499,995
4244	Grocery and Related Product Merchant Wholesalers	0.85		3,246	761	2,485	642	97	545	6,762	\$252,480,204
4245	Farm Product Raw Material Merchant Wholesalers	0.48		663	126	537	79	7	72	450	\$401,426,247
4246	Chemical and Allied Products Merchant Wholesalers	0.64	*	5,439	1,235	4,204	352	56	296	661	\$10,482,961
4247	Petroleum and Petroleum Products Merchant Wholesalers	0.87		2,967	456	2,511	590	79	511	2,210	\$132,596,533
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	0.66		280	65	215	3	0	3	7	\$39,598
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	0.64	*	5,628	1,392	4,236	450	75	375	889	\$23,404,389
4251	Wholesale Electronic Markets and Agents and Brokers	0.50	*	3,641	1,084	2,557	119	18	101	203	\$2,140,262
4411	Automobile Dealers	0.41	*	1,757	230	1,527	128	6	122	173	\$4,531,017
4412	Other Motor Vehicle Dealers	0.88		3,314	457	2,857	544	72	472	1,372	\$46,322,219
4413	Automotive Parts, Accessories, and Tire Stores	0.84		3,706	470	3,236	329	34	295	524	\$5,942,404
4421	Furniture Stores	0.58	*	2,401	799	1,602	230	51	179	331	\$6,858,806
4422	Home Furnishings Stores	0.63	*	2,517	825	1,692	180	41	139	231	\$3,168,419
4431	Electronics and Appliance Stores	1.24		5,546	1,309	4,237	312	72	240	451	\$10,794,059
4441	Building Material and Supplies Dealers	0.64	*	9,885	1,533	8,352	560	97	463	1,091	\$17,460,888
4442	Lawn and Garden Equipment and Supplies Stores	0.54	*	2,312	413	1,899	192	17	175	257	\$3,023,333
4451	Grocery Stores	1.09		662	144	518	102	19	83	246	\$3,053,040
4452	Specialty Food Stores	0.83		766	246	520	56	10	46	182	\$1,685,422
4453	Beer, Wine, and Liquor Stores	0.80		101	25	76	1	0	1	1	\$9,298
4461	Health and Personal Care Stores	0.82		4,281	1,131	3,150	360	62	298	990	\$24,667,002
4471	Gasoline Stations	1.27		687	113	574	71	11	60	124	\$2,424,745
4481	Clothing Stores	0.76		1,899	713	1,186	227	53	174	554	\$8,773,643
4482	Shoe Stores	0.89		1,108	171	937	33	5	28	61	\$502,878
4483	Jewelry, Luggage, and Leather Goods Stores	0.79		486	166	320	18	4	14	29	\$207,249
4511	Sporting Goods, Hobby, and Musical Instrument Stores	0.87		2,769	640	2,129	200	36	164	332	\$5,281,743
4512	Book, Periodical, and Music Stores	0.41	*	722	195	527	56	8	48	96	\$839,118
4521	Department Stores	1.07		161	57	104	16	3	13	29	\$455,815
4529	Other General Merchandise Stores	0.70		979	325	654	85	13	72	137	\$3,036,966
4531	Florists	0.99		215	93	122	5	2	3	5	\$7,600
4532	Office Supplies, Stationery, and Gift Stores	0.94		3,545	1,228	2,317	406	118	288	1,124	\$12,027,510
4533	Used Merchandise Stores	0.37		708	140	568	21	2	19	32	\$654,101
4539	Other Miscellaneous Store Retailers	0.82		5,428	1,627	3,801	436	110	326	802	\$24,283,141
4541	Electronic Shopping and Mail-Order Houses	0.54		3,037	880	2,157	101	12	89	254	\$4,725,657
4542	Vending Machine Operators	1.85		293	86	207	2	1	1	3	\$26,611
4543	Direct Selling Establishments	0.61	*	3,494	709	2,785	378	44	334	869	\$21,537,143
4811	Scheduled Air Transportation	0.40		1,024	255	769	76	4	72	169	\$3,952,559
4812	Nonscheduled Air Transportation	0.95		2,195	408	1,787	335	51	284	2,432	\$1,853,218,214
4821	Rail Transportation	0.62		406	82	324	7	0	7	17	\$319,149
4831	Deep Sea, Coastal, and Great Lakes Water Transportation	0.51	*	1,389	258	1,131	167	15	152	344	\$430,946,083
4832	Inland Water Transportation	0.69		759	154	605	65	8	57	89	\$19,800,092
4841	General Freight Trucking	0.74		6,958	1,834	5,124	259	43	216	376	\$13,141,818
4842	Specialized Freight Trucking	0.78	*	9,743	2,371	7,372	804	147	657	1,448	\$88,243,071
4851	Urban Transit Systems	0.74		1,193	250	943	77	10	67	157	\$11,883,218
4852	Interurban and Rural Bus Transportation	0.23		448	95	353	14	0	14	40	\$1,541,622
4853	Taxi and Limousine Service	0.68		921	249	672	41	7	34	66	\$5,125,686

4854	School and Employee Bus Transportation	0.55	691	183	508	28	4	24	38	\$4,275,612
4855	Charter Bus Industry	1.18	1,026	240	786	151	32	119	438	\$7,620,462
4859	Other Transit and Ground Passenger Transportation	0.83	2,603	729	1,874	417	90	327	566	\$96,533,030
4861	Pipeline Transportation of Crude Oil	1.63	543	30	513	1	0	1	2	\$52,925
4862	Pipeline Transportation of Natural Gas	1.69	619	36	583	6	1	5	11	\$2,067,157
4869	Other Pipeline Transportation	2.02	709	59	650	3	1	2	4	\$25,222
4871	Scenic and Sightseeing Transportation, Land	0.43	456	136	320	16	2	14	21	\$145,347
4872	Scenic and Sightseeing Transportation, Water	0.68	288	66	222	15	2	13	20	\$350,089
4879	Scenic and Sightseeing Transportation, Other	0.34	298	80	218	2	0	2	4	\$140,530
4881	Support Activities for Air Transportation	1.11	4,757	881	3,876	884	139	745	2,356	\$915,232,580
4882	Support Activities for Rail Transportation	0.50	639	159	480	11	1	10	16	\$2,424,479
4883	Support Activities for Water Transportation	0.80	2,194	413	1,781	250	30	220	523	\$77,639,033
4884	Support Activities for Road Transportation	0.52	2,746	677	2,069	148	21	127	259	\$5,934,622
4885	Freight Transportation Arrangement	0.90	2,944	755	2,189	92	15	77	159	\$8,184,794
4889	Other Support Activities for Transportation	0.96	4,114	1,037	3,077	239	45	194	371	\$13,309,333
4911	Postal Service	0.88	734	228	506	36	6	30	91	\$6,457,321
4921	Couriers and Express Delivery Services	0.78	1,708	489	1,219	160	30	130	389	\$16,724,192
4922	Local Messengers and Local Delivery	0.57	1,225	373	852	66	10	56	103	\$1,648,346
4931	Warehousing and Storage	0.71	7,387	1,665	5,722	441	71	370	755	\$337,930,430
5111	Newspaper, Periodical, Book, and Directory Publishers	0.50	5,050	1,413	3,637	880	97	783	3,389	\$107,693,421
5112	Software Publishers	0.66	12,466	2,123	10,343	3,206	318	2,888	11,627	\$750,903,195
5121	Motion Picture and Video Industries	0.59	5,790	1,740	4,050	381	77	304	613	\$37,868,909
5122	Sound Recording Industries	0.48	1,698	510	1,188	81	13	68	117	\$22,481,240
5151	Radio and Television Broadcasting	0.63	1,785	353	1,432	355	53	302	551	\$17,208,884
5152	Cable and Other Subscription Programming	0.53	794	129	665	247	12	235	928	\$10,382,651
5171	Wired Telecommunications Carriers	0.75	5,714	914	4,800	829	60	769	4,985	\$402,985,788
5172	Wireless Telecommunications Carriers (except Satellite)	0.64	2,868	578	2,290	390	40	350	1,315	\$91,601,498
5174	Satellite Telecommunications	0.57	2,379	459	1,920	249	28	221	733	\$178,665,535
5179	Other Telecommunications	0.63	7,779	1,672	6,107	883	103	780	1,826	\$242,838,679
5182	Data Processing, Hosting, and Related Services	0.67	14,786	4,038	10,748	932	141	791	1,566	\$387,486,660
5191	Other Information Services	0.59	11,506	3,455	8,051	978	135	843	2,860	\$216,429,049
5221	Depository Credit Intermediation	0.52	820	56	764	37	0	37	90	\$30,549,619
5222	Nondepository Credit Intermediation	1.45	1,365	283	1,082	27	3	24	35	\$759,120
5223	Activities Related to Credit Intermediation	0.76	1,154	319	835	47	6	41	67	\$45,992,489
5231	Securities and Commodity Contracts Intermediation and Brokerage	0.64	623	145	478	17	1	16	22	\$217,958,426
5232	Securities and Commodity Exchanges	0.56	101	12	89	4	0	4	7	\$112,045
5239	Other Financial Investment Activities	0.71	1,898	490	1,408	115	14	101	243	\$23,473,530
5241	Insurance Carriers	0.31	1,186	235	951	107	8	99	212	\$201,760,074
5242	Agencies, Brokerages, and Other Insurance Related Activities	0.33	2,150	653	1,497	79	8	71	179	\$115,844,241
5251	Insurance and Employee Benefit Funds	1.15	360	130	230	14	3	11	22	\$539,446
5259	Other Investment Pools and Funds	0.37	675	158	517	10	0	10	14	\$1,204,996
5311	Lessors of Real Estate	0.95	25,350	2,337	23,013	712	55	657	1,146	\$68,802,948
5312	Offices of Real Estate Agents and Brokers	1.09	4,030	1,591	2,439	55	15	40	86	\$1,076,979
5313	Activities Related to Real Estate	0.91	13,992	2,721	11,271	1,403	252	1,151	4,754	\$141,501,091
5321	Automotive Equipment Rental and Leasing	0.54	2,187	375	1,812	330	32	298	965	\$45,614,410
5322	Consumer Goods Rental	0.86	2,977	720	2,257	428	79	349	1,053	\$83,041,733
5323	General Rental Centers	0.51	737	163	574	61	7	54	76	\$1,542,571
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	0.62	10,405	2,073	8,332	1,417	163	1,254	3,738	\$155,523,147
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	1.16	179	45	134	15	1	14	40	\$7,037,211
5411	Legal Services	0.60	7,265	2,207	5,058	1,419	290	1,129	4,230	\$186,996,839
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	0.54	6,052	2,541	3,511	231	51	180	368	\$86,294,885
5413	Architectural, Engineering, and Related Services	0.84	64,160	12,634	51,526	5,743	856	4,887	9,790	\$5,018,420,242
5414	Specialized Design Services	0.82	20,532	6,939	13,593	471	149	322	622	\$36,199,821
5415	Computer Systems Design and Related Services	0.72	55,480	13,587	41,893	5,843	1,039	4,804	14,361	\$5,068,324,188
5416	Management, Scientific, and Technical Consulting Services	0.81	89,197	27,434	61,763	5,803	1,437	4,366	9,852	\$4,601,102,896
5417	Scientific Research and Development Services	0.63	30,958	6,830	24,128	4,746	665	4,081	13,008	\$8,659,555,483
5418	Advertising, Public Relations, and Related Services	0.45	11,133	4,831	6,302	592	134	458	946	\$255,066,403
5419	Other Professional, Scientific, and Technical Services	0.73	41,412	13,178	28,234	4,162	995	3,167	7,186	\$3,450,378,598
5511	Management of Companies and Enterprises	1.69	797	182	615	2	0	2	4	\$804,600
5611	Office Administrative Services	0.81	12,414	5,289	7,125	463	166	297	721	\$160,602,915
5612	Facilities Support Services	0.76	17,490	4,524	12,966	1,278	297	981	2,354	\$1,381,824,141
5613	Employment Services	1.07	11,905	4,919	6,986	604	236	368	1,228	\$180,038,613
5614	Business Support Services	0.94	16,926	7,513	9,413	1,386	578	808	4,082	\$645,510,756
5615	Travel Arrangement and Reservation Services	0.51	1,820	724	1,096	97	20	77	136	\$8,196,695

5616	Investigation and Security Services	0.77	*	17,225	3,549	13,676	2,158	384	1,774	6,332	\$627,393,793
5617	Services to Buildings and Dwellings	0.79	*	28,508	8,310	20,198	3,538	922	2,616	6,519	\$676,507,796
5619	Other Support Services	0.62	*	12,528	4,383	8,145	1,065	237	828	1,671	\$140,131,570
5621	Waste Collection	0.86		6,832	1,488	5,344	1,014	167	847	2,366	\$116,372,870
5622	Waste Treatment and Disposal Remediation and Other Waste Management Services	0.70	*	5,092	933	4,159	459	70	389	1,584	\$66,560,587
5629		0.84	*	16,366	3,436	12,930	1,627	338	1,289	3,511	\$819,941,258
6111	Elementary and Secondary Schools	0.73		2,105	471	1,634	32	4	28	60	\$8,176,719
6112	Junior Colleges Colleges, Universities, and Professional Schools	0.35		660	215	445	16	1	15	22	\$394,835
6113	Business Schools and Computer and Management Training	0.24	*	3,309	585	2,724	390	9	381	1,152	\$93,027,030
6114	Technical and Trade Schools	0.77	*	30,472	10,827	19,645	2,433	607	1,826	4,899	\$270,418,974
6115	Other Schools and Instruction	0.78		6,716	1,709	5,007	361	53	308	581	\$356,788,731
6116	Educational Support Services	0.64	*	11,436	3,802	7,634	725	150	575	1,196	\$103,710,099
6211	Offices of Physicians	0.45	*	16,222	5,825	10,397	1,920	406	1,514	5,682	\$168,682,059
6212	Offices of Dentists	0.75	*	7,376	1,282	6,094	1,042	153	889	3,356	\$576,840,283
6213	Offices of Other Health Practitioners	0.64		1,599	352	1,247	93	18	75	173	\$15,463,121
6214	Outpatient Care Centers	0.84		7,846	2,607	5,239	781	228	553	1,527	\$181,156,083
6215	Medical and Diagnostic Laboratories	0.55	*	9,518	1,274	8,244	311	51	260	554	\$138,901,347
6216	Home Health Care Services	0.57	*	2,983	654	2,329	674	68	606	1,660	\$123,226,154
6219	Other Ambulatory Health Care Services	0.80		3,844	1,281	2,563	274	69	205	433	\$35,691,942
6221	General Medical and Surgical Hospitals	0.68	*	3,954	1,115	2,839	557	82	475	1,683	\$209,889,784
6222	Psychiatric and Substance Abuse Hospitals Specialty (except Psychiatric and Substance Abuse) Hospitals	0.54	*	3,074	522	2,552	711	72	639	5,779	\$380,222,902
6223	Nursing Care Facilities Residential Mental Retardation, Mental Health and Substance Abuse Facilities	0.47		541	140	401	18	2	16	23	\$3,304,133
6231	Community Care Facilities for the Elderly	0.78		552	153	399	22	1	21	275	\$13,983,185
6232	Other Residential Care Facilities	0.51	*	4,105	389	3,716	934	39	895	1,047	\$69,780,775
6233	Individual and Family Services Community Food and Housing, and Emergency and Other Relief Services	1.96		2,528	423	2,105	103	13	90	139	\$34,994,914
6239	Vocational Rehabilitation Services	1.94		1,399	359	1,040	4	3	1	4	\$0
6241	Child Day Care Services	1.77		1,957	421	1,536	62	12	50	119	\$104,869,647
6242	Performing Arts Companies	0.84		14,164	3,625	10,539	380	98	282	530	\$211,320,231
6243	Spectator Sports Promoters of Performing Arts, Sports, and Similar Events	0.52	*	8,070	1,918	6,152	209	18	191	306	\$51,547,495
6244	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures Independent Artists, Writers, and Performers	0.75		4,956	1,729	3,227	197	70	127	223	\$27,680,398
7111	Museums, Historical Sites, and Similar Institutions	1.27		3,339	1,162	2,177	65	39	26	199	\$6,528,244
7112	Amusement Parks and Arcades	1.03		2,229	775	1,454	214	88	126	326	\$4,160,651
7113	Gambling Industries Other Amusement and Recreation Industries	0.22	*	803	179	624	89	4	85	129	\$5,384,691
7114	Traveler Accommodation RV (Recreational Vehicle) Parks and Recreational Camps	0.34	*	1,782	653	1,129	83	8	75	122	\$5,187,249
7115	Rooming and Boarding Houses	0.25	*	694	319	375	19	3	16	23	\$269,110
7121	Full-Service Restaurants	0.33	*	5,839	2,636	3,203	605	156	449	959	\$20,116,426
7122	Limited-Service Eating Places	1.11		3,052	798	2,254	163	54	109	198	\$13,362,004
7123	Special Food Services	0.27		265	81	184	6	0	6	19	\$494,873
7124	Drinking Places (Alcoholic Beverages)	3.22		125	38	87	3	2	1	3	\$60,613
7139	Restaurants and Other Eating Places	0.71		3,310	781	2,529	294	45	249	436	\$14,309,908
7211	Automotive Repair and Maintenance Electronic and Precision Equipment Repair and Maintenance Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance Personal and Household Goods Repair and Maintenance	0.49	*	11,540	921	10,619	2,501	132	2,369	5,140	\$168,452,082
7212	Death Care Services	0.69	*	1,717	494	1,223	485	128	357	590	\$7,769,398
7213	Drycleaning and Laundry Services	0.05		1,500	161	1,339	8	0	8	11	\$411,606
7221	Other Personal Services	1.11		1,097	199	898	0	0	0	0	\$0
7222	Religious Organizations	1.60		884	240	644	0	0	0	0	\$0
7223	Grantmaking and Giving Services	0.85		4,671	1,401	3,270	907	217	690	3,128	\$97,358,090
7224	Social Advocacy Organizations	1.43		655	87	568	0	0	0	0	\$0
7225	Civic and Social Organizations Business, Professional, Labor, Political, and Similar Organizations	0.46	*	1,275	213	1,062	87	8	79	123	\$1,060,179
8111	Automotive Repair and Maintenance	0.70	*	11,655	1,606	10,049	1,843	185	1,658	3,307	\$65,694,874
8112	Electronic and Precision Equipment Repair and Maintenance Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance Personal and Household Goods Repair and Maintenance	0.61	*	18,129	3,501	14,628	4,268	503	3,765	16,720	\$679,655,443
8113	Death Care Services	0.65	*	12,357	1,994	10,363	3,245	376	2,869	6,093	\$208,897,229
8114	Drycleaning and Laundry Services	0.81		4,681	1,021	3,660	528	92	436	700	\$19,256,209
8121	Other Personal Services	0.17	*	1,048	534	514	24	4	20	37	\$582,795
8122	Religious Organizations	0.82		828	121	707	186	21	165	361	\$57,585,753
8123	Grantmaking and Giving Services	0.62	*	2,366	649	1,717	450	75	375	895	\$59,085,089
8129	Social Advocacy Organizations	0.42	*	3,654	1,347	2,307	336	55	281	874	\$57,529,438
8131	Civic and Social Organizations Business, Professional, Labor, Political, and Similar Organizations	0.47	*	2,336	611	1,725	480	103	377	918	\$14,123,890
8132	Automotive Repair and Maintenance	0.10		1,746	368	1,378	31	0	31	52	\$642,496
8133	Electronic and Precision Equipment Repair and Maintenance Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance Personal and Household Goods Repair and Maintenance	0.84		5,615	1,107	4,508	152	21	131	215	\$6,698,601
8134	Automotive Repair and Maintenance	0.37		2,144	401	1,743	53	1	52	76	\$1,239,399
8139	Automotive Repair and Maintenance	0.41	*	4,531	809	3,722	568	20	548	1,735	\$59,662,861

Appendix A  
Sorted by  
Odds Ratio

NAICS Code	NAICS4 Title	Odds Ratio	Statistically Significant	Total Number of Firms	Number of WOBs	Number of Non-WOBs	Number of Winners	Number of WOB Winners	Number of Non-WOB Winners	Number of Contracts	Dollars Awarded
8121	Personal Care Services	0.17	*	1,048	534	514	24	4	20	37	\$582,795
7112	Spectator Sports	0.22	*	803	179	624	89	4	85	129	\$5,384,691
6113	Colleges, Universities, and Professional Schools	0.24	*	3,309	585	2,724	390	9	381	1,152	\$93,027,030
7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	0.25	*	694	319	375	19	3	16	23	\$269,110
5241	Insurance Carriers	0.31	*	1,186	235	951	107	8	99	212	\$201,760,074
5242	Insurance Related Activities	0.33	*	2,150	653	1,497	79	8	71	179	\$115,844,241
7115	Independent Artists, Writers, and Performers	0.33	*	5,839	2,636	3,203	605	156	449	959	\$20,116,426
7113	Promoters of Performing Arts, Sports, and Similar Events	0.34	*	1,782	653	1,129	83	8	75	122	\$5,187,249
8139	Business, Professional, Labor, Political, and Similar Organizations	0.41	*	4,531	809	3,722	568	20	548	1,735	\$59,662,861
4512	Book, Periodical, and Music Stores	0.41	*	722	195	527	56	8	48	96	\$839,118
4411	Automobile Dealers	0.41	*	1,757	230	1,527	128	6	122	173	\$4,531,017
8129	Other Personal Services	0.42	*	3,654	1,347	2,307	336	55	281	874	\$57,529,438
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	0.42	*	1,004	235	769	217	22	195	2,801	\$1,252,270,006
6117	Educational Support Services	0.45	*	16,222	5,825	10,397	1,920	406	1,514	5,682	\$168,682,059
5418	Advertising, Public Relations, and Related Services	0.45	*	11,133	4,831	6,302	592	134	458	946	\$255,066,403
7225	Restaurants and Other Eating Places	0.46	*	1,275	213	1,062	87	8	79	123	\$1,060,179
8131	Religious Organizations	0.47	*	2,336	611	1,725	480	103	377	918	\$14,123,890
5122	Sound Recording Industries	0.48	*	1,698	510	1,188	81	13	68	117	\$22,481,240
7211	Traveler Accommodation	0.49	*	11,540	921	10,619	2,501	132	2,369	5,140	\$168,452,082
4242	Drugs and Druggists' Sundries Merchant Wholesalers	0.50	*	1,643	420	1,223	225	18	207	1,769	\$72,578,259
4251	Wholesale Electronic Markets and Agents and Brokers	0.50	*	3,641	1,084	2,557	119	18	101	203	\$2,140,262
5111	Newspaper, Periodical, Book, and Directory Publishers	0.50	*	5,050	1,413	3,637	880	97	783	3,389	\$107,693,421
5615	Travel Arrangement and Reservation Services	0.51	*	1,820	724	1,096	97	20	77	136	\$8,196,695
4831	Deep Sea, Coastal, and Great Lakes Water Transportation	0.51	*	1,389	258	1,131	167	15	152	344	\$430,946,083
6231	Nursing Care Facilities	0.51	*	4,105	389	3,716	934	39	895	1,047	\$69,780,775
6242	Community Food and Housing, and Emergency and Other Relief Services	0.52	*	8,070	1,918	6,152	209	18	191	306	\$51,547,495
4884	Support Activities for Road Transportation	0.52	*	2,746	677	2,069	148	21	127	259	\$5,934,622
3231	Printing and Related Support Activities	0.53	*	7,637	2,577	5,060	690	126	564	1,501	\$40,077,661

NAICS Code	NAICS4 Title	Odds Ratio	Statistically Significant	Total Number of Firms	Number of WOBs	Number of Non-WOBs	Number of Winners	Number of WOB Winners	Number of Non-WOB Winners	Number of Contracts	Dollars Awarded
6221	General Medical and Surgical Hospitals	0.54	*	3,074	522	2,552	711	72	639	5,779	\$380,222,902
3141	Textile Furnishings Mills	0.54	*	1,261	430	831	226	51	175	442	\$14,578,109
5321	Automotive Equipment Rental and Leasing	0.54	*	2,187	375	1,812	330	32	298	965	\$45,614,410
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	0.54	*	6,052	2,541	3,511	231	51	180	368	\$86,294,885
4442	Lawn and Garden Equipment and Supplies Stores	0.54	*	2,312	413	1,899	192	17	175	257	\$3,023,333
6214	Outpatient Care Centers	0.55	*	9,518	1,274	8,244	311	51	260	554	\$138,901,347
3118	Bakeries and Tortilla Manufacturing	0.55	*	858	216	642	247	21	226	1,119	\$135,610,459
5174	Satellite Telecommunications	0.57	*	2,379	459	1,920	249	28	221	733	\$178,665,535
6215	Medical and Diagnostic Laboratories	0.57	*	2,983	654	2,329	674	68	606	1,660	\$123,226,154
2361	Residential Building Construction	0.57	*	26,691	5,372	21,319	1,016	136	880	2,922	\$88,089,159
4421	Furniture Stores	0.58	*	2,401	799	1,602	230	51	179	331	\$6,858,806
5191	Other Information Services	0.59	*	11,506	3,455	8,051	978	135	843	2,860	\$216,429,049
3391	Medical Equipment and Supplies Manufacturing	0.59	*	12,543	2,107	10,436	5,849	777	5,072	81,087	\$1,980,724,576
5121	Motion Picture and Video Industries	0.59	*	5,790	1,740	4,050	381	77	304	613	\$37,868,909
5411	Legal Services	0.60	*	7,265	2,207	5,058	1,419	290	1,129	4,230	\$186,996,839
8112	Electronic and Precision Equipment Repair and Maintenance	0.61	*	18,129	3,501	14,628	4,268	503	3,765	16,720	\$679,655,443
4543	Direct Selling Establishments	0.61	*	3,494	709	2,785	378	44	334	869	\$21,537,143
8123	Drycleaning and Laundry Services	0.62	*	2,366	649	1,717	450	75	375	895	\$59,085,089
4239	Miscellaneous Durable Goods Merchant Wholesalers	0.62	*	9,074	2,231	6,843	746	127	619	1,384	\$39,082,503
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	0.62	*	10,405	2,073	8,332	1,417	163	1,254	3,738	\$155,523,147
5619	Other Support Services	0.62	*	12,528	4,383	8,145	1,065	237	828	1,671	\$140,131,570
5179	Other Telecommunications	0.63	*	7,779	1,672	6,107	883	103	780	1,826	\$242,838,679
5417	Scientific Research and Development Services	0.63	*	30,958	6,830	24,128	4,746	665	4,081	13,008	\$8,659,555,483
5151	Radio and Television Broadcasting	0.63	*	1,785	353	1,432	355	53	302	551	\$17,208,884
4422	Home Furnishings Stores	0.63	*	2,517	825	1,692	180	41	139	231	\$3,168,419
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	0.64	*	5,628	1,392	4,236	450	75	375	889	\$23,404,389
5172	Wireless Telecommunications Carriers (except Satellite)	0.64	*	2,868	578	2,290	390	40	350	1,315	\$91,601,498
4246	Chemical and Allied Products Merchant Wholesalers	0.64	*	5,439	1,235	4,204	352	56	296	661	\$10,482,961
6116	Other Schools and Instruction	0.64	*	11,436	3,802	7,634	725	150	575	1,196	\$103,710,099
4441	Building Material and Supplies Dealers	0.64	*	9,885	1,533	8,352	560	97	463	1,091	\$17,460,888

NAICS Code	NAICS4 Title	Odds Ratio	Statistically Significant	Total Number of Firms	Number of WOBs	Number of Non-WOBs	Number of Winners	Number of WOB Winners	Number of Non-WOB Winners	Number of Contracts	Dollars Awarded
3241	Petroleum and Coal Products Manufacturing	0.65	*	2,636	430	2,206	788	90	698	2,743	\$8,150,305,066
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	0.65	*	12,357	1,994	10,363	3,245	376	2,869	6,093	\$208,897,229
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	0.66	*	10,836	2,104	8,732	1,149	167	982	2,362	\$38,133,285
2379	Other Heavy and Civil Engineering Construction	0.66	*	18,733	3,464	15,269	1,037	169	868	1,738	\$5,252,358,987
5112	Software Publishers	0.66	*	12,466	2,123	10,343	3,206	318	2,888	11,627	\$750,903,195
5182	Data Processing, Hosting, and Related Services	0.67	*	14,786	4,038	10,748	932	141	791	1,566	\$387,486,660
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	0.67	*	20,131	3,911	16,220	2,532	332	2,200	5,688	\$542,224,233
6219	Other Ambulatory Health Care Services	0.68	*	3,954	1,115	2,839	557	82	475	1,683	\$209,889,784
3328	Coating, Engraving, Heat Treating, and Allied Activities	0.69	*	3,176	699	2,477	263	40	223	492	\$19,404,204
7212	RV (Recreational Vehicle) Parks and Recreational Camps	0.69	*	1,717	494	1,223	485	128	357	590	\$7,769,398
8111	Automotive Repair and Maintenance	0.70	*	11,655	1,606	10,049	1,843	185	1,658	3,307	\$65,694,874
5622	Waste Treatment and Disposal	0.70	*	5,092	933	4,159	459	70	389	1,584	\$66,560,587
2213	Water, Sewage and Other Systems	0.71	*	8,641	1,567	7,074	675	85	590	1,035	\$106,964,258
4931	Warehousing and Storage	0.71	*	7,387	1,665	5,722	441	71	370	755	\$337,930,430
2383	Building Finishing Contractors	0.71	*	28,787	6,942	21,845	1,718	356	1,362	2,664	\$161,529,530
2381	Foundation, Structure, and Building Exterior Contractors	0.71	*	31,590	6,720	24,870	1,550	292	1,258	2,328	\$671,838,664
2389	Other Specialty Trade Contractors	0.72	*	40,739	9,101	31,638	2,854	528	2,326	4,536	\$563,267,139
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	0.72	*	25,993	6,005	19,988	5,619	920	4,699	24,502	\$745,297,697
5415	Computer Systems Design and Related Services	0.72	*	55,480	13,587	41,893	5,843	1,039	4,804	14,361	\$5,068,324,188
3346	Manufacturing and Reproducing Magnetic and Optical Media	0.72	*	2,523	569	1,954	802	109	693	1,379	\$64,481,501
2382	Building Equipment Contractors	0.73	*	46,213	8,949	37,264	6,064	973	5,091	11,686	\$1,565,700,847
5419	Other Professional, Scientific, and Technical Services	0.73	*	41,412	13,178	28,234	4,162	995	3,167	7,186	\$3,450,378,598
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	0.75	*	5,309	939	4,370	614	88	526	1,182	\$28,545,679
3335	Metalworking Machinery Manufacturing	0.75	*	6,659	1,194	5,465	1,030	152	878	2,356	\$144,535,512
6211	Offices of Physicians	0.75	*	7,376	1,282	6,094	1,042	153	889	3,356	\$576,840,283
3369	Other Transportation Equipment Manufacturing	0.76	*	4,508	804	3,704	864	124	740	3,199	\$2,073,503,158

NAICS Code	NAICS4 Title	Odds Ratio	Statistically Significant	Total Number of Firms	Number of WOBs	Number of Non-WOBs	Number of Winners	Number of WOB Winners	Number of Non-WOB Winners	Number of Contracts	Dollars Awarded
5612	Facilities Support Services	0.76	*	17,490	4,524	12,966	1,278	297	981	2,354	\$1,381,824,141
3323	Architectural and Structural Metals Manufacturing	0.77	*	12,958	2,605	10,353	2,048	333	1,715	4,284	\$431,771,759
1153	Support Activities for Forestry	0.77	*	8,103	1,587	6,516	2,945	525	2,420	5,497	\$201,252,365
6114	Business Schools and Computer and Management Training	0.77	*	30,472	10,827	19,645	2,433	607	1,826	4,899	\$270,418,974
4233	Lumber and Other Construction Materials Merchant Wholesalers	0.77	*	6,287	1,572	4,715	518	95	423	845	\$35,726,145
5616	Investigation and Security Services	0.77	*	17,225	3,549	13,676	2,158	384	1,774	6,332	\$627,393,793
4842	Specialized Freight Trucking	0.78	*	9,743	2,371	7,372	804	147	657	1,448	\$88,243,071
3331	Agriculture, Construction, and Mining Machinery Manufacturing	0.78	*	4,566	675	3,891	1,326	148	1,178	2,770	\$241,446,723
3325	Hardware Manufacturing	0.78	*	4,961	1,007	3,954	2,343	396	1,947	18,923	\$316,163,745
3149	Other Textile Product Mills	0.79	*	4,176	1,236	2,940	928	193	735	3,800	\$201,735,873
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	0.79	*	4,172	1,045	3,127	753	146	607	1,686	\$117,544,342
2373	Highway, Street, and Bridge Construction	0.79	*	19,463	3,744	15,719	1,215	212	1,003	1,965	\$1,949,342,536
2371	Utility System Construction	0.79	*	26,251	5,038	21,213	1,345	234	1,111	2,088	\$1,148,395,485
5617	Services to Buildings and Dwellings	0.79	*	28,508	8,310	20,198	3,538	922	2,616	6,519	\$676,507,796
3363	Motor Vehicle Parts Manufacturing	0.80	*	5,705	889	4,816	1,807	258	1,549	15,290	\$517,747,537
3324	Boiler, Tank, and Shipping Container Manufacturing	0.81	*	4,576	904	3,672	1,120	192	928	3,527	\$1,439,441,543
3339	Other General Purpose Machinery Manufacturing	0.81	*	15,127	2,302	12,825	5,316	739	4,577	24,883	\$852,418,965
3399	Other Miscellaneous Manufacturing	0.81	*	15,272	3,531	11,741	4,076	750	3,326	16,717	\$484,665,100
5416	Management, Scientific, and Technical Consulting Services	0.81	*	89,197	27,434	61,763	5,803	1,437	4,366	9,852	\$4,601,102,896
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	0.82	*	5,796	902	4,894	1,754	256	1,498	7,063	\$238,481,633
5413	Architectural, Engineering, and Related Services	0.84	*	64,160	12,634	51,526	5,743	856	4,887	9,790	\$5,018,420,242
5629	Remediation and Other Waste Management Services	0.84	*	16,366	3,436	12,930	1,627	338	1,289	3,511	\$819,941,258
3329	Other Fabricated Metal Product Manufacturing	0.84	*	16,500	3,067	13,433	4,997	799	4,198	66,498	\$2,671,834,016
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	0.85	*	19,674	2,781	16,893	7,743	937	6,806	47,303	\$6,680,462,531
2362	Nonresidential Building Construction	0.88	*	38,890	7,465	31,425	3,289	632	2,657	8,547	\$13,005,918,992
7213	Rooming and Boarding Houses	0.05		1,500	161	1,339	8	0	8	11	\$411,606
8132	Grantmaking and Giving Services	0.10		1,746	368	1,378	31	0	31	52	\$642,496
1122	Hog and Pig Farming	0.23		170	21	149	15	0	15	47	\$446,138

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4852	Interurban and Rural Bus Transportation	0.23		448	95	353	14	0	14	40	\$1,541,622
7131	Amusement Parks and Arcades	0.27		265	81	184	6	0	6	19	\$494,873
1111	Oilseed and Grain Farming	0.34		1,694	120	1,574	32	0	32	49	\$546,219
2121	Coal Mining	0.34		150	22	128	7	0	7	12	\$15,386,209
4879	Scenic and Sightseeing Transportation, Other	0.34		298	80	218	2	0	2	4	\$140,530
6112	Junior Colleges	0.35		660	215	445	16	1	15	22	\$394,835
8134	Civic and Social Organizations	0.37		2,144	401	1,743	53	1	52	76	\$1,239,399
4533	Used Merchandise Stores	0.37		708	140	568	21	2	19	32	\$654,101
5259	Other Investment Pools and Funds	0.37		675	158	517	10	0	10	14	\$1,204,996
1112	Vegetable and Melon Farming	0.40		559	133	426	7	0	7	10	\$141,926
4811	Scheduled Air Transportation	0.40		1,024	255	769	76	4	72	169	\$3,952,559
4871	Scenic and Sightseeing Transportation, Land	0.43		456	136	320	16	2	14	21	\$145,347
1142	Hunting and Trapping	0.46		492	91	401	32	2	30	70	\$957,971
6222	Psychiatric and Substance Abuse Hospitals	0.47		541	140	401	18	2	16	23	\$3,304,133
1124	Sheep and Goat Farming	0.48		204	61	143	10	2	8	12	\$133,340
4245	Farm Product Raw Material Merchant Wholesalers	0.48		663	126	537	79	7	72	450	\$401,426,247
4882	Support Activities for Rail Transportation	0.50		639	159	480	11	1	10	16	\$2,424,479
3274	Lime and Gypsum Product Manufacturing	0.51		190	47	143	12	2	10	17	\$241,590
5323	General Rental Centers	0.51		737	163	574	61	7	54	76	\$1,542,571
5221	Depository Credit Intermediation	0.52		820	56	764	37	0	37	90	\$30,549,619
2111	Oil and Gas Extraction	0.53		414	73	341	64	6	58	95	\$17,329,405
3113	Sugar and Confectionery Product Manufacturing	0.53		267	87	180	12	1	11	42	\$35,503,993
5152	Cable and Other Subscription Programming	0.53		794	129	665	247	12	235	928	\$10,382,651
3365	Railroad Rolling Stock Manufacturing	0.54		687	49	638	32	2	30	54	\$13,114,457
4541	Electronic Shopping and Mail-Order Houses	0.54		3,037	880	2,157	101	12	89	254	\$4,725,657
1129	Other Animal Production	0.55		711	191	520	98	15	83	247	\$5,617,220
4854	School and Employee Bus Transportation	0.55		691	183	508	28	4	24	38	\$4,275,612
5232	Securities and Commodity Exchanges	0.56		101	12	89	4	0	4	7	\$112,045
4922	Local Messengers and Local Delivery	0.57		1,225	373	852	66	10	56	103	\$1,648,346
3116	Animal Slaughtering and Processing	0.60		670	113	557	188	22	166	2,170	\$1,499,619,397
1141	Fishing	0.60		418	63	355	36	3	33	52	\$1,298,495
1123	Poultry and Egg Production	0.62		303	65	238	33	4	29	132	\$8,969,871

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4821	Rail Transportation	0.62		406	82	324	7	0	7	17	\$319,149
3117	Seafood Product Preparation and Packaging	0.64		233	59	174	34	6	28	104	\$82,796,496
3211	Sawmills and Wood Preservation	0.64		1,294	275	1,019	152	24	128	233	\$5,310,924
1131	Timber Tract Operations	0.64		981	169	812	26	2	24	70	\$1,097,676
5231	Securities and Commodity Contracts Intermediation and Brokerage	0.64		623	145	478	17	1	16	22	\$217,958,426
6212	Offices of Dentists	0.64		1,599	352	1,247	93	18	75	173	\$15,463,121
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	0.66		280	65	215	3	0	3	7	\$39,598
2212	Natural Gas Distribution	0.66		1,259	192	1,067	161	8	153	708	\$114,876,302
3162	Footwear Manufacturing	0.67		1,096	199	897	137	26	111	388	\$26,974,905
3151	Apparel Knitting Mills	0.68		691	242	449	46	11	35	78	\$5,382,282
4872	Scenic and Sightseeing Transportation, Water	0.68		288	66	222	15	2	13	20	\$350,089
4853	Taxi and Limousine Service	0.68		921	249	672	41	7	34	66	\$5,125,686
4832	Inland Water Transportation	0.69		759	154	605	65	8	57	89	\$19,800,092
4529	Other General Merchandise Stores	0.70		979	325	654	85	13	72	137	\$3,036,966
3311	Iron and Steel Mills and Ferroalloy Manufacturing	0.71		1,034	235	799	323	62	261	927	\$16,828,410
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	0.71		2,557	945	1,612	128	31	97	383	\$4,499,995
3273	Cement and Concrete Product Manufacturing	0.71		2,179	389	1,790	307	40	267	467	\$64,735,258
7139	Other Amusement and Recreation Industries	0.71		3,310	781	2,529	294	45	249	436	\$14,309,908
5239	Other Financial Investment Activities	0.71		1,898	490	1,408	115	14	101	243	\$23,473,530
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0.72		2,550	573	1,977	235	36	199	401	\$7,147,529
1151	Support Activities for Crop Production	0.72		2,934	562	2,372	231	31	200	380	\$18,047,897
6111	Elementary and Secondary Schools	0.73		2,105	471	1,634	32	4	28	60	\$8,176,719
3111	Animal Food Manufacturing	0.73		392	74	318	90	10	80	416	\$14,402,696
3121	Beverage Manufacturing	0.74		1,607	278	1,329	173	22	151	442	\$7,073,537
4841	General Freight Trucking	0.74		6,958	1,834	5,124	259	43	216	376	\$13,141,818
4851	Urban Transit Systems	0.74		1,193	250	943	77	10	67	157	\$11,883,218
6243	Vocational Rehabilitation Services	0.75		4,956	1,729	3,227	197	70	127	223	\$27,680,398
5171	Wired Telecommunications Carriers	0.75		5,714	914	4,800	829	60	769	4,985	\$402,985,788
4481	Clothing Stores	0.76		1,899	713	1,186	227	53	174	554	\$8,773,643
5223	Activities Related to Credit Intermediation	0.76		1,154	319	835	47	6	41	67	\$45,992,489
3119	Other Food Manufacturing	0.78		2,021	460	1,561	546	90	456	11,295	\$659,678,106

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6115	Technical and Trade Schools	0.78		6,716	1,709	5,007	361	53	308	581	\$356,788,731
4232	Furniture and Home Furnishing Merchant Wholesalers	0.78		4,421	1,554	2,867	385	98	287	664	\$21,405,937
1152	Support Activities for Animal Production Specialty (except Psychiatric and Substance Abuse) Hospitals	0.78		576	132	444	66	11	55	99	\$7,678,377
6223	Couriers and Express Delivery Services	0.78		552	153	399	22	1	21	275	\$13,983,185
4921	Other Crop Farming	0.78		1,708	489	1,219	160	30	130	389	\$16,724,192
1119	Other Furniture Related Product Manufacturing	0.78		1,706	247	1,459	175	21	154	401	\$35,784,997
3379	Jewelry, Luggage, and Leather Goods Stores	0.79		959	316	643	140	36	104	274	\$8,284,164
4483	Beer, Wine, and Liquor Stores	0.79		486	166	320	18	4	14	29	\$207,249
4453	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	0.80		101	25	76	1	0	1	1	\$9,298
3253	Home Health Care Services	0.80		863	181	682	166	30	136	443	\$9,197,024
6216	Motor Vehicle Manufacturing	0.80		3,844	1,281	2,563	274	69	205	433	\$35,691,942
3361	Support Activities for Water Transportation	0.80		1,506	202	1,304	315	31	284	698	\$113,881,681
4883	Office Administrative Services	0.80		2,194	413	1,781	250	30	220	523	\$77,639,033
5611	Personal and Household Goods Repair and Maintenance	0.81		12,414	5,289	7,125	463	166	297	721	\$160,602,915
8114	Specialized Design Services	0.81		4,681	1,021	3,660	528	92	436	700	\$19,256,209
5414	Other Miscellaneous Store Retailers	0.82		20,532	6,939	13,593	471	149	322	622	\$36,199,821
4539	Grain and Oilseed Milling	0.82		5,428	1,627	3,801	436	110	326	802	\$24,283,141
3112	Cut and Sew Apparel Manufacturing	0.82		523	118	405	108	15	93	909	\$647,939,106
3152	Health and Personal Care Stores	0.82		2,799	964	1,835	395	95	300	999	\$196,446,805
4461	Death Care Services	0.82		4,281	1,131	3,150	360	62	298	990	\$24,667,002
8122	Other Transit and Ground Passenger Transportation	0.82		828	121	707	186	21	165	361	\$57,585,753
4859	Household Appliance Manufacturing	0.83		2,603	729	1,874	417	90	327	566	\$96,533,030
3352	Specialty Food Stores	0.83		1,156	275	881	298	59	239	569	\$15,441,781
4452	Automotive Parts, Accessories, and Tire Stores	0.83		766	246	520	56	10	46	182	\$1,685,422
4413	Individual and Family Services	0.84		3,706	470	3,236	329	34	295	524	\$5,942,404
6241	Social Advocacy Organizations	0.84		14,164	3,625	10,539	380	98	282	530	\$211,320,231
8133	Offices of Other Health Practitioners	0.84		5,615	1,107	4,508	152	21	131	215	\$6,698,601
6213	Dairy Product Manufacturing	0.84		7,846	2,607	5,239	781	228	553	1,527	\$181,156,083
3115	Electric Power Generation, Transmission and Distribution	0.84		505	90	415	136	14	122	652	\$612,510,302
2211	Special Food Services	0.85		6,276	936	5,340	284	27	257	440	\$24,036,281
7223		0.85		4,671	1,401	3,270	907	217	690	3,128	\$97,358,090

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4244	Grocery and Related Product Merchant Wholesalers	0.85		3,246	761	2,485	642	97	545	6,762	\$252,480,204
3261	Plastics Product Manufacturing Soap, Cleaning Compound, and Toilet Preparation Manufacturing	0.85		8,087	1,691	6,396	1,456	273	1,183	4,626	\$109,646,304
3256	Preparation Manufacturing	0.86		1,921	537	1,384	255	57	198	607	\$7,421,533
5322	Consumer Goods Rental	0.86		2,977	720	2,257	428	79	349	1,053	\$83,041,733
5621	Waste Collection Greenhouse, Nursery, and Floriculture Production	0.86		6,832	1,488	5,344	1,014	167	847	2,366	\$116,372,870
1114	Petroleum and Petroleum Products Merchant Wholesalers	0.87		1,231	270	961	64	13	51	90	\$2,498,964
4247	Merchant Wholesalers	0.87		2,967	456	2,511	590	79	511	2,210	\$132,596,533
3366	Ship and Boat Building Pharmaceutical and Medicine Manufacturing	0.87		3,816	563	3,253	1,845	227	1,618	6,363	\$5,854,636,066
3254	Manufacturing Paint, Coating, and Adhesive Manufacturing	0.87		3,040	399	2,641	993	90	903	7,632	\$5,952,127,832
3255	Manufacturing Sporting Goods, Hobby, and Musical Instrument Stores	0.87		5,514	424	5,090	560	96	464	3,774	\$56,063,355
4511	Instrument Stores Motor Vehicle Body and Trailer Manufacturing	0.87		2,769	640	2,129	200	36	164	332	\$5,281,743
3362	Manufacturing	0.87		2,942	458	2,484	886	124	762	2,430	\$114,162,650
2123	Nonmetallic Mineral Mining and Quarrying Textile and Fabric Finishing and Fabric Coating Mills	0.88		3,698	615	3,083	535	71	464	844	\$50,478,110
3133	Coating Mills	0.88		1,113	268	845	342	57	285	842	\$41,022,820
4911	Postal Service Forest Nurseries and Gathering of Forest Products	0.88		734	228	506	36	6	30	91	\$6,457,321
1132	Products	0.88		943	189	754	61	8	53	97	\$2,492,836
4412	Other Motor Vehicle Dealers Office Furniture (including Fixtures)	0.88		3,314	457	2,857	544	72	472	1,372	\$46,322,219
3372	Manufacturing Steel Product Manufacturing from Purchased Steel	0.89		5,398	1,452	3,946	1,293	303	990	3,867	\$210,445,625
3312	Purchased Steel	0.89		2,692	567	2,125	741	129	612	2,885	\$49,332,357
3351	Electric Lighting Equipment Manufacturing Communications Equipment Manufacturing	0.89		3,939	880	3,059	993	183	810	3,619	\$77,842,146
3342	Manufacturing	0.89		11,289	1,930	9,359	3,591	527	3,064	14,494	\$1,824,391,498
4482	Shoe Stores	0.89		1,108	171	937	33	5	28	61	\$502,878
3221	Pulp, Paper, and Paperboard Mills	0.90		969	286	683	132	33	99	382	\$15,408,547
4885	Freight Transportation Arrangement	0.90		2,944	755	2,189	92	15	77	159	\$8,184,794
5313	Activities Related to Real Estate	0.91		13,992	2,721	11,271	1,403	252	1,151	4,754	\$141,501,091
3219	Other Wood Product Manufacturing	0.91		5,086	1,167	3,919	583	120	463	1,009	\$65,560,629
3332	Industrial Machinery Manufacturing	0.91		4,305	711	3,594	853	113	740	1,850	\$148,934,473
3272	Glass and Glass Product Manufacturing	0.92		1,365	362	1,003	205	42	163	465	\$17,427,763

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3333	Commercial and Service Industry Machinery Manufacturing	0.92		7,681	1,371	6,310	2,389	366	2,023	8,080	\$721,485,074
3259	Other Chemical Product and Preparation Manufacturing	0.93		4,029	928	3,101	987	178	809	2,585	\$238,005,982
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	0.93		796	175	621	100	20	80	216	\$4,227,904
4236	Electrical and Electronic Goods Merchant Wholesalers	0.93		14,714	3,328	11,386	1,677	318	1,359	3,312	\$142,107,449
1133	Logging	0.93		2,263	374	1,889	76	11	65	106	\$9,851,695
4532	Office Supplies, Stationery, and Gift Stores	0.94		3,545	1,228	2,317	406	118	288	1,124	\$12,027,510
3359	Other Electrical Equipment and Component Manufacturing	0.94		10,474	1,934	8,540	3,653	604	3,049	19,024	\$704,980,502
5614	Business Support Services	0.94		16,926	7,513	9,413	1,386	578	808	4,082	\$645,510,756
5311	Lessors of Real Estate	0.95		25,350	2,337	23,013	712	55	657	1,146	\$68,802,948
3251	Basic Chemical Manufacturing	0.95		2,777	422	2,355	751	103	648	2,656	\$239,601,180
4812	Nonscheduled Air Transportation	0.95		2,195	408	1,787	335	51	284	2,432	\$1,853,218,214
4889	Other Support Activities for Transportation Nonferrous Metal (except Aluminum)	0.96		4,114	1,037	3,077	239	45	194	371	\$13,309,333
3314	Production and Processing Alumina and Aluminum Production and Processing	0.97		1,665	339	1,326	563	100	463	2,364	\$52,331,794
3313	Electrical Equipment Manufacturing	0.98		1,402	264	1,138	448	78	370	1,776	\$27,532,170
3353	Engine, Turbine, and Power Transmission Equipment Manufacturing	0.98		7,118	1,193	5,925	2,484	383	2,101	14,108	\$603,853,958
3336	Rubber Product Manufacturing	0.99		4,657	692	3,965	2,050	307	1,743	16,545	\$586,489,756
3262	Tobacco Manufacturing	0.99		3,830	609	3,221	992	174	818	4,111	\$134,781,906
3122	Florists	0.99		47	11	36	2	0	2	2	\$266,642
4531	Fabric Mills	0.99		215	93	122	5	2	3	5	\$7,600
3132	Aquaculture	1.00		1,348	359	989	259	53	206	635	\$43,617,813
1125	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	1.00		493	108	385	37	5	32	68	\$1,967,900
3327	Other Leather and Allied Product Manufacturing	1.02		12,662	2,371	10,291	2,443	445	1,998	18,544	\$280,336,163
3169	Performing Arts Companies	1.02		1,180	375	805	170	47	123	279	\$7,496,563
7111	Apparel Accessories and Other Apparel Manufacturing	1.03		2,229	775	1,454	214	88	126	326	\$4,160,651
3159	Spring and Wire Product Manufacturing	1.03		2,341	718	1,623	553	139	414	1,500	\$207,151,864
3326	Clay Product and Refractory Manufacturing	1.03		2,828	571	2,257	926	167	759	3,160	\$54,288,310
3271	Department Stores	1.05		673	182	491	93	24	69	161	\$2,550,163
4521		1.07		161	57	104	16	3	13	29	\$455,815

NAICS Code	NAICS4 Title	Odds Ratio	Statistically Significant	Total Number of Firms	Number of WOBs	Number of Non-WOBs	Number of Winners	Number of WOB Winners	Number of Non-WOB Winners	Number of Contracts	Dollars Awarded
3341	Computer and Peripheral Equipment Manufacturing	1.07		8,097	1,618	6,479	2,525	464	2,061	10,179	\$799,255,170
5613	Employment Services	1.07		11,905	4,919	6,986	604	236	368	1,228	\$180,038,613
3322	Cutlery and Handtool Manufacturing	1.08		2,616	488	2,128	728	149	579	2,133	\$78,900,457
4451	Grocery Stores	1.09		662	144	518	102	19	83	246	\$3,053,040
3343	Audio and Video Equipment Manufacturing	1.09		3,407	709	2,698	1,142	235	907	3,247	\$179,955,878
5312	Offices of Real Estate Agents and Brokers	1.09		4,030	1,591	2,439	55	15	40	86	\$1,076,979
3344	Semiconductor and Other Electronic Component Manufacturing	1.10		11,043	1,826	9,217	4,193	633	3,560	41,613	\$1,254,953,823
7121	Museums, Historical Sites, and Similar Institutions	1.11		3,052	798	2,254	163	54	109	198	\$13,362,004
4881	Support Activities for Air Transportation	1.11		4,757	881	3,876	884	139	745	2,356	\$915,232,580
7221	Full-Service Restaurants	1.11		1,097	199	898	0	0	0	0	\$0
3222	Converted Paper Product Manufacturing	1.12		3,407	988	2,419	591	146	445	1,599	\$29,179,951
2131	Support Activities for Mining	1.12		3,687	666	3,021	242	39	203	376	\$44,250,481
3364	Aerospace Product and Parts Manufacturing	1.12		10,301	1,744	8,557	3,799	633	3,166	49,447	\$16,182,595,091
3279	Other Nonmetallic Mineral Product Manufacturing	1.14		2,252	381	1,871	562	108	454	1,729	\$116,552,097
5251	Insurance and Employee Benefit Funds	1.15		360	130	230	14	3	11	22	\$539,446
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	1.16		179	45	134	15	1	14	40	\$7,037,211
3321	Forging and Stamping	1.18		3,113	629	2,484	777	149	628	2,866	\$48,566,189
4241	Paper and Paper Product Merchant Wholesalers	1.18		4,994	1,743	3,251	357	120	237	884	\$10,157,463
4855	Charter Bus Industry	1.18		1,026	240	786	151	32	119	438	\$7,620,462
3252	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing	1.22		1,581	279	1,302	427	77	350	861	\$16,948,608
4431	Electronics and Appliance Stores	1.24		5,546	1,309	4,237	312	72	240	451	\$10,794,059
6244	Child Day Care Services	1.27		3,339	1,162	2,177	65	39	26	199	\$6,528,244
4471	Gasoline Stations	1.27		687	113	574	71	11	60	124	\$2,424,745
3315	Foundries	1.36		1,013	167	846	225	39	186	452	\$16,827,451
2372	Land Subdivision	1.37		5,600	1,246	4,354	7	2	5	7	\$3,883,566
7224	Drinking Places (Alcoholic Beverages)	1.43		655	87	568	0	0	0	0	\$0
5222	Nondepository Credit Intermediation	1.45		1,365	283	1,082	27	3	24	35	\$759,120
2122	Metal Ore Mining	1.46		209	38	171	7	1	6	11	\$261,248
1121	Cattle Ranching and Farming	1.57		1,699	179	1,520	61	9	52	114	\$2,357,927
7222	Limited-Service Eating Places	1.60		884	240	644	0	0	0	0	\$0

NAICS Code	NAICS4 Title	Odds Ratio	Statistically Significant	Total Number of Firms	Number of WOBs	Number of Non-WOBs	Number of Winners	Number of WOB Winners	Number of Non-WOB Winners	Number of Contracts	Dollars Awarded
4861	Pipeline Transportation of Crude Oil	1.63		543	30	513	1	0	1	2	\$52,925
1113	Fruit and Tree Nut Farming	1.64		650	123	527	7	2	5	10	\$357,663
4862	Pipeline Transportation of Natural Gas	1.69		619	36	583	6	1	5	11	\$2,067,157
5511	Management of Companies and Enterprises	1.69		797	182	615	2	0	2	4	\$804,600
6239	Other Residential Care Facilities	1.77		1,957	421	1,536	62	12	50	119	\$104,869,647
4542	Vending Machine Operators	1.85		293	86	207	2	1	1	3	\$26,611
6233	Community Care Facilities for the Elderly	1.94		1,399	359	1,040	4	3	1	4	\$0
6232	Residential Mental Retardation, Mental Health and Substance Abuse Facilities	1.96		2,528	423	2,105	103	13	90	139	\$34,994,914
3131	Fiber, Yarn, and Thread Mills	1.97		244	68	176	44	14	30	127	\$811,876
4869	Other Pipeline Transportation	2.02		709	59	650	3	1	2	4	\$25,222
3161	Leather and Hide Tanning and Finishing	2.30		181	49	132	21	6	15	22	\$1,773,049
7132	Gambling Industries	3.22		125	38	87	3	2	1	3	\$60,613

## Appendix B

NAICS Code	1111	1112	1113	1114	1119	1121	1122	1123	1124	1125	1129	1131
Woman-owned	0.336 (0.467)	0.399 (0.702)	1.639 (1.452)	0.866 (0.305)	0.784 (0.215)	1.573 (0.624)	0.228 (0.317)	0.621 (0.455)	0.484 (0.423)	1.002 (0.527)	0.546* (0.176)	0.641 (0.426)
SDB not 8(a)	0.495 (0.419)	0.351 (0.516)	2.048 (1.941)	0.657 (0.240)	0.981 (0.246)	1.116 (0.434)	1.109 (0.784)	2.909 (2.081)	8.963 (13.05)	0.643 (0.362)	0.487* (0.188)	1.589 (0.703)
8(a) certified	0.206 (0.715)	0.578 (1.437)	81.16 (229.2)	2.156 (1.624)	1.890 (1.608)	4.516 (8.979)		1.486 (3.109)		2.898 (6.261)	1.233 (2.079)	9.655 (19.71)
Minority-owned	0.445 (0.639)	7.165 (8.603)	0.954 (1.747)	0.371* (0.196)	0.525* (0.188)	0.330 (0.231)	0.271 (0.420)	0.477 (0.466)	0.251 (0.421)	0.172 (0.249)	0.314* (0.213)	0.145 (0.205)
HubZone certified	4.600 (8.730)		1.620 (3.803)	0.591 (0.560)	0.485 (0.465)	0.305 (0.511)		0.144 (0.344)	5.198 (10.69)	7.021 (12.49)	0.307 (0.472)	1.040 (0.928)
Service-disabled veteran	0.318 (0.559)	0.345 (0.667)	0.281 (0.694)	1.222 (0.704)	0.679 (0.385)	0.945 (0.961)	0.758 (1.197)	0.392 (0.630)	0.00707 (0.0317)	1.370 (2.108)	0.449 (0.388)	0.932 (0.867)
Other veteran	0.790 (1.152)	13.77 (26.88)	0.602 (1.510)	0.138 (0.199)	0.974 (0.379)	0.616 (0.528)	2.062 (2.299)	6.771 (8.079)	0.637 (0.833)	0.785 (0.710)	0.392 (0.268)	1.679 (1.015)
log age	0.755 (0.199)	0.934 (0.652)	1.259 (0.705)	1.444* (0.282)	0.953 (0.104)	1.142 (0.189)	0.972 (0.260)	2.531*** (0.869)	2.698 (2.325)	1.291 (0.310)	1.337* (0.203)	0.964 (0.242)
log employees	1.477** (0.248)	0.565 (0.200)	0.950 (0.544)	0.933 (0.0748)	1.120* (0.0672)	1.336*** (0.111)	0.927 (0.212)	0.815 (0.150)	1.026 (0.260)	0.849 (0.174)	1.175* (0.107)	0.726 (0.179)
log sales revenue	1.603*** (0.214)	2.199*** (0.672)	1.561 (0.953)	0.960 (0.0439)	1.150*** (0.0485)	1.023 (0.0471)	1.225 (0.214)	1.231 (0.172)	2.168* (0.886)	1.273* (0.170)	1.020 (0.0472)	1.003 (0.0713)
Sole proprietor	1.287 (1.514)	0.453 (0.951)	1.916 (2.965)	0.499 (0.248)	1.123 (0.358)	0.648 (0.328)	0.913 (0.968)	0.211 (0.230)	29.66* (51.86)	0.470 (0.330)	1.122 (0.462)	1.621 (1.050)
Partnership	1.030 (1.232)	1.145 (1.835)	0.753 (1.096)	0.257** (0.169)	0.422** (0.147)	0.533 (0.274)	0.619 (0.625)	0.861 (0.769)	7.921 (13.44)	1.193 (0.801)	0.914 (0.433)	1.100 (0.830)
Corporation for profit	5.510 (5.795)	0.750 (1.137)	0.645 (0.876)	0.737 (0.309)	0.762 (0.222)	0.945 (0.407)	0.489 (0.469)	0.436 (0.321)	6.423 (8.244)	0.806 (0.420)	1.204 (0.482)	0.971 (0.638)
Corporation, nonprofit	5.898 (7.028)	1.519 (2.870)	0.383 (1.430)	0.276 (0.257)	0.999 (0.557)	1.701 (1.104)	0.474 (0.867)	0.352 (0.615)	9.182 (17.36)	1.160 (0.761)	1.285 (0.809)	6.528 (12.03)
Government non-classified (omitted: no security clearance repor Government confidential	0.147 (0.296)	1.506 (2.559)	10.96 (30.63)	0.599 (0.426)	0.390* (0.219)	0.705 (0.520)	4.391 (7.712)	3.279 (4.854)	0.312 (0.695)	0.651 (0.617)	0.297 (0.263)	0.911 (0.823)
Government secret	7.166 (13.63)	8.103 (18.56)	0.690 (2.955)	1.468 (2.348)	0.252 (0.381)	11.19 (18.05)	76.68* (196.3)	6.868 (21.20)	6.951 (18.36)	0.873 (1.542)	0.649 (0.835)	16.91* (28.80)
Government top-secret	69.12** (131.0)	0.267 (0.586)	4.079 (8.783)	0.271 (0.404)	0.375 (0.575)	4.326 (7.507)	2.935 (6.592)	0.256 (0.606)	31.77 (98.48)	1.049 (1.899)	0.125 (0.190)	1.819 (3.515)
Share of FY 2013-2014 in sample	355.0*** (723.3)	107.6 (384.6)	30.41 (107.8)	0.296 (0.445)	0.534 (0.852)	0.340 (0.690)	2.443 (4.581)	0.823 (1.653)	14,339* (74,682)	0.178 (0.352)	1.942 (1.864)	7.391 (13.68)
Lower past performance rating	19.03*** (15.85)	112.3 (325.4)	17.01* (28.42)	69.95*** (50.48)	24.43*** (8.148)	27.22*** (14.82)	37.69*** (43.29)	97.96*** (125.8)	12.34* (16.13)	11.49*** (7.733)	18.77*** (8.703)	17.34*** (15.29)
Higher past performance rating	53.12** (97.46)	112.6** (252.0)	1.747 (3.142)	1.001 (0.701)	1.856 (0.985)	1.253 (1.136)	1.013 (2.378)	3.903 (4.811)		0.528 (0.850)	1.026 (0.788)	1.135 (1.006)
Small (SBA definition)	1.213 (1.626)	9.783 (18.76)	1.935 (4.649)	2.655** (1.141)	6.097*** (2.063)	3.478** (1.898)	1.803 (4.265)	3.625 (3.892)	0.362 (0.633)	2.708 (2.636)	1.378 (0.641)	0.802 (0.732)
Constant	22.59*** (17.91)	43.57** (63.85)	45.96** (75.07)	1.996* (0.755)	2.719*** (0.728)	1.866* (0.682)	1.868 (1.623)	3.022* (1.821)	112.9* (277.3)	1.831 (0.966)	1.657 (0.601)	1.383 (2.265)
Observations	2.39e-07*** (5.67e-07)	4.17e-09*** (2.17e-08)	2.41e-07** (1.75e-06)	0.00208*** (0.00219)	0.00153*** (0.00110)	0.00121*** (0.00109)	0.00129** (0.00373)	1.90e-05*** (4.58e-05)	9.42e-11** (9.12e-10)	0.000598*** (0.00110)	0.00561*** (0.00435)	0.00356*** (0.00755)
standard errors in parentheses (***)	1,694	559	650	1,231	1,706	1,699	170	303	204	493	711	981

NAICS Code	1132	1133	1141	1142	1151	1152	1153	2111	2121	2122	2123	2131
Woman-owned	0.880 (0.351)	0.935 (0.320)	0.603 (0.354)	0.465 (0.313)	0.723 (0.153)	0.782 (0.297)	0.771*** (0.0516)	0.527 (0.309)	0.340 (0.486)	1.463 (1.350)	0.876 (0.129)	1.124 (0.225)
SDB not 8(a)	0.390** (0.167)	1.259 (0.367)	1.957 (0.916)	1.227 (0.569)	0.654** (0.131)	0.671 (0.268)	0.856** (0.0571)	1.550 (0.854)	2.154 (2.484)	0.844 (0.754)	0.945 (0.126)	0.495*** (0.112)
8(a) certified	1.902 (1.363)	2.105 (1.455)	2.065 (3.836)	0.787 (1.352)	1.240 (0.586)	0.249 (0.377)	0.469*** (0.0880)	16.76 (31.26)	2.936 (6.823)	4.076 (8.617)	0.881 (0.282)	0.264** (0.144)
Minority-owned	0.779 (0.387)	0.783 (0.308)	0.318 (0.276)	0.565 (0.394)	0.491*** (0.135)	0.615 (0.329)	0.888 (0.0777)	0.230** (0.163)	0.782 (1.030)	0.329 (0.465)	0.484*** (0.0843)	1.103 (0.275)
HubZone certified	0.667 (0.478)	0.279* (0.185)		1.076 (1.629)	0.232** (0.154)	1.175 (1.115)	1.405*** (0.152)	2.945 (3.745)	0.231 (0.535)	0.519 (1.001)	0.462*** (0.104)	0.442 (0.222)
Service-disabled veteran	1.625 (1.067)	0.509 (0.428)	1.806 (1.655)	0.922 (0.813)	0.457 (0.231)	1.021 (0.902)	0.840 (0.101)	0.148 (0.221)	2.143 (2.448)	1.096 (1.492)	0.811 (0.187)	0.803 (0.279)
Other veteran	0.400 (0.343)	1.331 (0.567)	0.979 (0.831)	0.547 (0.474)	0.628 (0.215)	0.675 (0.410)	0.712*** (0.0673)	0.458 (0.433)	0.393 (0.712)	1.862 (2.048)	0.480** (0.138)	0.726 (0.238)
log age	1.426* (0.276)	0.911 (0.142)	1.102 (0.259)	1.442 (0.386)	1.097 (0.103)	1.574** (0.287)	1.089** (0.0371)	1.397 (0.295)	1.066 (0.635)	0.789 (0.326)	1.208*** (0.0774)	1.508*** (0.146)
log employees	1.143 (0.134)	1.182* (0.109)	1.230 (0.180)	1.162 (0.193)	0.976 (0.0553)	0.765* (0.121)	0.929*** (0.0206)	1.025 (0.113)	0.945 (0.289)	0.989 (0.276)	0.925* (0.0404)	1.026 (0.0523)
log sales revenue	0.935 (0.0458)	1.070 (0.0549)	1.013 (0.0615)	1.000 (0.0801)	1.064* (0.0350)	1.063 (0.0685)	1.003 (0.00914)	1.013 (0.0489)	1.014 (0.123)	1.112 (0.153)	1.033 (0.0231)	1.031 (0.0356)
Sole proprietor	1.505 (0.663)	1.911* (0.710)	1.755 (1.031)	0.785 (0.453)	1.126 (0.270)	2.711** (1.310)	1.254*** (0.103)	0.543 (0.520)	0.395 (0.823)	0.529 (0.916)	0.751 (0.178)	1.006 (0.358)
Partnership	0.680 (0.368)	0.781 (0.368)	1.373 (0.970)	0.538 (0.383)	1.151 (0.284)	2.364 (1.318)	1.337*** (0.132)	0.732 (0.520)	3.720 (4.889)	1.908 (2.085)	0.883 (0.185)	0.535* (0.180)
Corporation for profit	1.158 (0.484)	0.954 (0.327)	1.126 (0.613)	0.404 (0.232)	0.863 (0.178)	1.260 (0.627)	1.047 (0.0834)	0.464 (0.237)	0.568 (0.608)	0.942 (0.884)	1.228 (0.180)	1.172 (0.253)
Corporation, nonprofit	6.738* (7.412)	1.351 (1.212)	3.739* (2.616)	3.093 (2.902)	0.616 (0.345)	0.737 (0.613)	0.334*** (0.0662)	3.377 (3.885)	1.957 (4.240)	8.436 (11.20)	1.374 (0.567)	3.828*** (1.913)
Government non-classified (omitted: no security clearance repor	0.553 (0.387)	1.368 (0.721)	0.353 (0.521)	1.077 (0.765)	0.409** (0.172)	0.912 (0.570)	0.458*** (0.0581)	0.500 (0.402)	0.375 (0.519)	0.477 (0.695)	1.077 (0.228)	1.496* (0.350)
Government confidential	2.542 (4.974)	2.751 (4.125)	0.769 (1.265)	3.630 (3.876)	1.132 (1.024)	3.022 (5.791)	0.716 (0.261)	1.145 (1.979)	5.055 (11.05)	4.611 (10.38)	1.480 (0.699)	1.176 (0.626)
Government secret	0.428 (0.642)	0.458 (0.700)	4.236 (9.189)	0.926 (1.525)	0.359 (0.520)	0.646 (1.037)	0.274*** (0.0999)	0.0798 (0.137)	2.867 (3.841)	0.946 (1.762)	1.187 (0.537)	1.148 (0.390)
Government top-secret	0.580 (0.873)	2.276 (3.419)	0.893 (1.401)	1.896 (3.201)	0.306 (0.448)	0.479 (0.798)	0.331*** (0.133)	0.596 (0.863)	2.371 (4.550)	3.449 (6.214)	0.522 (0.355)	0.542 (0.223)
Share of FY 2013-2014 in sample	60.45*** (50.67)	6.667*** (3.245)	2.151 (1.317)	6.614*** (4.844)	34.04*** (11.88)	10.13*** (5.547)	42.92*** (5.148)	7.992*** (5.429)	14.32 (33.31)	2.243 (2.748)	14.03*** (3.002)	36.75*** (15.37)
Lower past performance rating	0.671 (0.409)	2.194* (0.879)	0.512 (0.980)	0.271 (0.413)	1.132 (0.404)	3.398* (2.336)	1.162 (0.134)	9.232*** (4.104)	1.677 (2.686)	2.192 (3.857)	0.886 (0.186)	2.745*** (0.631)
Higher past performance rating	1.103 (0.448)	1.889* (0.676)	3.198* (2.201)	1.787 (1.009)	2.083*** (0.451)	2.438* (1.256)	1.186* (0.111)	3.246* (2.125)	6.299* (6.314)	2.757 (3.081)	1.275 (0.215)	1.657** (0.352)
Small (SBA definition)	7.250** (6.677)	0.556 (0.373)	1.778 (1.134)	1.427 (1.123)	2.484*** (0.786)	0.762 (0.466)	1.163*** (0.0632)	0.531 (0.293)	0.752 (1.421)	1.552 (2.381)	0.750 (0.179)	2.485*** (0.643)
Constant	0.000346*** (0.000482)	0.00470*** (0.00484)	0.0137*** (0.0150)	0.00801*** (0.0107)	0.00124*** (0.000795)	0.00431*** (0.00484)	0.0214*** (0.00342)	0.0286*** (0.0317)	0.00818 (0.0241)	0.0105* (0.0252)	0.0137*** (0.00576)	0.000294*** (0.000201)
Observations	943	2,263	418	492	2,934	576	8,103	414	150	209	3,698	3,686

standard errors in parentheses (\*\*\*) p

	NAICS Code	2211	2212	2213	2361	2362	2371	2372	2373	2379	2381	2382	2383
Woman-owned		0.846 (0.189)	0.660 (0.274)	0.705*** (0.0899)	0.571*** (0.0556)	0.883** (0.0479)	0.791*** (0.0637)	1.370 (1.110)	0.791*** (0.0682)	0.660*** (0.0632)	0.715*** (0.0517)	0.729*** (0.0300)	0.712*** (0.0470)
SDB not 8(a)		0.704* (0.149)	0.413** (0.186)	0.823* (0.0971)	0.927 (0.0726)	0.999 (0.0563)	1.108 (0.0884)	2.521 (2.052)	0.784*** (0.0695)	1.030 (0.101)	1.114 (0.0794)	0.936* (0.0367)	0.954 (0.0639)
8(a) certified		1.045 (0.440)	0.201 (0.300)	1.170 (0.287)	1.143 (0.200)	5.132*** (0.376)	4.746*** (0.542)	3.020 (5.703)	2.876*** (0.351)	4.364*** (0.573)	5.053*** (0.511)	3.212*** (0.214)	3.115*** (0.310)
Minority-owned		0.526** (0.134)	0.391* (0.196)	0.513*** (0.0788)	0.374*** (0.0351)	0.738*** (0.0426)	0.427*** (0.0401)	0.483 (0.478)	0.493*** (0.0492)	0.417*** (0.0459)	0.481*** (0.0387)	0.480*** (0.0228)	0.459*** (0.0347)
HubZone certified		0.673 (0.318)	0.789 (0.621)	0.443*** (0.120)	0.545*** (0.119)	1.274*** (0.0950)	1.212* (0.124)	1.150 (1.862)	1.658*** (0.149)	1.550*** (0.151)	1.041 (0.105)	0.865* (0.0700)	1.117 (0.118)
Service-disabled veteran		0.787 (0.228)	0.0554** (0.0799)	0.949 (0.158)	0.559*** (0.0694)	1.758*** (0.101)	0.921 (0.0917)	0.330 (0.711)	0.753** (0.0838)	0.605*** (0.0738)	0.932 (0.0819)	0.852*** (0.0462)	0.826** (0.0712)
Other veteran		0.866 (0.269)	0.145 (0.208)	0.931 (0.160)	0.908 (0.108)	0.734*** (0.0702)	0.869 (0.108)	0.813 (1.191)	0.788 (0.117)	0.799 (0.127)	0.649*** (0.0816)	0.900* (0.0488)	0.701*** (0.0784)
log age		1.661*** (0.137)	1.133 (0.120)	1.291*** (0.0709)	0.882*** (0.0353)	0.946** (0.0260)	1.180*** (0.0469)	1.681 (0.855)	1.155*** (0.0513)	1.227*** (0.0592)	1.035 (0.0385)	1.164*** (0.0230)	1.130*** (0.0400)
log employees		0.850*** (0.0395)	0.951 (0.0624)	0.933** (0.0284)	0.857*** (0.0262)	0.946*** (0.0155)	0.928*** (0.0228)	1.088 (0.321)	0.881*** (0.0244)	0.842*** (0.0220)	0.990 (0.0244)	1.022* (0.0120)	0.990 (0.0229)
log sales revenue		1.136*** (0.0436)	1.020 (0.0366)	1.030 (0.0190)	1.029** (0.0124)	1.043*** (0.00881)	1.020 (0.0135)	0.958 (0.111)	1.013 (0.0143)	0.999 (0.0146)	1.022* (0.0119)	1.026*** (0.00681)	1.036*** (0.0121)
Sole proprietor		2.393*** (0.800)	0.193 (0.282)	0.917 (0.164)	2.484*** (0.297)	1.156 (0.108)	1.299** (0.163)	9.751 (16.10)	1.833*** (0.228)	1.621*** (0.233)	1.611*** (0.176)	1.064 (0.0715)	1.474*** (0.146)
Partnership		1.925** (0.566)	1.316 (0.611)	0.865 (0.149)	1.657*** (0.214)	1.063 (0.0796)	0.769** (0.0935)	64.51*** (80.36)	1.098 (0.135)	1.137 (0.150)	1.127 (0.125)	1.011 (0.0618)	1.206* (0.125)
Corporation for profit		1.801** (0.419)	0.983 (0.307)	0.838 (0.0987)	1.753*** (0.193)	1.167*** (0.0653)	1.000 (0.0796)	36.16** (52.19)	1.031 (0.0896)	1.139 (0.107)	1.316*** (0.105)	1.116** (0.0482)	1.182** (0.0896)
Corporation, nonprofit		1.235 (0.418)	1.689 (0.848)	1.346 (0.278)	1.046 (0.304)	0.568** (0.159)	2.268*** (0.503)	13.62 (23.30)	0.483 (0.239)	1.507 (0.497)	0.713 (0.277)	1.227* (0.149)	1.333 (0.321)
Government non-classified (omitted: no security clearance repor		0.990 (0.224)	0.254 (0.221)	0.867 (0.147)	0.623*** (0.0912)	1.185*** (0.0703)	1.067 (0.0994)	1.098 (1.668)	0.852 (0.0966)	0.896 (0.102)	0.850* (0.0784)	1.158*** (0.0542)	1.083 (0.0894)
Government confidential		0.719 (0.373)	0.955 (1.027)	1.875** (0.576)	0.666 (0.292)	1.538*** (0.207)	0.674 (0.182)	6.032 (10.19)	0.988 (0.270)	0.951 (0.259)	1.282 (0.260)	1.186 (0.128)	2.130*** (0.371)
Government secret		1.405 (0.470)	0.107 (0.157)	0.781 (0.247)	0.812 (0.250)	0.765*** (0.0784)	0.793 (0.137)	6.741 (10.20)	0.712 (0.160)	0.649* (0.145)	0.892 (0.156)	0.992 (0.0782)	0.655** (0.122)
Government top-secret		0.614* (0.178)	0.695 (0.727)	0.642 (0.196)	0.477* (0.192)	0.746*** (0.0751)	0.668** (0.123)	5.651 (12.74)	0.616* (0.158)	0.252*** (0.0845)	0.817 (0.181)	0.734*** (0.0604)	1.108 (0.201)
Share of FY 2013-2014 in sample		10.51*** (3.482)	4.485*** (1.688)	10.10*** (1.753)	13.62*** (1.623)	37.70*** (4.646)	15.60*** (2.391)	0.151 (0.193)	31.21*** (6.108)	23.58*** (5.129)	14.00*** (1.717)	21.04*** (1.394)	18.66*** (2.155)
Lower past performance rating		3.131*** (0.572)	4.555*** (1.098)	1.554*** (0.240)	0.729 (0.143)	2.944*** (0.175)	1.910*** (0.175)	2.371 (3.620)	2.544*** (0.235)	3.515*** (0.330)	1.830*** (0.167)	1.768*** (0.100)	1.474*** (0.141)
Higher past performance rating		1.957*** (0.380)	2.034** (0.601)	1.185 (0.166)	0.872 (0.141)	3.537*** (0.188)	2.215*** (0.173)	0.664 (1.120)	3.085*** (0.246)	3.828*** (0.321)	2.367*** (0.188)	1.772*** (0.0910)	1.807*** (0.151)
Small (SBA definition)		2.470*** (0.402)	0.577* (0.175)	1.217 (0.162)	1.711*** (0.337)	1.767*** (0.163)	1.424*** (0.182)	0.961 (1.175)	2.061*** (0.313)	1.069 (0.0760)	2.438*** (0.295)	1.570*** (0.0872)	1.857*** (0.216)
Constant		0.000147*** (8.81e-05)	0.0453*** (0.0321)	0.00634*** (0.00206)	0.00485*** (0.00131)	0.00104*** (0.000194)	0.00221*** (0.000578)	6.34e-05*** (0.000168)	0.00122*** (0.000375)	0.00234*** (0.000659)	0.00162*** (0.000378)	0.00424*** (0.000531)	0.00181*** (0.000407)
Observations		6,276	1,259	8,641	26,691	38,890	26,251	5,600	19,463	18,733	31,589	46,213	28,787

standard errors in parentheses (\*\*\*) p

NAICS Code	2389	3111	3112	3113	3114	3115	3116	3117	3118	3119	3121	3122
Woman-owned	0.716*** (0.0386)	0.732 (0.294)	0.816 (0.308)	0.530 (0.523)	0.423*** (0.120)	0.844 (0.318)	0.601* (0.176)	0.636 (0.413)	0.551** (0.166)	0.781 (0.122)	0.736 (0.194)	0.991 (2.030)
SDB not 8(a)	0.942 (0.0506)	1.345 (0.498)	0.356** (0.162)	0.837 (0.740)	0.934 (0.253)	0.591 (0.231)	1.089 (0.285)	0.923 (0.560)	0.657 (0.208)	0.804 (0.132)	1.228 (0.289)	1.074 (1.567)
8(a) certified	3.946*** (0.329)	0.347 (0.648)	3.757 (4.857)		1.260 (1.279)	20.27 (39.37)	3.412 (3.355)	1.264 (2.834)	0.0939 (0.164)	0.783 (0.540)	2.118 (2.063)	
Minority-owned	0.510*** (0.0331)	0.425 (0.235)	0.331* (0.191)	0.600 (0.719)	0.282*** (0.0920)	1.162 (0.556)	0.341*** (0.118)	0.167* (0.155)	0.973 (0.297)	0.481*** (0.0880)	0.691 (0.201)	1.031 (2.000)
HubZone certified	0.926 (0.0776)		0.213 (0.316)	2.363 (5.482)	0.193 (0.283)	0.439 (0.461)	0.865 (0.851)	0.506 (1.085)	3.710 (3.016)	0.834 (0.427)	0.202 (0.313)	
Service-disabled veteran	0.753*** (0.0560)	0.183* (0.165)	0.436 (0.437)	0.207 (0.477)	0.233** (0.133)	0.385 (0.302)	0.299* (0.192)	0.0996 (0.158)	0.344 (0.249)	0.322*** (0.106)	0.427* (0.201)	1.045 (2.134)
Other veteran	0.780*** (0.0674)	1.163 (0.629)	0.457 (0.309)	4.238 (5.970)	0.242** (0.134)	0.563 (0.422)	0.450 (0.251)	2.066 (1.824)	0.693 (0.367)	0.471*** (0.137)	1.187 (0.380)	1.517 (4.224)
log age	1.144*** (0.0321)	1.009 (0.157)	0.914 (0.134)	0.483* (0.207)	1.075 (0.110)	1.458*** (0.207)	0.728*** (0.0743)	0.721 (0.199)	1.005 (0.111)	1.055 (0.0680)	1.261** (0.139)	1.046 (0.925)
log employees	0.985 (0.0171)	0.887 (0.0910)	0.930 (0.0895)	0.801 (0.293)	0.867** (0.0552)	0.919 (0.0676)	0.877* (0.0588)	0.755* (0.121)	1.097 (0.0724)	0.978 (0.0368)	0.936 (0.0651)	1.049 (0.409)
log sales revenue	1.013 (0.00896)	1.074 (0.0598)	1.143** (0.0635)	1.276 (0.267)	1.070** (0.0352)	1.015 (0.0349)	1.099** (0.0415)	1.090 (0.0865)	1.087** (0.0367)	1.043** (0.0207)	1.037 (0.0323)	0.986 (0.139)
Sole proprietor	1.366*** (0.108)	1.133 (0.599)	3.320* (2.228)	0.198 (0.331)	2.655** (1.192)	1.114 (0.725)	1.687 (0.749)	0.612 (0.705)	0.775 (0.402)	0.857 (0.244)	0.465* (0.212)	1.350 (3.771)
Partnership	1.187** (0.0944)	1.602 (0.758)	1.335 (0.647)	0.617 (0.729)	1.273 (0.450)	0.850 (0.353)	1.668 (0.606)	2.457 (2.185)	1.719 (0.704)	1.556* (0.360)	0.687 (0.233)	1.247 (3.736)
Corporation for profit	1.072 (0.0626)	0.700 (0.252)	1.659 (0.626)	0.224* (0.185)	1.227 (0.347)	0.873 (0.281)	1.078 (0.293)	1.750 (1.065)	1.037 (0.296)	1.130 (0.200)	0.626* (0.164)	0.842 (1.923)
Corporation, nonprofit	1.534** (0.287)	0.925 (0.683)	1.137 (0.846)	0.808 (1.000)	0.230** (0.171)	0.802 (0.595)	0.543 (0.422)	0.976 (1.112)	0.0742*** (0.0590)	0.811 (0.329)	0.177 (0.258)	16.59 (55.92)
Government non-classified (omitted: no security clearance repor	1.201*** (0.0800)	0.822 (0.444)	0.861 (0.505)	0.350 (0.618)	0.998 (0.424)	1.288 (0.674)	0.679 (0.306)	1.097 (1.065)	1.215 (0.590)	0.720 (0.206)	1.038 (0.374)	1.755 (3.115)
Government confidential	1.310* (0.209)	0.274 (0.456)	1.758 (1.545)	7.183 (14.73)	1.677 (1.686)	0.491 (0.626)	0.241 (0.388)	18.44 (40.52)	3.480 (3.462)	3.551* (2.330)	2.447 (1.713)	
Government secret	1.061 (0.134)	1.337 (1.531)	1.487 (1.997)	9.979 (21.74)	1.251 (1.297)	0.248 (0.413)	0.609 (1.014)	4.137 (8.054)	1.414 (1.489)	0.454 (0.357)	1.321 (1.053)	2.002 (5.695)
Government top-secret	0.903 (0.125)	0.329 (0.577)	2.536 (3.985)	7.590 (19.18)	0.157 (0.238)	0.0691 (0.121)	0.166 (0.253)	0.513 (1.055)	1.173 (1.808)	0.119 (0.177)	0.372 (0.363)	3.430 (5.122)
Share of FY 2013-2014 in sample	15.69*** (1.476)	14.54*** (7.928)	97.46*** (73.04)	58.21** (93.20)	132.9*** (66.75)	74.71*** (52.30)	14.33*** (5.358)	191.3*** (246.9)	39.21*** (15.81)	33.98*** (8.618)	7.586*** (2.650)	0.925 (1.991)
Lower past performance rating	1.895*** (0.134)	2.726 (1.806)	4.175** (2.857)	1.805 (2.296)	1.862 (1.084)	5.166*** (2.695)	1.411 (1.180)	0.161 (0.333)	5.003** (3.992)	1.795** (0.525)	3.006** (1.352)	0.677 (2.532)
Higher past performance rating	2.297*** (0.141)	1.602 (1.046)	2.706 (1.983)	642.5*** (1,535)	0.818 (0.359)	2.635* (1.424)	1.029 (0.787)	0.318 (0.569)	6.813*** (3.584)	2.366*** (0.627)	7.009*** (3.063)	0.195 (0.444)
Small (SBA definition)	1.989*** (0.170)	0.615 (0.309)	1.184 (0.569)	1.639 (2.007)	1.101 (0.374)	0.889 (0.324)	0.709 (0.248)	0.681 (0.539)	1.031 (0.345)	2.533*** (0.543)	3.143*** (1.196)	0.885 (1.861)
Constant	0.00260*** (0.000451)	0.0390*** (0.0368)	0.00109*** (0.00120)	0.00267** (0.00689)	0.00319*** (0.00235)	0.00452*** (0.00431)	0.0735*** (0.0530)	0.00615*** (0.0112)	0.00415*** (0.00319)	0.00614*** (0.00260)	0.00615*** (0.00415)	0.135 (0.582)
Observations	40,738	392	523	267	1,004	505	670	233	858	2,021	1,607	47

standard errors in parentheses (\*\*\*) p

	NAICS Code	3131	3132	3133	3141	3149	3151	3152	3159	3161	3162	3169	3211
Woman-owned		1.968 (1.043)	0.998 (0.199)	0.877 (0.188)	0.539*** (0.104)	0.786** (0.0821)	0.676 (0.272)	0.821 (0.122)	1.030 (0.142)	2.296 (1.844)	0.670 (0.199)	1.019 (0.218)	0.638* (0.168)
SDB not 8(a)		0.896 (0.591)	0.794 (0.187)	0.628* (0.153)	0.671* (0.150)	0.616*** (0.0734)	0.809 (0.390)	0.593*** (0.101)	0.497*** (0.0791)	0.190* (0.180)	0.297*** (0.103)	0.656* (0.160)	0.877 (0.210)
8(a) certified			0.234* (0.181)	0.202 (0.313)	1.124 (0.508)	0.501* (0.183)	2.801 (2.523)	1.776 (0.660)	0.456** (0.175)	0.142 (0.274)	0.419 (0.378)	0.545 (0.431)	0.512 (0.485)
Minority-owned		0.576 (0.458)	0.708 (0.189)	1.005 (0.276)	0.797 (0.197)	0.932 (0.127)	1.044 (0.544)	0.580*** (0.112)	1.100 (0.191)	1.155 (0.943)	0.710 (0.272)	1.207 (0.312)	0.386** (0.155)
HubZone certified		5.214 (10.14)	0.263** (0.156)	0.277* (0.182)	1.160 (0.567)	0.952 (0.219)	0.674 (0.646)	0.741 (0.214)	0.984 (0.278)	0.685 (1.111)	1.643 (1.248)	1.244 (0.577)	0.398 (0.235)
Service-disabled veteran		0.514 (0.495)	1.130 (0.353)	0.464** (0.178)	0.262*** (0.0971)	0.773 (0.137)	0.913 (0.544)	0.766 (0.192)	0.541** (0.132)	0.732 (1.130)	0.237** (0.148)	0.740 (0.281)	0.848 (0.356)
Other veteran		0.302 (0.289)	1.052 (0.316)	0.564* (0.174)	0.908 (0.267)	0.989 (0.143)	1.005 (0.560)	0.751 (0.180)	0.881 (0.172)	0.0622 (0.154)	0.533 (0.232)	1.056 (0.282)	0.787 (0.269)
log age		0.823 (0.232)	1.255** (0.127)	1.362*** (0.137)	0.979 (0.0996)	1.101* (0.0590)	1.086 (0.222)	1.075 (0.0815)	1.153** (0.0815)	0.688 (0.255)	0.856 (0.111)	1.024 (0.118)	1.434*** (0.169)
log employees		0.762 (0.157)	1.078 (0.0595)	0.971 (0.0569)	0.899 (0.0590)	1.068** (0.0358)	0.924 (0.126)	1.017 (0.0442)	0.920** (0.0382)	0.682 (0.239)	0.791*** (0.0678)	0.970 (0.0732)	0.757*** (0.0676)
log sales revenue		1.267 (0.194)	1.016 (0.0282)	1.013 (0.0270)	1.088** (0.0409)	1.047*** (0.0179)	1.211* (0.122)	1.027 (0.0239)	1.081*** (0.0256)	1.290 (0.306)	1.105* (0.0571)	1.101** (0.0496)	1.130** (0.0640)
Sole proprietor		0.248 (0.415)	0.904 (0.336)	0.709 (0.308)	1.688 (0.563)	1.358* (0.253)	4.066** (2.792)	1.387 (0.362)	0.932 (0.229)	0.364 (0.666)	1.026 (0.526)	0.967 (0.390)	1.252 (0.465)
Partnership		0.384 (0.409)	0.380** (0.149)	0.515 (0.224)	0.477* (0.182)	0.726* (0.141)	1.789 (1.233)	1.052 (0.280)	1.001 (0.227)	0.777 (0.956)	1.420 (0.699)	1.016 (0.351)	1.367 (0.488)
Corporation for profit		0.365 (0.283)	0.550** (0.130)	1.178 (0.293)	1.242 (0.308)	1.023 (0.131)	1.671 (0.875)	1.175 (0.226)	0.959 (0.162)	0.818 (0.803)	1.412 (0.531)	0.769 (0.205)	1.127 (0.303)
Corporation, nonprofit		0.0769 (0.132)	0.225** (0.155)	0.0784*** (0.0521)	0.358* (0.191)	0.343*** (0.111)	0.589 (0.596)	0.0670*** (0.0412)	0.0487*** (0.0295)	0.738 (1.287)	0.480 (0.310)	0.110*** (0.0862)	0.370 (0.270)
Government non-classified (omitted: no security clearance repor Government confidential		0.318 (0.285)	1.207 (0.314)	0.843 (0.239)	1.098 (0.316)	1.277* (0.169)	0.823 (0.496)	0.749 (0.168)	1.081 (0.200)	0.206 (0.254)	1.204 (0.496)	0.634 (0.196)	0.959 (0.373)
Government secret		153.3* (394.7)	0.731 (0.709)	0.375 (0.321)	0.871 (0.591)	1.996** (0.681)	2.483 (3.903)	0.0829* (0.121)	1.759 (0.941)	16.58 (59.80)	0.0631 (0.108)	0.853 (0.625)	1.692 (1.366)
Government top-secret		0.722 (0.757)	1.856 (0.858)	0.837 (0.398)	1.380 (0.770)	0.871 (0.225)	2.365 (2.005)	1.305 (0.513)	1.405 (0.394)	0.146 (0.344)	1.860 (2.772)	0.777 (0.402)	0.533 (0.500)
Share of FY 2013-2014 in sample		0.667 (0.724)	1.025 (0.836)	0.528 (0.361)	1.452 (0.943)	0.990 (0.398)	2.557 (3.149)	0.701 (0.363)	0.542 (0.264)	0.589 (0.841)	0.940 (1.035)	0.787 (0.518)	1.262 (1.214)
Lower past performance rating		652.7*** (1,335)	32.49*** (13.59)	147.2*** (71.95)	19.38*** (7.030)	62.07*** (14.97)	85.08*** (104.3)	34.39*** (11.00)	57.70*** (18.93)	255.7*** (508.5)	58.00*** (39.82)	43.26*** (24.27)	32.68*** (13.76)
Higher past performance rating		5.321** (3.705)	2.555*** (0.710)	2.088** (0.667)	1.838** (0.529)	2.041*** (0.338)	1.144 (0.674)	3.110*** (0.693)	2.413*** (0.490)	1.706 (1.788)	2.853** (1.237)	2.928*** (0.911)	2.048* (0.805)
Small (SBA definition)		3.029* (1.881)	3.098*** (0.852)	2.450*** (0.713)	3.071*** (0.941)	1.842*** (0.297)	1.543 (0.742)	3.948*** (0.806)	2.606*** (0.515)	6.490* (7.074)	15.53*** (6.057)	1.685 (0.612)	0.642 (0.313)
Constant		0.778 (0.658)	1.345 (0.488)	0.400*** (0.136)	0.550 (0.205)	0.925 (0.205)	0.902 (0.623)	0.859 (0.220)	0.596** (0.143)	0.101* (0.127)	2.077* (0.887)	0.522 (0.218)	0.321*** (0.138)
Observations	244	1,348	1,113	1,261	4,176	691	2,799	2,341	181	1,096	1,180	1,294	

standard errors in parentheses (\*\*\*) p

NAICS Code	3212	3219	3221	3222	3231	3241	3251	3252	3253	3254	3255	3256
Woman-owned	0.934 (0.303)	0.906 (0.108)	0.896 (0.222)	1.117 (0.140)	0.529*** (0.0604)	0.646*** (0.0962)	0.949 (0.139)	1.224 (0.213)	0.798 (0.203)	0.869 (0.125)	0.870 (0.137)	0.857 (0.156)
SDB not 8(a)	0.573 (0.206)	0.682*** (0.0885)	0.881 (0.241)	0.666*** (0.0944)	0.675*** (0.0857)	0.871 (0.122)	0.855 (0.129)	0.568*** (0.111)	0.988 (0.246)	0.880 (0.121)	0.613*** (0.105)	0.822 (0.164)
8(a) certified	0.666 (0.818)	0.785 (0.274)	0.648 (0.424)	0.618 (0.262)	0.490* (0.198)	0.382*** (0.141)	0.419 (0.272)	0.575 (0.386)	0.727 (0.699)	1.149 (0.568)	0.173*** (0.103)	0.940 (0.645)
Minority-owned	0.468 (0.222)	0.384*** (0.0727)	0.982 (0.279)	0.725* (0.121)	0.622*** (0.0955)	0.612*** (0.104)	0.615*** (0.113)	0.806 (0.201)	0.481** (0.154)	0.813 (0.117)	0.841 (0.170)	0.704 (0.168)
HubZone certified	0.173** (0.154)	1.324 (0.317)	0.321* (0.221)	0.818 (0.248)	1.266 (0.429)	0.560* (0.170)	0.722 (0.303)	0.616 (0.310)	0.899 (0.592)	0.451 (0.295)	0.610 (0.257)	0.977 (0.496)
Service-disabled veteran	0.481 (0.266)	0.862 (0.169)	0.502* (0.193)	0.881 (0.190)	0.549** (0.129)	0.425*** (0.115)	0.671 (0.168)	0.452** (0.162)	0.927 (0.320)	1.175 (0.295)	0.214*** (0.0685)	0.500** (0.173)
Other veteran	0.695 (0.309)	0.858 (0.145)	0.752 (0.279)	1.121 (0.195)	0.819 (0.143)	0.972 (0.189)	0.958 (0.191)	1.237 (0.282)	0.845 (0.341)	0.934 (0.200)	0.978 (0.211)	1.004 (0.251)
log age	1.375** (0.219)	1.151** (0.0697)	1.418** (0.201)	1.080 (0.0730)	0.999 (0.0576)	1.217*** (0.0741)	1.543*** (0.0959)	1.211** (0.0920)	1.272** (0.143)	1.043 (0.0588)	0.985 (0.0760)	1.197* (0.118)
log employees	0.635*** (0.0824)	0.884*** (0.0393)	0.902 (0.0727)	0.984 (0.0407)	0.945 (0.0343)	0.838*** (0.0310)	0.999 (0.0368)	0.875*** (0.0437)	0.888 (0.0673)	1.083*** (0.0308)	0.892** (0.0425)	0.956 (0.0574)
log sales revenue	1.332*** (0.130)	1.127*** (0.0312)	1.082* (0.0506)	1.063*** (0.0237)	1.064*** (0.0239)	1.079*** (0.0196)	1.048*** (0.0189)	1.084*** (0.0301)	1.046 (0.0388)	1.038*** (0.0141)	1.031 (0.0241)	1.080** (0.0394)
Sole proprietor	3.825** (2.127)	1.418* (0.289)	0.903 (0.417)	0.952 (0.241)	0.992 (0.196)	0.841 (0.224)	1.580 (0.468)	0.915 (0.329)	0.888 (0.369)	0.773 (0.236)	0.878 (0.274)	0.682 (0.276)
Partnership	1.031 (0.567)	1.070 (0.203)	0.747 (0.363)	0.649* (0.149)	1.382* (0.253)	0.885 (0.174)	0.674* (0.147)	0.694 (0.199)	0.849 (0.363)	1.089 (0.215)	0.586* (0.166)	1.247 (0.366)
Corporation for profit	1.397 (0.493)	1.099 (0.149)	0.803 (0.248)	0.984 (0.153)	0.980 (0.135)	1.140 (0.169)	0.846 (0.133)	1.030 (0.201)	1.125 (0.313)	0.916 (0.145)	0.832 (0.154)	0.851 (0.196)
Corporation, nonprofit	0.924 (0.994)	0.454** (0.173)	0.127** (0.107)	0.309*** (0.117)	1.258 (0.283)	1.104 (0.411)	1.772* (0.569)	0.662 (0.332)	1.209 (0.994)	1.172 (0.326)	2.148* (0.925)	0.201** (0.132)
Government non-classified (omitted: no security clearance repor	0.732 (0.311)	1.058 (0.177)	0.616 (0.257)	1.058 (0.188)	1.272 (0.208)	0.959 (0.189)	1.421* (0.267)	1.231 (0.269)	0.542 (0.209)	0.738 (0.156)	1.167 (0.251)	1.140 (0.322)
Government confidential	1.521 (1.292)	0.519 (0.265)	0.554 (0.559)	1.725 (0.708)	0.702 (0.263)	0.712 (0.478)	1.760 (0.745)	0.792 (0.355)	0.267 (0.412)	1.013 (0.484)	1.642 (0.825)	1.447 (0.971)
Government secret	0.124 (0.191)	0.841 (0.296)	2.046 (1.350)	1.484 (0.590)	1.175 (0.376)	0.515 (0.264)	0.997 (0.307)	0.471** (0.170)	1.550 (1.095)	0.639 (0.262)	1.583 (0.590)	2.436* (1.306)
Government top-secret	0.558 (0.877)	0.612 (0.293)	1.078 (0.832)	0.618 (0.309)	0.486** (0.159)	0.365** (0.169)	0.394*** (0.134)	0.913 (0.471)	1.229 (1.174)	0.651 (0.309)	1.022 (0.619)	1.096 (0.875)
Share of FY 2013-2014 in sample	64.75*** (42.33)	21.02*** (4.365)	51.37*** (30.20)	41.49*** (11.68)	30.73*** (6.211)	29.39*** (6.869)	25.48*** (5.725)	38.19*** (12.48)	16.12*** (6.410)	14.70*** (2.803)	73.09*** (23.16)	83.06*** (41.25)
Lower past performance rating	1.960 (0.873)	1.545** (0.279)	2.630** (0.998)	3.180*** (0.618)	3.800*** (0.749)	3.402*** (0.503)	2.235*** (0.442)	3.104*** (0.821)	0.942 (0.375)	2.916*** (0.456)	8.056*** (1.846)	3.163*** (0.883)
Higher past performance rating	2.086 (0.934)	1.776*** (0.343)	2.149** (0.807)	3.496*** (0.694)	2.246*** (0.399)	2.499*** (0.470)	3.067*** (0.633)	2.983*** (0.880)	1.636 (0.631)	2.022*** (0.349)	7.453*** (2.119)	2.987*** (1.020)
Small (SBA definition)	0.683 (0.410)	1.017 (0.249)	0.458 (0.230)	0.994 (0.239)	0.408*** (0.0688)	0.669** (0.122)	1.406* (0.281)	0.841 (0.227)	0.860 (0.350)	0.818 (0.127)	7.273*** (2.024)	0.944 (0.328)
Constant	0.000136*** (0.000202)	0.00222*** (0.00104)	0.00269*** (0.00266)	0.00335*** (0.00157)	0.00966*** (0.00364)	0.0115*** (0.00430)	0.00308*** (0.00122)	0.00538*** (0.00314)	0.0140*** (0.00986)	0.0234*** (0.00722)	0.00139*** (0.000724)	0.00105*** (0.000796)
Observations	796	5,086	969	3,407	7,637	2,636	2,777	1,581	863	3,040	5,514	1,921

standard errors in parentheses (\*\*\*) p

NAICS Code	3259	3261	3262	3271	3272	3273	3274	3279	3311	3312	3313	3314
Woman-owned	0.933 (0.100)	0.854* (0.0718)	0.987 (0.117)	1.046 (0.312)	0.917 (0.200)	0.710* (0.140)	0.511 (0.552)	1.140 (0.176)	0.709* (0.146)	0.889 (0.115)	0.978 (0.174)	0.974 (0.155)
SDB not 8(a)	0.700*** (0.0846)	0.685*** (0.0641)	0.573*** (0.0783)	1.409 (0.476)	1.176 (0.274)	1.087 (0.185)	0.541 (0.697)	0.689** (0.121)	0.486*** (0.108)	0.535*** (0.0774)	0.410*** (0.0856)	0.609*** (0.108)
8(a) certified	0.613 (0.216)	0.355*** (0.116)	0.391** (0.182)	0.526 (0.864)	0.596 (0.563)	1.222 (0.462)	0.491 (1.040)	1.233 (0.682)	0.111** (0.102)	0.200*** (0.0958)	0.466 (0.284)	0.303 (0.224)
Minority-owned	0.808 (0.110)	0.793** (0.0923)	0.699** (0.108)	0.809 (0.319)	0.640 (0.191)	0.582** (0.134)	0.414 (0.555)	0.677* (0.148)	1.074 (0.289)	1.107 (0.186)	1.258 (0.276)	1.011 (0.192)
HubZone certified	0.815 (0.271)	0.766 (0.175)	0.466** (0.168)	0.579 (0.579)	0.593 (0.440)	0.701 (0.225)	1.164 (1.894)	0.297*** (0.122)	1.966 (0.870)	0.652 (0.192)	0.921 (0.421)	0.443** (0.178)
Service-disabled veteran	0.706** (0.123)	0.449*** (0.0743)	0.445*** (0.100)	0.202** (0.144)	0.448* (0.216)	0.591* (0.171)	0.389 (0.524)	0.207*** (0.0556)	0.217*** (0.101)	0.474*** (0.115)	0.564 (0.210)	0.575* (0.174)
Other veteran	0.894 (0.136)	1.103 (0.122)	0.937 (0.150)	0.756 (0.375)	0.630 (0.210)	0.907 (0.258)	6.388* (6.194)	1.255 (0.258)	0.574** (0.162)	0.867 (0.152)	1.008 (0.232)	0.680* (0.158)
log age	1.146*** (0.0602)	1.106** (0.0459)	0.881** (0.0486)	1.011 (0.157)	1.424*** (0.152)	1.493*** (0.129)	1.587 (0.864)	1.016 (0.0739)	1.516*** (0.152)	1.048 (0.0639)	0.993 (0.0848)	1.308*** (0.105)
log employees	0.997 (0.0305)	0.909*** (0.0233)	0.960 (0.0321)	0.966 (0.0897)	1.217*** (0.0770)	0.878** (0.0519)	0.809 (0.291)	0.975 (0.0469)	0.961 (0.0550)	0.986 (0.0361)	0.994 (0.0469)	1.013 (0.0411)
log sales revenue	1.041** (0.0166)	1.061** (0.0159)	1.008 (0.0170)	1.090 (0.0616)	0.962 (0.0303)	1.060* (0.0357)	1.031 (0.145)	1.021 (0.0267)	1.010 (0.0292)	1.029 (0.0201)	1.036 (0.0233)	1.027 (0.0216)
Sole proprietor	0.695 (0.171)	0.868 (0.145)	1.126 (0.250)	0.645 (0.380)	1.364 (0.541)	1.352 (0.442)	0.535 (1.004)	1.684* (0.461)	1.379 (0.500)	1.077 (0.243)	0.966 (0.303)	0.954 (0.311)
Partnership	0.855 (0.150)	0.960 (0.133)	0.834 (0.166)	0.536 (0.307)	2.065** (0.736)	1.329 (0.370)	0.138 (0.309)	0.803 (0.231)	1.774* (0.616)	1.316 (0.281)	1.268 (0.368)	0.623 (0.184)
Corporation for profit	0.866 (0.108)	0.961 (0.0932)	1.131 (0.141)	0.759 (0.272)	1.302 (0.354)	1.148 (0.220)	0.898 (0.903)	1.322 (0.227)	1.250 (0.299)	0.915 (0.137)	0.899 (0.181)	0.940 (0.179)
Corporation, nonprofit	0.939 (0.236)	0.959 (0.206)	1.095 (0.342)	4.303 (3.863)	0.847 (0.539)	1.152 (0.596)	0.256 (0.747)	2.051* (0.848)	0.388* (0.197)	1.717* (0.494)	0.600 (0.243)	0.591 (0.209)
Government non-classified (omitted: no security clearance repor	1.067 (0.150)	1.060 (0.118)	1.103 (0.167)	0.809 (0.359)	1.202 (0.348)	0.755 (0.222)	11.29** (11.37)	1.193 (0.244)	1.288 (0.349)	1.059 (0.172)	1.374 (0.285)	1.202 (0.226)
Government confidential	1.807* (0.562)	1.622** (0.377)	1.653* (0.462)	5.189** (4.029)	2.032 (1.105)	0.733 (0.520)		2.208* (0.949)	1.391 (0.884)	2.441*** (0.805)	2.654** (1.066)	1.586 (0.622)
Government secret	0.687* (0.148)	1.294 (0.251)	2.521*** (0.716)	1.374 (0.878)	0.814 (0.327)	0.350 (0.240)	6.124 (13.15)	4.178** (1.483)	0.821 (0.459)	0.968 (0.318)	1.364 (0.553)	0.839 (0.292)
Government top-secret	0.792 (0.215)	0.862 (0.289)	1.369 (0.614)	2.872 (2.552)	0.377 (0.262)	2.197 (1.272)	2.409 (4.072)	1.608 (0.845)	2.464 (1.756)	0.984 (0.409)	1.695 (0.802)	1.529 (0.654)
Share of FY 2013-2014 in sample	29.45*** (6.667)	36.51*** (6.312)	50.85*** (12.70)	54.51*** (36.34)	24.21*** (9.805)	10.97*** (2.864)	2.843 (4.099)	34.51*** (10.63)	136.7*** (64.90)	68.20*** (19.43)	106.6*** (48.81)	149.1*** (60.16)
Lower past performance rating	2.458*** (0.372)	3.222*** (0.405)	5.988*** (1.109)	0.637 (0.381)	3.762*** (1.318)	0.781 (0.239)	3.036 (3.976)	8.717*** (2.029)	2.253* (0.979)	2.649*** (0.528)	2.014*** (0.518)	2.114*** (0.526)
Higher past performance rating	2.660*** (0.419)	2.757*** (0.382)	4.762*** (0.929)	1.705 (0.898)	2.986*** (1.085)	2.282*** (0.504)	4.929 (5.853)	3.979*** (0.952)	1.494 (0.481)	2.264*** (0.498)	3.316*** (0.957)	1.557* (0.400)
Small (SBA definition)	0.555*** (0.0934)	2.256*** (0.325)	3.037*** (0.537)	0.903 (0.473)	1.299 (0.488)	0.716 (0.205)	0.273 (0.473)	6.224*** (1.554)	1.153 (0.379)	0.996 (0.199)	1.299 (0.336)	1.092 (0.261)
Constant	0.0131*** (0.00447)	0.00237*** (0.000718)	0.00681*** (0.00268)	0.00282*** (0.00321)	0.00278*** (0.00206)	0.00675*** (0.00395)	0.0465 (0.116)	0.00188*** (0.000989)	0.00179*** (0.00131)	0.00672*** (0.00296)	0.00393*** (0.00242)	0.00205*** (0.00115)
Observations	4,029	8,087	3,830	673	1,365	2,179	190	2,252	1,034	2,692	1,402	1,665

standard errors in parentheses (\*\*\*) p

NAICS Code	3315	3321	3322	3323	3324	3325	3326	3327	3328	3329	3331	3332
Woman-owned	1.365 (0.325)	1.179 (0.147)	1.079 (0.149)	0.769*** (0.0542)	0.807** (0.0820)	0.785*** (0.0681)	1.032 (0.127)	1.018 (0.0682)	0.685** (0.129)	0.837*** (0.0443)	0.783** (0.0876)	0.908 (0.111)
SDB not 8(a)	0.436*** (0.115)	0.571*** (0.0842)	0.373*** (0.0617)	0.712*** (0.0533)	0.735*** (0.0820)	0.673*** (0.0661)	0.528*** (0.0719)	0.586*** (0.0457)	0.651** (0.137)	0.618*** (0.0360)	0.673*** (0.0753)	0.715*** (0.0883)
8(a) certified	0.0661* (0.102)	0.0718*** (0.0501)	0.243** (0.136)	0.634** (0.114)	0.318*** (0.117)	0.399** (0.144)	0.222*** (0.0842)	0.184*** (0.0613)	0.507 (0.310)	0.270*** (0.0523)	0.349*** (0.132)	0.674 (0.302)
Minority-owned	0.677 (0.225)	1.430** (0.238)	1.277 (0.231)	0.602*** (0.0580)	0.785* (0.111)	1.019 (0.113)	0.855 (0.136)	1.050 (0.0950)	0.936 (0.241)	1.008 (0.0701)	0.688** (0.102)	0.790 (0.128)
HubZone certified	0.383 (0.239)	0.573* (0.192)	0.800 (0.295)	0.835 (0.123)	0.826 (0.183)	0.705 (0.157)	0.464** (0.143)	0.533*** (0.105)	0.460 (0.303)	0.643*** (0.0883)	0.534** (0.145)	1.082 (0.373)
Service-disabled veteran	0.811 (0.433)	0.702 (0.189)	0.474*** (0.122)	0.561*** (0.0714)	0.504*** (0.0917)	0.558*** (0.0860)	0.814 (0.175)	0.659*** (0.0908)	0.468* (0.201)	0.690*** (0.0625)	0.487*** (0.0975)	0.761 (0.176)
Other veteran	0.665 (0.217)	1.105 (0.184)	0.754 (0.135)	0.980 (0.0872)	0.810 (0.105)	0.941 (0.106)	0.857 (0.139)	0.978 (0.0861)	0.856 (0.192)	0.918 (0.0607)	0.766* (0.110)	1.016 (0.155)
log age	1.182* (0.119)	0.889* (0.0539)	1.020 (0.0626)	1.027 (0.0343)	1.008 (0.0478)	1.052 (0.0439)	1.037 (0.0612)	0.929** (0.0306)	1.061 (0.0935)	0.993 (0.0235)	1.113** (0.0498)	1.003 (0.0528)
log employees	1.011 (0.0620)	0.957 (0.0363)	0.944 (0.0393)	0.925*** (0.0202)	0.878*** (0.0275)	1.091*** (0.0272)	0.981 (0.0364)	1.003 (0.0209)	1.053 (0.0589)	1.000 (0.0146)	0.981 (0.0277)	0.991 (0.0311)
log sales revenue	1.004 (0.0328)	1.042** (0.0210)	0.995 (0.0200)	1.042*** (0.0128)	1.058*** (0.0188)	1.016 (0.0125)	1.015 (0.0195)	1.002 (0.0101)	0.992 (0.0326)	1.014* (0.00764)	1.039*** (0.0148)	1.037** (0.0181)
Sole proprietor	1.849 (0.742)	1.446 (0.329)	1.037 (0.241)	1.281** (0.161)	1.402* (0.263)	2.079*** (0.318)	1.871*** (0.396)	1.525*** (0.179)	0.796 (0.270)	1.605*** (0.146)	0.994 (0.186)	0.889 (0.211)
Omitted: other forms of organization	0.785 (0.336)	0.624* (0.151)	0.646* (0.155)	1.043 (0.120)	1.188 (0.195)	0.902 (0.138)	1.004 (0.214)	1.021 (0.127)	0.779 (0.236)	0.812** (0.0694)	1.025 (0.157)	1.218 (0.231)
Partnership	0.837 (0.230)	1.056 (0.160)	0.989 (0.155)	1.135 (0.0891)	1.201 (0.140)	1.097 (0.113)	1.233 (0.174)	1.307*** (0.105)	0.920 (0.184)	1.117* (0.0644)	1.295** (0.142)	1.211 (0.166)
Corporation for profit	0.593 (0.327)	0.439** (0.153)	0.984 (0.330)	1.102 (0.184)	0.541** (0.150)	1.051 (0.238)	0.445** (0.156)	1.015 (0.165)	1.086 (0.427)	1.104 (0.133)	0.598** (0.152)	0.559** (0.154)
Corporation, nonprofit	1.235 (0.323)	0.935 (0.137)	1.143 (0.197)	0.985 (0.0834)	0.992 (0.115)	0.838* (0.0848)	1.026 (0.151)	1.085 (0.0835)	1.119 (0.221)	1.131** (0.0688)	0.808 (0.113)	0.719** (0.107)
(omitted: no security clearance repor Government confidential	0.556 (0.316)	1.215 (0.374)	3.384*** (1.330)	1.184 (0.215)	1.329 (0.339)	1.134 (0.241)	1.501 (0.440)	1.793*** (0.263)	2.510*** (0.852)	1.476*** (0.189)	1.592 (0.498)	0.878 (0.290)
Government secret	1.153 (0.666)	1.291 (0.358)	1.740 (0.618)	1.147 (0.161)	0.741 (0.167)	0.832 (0.151)	1.398 (0.398)	1.569** (0.208)	0.772 (0.330)	1.192* (0.123)	1.898*** (0.420)	0.862 (0.229)
Government top-secret	1.540 (1.162)	0.944 (0.367)	2.637* (1.330)	0.803 (0.141)	0.556* (0.168)	0.343*** (0.0727)	0.131*** (0.0407)	0.986 (0.186)	0.277 (0.237)	0.523*** (0.0698)	1.643 (0.506)	1.247 (0.435)
Share of FY 2013-2014 in sample	88.37*** (43.98)	439.4*** (182.4)	126.1*** (43.45)	29.41*** (3.791)	45.92*** (9.732)	109.6*** (20.92)	110.8*** (32.34)	98.22*** (16.13)	31.56*** (11.27)	51.49*** (5.375)	17.80*** (2.679)	22.07*** (4.392)
Lower past performance rating	4.317*** (1.642)	2.967*** (0.571)	4.840*** (0.949)	2.024*** (0.197)	2.647*** (0.369)	2.517*** (0.377)	3.294*** (0.659)	5.283*** (0.578)	2.415*** (0.666)	3.628*** (0.294)	2.416*** (0.371)	3.469*** (0.623)
Higher past performance rating	2.625*** (0.970)	2.567*** (0.500)	3.677*** (0.742)	2.300*** (0.225)	1.976*** (0.285)	2.151*** (0.325)	2.081*** (0.385)	3.469*** (0.389)	1.963** (0.561)	2.628*** (0.218)	1.821*** (0.293)	3.168*** (0.543)
Small (SBA definition)	1.440 (0.543)	0.439*** (0.0922)	2.578*** (0.588)	0.732** (0.0887)	0.311*** (0.0522)	0.941 (0.144)	0.542*** (0.119)	1.317** (0.152)	1.296 (0.400)	1.661*** (0.131)	0.814 (0.121)	0.580*** (0.0939)
Constant	0.00308*** (0.00244)	0.00259*** (0.00138)	0.00331*** (0.00157)	0.0102*** (0.00240)	0.0215*** (0.00745)	0.00823*** (0.00239)	0.00982*** (0.00434)	0.00328*** (0.000794)	0.00431*** (0.00265)	0.00749*** (0.00124)	0.0207*** (0.00596)	0.0169*** (0.00588)
Observations	1,013	3,113	2,616	12,958	4,576	4,961	2,828	12,662	3,176	16,500	4,566	4,305

standard errors in parentheses (\*\*\*) p

NAICS Code	3333	3334	3335	3336	3339	3341	3342	3343	3344	3345	3346	3351
Woman-owned	0.920 (0.0701)	0.824** (0.0779)	0.750*** (0.0792)	0.986 (0.0995)	0.808*** (0.0453)	1.066 (0.0759)	0.892* (0.0574)	1.093 (0.114)	1.101 (0.0704)	0.847*** (0.0423)	0.722** (0.102)	0.892 (0.0956)
SDB not 8(a)	0.686*** (0.0564)	0.619*** (0.0608)	0.609*** (0.0746)	0.643*** (0.0715)	0.728*** (0.0429)	0.671*** (0.0523)	0.624*** (0.0431)	0.806* (0.0904)	0.632*** (0.0437)	0.734*** (0.0379)	0.765* (0.108)	0.685*** (0.0779)
8(a) certified	0.483*** (0.124)	0.510*** (0.127)	0.215*** (0.117)	0.138*** (0.0671)	0.382*** (0.0739)	0.736** (0.110)	0.748** (0.106)	1.075 (0.225)	0.417*** (0.0823)	0.379*** (0.0622)	0.822 (0.254)	0.599 (0.204)
Minority-owned	0.975 (0.0907)	0.698*** (0.0798)	0.887 (0.131)	0.862 (0.110)	0.764*** (0.0564)	0.824** (0.0650)	0.783*** (0.0581)	0.623*** (0.0748)	0.839** (0.0617)	0.706*** (0.0426)	0.484*** (0.0732)	0.769** (0.0970)
HubZone certified	0.926 (0.211)	0.536** (0.143)	0.683 (0.225)	0.713 (0.204)	0.636*** (0.103)	1.404* (0.256)	0.806 (0.135)	1.140 (0.305)	0.551*** (0.105)	0.589*** (0.0961)	1.007 (0.338)	0.670 (0.195)
Service-disabled veteran	0.673*** (0.0874)	0.506*** (0.0783)	0.644** (0.143)	0.418*** (0.0769)	0.488*** (0.0492)	0.550*** (0.0609)	0.522*** (0.0515)	0.652*** (0.0985)	0.687*** (0.0783)	0.519*** (0.0460)	0.865 (0.185)	0.581*** (0.0949)
Other veteran	0.949 (0.0920)	0.992 (0.123)	0.803 (0.111)	0.994 (0.125)	0.815*** (0.0565)	0.719*** (0.0762)	0.930 (0.0752)	0.772* (0.111)	0.913 (0.0750)	0.877** (0.0541)	1.061 (0.209)	0.997 (0.147)
log age	1.125*** (0.0393)	1.065 (0.0451)	0.974 (0.0452)	1.016 (0.0416)	1.015 (0.0241)	1.013 (0.0388)	1.366*** (0.0429)	1.153** (0.0665)	1.280*** (0.0374)	1.137*** (0.0235)	0.874* (0.0636)	1.077 (0.0554)
log employees	1.003 (0.0198)	0.963 (0.0245)	0.902*** (0.0290)	0.952** (0.0228)	0.982 (0.0141)	0.948*** (0.0184)	0.957*** (0.0155)	0.982 (0.0308)	1.005 (0.0157)	0.973** (0.0111)	1.004 (0.0353)	1.055* (0.0330)
log sales revenue	1.026** (0.0109)	1.023* (0.0125)	1.073*** (0.0206)	1.008 (0.0121)	0.994 (0.00723)	1.077*** (0.0122)	1.029*** (0.00931)	1.073*** (0.0190)	1.011 (0.00795)	1.024*** (0.00629)	1.077*** (0.0219)	1.038** (0.0172)
Sole proprietor	1.172 (0.161)	1.166 (0.198)	1.164 (0.217)	1.149 (0.196)	1.246** (0.124)	0.642*** (0.100)	1.290** (0.152)	1.223 (0.241)	1.267** (0.151)	0.909 (0.0803)	0.861 (0.225)	1.346 (0.254)
Partnership	1.055 (0.130)	0.830 (0.124)	1.158 (0.203)	0.685** (0.111)	1.019 (0.0890)	0.918 (0.111)	1.023 (0.102)	1.133 (0.190)	0.970 (0.105)	0.919 (0.0686)	0.922 (0.200)	0.919 (0.162)
Corporation for profit	1.081 (0.0933)	0.938 (0.0986)	1.301** (0.151)	0.896 (0.0964)	1.150** (0.0677)	0.953 (0.0816)	1.026 (0.0735)	1.063 (0.130)	0.908 (0.0662)	1.037 (0.0551)	1.101 (0.180)	1.165 (0.147)
Corporation, nonprofit	0.662** (0.133)	1.369 (0.289)	0.952 (0.225)	1.303 (0.299)	1.100 (0.139)	0.637** (0.135)	0.851 (0.149)	0.995 (0.308)	1.261 (0.194)	1.200 (0.136)	0.871 (0.342)	0.891 (0.273)
Government non-classified (omitted: no security clearance repor	0.873 (0.0784)	1.077 (0.123)	0.850 (0.107)	1.108 (0.119)	0.983 (0.0666)	0.870* (0.0694)	0.970 (0.0653)	0.899 (0.108)	0.971 (0.0645)	0.718*** (0.0392)	0.709** (0.111)	0.753** (0.105)
Government confidential	1.377 (0.283)	1.237 (0.265)	0.804 (0.208)	1.112 (0.208)	1.496*** (0.210)	0.822 (0.161)	0.995 (0.155)	0.886 (0.248)	1.292* (0.194)	0.699*** (0.0879)	0.666 (0.225)	0.957 (0.284)
Government secret	0.719*** (0.0867)	1.316 (0.246)	1.160 (0.276)	1.665*** (0.322)	1.219* (0.138)	0.709*** (0.0738)	0.996 (0.0752)	0.774 (0.124)	1.100 (0.0912)	0.675*** (0.0454)	0.697 (0.155)	0.767 (0.189)
Government top-secret	0.218*** (0.0322)	1.162 (0.277)	1.424 (0.434)	1.414 (0.424)	0.978 (0.157)	0.500*** (0.0458)	0.555*** (0.0425)	0.639*** (0.102)	0.524*** (0.0543)	0.222*** (0.0166)	0.628*** (0.110)	0.786 (0.248)
Share of FY 2013-2014 in sample	31.17*** (4.466)	53.45*** (9.049)	43.88*** (9.064)	69.81*** (13.15)	42.20*** (4.155)	42.08*** (6.697)	42.87*** (5.958)	28.56*** (6.352)	50.06*** (6.455)	33.51*** (2.804)	60.20*** (17.26)	49.19*** (10.97)
Lower past performance rating	2.530*** (0.263)	2.677*** (0.351)	4.997*** (0.792)	4.061*** (0.584)	3.355*** (0.270)	2.737*** (0.258)	2.638*** (0.207)	2.002*** (0.284)	3.746*** (0.348)	3.149*** (0.211)	3.044*** (0.534)	2.431*** (0.412)
Higher past performance rating	2.207*** (0.227)	2.199*** (0.301)	4.518*** (0.796)	3.004*** (0.473)	2.665*** (0.226)	1.901*** (0.171)	2.131*** (0.159)	2.217*** (0.320)	2.841*** (0.252)	2.058*** (0.125)	1.871*** (0.316)	1.907*** (0.318)
Small (SBA definition)	0.780** (0.0895)	2.184*** (0.291)	1.567*** (0.254)	1.714*** (0.232)	1.504*** (0.117)	0.573*** (0.0616)	0.875 (0.0822)	0.531*** (0.0990)	1.189* (0.107)	1.085 (0.0718)	0.547*** (0.0958)	1.082 (0.204)
Constant	0.0144*** (0.00334)	0.00651*** (0.00179)	0.00239*** (0.000884)	0.0139*** (0.00396)	0.0166*** (0.00269)	0.0135*** (0.00320)	0.00665*** (0.00137)	0.0137*** (0.00496)	0.00740*** (0.00142)	0.0185*** (0.00247)	0.0136*** (0.00556)	0.00531*** (0.00190)
Observations	7,681	5,796	6,659	4,657	15,127	8,097	11,289	3,407	11,043	19,674	2,523	3,939

standard errors in parentheses (\*\*\*) p

NAICS Code	3352	3353	3359	3361	3362	3363	3364	3365	3366	3369	3371	3372
Woman-owned	0.833 (0.163)	0.984 (0.0797)	0.940 (0.0593)	0.802 (0.185)	0.874 (0.111)	0.799** (0.0759)	1.124* (0.0729)	0.539 (0.397)	0.869 (0.0974)	0.761** (0.0886)	0.790** (0.0881)	0.888 (0.0769)
SDB not 8(a)	0.632** (0.131)	0.656*** (0.0578)	0.680*** (0.0472)	1.060 (0.230)	0.798* (0.106)	0.657*** (0.0672)	0.637*** (0.0473)	0.827 (0.561)	0.675*** (0.0750)	0.675*** (0.0872)	0.628*** (0.0818)	0.854 (0.0843)
8(a) certified	0.441 (0.253)	0.227*** (0.0564)	0.443*** (0.0739)	1.012 (0.649)	0.640 (0.293)	0.252*** (0.0957)	0.354*** (0.0794)	7.406 (15.09)	0.452*** (0.130)	0.707 (0.280)	0.685 (0.194)	0.950 (0.186)
Minority-owned	0.882 (0.202)	0.784** (0.0780)	0.896 (0.0675)	0.634* (0.174)	0.652** (0.111)	0.802* (0.0952)	1.108 (0.0886)	0.423 (0.426)	0.797* (0.105)	0.551*** (0.0878)	0.753* (0.111)	0.589*** (0.0699)
HubZone certified	1.029 (0.459)	0.577** (0.128)	0.717* (0.124)	1.209 (0.557)	0.787 (0.225)	0.559** (0.146)	0.795 (0.140)	0.941 (1.071)	1.054 (0.297)	0.866 (0.223)	0.707 (0.200)	1.484** (0.273)
Service-disabled veteran	0.779 (0.212)	0.541*** (0.0725)	0.485*** (0.0518)	0.383** (0.162)	0.616** (0.132)	0.497*** (0.0831)	0.615*** (0.0698)	0.769 (0.768)	0.596*** (0.104)	0.580*** (0.109)	0.746* (0.130)	0.656*** (0.0904)
Other veteran	0.790 (0.217)	0.963 (0.0986)	0.897 (0.0756)	1.224 (0.292)	1.082 (0.165)	0.825* (0.0946)	1.016 (0.0815)	0.425 (0.387)	0.912 (0.118)	0.734** (0.110)	0.953 (0.153)	0.759** (0.102)
log age	1.199* (0.119)	1.079** (0.0380)	1.088*** (0.0313)	1.171* (0.0975)	1.073 (0.0579)	0.965 (0.0378)	1.429*** (0.0417)	1.520 (0.440)	1.481*** (0.0715)	1.126** (0.0570)	1.025 (0.0613)	1.106** (0.0551)
log employees	0.926 (0.0540)	1.014 (0.0206)	0.992 (0.0163)	0.849*** (0.0466)	0.876*** (0.0304)	0.918*** (0.0224)	0.916*** (0.0149)	1.071 (0.154)	0.932*** (0.0245)	0.820*** (0.0264)	1.047 (0.0351)	0.964 (0.0296)
log sales revenue	1.066** (0.0345)	1.006 (0.0112)	1.028*** (0.00885)	1.113*** (0.0404)	1.052*** (0.0198)	1.004 (0.0126)	1.018** (0.00898)	0.961 (0.0582)	1.040** (0.0164)	1.069*** (0.0199)	1.036* (0.0190)	1.083*** (0.0194)
Sole proprietor	1.360 (0.489)	1.700*** (0.261)	1.375*** (0.166)	0.647 (0.245)	2.176*** (0.462)	1.258 (0.195)	1.205 (0.142)	4.246 (4.109)	0.832 (0.155)	1.128 (0.229)	1.121 (0.240)	1.112 (0.192)
Partnership	1.338 (0.436)	0.967 (0.133)	1.071 (0.112)	0.780 (0.222)	1.273 (0.233)	0.843 (0.124)	0.910 (0.0984)	0.158 (0.237)	1.304* (0.207)	1.077 (0.183)	1.305 (0.240)	1.138 (0.162)
Corporation for profit	1.125 (0.278)	1.111 (0.0937)	1.141* (0.0800)	0.741 (0.145)	1.508*** (0.199)	1.036 (0.104)	1.043 (0.0782)	0.998 (0.638)	1.299** (0.139)	0.995 (0.122)	1.280* (0.168)	1.063 (0.109)
Corporation, nonprofit	0.197** (0.138)	1.116 (0.213)	1.262 (0.202)	0.555 (0.283)	0.583 (0.192)	0.846 (0.178)	0.812 (0.128)	5.533* (5.597)	0.891 (0.250)	0.710 (0.209)	0.501** (0.165)	0.544** (0.154)
Government non-classified (omitted: no security clearance repor	0.890 (0.208)	1.176* (0.105)	1.032 (0.0719)	0.645* (0.155)	0.723** (0.119)	0.892 (0.0946)	0.806*** (0.0547)	0.924 (0.756)	0.746** (0.0910)	0.582*** (0.0770)	0.904 (0.141)	1.094 (0.131)
Government confidential	0.910 (0.560)	1.257 (0.226)	0.976 (0.150)	0.584 (0.333)	1.057 (0.361)	0.984 (0.186)	1.034 (0.151)	2.546 (2.823)	0.929 (0.190)	1.382 (0.343)	1.339 (0.563)	0.943 (0.261)
Government secret	1.330 (0.735)	1.359** (0.167)	1.133 (0.105)	0.482** (0.147)	0.554** (0.147)	1.039 (0.185)	0.516*** (0.0430)	0.325 (0.858)	0.407*** (0.0626)	0.536*** (0.0915)	1.245 (0.407)	0.753 (0.183)
Government top-secret	0.614 (0.452)	0.769* (0.114)	0.531*** (0.0571)	0.151*** (0.0729)	0.128*** (0.0658)	0.662 (0.170)	0.233*** (0.0233)	1.417 (3.803)	0.0965*** (0.0206)	0.245*** (0.0618)	0.858 (0.303)	0.642* (0.161)
Share of FY 2013-2014 in sample	45.38*** (19.03)	64.54*** (12.24)	40.92*** (5.717)	24.69*** (9.304)	23.06*** (4.684)	78.68*** (14.30)	62.92*** (9.044)	72.69*** (88.87)	27.94*** (4.949)	23.11*** (5.210)	37.53*** (8.552)	46.48*** (9.219)
Lower past performance rating	2.058*** (0.553)	3.747*** (0.398)	3.391*** (0.299)	2.504*** (0.479)	1.914*** (0.297)	4.980*** (0.677)	3.074*** (0.269)	6.511** (5.379)	2.195*** (0.313)	3.243*** (0.436)	1.977*** (0.323)	1.737*** (0.226)
Higher past performance rating	2.933*** (0.899)	2.693*** (0.291)	2.428*** (0.206)	2.213*** (0.530)	1.619** (0.318)	4.258*** (0.640)	2.004*** (0.163)	7.066* (7.062)	1.686*** (0.221)	2.459*** (0.364)	1.805*** (0.299)	2.525*** (0.342)
Small (SBA definition)	0.299*** (0.107)	2.110*** (0.228)	1.708*** (0.157)	0.438*** (0.117)	0.631** (0.130)	1.353** (0.177)	0.700*** (0.0668)	12.52*** (9.922)	0.402*** (0.0548)	0.795 (0.145)	0.384*** (0.0759)	0.680** (0.112)
Constant	0.0129*** (0.00866)	0.00418*** (0.00111)	0.00617*** (0.00125)	0.0101*** (0.00657)	0.0224*** (0.00847)	0.0128*** (0.00351)	0.00816*** (0.00167)	0.000115*** (0.000212)	0.0288*** (0.00865)	0.0125*** (0.00458)	0.0130*** (0.00493)	0.00481*** (0.00167)
Observations	1,156	7,118	10,474	1,506	2,942	5,705	10,301	687	3,816	4,508	4,172	5,398

standard errors in parentheses (\*\*\*) p

	NAICS Code	3379	3391	3399	4231	4232	4233	4234	4235	4236	4237	4238	4239
Woman-owned		0.786 (0.187)	0.590*** (0.0330)	0.810*** (0.0429)	0.745** (0.0992)	0.782* (0.108)	0.772** (0.0983)	0.717*** (0.0321)	0.722 (0.151)	0.934 (0.0693)	0.657*** (0.0642)	0.675*** (0.0458)	0.620*** (0.0677)
SDB not 8(a)		1.290 (0.336)	1.002 (0.0529)	0.803*** (0.0476)	0.832 (0.110)	0.721* (0.124)	0.601*** (0.0834)	0.765*** (0.0359)	0.725 (0.155)	0.764*** (0.0628)	0.752*** (0.0754)	0.780*** (0.0533)	0.679*** (0.0789)
8(a) certified		2.735* (1.568)	0.764 (0.178)	0.466*** (0.0875)	0.550 (0.276)	1.183 (0.346)	0.897 (0.274)	0.627*** (0.0729)	0.807 (0.479)	0.784 (0.146)	0.413*** (0.136)	0.369*** (0.0997)	0.378*** (0.136)
Minority-owned		0.456** (0.154)	0.582*** (0.0382)	0.718*** (0.0517)	0.687** (0.111)	0.661** (0.124)	0.552*** (0.0955)	0.607*** (0.0320)	0.533** (0.149)	0.701*** (0.0655)	0.519*** (0.0675)	0.575*** (0.0525)	0.704** (0.0989)
HubZone certified		1.838 (0.880)	0.404*** (0.0889)	0.639*** (0.103)	0.938 (0.314)	1.510 (0.401)	0.594* (0.167)	0.835 (0.103)	0.507 (0.298)	0.679* (0.139)	0.538** (0.152)	0.547*** (0.112)	0.790 (0.228)
Service-disabled veteran		0.548 (0.217)	0.483*** (0.0446)	0.604*** (0.0583)	0.401*** (0.0986)	0.574** (0.136)	0.407*** (0.100)	0.500*** (0.0356)	0.283*** (0.133)	0.460*** (0.0606)	0.401*** (0.0695)	0.507*** (0.0647)	0.519*** (0.0934)
Other veteran		1.138 (0.415)	0.784*** (0.0561)	0.841** (0.0632)	1.004 (0.166)	0.609** (0.153)	0.583*** (0.118)	0.765*** (0.0492)	0.529** (0.166)	0.945 (0.101)	0.836 (0.105)	0.871* (0.0721)	0.720** (0.110)
log age		0.901 (0.114)	0.833*** (0.0195)	0.948** (0.0244)	1.049 (0.0615)	1.306*** (0.109)	1.156** (0.0729)	0.868*** (0.0187)	1.148 (0.108)	1.027 (0.0384)	1.167*** (0.0522)	1.111*** (0.0319)	1.060 (0.0551)
log employees		1.096 (0.0874)	0.931*** (0.0130)	1.019 (0.0163)	0.892*** (0.0330)	1.034 (0.0468)	0.984 (0.0391)	1.042*** (0.0129)	1.091 (0.0656)	1.043* (0.0228)	0.972 (0.0271)	1.051*** (0.0186)	0.882*** (0.0293)
log sales revenue		1.040 (0.0450)	1.047*** (0.00720)	1.038*** (0.00888)	1.036* (0.0192)	1.086*** (0.0328)	1.029 (0.0221)	1.042*** (0.00700)	0.988 (0.0260)	1.030** (0.0124)	1.016 (0.0145)	0.997 (0.00901)	1.059*** (0.0206)
Sole proprietor		0.845 (0.394)	1.484*** (0.136)	1.253** (0.120)	1.046 (0.224)	0.763 (0.230)	0.913 (0.217)	0.957 (0.0812)	1.247 (0.483)	1.262 (0.185)	0.938 (0.165)	1.331** (0.153)	0.828 (0.165)
Partnership		1.531 (0.584)	0.956 (0.0799)	1.198** (0.106)	0.793 (0.158)	1.196 (0.276)	0.920 (0.190)	0.944 (0.0680)	1.478 (0.459)	1.175 (0.148)	0.974 (0.141)	1.094 (0.109)	1.159 (0.193)
Corporation for profit		1.018 (0.297)	0.957 (0.0608)	1.298*** (0.0814)	0.994 (0.139)	0.838 (0.140)	0.957 (0.137)	1.122** (0.0592)	1.190 (0.269)	1.265*** (0.108)	0.929 (0.0915)	1.097 (0.0752)	1.109 (0.141)
Corporation, nonprofit		0.0557* (0.0842)	1.411*** (0.177)	0.624*** (0.0913)	0.995 (0.331)	0.345** (0.149)	0.408** (0.168)	1.341*** (0.145)	2.233** (0.787)	1.351* (0.238)	1.266 (0.233)	1.499*** (0.205)	0.959 (0.294)
Government non-classified (omitted: no security clearance repor		0.581 (0.210)	0.584*** (0.0518)	1.086 (0.0783)	0.933 (0.173)	1.270 (0.252)	0.739 (0.153)	0.933 (0.0554)	0.996 (0.269)	1.044 (0.0987)	1.006 (0.136)	1.014 (0.0944)	0.819 (0.132)
Government confidential		0.232 (0.359)	0.713 (0.170)	1.686*** (0.277)	1.176 (0.376)	0.493 (0.292)	2.486** (1.076)	0.728** (0.107)	0.415 (0.379)	0.773 (0.163)	1.264 (0.339)	1.181 (0.259)	1.716* (0.558)
Government secret		1.063 (0.965)	0.517*** (0.0966)	1.026 (0.121)	2.832*** (0.819)	1.511 (0.576)	1.358 (0.581)	0.720*** (0.0722)	1.445 (0.887)	1.242 (0.191)	1.770** (0.431)	1.125 (0.202)	1.101 (0.272)
Government top-secret		2.839 (3.143)	0.370*** (0.0807)	0.749* (0.116)	0.844 (0.464)	1.123 (0.426)	1.146 (0.569)	0.743*** (0.0644)	0.311 (0.459)	1.059 (0.157)	2.013*** (0.470)	0.701 (0.168)	1.004 (0.365)
Share of FY 2013-2014 in sample		7.093*** (2.663)	16.46*** (1.333)	29.67*** (2.999)	27.00*** (6.304)	43.50*** (15.40)	18.45*** (3.967)	32.75*** (2.936)	24.18*** (9.733)	23.95*** (3.873)	23.32*** (4.159)	23.80*** (2.840)	18.99*** (3.686)
Lower past performance rating		2.987*** (1.063)	4.008*** (0.399)	3.962*** (0.353)	2.553*** (0.415)	2.085*** (0.433)	1.217 (0.277)	3.900*** (0.257)	2.760*** (0.846)	3.934*** (0.397)	5.040*** (0.693)	3.917*** (0.376)	4.315*** (0.651)
Higher past performance rating		1.987* (0.795)	2.872*** (0.336)	2.600*** (0.232)	3.543*** (0.663)	2.291*** (0.461)	2.076*** (0.391)	2.850*** (0.196)	4.609*** (1.314)	3.866*** (0.415)	4.230*** (0.638)	3.197*** (0.329)	3.556*** (0.586)
Small (SBA definition)		0.526 (0.238)	0.862* (0.0654)	1.369*** (0.123)	0.896 (0.172)	0.145*** (0.0344)	0.556*** (0.123)	0.968 (0.0648)	2.138** (0.693)	1.386*** (0.150)	2.812*** (0.393)	1.837*** (0.177)	1.101 (0.219)
Constant		0.0475*** (0.0408)	0.128*** (0.0180)	0.00893*** (0.00158)	0.00767*** (0.00298)	0.00416*** (0.00231)	0.0109*** (0.00441)	0.0119*** (0.00166)	0.00220*** (0.00139)	0.00279*** (0.000705)	0.00233*** (0.000701)	0.00395*** (0.000791)	0.00463*** (0.00167)
Observations	959		12,543	15,272	5,309	4,421	6,287	25,993	2,550	14,714	10,836	20,131	9,074

standard errors in parentheses (\*\*\*) p

NAICS Code	4241	4242	4243	4244	4245	4246	4247	4248	4249	4251	4411	4412
Woman-owned	1.180 (0.156)	0.496** (0.139)	0.710 (0.167)	0.851 (0.119)	0.484* (0.209)	0.638*** (0.104)	0.868 (0.131)	0.658 (1.069)	0.636*** (0.0934)	0.498*** (0.135)	0.410** (0.177)	0.882 (0.130)
SDB not 8(a)	0.684** (0.108)	0.607* (0.163)	0.764 (0.206)	0.607*** (0.0882)	0.823 (0.333)	0.557*** (0.105)	0.891 (0.129)	1.334 (1.466)	0.797 (0.127)	1.109 (0.274)	1.498 (0.374)	0.968 (0.134)
8(a) certified	0.732 (0.278)	0.0853 (0.148)	0.0918 (0.135)	0.179** (0.124)	255.5 (918.1)	0.482 (0.289)	0.298** (0.176)	2.064 (11.91)	0.681 (0.322)	0.348 (0.509)	9.637** (10.17)	1.010 (0.746)
Minority-owned	1.002 (0.165)	0.632 (0.178)	0.574* (0.186)	0.636*** (0.0999)	0.351** (0.184)	0.584** (0.131)	0.644** (0.115)	0.537 (0.611)	0.399*** (0.0860)	0.322*** (0.114)	0.508* (0.207)	0.626** (0.133)
HubZone certified	0.427** (0.170)	1.009 (0.777)	1.185 (0.584)	0.646 (0.275)	0.784 (0.746)	0.782 (0.364)	0.639 (0.253)	8.367 (39.87)	0.319** (0.163)	0.933 (0.796)	0.640 (0.945)	1.767 (0.788)
Service-disabled veteran	0.351*** (0.101)	0.364** (0.144)	0.420* (0.205)	0.282*** (0.0946)	0.0752* (0.111)	0.492** (0.144)	0.668 (0.179)	1.162 (1.918)	0.390*** (0.110)	0.213** (0.140)	0.295 (0.254)	0.293*** (0.120)
Other veteran	0.759 (0.169)	0.395* (0.205)	1.095 (0.363)	0.666* (0.155)	0.867 (0.531)	0.653* (0.151)	0.517*** (0.117)	3.887 (4.782)	0.734 (0.160)	0.940 (0.300)	0.654 (0.296)	0.709* (0.146)
log age	1.193** (0.0962)	0.739*** (0.0726)	1.025 (0.122)	1.243*** (0.0729)	1.032 (0.150)	0.958 (0.0741)	1.338*** (0.0900)	0.313 (0.258)	0.987 (0.0680)	1.108 (0.136)	0.965 (0.108)	0.957 (0.0614)
log employees	1.079 (0.0502)	1.155** (0.0656)	1.077 (0.0785)	0.983 (0.0344)	0.875 (0.0883)	1.099** (0.0515)	1.067 (0.0442)	0.891 (0.451)	1.002 (0.0399)	0.955 (0.0677)	1.037 (0.0777)	0.955 (0.0424)
log sales revenue	1.023 (0.0236)	1.029 (0.0318)	0.999 (0.0360)	1.040** (0.0198)	1.011 (0.0390)	0.975 (0.0221)	1.022 (0.0188)	1.133 (0.166)	0.980 (0.0193)	1.019 (0.0364)	1.038 (0.0353)	1.043* (0.0234)
Sole proprietor	0.955 (0.267)	1.124 (0.583)	0.612 (0.310)	1.227 (0.313)	1.478 (0.779)	0.501* (0.204)	1.338 (0.368)	0.0780 (0.207)	1.726** (0.411)	2.261* (1.088)	0.691 (0.380)	0.672 (0.176)
Partnership	0.549** (0.167)	0.784 (0.285)	2.348** (0.903)	1.432* (0.298)	1.577 (0.805)	0.917 (0.243)	1.536** (0.335)	0.118 (0.228)	1.260 (0.293)	2.112* (0.905)	0.890 (0.325)	0.777 (0.153)
Corporation for profit	0.929 (0.165)	0.765 (0.217)	1.380 (0.436)	1.365** (0.195)	1.409 (0.573)	0.954 (0.164)	1.170 (0.170)	0.550 (0.627)	1.456** (0.241)	2.449** (0.891)	0.784 (0.210)	0.940 (0.129)
Corporation, nonprofit	0.379** (0.163)	1.633 (0.801)	0.477 (0.322)	0.878 (0.308)	0.295 (0.307)	2.729*** (0.949)	2.096* (0.888)	3.533 (13.17)	3.300*** (0.975)	0.590 (0.394)	1.515 (0.840)	0.895 (0.333)
Government non-classified (omitted: no security clearance repor	0.841 (0.192)	1.200 (0.531)	1.400 (0.482)	0.821 (0.189)	1.131 (0.719)	1.442 (0.330)	0.899 (0.215)	0.785 (1.361)	0.755 (0.196)	0.855 (0.292)	1.019 (0.529)	0.629* (0.157)
Government confidential	1.641 (0.693)	1.421 (1.426)	2.317 (2.083)	1.064 (0.597)	0.332 (0.513)	0.947 (0.554)	0.672 (0.511)	6.073 (17.72)	0.485 (0.435)	1.272 (1.110)	1.540 (2.410)	2.237 (1.131)
Government secret	1.119 (0.554)	3.092 (2.564)	0.850 (0.772)	0.260* (0.193)	8.977** (9.583)	0.818 (0.490)	0.223** (0.154)	2.789 (6.212)	1.041 (0.481)	0.624 (0.549)	0.654 (1.047)	0.663 (0.329)
Government top-secret	0.932 (0.459)	0.269 (0.401)	1.549 (1.432)	0.353 (0.271)	1.453 (2.411)	1.277 (0.793)	1.105 (0.635)	4.564 (9.887)	0.813 (0.503)	0.0754* (0.109)	4.917** (3.840)	0.372 (0.328)
Share of FY 2013-2014 in sample	37.01*** (12.81)	17.93*** (7.967)	27.47*** (14.83)	23.37*** (5.331)	18.24*** (9.415)	21.68*** (7.079)	12.77*** (2.880)	2.389 (3.940)	12.84*** (3.187)	20.82*** (10.46)	5.628*** (1.883)	13.09*** (2.461)
Lower past performance rating	3.331*** (0.786)	4.055*** (0.991)	2.880*** (1.161)	2.902*** (0.684)	2.520 (1.876)	3.009*** (0.690)	2.302*** (0.352)	8.244 (17.05)	5.292*** (1.014)	0.901 (0.336)	2.337** (0.893)	1.433 (0.340)
Higher past performance rating	3.536*** (0.839)	5.246*** (1.583)	6.187*** (1.820)	3.335*** (0.736)	0.506 (0.383)	3.844*** (0.910)	2.535*** (0.522)	1.212 (2.714)	5.853*** (1.129)	2.141** (0.805)	0.711 (0.621)	1.532 (0.426)
Small (SBA definition)	0.595* (0.174)	0.797 (0.231)	0.535 (0.210)	1.653*** (0.321)	0.230*** (0.123)	3.057*** (0.747)	9.959*** (2.300)	1.061 (3.781)	1.410 (0.296)	0.223*** (0.0817)	1.669 (0.804)	1.637** (0.377)
Constant	0.00263*** (0.00142)	0.0209*** (0.0130)	0.00460*** (0.00354)	0.00377*** (0.00149)	0.0672*** (0.0582)	0.00336*** (0.00168)	0.000851*** (0.000382)	0.134 (0.460)	0.00955*** (0.00387)	0.00584*** (0.00452)	0.0108*** (0.00835)	0.0156*** (0.00670)
Observations	4,994	1,643	2,557	3,246	663	5,439	2,967	280	5,628	3,641	1,757	3,314

standard errors in parentheses (\*\*\*) p

NAICS Code	4413	4421	4422	4431	4441	4442	4451	4452	4453	4461	4471	4481
Woman-owned	0.835 (0.166)	0.584*** (0.107)	0.634** (0.124)	1.236 (0.193)	0.644*** (0.0825)	0.544** (0.149)	1.087 (0.348)	0.834 (0.327)	0.795 (1.333)	0.824 (0.136)	1.274 (0.489)	0.756 (0.148)
SDB not 8(a)	0.991 (0.167)	0.888 (0.188)	0.949 (0.202)	0.583*** (0.113)	0.909 (0.121)	0.900 (0.205)	0.387*** (0.140)	1.115 (0.416)	0.571 (0.935)	0.551*** (0.0958)	0.986 (0.342)	0.666* (0.151)
8(a) certified	1.564 (1.157)	1.091 (0.475)	0.688 (0.415)	0.918 (0.343)	0.524* (0.189)	2.789 (2.334)	3.168 (3.900)	0.932 (1.557)	12.20 (28.86)	0.135** (0.120)	0.960 (1.521)	0.699 (0.401)
Minority-owned	0.652* (0.155)	0.616* (0.157)	0.744 (0.201)	0.789 (0.157)	0.527*** (0.0949)	0.368** (0.156)	0.413* (0.193)	0.700 (0.305)	1.187 (1.780)	0.866 (0.167)	0.581 (0.296)	0.890 (0.224)
HubZone certified	1.218 (0.655)	0.733 (0.326)	0.723 (0.492)	1.773 (0.667)	0.682 (0.204)	1.206 (0.667)	0.158 (0.241)	0.640 (0.981)	4.238 (12.40)	1.001 (0.526)	0.466 (0.699)	2.435** (1.070)
Service-disabled veteran	0.628 (0.254)	0.426*** (0.137)	0.460* (0.198)	0.686 (0.199)	0.378*** (0.0920)	0.679 (0.334)	0.302 (0.436)	0.305 (0.451)	2.219 (4.166)	0.393*** (0.119)	1.479 (0.992)	0.686 (0.224)
Other veteran	0.780 (0.180)	0.777 (0.234)	0.677 (0.221)	0.824 (0.221)	0.910 (0.168)	1.018 (0.323)	1.161 (0.567)	0.408 (0.362)	1.423 (2.824)	0.713 (0.170)	0.565 (0.386)	0.871 (0.226)
log age	1.174** (0.0810)	1.051 (0.106)	1.329** (0.152)	0.908 (0.0895)	0.977 (0.0602)	1.075 (0.106)	0.739** (0.108)	1.208 (0.228)	0.795 (0.573)	0.681*** (0.0467)	1.220 (0.199)	1.157 (0.119)
log employees	0.957 (0.0442)	0.981 (0.0624)	0.924 (0.0572)	0.840*** (0.0512)	0.827*** (0.0326)	1.028 (0.0681)	1.008 (0.0948)	0.822 (0.105)	1.248 (0.424)	0.994 (0.0495)	0.958 (0.0923)	0.921 (0.0534)
log sales revenue	1.024 (0.0255)	1.035 (0.0355)	0.987 (0.0281)	1.299*** (0.0655)	1.044* (0.0231)	0.982 (0.0308)	1.056 (0.0486)	1.323*** (0.128)	0.987 (0.112)	1.155*** (0.0362)	1.017 (0.0453)	1.083** (0.0347)
Sole proprietor	0.875 (0.252)	0.622 (0.240)	1.310 (0.445)	1.230 (0.393)	0.931 (0.219)	0.906 (0.354)	0.659 (0.364)	1.855 (1.276)	2.812 (5.689)	2.347*** (0.586)	0.912 (0.579)	0.547* (0.192)
Partnership	1.253 (0.315)	1.165 (0.326)	1.283 (0.484)	1.583* (0.406)	1.052 (0.218)	1.115 (0.357)	0.731 (0.372)	2.379 (1.489)	3.767 (5.866)	1.363 (0.314)	1.014 (0.617)	0.847 (0.283)
Corporation for profit	0.933 (0.171)	0.744 (0.151)	1.646* (0.435)	1.094 (0.215)	1.075 (0.154)	1.137 (0.269)	1.031 (0.348)	1.445 (0.723)	0.687 (1.118)	1.270 (0.239)	0.753 (0.306)	0.825 (0.196)
Corporation, nonprofit	0.642 (0.270)	0.322 (0.236)	0.795 (0.397)	0.416** (0.185)	1.116 (0.375)	0.564 (0.307)	1.273 (0.725)	0.533 (0.472)	5.287 (13.18)	0.913 (0.347)	0.132 (0.204)	0.138*** (0.0751)
Government non-classified (omitted: no security clearance repor	1.676** (0.416)	1.018 (0.279)	0.671 (0.242)	1.011 (0.211)	1.543** (0.278)	0.336* (0.192)	0.631 (0.409)	0.141 (0.202)	2.514 (3.746)	0.848 (0.247)	0.914 (0.560)	1.462 (0.397)
Government confidential	1.988 (1.308)	1.465 (0.951)	2.993* (1.961)	0.325* (0.215)	1.452 (0.500)	0.311 (0.475)	0.369 (0.578)	13.27 (26.26)	4.745 (9.245)	2.043 (1.253)	3.735 (5.261)	2.165 (1.238)
Government secret	0.597 (0.428)	1.273 (0.739)	2.948* (1.892)	0.701 (0.247)	0.556 (0.274)	2.937 (2.859)	0.560 (0.874)	1.266 (2.128)	4.668 (10.51)	1.242 (0.893)	1.512 (1.994)	0.982 (0.546)
Government top-secret	0.769 (0.553)	0.475 (0.426)	1.552 (1.230)	0.715 (0.184)	2.589** (1.013)	0.587 (0.925)	3.679 (4.580)	1.417 (2.402)	5.277 (10.16)	0.548 (0.432)	2.463 (2.885)	2.875 (1.937)
Share of FY 2013-2014 in sample	9.958*** (2.309)	14.46*** (5.055)	10.07*** (3.018)	39.52*** (15.93)	20.89*** (4.481)	11.18*** (3.574)	47.82*** (26.02)	18.51*** (12.00)	2.199 (4.131)	33.57*** (10.66)	6.822*** (3.456)	28.81*** (11.15)
Lower past performance rating	1.555 (0.505)	3.721*** (1.006)	1.867 (0.736)	3.127*** (0.641)	6.180*** (1.165)	2.039 (0.885)	0.306 (0.277)	1.550 (1.693)	5.584*** (1.229)	1.253 (0.611)	3.780*** (1.411)	
Higher past performance rating	2.538*** (0.858)	3.655*** (1.007)	1.541 (0.680)	2.910*** (0.641)	4.050*** (0.846)	3.525*** (1.417)	0.516 (0.401)	1.800 (1.351)	7.590 (18.17)	3.522*** (1.037)	2.008 (1.039)	3.535*** (1.146)
Small (SBA definition)	0.671* (0.161)	0.818 (0.267)	0.188*** (0.0658)	0.202*** (0.0481)	1.557** (0.343)	0.413** (0.146)	1.889 (0.919)	0.773 (0.495)	1.557 (3.708)	0.902 (0.228)	0.335** (0.166)	0.395*** (0.112)
Constant	0.0139*** (0.00665)	0.0125*** (0.00823)	0.0375*** (0.0223)	0.000457*** (0.000360)	0.00497*** (0.00211)	0.0344*** (0.0227)	0.00851*** (0.00799)	0.000197*** (0.000300)	0.0248 (0.0833)	0.00179*** (0.00101)	0.0475*** (0.0430)	0.00834*** (0.00507)
Observations	3,706	2,401	2,517	5,546	9,885	2,312	662	766	101	4,281	687	1,899

standard errors in parentheses (\*\*\*) p

NAICS Code	4482	4483	4511	4512	4521	4529	4531	4532	4533	4539	4541	4542
Woman-owned	0.895 (0.505)	0.794 (0.538)	0.872 (0.179)	0.408** (0.176)	1.066 (0.947)	0.700 (0.274)	0.993 (0.930)	0.938 (0.128)	0.371 (0.263)	0.816* (0.101)	0.543* (0.175)	1.850 (1.932)
SDB not 8(a)	1.272 (0.758)	0.564 (0.464)	0.636** (0.143)	2.742*** (1.056)	2.324 (2.108)	0.586 (0.250)	1.037 (1.013)	0.833 (0.128)	1.494 (0.935)	0.830 (0.113)	0.336*** (0.131)	0.350 (0.469)
8(a) certified	3.822 (9.075)	0.920 (2.540)	0.557 (0.426)	14.54** (15.13)	5.515 (13.72)	1.779 (1.732)	0.975 (2.977)	0.240*** (0.107)	0.146 (0.278)	1.116 (0.517)	0.431 (0.399)	2.725 (6.091)
Minority-owned	0.113 (0.151)	0.382 (0.440)	0.811 (0.214)	0.402* (0.207)	0.0992 (0.215)	0.624 (0.295)	1.599 (2.180)	1.299 (0.213)	0.517 (0.486)	0.563*** (0.104)	1.188 (0.414)	0.542 (0.707)
HubZone certified	1.936 (3.031)	22.28** (27.41)	1.837 (1.037)	0.455 (0.715)	8.099 (24.60)	1.546 (1.470)	1.048 (3.256)	0.751 (0.293)	12.41 (23.34)	0.895 (0.366)	3.059 (2.204)	1.588 (2.646)
Service-disabled veteran	0.327 (0.305)	0.212 (0.281)	0.480* (0.188)	1.496 (0.935)	1.408 (1.791)	0.724 (0.395)	2.667 (8.235)	0.530** (0.140)	0.115 (0.199)	0.461*** (0.119)	0.415 (0.242)	1.027 (1.584)
Other veteran	0.485 (0.419)	0.892 (0.796)	0.748 (0.213)	1.357 (0.701)	0.775 (0.815)	0.508 (0.327)	1.459 (2.078)	1.129 (0.226)	0.0400 (0.107)	0.571*** (0.116)	0.672 (0.310)	0.988 (1.558)
log age	0.906 (0.206)	0.803 (0.262)	1.105 (0.109)	1.120 (0.220)	1.727 (0.736)	0.699* (0.132)	1.865 (1.245)	1.121 (0.0932)	0.778 (0.215)	1.068 (0.0701)	0.824 (0.108)	0.849 (0.613)
log employees	0.537*** (0.0932)	1.548** (0.285)	0.999 (0.0668)	0.905 (0.118)	0.991 (0.191)	0.682*** (0.0885)	1.058 (0.391)	0.912** (0.0407)	0.433*** (0.109)	0.880*** (0.0379)	1.040 (0.0842)	1.020 (0.364)
log sales revenue	1.140 (0.126)	1.027 (0.0811)	1.111*** (0.0446)	1.189* (0.116)	1.029 (0.0962)	1.391*** (0.147)	0.960 (0.134)	1.086*** (0.0303)	1.493** (0.267)	1.043* (0.0245)	1.085 (0.0552)	1.003 (0.185)
Sole proprietor	2.916 (2.677)	1.834 (2.054)	1.963** (0.594)	0.915 (0.663)	1.128 (1.405)	0.987 (0.638)	2.621 (5.002)	0.799 (0.223)	1.953 (1.598)	1.290 (0.277)	0.687 (0.374)	1.129 (1.831)
Partnership	3.499 (2.913)	0.0794 (0.137)	1.473 (0.448)	7.842*** (4.908)	1.793 (1.902)	0.184*** (0.118)	3.054 (6.275)	1.254 (0.328)	0.345 (0.369)	1.278 (0.285)	1.741 (0.626)	3.218 (4.804)
Corporation for profit	3.620* (2.798)	1.530 (1.322)	1.501* (0.349)	1.467 (0.823)	0.542 (0.494)	1.745 (0.760)	1.527 (2.598)	1.398* (0.270)	1.120 (0.825)	1.532** (0.262)	0.913 (0.284)	0.788 (1.037)
Corporation, nonprofit	0.0460 (0.101)	0.874 (2.173)	0.428 (0.305)	1.458 (1.156)	0.00952 (0.0281)	0.0724*** (0.0545)	0.931 (2.562)	0.200*** (0.0825)	0.0293 (0.0699)	0.288*** (0.114)	1.272 (0.764)	5.509 (12.08)
Government non-classified (omitted: no security clearance repor	1.530 (1.146)	1.087 (1.050)	1.039 (0.326)	0.710 (0.549)	0.446 (0.708)	1.803 (0.827)	1.023 (1.694)	1.039 (0.227)	0.445 (0.653)	1.144 (0.235)	1.046 (0.406)	1.525 (2.277)
Government confidential	36.48 (85.56)	2.732 (5.703)	0.891 (0.677)	1.314 (2.177)	37.80 (96.41)	0.811 (1.528)	8.582 (17.96)	1.092 (0.604)	1.572 (3.034)	1.220 (0.580)	2.068 (1.847)	15.45 (34.46)
Government secret	1.183 (2.399)	0.647 (1.136)	1.934 (1.254)	3.855* (2.849)	0.356 (1.079)	3.287 (2.945)	5.336 (11.99)	0.922 (0.438)	27.18 (61.31)	0.456 (0.274)	2.058 (1.354)	5.806 (11.20)
Government top-secret	13.48 (24.00)	1.126 (1.488)	2.151 (1.535)	0.808 (0.680)	4.262 (5.653)	2.767 (2.059)	3.695 (18.21)	1.200 (0.516)	12.29 (30.16)	1.584 (0.732)	2.699* (1.409)	8.655 (16.11)
Share of FY 2013-2014 in sample	11.47*** (10.10)	2.737 (2.828)	13.98*** (4.456)	2.431 (1.347)	34.54* (70.58)	11.28*** (7.069)	2.823 (4.298)	30.52*** (9.624)	17.55*** (18.43)	8.641*** (1.736)	21.37*** (12.28)	17.73 (35.73)
Lower past performance rating	10.79*** (7.857)	5.178 (6.904)	3.038*** (1.215)	2.166 (1.344)	11.70 (26.78)	6.037** (4.340)	6.526 (9.672)	8.587*** (2.227)	20.17*** (20.92)	2.656*** (0.643)	1.254 (0.534)	4.838 (8.702)
Higher past performance rating	8.431*** (6.495)	4.453 (5.208)	1.663 (0.667)	1.933 (1.243)	1.851 (2.534)	3.596** (2.036)	1.421 (2.949)	4.701*** (1.215)	1.542 (2.292)	2.413*** (0.639)	1.422 (0.644)	1.094 (2.208)
Small (SBA definition)	0.0864*** (0.0635)	3.721 (5.960)	0.755 (0.286)	1.401 (0.852)	0.241 (0.374)	0.0456*** (0.0200)	0.126 (0.169)	0.314*** (0.0691)	0.301 (0.244)	0.244*** (0.0531)	0.615 (0.245)	1.920 (5.120)
Constant	0.0186** (0.0321)	0.00301** (0.00688)	0.00203*** (0.00134)	0.00169*** (0.00246)	0.00680** (0.0137)	0.0112*** (0.0165)	0.0185 (0.0530)	0.00451*** (0.00235)	0.000957*** (0.00231)	0.0363*** (0.0146)	0.00273*** (0.00247)	0.00319* (0.0100)
Observations	1,108	486	2,769	722	161	979	215	3,545	708	5,428	3,037	293

standard errors in parentheses (\*\*\*) p

NAICS Code	4543	4811	4812	4821	4831	4832	4841	4842	4851	4852	4853	4854
Woman-owned	0.613*** (0.112)	0.400 (0.225)	0.955 (0.185)	0.622 (0.800)	0.510** (0.151)	0.685 (0.278)	0.738* (0.132)	0.781** (0.0790)	0.741 (0.279)	0.235 (0.322)	0.680 (0.311)	0.554 (0.311)
SDB not 8(a)	1.016 (0.167)	0.808 (0.418)	0.756 (0.157)	0.403 (0.618)	0.625* (0.178)	0.685 (0.272)	1.096 (0.191)	0.773** (0.0840)	0.884 (0.315)	0.667 (0.741)	0.602 (0.278)	0.479 (0.281)
8(a) certified	0.643 (0.474)	0.758 (1.158)	0.667 (0.519)	1.970 (5.625)	0.206* (0.189)	2.984 (2.646)	0.908 (0.418)	2.175*** (0.424)	8.451*** (6.112)	7.719 (13.01)	0.852 (0.875)	0.727 (0.707)
Minority-owned	0.733 (0.165)	0.709 (0.359)	0.387*** (0.108)	1.211 (1.675)	0.580* (0.188)	0.469 (0.255)	0.680* (0.140)	0.762** (0.0987)	0.429** (0.173)	2.749 (2.588)	0.861 (0.408)	2.377 (1.309)
HubZone certified	0.720 (0.438)	1.256 (1.929)	1.607 (0.917)	3.117 (9.415)	0.999 (0.603)	0.791 (0.752)	0.511 (0.231)	0.581** (0.135)	2.441 (1.740)	1.691 (2.954)	6.897* (7.450)	1.431 (1.602)
Service-disabled veteran	0.679 (0.218)	0.340 (0.303)	0.401*** (0.138)	0.733 (1.156)	0.200*** (0.115)	0.302 (0.267)	0.868 (0.254)	0.726* (0.133)	0.514 (0.325)	1.054 (1.774)	0.767 (0.496)	0.613 (0.479)
Other veteran	0.685 (0.166)	1.455 (0.775)	0.698* (0.141)	1.682 (2.743)	0.836 (0.285)	0.666 (0.332)	1.260 (0.297)	1.254 (0.178)	1.221 (0.540)	0.315 (0.451)	1.450 (0.758)	1.046 (0.750)
log age	1.197** (0.0906)	2.462*** (0.625)	1.353*** (0.128)	1.104 (0.451)	1.279** (0.141)	1.797*** (0.340)	1.229** (0.106)	1.172*** (0.0595)	1.381** (0.226)	3.743** (1.961)	1.633** (0.385)	1.473 (0.425)
log employees	1.040 (0.0470)	1.108 (0.105)	1.013 (0.0424)	1.378 (0.324)	0.915 (0.0528)	0.810* (0.0906)	1.086** (0.0444)	1.069** (0.0288)	1.161** (0.0858)	1.157 (0.185)	0.991 (0.137)	1.162 (0.132)
log sales revenue	1.058** (0.0261)	0.898* (0.0548)	0.986 (0.0244)	0.884 (0.0726)	0.991 (0.0292)	1.012 (0.0557)	1.016 (0.0252)	0.990 (0.0146)	0.929** (0.0347)	0.926 (0.0642)	0.989 (0.0742)	0.965 (0.0665)
Sole proprietor	0.890 (0.282)	2.880 (2.228)	0.556 (0.200)	1.712 (3.299)	1.314 (0.538)	2.672** (1.336)	1.553 (0.438)	1.217 (0.212)	0.742 (0.590)	0.142 (0.285)	11.44*** (10.75)	2.025 (1.520)
Partnership	0.982 (0.244)	2.896* (1.777)	0.831 (0.233)	0.934 (1.707)	1.023 (0.356)	1.200 (0.678)	1.435 (0.381)	1.264 (0.196)	1.401 (0.718)	1.729 (2.690)	8.258*** (6.138)	0.592 (0.556)
Corporation for profit	1.187 (0.217)	1.530 (0.809)	0.803 (0.157)	1.569 (2.002)	0.850 (0.200)	1.191 (0.499)	1.287 (0.248)	1.168 (0.129)	1.030 (0.406)	0.526 (0.424)	10.03*** (8.226)	0.541 (0.284)
Corporation, nonprofit	2.227** (0.870)	0.953 (1.064)	2.169* (1.006)	0.787 (1.483)	2.596* (1.322)	0.963 (0.811)	0.953 (0.496)	1.390 (0.448)	1.347 (0.760)	0.296 (0.322)	5.530* (5.036)	0.267 (0.303)
Government non-classified (omitted: no security clearance repor	1.089 (0.285)	1.070 (0.493)	0.817 (0.196)	1.098 (1.574)	0.661 (0.228)	0.631 (0.345)	0.999 (0.240)	0.993 (0.145)	0.867 (0.387)	5.950** (4.805)	1.519 (0.866)	2.090 (1.322)
Government confidential	3.708** (1.969)	0.541 (0.636)	0.970 (0.586)	12.86 (27.65)	0.0792* (0.115)	0.343 (0.513)	1.373 (0.785)	1.937** (0.555)	0.942 (1.379)	18.16 (35.47)	0.412 (0.668)	3.399 (6.067)
Government secret	0.591 (0.370)	1.128 (0.500)	0.592** (0.155)	2.741 (2.909)	0.889 (0.259)	0.432 (0.378)	0.837 (0.279)	0.578** (0.141)	0.173** (0.151)	3.172 (4.809)	0.207 (0.329)	1.198 (1.149)
Government top-secret	0.880 (0.581)	0.136* (0.144)	0.631 (0.193)	3.166 (6.168)	0.528 (0.293)	0.256 (0.378)	0.989 (0.422)	0.551* (0.175)	0.556 (0.403)	8.056 (10.66)	1.608 (1.308)	0.789 (0.735)
Share of FY 2013-2014 in sample	14.12*** (3.808)	56.53*** (58.86)	20.10*** (7.334)	8.105 (12.17)	10.02*** (4.074)	11.40*** (6.895)	14.31*** (4.506)	20.97*** (4.262)	5.321*** (2.813)	3.656 (3.765)	32.01*** (28.87)	9.604*** (8.248)
Lower past performance rating	3.742*** (0.717)	3.499*** (1.701)	3.014*** (0.607)	0.524 (0.778)	3.030*** (0.806)	1.046 (0.525)	3.441*** (0.790)	2.222*** (0.321)	4.534*** (1.737)	0.645 (1.277)	4.148*** (1.953)	2.222 (1.274)
Higher past performance rating	3.239*** (0.727)	5.940*** (2.350)	6.633*** (1.112)	0.573 (0.897)	4.100*** (1.059)	1.638 (0.743)	2.592*** (0.561)	2.273*** (0.290)	1.701 (0.701)	1.408 (1.343)	1.073 (0.788)	1.349 (0.842)
Small (SBA definition)	2.211*** (0.555)	0.189*** (0.0927)	1.272 (0.222)	1.087 (1.306)	1.234 (0.419)	0.344** (0.176)	0.898 (0.192)	1.198 (0.173)	1.771 (0.662)	0.733 (0.519)	1.546 (1.015)	0.806 (0.414)
Constant	0.00147*** (0.000756)	0.00127*** (0.00178)	0.00637*** (0.00326)	0.00798** (0.0188)	0.0172*** (0.0115)	0.0125*** (0.0128)	0.00147*** (0.000794)	0.00340*** (0.00115)	0.00983*** (0.00828)	0.000699*** (0.00145)	9.91e-05*** (0.000154)	0.00500*** (0.00681)
Observations	3,494	1,024	2,195	406	1,389	759	6,958	9,743	1,193	448	921	691

standard errors in parentheses (\*\*\*) p

NAICS Code	4855	4859	4861	4862	4869	4871	4872	4879	4881	4882	4883	4884
Woman-owned	1.185 (0.295)	0.831 (0.135)	1.627 (1.885)	1.693 (2.204)	2.023 (3.239)	0.432 (0.310)	0.680 (0.476)	0.341 (0.910)	1.112 (0.130)	0.498 (0.484)	0.802 (0.176)	0.523** (0.133)
SDB not 8(a)	1.264 (0.318)	0.613*** (0.105)	6.199 (9.363)	0.258 (0.431)	0.487 (0.761)	1.166 (0.767)	1.040 (0.673)	0.550 (1.113)	0.674*** (0.0862)	0.199 (0.262)	1.195 (0.240)	1.041 (0.231)
8(a) certified	4.070* (2.996)	0.980 (0.449)	14.86 (40.58)	1.509 (4.942)	2.490 (5.452)	1.818 (3.166)	5.062 (14.63)	5.434 (17.30)	0.598* (0.176)	2.523 (4.209)	0.706 (0.398)	0.988 (0.565)
Minority-owned	0.534** (0.154)	0.312*** (0.0583)	0.614 (0.895)	0.209 (0.313)	0.385 (0.613)	0.907 (0.668)	0.240 (0.285)	2.095 (4.519)	0.738** (0.104)	0.563 (0.784)	0.525** (0.138)	0.595* (0.162)
HubZone certified	0.548 (0.522)	1.711 (0.736)	9.063 (22.90)	39.97 (133.7)	11.43 (25.15)	0.889 (1.410)	2.965 (5.108)	19.30 (44.63)	0.344** (0.158)	5.316 (9.751)	0.664 (0.352)	0.178** (0.153)
Service-disabled veteran	0.852 (0.438)	0.541** (0.130)	0.727 (1.232)	0.698 (1.186)	0.437 (0.684)	0.572 (0.903)	0.592 (0.795)	0.709 (1.751)	0.577*** (0.0996)	6.847* (7.197)	0.538* (0.190)	0.389** (0.170)
Other veteran	0.604 (0.238)	0.788 (0.168)	2.672 (4.848)	0.479 (1.482)	0.558 (1.099)	0.214 (0.317)	1.262 (0.922)	1.042 (1.622)	0.780* (0.110)	2.249 (2.253)	0.649 (0.175)	0.758 (0.249)
log age	1.155 (0.162)	1.008 (0.0858)	0.955 (0.553)	0.745 (0.346)	0.405 (0.243)	2.607** (1.043)	0.876 (0.271)	1.549 (2.190)	1.590*** (0.0874)	1.250 (0.507)	1.662*** (0.150)	1.031 (0.119)
log employees	1.180** (0.0812)	0.957 (0.0468)	1.651 (0.669)	0.776 (0.188)	0.851 (0.278)	1.135 (0.199)	1.059 (0.136)	1.175 (0.612)	1.076*** (0.0301)	1.530** (0.322)	0.992 (0.0470)	0.863** (0.0621)
log sales revenue	1.025 (0.0407)	1.001 (0.0216)	0.939 (0.136)	0.991 (0.104)	1.008 (0.156)	1.074 (0.135)	0.985 (0.0834)	0.994 (0.324)	1.033* (0.0181)	0.921 (0.0955)	0.980 (0.0239)	1.136*** (0.0522)
Sole proprietor	1.526 (0.846)	8.760*** (2.033)	0.939 (1.898)	1.440 (2.233)	0.298 (0.644)	5.225 (5.315)	1.078 (0.917)	2.165 (4.226)	1.681*** (0.331)	1.099 (1.474)	1.633 (0.497)	1.277 (0.406)
Partnership	1.294 (0.603)	1.199 (0.341)	0.820 (1.513)	0.0647 (0.146)	0.558 (1.038)	3.894 (3.562)	0.942 (0.883)	3.652 (6.797)	1.089 (0.189)	1.577 (1.903)	1.326 (0.385)	1.015 (0.351)
Corporation for profit	1.778* (0.545)	1.058 (0.225)	0.520 (0.860)	0.104** (0.119)	0.769 (1.186)	0.526 (0.410)	1.289 (0.947)	0.184 (0.348)	1.056 (0.132)	0.869 (0.833)	1.322 (0.284)	0.928 (0.233)
Corporation, nonprofit	1.519 (1.567)	0.424** (0.184)	640.9 (2,842)	0.394 (0.780)	3.765 (12.96)	2.810 (4.458)	0.944 (1.659)	2.531 (6.959)	1.032 (0.358)	9.191 (18.15)	2.285** (0.933)	1.463 (0.908)
Government non-classified (omitted: no security clearance repor	1.301 (0.450)	0.393*** (0.130)	1.511 (2.153)	1.751 (3.163)	2.484 (3.996)	3.606* (2.493)	0.480 (0.704)	0.724 (1.398)	0.886 (0.118)	0.104 (0.236)	0.623* (0.167)	0.933 (0.311)
Government confidential	0.304 (0.462)	0.766 (0.515)	5.956 (15.27)	19.11 (43.40)	13.22 (30.32)	5.671 (10.61)	1.255 (1.962)	7.877 (40.47)	0.722 (0.238)	4.293 (4.778)	0.466 (0.242)	2.852* (1.811)
Government secret	1.402 (1.971)	0.346** (0.152)	5.242 (11.90)	2.197 (4.500)	3.453 (6.443)	6.090 (10.11)	3.420 (6.776)	6.374 (11.52)	0.723** (0.106)	0.321 (0.530)	0.937 (0.257)	1.067 (0.579)
Government top-secret	0.839 (0.654)	1.024 (0.412)	2.989 (8.346)	18.23 (32.55)	2.696 (6.644)	12.50 (25.90)	0.422 (0.776)	9.486 (29.29)	0.375*** (0.0645)	0.987 (1.593)	0.302*** (0.137)	1.100 (0.570)
Share of FY 2013-2014 in sample	39.78*** (19.73)	50.14*** (15.35)	0.154 (0.350)	8.940 (15.27)	14.92 (34.14)	6.021* (6.214)	4.666 (4.526)	0.369 (0.762)	31.05*** (7.909)	76.65* (187.3)	12.75*** (4.207)	10.68*** (3.898)
Lower past performance rating	1.857 (0.703)	3.299*** (0.831)	9.940 (20.97)	20.99*** (20.97)	1.428 (2.690)	1.516 (1.463)	0.511 (0.790)	6.577 (23.01)	1.195 (0.147)	1.406 (1.554)	1.112 (0.293)	2.758*** (0.908)
Higher past performance rating	1.411 (0.547)	1.835** (0.479)	3.889 (8.319)	2.065 (5.529)	4.423 (6.655)	0.876 (0.830)	1.055 (1.721)	8.483 (19.53)	1.369** (0.169)	0.614 (0.643)	2.464*** (0.523)	3.000*** (0.890)
Small (SBA definition)	2.195** (0.790)	1.619* (0.444)	74.04 (257.5)	0.492 (0.824)	0.802 (1.332)	1.956 (1.470)	0.765 (0.740)	0.900 (1.510)	2.006*** (0.293)	7.705 (9.840)	0.756 (0.177)	1.276 (0.388)
Constant	0.000810*** (0.000710)	0.00578*** (0.00272)	0.000642 (0.00361)	0.270 (0.747)	0.0592 (0.208)	0.000150*** (0.000330)	0.0629* (0.0913)	0.0137 (0.0956)	0.00101*** (0.000381)	7.95e-05*** (0.000237)	0.00608*** (0.00326)	0.00230*** (0.00181)
Observations	1,026	2,603	543	619	709	456	288	298	4,757	639	2,194	2,746

standard errors in parentheses (\*\*\*) p

	NAICS Code	4885	4889	4911	4921	4922	4931	5111	5112	5121	5122	5151	5152
Woman-owned		0.902 (0.281)	0.956 (0.177)	0.878 (0.445)	0.783 (0.185)	0.571 (0.209)	0.709** (0.0992)	0.501*** (0.0640)	0.663*** (0.0483)	0.593*** (0.0820)	0.479** (0.154)	0.630** (0.126)	0.532* (0.183)
SDB not 8(a)		1.133 (0.365)	1.086 (0.229)	0.765 (0.501)	1.360 (0.314)	0.378*** (0.143)	0.850 (0.125)	0.703** (0.100)	0.721*** (0.0505)	0.672*** (0.102)	1.161 (0.373)	0.893 (0.174)	0.511** (0.163)
8(a) certified		0.740 (0.684)	1.720 (0.902)	1.652 (1.342)	1.111 (0.639)	0.716 (0.405)	1.355 (0.343)	1.037 (0.362)	1.044 (0.147)	1.616 (0.541)	2.684 (2.343)	0.271 (0.259)	0.0891 (0.136)
Minority-owned		0.457* (0.188)	0.342*** (0.105)	1.164 (0.761)	0.354*** (0.0919)	1.549 (0.525)	0.680** (0.112)	0.605*** (0.103)	0.495*** (0.0389)	0.571*** (0.0985)	0.211*** (0.101)	0.820 (0.154)	0.807 (0.277)
HubZone certified		0.244 (0.355)	1.310 (0.595)	0.235 (0.349)	1.033 (0.736)	0.494 (0.474)	0.703 (0.235)	0.896 (0.425)	1.152 (0.224)	0.756 (0.510)	1.738 (1.710)	1.334 (2.107)	3.718 (6.224)
Service-disabled veteran		0.508 (0.271)	0.278** (0.139)	0.798 (0.498)	0.846 (0.242)	0.522 (0.263)	0.773 (0.145)	0.683 (0.166)	0.779** (0.0885)	0.117*** (0.0638)	0.525 (0.366)	0.200*** (0.105)	0.534 (0.303)
Other veteran		1.142 (0.469)	1.149 (0.312)	1.185 (0.868)	0.756 (0.264)	2.146** (0.827)	1.051 (0.195)	0.597** (0.130)	0.806** (0.0849)	1.065 (0.225)	0.492 (0.327)	0.426** (0.169)	0.652 (0.256)
log age		0.982 (0.140)	1.340*** (0.121)	1.393 (0.426)	1.405** (0.187)	1.249 (0.240)	1.118* (0.0714)	1.134** (0.0572)	1.129*** (0.0380)	0.869* (0.0639)	0.916 (0.143)	0.798*** (0.0660)	1.123 (0.134)
log employees		1.128** (0.0667)	1.010 (0.0471)	1.344** (0.161)	1.096 (0.0678)	1.292*** (0.0981)	0.980 (0.0355)	1.112*** (0.0312)	1.011 (0.0174)	1.035 (0.0434)	1.145* (0.0912)	1.174*** (0.0437)	1.283*** (0.0660)
log sales revenue		0.989 (0.0422)	1.005 (0.0311)	1.037 (0.108)	0.992 (0.0304)	0.975 (0.0446)	1.013 (0.0214)	1.036** (0.0169)	1.070*** (0.0112)	0.973 (0.0172)	0.949 (0.0328)	0.954*** (0.0160)	0.971 (0.0289)
Sole proprietor		2.571* (1.370)	1.344 (0.513)	1.066 (1.026)	0.961 (0.349)	1.652 (0.859)	1.675** (0.407)	0.984 (0.199)	0.887 (0.131)	2.735*** (0.573)	3.382** (1.604)	6.971*** (1.832)	1.432 (0.740)
Partnership		1.291 (0.602)	1.221 (0.366)	1.775 (1.758)	1.100 (0.390)	2.085 (1.082)	1.716*** (0.307)	0.834 (0.155)	1.083 (0.107)	1.225 (0.285)	2.189 (1.071)	0.681 (0.243)	0.873 (0.299)
Corporation for profit		1.431 (0.480)	0.932 (0.197)	1.919 (1.150)	0.847 (0.225)	0.734 (0.279)	1.053 (0.147)	0.806 (0.110)	1.203** (0.0904)	1.245 (0.243)	2.689** (1.152)	0.989 (0.254)	1.007 (0.273)
Corporation, nonprofit		1.722 (1.529)	1.150 (0.452)	0.367 (0.389)	0.778 (0.532)	1.867 (1.593)	0.297*** (0.128)	0.729 (0.146)	1.543** (0.272)	0.760 (0.283)	0.519 (0.410)	0.302*** (0.130)	0.995 (0.457)
Government non-classified (omitted: no security clearance repor		0.886 (0.330)	0.919 (0.235)	0.758 (0.452)	0.743 (0.221)	1.369 (0.533)	0.707* (0.133)	0.612*** (0.113)	0.751*** (0.0531)	0.930 (0.159)	0.953 (0.374)	1.086 (0.243)	1.028 (0.393)
Government confidential		0.765 (0.678)	0.127 (0.183)	1.196 (1.819)	0.713 (0.506)	0.204 (0.325)	0.689 (0.252)	0.192*** (0.102)	0.732 (0.154)	1.304 (0.566)	0.633 (0.556)	0.528 (0.288)	0.571 (0.862)
Government secret		0.688 (0.314)	0.428** (0.158)	1.024 (0.553)	0.208*** (0.106)	0.0597* (0.0863)	0.732 (0.141)	0.370*** (0.101)	0.649*** (0.0618)	0.647 (0.222)	1.955 (1.274)	0.436* (0.201)	0.508 (0.338)
Government top-secret		0.185* (0.160)	0.413** (0.162)	0.258** (0.163)	0.191*** (0.102)	0.392 (0.259)	0.517*** (0.111)	0.177*** (0.0420)	0.492*** (0.0410)	0.309*** (0.107)	0.545 (0.373)	0.383** (0.179)	0.166*** (0.0941)
Share of FY 2013-2014 in sample		13.33*** (7.392)	7.596*** (2.739)	6.914* (7.379)	13.25*** (5.202)	76.70*** (61.85)	9.808*** (2.455)	22.39*** (4.107)	26.08*** (3.060)	31.60*** (8.055)	14.51*** (7.879)	25.51*** (7.252)	9.040*** (3.584)
Lower past performance rating		3.466*** (1.266)	5.789*** (1.237)	3.220** (1.793)	1.775* (0.578)	1.629 (0.854)	2.466*** (0.407)	2.494*** (0.463)	2.212*** (0.191)	0.969 (0.327)	2.766** (1.399)	2.188 (1.097)	2.645** (1.024)
Higher past performance rating		5.247*** (1.639)	4.985*** (1.009)	2.208 (1.251)	2.065** (0.636)	1.283 (0.627)	2.780*** (0.420)	1.259 (0.197)	1.543*** (0.122)	1.644** (0.371)	0.765 (0.480)	2.570** (1.007)	3.522*** (1.650)
Small (SBA definition)		1.274 (0.327)	1.104 (0.254)	2.679* (1.514)	0.421** (0.179)	1.963 (1.104)	0.798 (0.133)	0.559*** (0.0821)	0.727*** (0.0609)	0.537** (0.137)	0.280*** (0.104)	0.512*** (0.103)	1.207 (0.361)
Constant		0.00222*** (0.00175)	0.00381*** (0.00237)	0.000296*** (0.000532)	0.0194*** (0.0130)	0.000518*** (0.000600)	0.00732*** (0.00309)	0.0144*** (0.00473)	0.00918*** (0.00180)	0.0164*** (0.00680)	0.0227*** (0.0181)	0.0466*** (0.0197)	0.0321*** (0.0212)
Observations		2,944	4,114	734	1,708	1,225	7,387	5,050	12,466	5,790	1,698	1,785	794

standard errors in parentheses (\*\*\*) p

	NAICS Code	5171	5172	5174	5179	5182	5191	5221	5222	5223	5231	5232	5239
Woman-owned		0.752*	0.637**	0.565**	0.625***	0.673***	0.588***	0.522	1.449	0.758	0.642	0.555	0.713
		(0.117)	(0.123)	(0.128)	(0.0744)	(0.0684)	(0.0624)	(0.791)	(0.995)	(0.379)	(0.606)	(0.907)	(0.246)
SDB not 8(a)		0.819	0.805	1.284	0.643***	0.611***	0.506***	1.703	1.618	0.415	0.283	0.214	1.697
		(0.125)	(0.160)	(0.290)	(0.0799)	(0.0727)	(0.0654)	(1.371)	(1.018)	(0.320)	(0.303)	(0.341)	(0.571)
8(a) certified		0.834	1.092	1.293	1.090	1.267	1.025	0.0897	1.761	2.849	1.111		0.945
		(0.216)	(0.383)	(0.622)	(0.218)	(0.211)	(0.227)	(0.211)	(3.024)	(2.202)	(1.356)		(0.885)
Minority-owned		0.692**	0.668*	0.208***	0.544***	0.594***	0.427***	0.555	0.789	0.635	1.799	0.526	0.365***
		(0.107)	(0.140)	(0.0629)	(0.0720)	(0.0695)	(0.0577)	(0.605)	(0.535)	(0.412)	(1.535)	(0.742)	(0.135)
HubZone certified		0.423*	0.693	1.457	0.882	0.667	0.707	23.33*	2.884	0.373	3.282		1.478
		(0.196)	(0.369)	(0.723)	(0.254)	(0.206)	(0.256)	(40.41)	(7.648)	(0.555)	(5.660)		(1.175)
Service-disabled veteran		0.549***	0.383***	0.182***	0.492***	0.499***	0.333***	0.199	0.428	1.048	0.562	0.999	0.273
		(0.116)	(0.118)	(0.0676)	(0.0806)	(0.0812)	(0.0750)	(0.578)	(0.920)	(0.939)	(0.831)	(1.584)	(0.236)
Other veteran		0.854	0.435***	0.490**	0.741*	0.538***	0.625**	19.47***	2.459	0.633	0.809	4.060	1.535
		(0.177)	(0.137)	(0.151)	(0.118)	(0.102)	(0.117)	(22.40)	(2.327)	(0.917)	(1.294)	(4.989)	(0.747)
log age		1.187***	1.470***	1.170	1.216***	1.172***	1.159***	0.935	1.117	1.222	0.566*	0.700	1.132
		(0.0651)	(0.128)	(0.115)	(0.0661)	(0.0619)	(0.0569)	(0.174)	(0.241)	(0.243)	(0.194)	(0.243)	(0.156)
log employees		1.117***	0.908**	0.888***	1.040	1.155***	1.116***	1.256***	1.347***	1.204**	1.252	1.143	0.817***
		(0.0302)	(0.0368)	(0.0393)	(0.0258)	(0.0294)	(0.0266)	(0.0886)	(0.113)	(0.100)	(0.184)	(0.226)	(0.0551)
log sales revenue		1.001	1.034	1.041	1.016	1.026	1.021	0.960	0.990	1.012	0.967	0.998	1.073
		(0.0166)	(0.0259)	(0.0281)	(0.0157)	(0.0171)	(0.0141)	(0.0387)	(0.0614)	(0.0620)	(0.0780)	(0.110)	(0.0460)
Sole proprietor		1.219	1.250	0.850	1.168	2.067***	2.201***	0.150	1.506	0.401	0.265	1.055	1.380
Omitted: other forms of organization		(0.380)	(0.474)	(0.357)	(0.243)	(0.356)	(0.335)	(0.266)	(2.321)	(0.596)	(0.408)	(2.311)	(0.728)
Partnership		1.531**	1.985***	1.381	1.151	1.216	1.296*	0.857	1.098	0.939	0.407	3.229	1.265
		(0.268)	(0.474)	(0.387)	(0.174)	(0.177)	(0.195)	(1.131)	(1.191)	(0.538)	(0.325)	(4.797)	(0.505)
Corporation for profit		1.129	1.347	1.329	0.935	1.011	0.913	0.417	3.335	0.865	0.645	2.179	1.589
		(0.146)	(0.257)	(0.298)	(0.105)	(0.105)	(0.107)	(0.235)	(2.726)	(0.369)	(0.418)	(3.241)	(0.547)
Corporation, nonprofit		1.131	0.459*	0.920	1.190	4.015***	0.934	0.415	1.025	1.016	1.186	0.758	0.240**
		(0.303)	(0.196)	(0.496)	(0.318)	(0.718)	(0.167)	(0.331)	(1.208)	(0.733)	(1.399)	(1.488)	(0.147)
Government non-classified		0.767*	0.932	0.919	0.944	0.742***	0.677***	0.279	2.041	1.328	0.968	1.025	0.451*
(omitted: no security clearance repor		(0.117)	(0.179)	(0.196)	(0.114)	(0.0844)	(0.0835)	(0.336)	(1.374)	(0.553)	(0.871)	(1.660)	(0.210)
Government confidential		0.417**	0.670	0.969	0.705	0.628	0.430**	5.348*	1.086	1.165	1.896	1.492	0.788
		(0.182)	(0.367)	(0.524)	(0.273)	(0.178)	(0.148)	(5.001)	(1.642)	(0.850)	(1.821)	(2.695)	(0.544)
Government secret		0.610***	0.746	0.941	0.775*	0.417***	0.266***	0.271	2.475	1.285	0.991	15.51	0.0745*
		(0.116)	(0.202)	(0.226)	(0.117)	(0.0647)	(0.0579)	(0.539)	(2.511)	(1.063)	(1.734)	(40.02)	(0.114)
Government top-secret		0.142***	0.386***	0.461***	0.424***	0.554***	0.273***	2.232	0.116	0.329	0.288	0.904	1.115
		(0.0189)	(0.0768)	(0.0935)	(0.0510)	(0.0576)	(0.0399)	(3.075)	(0.188)	(0.237)	(0.430)	(1.562)	(0.491)
Share of FY 2013-2014 in sample		12.47***	18.50***	20.42***	23.78***	10.50***	16.01***	2.615	4.418*	18.79***	322.4***	14.94	28.07***
		(2.720)	(6.463)	(8.812)	(5.644)	(1.962)	(2.755)	(1.667)	(3.642)	(19.01)	(681.0)	(31.51)	(15.03)
Lower past performance rating		4.314***	4.383***	3.427***	3.865***	2.303***	2.123***	7.953***	3.592**	2.094*	0.474	0.527	3.057***
		(0.628)	(0.850)	(0.788)	(0.474)	(0.268)	(0.296)	(5.751)	(2.189)	(0.904)	(0.440)	(1.135)	(1.144)
Higher past performance rating		2.536***	1.774***	1.681**	2.884***	2.173***	1.793***	22.35***	1.108	2.768**	0.476	0.440	2.756***
		(0.342)	(0.377)	(0.351)	(0.343)	(0.216)	(0.215)	(16.57)	(0.893)	(1.151)	(0.371)	(1.294)	(0.910)
Small (SBA definition)		0.625***	0.248***	0.609**	0.887	1.230	0.510***	0.739	1.171	1.938	0.797	0.992	0.0828***
		(0.0952)	(0.0533)	(0.150)	(0.123)	(0.156)	(0.0645)	(0.336)	(0.692)	(0.976)	(0.598)	(1.267)	(0.0266)
Constant		0.0114***	0.0117***	0.00959***	0.00519***	0.00296***	0.0111***	0.0303***	0.000625***	0.000721***	0.00272***	0.0276*	0.00982***
		(0.00396)	(0.00607)	(0.00556)	(0.00173)	(0.000915)	(0.00300)	(0.0285)	(0.000890)	(0.00104)	(0.00586)	(0.0520)	(0.00738)
Observations	5,714	2,868	2,379	7,779	14,786	11,506	820	1,365	1,154	623	101	1,898	

standard errors in parentheses (\*\*\*) p

NAICS Code	5241	5242	5251	5259	5311	5312	5313	5321	5322	5323	5324	5331
Woman-owned	0.307*** (0.126)	0.333*** (0.135)	1.147 (1.054)	0.372 (0.732)	0.947 (0.145)	1.093 (0.361)	0.906 (0.0750)	0.540*** (0.115)	0.860 (0.127)	0.514 (0.218)	0.622*** (0.0592)	1.163 (2.347)
SDB not 8(a)	0.951 (0.284)	0.669 (0.273)	0.772 (0.691)	2.615 (3.079)	1.072 (0.131)	0.931 (0.338)	0.608*** (0.0539)	1.171 (0.227)	0.914 (0.139)	0.727 (0.283)	0.895 (0.0820)	0.840 (2.129)
8(a) certified	1.746 (1.505)	1.148 (0.925)	9.343 (12.83)	105.9 (301.9)	1.757 (0.619)	4.155 (4.358)	0.377** (0.150)	1.106 (0.495)	0.942 (0.487)	0.447 (0.764)	0.893 (0.192)	3.809 (12.86)
Minority-owned	0.422* (0.189)	0.385** (0.186)	0.331 (0.304)	0.131 (0.195)	0.439*** (0.0873)	0.108*** (0.0800)	0.472*** (0.0552)	0.619** (0.147)	0.484*** (0.102)	0.763 (0.474)	0.582*** (0.0669)	1.183 (3.809)
HubZone certified	3.231 (3.948)	0.886 (1.307)	1.635 (2.691)	9.224 (17.07)	0.946 (0.408)	1.295 (1.908)	0.901 (0.331)	0.960 (0.362)	1.318 (0.515)	1.347 (1.244)	0.613** (0.139)	
Service-disabled veteran	0.275* (0.202)	0.368 (0.254)	1.399 (1.610)	3.914 (6.224)	0.750 (0.233)	0.974 (0.656)	0.374*** (0.0844)	0.576 (0.197)	0.370*** (0.114)	1.343 (0.863)	0.600*** (0.0942)	1.377 (2.677)
Other veteran	0.260 (0.226)	0.345 (0.293)	0.0799 (0.134)	8.867* (11.10)	0.834 (0.190)	1.384 (0.795)	1.188 (0.137)	0.990 (0.259)	0.538** (0.135)	0.531 (0.373)	0.868 (0.110)	0.638 (1.976)
log age	1.015 (0.122)	1.147 (0.177)	0.505 (0.215)	1.573 (0.600)	1.243*** (0.0594)	1.107 (0.182)	1.390*** (0.0564)	1.057 (0.0800)	1.116 (0.0811)	0.999 (0.168)	1.079* (0.0424)	0.741 (0.308)
log employees	0.890* (0.0563)	1.030 (0.0875)	0.806 (0.148)	1.330** (0.178)	1.120*** (0.0221)	1.158* (0.0960)	0.957* (0.0227)	1.086* (0.0480)	1.099** (0.0407)	1.616*** (0.186)	1.136*** (0.0248)	0.878 (0.257)
log sales revenue	1.041 (0.0373)	1.007 (0.0560)	1.096 (0.142)	0.885 (0.0678)	1.000 (0.0126)	1.002 (0.0466)	0.981* (0.00967)	1.004 (0.0280)	0.978 (0.0203)	0.897** (0.0450)	0.995 (0.0133)	1.088 (0.175)
Sole proprietor	1.941 (1.035)	1.033 (0.583)	0.729 (1.248)	0.794 (1.308)	1.182 (0.192)	1.954 (1.040)	3.054*** (0.300)	0.445** (0.179)	1.196 (0.317)	0.809 (0.625)	0.899 (0.149)	1.541 (3.029)
Partnership	2.675** (1.200)	1.385 (0.649)	0.736 (0.875)	2.067 (2.326)	0.930 (0.105)	1.735 (0.815)	0.496*** (0.0561)	1.851** (0.460)	1.148 (0.267)	1.439 (0.773)	1.073 (0.136)	0.432 (0.881)
Corporation for profit	1.918* (0.691)	1.101 (0.405)	1.720 (1.616)	0.686 (0.627)	1.366*** (0.153)	1.339 (0.574)	1.525*** (0.141)	1.149 (0.214)	1.016 (0.175)	0.933 (0.386)	1.087 (0.0983)	0.806 (0.678)
Corporation, nonprofit	0.515 (0.367)	0.780 (0.624)	0.0695* (0.112)	1.354 (1.377)	0.673** (0.125)	1.229 (1.111)	0.609** (0.140)	1.822 (0.760)	0.341** (0.180)	0.885 (0.881)	1.280 (0.290)	0.157 (0.493)
Government non-classified (omitted: no security clearance repor	1.323 (0.513)	0.556 (0.249)	0.578 (0.806)	0.345 (0.520)	0.727 (0.179)	0.149 (0.214)	0.610*** (0.108)	0.553* (0.169)	0.986 (0.231)	0.582 (0.370)	0.725*** (0.0885)	0.682 (1.308)
Government confidential	0.370 (0.559)	2.934** (1.372)	0.232 (0.453)	0.124 (0.275)	0.737 (0.379)	0.685 (1.010)	0.530* (0.200)	2.380 (1.461)	0.953 (0.624)	2.526 (4.079)	1.875*** (0.444)	2.581 (7.206)
Government secret	1.690 (1.805)	0.153 (0.223)	24.41* (45.46)	1.068 (2.326)	0.459 (0.238)	0.525 (0.761)	0.797 (0.278)	0.604 (0.268)	1.166 (0.637)	0.536 (0.858)	0.528*** (0.119)	0.105 (0.286)
Government top-secret	0.511 (0.475)	0.156*** (0.107)	1.760 (3.027)	0.841 (1.371)	0.804 (0.270)	1.343 (0.992)	0.761 (0.250)	0.178** (0.155)	0.0811*** (0.0468)	0.346 (0.536)	0.533*** (0.112)	0.0297 (0.0755)
Share of FY 2013-2014 in sample	14.01*** (6.501)	24.73*** (15.60)	106.6** (223.4)	3.645 (4.005)	19.56*** (3.401)	8.622*** (4.528)	18.28*** (2.194)	13.64*** (4.059)	11.87*** (2.860)	13.30*** (7.609)	13.99*** (2.158)	11.66 (25.88)
Lower past performance rating	2.365** (0.990)	3.348*** (1.266)	3.655 (2.895)	3.580 (3.814)	3.252*** (0.638)	2.141 (1.234)	2.344*** (0.425)	2.946*** (0.655)	5.035*** (1.112)	3.523* (2.435)	2.712*** (0.297)	7.151 (10.85)
Higher past performance rating	2.771** (1.237)	3.100*** (1.041)	0.634 (0.685)	6.668* (7.049)	4.878*** (0.876)	1.678 (1.028)	1.596** (0.346)	2.344*** (0.558)	2.414*** (0.549)	4.106*** (2.026)	2.261*** (0.249)	19.76 (56.58)
Small (SBA definition)	1.534 (0.538)	1.511 (0.637)	0.0942*** (0.0835)	0.158* (0.156)	0.644*** (0.0699)	0.934 (0.441)	2.409*** (0.333)	1.391 (0.309)	0.977 (0.180)	3.646** (1.883)	1.403*** (0.147)	0.0755* (0.101)
Constant	0.00621*** (0.00489)	0.00193*** (0.00199)	0.0187 (0.0495)	0.0139*** (0.0205)	0.00162*** (0.000436)	0.00191*** (0.00185)	0.00321*** (0.000753)	0.00934*** (0.00506)	0.0210*** (0.00877)	0.00600*** (0.00623)	0.00785*** (0.00210)	0.0742 (0.188)
Observations	1,186	2,150	360	675	25,350	4,030	13,992	2,187	2,977	737	10,405	179

standard errors in parentheses (\*\*\*) p

NAICS Code	5411	5412	5413	5414	5415	5416	5417	5418	5419	5511	5611	5612
Woman-owned	0.600*** (0.0489)	0.543*** (0.0974)	0.837*** (0.0357)	0.815* (0.0875)	0.718*** (0.0285)	0.814*** (0.0284)	0.627*** (0.0304)	0.452*** (0.0495)	0.733*** (0.0309)	1.693 (2.710)	0.810* (0.0901)	0.762*** (0.0589)
SDB not 8(a)	0.671*** (0.0619)	0.728 (0.163)	0.817*** (0.0359)	0.756** (0.0931)	0.783*** (0.0349)	0.788*** (0.0329)	0.663*** (0.0360)	0.718*** (0.0911)	0.842*** (0.0420)	1.288 (2.319)	0.998 (0.152)	0.929 (0.0868)
8(a) certified	0.739 (0.200)	2.170*** (0.588)	1.366*** (0.100)	1.757*** (0.375)	2.119*** (0.139)	3.369*** (0.213)	0.353*** (0.0470)	1.571* (0.399)	1.941*** (0.172)	6.154 (15.80)	4.465*** (0.760)	2.890*** (0.335)
Minority-owned	0.468*** (0.0534)	0.480*** (0.103)	0.640*** (0.0308)	0.619*** (0.0902)	0.657*** (0.0299)	0.583*** (0.0262)	0.633*** (0.0360)	0.771* (0.106)	0.525*** (0.0291)	0.675 (1.400)	0.554*** (0.0790)	0.453*** (0.0422)
HubZone certified	0.416* (0.196)	0.505 (0.282)	0.765*** (0.0779)	1.066 (0.309)	1.282*** (0.122)	0.951 (0.0960)	0.571*** (0.100)	1.195 (0.441)	0.790 (0.119)	1.875 (5.012)	1.124 (0.241)	0.843 (0.125)
Service-disabled veteran	0.309*** (0.0757)	0.735 (0.184)	1.042 (0.0543)	0.797 (0.148)	0.667*** (0.0379)	0.651*** (0.0355)	0.193*** (0.0211)	0.415*** (0.116)	0.411*** (0.0349)	2.010 (3.664)	0.734** (0.101)	0.630*** (0.0588)
Other veteran	0.846 (0.113)	0.588* (0.188)	1.034 (0.0577)	0.593** (0.135)	0.743** (0.0445)	0.695*** (0.0400)	0.465*** (0.0386)	0.889 (0.171)	0.649*** (0.0476)	2.093 (3.868)	0.649** (0.137)	0.788** (0.0947)
log age	1.074* (0.0412)	0.994 (0.0999)	1.144*** (0.0230)	1.084 (0.0716)	1.044** (0.0229)	1.007 (0.0192)	0.868*** (0.0191)	1.168*** (0.0682)	1.057** (0.0234)	1.164 (0.734)	1.087 (0.0843)	1.012 (0.0433)
log employees	0.960* (0.0239)	1.113** (0.0586)	1.040*** (0.0101)	0.858*** (0.0383)	1.013 (0.0108)	0.972*** (0.0102)	0.979** (0.00985)	1.055* (0.0334)	1.035*** (0.0122)	1.266 (0.356)	1.155*** (0.0399)	1.002 (0.0216)
log sales revenue	1.048*** (0.0138)	1.041 (0.0381)	0.989 (0.00656)	1.036 (0.0235)	1.047*** (0.00737)	1.002 (0.00530)	1.020*** (0.00590)	0.989 (0.0158)	0.980*** (0.00591)	0.921 (0.168)	0.991 (0.0180)	0.954*** (0.0102)
Sole proprietor	1.555*** (0.180)	2.093*** (0.537)	1.207*** (0.0809)	1.485** (0.247)	1.266*** (0.0898)	2.354*** (0.116)	1.247*** (0.0853)	1.440** (0.254)	2.263*** (0.139)	2.923 (5.551)	2.808*** (0.486)	4.990*** (0.543)
Omitted: other forms of organization	0.887 (0.110)	0.894 (0.202)	0.975 (0.0590)	0.774 (0.147)	1.131** (0.0668)	0.927 (0.0530)	1.120 (0.0783)	1.990*** (0.329)	0.880* (0.0667)	0.786 (1.416)	0.905 (0.177)	0.871 (0.106)
Corporation for profit	1.244** (0.132)	0.715* (0.134)	1.089** (0.0465)	0.928 (0.127)	1.220*** (0.0536)	0.936 (0.0396)	1.133** (0.0612)	1.185 (0.165)	0.995 (0.0545)	0.932 (1.507)	1.194 (0.159)	0.966 (0.0821)
Corporation, nonprofit	0.203*** (0.0490)	0.608 (0.303)	2.537*** (0.227)	1.274 (0.505)	1.650*** (0.185)	2.299*** (0.175)	1.226** (0.101)	1.451 (0.335)	1.943*** (0.174)	3.580 (6.335)	3.411*** (0.945)	0.814 (0.214)
Government non-classified (omitted: no security clearance repor	0.688*** (0.0957)	0.611* (0.154)	0.827*** (0.0397)	0.891 (0.127)	0.885*** (0.0387)	0.807*** (0.0366)	1.164*** (0.0575)	0.777 (0.131)	0.669*** (0.0389)	1.634 (2.483)	0.899 (0.129)	0.818** (0.0770)
Government confidential	0.533** (0.133)	0.752 (0.323)	0.782** (0.0980)	0.618 (0.270)	0.860 (0.0955)	1.015 (0.108)	0.898 (0.134)	0.306* (0.199)	0.676*** (0.0952)	4.229 (7.821)	1.077 (0.310)	1.259 (0.247)
Government secret	0.504*** (0.117)	0.763 (0.198)	1.264*** (0.0584)	0.683 (0.161)	0.838** (0.0418)	0.989 (0.0525)	1.385*** (0.0760)	0.326** (0.128)	0.590*** (0.0450)	3.532 (7.400)	1.072 (0.145)	0.863 (0.0847)
Government top-secret	0.257*** (0.0576)	0.853 (0.168)	1.119*** (0.0467)	0.489*** (0.120)	0.849*** (0.0343)	0.840*** (0.0396)	0.715*** (0.0371)	0.115*** (0.0398)	0.453*** (0.0287)	1.381 (2.825)	0.801* (0.108)	0.873 (0.0756)
Share of FY 2013-2014 in sample	17.49*** (2.163)	18.16*** (7.072)	23.01*** (2.079)	22.21*** (5.228)	35.92*** (3.398)	11.27*** (0.763)	15.03*** (1.305)	18.58*** (3.456)	9.671*** (0.735)	12.58 (33.96)	9.231*** (2.795)	15.39*** (3.019)
Lower past performance rating	0.973 (0.165)	1.740** (0.409)	2.991*** (0.142)	1.928*** (0.354)	2.809*** (0.140)	2.580*** (0.142)	2.264*** (0.153)	0.908 (0.212)	2.294*** (0.156)	5.923 (8.812)	2.561*** (0.389)	2.426*** (0.234)
Higher past performance rating	2.147*** (0.304)	2.609*** (0.487)	3.539*** (0.131)	1.776*** (0.268)	2.455*** (0.101)	4.139*** (0.168)	2.913*** (0.138)	0.921 (0.171)	2.548*** (0.137)	2.063 (3.943)	2.289*** (0.304)	2.915*** (0.229)
Small (SBA definition)	0.972 (0.107)	1.173 (0.305)	1.414*** (0.0524)	1.789*** (0.366)	1.294*** (0.0659)	0.980 (0.0550)	1.052 (0.0421)	0.385*** (0.0600)	0.825*** (0.0536)	0.812 (1.148)	2.666*** (0.512)	1.104 (0.138)
Constant	0.0198*** (0.00485)	0.00237*** (0.00148)	0.00292*** (0.000353)	0.00109*** (0.000449)	0.00189*** (0.000251)	0.00876*** (0.000887)	0.0208*** (0.00219)	0.0127*** (0.00405)	0.0238*** (0.00283)	0.000808** (0.00274)	0.00109*** (0.000434)	0.0104*** (0.00262)
Observations	7,265	6,052	64,159	20,532	55,479	89,197	30,958	11,133	41,412	797	12,414	17,490

standard errors in parentheses (\*\*\*) p

	NAICS Code	5613	5614	5615	5616	5617	5619	5621	5622	5629	6111	6112	6113
Woman-owned		1.072 (0.104)	0.940 (0.0609)	0.506** (0.142)	0.774*** (0.0503)	0.794*** (0.0358)	0.623*** (0.0528)	0.861 (0.0867)	0.701** (0.104)	0.837** (0.0588)	0.732 (0.425)	0.346 (0.330)	0.237*** (0.0854)
SDB not 8(a)		0.885 (0.109)	0.717*** (0.0554)	1.372 (0.426)	0.987 (0.0637)	1.020 (0.0477)	0.680*** (0.0685)	0.935 (0.0950)	0.846 (0.127)	0.876* (0.0659)	0.298 (0.233)	1.389 (1.116)	0.533* (0.173)
8(a) certified		2.185*** (0.356)	1.189 (0.190)	2.314 (1.386)	1.471*** (0.176)	1.885*** (0.162)	1.756*** (0.278)	0.769 (0.151)	1.392 (0.338)	2.159*** (0.244)	0.474 (0.756)	1.531 (2.782)	0.871 (0.574)
Minority-owned		0.493*** (0.0601)	0.411*** (0.0368)	0.557* (0.184)	0.466*** (0.0340)	0.505*** (0.0260)	0.503*** (0.0547)	0.426*** (0.0514)	0.483*** (0.0814)	0.632*** (0.0525)	1.067 (0.515)	0.567 (0.421)	0.736 (0.157)
HubZone certified		1.134 (0.262)	0.721 (0.178)	0.796 (0.691)	0.558*** (0.110)	0.842* (0.0847)	0.683* (0.156)	0.581** (0.125)	0.712 (0.188)	0.649*** (0.0931)	4.813 (14.06)	14.79 (40.30)	0.319 (0.500)
Service-disabled veteran		0.806 (0.118)	0.512*** (0.0668)	0.786 (0.379)	0.378*** (0.0353)	0.617*** (0.0435)	0.475*** (0.0669)	0.445*** (0.0755)	0.474*** (0.106)	0.569*** (0.0605)	4.213 (4.340)	0.898 (1.383)	1.106 (0.399)
Other veteran		0.863 (0.155)	0.769** (0.0974)	0.788 (0.372)	0.700*** (0.0542)	0.788** (0.0595)	0.504*** (0.0799)	0.756* (0.127)	1.237 (0.253)	0.941 (0.112)	0.309 (0.454)	5.677* (5.441)	0.746 (0.272)
log age		1.160** (0.0796)	1.209*** (0.0468)	1.224 (0.169)	1.125*** (0.0351)	1.106*** (0.0275)	1.173*** (0.0512)	1.132** (0.0587)	1.369*** (0.104)	1.053 (0.0402)	1.548** (0.334)	1.786 (0.728)	1.152* (0.0835)
log employees		1.147*** (0.0343)	1.018 (0.0204)	0.963 (0.0581)	1.013 (0.0165)	1.063*** (0.0159)	1.015 (0.0235)	1.037 (0.0271)	0.857*** (0.0347)	0.889*** (0.0169)	1.182 (0.148)	0.991 (0.212)	1.146*** (0.0415)
log sales revenue		0.980 (0.0168)	1.003 (0.0104)	1.012 (0.0392)	0.956*** (0.00745)	0.985** (0.00659)	1.004 (0.0127)	1.006 (0.0154)	1.052* (0.0281)	1.017 (0.0118)	0.962 (0.0492)	1.316 (0.344)	0.964** (0.0177)
Sole proprietor		2.481*** (0.414)	1.381*** (0.143)	0.336 (0.236)	1.045 (0.0956)	2.340*** (0.155)	1.900*** (0.241)	1.319* (0.211)	0.728 (0.214)	1.287** (0.149)	1.931 (1.782)	2.478 (2.659)	1.988** (0.546)
Omitted: other forms of organization		0.735* (0.132)	1.048 (0.128)	1.655 (0.642)	0.882 (0.0909)	1.050 (0.0824)	0.931 (0.131)	1.114 (0.164)	0.995 (0.218)	0.868 (0.0943)	1.830 (1.863)	0.699 (0.819)	0.380 (0.231)
Partnership		0.981 (0.115)	1.060 (0.0967)	1.249 (0.415)	1.155* (0.0857)	1.085 (0.0661)	1.002 (0.102)	1.029 (0.114)	1.073 (0.163)	1.000 (0.0778)	2.897 (1.884)	0.239 (0.215)	0.662* (0.148)
Corporation for profit		0.357*** (0.101)	0.571*** (0.119)	0.652 (0.378)	2.228*** (0.406)	0.575*** (0.0947)	1.055 (0.164)	1.136 (0.335)	1.766 (0.727)	1.420 (0.307)	1.103 (0.635)	2.062 (1.533)	0.952 (0.177)
Corporation, nonprofit		0.695** (0.0993)	0.706*** (0.0686)	0.876 (0.381)	0.872* (0.0690)	0.850** (0.0574)	0.864 (0.0973)	0.879 (0.123)	0.784 (0.142)	0.806** (0.0768)	0.920 (0.637)	0.928 (0.857)	1.431 (0.344)
(omitted: no security clearance repor Government confidential		0.372** (0.143)	0.938 (0.148)	1.692 (1.021)	1.486*** (0.217)	0.923 (0.155)	1.128 (0.242)	1.061 (0.328)	2.218*** (0.656)	1.337 (0.260)	0.926 (1.464)	5.185 (8.961)	0.851 (0.683)
Government secret		0.610*** (0.0900)	0.695*** (0.0960)	0.716 (0.346)	1.135 (0.0963)	0.561*** (0.0720)	0.677*** (0.0996)	0.764 (0.183)	1.020 (0.271)	0.682*** (0.100)	0.780 (1.169)	1.861 (2.838)	0.957 (0.348)
Government top-secret		0.342*** (0.0533)	0.590*** (0.0708)	0.473 (0.279)	0.741*** (0.0522)	0.555*** (0.0810)	0.571*** (0.0808)	0.183*** (0.0601)	0.231*** (0.0883)	0.392*** (0.0694)	0.638 (1.081)	0.780 (1.410)	0.500** (0.151)
Share of FY 2013-2014 in sample		16.47*** (3.952)	8.107*** (1.015)	8.846*** (3.922)	9.126*** (0.979)	25.12*** (2.080)	11.43*** (1.862)	14.80*** (2.624)	13.77*** (3.868)	17.26*** (2.371)	24.23*** (17.62)	1.374 (1.160)	9.450*** (2.293)
Lower past performance rating		3.824*** (0.477)	1.708*** (0.203)	1.154 (0.496)	2.414*** (0.217)	1.821*** (0.144)	1.601*** (0.198)	2.018*** (0.269)	2.223*** (0.364)	1.434*** (0.144)	1.070 (1.594)	6.558* (7.255)	9.406*** (2.325)
Higher past performance rating		2.785*** (0.349)	1.329*** (0.139)	1.242 (0.400)	1.887*** (0.159)	1.762*** (0.126)	1.700*** (0.173)	1.859*** (0.213)	2.104*** (0.294)	1.871*** (0.146)	2.139 (1.510)	8.447** (7.106)	6.014*** (1.133)
Small (SBA definition)		0.775 (0.123)	1.069 (0.121)	0.507** (0.170)	1.341*** (0.134)	2.405*** (0.232)	0.812* (0.0937)	1.331* (0.206)	1.514* (0.327)	1.649*** (0.109)	1.818 (1.359)	5.214 (5.579)	0.742 (0.180)
Constant		0.00452*** (0.00155)	0.0133*** (0.00283)	0.0132*** (0.00959)	0.0298*** (0.00510)	0.00459*** (0.000705)	0.0129*** (0.00318)	0.0106*** (0.00330)	0.00315*** (0.00151)	0.00849*** (0.00169)	0.000352*** (0.000370)	4.72e-05*** (0.000169)	0.0139*** (0.00533)
Observations		11,905	16,926	1,820	17,225	28,508	12,528	6,832	5,092	16,365	2,105	660	3,309

standard errors in parentheses (\*\*\*) p

NAICS Code	6114	6115	6116	6117	6211	6212	6213	6214	6215	6216	6219	6221
Woman-owned	0.771*** (0.0422)	0.782 (0.131)	0.640*** (0.0664)	0.450*** (0.0304)	0.754*** (0.0793)	0.645 (0.188)	0.840* (0.0776)	0.548*** (0.106)	0.568*** (0.0890)	0.800 (0.131)	0.681*** (0.0986)	0.535*** (0.0866)
SDB not 8(a)	0.716*** (0.0476)	0.788 (0.141)	0.871 (0.0981)	0.738*** (0.0587)	0.866 (0.0981)	1.386 (0.407)	0.871 (0.0953)	0.791 (0.171)	0.805 (0.121)	0.740 (0.136)	0.599*** (0.102)	0.832 (0.139)
8(a) certified	1.242* (0.157)	1.199 (0.457)	0.951 (0.257)	1.351* (0.234)	1.901*** (0.419)	1.351 (0.828)	2.753*** (0.566)	0.303* (0.209)	0.334*** (0.137)	0.225* (0.199)	1.131 (0.362)	0.850 (0.267)
Minority-owned	0.432*** (0.0313)	0.339*** (0.0698)	0.401*** (0.0526)	0.425*** (0.0347)	0.532*** (0.0647)	0.322*** (0.120)	0.635*** (0.0775)	0.629** (0.131)	0.752* (0.120)	0.648** (0.127)	0.484*** (0.0867)	0.489*** (0.0896)
HubZone certified	0.509*** (0.117)	0.543 (0.359)	0.937 (0.331)	0.532** (0.169)	1.615 (0.756)	0.917 (1.419)	0.562 (0.298)	0.334 (0.519)	0.959 (0.506)	2.565 (1.650)	0.536 (0.364)	0.265 (0.229)
Service-disabled veteran	0.592*** (0.0541)	0.988 (0.198)	0.907 (0.117)	0.433*** (0.0514)	0.360*** (0.0774)	0.124** (0.105)	0.745* (0.124)	0.239*** (0.105)	0.444*** (0.109)	0.609 (0.210)	0.445*** (0.115)	0.399*** (0.0982)
Other veteran	0.937 (0.0758)	0.948 (0.181)	0.962 (0.128)	0.877 (0.0858)	0.603*** (0.0875)	0.645 (0.252)	0.806 (0.129)	1.107 (0.306)	0.678* (0.148)	0.497** (0.167)	0.881 (0.193)	0.841 (0.191)
log age	1.299*** (0.0403)	1.678*** (0.139)	0.986 (0.0521)	1.095*** (0.0355)	0.817*** (0.0348)	0.951 (0.131)	1.057 (0.0547)	1.519*** (0.138)	1.359*** (0.0908)	1.273*** (0.113)	1.408*** (0.0995)	1.061 (0.0602)
log employees	0.980 (0.0163)	0.985 (0.0365)	1.052* (0.0306)	1.084*** (0.0200)	1.077*** (0.0239)	0.852 (0.0834)	1.046* (0.0288)	0.815*** (0.0277)	1.108*** (0.0339)	0.996 (0.0373)	1.036 (0.0323)	0.958 (0.0268)
log sales revenue	1.054*** (0.0105)	1.030 (0.0245)	1.035** (0.0158)	0.978*** (0.00802)	1.011 (0.0117)	1.070 (0.0465)	1.024 (0.0153)	1.001 (0.0228)	1.010 (0.0172)	1.037 (0.0253)	1.006 (0.0182)	1.013 (0.0158)
Sole proprietor	1.837*** (0.147)	1.127 (0.266)	1.767*** (0.255)	4.571*** (0.445)	1.543*** (0.209)	1.632 (0.695)	1.358** (0.190)	2.290*** (0.604)	2.046*** (0.441)	2.899*** (0.858)	1.354 (0.342)	1.324 (0.306)
Omitted: other forms of organization	1.159 (0.105)	1.697** (0.375)	1.039 (0.175)	0.849 (0.111)	0.781 (0.122)	1.238 (0.628)	0.946 (0.158)	1.627* (0.468)	1.118 (0.216)	1.345 (0.378)	0.911 (0.209)	1.085 (0.229)
Partnership	0.986 (0.0678)	0.895 (0.151)	1.412*** (0.176)	0.875 (0.0819)	1.202 (0.144)	1.421 (0.562)	1.070 (0.135)	0.807 (0.183)	0.878 (0.132)	1.433 (0.316)	1.166 (0.191)	1.190 (0.182)
Corporation, nonprofit	1.488*** (0.160)	1.051 (0.264)	0.725* (0.139)	0.556*** (0.0678)	0.674** (0.110)	0.770 (0.546)	0.339*** (0.0734)	0.441*** (0.119)	0.572*** (0.120)	0.965 (0.296)	0.959 (0.207)	0.421*** (0.0744)
Government non-classified (omitted: no security clearance repor	0.753*** (0.0544)	0.684* (0.146)	0.692*** (0.0987)	1.025 (0.0893)	1.454*** (0.174)	0.433 (0.248)	0.724** (0.118)	0.958 (0.267)	0.832 (0.176)	1.234 (0.375)	0.874 (0.179)	0.546*** (0.121)
Government confidential	0.700* (0.139)	1.237 (0.500)	0.626 (0.247)	0.941 (0.231)	0.604* (0.177)	1.127 (0.996)	0.779 (0.228)	0.311 (0.281)	1.767 (0.896)	2.341* (1.158)	0.373* (0.195)	0.427 (0.256)
Government secret	0.661*** (0.0630)	0.622** (0.129)	0.785 (0.127)	0.716** (0.0930)	0.680 (0.174)	1.034 (0.627)	0.877 (0.195)	0.535 (0.257)	0.417** (0.165)	0.687 (0.481)	0.583* (0.188)	0.482** (0.158)
Government top-secret	0.456*** (0.0382)	0.295*** (0.0583)	0.465*** (0.0715)	0.371*** (0.0451)	0.750 (0.196)	0.945 (0.673)	0.405*** (0.106)	0.937 (0.435)	0.398** (0.148)	0.234 (0.341)	0.253*** (0.0980)	0.574* (0.181)
Share of FY 2013-2014 in sample	13.17*** (1.376)	12.16*** (3.368)	11.89*** (2.064)	13.31*** (1.473)	10.40*** (1.450)	14.81*** (6.824)	13.76*** (2.366)	8.739*** (2.314)	10.16*** (2.041)	18.48*** (5.080)	10.14*** (2.184)	12.28*** (2.324)
Lower past performance rating	1.720*** (0.156)	3.439*** (0.691)	2.093*** (0.374)	2.306*** (0.298)	1.965*** (0.197)	1.759 (0.738)	1.584*** (0.209)	7.655*** (1.337)	2.295*** (0.369)	1.612* (0.444)	2.516*** (0.376)	3.377*** (0.487)
Higher past performance rating	1.739*** (0.129)	3.322*** (0.533)	2.325*** (0.333)	2.368*** (0.245)	1.339** (0.169)	2.858*** (1.057)	2.063*** (0.272)	7.732*** (1.576)	3.004*** (0.526)	1.545 (0.545)	2.453*** (0.396)	1.893*** (0.318)
Small (SBA definition)	0.947 (0.0820)	1.257 (0.181)	1.041 (0.160)	0.801** (0.0803)	1.010 (0.126)	2.741** (1.155)	1.345* (0.209)	0.965 (0.183)	0.714** (0.115)	1.667** (0.374)	0.986 (0.164)	0.460*** (0.0740)
Constant	0.00431*** (0.000761)	0.00160*** (0.000667)	0.00719*** (0.00198)	0.0243*** (0.00396)	0.0333*** (0.00791)	0.00260*** (0.00203)	0.00783*** (0.00228)	0.00767*** (0.00333)	0.0192*** (0.00641)	0.00202*** (0.00100)	0.0104*** (0.00377)	0.0762*** (0.0239)
Observations	30,472	6,716	11,436	16,222	7,376	1,599	7,846	9,518	2,983	3,844	3,954	3,074
standard errors in parentheses (***) p												

	NAICS Code	6222	6223	6231	6232	6233	6239	6241	6242	6243	6244	7111	7112
Woman-owned		0.472 (0.342)	0.782 (0.735)	0.511*** (0.0998)	1.958* (0.780)	1.935 (2.156)	1.771 (0.906)	0.836 (0.119)	0.519** (0.140)	0.750* (0.124)	1.265 (0.386)	1.026 (0.175)	0.216*** (0.128)
SDB not 8(a)		0.223 (0.260)	0.421 (0.590)	1.719*** (0.249)	1.467 (0.775)	4.998 (7.386)	4.227** (2.667)	1.236 (0.204)	0.639 (0.205)	0.709* (0.139)	1.115 (0.368)	0.697 (0.155)	0.783 (0.339)
8(a) certified		0.424 (0.602)	3.863 (7.670)	0.231 (0.333)	0.430 (0.742)	17.50 (43.29)	1.241 (2.132)	2.266** (0.815)	0.522 (0.372)	0.831 (0.590)	0.144 (0.224)	0.229 (0.232)	0.119 (0.232)
Minority-owned		1.828 (1.353)	0.119 (0.170)	0.293*** (0.0709)	0.391** (0.176)	2.082 (2.651)	0.0780*** (0.0662)	0.389*** (0.0669)	0.584** (0.152)	0.412*** (0.0948)	0.496** (0.161)	0.605** (0.125)	0.741 (0.283)
HubZone certified		35.93* (70.18)	22.32 (42.96)	0.826 (1.309)	4.439 (7.610)	3.558 (9.892)	3.944 (7.652)	0.957 (0.660)	0.415 (0.357)	2.740* (1.677)	8.399* (10.16)	2.178 (2.302)	0.572 (1.017)
Service-disabled veteran		0.0498 (0.128)	0.195 (0.330)	0.184** (0.122)	1.763 (1.221)	0.297 (0.631)	0.309 (0.447)	0.495** (0.149)	0.360** (0.185)	0.444** (0.149)	0.651 (0.484)	0.358* (0.189)	0.773 (0.465)
Other veteran		4.153 (3.719)	0.593 (1.062)	0.526 (0.229)	4.758*** (2.503)	4.640 (4.960)	1.781 (1.352)	0.568* (0.173)	1.040 (0.379)	0.705 (0.228)	0.453 (0.326)	0.836 (0.229)	0.465 (0.257)
log age		3.403*** (1.576)	0.776 (0.213)	1.150*** (0.0538)	1.290 (0.222)	0.950 (0.597)	1.582* (0.397)	1.031 (0.0738)	1.057 (0.106)	0.576*** (0.0511)	1.134 (0.208)	0.871 (0.0786)	1.278 (0.205)
log employees		0.565** (0.132)	0.926 (0.135)	0.985 (0.0250)	0.906 (0.0754)	1.276 (0.260)	1.085 (0.141)	1.062 (0.0393)	1.030 (0.0511)	1.004 (0.0637)	0.859 (0.0875)	0.986 (0.0683)	1.168** (0.0912)
log sales revenue		1.283 (0.203)	1.105 (0.113)	0.986 (0.0167)	1.069 (0.0597)	1.043 (0.126)	1.004 (0.0938)	1.050** (0.0225)	1.049 (0.0337)	1.012 (0.0223)	1.000 (0.0434)	1.007 (0.0242)	0.965 (0.0296)
Sole proprietor		0.691 (0.797)	21.23** (27.31)	0.663 (0.247)	5.022** (3.435)	0.487 (0.865)	7.689** (7.454)	1.880*** (0.433)	1.061 (0.494)	2.270*** (0.634)	2.247* (1.076)	2.811*** (0.971)	1.880 (0.940)
Omitted: other forms of organization		2.338 (2.234)	0.132 (0.230)	0.923 (0.113)	3.711* (2.523)	0.248 (0.394)	0.256 (0.383)	1.260 (0.318)	0.483 (0.234)	1.394 (0.511)	2.154 (1.161)	1.012 (0.479)	1.434 (0.562)
Corporation for profit		0.507 (0.380)	1.968 (2.068)	1.387*** (0.152)	1.602 (0.831)	0.860 (1.208)	1.569 (0.935)	1.185 (0.231)	0.961 (0.294)	1.614* (0.446)	1.887 (0.828)	1.182 (0.448)	1.166 (0.439)
Corporation, nonprofit		0.134** (0.120)	0.436 (0.456)	0.802 (0.128)	1.111 (0.610)	0.695 (1.570)	0.780 (0.505)	0.678 (0.165)	1.600 (0.560)	0.217*** (0.0902)	0.146*** (0.0916)	0.213*** (0.112)	0.279*** (0.136)
Government non-classified (omitted: no security clearance repor		5.768* (5.264)	1.412 (2.436)	1.136 (0.344)	1.921 (0.987)	2.131 (2.976)	2.512 (1.699)	0.681 (0.187)	1.306 (0.408)	1.229 (0.312)	1.814 (0.938)	0.959 (0.305)	0.502 (0.321)
Government confidential		3.139 (5.583)	7.266 (13.66)	0.489 (0.438)	0.731 (1.061)	9.207 (16.40)	2.542 (4.030)	0.712 (0.357)	0.573 (0.490)	0.936 (0.393)	0.432 (0.704)	0.412 (0.627)	2.356 (2.407)
Government secret		1.123 (1.192)	1.506 (2.759)	0.162 (0.237)	0.0989 (0.186)	13.53* (20.50)	0.338 (0.420)	0.515 (0.222)	0.625 (0.421)	1.442 (0.705)	1.466 (1.556)	1.587 (1.113)	2.155 (1.726)
Government top-secret		17.25** (19.83)	3.443 (5.037)	0.132 (0.191)	1.005 (1.574)	1.119 (2.656)	1.297 (2.073)	1.055 (0.359)	0.116** (0.0983)	1.370 (0.698)	1.550 (1.535)	1.493 (1.155)	0.113** (0.116)
Share of FY 2013-2014 in sample		3.175 (3.030)	11.03** (10.71)	2.826*** (0.388)	5.703*** (2.399)	2.904 (4.625)	99.66*** (116.0)	9.158*** (1.960)	4.409*** (1.217)	4.501*** (1.396)	176.2*** (107.8)	33.13*** (10.52)	23.61*** (11.50)
Lower past performance rating		2.493 (1.768)	0.344 (0.349)	1.437*** (0.187)	8.391*** (2.256)	0.265 (0.559)	13.01*** (4.420)	2.006*** (0.492)	7.524*** (1.616)	1.554 (0.762)	2.617 (2.128)	2.586 (2.706)	0.805 (0.827)
Higher past performance rating		1.845 (1.374)	3.305* (2.098)	0.511 (0.221)	3.118*** (1.358)	0.110 (0.393)	4.995*** (2.213)	2.679*** (0.587)	4.524*** (1.236)	1.214 (0.576)	4.683** (3.050)	4.809** (3.144)	3.969 (3.691)
Small (SBA definition)		0.261* (0.203)	0.0795*** (0.0698)	1.022 (0.129)	0.319** (0.175)	1.136 (1.967)	0.673 (0.422)	2.531*** (0.593)	1.871** (0.582)	0.710 (0.224)	1.551 (0.731)	1.065 (0.352)	0.417*** (0.139)
Constant		0.000413*** (0.00103)	0.0185** (0.0324)	0.129*** (0.0383)	0.00206*** (0.00183)	0.000411*** (0.00119)	7.46e-05*** (0.000108)	0.00210*** (0.000786)	0.00264*** (0.00143)	0.0684*** (0.0301)	0.000542*** (0.000483)	0.00889*** (0.00462)	0.0186*** (0.0132)
Observations	541	552	4,105	2,528	1,399	1,957	14,164	8,070	4,956	3,339	2,229	803	

standard errors in parentheses (\*\*\*) p

NAICS Code	7113	7114	7115	7121	7131	7132	7139	7211	7212	7213	7221	7222
Woman-owned	0.343*** (0.135)	0.254** (0.153)	0.335*** (0.0361)	1.106 (0.220)	0.268 (0.410)	3.221 (4.040)	0.711* (0.128)	0.487*** (0.0538)	0.694*** (0.0961)	0.0512 (0.137)	1.113 (2.006)	1.600 (2.692)
SDB not 8(a)	0.640 (0.232)	1.809 (1.077)	0.591*** (0.0764)	0.748 (0.187)	0.314 (0.430)	1.433 (1.780)	0.764 (0.136)	1.145* (0.0873)	1.160 (0.179)	0.852 (0.909)	2.181 (3.773)	1.365 (2.337)
8(a) certified	0.459 (0.695)	3.113 (5.681)	0.728 (0.360)	2.925* (1.749)	4.530 (15.75)	0.822 (1.851)	0.313 (0.274)	0.479* (0.196)	0.821 (1.232)	7.707 (29.58)	1.477 (5.538)	3.398 (9.130)
Minority-owned	0.262*** (0.112)	0.497 (0.322)	0.974 (0.123)	0.708 (0.208)	0.310 (0.499)	0.305 (0.473)	0.612** (0.130)	0.841** (0.0618)	0.338*** (0.0931)	0.155 (0.237)	1.027 (2.177)	0.564 (0.913)
HubZone certified	1.156 (1.807)	2.493 (4.006)	0.355 (0.299)	1.330 (0.915)	1.180 (2.398)	5.772 (14.04)	1.640 (0.911)	0.217* (0.190)	2.322 (3.861)	0.618 (1.587)	69.96* (166.8)	23.68* (43.05)
Service-disabled veteran	0.506 (0.350)	0.184 (0.321)	0.185*** (0.0765)	0.517 (0.293)	2.113 (3.420)	1.062 (2.206)	0.732 (0.208)	0.201*** (0.0632)	0.487* (0.211)	1.483 (2.584)	2.962 (6.371)	2.124 (4.023)
Other veteran	1.750 (0.777)	0.238 (0.351)	0.416*** (0.0931)	1.615 (0.599)	0.570 (1.244)	1.277 (2.656)	1.100 (0.258)	0.909 (0.165)	0.840 (0.159)	0.563 (0.866)	6.585 (10.82)	3.791 (5.693)
log age	1.149 (0.168)	1.152 (0.396)	0.910* (0.0502)	0.945 (0.0900)	0.845 (0.397)	1.317 (1.065)	0.991 (0.0771)	0.953 (0.0280)	0.780*** (0.0518)	2.743** (1.294)	0.747 (0.868)	0.853 (1.109)
log employees	1.226*** (0.0881)	0.971 (0.140)	1.037 (0.0446)	1.082 (0.0636)	1.343 (0.376)	1.008 (0.330)	1.096** (0.0470)	1.061*** (0.0156)	0.976 (0.0482)	0.729 (0.177)	1.313 (0.364)	1.219 (0.310)
log sales revenue	1.004 (0.0347)	0.992 (0.0652)	0.940*** (0.0118)	0.952* (0.0243)	0.907 (0.0773)	0.960 (0.151)	1.027 (0.0229)	0.993 (0.00790)	1.001 (0.0160)	0.905 (0.0879)	0.893 (0.139)	0.877 (0.128)
Sole proprietor	1.678 (0.722)	0.941 (0.661)	3.590*** (0.710)	1.922** (0.594)	1.404 (1.739)	0.110 (0.205)	0.992 (0.239)	1.461** (0.228)	2.566*** (0.879)	0.786 (0.998)	1.727 (3.554)	0.977 (2.074)
Partnership	1.163 (0.493)	0.192 (0.284)	0.560* (0.182)	1.070 (0.425)	0.162 (0.292)	0.682 (1.209)	1.380 (0.304)	1.389*** (0.0964)	0.828 (0.372)	0.554 (0.874)	0.688 (1.372)	0.946 (1.775)
Corporation for profit	0.507* (0.202)	0.725 (0.466)	1.016 (0.220)	0.527** (0.169)	0.248 (0.235)	0.164 (0.237)	1.007 (0.188)	1.159** (0.0748)	0.548 (0.214)	0.838 (0.686)	0.409 (0.760)	0.487 (0.913)
Corporation, nonprofit	0.218*** (0.101)	0.0467** (0.0692)	0.317*** (0.110)	1.351 (0.551)	0.210 (0.418)	0.831 (1.417)	0.587* (0.170)	3.605*** (0.624)	2.388** (1.049)	0.0774 (0.179)	1.975 (5.853)	1.451 (4.978)
Government non-classified (omitted: no security clearance repor	0.667 (0.352)	0.422 (0.592)	1.463** (0.237)	0.736 (0.258)	1.559 (2.767)	1.532 (2.931)	0.915 (0.228)	0.989 (0.153)	0.715 (0.198)	0.834 (1.966)	4.854 (7.473)	3.271 (5.446)
Government confidential	2.277 (2.063)	5.842 (10.33)	1.189 (0.489)	0.221 (0.327)	2.543 (5.267)	7.523 (17.55)	1.456 (0.808)	1.131 (0.416)	0.417 (0.401)	10.90 (25.08)	40.23 (97.04)	25.48 (53.13)
Government secret	0.573 (0.855)	4.692 (7.318)	0.551 (0.261)	0.365 (0.308)	7.825 (21.38)	0.181 (0.839)	0.560 (0.273)	0.610 (0.259)	0.529 (0.498)	2.808 (6.846)	24.92 (64.35)	6.744 (12.67)
Government top-secret	1.986 (1.841)	0.198 (0.386)	0.947 (0.419)	0.717 (0.421)	0.711 (2.310)	0.619 (1.588)	0.884 (0.420)	0.627 (0.238)	0.575 (0.561)	0.318 (0.671)	8.539 (20.80)	8.810 (22.06)
Share of FY 2013-2014 in sample	9.152*** (3.887)	14.75*** (13.26)	25.19*** (4.654)	6.011*** (1.900)	3.822 (5.331)	4.397 (7.985)	7.643*** (1.742)	12.29*** (1.082)	18.06*** (4.328)	5.474 (7.299)	1.170 (3.014)	1.359 (2.974)
Lower past performance rating	2.016 (1.898)	8.001 (14.25)	1.367 (0.706)	1.907 (0.801)	27.35 (71.66)	0.286 (0.654)	1.527 (0.503)	1.766*** (0.377)	3.271* (2.211)	3.856 (7.249)	14.73 (28.51)	9.542 (18.46)
Higher past performance rating	1.946 (1.356)	1.747 (3.320)	1.114 (0.338)	1.705* (0.539)	0.890 (1.786)	1.760 (3.589)	2.024** (0.650)	2.932*** (0.512)	0.0942 (0.138)	30.49** (46.07)	8.324 (18.51)	6.595 (14.31)
Small (SBA definition)	0.688 (0.257)	0.179*** (0.109)	0.246*** (0.0389)	1.340 (0.460)	1.054 (1.528)	3.625 (6.362)	1.130 (0.234)	2.466*** (0.208)	0.577 (0.206)	3.156 (4.482)	0.863 (1.787)	1.226 (2.680)
Constant	0.0212*** (0.0144)	0.0570** (0.0735)	0.0704*** (0.0203)	0.0209*** (0.0106)	0.228 (0.536)	0.0234 (0.0607)	0.0159*** (0.00655)	0.0191*** (0.00356)	0.0689*** (0.0325)	0.00682** (0.0144)	0.0129 (0.0527)	0.0145 (0.0692)
Observations	1,782	694	5,839	3,052	265	125	3,310	11,540	1,717	1,500	1,097	884

standard errors in parentheses (\*\*\*) p

	NAICS Code	7223	7224	7225	8111	8112	8113	8114	8121	8122	8123	8129	8131
Woman-owned		0.851 (0.0855)	1.429 (2.216)	0.462** (0.180)	0.696*** (0.0609)	0.612*** (0.0356)	0.652*** (0.0445)	0.813 (0.104)	0.171*** (0.0965)	0.824 (0.243)	0.617*** (0.0947)	0.419*** (0.0690)	0.466*** (0.0718)
SDB not 8(a)		0.976 (0.102)	2.087 (3.853)	0.829 (0.246)	1.164** (0.0794)	0.617*** (0.0360)	0.764*** (0.0500)	1.100 (0.131)	0.812 (0.438)	1.203 (0.289)	1.042 (0.163)	0.992 (0.160)	0.717* (0.132)
8(a) certified		1.016 (0.296)		5.699 (6.791)	1.443 (0.418)	0.811* (0.103)	0.938 (0.156)	0.809 (0.311)	2.323 (4.570)	0.288 (0.259)	0.315* (0.187)	2.136 (0.998)	2.037 (0.926)
Minority-owned		0.496*** (0.0570)	1.357 (2.646)	0.264*** (0.124)	0.546*** (0.0507)	0.478*** (0.0322)	0.580*** (0.0508)	0.647*** (0.0978)	0.788 (0.419)	0.602* (0.162)	0.794 (0.137)	0.295*** (0.0622)	0.455*** (0.0709)
HubZone certified		0.417** (0.169)	51.93 (151.4)	2.493 (3.872)	1.254 (0.319)	0.635** (0.116)	0.719* (0.129)	0.464* (0.215)	0.710 (1.382)	0.302 (0.283)	0.967 (0.403)	0.0765* (0.111)	1.065 (0.707)
Service-disabled veteran		0.202*** (0.0572)	3.794 (8.719)	0.191 (0.278)	0.758* (0.127)	0.549*** (0.0496)	0.535*** (0.0617)	0.585** (0.135)	0.116 (0.173)	0.749 (0.248)	0.682 (0.182)	0.476*** (0.129)	0.656 (0.173)
Other veteran		0.750 (0.136)	2.218 (3.985)	1.388 (0.599)	1.124 (0.113)	0.807*** (0.0556)	0.798*** (0.0637)	0.818 (0.146)	0.709 (0.530)	0.728 (0.301)	0.854 (0.182)	0.564** (0.152)	0.965 (0.208)
log age		1.170*** (0.0573)	0.667 (0.598)	1.233* (0.151)	1.013 (0.0325)	1.195*** (0.0326)	1.135*** (0.0323)	1.029 (0.0609)	1.522 (0.392)	1.136 (0.116)	1.163** (0.0845)	1.033 (0.0758)	1.038 (0.0642)
log employees		1.049* (0.0272)	1.250 (0.348)	0.971 (0.0748)	1.091*** (0.0221)	1.083*** (0.0149)	1.148*** (0.0182)	1.120*** (0.0404)	0.953 (0.139)	1.088 (0.0825)	1.158*** (0.0441)	1.085** (0.0412)	0.950 (0.0369)
log sales revenue		1.051*** (0.0166)	0.909 (0.178)	0.954 (0.0352)	1.055*** (0.0121)	1.003 (0.00818)	1.015 (0.00975)	1.050** (0.0228)	0.935 (0.0582)	1.152*** (0.0492)	1.003 (0.0234)	0.990 (0.0183)	1.010 (0.0158)
Sole proprietor		2.044*** (0.307)	1.211 (2.671)	0.784 (0.321)	1.117 (0.118)	1.012 (0.0972)	0.920 (0.102)	1.660*** (0.302)	1.235 (0.848)	1.554 (0.622)	1.372 (0.333)	1.089 (0.228)	2.288*** (0.556)
Partnership		0.780* (0.117)	0.868 (2.033)	0.336*** (0.134)	1.052 (0.118)	0.991 (0.0903)	1.099 (0.107)	1.206 (0.241)	0.432 (0.436)	0.875 (0.371)	1.231 (0.299)	0.747 (0.173)	0.996 (0.460)
Corporation for profit		1.161 (0.144)	0.693 (1.446)	0.399*** (0.133)	0.983 (0.0815)	1.162** (0.0734)	1.115 (0.0765)	1.064 (0.162)	0.871 (0.574)	1.214 (0.370)	1.000 (0.189)	0.762 (0.137)	1.015 (0.286)
Corporation, nonprofit		0.643* (0.156)	3.231 (9.479)	0.846 (0.597)	0.833 (0.145)	0.932 (0.134)	1.380** (0.207)	2.039** (0.637)	0.0646* (0.102)	0.568 (0.384)	0.362** (0.158)	0.542** (0.161)	0.477*** (0.119)
Government non-classified (omitted: no security clearance repor		0.834 (0.143)	3.804 (5.587)	1.655 (0.841)	0.689*** (0.0963)	0.793*** (0.0516)	0.940 (0.0770)	0.601** (0.129)	0.115 (0.182)	0.638 (0.301)	0.964 (0.233)	0.492*** (0.132)	1.308 (0.268)
Government confidential		0.888 (0.416)	3.622 (9.086)	2.921 (4.611)	0.477** (0.149)	0.652*** (0.0979)	0.994 (0.165)	1.314 (0.551)	4.302 (4.633)	0.0917 (0.139)	0.278 (0.256)	0.508 (0.299)	0.697 (0.464)
Government secret		0.462** (0.161)	7.397 (14.71)	0.343 (0.544)	0.297*** (0.0706)	0.597*** (0.0512)	0.634*** (0.0887)	0.994 (0.334)	3.191 (3.556)	0.155 (0.230)	0.486 (0.245)	0.554 (0.238)	1.596 (0.603)
Government top-secret		0.0701*** (0.0588)	26.24 (141.6)	0.633 (1.068)	0.0877*** (0.0324)	0.315*** (0.0265)	0.653** (0.113)	0.689 (0.305)	0.185 (0.352)	0.305 (0.257)	0.660 (0.370)	0.391** (0.165)	0.577 (0.270)
Share of FY 2013-2014 in sample		10.28*** (1.523)	0.985 (2.642)	0.795 (0.357)	9.371*** (0.920)	28.86*** (3.104)	25.30*** (2.716)	7.033*** (1.349)	19.85*** (16.75)	15.06*** (5.430)	15.11*** (3.753)	10.97*** (2.706)	14.77*** (3.108)
Lower past performance rating		0.846 (0.187)	17.07 (37.70)	5.442** (4.185)	1.782*** (0.264)	3.544*** (0.263)	2.180*** (0.198)	3.240*** (0.659)	1.578 (1.492)	0.976 (0.426)	1.838*** (0.429)	2.804*** (0.777)	1.014 (0.446)
Higher past performance rating		0.984 (0.171)	12.61 (32.67)	5.312*** (3.369)	1.435** (0.234)	2.506*** (0.184)	1.944*** (0.175)	2.678*** (0.564)	5.034* (4.292)	1.091 (0.442)	1.816*** (0.406)	2.704*** (0.668)	0.862 (0.309)
Small (SBA definition)		2.500*** (0.370)	1.602 (3.645)	2.783*** (1.045)	1.322*** (0.119)	1.005 (0.0710)	2.158*** (0.151)	1.822*** (0.310)	0.681 (0.465)	1.911* (0.674)	1.840*** (0.379)	0.535*** (0.102)	1.980*** (0.372)
Constant		0.00801*** (0.00244)	0.0157 (0.0703)	0.157*** (0.113)	0.0124*** (0.00265)	0.0102*** (0.00174)	0.00535*** (0.00103)	0.00608*** (0.00238)	0.0135*** (0.0150)	0.00249*** (0.00182)	0.00722*** (0.00341)	0.0546*** (0.0190)	0.0343*** (0.0110)
Observations		4,671	655	1,275	11,655	18,129	12,357	4,681	1,048	828	2,366	3,654	2,336

standard errors in parentheses (\*\*\*) p

NAICS Code	8132	8133	8134	8139
Woman-owned	0.101 (0.149)	0.840 (0.225)	0.369 (0.335)	0.406*** (0.106)
SDB not 8(a)	2.419 (2.223)	0.576 (0.226)	1.301 (1.398)	0.612 (0.184)
8(a) certified	3.451 (6.202)	0.476 (0.701)	3.274 (6.021)	1.988 (1.291)
Minority-owned	1.162 (0.703)	0.727 (0.210)	1.139 (0.513)	0.397*** (0.109)
HubZone certified	1.354 (2.255)	1.313 (2.011)	5.574 (10.80)	1.406 (1.329)
Service-disabled veteran	0.507 (0.746)	0.216 (0.310)	0.330 (0.560)	0.517 (0.246)
Other veteran	0.752 (1.130)	0.601 (0.397)	0.244 (0.353)	0.537 (0.247)
log age	1.898** (0.479)	1.176 (0.136)	2.176*** (0.434)	1.212*** (0.0723)
log employees	1.168 (0.138)	0.840*** (0.0552)	0.954 (0.0947)	1.129*** (0.0349)
log sales revenue	0.913* (0.0486)	1.111** (0.0459)	0.972 (0.0425)	1.034* (0.0192)
Sole proprietor	0.386	2.353**	1.172	1.342
Omitted: other forms of organization	(0.640)	(1.007)	(1.871)	(0.403)
Partnership	0.900 (1.557)	0.691 (0.434)	3.362 (5.388)	0.744 (0.298)
Corporation for profit	0.720 (0.706)	1.336 (0.498)	3.772** (2.283)	0.973 (0.179)
Corporation, nonprofit	0.340* (0.213)	0.793 (0.267)	1.091 (0.569)	1.139 (0.194)
Government non-classified (omitted: no security clearance repor	1.367 (1.173)	0.596 (0.332)	2.486 (1.785)	1.278 (0.306)
Government confidential	1.246 (2.218)	2.225 (1.933)	2.184 (3.757)	1.447 (0.786)
Government secret	18.18 (33.11)	0.233 (0.336)	4.488 (5.825)	1.398 (0.579)
Government top-secret	1.046 (1.738)	0.918 (0.857)	0.357 (0.438)	0.645 (0.289)
Share of FY 2013-2014 in sample	14.35*** (10.39)	8.464*** (2.609)	9.379*** (5.013)	7.197*** (1.293)
Lower past performance rating	1.661 (1.580)	1.014 (0.685)	2.113 (1.935)	2.061*** (0.502)
Higher past performance rating	2.296 (1.472)	1.854 (0.729)	13.36*** (7.946)	2.324*** (0.436)
Small (SBA definition)	0.695 (0.781)	1.106 (0.407)	0.418 (0.407)	0.746 (0.156)
Constant	0.00305*** (0.00311)	0.00187*** (0.00116)	0.000662*** (0.000682)	0.00999*** (0.00329)
Observations	1,746	5,615	2,144	4,531

standard errors in parentheses (\*\*\*) p

Appendix C

Business Type Code	Business Type Name
A7	AbilityOne Non Profit Agency
2R	U.S Federal Government
2F	U.S. State Government
12	U.S. Local Government
3I	Tribal Government
20	Foreign Owned and Located
1D	Small Agricultural Cooperative
LJ	Limited Liability Company
XS	Subchapter S Corporation
MF	Manufacturer of Goods
2X	For Profit Organization
A8	Non-Profit Organization
2U	Other Not For Profit Organization
HK	Community Development Corporation Owned Firm
A3	Labor Surplus Area Firm
A5	Veteran Owned Business
QF	Service Disabled Veteran Owned Business
A2	Woman Owned Business
23	Minority Owned Business
FR	Asian-Pacific American Owned
QZ	Subcontinent Asian (Asian-Indian) American Owned
OY	Black American Owned
PI	Hispanic American Owned
NB	Native American Owned
8W	Woman Owned Small Business
27	Self Certified Small Disadvantaged Business
8E	Economically Disadvantaged Women Small Owned Business
8C	Joint Venture Women Owned Small Business
8D	Joint Venture Economically Disadvantaged Women Small Owned Business
NG	Federal Agency
QW	Federally Funded Research and Development Corp
C8	City
C7	County
ZR	Inter-municipal
MG	Local Government Owned
C6	Municipality
H6	School District
TW	Transit Authority
UD	Council of Governments
8B	Housing Authorities Public/Tribal
86	Interstate Entity
KM	Planning Commission
T4	Port Authority

<b>Business Type Code</b>	<b>Business Type Name</b>
H2	Community Development Corporation
6D	Domestic Shelter
M8	Educational Institution
G6	1862 Land Grant College
G7	1890 Land Grant College
G8	1994 Land Grant College
HB	Historically Black College or University
1A	Minority Institution
1R	Private University or College
ZW	School of Forestry
GW	Hispanic Servicing Institution
OH	State Controlled Institution of Higher Learning
HS	Tribal College
QU	Veterinary College
G3	Alaskan Native Servicing Institution
G5	Native Hawaiian Servicing Institution
BZ	Foundation
80	Hospital
FY	Veterinary Hospital
HQ	DOT Certified DBE
05	Alaskan Native Corporation Owned Firm
OW	American Indian Owned
XY	Indian Tribe (Federally Recognized)
8U	Native Hawaiian Organization Owned Firm
1B	Tribally Owned Firm
FO	Township
TR	Airport Authority
V2	Grants
VW	Contracts and Grants
G9	Other Than One of the Proceeding
<b>The following business types were only available in the 2014 SAM data:</b>	
A4	SBA Certified Small Disadvantaged Business
A6	SBA Certified 8A Program Participant
JT	SBA Certified 8A Joint Venture
XX	SBA Certified Hub Zone Firm