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CITY OF

CAMBRIDGE

MASSACHUSETTS

DISPARITY STUDY REPORT

OCTOBER 2023

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Griffin & Strong, P.C. **thanks the City of Cambridge's Economic Development, Procurement and Legal Departments for their assistance in the Study's process.**

I. INTRODUCTION

A. Scope of Work

In March of 2022, the City of Cambridge, Massachusetts (“City”) contracted with Griffin & Strong, P.C. (GSPC)

“...to design and conduct a Disparity Study to provide a basis to determine whether a sheltered market program under G.L. c. 30B, § 18 can be implemented in the City (G.L. c. 30B is the Uniform Procurement Act, which establishes procedures for the City to use when contracting for supplies and services). In particular, the Consultant will work with the City’s Purchasing Department, Office of Equity and Inclusion, and Community Development Department (“CDD”) and will conduct a Disparity Study to review and analyze whether there are present effects of past discrimination within markets of business enterprises from which the City procures supplies and services. Based on the results of the Disparity Study, the City will review whether a basis exists for the City to implement a sheltered market program in conformance with G.L. c. 30B, § 18, to remedy past discriminatory effects for certain groups going forward (determining whether a basis exists for the City to implement a sheltered market program is not part of this scope of work).”

GSPC further understands that the scope of this project is to conduct a legally defensible Disparity Study under the framework established in applicable case law that will analyze the City of Cambridge’s procurement processes and outcomes, as well as those of the marketplace, using empirical and anecdotal evidence, including evidence of the impact of the City of Cambridge’s **purchasing and contracting** practices on Minority Business Enterprises (“MBE”), Women Business Enterprises (“WBE”), and Veteran Business Enterprises (“VBE”).

Toward achievement of these ends, GSPC has analyzed the prime contracting activities for the City’s purchases of Services and Supplies during the five (5) year Study Period FY2017 through FY 2021 (Study Period).

The scope of work included the three (3) Industry Categories of:

Professional Services such as consultants, medical services, legal services, financial services; and specifically excluding all construction (vertical and horizontal) and construction-related professional services such as architecture, engineering, surveying, and construction management.

Other Services such as marketing, advertising, printing, janitorial, IT, lawn service, and all other services not included in Professional Services; specifically excluding all construction (vertical and horizontal) and construction-related professional services.

Supplies which include all tangible items.

B. Objectives

The principal questions of this Study were:

Is there a statistically significant disparity in the relevant geographic market between the percentage of qualified Minority and Women Owned Business Enterprises and Veteran Owned Business Enterprises willing and able to provide supplies or services in each of the Industry Categories of contracts covered by G.L. c. 30B, and the percentage of dollars spent by the City with such firms?

If a statistically significant disparity exists for MBE/WBEs have factors, other than race and gender been ruled out as the cause of that disparity?

Are there present effects of past discrimination within markets of business enterprises from which the City procures supplies and services?

Can the disparities for MBEs/WBEs be adequately remedied with race and gender neutral remedies?

From the findings of the Study, the City will review and consider whether a basis exists for the City to implement a sheltered market program in conformance with G.L. c. 30B, § 18, to remedy past discriminatory effects for certain groups going forward (determining whether a basis exists for the City to implement a sheltered market program is not part of this scope of work).

C. Technical Approach

In conducting this Study and preparing its recommendations, GSPC followed a carefully designed work plan that allowed Study team members to fully analyze Availability, Utilization, and Disparity with regard to participation. The final work plan consisted of, but was not limited to, the following major tasks:

- Establishing data parameters and finalizing a work plan;
- Legal analysis;
- Reviewing policy and procurement processes and M/WBE program analysis;
- Collecting electronic data, inputting manual data, organizing, and cleaning data, as well as

- filling any data gaps;
- Conducting geographic and product market area analyses;
 - Conducting Utilization analyses;
 - Determining the Availability of qualified firms;
 - Analyzing the Utilization and Availability data for disparity and statistical significance;
 - Conducting private sector analysis including credit and self-employment analysis;
 - Collecting and analyzing anecdotal evidence; anecdotal interviews, public hearings, focus groups, business **owners'** interviews and Survey of Business Owners results
 - Establishing findings of fact regarding the existence and nature of marketplace discrimination and/or other barriers to M/WBE participation in City of Cambridge contracts; and
 - Preparing a final report that identifies and assesses the efficacy of various race- and gender-neutral and narrowly tailored race- and gender-based remedies if indicated by the findings.

Study definitions are contained in Appendix C.

D. Report Organization

This report is organized into the following sections, which provide the results of GSPC's analytical findings and recommendations for the City. In addition to this introductory chapter, this report includes:

- Chapter II, which presents the Executive Summary of Findings and Recommendations;
- Chapter III, which is an overview of the legal framework and basis for the Study;
- **Chapter IV, which provides a review of the City's purchasing policies, practices, and procedures;**
- Chapter V, which presents the methodology used in the collection of statistical data from the City and the analyses of the data regarding relative M/WBE and VBE Availability and Utilization analyses, and includes a discussion on levels of disparity for the City of Cambridge's prime contractors
- Chapter VI, which analyzes whether present or ongoing effects of past discrimination are affecting the City of Cambridge's marketplace and
- Chapter VII, which outlines the qualitative analyses, the analysis of anecdotal data collected from the online survey, personal interviews, focus groups, and public meetings.

II. EXECUTIVE SUMMARY OF FINDINGS AND RECOMMENDATIONS

A. Introduction

This chapter presents the findings and recommendations resulting from the Study for the City of Cambridge, Massachusetts related to Professional Services, Other Services, and Supplies for FY2017-FY2021 (July 01, 2016-June 30, 2021).

As outlined in the Legal Analysis, the Courts have indicated that for race-based or gender-based preference programs to be maintained there must be a strong basis in the evidence for the establishment of such programs or the continuation of existing programs. As the detailed findings below will demonstrate, GSPC found statistically significant underutilization of the majority of Minority owned firms and Non-minority Women owned firms in each of the three (3) Industry Categories analyzed. The exceptions will be discussed in the findings below.

A regression analysis was performed and GSPC found that there was evidence to indicate disparities by race, ethnicity, or gender status of the firm owners even after controlling for capacity and other race- and gender-neutral factors. This statistical evidence found support in the anecdotal evidence of the experiences of firms in the Relevant Market Area.

B. Findings

1. Legal Findings

FINDING 1: MORE ROBUST REMEDIES

Consistent with the “narrow tailoring” requirements of the strict scrutiny analysis (discussed at length in Chapter III, Legal Analysis), the City of Cambridge implements primarily race and gender-neutral measures to try to increase utilization of M/WBE firms.

The present Study shows that those efforts have not been effective in resolving the identified disparities.¹ Accordingly, Cambridge has a basis to expand its use of race and gender-conscious policies toward that goal, and to perhaps introduce more robust race and gender-neutral remedial measures.²

Moreover, the use of a regression analysis and consideration of the contracting environment in the private sector as part of this Study have demonstrated that factors *other than* M/WBE status cannot fully account for the statistical disparities found. Stated otherwise, the City of Cambridge can show that M/WBE status continues to have an adverse impact on a firm’s ability to secure contracting opportunities with the City, further supporting more aggressive remedial efforts.

Lastly, having obtained statistical and anecdotal evidence of disparities that are race, ethnicity, and gender specific, the City can ensure that the more robust remedies considered as a result of this Study can be limited to minority groups for which underutilization has been sufficiently identified.

2. Policy Findings

FINDING 2: PROMPT PAYMENT

The City does not have a prompt payment ordinance. City staff interviews did not report problems with prompt payment. Cambridge Public School staff did indicate that prompt payment was currently an issue due to staffing shortages and the need to upgrade software.

FINDING 3: VENDOR REGISTRATION

The City vendor list is in its BidTracker system, which is separate from its PeopleSoft financial system. Vendors can register in BidTracker at no cost. Vendor registration does indicate self-identified MBE and WBE status. Vendors do not have to register to bid or to be awarded a contract. Neither the City nor CPS maintain a prequalification list for Supplies & Services. The City's registration is intended to allow the City to notify firms of any bids that are available.

The City post solicitations on the State COMMBUYS system, as required by statute for formal procurement. COMMBUYS is the Commonwealth's electronic procurement system. Any public agency in Massachusetts can post solicitations on the COMMBUYS system free of charge. The City notifies vendors of solicitations by post card. Interviews with City staff indicated that electronic notification by email did not work because all vendors did not have email. The City purchasing website presents current bids but does not contain forecasts of upcoming bid opportunities¹. The Cambridge Public Schools (CPS) purchasing department does not maintain a vendors list but relies on CPS departments to source vendors.

FINDING 4: MBE GOALS

One of four goals FY22 Objectives & Performance Measures of City Purchasing is to: "Work with the Community Development Department and the State Office of Supplier Diversity to participate in and organize vendor fairs, panels, and informational sessions to encourage local, minority, women, and veteran-owned businesses to do business with the City." Similarly, the CPS Purchasing Manual states that, "The City encourages all departments to do business with small, local and minority owned firms in Cambridge when possible."

¹ Any forecasting must be within the options of 30B.

The City has no MWBE or Small Business Enterprise (SBE) set-asides or bid preferences program for Supplies and Services. There is no provision for MWBE goals or SBE set-asides in 30B. Further, although the City may develop some goals or aspirations for expansions of diverse vendor participation, staff reports that it may not be able to place requirements on bidding and quoting processes.

FINDING 5: CERTIFICATION

The City does not certify MWBEs or VBEs but does maintain a self-identified diversity directory by race, gender, and other disadvantaged status. The Commonwealth's Supplier Diversity Office and the City of Boston certify disadvantaged firms. The City of Boston has reciprocal certification with the Commonwealth of Massachusetts.

For the Commonwealth's SDO certification process, and not for a considered sheltered market, minority means a person who meets one or more of the following definitions:

- (a) American Indian or Native American means: all persons having origins in any of the original peoples of North America and who are recognized as an Indian by a tribe or tribal organization.
- (b) Asian means: All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian sub-continent, or the Pacific Islands, including, but not limited to China, Japan, Korea, Samoa, India, and the Philippine Islands.
- (c) Black means: All persons having origins in any of the Black racial groups of Africa, including, but not limited to, African Americans, and all persons having origins in any of the original peoples of the Cape Verdean Islands.
- (d) Eskimo or Aleut means: All persons having origins in any of the peoples of Northern Canada, Greenland, Alaska, and Eastern Siberia.
- (e) Hispanic means: All persons having their origins in any of the Spanish-speaking peoples of Mexico, Puerto Rico, Cuba, Central or South America, or the Caribbean Islands.

The two distinctive elements of this definition that differ from the minority definitions in other parts of the country is the inclusion of Cape Verdeans. Massachusetts also allows for the certification of nonprofit organizations that meet certain criteria which is not typical; and the Commonwealth's disadvantaged firm definition does not set geographic or size limitations on certification.

The City does not certify but maintains a Diversity Directory. The current Directory is searchable online by business demographic and type of category. Firms in the Diversity Directory are self-certified, and the Directory does not indicate whether they are state certified. Staff interviews indicated that this Directory is not used by the Purchasing Department for procurement outreach. Either the requesting department provides vendor contacts or Purchasing utilizes the vendor registry to identify potential vendors.

FINDING 6: REPORTING MWBE UTILIZATION

The City does not track or report MWBE utilization in Supplies & Services. Vendor demographic status is not indicated in the City PeopleSoft financial system.

FINDING 7: BUSINESS DEVELOPMENT EFFORTS

The City provides financial and technical assistance, including:

- Virtual Commonwealth certification workshop
- Small business grants for storefront improvement and equipment and marketing support
- **“How to be a Vendor” and “How to Respond to a BID”** Workshops
- Local Vendor Fairs
- Business development courses in a variety of business subjects, including collaborations with SCORE and other regional partners
- One-on-one technical assistance with staff
- Small Business Coaching Program with experts in such areas as marketing and financial planning
- Financial education classes with local banks.
- Ten-week business planning course starting or growing a business, or develop business plan, in partnership with the Center for Women in Enterprise.

In FY 2022, \$82,000 of Community Development Block Grant (CDBG) funds were budgeted for Business Development Services program including the 10-week Business Planning Program, Small Business Coaching Program, and the Cambridge Entrepreneurship Assistance Program. The City reported 243 people attended small business workshops and receiving startup, expansion, relocation, or business development assistance in FY 2020, with a target 255 for FY 2022.

The City does not provide regular small business loans to firms but does provide grants as stated above. In addition, as part of COVID relief the City along with the Cambridge Redevelopment Authority awarded \$4.2 million in grants and loans to support small businesses between 2020-2021. The City of Cambridge provided over 560 grants and loans through these Covid relief efforts. The City reported that more than 70% of the recipients self-identified as women- and/or minority-owned businesses.

FINDING 8: BUDGET AND STAFFING

The Office of Equity and Inclusion (OEI) replaced the Affirmative Action office. The OEI currently has a staff of 1.25 FTE and is projected to add a full-time analyst. Noted from staff interviews, the FY 2022 OEI Budget was \$502,465. There was no internal or external City MWBE or VBE advisory committee during

the Study Period. However, in October 2021, the Community Development Department convened the BIPOC Business Advisory Committee.²

3. Quantitative Findings

FINDING 9: RELEVANT GEOGRAPHIC AND PRODUCT MARKETS

The Study compares the availability and utilization of firms in a common area, the Relevant Geographic Market, where about 75% of Cambridge spending with vendors takes place. The Geographic Relevant Market is the Boston Metropolitan Statistical Area (MSA), composed of Suffolk, Essex, Norfolk, Middlesex, and Plymouth counties.

- In Professional Services³, 82.58%
- In Other Services, 84.01%
- In Supplies, 68.64%

About 77.97% of all the City spending in these three categories was with firms located in this relevant market.

FINDING 10: AVAILABILITY

The measures of availability utilized in this Study incorporate all the criteria of availability required by City of Richmond v. J.A. Croson Co., 488 U.S. 469 (1989).

- The firm does business within an industry group from which Cambridge makes certain purchases.
- The firm's owner has taken steps to demonstrate interest in doing business with the government e.g., registering, certifying, bidding, or actually doing business with an agency.
- The firm is located within a relevant geographical area such that it can do business with Cambridge.

²

<https://www.cambridgema.gov/CDD/economicopportunityanddevelopment/smallbusinessassistance/bipocbusinessadvisorycommittee>

³ Excludes construction-related professional services.

The firms used to calculate Availability came from the Master Vendor File⁴ in the Relevant Market Area. GSPC found that firms were available to provide supplies and services to Cambridge as reflected in the following percentages by each race, ethnicity, and gender group⁵ (Table 1).

*Table 1: Summary of Availability by Industry Category
In the Relevant Market
Cambridge Disparity Study*

Business Ownership Classification	Professional Services	Other Services	Supplies
Black American	0.42%	0.80%	0.09%
Asian American	0.42%	1.92%	0.09%
Hispanic American	0.42%	0.56%	0.19%
Native American	0.00%	0.24%	0.00%
Portuguese American	0.00%	0.00%	0.00%
TOTAL MBE	1.27%	3.52%	0.37%
Nonminority Female	5.06%	4.00%	2.72%
TOTAL M/WBE	6.33%	7.52%	3.09%
NON-M/WDBE	93.67%	92.48%	96.91%
TOTAL FIRMS	100.00%	100.00%	100.00%

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FINDING 11: MWBE PRIME UTILIZATION

As Table 2 below shows, Cambridge paid a total of \$19.5 million in prime Professional Services spending in the Relevant Market during the Study Period and \$582,992 of this amount, or 3.03% was paid to MWBE firms as prime contractors. Cambridge spent 1.35% of Other Services, and 0.46% of Supplies with MWBEs. MWBEs won 0.46% of prime payments across all three purchasing categories. The only spending with Veteran Owned Businesses (VBE) was with one VBE for \$12,900 in Other Services.

⁴ The sources for the Master Vendor File were the City of Cambridge Prime Payments, City of Cambridge Awards, City of Cambridge Vendor Lists, City of Cambridge Bid Tabulations, COMMBUY Index, the Federal System for Award Management, and the Rhode Island Veterans Certified Business Directory.

⁵ For purposes of GSPC’s analysis, only certified firms were counted as MWBEs.

Table 2: Summary of Prime Utilization by Industry Category
 In the Relevant Market
 (Based upon Payments FY2017-FY2021)
 Cambridge Disparity Study

Business Ownership Classification	Professional Services	Other Services	Goods	TOTAL
	(\$)	(\$)	(\$)	(\$)
Black American	\$45,550	\$14,003	\$-	\$59,553
Asian American	\$-	\$985,433	\$-	\$985,433
Hispanic American	\$282,324.00	\$-	\$24,757	\$307,081
Native American	\$-	\$6,626	\$-	\$6,626
Portuguese American	\$-	\$-	\$-	\$-
TOTAL MINORITY	\$327,874	\$1,006,062	\$24,757	\$1,358,693
Nonminority Female	\$255,118	\$1,069,629	\$379,869	\$1,704,616
TOTAL M/WBE	\$582,992	\$2,075,691	\$404,626	\$3,063,309
NON-M/WBE	\$18,667,401	\$151,284,162	\$86,952,238	\$256,903,801
TOTAL FIRMS	\$19,250,393	\$153,359,853	\$87,356,864	\$259,967,110
Business Ownership Classification	Professional Services	Other Services	Goods	TOTAL
	(%)	(%)	(%)	(%)
Black American	0.24%	0.01%	0.00%	0.02%
Asian American	0.00%	0.64%	0.00%	0.38%
Hispanic American	1.47%	0.00%	0.03%	0.12%
Native American	0.00%	0.00%	0.00%	0.00%
Portuguese American	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY	1.70%	0.66%	0.03%	0.52%
Nonminority Female	1.33%	0.70%	0.43%	0.66%
TOTAL M/WBE	3.03%	1.35%	0.46%	1.18%
NON-M/WBE	96.97%	98.65%	99.54%	98.82%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%

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FINDING 12: SUMMARY OF DISPARITY ANALYSIS FOR FY2017-FY2021

Table 3 below indicates those MWBE groups where a statistically significant disparity (X) was found in Prime Utilization for Professional Services, Other Services, and Supplies. There was underutilization in prime contracts for all MWBEs groups, except Hispanic American owned firms in Professional Services. There was no availability for a MWBE group in boxes with a “NA”.

There was disparity for all MWBE groups for prime payments less than \$500,000 and less than \$1 million for all procurement categories, except that Asian American owned firms were overutilized in Other Services for projects less than \$500,000 and less than \$1,000,000.

Table 3: Summary of Statistically Significant Underutilization of M/WBE s in Prime Contracting: Cambridge Disparity Study

Business Owner Classification	Professional Services	Other Services	Supplies
Asian American	X	X	X
African American	X	X	X
Hispanic American		X	X
Native American	NA	X	NA
Portuguese American	NA	NA	NA
Non-Minority Women	X	X	X

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4. Marketplace Disparities Findings

For purposes of the Marketplace Disparities Analysis, the City of Cambridge Market Area includes the Boston-Cambridge-Newton, MA-NH Statistical Area (“MSA”) from the US Census Bureau.

FINDING 13: MWBE REVENUE SHARE

For the City of Cambridge Market Area, relative to firms owned by White Americans⁶, the estimated revenue shares of each Minority-owned firm never exceed 4.5%. All MWBEs have estimated revenue shares far smaller than their firm representation shares. Relative to firms owned by White Americans in the City of Cambridge Market Area, exclusive of Women owned firms—some of whom are White Americans—the individual MWBE revenue shares are of a large order of magnitude below their implied 17% (approximately) firm representation shares. This is consistent with and suggestive of, but not necessarily causal evidence for MWBEs facing discriminatory barriers in the private sector of the City of Cambridge Market Area.

⁶ Using **Integrated Public Use Microdata Series (“IPUMS”)**, International), the world’s largest collection of publicly available individual-level census data.

FINDING 14: SELF-EMPLOYMENT LIKELIHOOD

Relative to White Americans⁷, African Americans, Pacific Islanders and Women are less likely to be self-employed. This is suggestive of these types of firms facing barriers to self-employment in the City of Cambridge Relevant Market Area (Relevant Market; MSA).

FINDING 15: COMMERCIAL BANK LOAN DENIALS

Relative to White American-owned firms⁸, firms owned by Hispanic Americans, Native Americans and Bi/multiracial Americans are more likely to have encountered commercial bank loan denials relative to firms owned by White Americans. This suggests that among MWBEs in the City of Cambridge Market Area, firms like these types of MWBEs—who are not necessarily certified MWBEs, are relatively more likely to have their capacity to compete in the market for public procurement constrained as a result of private sector credit market discrimination when access to capital is needed for businesses to be established and grow capacity.

FINDING 16: LESS LIKELY TO BE NEW FIRMS

Relative to White-owned firms, those owned by Native Americans and Other Race Americans in the City of Cambridge Market Area are less likely to be new firms. This suggests that any public contracting disparities between non-MWBEs and firms owned by these types of MWBEs cannot be explained by differential rates of market experience.

FINDING 17: PRIME CONTRACT AND SUBCONTRACT AWARDS FOR MWBES

Relative to non-MWBEs, certified Veteran-owned firms have higher prime bid submission rates. This suggests that any disparities between non-MWBEs and certified Veteran-owned firms cannot be explained by differential prime bid submission rates. When disaggregating by race/ethnicity/gender, firms owned by Native Americans and Bi/multiracial Americans are more likely to submit prime bids relative to non-MWBEs. This suggests that any disparities in public procurement outcomes between these types of MWBEs and non-MWBEs in the City of Cambridge market area can't be explained by relatively lower prime bid submissions rates.

There is no difference between MWBEs and non-MWBEs in the probability of receiving a prime contract award from the City of Cambridge. This suggests that any contracting disparities between MWBEs and non-

⁷ Using IPUMS

⁸ Using IPUMS.

MWBEs can't be explained by past, and possibly discriminatory constraints on them successfully winning prior prime contracts which could translate into future capacity to secure prime contracts. Relative to non-MWBEs, certified Minority-owned firms are less likely to have been awarded subcontracts. To the extent that success in public contracting is proportional to having prior subcontracts, the parameter estimates this suggest that any contracting disparities between non-MWBEs and certified Minority-owned firms, can be explained, at least in part, by relative deficits in contracting experience gained by the awarding of subcontracts.

With the exception of certified Veteran-owned firms, there is no difference in the probability of never serving as a contractor or subcontractor with the City of Cambridge between MWBEs and non-MWBEs. To the extent that success in public contracting is proportional to having prior prime contracts or subcontracts, this suggests that any contracting disparities between MWBEs and non-MWBEs can't be explained by past and possibly discriminatory constraints on prior success in securing prime contracts or subcontracts from the City of Cambridge.

FINDING 18: PERCEPTION OF DISCRIMINATION

Relative to non-MWBEs, certified Minority-owned firms are more likely to have a perceived experience of discrimination in the private sector of the City of Cambridge Market Area. To the extent that private sector discrimination can undermine the capacity of MWBEs to compete for public sector procurement, this suggests that, at least in the City of Cambridge Market Area, private sector discrimination may explain public contracting disparities between firms owned by certified Minority-owned firms and non-MWBEs.

Relative to non-MWBEs, certified Minority-owned firms are more likely to have a perception of experiencing discrimination from the City of Cambridge. To the extent that discrimination at the City of Cambridge can undermine the capacity of MWBEs to compete for public sector procurement, this suggests that, at least in the City of Cambridge Market Area, if discrimination at the City of Cambridge was actual, it may explain public contracting disparities between firms owned by certified Minority-owned firms and non-MWBEs.

In comparing the perception of having experienced discrimination in the private sector compared to discrimination by the City of Cambridge, see FINDING 27.

FINDING 19: PERCEPTION OF INFORMAL NETWORKS

Relative to non-MWBEs, firms certified as Minority are more likely to perceive that informal networks enable contracting success with the City of Cambridge. This suggests that contracting disparities between MWBEs and non-MWBEs can explained, at least in part, by their exclusion from the City of Cambridge public contracting networks that reduces their ability to secure prime contracts and subcontracts.

5. Anecdotal Findings

FINDING 20: LIMITED PARTICIPATION IN PUBLIC CONTRACTING

According to the GSPC Survey of Business Owners' experience during the Study Period between July 1, 2017, and June 30, 2021, 10.7% of the 150 survey respondents submitted bids for awards as prime contractors, as compared to 35.3% who bid on prime contracts with the private sector in the market area, and 32.6% that bid for roles as prime contractors with other non-City of Cambridge projects.

Fewer attempted to bid for subcontractor roles with the City, survey data showed, with only 8.6% of respondents seeking to sub on projects in that same period, versus 33.4% who sought subcontract roles with the private sector firms and 30% bid to be subcontractors with other public agencies.

In terms of winning bids, only 6% of those seeking prime contracting roles with the City won those awards, while just 6.7% of businesses owners bidding on the City's subcontractor jobs were awarded.

22.7% of those polled told GSPC they did not bid on work with the City of Cambridge because they did not see opportunities that aligned with their respective fields of work in the City of Cambridge.

FINDING 21: PRIMES AVOID HIRING MWBEs

52% of businesses surveyed agreed to some degree that some primes contact a Minority and/or Woman owned business to ask for quotes, with no intention of giving that firm's proposal sufficient review to consider giving the company a reward. That includes 28% who "Strongly Agree" – encompassing 32% of African American owned businesses and 18.4% of Woman owned firms – and 24% who "Agree," including 28.6% of Woman owned companies and 24% of African American owned firms.

More than half of business owners polled for the Study – 53.3% – believe to some degree that double standards in qualifications and work performance make it more difficult for Minority and/or Woman owned businesses to win bids or contracts. That breaks down to 28% that "Strongly Agree," including 42% of African American owned firms and 16.3% of Woman owned businesses, and 25.3% that "Agree," with 26.5% of Woman owned companies and 22% of African American owned firms.

FINDING 22: DOUBLE STANDARDS IN QUALIFICATION/PERFORMANCE

Nearly 45% of business owners polled for the Survey agreed to some extent that double standards in work performance and qualifications hindered Minority, Woman, and or Veteran businesses from working with

the City, including 23.2% that “strongly agree” and 21.7% who “agree.” More than 64% of African American owned firms (38.8 % “strongly agree and 25.4% “agree), nearly 31% of Non-minority owned businesses (30.8% “strongly agree), and over 24% of Woman owned companies (14.9% “agree” and 8.5% “strongly agree”) agreed to some degree.

FINDING 23: PERCEPTION OF INFORMAL NETWORKS

Sixty percent (60%) of the business owners polled for the Study said they believed there was an informal network of prime and subcontractors doing business with the City that monopolized public contracting. That includes 78% of African American owned businesses, 66.7% of Hispanic American owned firms, 50% of Caucasian owned companies, and 40.8% of Woman owned firms.

FINDING 24: REGISTRY WITH COMMBUYS

29.3% of those polled were registered with COMMBUYS, the Commonwealth of Massachusetts’ electronic procurement system. Unregistered poll respondents said at the rate of 45.5% that they were unaware of the registry.

FINDING 25: EXCESSIVE PAPERWORK

More than 20% of the business owners polled for the Study said that excessive paperwork was a barrier to bidding on projects with the City. That includes 24% of African American owned businesses, and 14.3% of Woman owned businesses.

FINDING 26: UNFAIR COMPETITION WITH LARGER COMPANIES

31.3% of survey respondents said competition with larger companies presented a barrier to bidding on contracts with the City of Cambridge. That includes 42% of African American owned businesses and 28.6% of Woman owned companies. A slightly larger percentage of business owners, 32.7%, indicated that competition with larger companies was a barrier to getting work on public projects with government entities other than the City. Included in that ratio are 38% of African American owned companies and 30.6% of Woman owned firms.

FINDING 27: DISCRIMINATORY BEHAVIOR

Just under 12% of businesses polled, 11.9%, indicated some degree of experience with discriminatory behavior based on gender, race or ethnicity when dealing with the City of Cambridge. That includes 7.3% who characterized their experience as “Seldom,” 3.3% who said it was “Often,” and 1.3% who described it as “Very Often.” That compares well against the private sector in the Boston area where the results were 27.3% and non-Cambridge governmental entities with 18.7%.

C. Commendations

COMMENDATION 1: EDUCATION AND PARTICIPATION

The City provides financial and management assistance in the form of:

- Virtual Commonwealth certification workshops
- Small business grants for storefront improvement and equipment and marketing support
- **“How to be a City Vendor” and “How to Respond to a City BID” Workshops**
- Local Vendor Fairs
- Business development courses in a variety of business subjects
- One-on-one technical assistance with staff
- Small Business Coaching Program
- Free consulting with professionals
- Financial education, financial literacy classes with local banks and SCORE.
- Ten-week business planning course starting or growing a business, or develop business plan, in partnership with the Center for Women in Enterprise.

The City should continue these efforts to provide the business community with resources. See Chapter IV, Purchasing Policies, Practices, and Procedures.

COMMENDATION 2: LESS EXPERIENCES OF PERCEIVED DISCRIMINATION

The experience of perceived discrimination is far lower for the City of Cambridge when compared to the Cambridge market private sector and other non-City of Cambridge public entities.

D. Recommendations

RECOMMENDATION 1: TRACKING PRIME AND SUBCONTRACTING UTILIZATION OF MWBEs AND VETERANS

GSPC found that subcontractor data was not kept for Professional Services, Other Services and Supplies, which is not unusual for these procurement categories.

The City should maintain both subcontractor payment records and awards for all Industry Categories the City procures. The City should monitor prime vendor awards to subcontractors to ensure they are honoring those awards as contract commitments. This system should have fields which reference the prime name, contract number and subcontractor payment dates and amounts.

RECOMENDATION 2: INTERNAL ANNUAL ASPIRATIONAL GOALS

Aspirational goals are an internal measure of how well the City has reached the Availability benchmarks established by the Disparity Study. It is the aggregated annual measure attainment of MBE, WBE, and VBE attainment using all of the “tools” for promoting MBE and WBE participation. GSPC can work with the City to set annual goals for the first year and the formula for succeeding years. The City should set separate MBE, WBE, and VBE aspirational goals.

RECOMMENDATION 3: ASPIRATIONAL CONTRACT GOALS

There is no provision for MWBE goals or SBE set-asides in 30B. Further, although the City may develop some goals or aspirations for expansions of diverse vendor participation, staff reports that it may not be able to place requirements on bidding and quoting processes. However, it is recommended that contract-by-contract aspirational goals should be communicated to prime contractors in the solicitation requesting that the prime assist the City in meeting those goals. Once the prime contractor has submitted its proposed utilization of MBE and WBEs in the bid submission, that achievement should become part of the prime contractor’s contract commitment. The City should track this commitment to make sure that the prime contractor adheres to this contractual commitment.

It is not the intention of this recommendation that a bid be rejected if a certain aspirational goal is not met, however, certain failures to adhere to the City’s Discrimination Policies may result in an investigation and rejection of a bid. There is not a basis for triggering an investigation as the City makes Professional Services and Other Services unable to subcontract. The State is using a supplier diversity list for state contracts, but they are unapplicable for local/city governments.

GSPC found substantial underutilization of MWBEs and Veterans in prime contracting except for Hispanic American owned firms in Professional Services. One way to increase utilization of these firms is to make efforts to encourage prime vendors to utilize MWBEs and Veterans as subcontractors wherever there are subcontracting opportunities.

RECOMMENDATION 4: ENCOURAGE CERTIFICATION

The City uses self-identification within their Diversity Directory. GSPC recommends that the City encourage firms to get certified by the State and to join the City’s Diversity. Directory.

RECOMMENDATION 5: FORECASTING

60% of respondents to the GSPC Survey of Business Owners mentioned the perception of an informal network. Part of an informal network is that firms that already have relationships with the City know about bids before they are issued and firms under contract for recurring services know when their contract(s) expire and will need to be rebid.

One way to partially address this issue is to forecast upcoming solicitation opportunities as far ahead of the bid as possible, preferably at least a year ahead of time. This gives all firms an equal opportunity to prepare for opportunities and gives time to plan for teaming or joint ventures. This will also allow the City to provide supportive services such as technical assistance (estimating and business formation), seminars (how to bid, how to register, how to certify), well in advance of the bid issuance, if needed. Where there is no formal bid required, lists of the City's upcoming needs and types of services and supplies anticipated should also be made available to firms with opportunities posted.

RECOMMENDATION 6: TARGETED OUTREACH

Annual forecasting will enable the Purchasing Department and other relevant City staff to target and notify firms that may be capable of doing the work. This is important so that firms, including those who desire to do business with the City, are aware of upcoming opportunities. Knowing what work will be presented in the coming year will give room for City staff to schedule certification workshops, classes and events, and encourage firms to network. It also gives more time for pre-bid conferences where potential prime contractors can meet potential subcontractors.

RECOMMENDATION 7: CONTRACT COMPLIANCE

To effectively administer effective remedial programs, the City should enhance its contract compliance efforts, including robust tracing and monitoring to make sure that prime contractors utilize firms as committed to in their bid package. The five (5) steps of Contract Compliance are:

- Assessment – An initial assessment of individual firm availability and capacity for specific scopes of work.
- Outreach – An ongoing campaign to let the MWBE and Veteran business communities know that the City wants to do business with them, and that the City is willing to work with firms to create opportunities and assist, particularly local firms in building capacity.
- Certification/Verification – the City should continue to encourage and assist firms in getting certified and should accept bona fide third-party certifications but should have audit

rights with any non-**governmental agencies, including the right to reject the City's acceptance** of a certification that it deems not sufficiently supported.

- **Procurement** – All applicable solicitation packages and awarded contracts should include the MWBE commitments as contract terms and City participation requirements, such as all firms performing commercially useful functions.
- **Tracking & Monitoring** – It is essential that there is close tracking and monitoring of vendor performance and the efficient closeout of projects to verify that MWBE and Veteran firms are performing the work that they contracted to perform and that they are compensated in a timely manner and in the amounts committed. Monitoring vendor performance should also assure equal and fair treatment on contracts.

RECOMMENDATION 8: DATA REFORM

GSPC encountered several challenges as it relates to collecting data for this Study. It recommends that the City implement the following data reforms to properly track and monitor the other program recommendations:

- **Vendor System/ File:** Include ethnicity, gender, and other certifications. Currently the vendor system does not track ethnicity, only certification (MBE or WBE).
- **Commodity Codes:** GSPC recommends utilizing preexisting commodity codes across all **data sources to ensure accuracy of analysis done on the City's data.**
- **Vendor ID:** **Vendor Id's should be utilized across all data for Vendors to allow better** tracking of Vendor usage in both payments and contracts.
- **Payment Data:** Including Vendor Addresses such as City, State, Zip code and County to the Payment database will lessen the time of cleaning data and searching for vendor **information. Purchase order numbers or reference ID's.**
- **Bid Tabs:** Create a database for bid tabs that is readily available to the City. This will allow for bid tabs to be extracted in a timely manner and provide columns such as bid number, date append, date closed, vendor info, and project details. This would also consolidate multiple Excel or PDF files which are currently hosting this information.
- **Awards/ Contracts:** The contract system should be connected to the payment database by a primary key such as purchase order numbers or reference IDs.

RECOMMENDATION 9: IMPLEMENTATION

As the City considers GSPC's recommendations, it is important to make sure that any resulting race or gender policies consider the following:

- **Severability Clause**-GSPC recommends the inclusion of a severability clause in any race or gender program plan or ordinance so that if any provision is deemed unconstitutional it will not cause the whole plan or ordinance to be dismantled.
- **Sunset Provision**-If any race or gender program plan or ordinance is implemented, it should have a defined end date or sunset provision. The program or ordinance would only be able to continue beyond the sunset date if a new factual predicate establishes a fresh need for race and gender remedies. GSPC recommends that a new factual predicate be established every 5-7 years.
- **Data Reform**-Data reforms should be considered as a priority to assure complete and reliable data to track and monitor the effectiveness of any remedial program elements.
- **Ethnic Classification**-Along with collecting minority status, requesting national or ethnic identities as part of any certification or diversity directory will allow the City to see if there are any particularized shared experiences based upon similar national or ethnic identities.

III. LEGAL ANALYSIS

A. Introduction

The City of Cambridge (hereafter “City”) engaged Griffin & Strong, P.C. (“GSPC”) to conduct a Disparity Study assessing the City’s procurement policies, practices, and overall purchasing environment. One core question the City has presented for the Study is whether it has proper authority to develop and implement a sheltered market program for supplies and services consistent with Massachusetts procurement law.¹ The present Study will therefore address that question, among other relevant matters.

The analysis provided throughout this Legal Chapter underscores the several purposes for which a disparity study may be done, the importance of methodological soundness, and the usefulness of the data and other information contained therein. Disparity studies can provide context regarding prior government procurement practices, a contemporary snapshot of current procurement practices, and a predictive preview of future challenges/needs.

There is also an important historical legal basis for the advent of disparity studies in the first instance. Key judicial decisions from the United States Supreme Court anticipating and inviting increased use of disparity studies are therefore discussed first in the following legal analysis, before digging deeper into the legal considerations and related evidentiary requirements for sustaining an MBE/WBE program even in the face of a challenge on constitutional grounds. -Special consideration is made to decision of the United States Court of Appeals for the First Circuit, as these decisions govern the City of Cambridge and highlight some of the legal considerations under which a challenge to the City’s policies or programs would be analyzed.

B. Historical Overview – Development of the Law

The outgrowth of disparity studies was in large measure a response to constitutionally based legal challenges made against federal, state, and local minority business enterprise programs enacted to remedy past or present discrimination (whether real or perceived). Such studies effectively were invited by the United States Supreme Court in its seminal decision in *City of Richmond v. J. A. Croson Co.*,² and subsequent judicial decisions have drawn a direct line between *Croson* and the utilization of disparity studies.³

Disparity studies have become an important tool for governmental entities in deciding whether to enact minority business programs or legislation, and in justifying existing programs or legislation in the face of constitutional challenge. To better understand the proper parameters of such programs, one must understand their judicial origin.

1. **The Supreme Court's Decision in** *City of Richmond v. J.A. Croson*

To fully appreciate the usefulness of disparity studies for development and defense of minority business programs, an overview of the *Croson* decision is essential.

State and local laws that, on their face, favor one class of citizens over another, may run afoul of the Equal Protection Clause of the Fourteen Amendment to the United States Constitution. MBE/WBE programs and legislation are among the laws that invoke such concerns. The nature of the differentiation (e.g., race, ethnicity, gender) upon which the program is based determines the level of judicial scrutiny applied by courts evaluating the constitutionality of such programs. As explained at greater length below, race-based programs are evaluated under a “strict scrutiny” standard, and gender-based programs may be subject either to strict scrutiny or to a less-rigorous “intermediate scrutiny” standard, depending on the federal circuit within which the public entity is located.

In its *Croson* decision, the Supreme Court, applying a strict scrutiny standard, ruled that the City of Richmond failed to demonstrate a compelling state interest for its Minority Business Enterprise program, which required prime contractors to subcontract 30% of the city’s construction contracts to minority-owned firms.⁴ “Strict scrutiny” review involves two co-equal considerations: the need to demonstrate a compelling governmental interest in taking remedial action; and implementation of a program or method narrowly-tailored to achieve/remedy the compelling interest.⁵ In *Croson*, the Supreme Court concluded that the City of Richmond failed to show identifiable discrimination in its construction industry, and thus, could not show that its minority set-aside program was necessary to remedy the effects of any purported discrimination.⁶ The Court reasoned that a statistical disparity between the overall minority population in Richmond (50% African-American) and awards of prime contracts to minority-owned firms (0.67% to African-American firms) was an irrelevant statistical comparison and insufficient to raise an inference of discrimination.⁷

Addressing the disparity evidence that Richmond proffered to justify its MBE program, the Court emphasized the need to distinguish between “societal discrimination,” which it found to be an inappropriate and inadequate basis for social classification, and the type of identified discrimination that can support and define the scope of race-based relief. Specifically, the Court opined that a generalized assertion of past discrimination in an entire industry provided no guidance in determining the present scope of the injury a race-conscious program seeks to remedy. It emphasized “there was no direct evidence of race discrimination on the part of the City in letting contracts or any evidence that the City’s prime contractors had discriminated against minority-owned subcontractors.”⁸

The Court concluded there was no *prima facie* case of a constitutional or statutory violation by anyone in the construction industry that might justify the City of Richmond’s MBE program.⁹ Justice O'Connor nonetheless provided some guidance on the type of evidence that might indicate a proper statistical comparison:

[W]here there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality's prime contractors, an inference of discriminatory exclusion could arise.¹⁰

Stated otherwise, the statistical comparison should be between the percentage of MBEs in the marketplace qualified to do contracting work (including prime contractors and subcontractors) and the percentage of total government contract awards (and/or contractual dollars paid) to minority firms. The relevant question among lower federal courts has been which tools or methods are best for such analysis, a matter addressed in the detailed discussion of statistical comparison provided below.

Of note, the *Croson* court stated that identified anecdotal accounts of past discrimination also could be used as part of the effort to meet the required compelling interest for local governments to enact race-conscious remedies.¹¹ However, conclusory claims of discrimination by City officials would not suffice, nor would an amorphous claim of societal discrimination, simple legislative assurances of good intention, or congressional findings of discrimination in the national economy.¹²

Regarding the second prong of the strict scrutiny test, the *Croson* Court opined that Richmond's MBE program was also not narrowly tailored to redress the effects of discrimination. For example, the Court reasoned that Richmond's MBE program was not remedial in nature because it provided preferential treatment to minorities such as Eskimos and Aleuts, groups for which there was no evidence of discrimination in Richmond.¹³ Thus, the scope of the City's program was too broad.

Also, the Court reasoned that the 30% goal for MBE participation in the Richmond program was a rigid quota not related to identified discrimination, specifically criticizing the City for its lack of inquiry into whether a particular minority business, seeking racial preferences, had suffered from the effects of past discrimination.¹⁴ The Court further noted the City failed to consider race-neutral alternatives to remedy the under-representation of minorities in contract awards.¹⁵

Subsequent to the decision in *Croson*, the Supreme Court and the federal Circuit Courts of Appeal have provided additional guidance regarding the considerations, measurements, information, and features surrounding an M/WBE program that will assist in protecting the program from constitutional challenge under a strict scrutiny analysis. These recommendations have, in many respects, provided a roadmap for disparity studies, which is discussed in greater detail in the Expanded Legal Analysis.

2. The Supreme Court's Decision in *Adarand Constructors, Inc. v. Peña* and Subsequent Circuit Court Proceedings

Six years after its decision in *Croson*, the Supreme Court was again confronted with an equal protection challenge to a disadvantaged business program in *Adarand Constructors, Inc. v. Peña*.¹⁶ This time, however, the program under challenge was enacted by the federal government, thus implicating the Fifth Amendment to the United States Constitution rather than the Fourteenth Amendment that was at issue with respect to the local program in *Croson*.

Vacating the decision of the United States Court of Appeals for the Tenth Circuit (the “Tenth Circuit”) and remanding for further proceedings, the Supreme Court ruled that federal programs are not reviewed for constitutionality under a more lenient standard than that which is applied to state and local programs (as had been indicated in some prior Supreme Court opinions), but rather, that strict scrutiny is to be applied to an analysis of the constitutionality of federal race-based programs as well.¹⁷ Because the United States District Court for the District of Colorado (the “Colorado District Court”) and the Tenth Circuit had applied a lesser standard of review, the Supreme Court remanded the case for review of the federal program under the strict scrutiny standard, consistent with *Croson*.¹⁸

On remand, the Colorado District Court essentially ruled that no program can meet the strict scrutiny standard -*i.e.*, it is “fatal in fact.”¹⁹ The Tenth Circuit disagreed, and it upheld the federal program even under a strict scrutiny standard, finding both a compelling state interest and the required narrow tailoring to achieve such compelling interest.²⁰ Consistent with *Croson* and subsequent opinions, the Tenth Circuit described its task regarding the compelling state interest as follows:

[O]ur inquiry necessarily consists of four parts: First, we must determine whether the government's articulated goal in enacting the race-based measures at issue in this case is appropriately considered a “compelling interest” under the governing case law; if so, we must then set forth the standards under which to evaluate the government's evidence of compelling interest; third, we must decide whether the evidence presented by the government is sufficiently strong to meet its initial burden of demonstrating the compelling interest it has articulated; and finally, we must examine whether the challenging party has met its ultimate burden of rebutting the government's evidence such that the granting of summary judgment to either party is proper. We begin, as we must, with an inquiry into the meaning of “compelling interest.”²¹

The court first found that the government's proffered interest- “remedying the effects of racial discrimination and opening up federal contracting opportunities to members of previously excluded minority groups” – is an appropriately compelling interest.²² It then provided that both direct evidence and circumstantial evidence of discrimination could be considered in support of that interest.²³

Considering the specific evidence presented by the government to support its argument that remedial action was necessary, the *Adarand VII* court found the government demonstrated a “strong basis in evidence” for such action. Evidence of classic “old boy” networks of contractors that historically excluded minority firms, denial of access to capital based on race, and denial of or difficulty in obtaining union membership by minority firms established minority contractors faced significant discriminatory barriers to business formation.²⁴ The court also determined from the evidence that existing minority contractors faced barriers to competition for federal construction contracts due to “discrimination by prime contractors, private sector customers, business networks, suppliers, and bonding companies[.]”²⁵

In support of its position, the government produced statistical and anecdotal evidence taken from local disparity studies which demonstrated under-utilization of minority subcontractors (described in more detail below), and the effect on utilization rates when affirmative action programs or efforts were discontinued for one reason or another.²⁶

The Court went on to discuss at length its reasoning that the government also adequately demonstrated its program was narrowly tailored to achieve the compelling interest discussed previously.²⁷ In sum, the Court found that the government satisfactorily met the following important factors: “the necessity for the relief and the efficacy of alternative remedies; the flexibility and duration of the relief, including the availability of waiver provisions; the relationship of the numerical goals to the relevant labor market; and the impact of the relief on the rights of third parties.”²⁸ The case was therefore returned to the district court for further proceedings “consistent with this opinion.”²⁹

3. The First Circuit’s Adoption and Application of *Croson*

Interestingly, the United States Court of Appeals for the First Circuit, which covers Massachusetts, has primarily relied on the Supreme Court’s guidance in *Croson* in the contexts of school choice litigation and public employment/promotion cases.³⁰ There are no significant decisions of the First Circuit specific to government purchasing or procurement.

Because race-conscious policies or programs are at issue in the above school choice and public employment cases, however, the First Circuit has expressly adopted the *Croson* court’s application of the strict scrutiny standard to such policies/programs, requiring demonstration of a “compelling state interest” to remedy disparities and “narrowly-tailored” remedial efforts.³¹

C. The Massachusetts Statute Governing Sheltered Market Programs

Massachusetts General Law, Part I, Title III, Chapter 30B, the “Uniform Procurement Act” (hereafter, Ch. 30B), governs purchasing at the City of Cambridge. Included in Ch. 30B is a provision permitting a governmental body to introduce a Sheltered Market Program intended to address disparities affecting “disadvantaged” vendors.³² Such a program is defined as one “under which certain contracts are designated by the chief procurement officer for procurement from one or more classes of disadvantaged vendors.”³³

The sheltered market statute (§ 18) sets forth detailed requirements for creating and implementing a program and stipulates that the program may be applied to one or more contracts, and may cover one or more disadvantaged vendor group(s) (*e.g.*, Minorities, Women, Veterans):

When authorized by majority vote, a chief procurement officer may establish a sheltered market program in conformity with the requirements of this section. Such authorization may apply to a single contract or to any number or types of contracts, shall specify the class or classes of disadvantaged vendors to be included in the sheltered market program, and shall to the extent constitutionally required be based on findings that such program is a remedy for the present effects of past discrimination.³⁴

As indicated, the predicate necessary for developing a sheltered market program is a demonstrated need to remedy the present effects of past discrimination. There has been no legal decision in Massachusetts (state or federal) involving a challenge to a sheltered market program, but based on *Croson* and its progeny, it would appear that the type of factual predicate that a disparity study is intended to identify or provide will be equally applicable to a sheltered market program introduced pursuant to Ch. 30B, § 18¹⁰.

¹⁰ The complaint filed with the DOJ in regard to the Boston Sheltered Market Program does not appear to be under the premise of a race based sheltered market. The consideration of a sheltered market for the City of Cambridge would not be the same

IV. PURCHASING POLICIES, PRACTICES AND PROCEDURES

A. Introduction

This chapter is designed to review the written policies and practices of the City of Cambridge with respect to purchasing and contracting, including related programs or efforts to enhance inclusion of Disadvantaged Business Enterprises (DBEs, as defined in Massachusetts statute) in Supplies and Services. This Chapter does not cover Construction or Construction-related Professional Services, which are not Industry Categories of this Study, except tangentially.

Underlying this policy review is an understanding that written policies and practices may not always be consistently administered as there is often room for interpretation or discretionary implementation. Accordingly, policy interviews are intended to identify any deviations, differing interpretations or variant implementation of policies in order to determine whether there may be any effect on participation of small businesses, including those owned by Minorities and Women.

The Executive Summary of Findings and Recommendations provides findings about the City's policies, practices, and procedures, and formal recommendations for improvement of the overall procurement program and greater achievement of its goals based upon those findings.

B. Document Review and Personnel Interviews

In preparation for the policy interviews GSPC reviewed, among other materials:

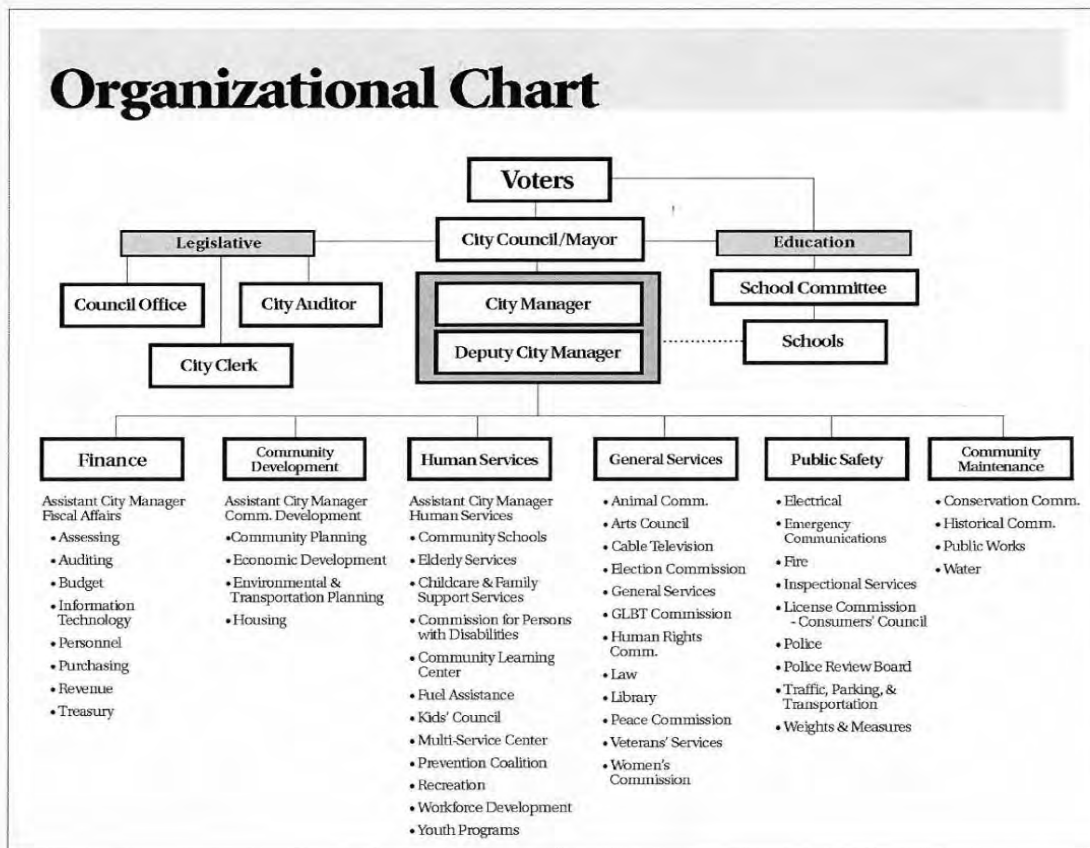
- Massachusetts State statutes relating to contracting and procurement
- City procurement policy and procedure documents
- City ordinances
- City website, including the Procurement and Economic Development webpages
- City budget documents
- Other publicly available resources relating to City procurement

GSPC conducted policy interviews in May and June of 2022 with decision makers and officials regularly engaged in purchasing and contracting for the City. Included in these interviews were personnel in City Purchasing, Cambridge Public Schools (CPS) Purchasing Department, Community Development, Law, and the Office of Equity & Inclusion.

C. Overview of City Purchasing

The Organizational Chart below shows the overall City government structure, including the City Finance Department, which includes Purchasing. The City Purchasing Department is budgeted for a staff of eight. CPS is a Department of the City but has its own purchasing department. CPS conducts the vast majority of purchases through their own purchasing department, including quotes, cooperative agreements, and state contracts. CPS has a purchasing staff of five, including the director. CPS follows all the City procurement rules, except that purchases above \$25,000 have to be approved by the School Committee.

Table 4: City of Cambridge Organizational Chart (2016)
City of Cambridge Disparity Study



D. Uniform Procurement Act

The Massachusetts Uniform Procurement Act, M.G.L. c. 30B (Chapter 30B) governs the purchases of Supplies, Services and Real Property by local governments in Massachusetts. “Supplies” are defined in the law as “all property, other than real property, including equipment, materials and printing and further including services incidental to the delivery, conveyance and installation of such property.”¹ “Services” are defined as “the furnishing of labor, time or effort by a contractor, not involving the furnishing of a specific end product other than reports.”²

E. Thresholds

The basic parameters of City purchasing in terms of thresholds for competition are summarized below:

Supplies or Services Estimated to Cost under \$10,000. **The City is to use “sound business practices,” defined as “ensuring the receipt of a favorable price by periodically soliciting price lists or quotes.”**³ State law does not require a formal competitive process.

Supplies or Services Estimated to Cost at least \$10,000 but not more than \$50,000. The City is to seek written price quotes from at least three vendors and award the contract to the responsible vendor with the best price.⁴

Supplies or Services Estimated to Cost more than \$50,000. The City is to Conduct a formal, advertised competition through an invitation for bids (IFB) or a request for proposals (RFP).⁵ The City must also publish a notice in the State Goods and Services Bulletin if the contract value is more than \$100,000.

F. Other Purchasing Methods

State local procurement law also allows for the following purchase methods:

Statewide contract purchases. The State Operational Services Division (OSD) awards a variety of statewide contracts that local jurisdictions may use without conducting a separate procurement.⁶ Local jurisdictions may use certain supply or service contracts procured by Commonwealth “departments” (which includes any office, department, agency, division, board, commission, or institution within the executive branch). -The City uses state contracts to purchase goods such as facilities supplies, vehicle parts, office supplies, and food-related items. -CPS uses state contracts for facilities supplies, furniture and instructional materials. -State contracts do indicate the diversity status of the firms holding the state contract.

Collective purchases (also known as collaborative purchases). Two or more local jurisdictions may solicit bids for supplies or services as a group.⁷ The City has used this method to procure fuel.

GSA purchases. Local jurisdictions may purchase supplies and services that are available through U.S. General Services Administration (GSA) federal supply schedules.⁸ The City has used the federal GSA schedule to purchase emergency communications.

Cooperative purchases. Local jurisdictions may purchase supplies (but not services) from contracts that have already been procured by an in-state or out of state political subdivision, or unit of a political subdivision, or a federal or state agency, as long as the contract is open to local jurisdictions and was procured in a manner that constitutes full and open competition.⁹ CPS uses cooperative contracts for food services.

Reverse auction. Local jurisdictions can use reverse auctions to acquire supplies and services valued at more than \$50,000.¹⁰ A reverse auction allows vendors to bid anonymously against each other over the internet until the auction time expires. The winning bidder is the vendor with the lowest bid before the auction expires. Reverse auctions bids must be submitted by registered vendors. The City and CPS have not used reverse auctions.

Sole-source procurement. For contracts of \$50,000 or less local jurisdictions can procure any **supply or service “when a reasonable investigation shows that there is only one practicable source for the required supply or service.”**¹¹ Sole-source procurement of more than \$50,000 is only allowed for:

1. Software maintenance, library books and educational materials.
2. Noncompetitive purchases of water, gas, electricity.¹²

The City, including Cambridge Public Schools, uses sole source procurement primarily for software. The initial bid for software may be competitive, but renewals are sole source.

Emergency Procurement. If the time required to comply fully with state local procurement law would endanger the health or safety of people or their property due to an emergency, local jurisdictions can procure the needed item or service without complying with all of local procurement law statutory requirements.¹³

City staff noted that several of these cooperative methods do not necessarily provide the lowest price but do substantially save staff time relative to issuing many solicitations. Note further that the City does not use procurement cards¹¹.

G. Professional Services

Contracts with architects, engineers or related professionals are exempt from Chapter 30B.(1)(b) (32A). Cambridge Public School uses requests for quotes for most of its professional services, outside of

¹¹ Procurement cards are credit cards issued to Purchasing staff that may be used to pay vendors for services.

professional development services which are exempt from Section 30B. Staff interviews indicated that the City does not use “master lists” for the various professional services disciplines.

H. Exemptions from Competitive Bidding

The Massachusetts local public contracting statutes set forth a number of exemptions to the competitive bidding requirements discussed above.¹⁴ These include:

1. Public construction contracts.¹⁵
2. Public building design contracts subject to the provisions of M.G.L. c. 7C, §§ 44-57, inclusive.
3. Intergovernmental service agreements.
4. Agreements with the Commonwealth.
5. Contracts for the purchase of materials, under specifications of the Massachusetts Department of Transportation Highway Division.
6. Contracts for the advertising of required notices.
7. An agreement between agencies, boards, commissions, authorities, departments or public instrumentalities of one city or town.
8. An agreement for the provision of special education.
9. A contract to purchase supplies or services from, or to dispose of supplies to, any agency or instrumentality of the federal government, the Commonwealth or any of its political subdivisions, or to another state or its political subdivision.
10. The issuance of bonds, notes or securities in accordance with procedures established by law.
11. Contracts and investments made in connection with deferred compensation programs for employees.
12. A contract for the procurement of insurance or surety bonds.
13. Contracts for the services of expert witnesses.
14. Contracts or agreements entered into by a municipal gas or electric department governed by a municipal light board.
15. Contracts with labor relations representatives, lawyers or certified public accountants.
16. Contracts with physicians, dentists and other health care individuals or persons **(including nurses, nurses’ assistants, medical and laboratory technicians); health care providers (including diagnosticians); social workers; psychiatric workers; and veterinarians.**
17. A contract for snow plowing services.
18. A contract or lease by a governmental body of its boat slips, berths or moorings.
19. A contract for retirement board services.
20. A contract that is funded by proceeds derived from a gift to a governmental body or a trust established for the benefit of a governmental body.
21. A contract for the towing and storage for motor vehicles.
22. A contract to provide job-related training, educational or career development services to the employees of a governmental body.
23. [This extension was repealed in 2016]
24. A contract for ambulance service by a governmental body.

25. A contract to sell, lease or acquire residential, institutional, industrial or commercial real property by a public or quasi-public economic development agency or urban renewal agency engaged in the development and disposition of said real property in accordance with a plan approved by the appropriate authorizing authority.
26. A contract for the collection of delinquent taxes or for the services of a deputy tax collector.
27. Contracts or agreements entered into by a municipal hospital or a municipal department of health.
28. Contracts entered into by a governmental body on behalf of a hospital owned by such governmental body where such contract is funded by expenditures from an operations account, so-called, or a special account, established pursuant to a special act that is maintained for the benefit of and designated with the name of such hospital.
29. Contracts, agreements or leases entered into by a municipal airport commission.
30. A contract for the collection, transportation, receipt, processing or disposal of solid waste, recyclable materials or compostable materials. Hazardous waste contracts and sludge disposal contracts are not exempt.
31. An agreement for the purchase of photography services entered into by a public school;
32. energy aggregation contracts entered into by a political subdivision of the commonwealth for energy or energy related services arranged or negotiated by such subdivision on behalf of its residents;
- 32A. contracts with architects, engineers and related professionals;
33. Energy contracts entered into by a city or town or group of cities or towns or political subdivisions of the commonwealth, for energy or energy related services.
34. A contract made in accordance with section 5 of chapter 111C (covering sanitary investigations).

I. Insurance and Prompt Payment

1. Insurance

With regard to insurance the City contract control policy provides the following requirements:

- **Owner's Protective Liability (as a separate policy)**
 - Each Occurrence \$1 Million
 - Aggregate \$2 Million
- Commercial Liability
 - General Aggregate - per project \$2 Million
 - Products Completed Operations Aggregate – per project \$1 Million
 - Personal Injury and Advertising Limit \$1 Million
 - Each Occurrence \$1 Million
- Automotive-for all owned, non-owned, hired and leased vehicles
 - Combined single limit \$1 Million
 - or

- o Bodily injury- each person \$100,000 each accident \$1 Million Property damage-each occurrence \$1 Million.¹⁶

City procurement staff did report vendor concerns about insurance requirements, although not with cyber insurance. CPS procurement staff did not report vendor concerns about insurance requirements. Vendor experience with City insurance requirements is discussed in Chapter VII, Anecdotal Evidence, below.

2. Prompt Payment

The City does not have a prompt payment ordinance. City staff interviews did not report problems with prompt payment. Cambridge Public School staff did indicate that prompt payment was currently an issue due to staffing shortages and the need to upgrade software. Vendor experience with prompt payment by the City is discussed in Chapter VII, Anecdotal Evidence, below.

J. Vendor Registration and Prequalification

The City vendor list is in its BidTracker system, which is separate from its PeopleSoft financial system. Vendors can register BidTracker at no cost. Vendor registration does indicate MBE and WBE status.¹⁸ Vendors do not have to register to bid. Neither the City nor CPS maintain a prequalification list for Supplies & Services.

The City post solicitations on the State COMMBUYS system, as required by statute for formal procurement. COMMBUYS is the Commonwealth's electronic procurement system. Any public agency in Massachusetts can post solicitations on the COMMBUYS system free of charge. The City notifies vendors of solicitations by postcard. Interviews with City staff indicated that electronic notification by email can be a challenge because all vendors do not have email, but when available staff will send out email notification. The City Purchasing website presents current bids but does not contain forecasts of upcoming bid opportunities.¹⁹ CPS purchasing department does not maintain a vendors list but relies on the School's departments to source vendors.

K. MWBE State Certification

The City does not certify MWBEs or SBEs. The Commonwealth's Supplier Diversity Office and City of Boston certify disadvantaged firms. The City of Boston has reciprocal certification with the State of Massachusetts.

For the State minority means a person who meets one or more of the following definitions:

“Minority”, a person with a permanent residence in the United States who is American Indian, Black, Cape Verdean, Western Hemisphere Hispanic, Aleut, Eskimo, or Asian.¹²

The two distinctive elements of this definition that differ from the minority definitions in other parts of the country is the inclusion of Cape Verdeans.

Massachusetts also allows for the certification of nonprofit organizations that meet the following criteria:

- (a) The applicant must be tax-exempt under either § 501(c)(3) or § 501(c)(4) of the United States Internal Revenue Code,
- (b) The applicant must be in compliance with, and in good standing legally under, the laws of its governing jurisdiction and any filing requirements of the Public Charities Division of the Office of the Attorney General of Massachusetts,
- (c) One or more eligible persons must constitute 51% or more of the applicant's voting membership, if any, and 51% or more of its board of directors,
- (d) The applicant must be independent, and controlled by one or more, minorities, women or minority/women and
- (e) The applicant must be ongoing.²¹

Eligible person is defined here as an “adult permanent resident of the United States who is a minority or woman. This person must also be represented by the applicant to be a minority person or woman who controls, or is among the persons, who control the non-profit organization.”²²

Every firm must have its certification renewed every two years and undergo a substantive recertification review at least every six years.

The State disadvantaged firm definition does not set geographic or size limitations on certification. An out-of-state applicant or certified entity must be certified in its home-state and provide a copy of a home-state

¹² 2006 Massachusetts Code - Chapter 7, Section 40N(b).

site visit report to become and remain eligible for Commonwealth certification. Note that this is not the same as the federal definition of Disadvantaged Business Enterprise (DBE) for US Department of Transportation programs.

L. City Diverse Vendor Directory

The City has had a MWBE directory since the early 2000s. That directory has been updated to a Diversity Directory that includes the disabled veterans and LGBTQ firms. The previous directory was a paper directory that was issued once a year, while the online version is updated daily. The current Diversity Directory is searchable by business demographic and type of category. Firms in the Diversity Directory are self-certified, and the Diversity Directory does not indicate whether they are Commonwealth certified. Staff interviews indicated that this Diversity Directory is not used by the Purchasing Department for procurement outreach, since Purchasing relies on its vendor registry for outreach.

M. MBE Goals

One of four FY22 Objectives & Performance Measures goals of the City's Purchasing Department is to: "Work with the Community Development Department and the State Office of Supplier Diversity to participate in and organize vendor fairs, panels, and informational sessions to encourage local, minority, women, and veteran-owned businesses to do business with the City."²³ Similarly, the CPS Purchasing Manual states that, "The City encourages all departments to do business with small, local and minority owned firms in Cambridge when possible."²⁴

The City has no MWBE or Small Business Enterprise (SBE) set-asides or bid preferences program for Supplies & Services. The City does not have formal local business preferences either. Staff interviews did indicate that the City and CPS did tend to use local vendors for towing, library books (as opposed to textbooks) and some art procurements, as these are exempt from Chapter 30B. Not all art procurements are exempt, and therefore will require a formal procurement process.

N. Sheltered Market Programs

State law allows for local governments to have sheltered markets for disadvantaged vendors.²⁵ The Commonwealth defines "disadvantaged vendors" as including minorities, women and veterans.²⁶ State law defines a sheltered market program as, "a program under which certain contracts are designated by the chief procurement officer for procurement from one or more classes of disadvantaged vendors."²⁷ State law further requires that a sheltered market program "shall to the extent constitutionally required be based on findings that such program is a remedy for the present effects of past discrimination."²⁸

The Sheltered Market Program is a program where some contracts are specifically set-aside by the chief procurement officer for procurement from designated disadvantaged vendors. Key provisions include:

Establishment: A sheltered market program can be established by the chief procurement officer when authorized by a majority vote. The program can be applied to different types of contracts, specifying the class of disadvantaged vendors it caters to.

Implementation: Before executing a contract under the program, there are a series of approvals and procedures the procurement officer must adhere to, including getting clearance from the chief procurement officer, post a public hearing, and publishing these procedures in a widely circulated newspaper and a state publication.

The procedures include:

- Certification protocols for disadvantaged vendors, encompassing a standardized application process, opportunity for vendors to be heard if denied, validity of certification, and a public awareness campaign.

- Specific criteria for designating which contracts are covered under the program.

- Mechanisms to ensure healthy competition among the vendors within the program. Depending on the contract's value, specific bidding requirements are in place.

- Annual review and evaluation of the program, mandating a detailed report by the chief procurement officer.

Other provisions include:

- Advertisement:** All contract ads within this program should indicate the program and specify the class of vendors eligible for bidding.

- Award Limitations:** Contracts under this program should not be awarded on a sole-source basis. If there aren't enough responsive bids or if all bids are rejected, the contract won't be granted under this program.

- Duration & Restrictions:** The contract term under the program cannot exceed three years, with specific restrictions on disadvantaged vendors in terms of the number of contracts they can hold concurrently and annually.

The City does not currently have a sheltered market program for disadvantaged firms. -Staff interviews indicated that sheltered markets are not widely used in Massachusetts at present. -The City of Boston recently implemented a pilot sheltered market program for six contracts in early 2022.²⁹

O. Reporting MWBE Utilization

The City does not track or report MWBE utilization in Supplies & Services. Vendor demographic status is not indicated in the City PeopleSoft financial system.

P. Business Development Efforts

1. Management and Technical Assistance

The City has provided financial and technical assistance, including:

- Virtual Commonwealth certification workshop
- Small business grants for storefront improvement and equipment and marketing support
- **“How to be a Vendor with the City” and “How to Respond to a City BID” Workshops**
- Business development courses in a variety of business subjects
- Local Vendor Fairs
- One-on-one technical assistance with staff
- Small Business Coaching Program
- Free consulting with professionals
- Financial education, financial literacy classes with local banks and SCORE.
- Ten-week business planning course starting or growing a business, or develop business plan, in partnership with the Center for Women in Enterprise.

In FY 2022, \$82,000 of CDBG funds was budgeted for Business Development Services program including the 10-week Business Planning Program, Small Business Coaching Program, and the Cambridge Entrepreneurship Assistance Program.³⁰ The City reported 243 people attended small business workshops and receiving startup, expansion, relocation, or business development assistance in FY 2020, with a target 255 for FY 2022.³¹

2. Financial Assistance

The City does not provide regular small business loans to firms. However, as part of COVID relief the City along with the Cambridge Redevelopment Authority (CDD) awarded \$4.2 million in grants and loans to support small businesses. The City of Cambridge provided over 560 grants and loans through these Covid relief efforts. The City reported that more than 70% of the recipients were women- and/or minority-owned businesses.³²

3. Tax Incentives

The City has not used tax incentives for economic development during the study period (most tax incentives come from the State). Consequently, there is no use of MWBE programs in conjunction with City tax incentives.

Q. Staffing & Budget

The OEI replaced the Affirmative Action office. The OEI is designed to foster a climate of diversity throughout City government. OEI's work also includes monitoring all equal employment opportunities and nondiscrimination laws to ensure compliance and monitoring the workplace climate. In addition, OEI maintains and evaluates demographic data and workforce reports for the EEOC, ensures adherence to the City Affirmative Action Plan goals, and investigates formal complaints of alleged discrimination.³³

Staff interviews indicated that the OEI currently has a staff of 1.25 FTE and is projected to add a full-time analyst. The FY 2022 OEI Budget is \$502,465.³⁴ There is no internal or external City MWBE or VBE advisory committee.

R. Conclusions

No procurement barriers were reported by City staff, except current issues with prompt payment at CPS. Barriers identified by vendors are reported in Chapter VII, Anecdotal Evidence, below.

The City has no MWBE or SBE program in Supplies & Services. The City has not used the sheltered market program for disadvantaged firms as authorized by State law.

The City does not certify MWBEs. The City has a Diversity Directory, but it does not indicate certified firms and is not used for procurement outreach for Supplies & Services. The City does not track or report MWBE utilization in Supplies and & Services.

V. QUANTITATIVE ANALYSIS

A. Introduction

The quantitative analysis of a disparity study measures and compares the availability of firms in each race/ethnicity/gender group within the City of Cambridge (hereinafter, “Cambridge, or “City”) geographical and product market areas to the utilization of each race/ethnicity/gender group, measured by the payments to these groups by the City.

Research Question: Statistical Analysis
Is there a disparity that is statistically significant between the percentage of available, qualified, and willing MWBE firms, in the Relevant Market, and the percentage of dollars spent with MWBE firms in that same Relevant Market during the Study Period?

The outcome of the comparison shows us whether there is a disparity between Availability and Utilization or Utilization is in Parity with Availability (i.e., the amount to be expected). Where there is disparity, a determination is made whether it is an Overutilization or an Underutilization. Further, the disparity is tested to see if it is statistically significant. Legal precedents have clearly established that the presence of such significant statistical disparities create an inference of discrimination adversely affecting the participation of the underutilized firms. Finally, the regression analysis contained in Chapter VI, Private Sector Analysis, tests for other explanations for the disparity to determine if it is likely that the disparity is caused by race, ethnicity, and gender status, or other factors. Where there is statistically significant Underutilization of MWBEs that is likely caused by race, ethnicity, and/or gender, GSPC determines as part of its findings whether there is a basis for an inference of discrimination and consideration by the City of the use of narrowly tailored race- and gender-conscious remedies.

B. Data Assessment and Requests

GSPC conducted several meetings with representatives who were familiar with the City of Cambridge’s data. The objective of the meetings was for GSPC to get a better understanding of how the City of Cambridge’s data is kept and how best to request the data needed for the Study. Following the data assessment meetings, GSPC presented written requests for the data, detailing the type and fields of data needed to complete the quantitative analysis.

The electronic data was uploaded to GSPC by the City of Cambridge in Microsoft SharePoint where they were catalogued and stored in GSPC’s own cloud repository. The data collected was used to develop data files containing purchasing history for each major purchasing category, that is, Professional Services, Other Services, and Supplies. There was no subcontracting data, which is not unusual for these purchasing categories.

Additionally, GSPC verified the gender and ethnicity of vendors, and completed necessary information about vendor address, Industry Category, and other related areas. Gender and ethnicity verification were

based on official certification listings. GSPC used vendor ZIP codes to identify the county where businesses are located to determine whether a vendor will be included in the Relevant Geographic Market analysis. Some files submitted by the City of Cambridge did not contain the necessary information, including vendors' physical addresses. To supplement the missing information, more data was obtained from Dun & Bradstreet databases, or by simply searching the businesses' name on the internet. As GSPC developed data files, those files were shared for approval with the City. The City of Cambridge was given access to all files and tables in GSPC's cloud repository.

C. Data Assignment, Cleanup and Verification

After the completion of data collection, the submitted data were electronically and manually "cleaned" to remove duplicates and exclude all unrelated payments such as payment to personnel, nonprofit organizations, and governmental agencies, as well as Construction and Architecture and Engineering. File cleanup was first done electronically by linking information provided by the City of Cambridge to certain indicators, like purchase order number, vendor name, vendor number, or cross-referencing information with other files to fill in missing fields. This cleansing and re-tabulating process excluded some dollars and vendors from the analysis, such as payments made to local governments, utility companies, not-for profits, and universities/colleges. The cleanup phase also included the following five (5) tasks:

- Assigning and verifying ethnicity, race & gender of each firm
- Utilizing zip codes to determine certain areas to assign each firm's location
- Matching files electronically to pick up addresses, ethnicity/race/gender, and/or industry category
- Filling in any additional necessary data on firms

1. Assignment of Ethnicity and Gender

To identify all minority owned firms, GSPC utilized only those which were certified through the following certification process:

- COMMBUY Index
- Boston Certified Business List
- Rhode Island Veterans Certified Business Directory
- System for Award Management (federal register)

In assigning race/gender/ethnicity, priority was given to firms' race/ethnicity, so that all minority owned firms were categorized according to their race/ethnicity and not by gender in the following groups:

- African American
- Asian American
- Hispanic American

- Native American
- Portuguese American (Cape Verdean)
- Non-Minority Women
- Non-MWBE

For example, a Woman owned Asian American firm was categorized as Asian American rather than a Woman owned business. Non-minority Women owned firms were categorized individually by their race and gender. Non-minority male owned firms, publicly traded corporations, and non-certified firms are categorized as Non-MWBE firms. Vendors were identified as MBE or WBE only if they were certified through a government agency.

2. Assignment of Business Categories

In order to place firms into the proper industry categories, GSPC initially used the internal City of Cambridge purchasing descriptions within purchasing data but verified the results after assigning vendors into Professional Services, Other Services and Supplies categories. Several data summaries were provided by GSPC for joint review with the City of Cambridge. As a result, some vendors were reclassified based on additional information provided by the City. In the final analysis, GSPC and the City of Cambridge Project Managers agreed on the classification and accuracy of vendors in various categories.

3. Master Vendor File

The City of Cambridge provided a series of data files reflecting all aspects of procurement activities during the Study Period. Based on the submitted files, GSPC created two master files. One file comprised of the City's payment data, was used to analyze prime utilization. The payment file was included, along with the other data files listed below, to create a Master Vendor File of available firms in the Relevant Market. The following is the list of data sources used in generating the availability master file:

- City of Cambridge Prime Payments
- City of Cambridge Awards
- City of Cambridge Vendor Lists
- City of Cambridge Bid Tabulations
- COMMBUY Index
- System for Award Management
- Rhode Island Veterans Certified Business Directory

D. Relevant Market Analysis

The commonly held idea that the Relevant Market area should encompass at least 75% to 85% of the "qualified" vendors that serve a particular sector has its origins in antitrust lawsuits.¹³ In line with antitrust precepts, United States Supreme Court, Justice Sandra Day O'Connor in Croson,

Relevant Market Area is the geographic location where the City spends at least 75% of its dollars. The Utilization and Availability analyses are conducted only using firms located within the Relevant Market Area

specifically criticized the City of Richmond, Virginia, for making MBEs all over the country eligible to participate in its set-aside programs.¹⁴ The Court reasoned that a mere statistical disparity between the overall Minority population in Richmond, Virginia, which was 50% African American, and the award of prime contracts to Minority-owned firms, 0.67% of which were African American-owned firms, was an insufficient statistical comparison to raise an inference of discrimination. Justice O'Connor also wrote that the relevant statistical comparison is one between the percentage of MBEs in the marketplace (or Relevant Market Area) who were qualified to perform contracting work (including prime and subcontractors) and the percentage of total City contracting dollars awarded to Minority firms.

The City's Relevant Market Area has been determined for each of the Industry Categories:

- Professional Services
- Other Services
- Supplies

For each purchasing category GSPC measured the "Relevant Geographic Market Area" as the area where at least 75% of the City dollars were paid during the Study Period. In doing that, GSPC converted vendors' Postal Zip Codes into Counties and State and then worked on drawing the Relevant Geographic Market Area. The Geographic Relevant Market is the Boston Metropolitan Statistical Area (MSA).¹⁵

The results of Relevant Geographic Market Area are presented in Table 5 shows that close to 82.58% of all Professional Services related procurements, during the study period, were paid to vendors within the Cambridge relevant market. The Cambridge market area covered 84.01% of Other Services, and 68.64% of Supplies. About 77.97% of all the City spending was with firms located in this relevant market. A more detailed breakdown of the Relevant Geographic Market by County is included in Appendix A.

¹³ D. Burman. "Predicate Studies: The Seattle Model," Tab E of 11-12 Minority and Women Business Programs Revisited (ABA Section of Public Contract Law, Oct. 1990).

¹⁴ Croson, 488 U.S. 509, 709 S. Ct. 706 (1989).

¹⁵ The MSA is composed of Suffolk, MA; Essex, MA; Norfolk, MA; Middlesex MA; Plymouth, MA; Rockingham, NH; and Strafford, NH counties.

Table 5: Relevant Market By Counties and State
(Using Payment Dollars, FY 2017-2021)
Cambridge Disparity Study

Work Category	Area	Amount	Percent	Cumulative %
Professional Services	City of Cambridge	\$ 1,298,274	5.22%	5.22%
	Relevant Market Area (MSA)	\$ 19,250,395	77.36%	82.58%
	CSA	\$ 191,344	0.77%	5.99%
	Rest of Counties in Massachusetts	\$ 15,069	0.06%	6.05%
	Rest of USA	\$ 4,113,626	16.53%	22.58%
	Outside of USA	\$ 15,595	0.06%	22.64%
	Total	\$ 24,884,302	100.00%	
Other Services	City of Cambridge	\$ 12,857,779	7.03%	7.03%
	Relevant Market Area (MSA)	\$ 140,705,074	76.97%	84.01%
	CSA	\$ 6,781,228	3.71%	10.74%
	Rest of Counties in Massachusetts	\$ 533,071	0.29%	11.04%
	Rest of USA	\$ 21,601,749	11.82%	22.85%
	Outside of USA	\$ 318,581	0.17%	23.03%
	Total	\$ 182,797,482	100%	
Supplies	City of Cambridge	\$ 8,883,764	6.98%	6.98%
	Relevant Market Area (MSA)	\$ 78,446,546	61.66%	68.64%
	CSA	\$ 9,891,376	7.77%	7.77%
	Rest of Counties in Massachusetts	\$ 2,628,153	2.07%	9.05%
	Rest of USA	\$ 27,283,913	21.44%	30.49%
	Outside of USA	\$ 95,789	0.08%	30.57%
	Total	\$ 127,229,541	100%	

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Note: GSPC uses full decimal numbers, so automatic rounding may cause differences within the tables¹⁶.

¹⁶ CSA is defined as the Combined statistical Area which may include multiple Metropolitan Statistical Areas (MSA). The Cambridge CSA is Boston-Worcester-Providence, MA-RI-NH-CT Combined Statistical Area which includes the Barnstable Town, Boston-Cambridge-Newton, Concord, Laconia, Manchester – Nashua and Providence – Warwick Metropolitan Statistical Areas (or micro areas). E.g., Worcester Metropolitan Statistical Area.

E. Availability Analysis

1. Methodology

The methodology utilized to determine the Availability of businesses for public contracting is crucial to understanding whether a disparity exists within the Relevant Market area. Availability is a benchmark to examine whether there are any disparities between the Utilization of MWBEs and their Availability in the marketplace.

Availability Estimate is the determination of the percentage of MWBEs that are “ready, willing, and able” to provide Supplies or services to the City of Cambridge.

Croson and subsequent decisions give only general guidance as to how to measure Availability. One common theme from the court decisions is that being qualified to perform work for a local jurisdiction is one of the key indices of an available firm. In addition, the firm must have demonstrated that it is both willing and able to perform the work.

The measures of Availability utilized in this Study incorporate all the criteria of Availability required by Croson:

- The firm does business within an industry group from which the City makes certain purchases.
- The firm's owner has taken steps (such as registering, bidding, certification, prequalification, etc.) to demonstrate interest in doing business with government; and
- The firm is located within a relevant geographical market area such that it can do business with the City.

An MWBE Availability Estimate is expressed as a percentage of total Availability, computed by dividing the number of firms in each MWBE group in each Industry Category by the total number of businesses in the pool of firms for that Industry Category. Once these Availability estimates were calculated, GSPC compared them to the percentage of firms utilized in the respective business categories to generate the disparity indices, which will be discussed later in this analysis.

2. Measurement Basis for Availability

There are several approaches to measuring available, qualified firms. GSPC has established a methodology of measuring Availability based upon demonstrated interest in doing business with governments in the Relevant Market area and in the relevant Industry Category. A firm is considered to be demonstrating interest if the owner has taken steps, such as registering, bidding, certification, prequalification, etc. In determining those firms to be included in the Availability pool, GSPC included the entire “Master Vendor File.”

3. Capacity

The ability or capacity to perform the work is tested in the Regression Analysis conducted in Chapter VI, Private Sector Analysis, herein. The Regression Analysis shows whether race, ethnicity, and gender factors are impediments overall to the success of MWBEs in obtaining awards in the marketplace and whether, but for those factors, firms would have the capacity to provide Supplies and Services on a level higher than what is presently being utilized.

F. Availability Estimates

The Availability estimates for the Study are separated into three (3) Industry Categories. Figures 1 through 3 below show the number of available firms by race/gender/ethnicity as compared with the total number of available firms. See Tables E-1 through E-5 in Appendix E for detailed Availability information including the breakdown by Industry Category and the race, ethnicity, or gender of the firm owners.

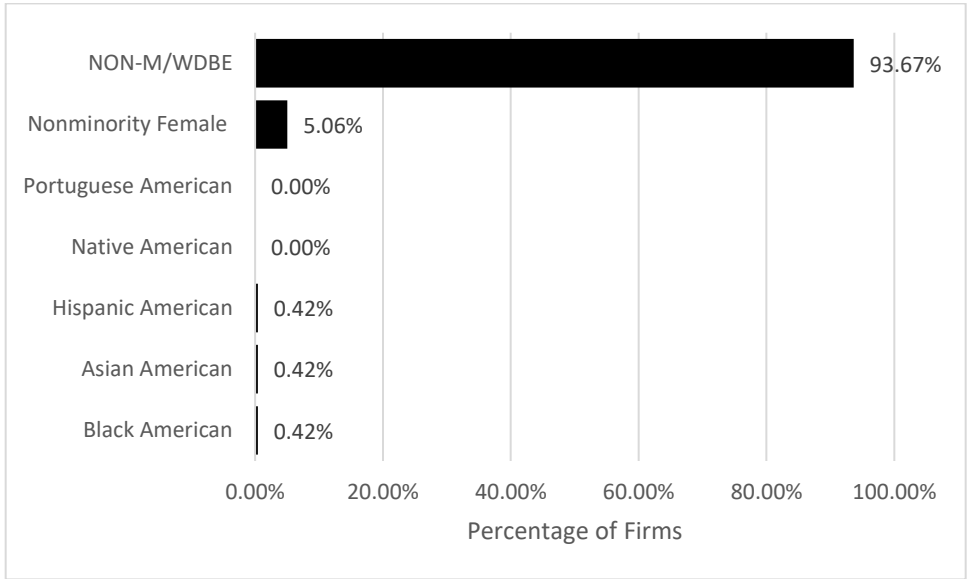
Note: GSPC uses full decimal numbers, so automatic rounding may cause differences within the tables.

1. Professional Services

Availability of Professional Services Firms by Ownership in the Relevant Geographic Area is presented in Figure 1. GSPC recorded 237 vendors in that area. As the Figure reflects, 93.67% of the vendors were Non-MWBEs while 5.06% of business were Non-minority Female Owned. Likewise, as depicted in Figure 1, both firms owned by African Americans, Asian Americans and Hispanic Americans represented 0.42% of total firms in that category while, Asian Americans, Native Americans and Portuguese Americans owned firms showed no availability¹⁷.

¹⁷ For the purposes of GSPC's analysis, Minority and Non-minority Women owned firms are only those certified as such.

Figure 1: Availability Estimates: Availability estimates – Professional Services in the Relevant Market
Cambridge, MA MSA
Cambridge Disparity Study

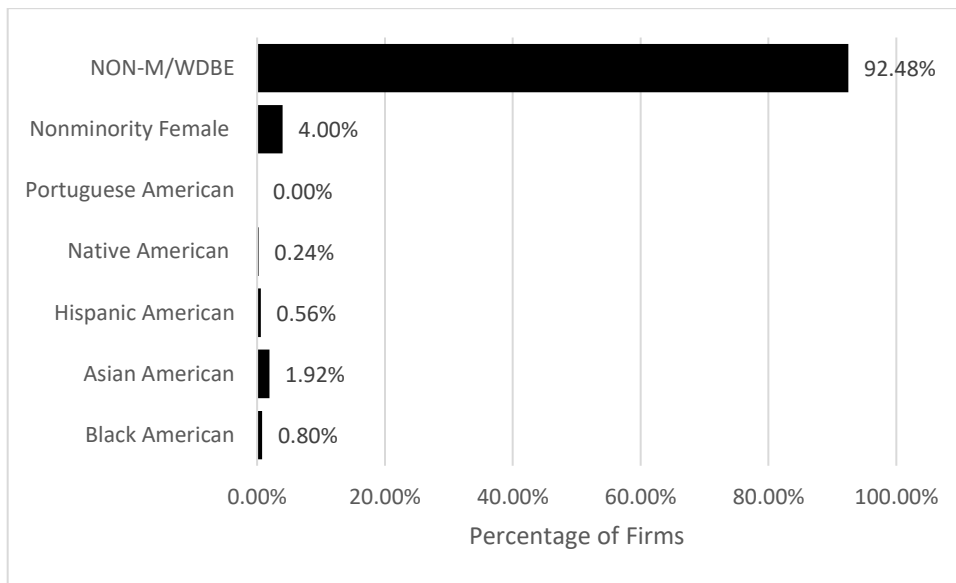


Griffin & Strong, P.C. 2023

2. Other Services

Availability of Other Services firms in the Relevant Geographic Market Area is presented in Figure 2. As depicted in Figure 2, 92.48% of the 1,250 Other Services firms were Non-MWBEs and 4.00% were Nonminority Female. The Asian American Owned firms consisted of 1.92% while firms owned African Americans, Hispanic Americans and Native Americans made up 0.80%, 0.56% and 0.24%, respectively. There were no Portuguese American owned firms in this category.

Figure 2: Availability Estimates- Other Services In the Relevant Market
Cambridge MA MSA
Cambridge Disparity Study

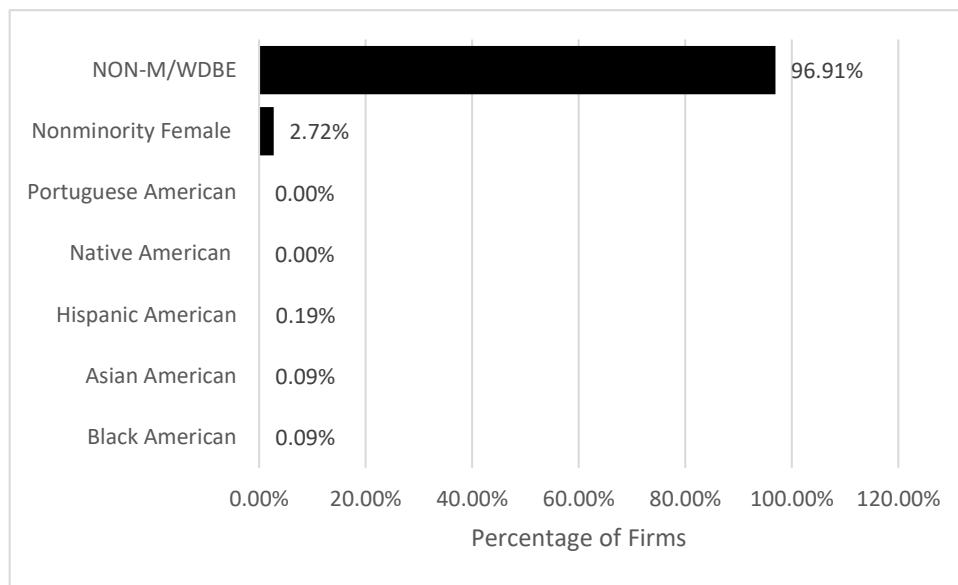


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3. Supplies

Availability of firms in the Supplies category is presented in Figure 3. As shown in Figure 3, 96.91% of the 1,068 firms were Non-MWBEs while 2.72% were owned by Nonminority Females. Hispanic American owned firms owned firms accounted for 0.19% of the total, and firms owned by African Americans and Asian Americans were both 0.09%. **There were also no Portuguese American or Native American owned firms in this category.**

Figure 3: Availability Estimates- Supplies in the Relevant Market:
 Cambridge, MA MSA
 Cambridge Disparity Study



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G. Prime Contractor Utilization Analysis

The relevant prime payment history for the City has been recorded based upon the paid amounts captured in the City’s financial system and provided by the City. In the Prime Contractor Utilization tables below, the dollars and percentage of dollars paid in each of the three (3) Industry Categories have been broken out by race, ethnicity, and gender for each year of the Study Period. The total of each race, ethnicity, and gender group represented in the MWBE category, when added to the Non-MWBE category, equals the Total Column.

PRIME UTILIZATION is the percentage of actual payments during the Study Period made directly by the City of Cambridge to MWBEs in comparison to all vendors.

Note: The totals for each year represent the unique number of firms in that year. The Total Unique Number of Businesses represents the unique pool for firms used over the entire Study Period.

As shown in Table 6, 3.03% of procurement in Professional Services was spent with MWBEs. Table 7, in particular, shows 10 MWBE vendors were utilized in Professional Services area as compared to 111 Non-MWBE vendors. The average pay for MWBEs in Professional Services category was \$58,299, as compared to \$168,175 for Non-MWBE vendors over the study period. There was no spending with Veteran Business Enterprises (VBE) in Professional Services.

Table 6: Number of Businesses by Business Ownership and Fiscal Year, Prime Data Professional Services: Number of Businesses by Business Ownership and Fiscal Year
(Using Vendor Payments, FY 2017-2021)
Cambridge Disparity Study

Fiscal Year	African American		Asian American		Hispanic American		Native American		Total MBE		Non Minority Woman		Total MWBE		Non-MWBE		TOTAL	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	3	4.84%	3	4.84%	59	95.16%	62	100.00%
2018	0	0.00%	0	0.00%	1	1.59%	0	0.00%	1	1.59%	6	9.52%	7	11.11%	56	88.89%	63	100.00%
2019	1	1.49%	0	0.00%	1	1.49%	0	0.00%	2	2.99%	5	7.46%	7	10.45%	60	89.55%	67	100.00%
2020	0	0.00%	0	0.00%	1	1.54%	0	0.00%	1	1.54%	6	9.23%	7	10.77%	58	89.23%	65	100.00%
2021	1	1.52%	0	0.00%	1	1.52%	0	0.00%	2	3.03%	7	10.61%	9	13.64%	57	86.36%	66	100.00%
Total 2017-2021	2	0.62%	0	0.00%	4	1.24%	0	0.00%	6	1.86%	27	8.36%	33	10.22%	290	89.78%	323	100.00%
Total Number of Unique Business*	1	0.83%	0	0.00%	1	0.83%	0	0.00%	2	1.65%	8	6.61%	10	8.26%	111	91.74%	121	100.00%

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Table 7: Utilization of Prime Analysis in Relevant Market area, Prime Data- Professional Services:
 Utilization of Prime Analysis in Relevant Market area
 (Using Payment Dollars, FY 2017-2021)
 Cambridge Disparity Study

Business Ownership Classification	2017	2018	2019	2020	2021	TOTAL
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American	\$ -	\$ -	\$ 30,000	\$ -	\$ 15,550	\$ 45,550
Asian American	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hispanic American	\$ -	\$ 177,668	\$ 74,232	\$ 13,022	\$ 17,402	\$ 282,324
Native American	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Portuguese American	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL MINORITY	\$ -	\$ 177,668	\$ 104,232	\$ 13,022	\$ 32,952	\$ 327,874
Nonminority Female	\$ 21,744	\$ 89,467	\$ 43,018	\$ 64,394	\$ 36,495	\$ 255,118
TOTAL M/WBE	\$ 21,744	\$ 267,135	\$ 147,250	\$ 77,416	\$ 69,447	\$ 582,992
NON-M/WBE	\$ 2,481,319	\$ 3,193,067	\$ 3,670,638	\$ 3,634,154	\$ 5,688,222	\$ 18,667,401
TOTAL FIRMS	\$ 2,503,063	\$ 3,460,201	\$ 3,817,889	\$ 3,711,570	\$ 5,757,670	\$ 19,250,393
Business Ownership Classification	2017	2018	2019	2020	2021	TOTAL
	(%)	(%)	(%)	(%)	(%)	(%)
African American	0.00%	0.00%	0.79%	0.00%	0.27%	0.24%
Asian American	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Hispanic American	0.00%	5.13%	1.94%	0.35%	0.30%	1.47%
Native American	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Portuguese American	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY	0.00%	5.13%	2.73%	0.35%	0.57%	1.70%
Nonminority Female	0.87%	2.59%	1.13%	1.73%	0.63%	1.33%
TOTAL M/WBE	0.87%	7.72%	3.86%	2.09%	1.21%	3.03%
NON-M/WBE	99.13%	92.28%	96.14%	97.91%	98.79%	96.97%

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The number of firms utilized, and the associated amounts spent in Other Services are presented in Tables 8 and 9. The number of unique MWBEs utilized in that Industry Category (19) was 2.04 % of total number of 931 unique businesses utilized for Other Services (Table 8). With respect to the City prime expenditures, and as reflected in Table 9, 0.66% of the total procurement was conducted with MBEs and 0.70% with Women-owned businesses during the Study Period. The average pay for MWBEs in Other Services category was \$109,247, as compared to \$165,882 for Non-MWBE vendors over the Study Period. There was \$12,900 spent with one VBE in Other Services.

*Table 8: Number of Businesses by Business Ownership and Fiscal Year, Prime Data-Other Services
(Using Vendor Payments, FY 2017-2021)
Cambridge Disparity Study*

Fiscal Year	African American		Asian American		Hispanic American		Native American		Total MBE		Non Minority Woman		Total MWBE		Non-MWBE		TOTAL	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2017	0	0.00%	2	0.38%	0	0.00%	1	0.19%	3	0.58%	4	0.77%	7	1.35%	513	98.65%	520	100.00%
2018	0	0.00%	2	0.41%	0	0.00%	0	0.00%	2	0.41%	7	1.42%	9	1.83%	483	98.17%	492	100.00%
2019	0	0.00%	2	0.42%	0	0.00%	0	0.00%	2	0.42%	2	0.42%	4	0.84%	474	99.16%	478	100.00%
2020	0	0.00%	2	0.42%	0	0.00%	0	0.00%	2	0.42%	4	0.83%	6	1.25%	474	98.75%	480	100.00%
2021	3	0.75%	1	0.25%	0	0.00%	0	0.00%	4	1.00%	3	0.75%	7	1.75%	393	98.25%	400	100.00%
Total 2017-2021	3	0.13%	9	0.38%	0	0.00%	1	0.04%	13	0.55%	20	0.84%	33	1.39%	2337	98.61%	2370	100.00%
Total Number of Unique Business*	3	0.32%	4	0.43%	0	0.00%	1	0.11%	8	0.86%	11	1.18%	19	2.04%	912	97.96%	931	100.00%

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Table 9: Utilization of Prime Analysis in Relevant Market area, Prime Data-Other Services
 (Using Payment Dollars, FY 2017-2021)
 Cambridge Disparity Study

Business Ownership Classification	2017	2018	2019	2020	2021	TOTAL
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Black American	\$ -	\$ -	\$ -	\$ -	\$ 14,003	\$ 14,003
Asian American	\$ 91,390	\$ 82,810	\$ 151,502	\$ 285,188	\$ 374,543	\$ 985,433
Hispanic American	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Native American	\$ 6,625.81	\$ -	\$ -	\$ -	\$ -	\$ 6,626
Portuguses American	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL MINORITY	\$ 98,016	\$ 82,810	\$ 151,502	\$ 285,188	\$ 388,546	\$ 1,006,063
Nonminority Female	\$ 321,975	\$ 231,674	\$ 326,580	\$ 44,704	\$ 144,696	\$ 1,069,629
TOTAL M/WBE	\$ 419,991	\$ 314,484	\$ 478,082	\$ 329,892	\$ 533,243	\$ 2,075,691
NON-M/WBE	\$ 26,008,091	\$ 29,171,134	\$ 29,399,298	\$ 32,244,258	\$ 34,461,382	\$ 151,284,162
TOTAL FIRMS	\$ 26,428,082	\$ 29,485,617	\$ 29,877,380	\$ 32,574,150	\$ 34,994,625	\$ 153,359,853
Business Ownership Classification	2017	2018	2019	2020	2021	TOTAL
	(%)	(%)	(%)	(%)	(%)	(%)
Black American	0.00%	0.00%	0.00%	0.00%	0.04%	0.01%
Asian American	0.35%	0.28%	0.51%	0.88%	1.07%	0.64%
Hispanic American	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Native American	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%
Portuguses American	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY	0.37%	0.28%	0.51%	0.88%	1.11%	0.66%
Nonminority Female	1.22%	0.79%	1.09%	0.14%	0.41%	0.70%
TOTAL M/WBE	1.59%	1.07%	1.60%	1.01%	1.52%	1.35%
NON-M/WBE	98.41%	98.93%	98.40%	98.99%	98.48%	98.65%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

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Similar observations were made with respect to businesses in the Supplies category. As depicted in Table 10, only two unique certified MBEs (or 0.25%) were utilized for the procurement of Supplies during the Study Period as compared to 785 unique Non-MWBE businesses. Only ten unique Women-owned businesses (1.25% of total businesses) received City prime payments for Supplies during the Study. As summarized in Table 11, MBEs received \$24,757 (0.03% of the total City prime spend) compared with over \$86.9 million (99.54%) spent with Non-MWBEs during the same time frame; Women owned business received 0.43%. The average pay for MBEs in Supplies category was \$33,719, as compared to \$110,767 for Non-MWBE vendors over the Study Period. There was no spending with Veteran Business Enterprises (VBE) in Supplies.

*Table 10: Number of Businesses by Business Ownership and Fiscal Year, Prime Data-Supplies
(Using Vendor Payments, FY 2017-2021)
Cambridge Disparity Study*

Fiscal Year	African American		Asian American		Hispanic American		Native American		Total MBE		Non Minority Woman		Total MWBE		Non-MWBE		TOTAL	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	6	1.42%	6	1.42%	416	98.58%	422	100.00%
2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	8	1.93%	8	1.93%	407	98.07%	415	100.00%
2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	7	1.85%	7	1.85%	371	98.15%	378	100.00%
2020	0	0.00%	0	0.00%	1	0.26%	0	0.00%	1	0.26%	7	1.79%	8	2.04%	384	97.96%	392	100.00%
2021	0	0.00%	0	0.00%	2	0.56%	0	0.00%	2	0.56%	5	1.41%	7	1.98%	347	98.02%	354	100.00%
Total 2017-2021	0	0.00%	0	0.00%	3	0.15%	0	0.00%	3	0.15%	33	1.68%	36	1.84%	1925	98.16%	1961	100.00%
Total Number of Unique Business*	0	0.00%	0	0.00%	2	0.25%	0	0.00%	2	0.25%	10	1.25%	12	1.51%	785	98.49%	797	100.00%

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Table 11: Utilization of Prime Analysis in Relevant Market area, Prime Data-Supplies
 (Using Payment Dollars, FY 2017-2021)
 Cambridge Disparity Study

Business Ownership Classification	2017	2018	2019	2020	2021	TOTAL
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Asian American	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hispanic American	\$ -	\$ -	\$ -	\$ 22,995	\$ 1,762	\$ 24,757
Native American	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Portuguese American						
TOTAL MINORITY	\$ -	\$ -	\$ -	\$ 22,995	\$ 1,762	\$ 24,757
Nonminority Female	\$ 36,659	\$ 32,938	\$ 78,163	\$ 179,506	\$ 52,603	\$ 379,869
TOTAL M/WBE	\$ 36,659	\$ 32,938	\$ 78,163	\$ 202,501	\$ 54,365	\$ 404,626
NON-M/WBE	\$ 12,070,903	\$ 18,065,903	\$ 14,869,350	\$ 16,714,080	\$ 25,232,003	\$ 86,952,238
TOTAL FIRMS	\$ 12,107,562	\$ 18,098,841	\$ 14,947,513	\$ 16,916,581	\$ 25,286,367	\$ 87,356,864
Business Ownership Classification	2017	2018	2019	2020	2021	TOTAL
	(%)	(%)	(%)	(%)	(%)	(%)
African American	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Asian American	0.00%	0.00%	#REF!	0.00%	0.00%	0.00%
Hispanic American	0.00%	0.00%	0.00%	0.14%	0.01%	0.03%
Native American	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Portuguese American	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY	0.00%	0.00%	0.00%	0.14%	0.01%	0.03%
Nonminority Female	0.30%	0.18%	0.52%	1.06%	0.21%	0.43%
TOTAL M/WBE	0.30%	0.18%	0.52%	1.20%	0.21%	0.46%
NON-M/WBE	99.70%	99.82%	99.48%	98.80%	99.79%	99.54%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

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H. Determination of Disparity

This section of the report addresses the crucial question of whether, and to what extent, there is disparity between the utilization of MWBEs as measured against their Availability in the Relevant Market.

DISPARITY INDICES calculate the difference between the percentage of Cambridge's Utilization of MWBEs during the Study Period and the Availability percentage of MWBEs.

1. Methodology

The statistical approach to answer this question is to assess the existence and extent of disparity by comparing the MWBE utilization percentages (by dollars) to the percentage of the total pool of MWBE firms in the relevant geographic and product areas. The actual disparity derived as a result of employing this approach is measured by use of a Disparity Index (DI).

The Disparity Index is defined as the ratio of the percentage of MWBE firms utilized (U) divided by the percentage of such firms available in the marketplace, (A):

Let: U =Utilization percentage for the MWBE group
 A =Availability percentage for the MWBE group
 DI =Disparity Index for the MWBE group
 DI =U/A

The results obtained by a disparity analysis will result in one of three conclusions: Overutilization, Underutilization, or Parity. Underutilization is when the Disparity Index is below one hundred. Overutilization is when the Disparity Index is over one hundred. Parity or the absence of disparity is when the Disparity Index is one hundred (100) which indicates that the utilization percentage equals the Availability percentage. In situations where there is Availability, but no utilization, the corresponding disparity index will be zero. Finally, in cases where there is neither utilization nor Availability, the corresponding disparity index is undefined and designated by a dash (-) or (Small Number) symbol. Disparity analyses are presented separately for each purchasing category and for each race/gender/ethnicity group.

2. Determining the Significance of Disparity Indices

The determination that a particular ethnic or gender group has been overutilized or underutilized is not, standing alone, proof of discrimination. Typically, the determination of whether a disparity is “statistically significant” can be based on the depth of the disparity in that any disparity index that is less than 80 is considered to be a statistically significant Underutilization, and any disparity index over 100 is considered

to be an Overutilization. The disparity indices impact as designated in the tables below as “Overutilization”, “Underutilization”, or “Parity” have been bolded to indicate such statistically significant impact.

GSPC uses a statistical test that considers whether or not the typical disparity index across all vendor categories is equal to unity. This constitutes a null hypothesis of “Parity”, and the test estimates the probability that the typical disparity index departs from unity, and the magnitude of the calculated test statistic indicates whether there is typically Underutilization or overrepresentation. Statistical significance tests were performed for each disparity index derived for each MWBE group, and in each purchasing category. This approach to statistical significance is consistent with the case law.

The existence of a statistically significant disparity between the Availability and utilization of Minority or Non-Minority Woman-owned businesses which are determined to likely be the result of the owners’ race, gender, or ethnicity will establish an inference that ongoing effects of discrimination are adversely affecting market outcomes for underutilized groups. Accordingly, such findings will impact the recommendations provided in this Study. GSPC will, in such a case, make recommendations for consideration of appropriate and narrowly tailored race, ethnicity, and gender-neutral remedies for this discrimination to give all firms equal access to public contracting within the City. GSPC will also, if appropriate, recommend narrowly tailored race- ethnicity-, and gender-conscious remedies to ameliorate identified barriers and forms of discrimination likely affected by such discrimination. If no statistically significant disparity is found to exist, or if such a disparity is not determined to be a likely result of firm owners’ race, ethnicity, or gender upon their success in the marketplace, GSPC may still make recommendations to support the continuation of engagement, outreach, small business development, and non-discrimination policies in the purchasing processes of the City.

3. Prime Disparity Indices

The results of our statistical analysis of utilization data for five Industry Categories are presented in Table 12. The outcomes of the statistical tests are colorized for easy understanding. As reflected in the Table, there was underutilization in prime contracts for all MWBEs groups, except Hispanic American owned firms in Professional Services. There was no availability for a MWBE group in boxes with a “NA.”

There was disparity for all MWBE groups for prime payments less than \$500,000 and less than \$1 million for all procurement categories, except that Asian American owned firms were also overutilized in Other Services for projects less than \$500,000 and less than \$1,000,000.

Please see tables showing detailed analysis of this section in Appendix F.

Table 12: Prime Contractor Utilization Analysis Summary
 (Using Payment Dollars, FY 2017-2021)
 Cambridge Disparity Indices

Firm Ownership	Professional Services	Other Services	Supplies & Commodities
African American	56.08	1.14	0.00
Asian American	0.00	33.47	0.00
Hispanic American	347.58	0.00	15.13
Native American	NA	1.80	NA
Portuguese American	NA	NA	NA
TOTAL MBE	134.55	18.64	7.57
Non-Minority Woman	26.17	17.44	16.01
TOTAL MWBE	47.85	18.00	14.99
Non-MWBE	103.52	106.67	102.71

Legend:

* Statistically significant disparity (Confidence interval of 95% and probability of error of less than 5%).

**Very small number to produce statistical significance

Significant Disparity (Disparity percentage below 80%).

Disparity (Disparity percentage 80% to 99.9%).

Overutilized (Disparity percentage over 100%).

No color is Parity.

I. Conclusion

In GSPC’s analysis of certified vendors utilized in each Industry Category, except for Hispanic American owned firms in Professional Services, every MWBE group was significantly underutilized in each category throughout the Study Period as Prime Contractor.

There was disparity for all MWBE groups for prime payments less than \$500,000 and less than \$1 million for all procurement categories, except that Asian American owned firms were overutilized in Other Services for projects less than \$500,000 and less than \$1,000,000.

VI. PRIVATE SECTOR ANALYSIS

A. Introduction

In this section, GSPC considers the market entry, private sector, public contracting and subcontracting outcomes, and other relevant market experiences of Minority, Women, and Veteran owned firms relative to all Non-MWBE and all firms in the City of Cambridge Market Area¹⁸. **GSPC’s analysis utilizes data from** businesses that are willing, able, or have actually contracted/subcontracted in the City of Cambridge Market Area, with the aim of determining if the likelihood of successful contracting/subcontracting opportunities—actual and perceived—in the City of Cambridge Market Area. This likelihood is conditioned, in a statistically significant manner, on the race, ethnicity, or gender status of firm owners. Such an analysis is a useful and important complement to estimating simple disparity indices, which assume all things important for success and failure are equal among businesses competing for public contracts. This analysis is based on unconditional moments, that is, statistics that do not necessarily inform causality or the source of differences across such statistics. As simple disparity indices do not condition on possible confounders¹⁹ of new firm entry, and success and failure in public sector contracting/subcontracting by businesses, they are only suggestive of disparate treatment, and their implied likelihood of success/failure could be biased. Further details on this statistical analysis are provided in Appendix G.

GSPC’s analysis posits that there are possible confounders of success and failure in the entry of new firms in the market and public sector contracting/subcontracting that are sources of heterogeneity, or diverse characteristics among businesses that lead to differences in success and failure. Failure to condition on the sources of similarities in success/failure in new firm formation and public sector contracting/subcontracting outcomes can leave simple disparity indices devoid of substantive policy implications as they ignore the extent to which firm owner race/ethnicity characteristics are causal factors. Disparate outcomes could possibly reflect in whole or in part, outcomes driven by disparate business firm characteristics that matter fundamentally for success/failure in the formation of new firms and public sector contracting/subcontracting outcomes. If the race, ethnicity, or gender status of a firm owner conditions lower likelihoods of success/failure, this would be suggestive of these salient and mostly immutable characteristics causing the observed disparities.

A broad context for considering disparities by firm ownership status can be informed by considering private sector outcomes in the relevant City of Cambridge Market Area. In general, the success and failure of MWBEs in public contracting could be conditioned by their outcomes in the private sector regarding their revenue generating capacity. The value of a descriptive private sector analysis is that it situates disparity

¹⁸ *In particular, the relevant market is the Boston-Cambridge-Newton, MA-NH Statistical Area (“MSA”) from the US Census Bureau.*

¹⁹ **A confounder can be defined as a variable that, when added to the regression model, changes the estimate of the association between the main independent variable of interest (exposure) and the dependent variable (outcome) by 10% or more.**

analyses in the “but-for” justification. Ayres and Vars (1998), in their consideration of the constitutionality of public affirmative programs posit a scenario in which private suppliers of financing systematically exclude or charge higher prices to Minority businesses, which potentially increases the cost of which Minority owned businesses can provide services required under public contracts relative to Non-Minority owned businesses.²⁰ This phenomenon means that MWBEs may only have recourse to higher cost financing due to facing discrimination in private sector capital markets, which compromises the competitiveness of their bids. Such a perspective on discrimination suggests that barriers faced by MWBEs in the private sector can rationalize targeted contracting programs by political jurisdictions, as the counterfactual is that in the absence of such private sector discrimination, they would be able to compete with other firms in bidding for public contracts.

B. Firm Revenue

Table 13 below reports on firm ownership type and “proxied” sales revenue for the Cambridge Metropolitan Statistical area—the relevant market area—from the US Census Bureau’s Annual Business Survey (ABS).²¹ GSPC’s descriptive private sector analysis considers the percentage of representation in the population of firms and revenue across the available and relevant firm ownership type classifications.²² Measuring at the firm level, business ownership is defined as having more than 50% of the stock or equity in the business and is categorized by sex, ethnicity, race, veteran status, and publicly held and other firms not classifiable by sex, ethnicity, race, and veteran status.

²⁰ See: Ayres, Ian, and Fredrick E. Vars. 1998, “When does private discrimination justify public affirmative action?” *Columbia Law Review*, 98: 1577-1641.

²¹ ABS data are publicly available at <https://www.census.gov/programs-surveys/abs/data.htm>. The ABS provides information on selected economic and demographic characteristics for businesses and business owners by sex, ethnicity, race, and veteran status. Further, the survey measures research and development (for microbusinesses), new business topics such as innovation and technology, as well as other business characteristics. The ABS is conducted jointly by the U.S. Census Bureau and the National Center for Science and Engineering Statistics within the National Science Foundation. It replaces the five-year Survey of Business Owners for employer businesses, the Annual Survey of Entrepreneurs, the Business R&D and Innovation for Microbusinesses survey, and the innovation section of the Business R&D and Innovation Survey. The most recent data for the Cambridge MSA for which firm revenue data are available is for the year 2017. As sales revenue data are not sufficiently and uniformly reported, we proxy sales with a firm’s payroll, which is proportional to payroll.

²² The data are only reportable for firms with data that can be captured without any sacrifice of confidentiality. In some instances, there are firms in revenue/sales categories for which this condition is not met, and there operating data is not reported in the publicly available version of the ABS. In this context, while this may impart a bias to Table 1, data for firms that cannot satisfy the confidentiality requirements are likely very small, and account for a small percentage of overall market revenue.

The City of Cambridge Market Area, Table 13 reveals that relative to White American owned firms, the estimated revenue shares of each Minority owned firm never exceed 4.5% (Women).²³ All MWBEs have estimated revenue shares far smaller than their firm representation shares. Relative to firms owned by White Americans in the City of Cambridge Market Area, exclusive of Women owned firms—some of whom are White Americans—the individual MWBE revenue shares are of a large order of magnitude below their implied 17% (approximately) firm representation shares.²⁴ This is consistent and suggestive of, but not necessarily causal evidence for MWBEs facing discriminatory barriers in the private sector of the City of Cambridge Market Area.²⁵

Table 13: Firm Ownership Type and Revenue Characteristics
 City of Cambridge Market Area:
 Census Bureau Annual Business Survey
 Cambridge Disparity Study

Ownership Structure	Number of Firms	Percentage of all Firms (approximate)	Market Area Total Revenue (proxied by payroll) (\$1,000)	Percentage of Market Area Total Revenue (approximate)	Ratio of Firm Share to Proxied Revenue Share (approximate)
All	100,892	100	\$205,830,919	100	1.0
Women	19,995	.198	\$9,198,734	.045	4.40
Caucasian American	83,902	.832	\$70,122,882	.341	2.44
African American	1,936	.019	\$492,083	.002	9.50
American Indian & Alaskan Native	Suppressed ^a	Suppressed ^a	Suppressed ^a	Suppressed ^a	Suppressed ^a
Asian American	8,777	.087	\$2,810,258	.014	6.21
Native Hawaiian & Other Pacific Islanders	7	.00007	\$5,726	.00003	2.33
Hispanic American	3,408	.034	\$831,062	.004	8.50
Veteran	466	.005	\$115,525	.0006	8.33
Unclassifiable by sector, race, gender, ethnicity	6,537	.065	\$132,251,655	.642	.101

Source: US Census Bureau 2019 Annual Business Survey. ^a Value suppressed to preserve confidentiality as a result of very few firms or there are one or two large firms that dominate the statistic. In general, across

²³ The percentages do not “add-up” to one, as the Women ownership category is not “mutually exclusive” of the other race/ethnicity/gender categories.

²⁴ This implied MWBE share is simply 1 minus the firm share of firms owned by White Americans.

²⁵ This can be ascertained by simply computing the ratio of each MWBEs firm share to total revenue share. For example, in the case of firms owned by Asian Americans, this ratio is approximately 3.78, in contrast to approximately 2.29 for firms owned by White Americans. In this context, relative to firms owned by White Americans, firms owned by Asian Americans are more “revenue underrepresented” with respect to their firm share.

the payroll and counts for each type of firm in the ABS, there were in many instances data suppressions due to confidentiality, unreliable estimates, or lack of availability. As such, the descriptive statistics reported in Table 13 are what was estimable in the ABS.

Given that publicly held firms are not usually classifiable by race/ethnicity/gender status, and account for a disproportionate share of revenues, a simple comparison of an MWBE firm and revenue share may not inform the existence of any private sector disparities with precision. In this context, the ratio of an MWBE and Veteran firm share to revenue share may be more informative of disparities.²⁶ For example, in the case of firms owned by African Americans, this ratio is (.019)/ (.002) or approximately 9.50. This suggests that the revenue share of firms owned by African Americans would have to increase by a factor of approximately 9.5 to achieve firm share parity in the City of Cambridge Market Area. For firms owned by African Americans this ratio is approximately 2.44. Relative to White American owned firms, those owned by African Americans are revenue underrepresented in the City of Cambridge Market Area by a factor of approximately $9.50/2.44 = 3.89$ or approximately 389%. In general, the estimates suggest that the majority of firms owned by non-White Americans or MWBEs—in the City of Cambridge Market Area are revenue underrepresented relative to White American owned firms.

Overall, the descriptive summary in Table 13 suggests that in the City of Cambridge Market Area private sector, MWBEs and Veteran owned firms face barriers that translate into lower firm revenues. In general, if being an MWBE or Veteran-owned firm in the City of Cambridge Market Area private sector is associated with lower firm revenue, absolutely and relative to their firm share in the market, this lends some support **to the “but-for” justification for affirmative action in public procurement. Lower revenues for MWBEs and Veteran-owned firms in the City of Cambridge Market Area is suggestive, but does not necessarily prove, the existence of private discrimination that undermines their capacity to compete with Non-MWBEs for public contracting opportunities.** This could motivate a private discrimination justification for Affirmative Action in City procurement policies, otherwise the City is potentially a passive participant in private discrimination against MWBEs and Veteran-owned firms with respect to its procurement practices.

C. Self-Employment

The Concrete Works decision upholding an MWBE program was based in part on evidence that **“Black Americans, Hispanic Americans, and Native Americans working in Construction have lower rates of self-employment than similarly situated White Americans.”**²⁷

²⁶ This ratio can be viewed as an index of underrepresentation, as it measures the distance between a firm’s representation in the market relative to its share of market revenue. A value greater than unity indicates underrepresentation, a value equal to unity indicates parity, and a value less than unity indicates overrepresentation.

²⁷ *Concrete Works v. City and County of Denver*, 321 F.3 950 (10th Cir 2003).

To explicitly examine potential disparities in the rates of business ownership in the City of Cambridge Market Area, GSPC estimated the parameters of a Logit regression model using 2020 American Community Survey (ACS) data from the Integrated Public Use Microdata Series (IPUMS) housed at the University of Minnesota.²⁸ The ACS is a project of the U.S. Census Bureau that has replaced the decennial census as the key source of information about American population and housing characteristics. The 2020 ACS is an approximately 1-in-100 weighted public use sample consisting of U.S. households with the smallest identifiable unit being the Public Use Microdata Unit (PUMA), which is a geography containing at least 100,000 individuals. The specification of each model controls for those variables customary in the literature that are utilized to explain self-employment, so as to estimate the effects of MWBE status on self-employment while minimizing and/or eliminating confounding factors.²⁹ GSPC determines statistical **significance on the basis of the estimated coefficient's probability value**—or P-value. The P-value is the probability of obtaining an estimate of the coefficient by chance alone, assuming that the null hypothesis of the variable having a zero effect is true. As a convention, GSPC rejects the null hypothesis of no effect, and concludes the estimated coefficient is statistically significant as long as **P-value \leq .10, which** are highlighted in bold in the tables for all parameter estimates.

GSPC's ACS data define the City of Cambridge Market Area as Boston-Cambridge-Newton, MA-NH Metropolitan Statistical Area (MSA). In particular, GSPC selected the ACS sample on the basis of the MET2013 variable, which identifies MSAs using the 2013 definitions for MSA from the U.S. Office of Management and Budget (OMB). An MSA is a region consisting of a large urban core together with surrounding communities that have a high degree of economic and social integration with the urban core.

In the GSPC Logit regression model of self-employment, the estimated parameters are odds ratios, and when greater (or less) than unity indicate that having a particular characteristics increases (or decreases) the likelihood of being self-employed. In the case of the MWBE status indicators (e.g. African American, Woman, Veteran), the excluded category is White Males, and a positive (or negative) odds ratio indicates that relative to White Males, having that MWBE characteristic increases (or decreases) the likelihood of being self-employed in the City of Cambridge Market Area. The MWBE status indicator are of primary interest, as they inform the extent to which MWBE status is a driver of disparities in outcomes. The other covariates serve as controls for firm capacity. The capacity to do business is conceptually defined as how much, and how effectively/efficiently, a firm can produce and sell within a market, independent of MWBE status. **In particular, GSPC measures a firm's capacity for public contracting as a function of owner's education, firm revenue, its financing capacity, and its bonding capacity.** Each of these control covariates

²⁸ ACS data are publicly available at <https://usa.ipums.org/usa/>. See: Steven Ruggles, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas and Matthew Sobek. *IPUMS USA: Version 10.0 [dataset]*. Minneapolis, MN: IPUMS, 2020. <https://doi.org/10.18128/DO10.V10.0>

²⁹ See: Grilo, Isabel, and Roy Thurik. 2008. "Determinants of Entrepreneurial Engagement Levels in Europe and the US." *Industrial and Corporate Change* 17: pp. 1113-1145, and Van der Sluis, Justin, Mirjam Van Praag, and Wim Vijverberg. 2008. "Education and Entrepreneurship Selection and Performance: A Review of the Empirical Literature." *Journal of economic surveys* 22: pp. 795-841.

capture fundamental capabilities associated with a firm’s capacity to produce and sell a good/service effectively and efficiently.

Table 14 reports Logit odds ratio parameter estimates across all business sectors in the City of Cambridge Market Area. Relative to White Americans, African Americans, Pacific Islanders and Women are less likely to be self-employed, as the estimated odds ratio is less than unity and statistically significant in these instances. This is suggestive of these type of firms facing barriers to self-employment in the City of Cambridge Market Area. The lower self-employment likelihood of these type of MWBEs could reflect disparities in public contracting as Chatterji, Chay, and Fairlie (2014) find that the self-employment rate of African Americans is increasing with respect to the provisioning and establishment of MWBE public procurement programs.³⁰

*Table 14: Self-Employment/Business Ownership in City of Cambridge Market Area:
Logit Parameter Odds Ratio Estimates
from the 2020 American Community Survey
Cambridge Disparity Study*

	Coefficient	P-value
<i>Regressand: Self-Employed: Binary</i>		
Age	1.0584	0.0000
Age Squared	0.9998	0.0368
Respondent is Married: Binary	1.0836	0.1864
Respondent is Female: Binary	0.6639	0.0000
Respondent is Non-Hispanic Black: Binary	0.7016	0.0093
Respondent is Non-White Hispanic: Binary	0.7953	0.0722
Respondent is Native American: Binary	1.7641	0.0312
Respondent is a Pacific Islander: Binary	0.0014	0.0000
Respondent is Asian: Binary	0.8660	0.2027
Respondent is Other Race: Binary	0.9121	0.5242
Respondent is Veteran: Binary	0.9041	0.3911
Respondent has a 4-year degree: Binary	1.0169	0.7799
Respondent speaks only English: Binary	0.8825	0.0867
Value of Home	1.0153	0.0000
Interest, Dividend, and Rental Income	1.0251	0.0003
Mortgage Payment	1.0231	0.5323
Number of Observations	16,894	
Pseudo R ²	0.0581	

Source of Data: American Community Survey 2020, IPUMs USA

³⁰ Chatterji, Aaron K., Kenneth Y. Chay, and Robert W. Fairlie. 2014. "The Impact of City Contracting Set-asides on Black Self-employment and Employment." *Journal of Labor Economics* 32: pp. 507-561.

D. Bank Loan Denials

To the extent that Minority, Women, and Disadvantaged Enterprise (“MWBEs”) are credit-constrained as a result of facing discrimination in private lending markets, their capacity to compete for and execute public projects could be compromised. In this context, a political jurisdiction that awards public contracts is potentially a passive participant in discrimination as MWBEs may only have recourse to higher cost financing due to facing discrimination in private credit markets, which compromises the competitiveness of their bids. Such a perspective on discrimination suggests that barriers faced by MWBEs in the private sector credit markets can rationalize targeted public contracting programs by political jurisdictions, and the capacity and growth of MWBEs could be enhanced with access to public contracting opportunities (Bates, 2009).³¹

To determine if MWBEs face barriers in the private credit market in the City of Cambridge Market Area, Tables 15-16 report, for each of the distinct MWBEs and owner self-reported race/ethnicity/gender ownership characteristics in the GSPC sample, the estimated parameters of an Ordinary Least Squares regression, where the dependent variable is the standardized linear prediction of being denied for a commercial bank loan, which is estimated from an ordinal logit regression model.³²

The estimated linear prediction captures how the outcome **of interest is determined by presumably “race-neutral” factors determining a firm’s capacity to do business in the marketplace and with the City of Cambridge.** The regressors in the logit specification capturing firm capacity include: (1) Firm owner has more than 20 years experience, (2) Firm has more than 10 employees, (3) Firm owner has a baccalaureate degree, (4) Firm gross revenue is more than 1.5 million dollars, (5) Firm bonding limit is more than 1.5 million dollars, (6) Whether or not financing is a barrier to securing public contracts, (7) Whether or not the firm is in the construction sector, (8) Whether or not the firm is registered to do business with the City of Cambridge, (9) Whether or not the firm is a willing/able prime contractor for the City of Cambridge, and (10), Whether or not the firm a willing/able subcontractor for the City of Cambridge.

The estimated coefficients in Table 15 reveal that for the four distinct broadly classified MWBEs in the GSPC sample, relative to non-MWBEs—the excluded group in the CRM specification— certified veteran firms are more likely to have commercial bank loan denials. This suggests that these type of MWBEs face barriers in the private credit market. When disaggregated by the race/ethnicity/gender of owners, the results in

³¹ See: Bates, Timothy. 2009 "Utilizing Affirmative Action in Public Sector Procurement as a Local Economic Development Strategy." *Economic Development Quarterly*, 23: pp. 180 - 192., Bates, Timothy, and Alicia Robb. 2013. "Greater Access to Capital is Needed to Unleash the Local Economic Development Potential of Minority owned Businesses." *Economic Development Quarterly*, 27: pp.250 - 259., and Shelton, Lois M., and Maria Minniti. 2018. "Enhancing product market access: Minority Entrepreneurship, Status Leveraging, and Preferential Procurement Programs." *Small Business Economics*, 50: pp. 481-498.

³² See the Appendix G for a detailed discussion of this regression methodology. The P-values are based upon heteroskedasticity-robust standard errors.

Table 16 suggest that firms owned by Hispanic Americans, Native Americans and Bi/multiracial Americans are more likely to commercial bank loan denials relative to firms owned by White Americans. This suggests that among MWBEs in the City of Cambridge Market Area, firms that these type of MWBEs—who are not necessarily certified MWBEs, are relatively more likely to have their capacity to compete in the market for public procurement constrained as a result of private sector credit market discrimination.

*Table 15: Ordinary Least Parameter Estimates-Bank Loan Denials:
MWBE Status and Commercial Bank Loan Denial Probabilities
In City of Cambridge Market Area
Cambridge Disparity Study*

	Coefficient	P-value
<i>Regressand:</i> Linear Prediction of Commercial Bank Loan Denial		
Firm is a certified minority business enterprise: (Binary)	0.1034	0.5322
Firm is a certified Woman enterprise: (Binary)	0.2132	0.2050
Firm is a certified Veteran business enterprise	0.6985	0.0461
Constant	-0.1940	0.2133
Number of Observations	150	
R ²	0.0271	

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*Table 16: Ordinary Least Parameter Estimates-Bank Loan Denials:
Race/Ethnicity/Gender Status and Commercial Bank Loan Denial Probabilities
In City of Cambridge Market Area
Cambridge Disparity Study*

	Coefficient	P-value
<i>Regressand:</i> Standardized Linear Prediction of Commercial Bank Loan Denial		
Firm is African American-owned: (Binary)	0.2233	0.1327
Firm is Hispanic American-owned: (Binary)	0.2328	0.0392
Firm is Asian American-owned: (Binary)	-0.1936	0.2626
Firm is Native American-owned: (Binary)	1.7322	0.0099
Firm is bi/multiracial-owned: (Binary)	0.7565	0.0490
Firm is other race-owned: (Binary)	0.5164	0.0600
Firm is Veteran-owned	-0.0267	0.8875
Firm is Woman-owned: (Binary)	-0.3607	0.1826
Constant	-0.0295	0.8941
Number of Observations	150	
R ²	0.0728	

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E. Conclusion

A descriptive and inferential private sector analysis of the City of Cambridge Market Area revealed that in general, being an MWBE in the City of Cambridge Market Area is associated with lower firm revenue relative to non-MWBE firms. For firms owned by Native Americans and Pacific Islanders, self-employment **likelihoods are lower, which lends some support to the “but-for” justification for affirmative action in public procurement**—a policy intervention which can increase the self-employment outcomes of MWBEs. Lower revenues for MWBEs in the City of Cambridge Market Area are suggestive of private sector discrimination that undermines their capacity to enter the market and compete with non-MWBEs firms for public contracting and subcontracting opportunities. Firms certified as Veteran-owned, and those owned by Bi/multiracial Americans, Hispanic Americans and Native Americans, have relatively higher commercial bank loan denials. This suggests that these type of MWBEs may face credit market barriers in the City of Cambridge Market Area that undermines their capacity to compete for public procurement opportunities relative to non-MWBEs.

In other relevant outcomes, the regression results reported in Appendix G provide specific detail on which particular MWBEs in the broad City of Cambridge Market Area are potentially constrained by barriers that could translate into lower likelihoods of winning prime contracts. Firms certified as Minority-owned are particularly harmed by perceived discrimination against them by the City of Cambridge. Certified Veteran and Minority-owned firms are relatively more likely to have never secured a City of Cambridge subcontract. GSPC also found that among MWBEs, firms certified as Minority-owned, and those owned by Hispanic Americans are relatively more likely to have their capacity to compete in the market for public procurement constrained as a result of the perception of being excluded from informal contracting networks that enhance success in winning public contracts with the City of Cambridge.

VII. ANECDOTAL EVIDENCE

A. Introduction

The objective of this chapter of the Study is to present and analyze the experiences, perceptions and beliefs of individuals, businesses, and groups in and around the City of Cambridge. The quotes, themes and conversations presented are not intended to be representative of every single community member or even most of the community but are an attempt to authentically represent the variety of individual perspectives **about the City's contracting, procurement and** Minority, Women, and Veteran owned business utilization. Those experiences can be and often are perceived differently from person to person, so it is possible readers recollect experiences differently than those referenced. However, perceived experiences undergird and inform beliefs and those beliefs then undergird and inform behavior. Since the behavior of all involved parties in procurement and contracting is relevant to the Study, the beliefs, experiences, and perceptions are integral to those beliefs as well. Also, it should be noted that the Study only looks at the Industry Categories of Professional Services, Other Services, and Supplies, and excludes Construction and Construction related Professional Services, which resulted in a smaller scope of participants.

The Survey of Business Owners for the City of Cambridge, MA was cast to 8,000 firms certified and self-identified within the Relevant Market of the State of Massachusetts and neighboring counties in Rhode Island. Of the 350 completed surveys, only 150 have been accumulated to create this report due to the scope of work only including firms that are within the Industry Categories of Professional Services, Other Services, and Supplies. Of the 150 respondents, 125 have some certification accepted within the State of Massachusetts and 10 have Veteran status. Though this number of respondents at 150 is small, GSPC is able to use this number as a sample of the Relevant Market Area due to no response bias being introduced to the Survey.

The GSPC Study team did not seek to verify, disprove, or correct insights shared by participants in anecdotal data collection to honor the integrity of the information gathered. Therefore, there may be conclusions included which are not reflective of written policy and procedures, but those conclusions are included to **provide readers with as much information as possible about the community's experiences** and perceptions doing or attempting to do business with the City. They may also serve to highlight areas where communication between the City and the public regarding policy and procedure can be bolstered or improved.

During the Study, a variety of methods were used to gather evidence from a diverse collection of participants. The Study team engaged with 30 diverse local business owners and vendors randomly selected for several 30- to 60-minute virtual or phone interviews conducted between March 27 and April 20, 2023. GSPC conducted four independent business interviews on April 28, 2023, for a total of 34 interviews.

GSPC assembled two virtual focus groups of randomly selected stakeholders to facilitate discussions about working with the City on March 8 and 9, 2023, with a total of 9 participants – four (4) participants in the first session and five (5) participants in the second session. Two virtual public engagement meetings were convened with twenty-two (22) community attendees participating on October 25, 2022, and thirty-one (31) on October 27, 2022. Both public hearings were widely publicized through social media, press releases to area news outlets, City website and newsletters, email blasts, and an announcement on the Study website. Recruitment for both interviews and focus groups was done via telephone. Both the focus groups and public meetings were held online to adhere to safe social distancing practices recommended by state and federal governments during the ongoing COVID-19 crisis.

Finally, GSPC circulated an Online Survey of Business Owners widely throughout the area asking for detailed information about demographics and previous or current experience working with the City, and the Study team collected data from 150 respondents. The Survey results were divided to highlight responses from minority status: Non-minority Woman, Hispanic American, Non-MWBE, Asian American, African American, Portuguese American, Multi-Racial or Bi-Racial, and Cape Verdean separate from Veteran status. This is due to the overlap of Veteran status potentially inflating Survey response totals. By synthesizing and spotlighting specific themes expressed in these focus groups, interviews, surveys and public meetings, this analysis seeks to empower the City with comprehensive findings to inform effective recommendations.

The data gathered from survey responses, interviews, focus groups and public hearings were analyzed and reflected several common themes representing barriers that MWBEs encounter doing business with the City. Those themes include Limited Participation In Public Contracting, Primes Attempting to Circumvent Hiring MWBEs, issues with Prompt Pay, and the Perception of Informal Networks.

Key Themes from Anecdotal Data Analysis	
1	Limited Participation In Public Contracting
2	Primes Attempting to Circumvent Hiring MWBEs
3	Prompt Pay
4	Perception of Informal Networks

B. Limited Participation in Public Contracting

Respondents to the Survey of Business Owners indicated little willingness to participate in public contracting with the City of Cambridge. Between July 1, 2017, and June 30, 2021, only 10.7% submitted bids for awards as prime contractors (See Table 1 below and Appendix D Survey of Business Owners: Table 35). That is compared to 35.3% who bid on prime contracts with the private sector in the area (See Table 2 below and Appendix D Survey of Business Owners: Table 36), and 32.6% that bid for roles as prime

contractors with other non-City of Cambridge projects (See Table 3 below and Appendix D Survey of Business Owners: Table 37).

Table 35. From July 1, 2017 through June 30, 2021, how many times has your company submitted bids or proposals for projects as a prime

Responses	Owners' Minority Status										Total
	Caucasian	Woman	African	Cape	American	Asian	Hispanic	Portuguese	Multi-	Other	
None	1	41	41	2	1	10	16	1	4	8	125
	25 %	83.7 %	82 %	100 %	100 %	83.3 %	88.9 %	50 %	100 %	100 %	83.3
1-10	2	5	6	0	0	1	1	1	0	0	16
	50 %	10.2 %	12 %	0 %	0 %	8.3 %	5.6 %	50 %	0 %	0 %	10.7
11-25	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
26-50	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
51-100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Over 100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Do Not Know/NA	1	3	3	0	0	1	1	0	0	0	9
	25 %	6.1 %	6 %	0 %	0 %	8.3 %	5.6 %	0 %	0 %	0 %	6 %
Total	4	49	50	2	1	12	18	2	4	8	150

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Table 2. Private Sector Projects

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African	Cape	American	Asian	Hispanic	Portuguese	Multi-	Other	<i>Total</i>
None	2	27	30	0	0	10	10	1	1	7	88
	50 %	55.1 %	60 %	0 %	0 %	83.3 %	55.6 %	50 %	25 %	87.5 %	58.7
1-10	1	12	10	1	0	1	6	0	2	0	33
	25 %	24.5 %	20 %	50 %	0 %	8.3 %	33.3 %	0 %	50 %	0 %	22 %
11-25	0	2	2	0	0	1	2	0	1	0	8
	0 %	4.1 %	4 %	0 %	0 %	8.3 %	11.1 %	0 %	25 %	0 %	5.3
26-50	0	1	1	0	0	0	0	1	0	0	3
	0 %	2 %	2 %	0 %	0 %	0 %	0 %	50 %	0 %	0 %	2 %
51-100	0	1	2	0	0	0	0	0	0	1	4
	0 %	2 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	12.5 %	2.7
Over 100	0	2	2	0	1	0	0	0	0	0	5
	0 %	4.1 %	4 %	0 %	100 %	0 %	0 %	0 %	0 %	0 %	3.3
Do Not Know/NA	1	4	3	1	0	0	0	0	0	0	9
	25 %	8.2 %	6 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %	6 %
Total	4	49	50	2	1	12	18	2	4	8	150

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Table 3. Other Public Sector (non-City of Cambridge Projects)

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African	Cape	American	Asian	Hispanic	Portuguese	Multi-	Other	<i>Total</i>
None	1	27	31	1	0	10	11	1	2	7	91
	25 %	55.1 %	62 %	50 %	0 %	83.3 %	61.1 %	50 %	50 %	87.5 %	60.7
1-10	1	9	10	1	0	2	4	0	2	0	29
	25 %	18.4 %	20 %	50 %	0 %	16.7 %	22.2 %	0 %	50 %	0 %	19.3
11-25	1	3	1	0	0	0	0	1	0	0	6
	25 %	6.1 %	2 %	0 %	0 %	0 %	0 %	50 %	0 %	0 %	4 %
26-50	0	4	0	0	0	0	2	0	0	0	6
	0 %	8.2 %	0 %	0 %	0 %	0 %	11.1 %	0 %	0 %	0 %	4 %
51-100	0	1	2	0	0	0	0	0	0	0	3
	0 %	2 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	2 %
Over 100	0	0	2	0	1	0	1	0	0	1	5
	0 %	0 %	4 %	0 %	100 %	0 %	5.6 %	0 %	0 %	12.5 %	3.3
Do Not Know/NA	1	5	4	0	0	0	0	0	0	0	10
	25 %	10.2 %	8 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	6.7
Total	4	49	50	2	1	12	18	2	4	8	150

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Fewer attempted to bid for subcontractor roles with the City, survey data showed, with only 8.6% of respondents seeking to be subcontractors on projects in that same period. (See Table 4 below and Appendix D Survey of Business Owners: Table 41). Comparatively, 33.4% sought subcontract roles with the private sector firms (See Table 5 below and Appendix D Survey of Business Owners: Table 42), and 30% bid to be subcontractors with other public agencies (See Table 6 below and Appendix D Survey of Business Owners: Table 43).

Table 4. From July 1, 2017, through June 30, 2021, how many times has your company submitted bids or proposals for projects as a

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African	Cape	American	Asian	Hispanic	Portuguese	Multi-	Other	
None	2	41	43	2	1	11	17	2	3	8	130
	50 %	83.7 %	86 %	100 %	100 %	91.7 %	94.4 %	100 %	75 %	100 %	86.7
1-10	1	3	3	0	0	0	1	0	1	0	9
	25 %	6.1 %	6 %	0 %	0 %	0 %	5.6 %	0 %	25 %	0 %	6 %
11-25	0	1	1	0	0	0	0	0	0	0	2
	0 %	2 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1.3
26-50	0	0	1	0	0	1	0	0	0	0	2
	0 %	0 %	2 %	0 %	0 %	8.3 %	0 %	0 %	0 %	0 %	1.3
51-100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Over 100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Do Not Know/NA	1	4	2	0	0	0	0	0	0	0	7
	25 %	8.2 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	4.7
Total	4	49	50	2	1	12	18	2	4	8	150

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Table 5. Private Sector Projects

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African	Cape	American	Asian	Hispanic	Portuguese	Multi-	Other	<i>Total</i>
None	2	25	33	1	0	10	12	1	1	7	92
	50 %	51 %	66 %	50 %	0 %	83.3 %	66.7 %	50 %	25 %	87.5 %	61.3
1-10	1	16	12	0	0	1	3	1	2	1	37
	25 %	32.7 %	24 %	0 %	0 %	8.3 %	16.7 %	50 %	50 %	12.5 %	24.7
11-25	0	2	3	0	0	0	1	0	1	0	7
	0 %	4.1 %	6 %	0 %	0 %	0 %	5.6 %	0 %	25 %	0 %	4.7
26-50	0	1	0	0	0	1	1	0	0	0	3
	0 %	2 %	0 %	0 %	0 %	8.3 %	5.6 %	0 %	0 %	0 %	2 %
51-100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Over 100	0	1	1	0	1	0	0	0	0	0	3
	0 %	2 %	2 %	0 %	100 %	0 %	0 %	0 %	0 %	0 %	2 %
Do Not Know/NA	1	4	1	1	0	0	1	0	0	0	8
	25 %	8.2 %	2 %	50 %	0 %	0 %	5.6 %	0 %	0 %	0 %	5.3
Total	4	49	50	2	1	12	18	2	4	8	150

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Table 6. Other Public Sector (non-City of Cambridge Projects)

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African	Cape	American	Asian	Hispanic	Portuguese	Multi-	Other	<i>Total</i>
None	2	25	34	1	1	11	12	2	1	8	97
	50 %	51 %	68 %	50 %	100 %	91.7 %	66.7 %	100 %	25 %	100 %	64.7
1-10	1	13	11	0	0	1	4	0	3	0	33
	25 %	26.5 %	22 %	0 %	0 %	8.3 %	22.2 %	0 %	75 %	0 %	22 %
11-25	0	3	1	0	0	0	0	0	0	0	4
	0 %	6.1 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	2.7
26-50	0	0	1	0	0	0	1	0	0	0	2
	0 %	0 %	2 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	1.3
51-100	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0.7
Over 100	0	3	1	0	0	0	1	0	0	0	5
	0 %	6.1 %	2 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	3.3
Do Not Know/NA	1	5	1	1	0	0	0	0	0	0	8
	25 %	10.2 %	2 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %	5.3
Total	4	49	50	2	1	12	18	2	4	8	150

Griffin & Strong, P.C. 2023

Only 6% of those seeking prime contracting roles with the City won those awards (See Table 7 below and Appendix D Survey of Business Owners: Table 38), while just 6.7% of businesses owners bidding on the City’s subcontractor jobs were awarded (See Table 8 below and Appendix D Survey of Business Owners: Table 44).

Table 7. From July 1, 2017, through June 30, 2021, how many times has your company been awarded contracts to perform as a prime

Responses	Owners' Minority Status										Total
	Caucasian	Woman	African	Cape	American	Asian	Hispanic	Portuguese	Multi-	Other	
None	2	40	47	2	1	10	17	1	4	8	132
	50 %	81.6 %	94 %	100 %	100 %	83.3 %	94.4 %	50 %	100 %	100 %	88 %
1-10	1	4	0	0	0	0	1	1	0	0	7
	25 %	8.2 %	0 %	0 %	0 %	0 %	5.6 %	50 %	0 %	0 %	4.7
11-25	0	0	2	0	0	0	0	0	0	0	2
	0 %	0 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1.3
26-50	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
51-100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Over 100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Do Not Know/NA	1	5	1	0	0	2	0	0	0	0	9
	25 %	10.2 %	2 %	0 %	0 %	16.7 %	0 %	0 %	0 %	0 %	6 %
Total	4	49	50	2	1	12	18	2	4	8	150

Griffin & Strong, P.C. 2023

Table 8. From July 1, 2017, through June 30, 2021, how many times has your company been awarded contracts to perform as a subcontractor:

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African	Cape	American	Asian	Hispanic	Portuguese	Multi-	Other	
None	2	42	46	2	1	9	17	1	4	8	132
	50 %	85.7 %	92 %	100 %	100 %	75 %	94.4 %	50 %	100 %	100 %	88 %
1-10	1	2	3	0	0	1	1	1	0	0	9
	25 %	4.1 %	6 %	0 %	0 %	8.3 %	5.6 %	50 %	0 %	0 %	6 %
11-25	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
26-50	0	0	0	0	0	1	0	0	0	0	1
	0 %	0 %	0 %	0 %	0 %	8.3 %	0 %	0 %	0 %	0 %	0.7
51-100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Over 100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Do Not Know/NA	1	5	1	0	0	1	0	0	0	0	8
	25 %	10.2 %	2 %	0 %	0 %	8.3 %	0 %	0 %	0 %	0 %	5.3
Total	4	49	50	2	1	12	18	2	4	8	150

Griffin & Strong, P.C. 2023

Nearly 23% of those polled – 22.7% – told GSPC they did not bid on work with the City of Cambridge because they did not see opportunities that aligned with their respective fields of work (See Table 9 below and Appendix D Survey of Business Owners: Table 24).

Table 9. If you answered “No” to "is your company registered with the State's COMMBUYS", why is your company not registered with COMMBUYS? I do not see opportunities in my field of work.

Responses	Owners' Minority Status										Total
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Not Selected	0	8	10	1	0	4	3	1	1	6	34
	0 %	66.7 %	71.4 %	100 %	0 %	80 %	100 %	100 %	50 %	100 %	77.3 %
Selected	0	4	4	0	0	1	0	0	1	0	10
	0 %	33.3 %	28.6 %	0 %	0 %	20 %	0 %	0 %	50 %	0 %	22.7 %
Total	0	12	14	1	0	5	3	1	2	6	44

Griffin & Strong, P.C. 2023

Study participants told GSPC they either did not attempt to bid on contracts for City projects or did so without success. Study participants note that locating opportunities for their specific service has been a consistent challenge. Though some services are not consistently needed for the City, having communication for work specific contracts may assist firms in their search for work. Portuguese American owned business consulting firm AI-11 and African American owned janitorial company AI-18 have not worked with the City but expressed a desire to bid for contracts. “I am open to doing work with the City of Cambridge.” AI-18 said. “We have never done any municipality work.” AI-11 said she has attempted to complete a Cambridge RFP for her corporate training business. “I do recall reaching out to the City, maybe 10-plus years ago,” she said. “There are no RFPs surrounding training, coaching or information management.” AI-6, an African American owned food service business, said he also wants to win a contract working with the City. “It has been a dream to be able to work with the City of Cambridge,” he said. “But I have been unable to find opportunities.” AI-16, a Veteran owned cybersecurity business, said he has never applied for a Request for Proposal from the City. “I find it extremely difficult to identify opportunities,” he said, noting that it is a challenge for him to respond to RFPs in a meaningful way.

Business owners expressed that the City seemed to only consistently release specific contracts. Woman owned materials supply company AI-20 and Woman owned interpreting business AI-14 said they often find the same job advertisements. **“I do not see enough RFPs for translation and interpreting services but have seen plenty of RFP's regarding construction,”** AI-14 said. **“The City should email MWBEs RFPs that align with the scope of work they can complete.”** AI-20 suggested that businesses could not succeed with the information she received. **“Give WBEs and DBEs real opportunities in their field and not set them up to fail with opportunities they do not specialize in,”** she said. AI-18, a Veteran owned communications equipment company, has never attempted to work with the City because there were no opportunities for the services he provides. **“We have seen RFPs when searching the City’s website,”** he said. **“After doing some research, we found potential opportunities, but determined the RFP was not in our scope of work.”** Hispanic American consulting firm, AI-28 noted that he has done municipality work within the State, and desires to work with the City as well, but has not seen any RFPs from the City that relate to his work.

C. Primes Avoid Hiring MWBEs

The City of Cambridge has no Sheltered Market Program or initiative that expressly dedicates a percentage or **“set-aside” to Small, Local, Minority, Woman, or Veteran owned businesses** (see Chapter IV, Purchasing Policies, Practices and Procedures). Although a Fiscal Year 2022 Objectives & Performance Measure of City Purchasing **“encourages all departments to do business with MWBEs, SBEs and VBEs, “when possible,”** there is no mandate or goal. It is within the GSPC scope to identify if it is feasible for a Sheltered Market Program for Services and Supplies through this current Disparity Study.

Business owners engaged for the Study told GSPC that primes will not hire MWBEs and small businesses as subcontractors. Survey participants stated some **primes participate in “bid shopping,” or contacting a Minority and/or Woman-owned business to ask for quotes, with no intention of giving that firm’s proposal sufficient review to consider giving the company a reward.** According to the Survey of Business Owners, 52% agreed to some degree that the aforementioned bid shopping occurred. That includes 28% who **“Strongly Agree”** – encompassing 32% of African American-owned businesses and 18.4% of Woman owned firms – **and 24% who “Agree,” including 28.6% of Woman owned** companies and 24% of African American owned firms (See Table 11 below and Appendix D Survey of Business Owners: Table 149). Veteran owned firms held a similar sentiment, with 50% agreeing to some degree that they have experienced bid shopping. (See Table 12 below and Appendix D Survey of Business Owners: Table 149).

Table 11. Please tell us if you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with each of the following statements: [Sometimes, a prime contractor will contact a Minority and/or Woman-Owned company to ask for quotes, but never give the proposal sufficient review to consider giving that company the award.]

Responses	Owners' Minority Status										Total
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Strongly agree	0	9	16	0	1	3	7	1	2	3	42
	0 %	18.4 %	32 %	0 %	100 %	25 %	38.9 %	50 %	50 %	37.5 %	28 %
Agree	1	14	12	0	0	6	2	0	0	1	36
	25 %	28.6 %	24 %	0 %	0 %	50 %	11.1 %	0 %	0 %	12.5 %	24 %
Neither agree nor disagree	3	24	18	2	0	3	9	1	2	3	65
	75 %	49 %	36 %	100 %	0 %	25 %	50 %	50 %	50 %	37.5 %	43.3 %
Disagree	0	2	3	0	0	0	0	0	0	0	5
	0 %	4.1 %	6 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	3.3 %
Strongly disagree	0	0	1	0	0	0	0	0	0	1	2
	0 %	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	12.5 %	1.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Griffin & Strong, P.C. 2023

Table 12. Please tell us if you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with each of the following statements: [Sometimes, a prime contractor will contact a Minority and/or Woman-Owned company to ask for quotes, but never give the proposal sufficient review to consider giving that company the award.]

	<i>Owners' Minority Status (Veteran)</i>			
Responses	Caucasian	Woman	African American	Total
Strongly agree	0	0	3	3
	0 %	0 %	42.9 %	30 %
Agree	1	0	1	2
	50 %	0 %	14.3 %	20 %
Neither agree nor disagree	1	1	3	5
	50 %	100 %	42.9 %	50 %
Disagree	0	0	0	0
	0 %	0 %	0 %	0 %
Strongly disagree	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Griffin & Strong, P.C., 2023

More than half of business owners polled for the Study – 53.3% – believe to some degree that double standards in qualifications and work performance make it more difficult for Minority and/or Woman owned businesses to win bids or contracts in comparison to Non-MWBEs. (See Table 13 below and Appendix D Survey of Business Owners: Table 147). That breaks down to 28% that “Strongly Agree,” including 42% of African American owned firms and 16.3% of Woman owned businesses, and 25.3% that “Agree,” with 26.5% of Woman owned companies and 22% of African American owned firms.

Table 13. Please tell us if you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with each of the following

Responses	Owners' Minority Status										Total
	Caucasian	Woman	African	Cape	American	Asian	Hispanic	Portuguese	Multi-	Other	
Strongly agree	0	8	21	1	0	2	6	2	1	1	42
	0 %	16.3 %	42 %	50 %	0 %	16.7 %	33.3 %	100 %	25 %	12.5 %	28 %
Agree	0	13	11	0	1	5	3	0	2	3	38
	0 %	26.5 %	22 %	0 %	100 %	41.7 %	16.7 %	0 %	50 %	37.5 %	25.3
Neither agree nor disagree	3	23	16	1	0	5	8	0	1	2	59
	75 %	46.9 %	32 %	50 %	0 %	41.7 %	44.4 %	0 %	25 %	25 %	39.3
Disagree	0	4	1	0	0	0	0	0	0	0	5
	0 %	8.2 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	3.3
Strongly disagree	1	1	1	0	0	0	1	0	0	2	6
	25 %	2 %	2 %	0 %	0 %	0 %	5.6 %	0 %	0 %	25 %	4 %
Total	4	49	50	2	1	12	18	2	4	8	150

Griffin & Strong, P.C. 2023

Business owners described primes who claim to be trying to find an MWBE to work as a subcontractor, only to give up without any real progress. “Primes should have to show they tried and have documentation showing the results,” said AI-7, a Hispanic American owned logistics and consulting firm. “Primes like that say they tried with ‘good faith effort,’ but never provide any proof. This type of behavior is not helpful for MWBEs trying to win work.” African American owned sanitation company AI-5 said primes using this “best efforts” tactic are attempting to falsely portray a desire to use MWBE work. “They perform a small due diligence,” he said. “This outreach is just a soft inquiry to be able to list the MWBE. But they never intend on using us on the job.”

“Primes will call wanting information, and I have never heard back from them,” AI-9, an Asian American owned IT firm, said. **“This makes me think primes only want to list my company but never want to use us.”** Hispanic American owned interpretation company AI-1 said she has had experience with prime contractors so-called **“bid shopping.”** **“They have no intention of working with the MWBE,”** she said. **“And in the rare case where the prime did use me, I earned little to no money because the percentage allocated is miniscule and had to be split amongst other businesses.”**

AI-5, an African American owned marketing firm said, **“(We) submitted a bid as a sub for a prime,”** she said. **“The prime was awarded the job but cancelled my company’s portion. There is no accountability of the prime. The prime can drop the sub with no recourse even though the contract calls for the minority business to do the work.”** **Not having requirements of Primes to utilize MWBEs is noted to be a barrier to participation in the Market Area, as well as having such requirements but not monitoring prime contractors to ensure that they fulfill their commitments** Though there are not many opportunities to subcontract within Services and Supplies, firms perceive not having any goals on any projects as a deterrent. AI-24, African American Woman owned consulting firm does not see a priority focus on MBEs within the market area, **which has led her in her decision to not bid on City projects.** **“When I look at RFPs coming from that area, there has never been any aspirational goals, or any incentives for MBE representation on these contracts.”** **Within the interview, she explains from her experience** that if there is no requirement within the bid itself to have MBEs participate, that prime vendors will not include minority firms at all.

Minority and Woman owned firms are not the **only businesses wary of prime contractors.** **“I just know that primes are not mandated to work with Veteran owned businesses, which makes it hard to operate as a sub,”** said Veteran owned cybersecurity firm AI-16. **“The bigger the prime, the harder it is. Quite frankly, I feel primes do not want small businesses playing in their backyard and since there is no mandate, prime contractors have no real reason to use Veteran owned businesses.”**

Hispanic American owned company AI-19 and AI-20, a Woman owned supply business, both say they have **had better experiences.** **“There has been more oversight from municipalities to keep primes honest,”** AI-20 said. AI-19 said a prime put his company on an RFP continuously while bidding for a project. **“I’m aware of how some primes have no real intent,”** he said. **“I’m helping a prime meet MBE goals when I’m included on an RFP. But as of April 1, I won my first job working as a sub of a sub on a project for the City of Cambridge. My persistence paid off.”**³³

³³May not relate to supplies and services procurement under 30B since the City does not have stated MBE goals in its 30B procurements.

D. Prompt Pay

Anecdotal data collected for the Study has shown that in some cases businesses working as subcontractors waited more than 60, and even 90 days to be paid either directly by the City or by a prime contractor. Payment is always a point of contention, because it often is the component that holds together many small businesses.

Of those businesses polled, 40% said it took 31 days or more to receive payment from the City from the time they submitted an invoice (See Table 14 below and Appendix D Survey of Business Owners: Table 86). That includes 27.8% who were paid from 31 to 60 days, 5.6% who were paid between 61 and 90 days, and 5.6% who had to wait more than 120 days to be paid.

Table 14. What is the amount of time that it typically takes to receive payment, from the date you submit your invoice, from the City of

Responses	Owners' Minority Status										Total
	Caucasian	Woman	African	Cape	American	Asian	Hispanic	Portuguese	Multi-	Other	
30 days or less	0	2	0	0	0	1	1	0	0	0	4
	0 %	22.2 %	0 %	0 %	0 %	50 %	100 %	0 %	0 %	0 %	22.2
31-60 days	2	2	1	0	0	0	0	0	0	0	5
	100 %	22.2 %	33.3 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	27.8
61-90 days	0	0	0	0	0	0	0	1	0	0	1
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	100 %	0 %	0 %	5.6
91-120 days	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Over 120 days	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	33.3 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	5.6
Do Not Know	0	1	0	0	0	0	0	0	0	0	1
	0 %	11.1 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	5.6
Not Applicable	0	4	1	0	0	1	0	0	0	0	6
	0 %	44.4 %	33.3 %	0 %	0 %	50 %	0 %	0 %	0 %	0 %	33.3
Total	2	9	3	0	0	2	1	1	0	0	18

Griffin & Strong, P.C. 2023

In terms of payment from primes working on City projects, 44.5% of survey respondents said they waited at least 31 days for a paycheck (See Table 15 below and Appendix D Survey of Business Owners: Table 87). Among those were 27.8% whose pay arrived between 31 and 60 days, 11.1% who were paid between 61 and 90 days, and 5.6% whose pay day took between 91 and 120 days to come.

Table 15. What is the amount of time that it typically takes to receive payment, from the date you submit your invoice, from the prime											
Responses	Owners' Minority Status										Total
	Caucasian	Woman	African	Cape	American	Asian	Hispanic	Portuguese	Multi-	Other	
30 days or less	0	0	0	0	0	0	1	0	0	0	1
	0 %	0 %	0 %	0 %	0 %	0 %	100 %	0 %	0 %	0 %	5.6
31-60 days	2	1	2	0	0	0	0	0	0	0	5
	100 %	14.3 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	27.8
61-90 days	0	0	0	0	0	1	0	1	0	0	2
	0 %	0 %	0 %	0 %	0 %	33.3 %	0 %	100 %	0 %	0 %	11.1
91-120 days	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	25 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	5.6
Do Not Know	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Not Applicable	0	6	1	0	0	2	0	0	0	0	9
	0 %	85.7 %	25 %	0 %	0 %	66.7 %	0 %	0 %	0 %	0 %	50 %
Total	2	7	4	0	0	3	1	1	0	0	18

Griffin & Strong, P.C. 2023

Study participants expressed concerns about being able to be compensated in a timely manner. The City does not have a prompt payment policy (refer to Chapter IV, Purchasing Policies, Practices, and Procedures). Having a focus on ensuring that prime contractors adhere to a policy may address concerns that MWBEs face as sub contactors for firms working as primes. AI-3, an African American owned marketing and event planning company, listed prompt pay among her wish list of improvements the City can make when **working with MWBEs. “Paying minorities on time,” she said. Minority owned printing and marketing firm, FG-5, described problems that can arise when subcontractors are not paid promptly. They pointed to the larger impact of slow pay. “You have the larger companies and they do hire phenomenal Minority, or Women, or Disabled, or etc. companies, but they take their time pay them if they pay them at**

all, but it seems that the guy who's the smallest on the totem pole, they're the ones that endured the brunt **of the negativity that comes out of the situation.**" Supplies firm, AI 25, noted that payment from the City **was not received for months, which has set the company back.** "The inability to not pay within Net-30 was bad. The people are tremendous, and I love who we work with, but it did set us back a little bit."

Recognizing their limitations for financial stress, several business owners outlined a similar payment timeline requirement of 30 days or less for being able to work with the City. "We would need favorable payment terms, such as Net 30," said Woman owned public relations firm, AI-15. "Net 90 would be tough and would require having an upfront payment. Ideally, terms of 'due upon receipt' would be the goal. I am not opposed to receiving a monthly retainer to help pay salaries." Veteran owned communications equipment company AI-22 and Portuguese American owned advertising agency AI-12 echoed the need to be paid within a month of invoicing. "A favorable payment term of Net 30 payment would be preferred," AI-12 said. "The company would prefer the completed stages to be paid in Net 30," AI-22 said.

E. Perception of Informal Networks

Relationship building is a part of doing business, however, informal networks go a step beyond. At best, informal networks tend to favor the same firms with which an agency is familiar because of perhaps a previous working arrangement. At worst, informal networks serve as back channels providing information and preference to the same firms. In either case, they exclude the entrance of new firms into doing business with a public agency. While private sector firms can legitimately and exclusively use the same firms over and over, that practice is not permissible with publicly funded work because it feeds a continuing practice of exclusion of possibly underutilized tax paying populations.

Sixty percent (60%) of the business owners polled for the Study said they believed there was an informal network of prime and subcontractors doing business with the City that monopolized public contracting (See Table 17 below and Appendix D Survey of Business Owners: Table 146). That includes 78% of African American owned businesses, 66.7% of Hispanic American owned firms, 50% of Caucasian owned companies, and 40.8% of Woman owned firms. 70% of Veteran identified firms believed that an informal network allows for some firms to be more advantageous (See Table 18 below and Appendix D Survey of Business Owners: Table 146).

Table 17. Do you believe there is an informal network of prime and subcontractors doing business with the City of Cambridge that monopolizes the public contracting process? Informal network are firms with an advantage due to their relationships in the City.

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Yes	2	20	39	1	1	8	12	2	4	1	90
	50 %	40.8 %	78 %	50 %	100 %	66.7 %	66.7 %	100 %	100 %	12.5 %	60 %
No	2	29	11	1	0	4	6	0	0	7	60
	50 %	59.2 %	22 %	50 %	0 %	33.3 %	33.3 %	0 %	0 %	87.5 %	40 %
Total	4	49	50	2	1	12	18	2	4	8	150

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Table 18. Do you believe there is an informal network of prime and subcontractors doing business with the City of Cambridge that monopolizes the public contracting process? Informal network are firms with an advantage due to their relationships in the City.

Responses	<i>Owners' Minority Status (Veteran)</i>			<i>Total</i>
	Caucasian	Woman	African American	
Yes	2	0	5	7
	100 %	0 %	71.4 %	70 %
No	0	1	2	3
	0 %	100 %	28.6 %	30 %
Total	2	1	7	10

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AI-2, an African American owned speech consulting firm, said she has struggled to make connections she believes are the only path to working with the City of Cambridge, and has stopped bidding on projects. “It is also dependent upon who you know,” she said. “The City has a reputation of hiring who they already know. It is a closed system and I do not find value in it when the ‘good ole boys’ continue to benefit while minorities are left out.” Hispanic American owned logistics company AI-7 noted that small businesses had to meet higher standards of service to be considered for bid awards while some firms had an established connection with the City. “Larger firms have been building relationships and have already been in talks to secure work with the government,” he said. “There are expectations to above par work with discounted pricing for the government to acknowledge your business.”

Veteran owned communications firm AI-17 acknowledged that his success comes from his relationship with individuals inside City government. “We have a great relationship with the City and attribute that to knowing people in the procurement department,” he said.

F. Other Notable Findings

Beyond the major topics discussed above, there were other topics and issues that, while not explicitly reflected in the interviews, focus groups or public hearings, did elicit notable response in the Survey of Business Owners.

1. Registry with COMMBUYS

Data collected in the Survey of Business owners showed that just under 30% of those polled – 29.3% – were **registered with COMMBUYS, the commonwealth of Massachusetts’ electronic procurement system** (See Table 19 below and Appendix D Survey of Business Owners: Table 17). Of those who were not registered, 31.8% said they did not know how to register (See Table 19a below and Appendix D Survey of Business Owners: Table 19). Unregistered poll respondents said at the rate of 45.5% that they were unaware of the registry (See Table 20 below and Appendix D Survey of Business Owners: Table 20)

Table 19. Is your company registered with the State's COMMBUYS?

Responses	Owners' Minority Status										Total
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Yes	4	37	36	1	1	7	15	1	2	2	106
	100 %	75.5 %	72 %	50 %	100 %	58.3 %	83.3 %	50 %	50 %	25 %	70.7 %
No	0	12	14	1	0	5	3	1	2	6	44
	0 %	24.5 %	28 %	50 %	0 %	41.7 %	16.7 %	50 %	50 %	75 %	29.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

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Table 19a. If you answered “No” to "is your company registered with the State's COMMBUYS", why is your company not registered with

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African	Cape	American	Asian	Hispanic	Portuguese	Multi-	Other	<i>Total</i>
Not Selected	0	9	11	0	0	2	1	1	2	4	30
	0 %	75 %	78.6 %	0 %	0 %	40 %	33.3 %	100 %	100 %	66.7 %	68.2
Selected	0	3	3	1	0	3	2	0	0	2	14
	0 %	25 %	21.4 %	100 %	0 %	60 %	66.7 %	0 %	0 %	33.3 %	31.8
Total	0	12	14	1	0	5	3	1	2	6	44

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Table 20. If you answered “No” to "is your company registered with the State's COMMBUYS", why is your company not registered with

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African	Cape	American	Asian	Hispanic	Portuguese	Multi-	Other	<i>Total</i>
Not Selected	0	5	10	1	0	1	1	1	1	4	24
	0 %	41.7 %	71.4 %	100 %	0 %	20 %	33.3 %	100 %	50 %	66.7 %	54.5
Selected	0	7	4	0	0	4	2	0	1	2	20
	0 %	58.3 %	28.6 %	0 %	0 %	80 %	66.7 %	0 %	50 %	33.3 %	45.5
Total	0	12	14	1	0	5	3	1	2	6	44

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2. Excessive Paperwork

More than 20% of the business owners polled for the Study said that excessive paperwork was a barrier to bidding on projects with the City (See Table 21 below and Appendix D Survey of Business Owners: Table 50).

Table 21. Excessive paperwork

Table 21. Excessive paperwork											
	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	42	38	1	1	8	16	2	1	6	119
	100 %	85.7 %	76 %	50 %	100 %	66.7 %	88.9 %	100 %	25 %	75 %	79.3 %
Selected	0	7	12	1	0	4	2	0	3	2	31
	0 %	14.3 %	24 %	50 %	0 %	33.3 %	11.1 %	0 %	75 %	25 %	20.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

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3. Unfair Competition With Larger Companies

Small businesses often consider efforts to compete against larger companies difficult. In this Study, 31.3% of survey respondents said competition with larger companies presented a barrier to bidding on contracts with the City of Cambridge (See Table 22 below and Appendix D Survey of Business Owners: Table 65). That includes 42% of African American owned businesses and 28.6% of Woman owned companies. 90% of Veteran identified firms stated that competition is presented as a barrier (See Table 23 below and Appendix D Survey of Business Owners: Table 65). This ratio is devised of 100% of Non-MWBEs and 100% of African Americans. A slightly larger percentage of business owners – 32.7% – indicated that competition with larger companies was a barrier to getting work on public projects with government entities other than the City (See Table 24 below and Appendix D Survey of Business Owners: Table 84). Included in that ratio are 38% of African American owned companies and 30.6% of Woman owned firms.

Table 22. The following is a list of things that may prevent companies from bidding or obtaining work on a project. In your experience, have any of the following been a barrier to your company obtaining work on projects for the City of Cambridge? [Competition with large companies]

<i>Owners' Minority Status</i>											
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	4	35	29	2	0	11	13	1	3	5	103
	100 %	71.4 %	58 %	100 %	0 %	91.7 %	72.2 %	50 %	75 %	62.5 %	68.7 %
Selected	0	14	21	0	1	1	5	1	1	3	47
	0 %	28.6 %	42 %	0 %	100 %	8.3 %	27.8 %	50 %	25 %	37.5 %	31.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

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Table 23. The following is a list of things that may prevent companies from bidding or obtaining work on a project. In your experience, have any of the following been a barrier to your company obtaining work on projects for the City of Cambridge? [Competition with large companies]

	<i>Owners' Minority Status (Veteran)</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	2	0	7	9
	100 %	0 %	100 %	90 %
Selected	0	1	0	1
	0 %	100 %	0 %	10 %
Total	2	1	7	10

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Table 24. Things that may prevent companies from bidding or obtaining work on a project. In your experience, have any of the following been a barrier to your company obtaining work on projects for any governmental entity in the Boston Metropolitan Area except the City of Cambridge [Competition with large companies]

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	4	34	31	2	0	9	13	0	3	5	101
	100 %	69.4 %	62 %	100 %	0 %	75 %	72.2 %	0 %	75 %	62.5 %	67.3 %
Selected	0	15	19	0	1	3	5	2	1	3	49
	0 %	30.6 %	38 %	0 %	100 %	25 %	27.8 %	100 %	25 %	37.5 %	32.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

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4. Perception of Discriminatory Behavior

Just under 12% of businesses polled – 11.9%– indicated having a perception of experiencing discriminatory behavior based on gender, race or ethnicity when dealing with the City of Cambridge (See Table 25 below and Appendix D Survey of Business Owners: Table 144). That includes 7.3% who characterized their experience as “Seldom,” 3.3% who said it was “Often,” and 1.3% who described it as “Very Often.” Veteran identified firms had a higher percentage, with 20% stating that discriminatory practices occur “Often” (See Table 26 below and Appendix D Survey of Business Owners: Table 144).

The percentage of perceived discriminatory behavior is lower in the City than the private sector, which includes the Boston area where the results were much greater at 27.3% (See Table 27 below and Appendix D Survey of Business Owners: Table 143). Veteran identified firms had a higher degree of perceiving discriminatory behavior in the private sector with 30% (See Table 28 below and Appendix D Survey of Business Owners: Table 143). The City compares well to other non-Cambridge governmental entities in which 18.7% of businesses indicated a perception of experiencing a degree of discriminatory behavior. (See Table 29 and Appendix D Survey of Business Owners: Table 143) Veteran identified firms engaging with other non-Cambridge governmental entities also have a higher percentage of 30% (See Table 30 and Appendix D Survey of Business Owners: Table 145).

Table 25. From July 1, 2017, through June 30, 2021, how often has your company experienced any racial, gender, or ethnicity discriminatory behavior from The City of Cambridge?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Never	3	43	18	1	0	5	12	1	0	7	90
	75 %	87.8 %	36 %	50 %	0 %	41.7 %	66.7 %	50 %	0 %	87.5 %	60 %
Seldom	0	0	7	0	0	2	0	0	1	1	11
	0 %	0 %	14 %	0 %	0 %	16.7 %	0 %	0 %	25 %	12.5 %	7.3 %
Often	0	0	4	0	0	0	1	0	0	0	5
	0 %	0 %	8 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	3.3 %
Very Often	0	0	2	0	0	0	0	0	0	0	2
	0 %	0 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1.3 %
Do Not Know	1	6	19	1	1	5	5	1	3	0	42
	25 %	12.2 %	38 %	50 %	100 %	41.7 %	27.8 %	50 %	75 %	0 %	28 %
Total	4	49	50	2	1	12	18	2	4	8	150

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Table 26. From July 1, 2017 through June 30, 2021, how often has your company experienced any racial, gender, or ethnicity discriminatory behavior from The City of Cambridge?

Responses	<i>Owners' Minority Status (Veteran)</i>			<i>Total</i>
	Caucasian	Woman	African American	
Never	1	0	3	4
	50 %	0 %	42.9 %	40 %
Seldom	0	0	0	0
	0 %	0 %	0 %	0 %
Often	0	0	2	2
	0 %	0 %	28.6 %	20 %
Very Often	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know	1	1	2	4
	50 %	100 %	28.6 %	40 %
Total	2	1	7	10

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Table 27. From July 1, 2017, through June 30, 2021, how often has your company experienced any racial, gender, or ethnicity discriminatory behavior from any private businesses within the Boston Metropolitan Area (i.e., non-governmental entities)?

Responses	Owners' Minority Status										Total
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Never	3	34	15	1	1	1	7	0	0	6	68
	75 %	69.4 %	30 %	50 %	100 %	8.3 %	38.9 %	0 %	0 %	75 %	45.3 %
Seldom	0	3	9	0	0	5	2	1	1	0	21
	0 %	6.1 %	18 %	0 %	0 %	41.7 %	11.1 %	50 %	25 %	0 %	14 %
Often	0	2	7	0	0	0	1	0	1	1	12
	0 %	4.1 %	14 %	0 %	0 %	0 %	5.6 %	0 %	25 %	12.5 %	8 %
Very Often	0	1	5	0	0	0	1	0	0	1	8
	0 %	2 %	10 %	0 %	0 %	0 %	5.6 %	0 %	0 %	12.5 %	5.3 %
Do Not Know	1	9	14	1	0	6	7	1	2	0	41
	25 %	18.4 %	28 %	50 %	0 %	50 %	38.9 %	50 %	50 %	0 %	27.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Griffin & Strong, P.C. 2023

Table 28. From July 1, 2017 through June 30, 2021, how often has your company experienced any racial, gender, or ethnicity discriminatory behavior from any private businesses within the Boston Metropolitan Area (i.e., non-governmental entities)?

Responses	<i>Owners' Minority Status (Veteran)</i>			<i>Total</i>
	Caucasian	Woman	African American	
Never	1	0	3	4
	50 %	0 %	42.9 %	40 %
Seldom	0	0	0	0
	0 %	0 %	0 %	0 %
Often	0	0	2	2
	0 %	0 %	28.6 %	20 %
Very Often	0	0	1	1
	0 %	0 %	14.3 %	10 %
Do Not Know	1	1	1	3
	50 %	100 %	14.3 %	30 %
Total	2	1	7	10

Griffin & Strong, P.C. 2023

Table 29. From July 1, 2017, through June 30, 2021, how often has your company experienced any racial, gender, or ethnicity discriminatory behavior from governmental entities within the Greater Boston Area other than the City of Cambridge?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Never	2	40	16	1	0	4	10	0	1	6	80
	50 %	81.6 %	32 %	50 %	0 %	33.3 %	55.6 %	0 %	25 %	75 %	53.3 %
Seldom	0	2	6	0	0	2	1	1	0	1	13
	0 %	4.1 %	12 %	0 %	0 %	16.7 %	5.6 %	50 %	0 %	12.5 %	8.7 %
Often	1	0	6	0	0	0	2	0	0	1	10
	25 %	0 %	12 %	0 %	0 %	0 %	11.1 %	0 %	0 %	12.5 %	6.7 %
Very Often	0	1	4	0	0	0	0	0	0	0	5
	0 %	2 %	8 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	3.3 %
Do Not Know	1	6	18	1	1	6	5	1	3	0	42
	25 %	12.2 %	36 %	50 %	100 %	50 %	27.8 %	50 %	75 %	0 %	28 %
Total	4	49	50	2	1	12	18	2	4	8	150

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Table 30. From July 1, 2017, through June 30, 2021, how often has your company experienced any racial, gender, or ethnicity discriminatory behavior from governmental entities within the Greater Boston Area other than the City of Cambridge?

Responses	<i>Owners' Minority Status (Veteran)</i>			<i>Total</i>
	Caucasian	Woman	African American	
Never	0	0	4	4
	0 %	0 %	57.1 %	40 %
Seldom	0	0	0	0
	0 %	0 %	0 %	0 %
Often	1	0	1	2
	50 %	0 %	14.3 %	20 %
Very Often	0	0	1	1
	0 %	0 %	14.3 %	10 %
Do Not Know	1	1	1	3
	50 %	100 %	14.3 %	30 %
Total	2	1	7	10

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5. Educational Opportunities

Firms that participated in the anecdotal process commend the City for their efforts in providing businesses with education and training programs. Retail business owner, AI 23 highlighted the way that the City offers opportunities and resources and financial funding. **“They are no joke about their small businesses and getting information to them. They are really on point with giving education and funding for small businesses, I’ve never seen anything like it.”** Firms who have not participated in the City’s procurement process due to not seeing how they would offer their services to the bidding process have located business programs that the City offers in which they participate in. These firms, such as AI-27 and AI-28 would like to see more programs and events for businesses. Additionally, firms that participated in the Survey of Business Owners have a positive perception of the City’s efforts to be inclusive in the languages offered within these opportunities. 30% of surveyed firms either agreed or strongly agreed that the City is generally accommodating to the language needs of its vendor community. This includes 33% of Asian American

owned firms, 44.4% of Hispanic American owned firms, 100% of Portuguese owned firms, and 75% of Multi/Biracial owned firms. (See Table 16 below and Appendix D Survey of Business Owners: Table 148)

Table 16. Please tell us if you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with each of the following

Responses	Owners' Minority Status										Total
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-	Other (specify):	
Strongly agree	0	1	5	0	0	0	2	2	1	1	12
	0 %	2 %	10 %	0 %	0 %	0 %	11.1 %	100 %	25 %	12.5 %	8 %
Agree	1	11	15	0	0	4	6	0	2	3	42
	25 %	22.4 %	30 %	0 %	0 %	33.3 %	33.3 %	0 %	50 %	37.5 %	28 %
Neither agree nor disagree	3	37	28	2	1	8	8	0	1	2	90
	75 %	75.5 %	56 %	100 %	100 %	66.7 %	44.4 %	0 %	25 %	25 %	60 %
Disagree	0	0	1	0	0	0	2	0	0	0	3
	0 %	0 %	2 %	0 %	0 %	0 %	11.1 %	0 %	0 %	0 %	2 %
Strongly disagree	0	0	1	0	0	0	0	0	0	2	3
	0 %	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	25 %	2 %
Total	4	49	50	2	1	12	18	2	4	8	150

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G. Conclusion

Anecdotal evidence shows that the perception of informal networks have created an atmosphere that suggests a select few businesses have access to contracting opportunities with the City. This is supported by tables 16 and 17. Evidence pointed to prime vendors who took advantage of the absence of an MWBE policy within the City to eschew contracting with Minority, Woman, or Veteran owned firms. Competition with larger firms discourages Minority, Woman, and Veteran owned businesses **from engaging with the City's** procurement process. The Study pointed to a need to reduce the amount of time it takes both the City and prime contractors to pay Minority, Woman and Veteran owned firms. Anecdotal evidence found that firms notice how the City provides educational opportunities, resources, and information to small businesses.

Appendix A

Relevant Market By County

Appendix A - Relevant Market by County

The tables in Appendix A (Tables A-1 through A-3) present the dollar value of awards by counties for all Cambridge, MA prime spending, broken down by the five procurement categories. The top thirty-five counties are arranged from the highest dollar value to the lowest dollar value, first within the relevant market and then within the rest of the Consolidated Statistical Area (CSA), then within the state of Massachusetts and then outside of the state of Massachusetts. The first percentage column is the percentage of Cambridge, MA prime spending with firms in that county. The last column is the cumulative percentage of Cambridge, MA spending with firms for that county and the counties above it. The counties highlighted in orange are the relevant market for the Study.

CAMBRIDGE, MA 2023 DISPARITY STUDY

Table A-1: Prime Professional Services by Counties
 (Using Payment Dollars, FY 2018-2021)
 Cambridge Disparity Study

Statistical Area	County	State	Total Amount	Percent	Cumulative Percent
Main City	Cambridge City	MA	\$ 1,298,274	5.50%	5.50%
MSA	Suffolk County	MA	\$ 9,139,142	38.75%	44.25%
MSA	Essex County	MA	\$ 3,082,853	13.07%	57.32%
MSA	Norfolk County	MA	\$ 2,916,871	12.37%	69.69%
MSA	Middlesex County	MA	\$ 1,813,633	7.69%	77.38%
MSA	Plymouth County	MA	\$ 999,621	4.24%	81.62%
CSA	Providence County	RI	\$ 99,069	0.42%	82.04%
CSA	Bristol County	MA	\$ 81,679	0.35%	82.38%
CSA	Newport County	RI	\$ 4,950	0.02%	82.41%
CSA	Worcester County	MA	\$ 3,910	0.02%	82.42%
CSA	Belknap County	NH	\$ 1,737	0.01%	82.43%
Remaining Count	Berkshire County	MA	\$ 7,910	0.03%	82.46%
Remaining Count	Hampden County	MA	\$ 7,159	0.03%	82.49%
USA	Lucas County	OH	\$ 1,144,004	4.85%	87.34%
USA	Cook County	IL	\$ 816,494	3.46%	90.81%
USA	District of Columbia	DC	\$ 300,176	1.27%	92.08%
USA	Philadelphia County	PA	\$ 268,104	1.14%	93.21%
USA	El Paso County	CO	\$ 267,815	1.14%	94.35%
USA	Montgomery County	MD	\$ 256,242	1.09%	95.44%
USA	Bergen County	NJ	\$ 206,728	0.88%	96.31%
USA	Dupage County	IL	\$ 151,768	0.64%	96.96%
USA	Los Angeles County	CA	\$ 79,842	0.34%	97.29%
USA	New Haven County	CT	\$ 79,195	0.34%	97.63%
USA	Honolulu County	HI	\$ 65,750	0.28%	97.91%
USA	New York County	NY	\$ 63,133	0.27%	98.18%
USA	York County	ME	\$ 56,985	0.24%	98.42%
USA	Baltimore City	MD	\$ 51,186	0.22%	98.64%
USA	Jackson County	MO	\$ 41,687	0.18%	98.81%
USA	Dallas County	TX	\$ 32,898	0.14%	98.95%
USA	Sacramento County	CA	\$ 25,972	0.11%	99.06%
USA	Allegheny County	PA	\$ 21,240	0.09%	99.15%
USA	Davidson County	TN	\$ 19,900	0.08%	99.24%
USA	Alameda County	CA	\$ 19,035	0.08%	99.32%
USA	Hillsborough County	FL	\$ 14,115	0.06%	99.38%

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CAMBRIDGE, MA 2023 DISPARITY STUDY

Table A-2: Prime Other Services by Counties
 (Using Payment Dollars, FY 2018-2021)
 Cambridge Disparity Study

Statistical Area	County	State	Total Amount	Percent	Cumulative Percent
Main City	Cambridge City	MA	\$ 12,857,779	7.04%	7.04%
MSA	Middlesex County	MA	\$ 80,003,564	43.81%	50.86%
MSA	Suffolk County	MA	\$ 37,470,565	20.52%	71.38%
MSA	Norfolk County	MA	\$ 10,700,663	5.86%	77.24%
MSA	Essex County	MA	\$ 5,123,320	2.81%	80.04%
MSA	Plymouth County	MA	\$ 3,959,696	2.17%	82.21%
MSA	Rockingham County	NH	\$ 3,181,315	1.74%	83.95%
MSA	Strafford County	NH	\$ 62,951	0.03%	83.99%
CSA	Worcester County	MA	\$ 2,236,443	1.22%	85.21%
CSA	Hillsborough County	NH	\$ 2,034,042	1.11%	86.33%
CSA	Providence County	RI	\$ 1,543,361	0.85%	87.17%
CSA	Bristol County	MA	\$ 744,066	0.41%	87.58%
CSA	Merrimack County	NH	\$ 79,738	0.04%	87.62%
CSA	Kent County	RI	\$ 78,917	0.04%	87.67%
CSA	Barnstable County	MA	\$ 60,314	0.03%	87.70%
CSA	Newport County	RI	\$ 2,239	0.00%	87.70%
CSA	Bristol County	RI	\$ 1,500	0.00%	87.70%
CSA	Washington County	RI	\$ 609	0.00%	87.70%
Remaining County	Hampden County	MA	\$ 335,171	0.18%	87.89%
Remaining County	Hampshire County	MA	\$ 170,950	0.09%	87.98%
Remaining County	Franklin County	MA	\$ 25,510	0.01%	87.99%
Remaining County	Dukes County	MA	\$ 1,440	0.00%	88.00%
USA	Cook County	IL	\$ 3,834,589	2.10%	90.10%
USA	Dallas County	TX	\$ 3,162,942	1.73%	91.83%
USA	Los Angeles County	CA	\$ 1,228,851	0.67%	92.50%
USA	Fulton County	GA	\$ 1,066,533	0.58%	93.08%
USA	Kings County	NY	\$ 1,042,182	0.57%	93.66%
USA	San Francisco County	CA	\$ 729,837	0.40%	94.05%
USA	Salt Lake County	UT	\$ 694,177	0.38%	94.44%
USA	New York County	NY	\$ 686,174	0.38%	94.81%
USA	Allegheny County	PA	\$ 580,349	0.32%	95.13%
USA	Philadelphia County	PA	\$ 462,466	0.25%	95.38%
USA	Dubuque County	IA	\$ 406,937	0.22%	95.60%
USA	Morris County	NJ	\$ 389,650	0.21%	95.82%

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CAMBRIDGE, MA 2023 DISPARITY STUDY

Table A-3: Prime Supplies by Counties
 (Using Payment Dollars, FY 2018-2021)
 Cambridge Disparity Study

Statistical Area	County	State	Total Amount	Percent	Cumulative Percent
Main City	Cambridge City	MA	\$ 8,883,764	6.98%	6.98%
MSA	Middlesex County	MA	\$ 31,683,759	24.90%	31.89%
MSA	Suffolk County	MA	\$ 25,388,271	19.95%	51.84%
MSA	Norfolk County	MA	\$ 12,130,584	9.53%	61.37%
MSA	Plymouth County	MA	\$ 6,898,885	5.42%	66.80%
MSA	Essex County	MA	\$ 1,941,622	1.53%	68.32%
MSA	Rockingham County	NH	\$ 375,410	0.30%	68.62%
MSA	Strafford County	NH	\$ 28,015	0.02%	68.64%
CSA	Worcester County	MA	\$ 5,323,191	4.18%	72.82%
CSA	Bristol County	MA	\$ 3,138,188	2.47%	75.29%
CSA	Hillsborough County	NH	\$ 810,132	0.64%	75.93%
CSA	Providence County	RI	\$ 287,064	0.23%	76.15%
CSA	Merrimack County	NH	\$ 266,457	0.21%	76.36%
CSA	Barnstable County	MA	\$ 18,157	0.01%	76.38%
CSA	Kent County	RI	\$ 16,248	0.01%	76.39%
CSA	Washington County	RI	\$ 15,998	0.01%	76.40%
CSA	Bristol County	RI	\$ 9,623	0.01%	76.41%
CSA	Belknap County	NH	\$ 5,323	0.00%	76.41%
CSA	Newport County	RI	\$ 995	0.00%	76.41%
Remaining County	Berkshire County	MA	\$ 1,040,657	0.82%	77.23%
Remaining County	Hampden County	MA	\$ 979,760	0.77%	78.00%
Remaining County	Franklin County	MA	\$ 581,489	0.46%	78.46%
Remaining County	Hampshire County	MA	\$ 26,247	0.02%	78.48%
USA	Cook County	IL	\$ 5,811,087	4.57%	83.05%
USA	St. Louis City	MO	\$ 2,117,936	1.66%	84.71%
USA	Philadelphia County	PA	\$ 2,008,320	1.58%	86.29%
USA	Los Angeles County	CA	\$ 1,452,628	1.14%	87.43%
USA	Fulton County	GA	\$ 1,153,472	0.91%	88.34%
USA	New York County	NY	\$ 1,008,035	0.79%	89.13%
USA	Hamilton County	OH	\$ 769,516	0.60%	89.74%
USA	Dallas County	TX	\$ 752,750	0.59%	90.33%
USA	Cumberland County	ME	\$ 702,521	0.55%	90.88%
USA	Allegheny County	PA	\$ 599,097	0.47%	91.35%
USA	Suffolk County	NY	\$ 578,040	0.45%	91.81%

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Appendix B

Expanded Legal Analysis

Appendix B - Expanded Legal Analysis

Having provided an historical overview of the significant cases that led to the development of disparity studies, the following discussion underscores the importance of such studies for establishing and maintaining a legally defensible M/WBE program or initiative. Included in this expanded section is a review of the key aspects of the methodology utilized by GSPC to conduct the **City of Cambridge's** Study, including the process by which GSPC gathered and analyzed both the statistical and the anecdotal evidence, which **together provide the "factual predicate" for recommended remedial programs and policies.**

It is important to remain mindful that for the City of Cambridge, controlling legal precedent is established only by the United States Supreme Court and the United States Court of Appeals for the 1st Circuit. Case opinions and examples presented herein from other communities and states should be viewed on a case-by-case basis. Cases from another state or community will implicate different local and state laws, and thus will not be binding on the City. While such sources may have informative value, they are not dispositive or controlling and may not account for differences and nuances in local and state law, as well as market conditions. Therefore, these additional case authorities should not, and cannot, be conclusively relied upon by the City for the purposes of this Study.

A. Overview of Legal Challenges to M/WBE Programs and Legislation

There are several important legal standards and considerations which arise when a constitutional challenge to an MBE/WBE program is initiated. Matters such as standing, burden(s) of proof, the applicable judicial **scrutiny, and the types and sufficiency of evidence necessary for the court's evaluation all must be addressed.**

1. Burdens of Production/Proof

As noted above, the *Crosan* court struck down the City of Richmond's minority set-aside program because the City failed to provide an adequate evidentiary showing of past and present discrimination as was its initial burden.³⁵ Since the Fourteenth Amendment only allows affirmative action policies that narrowly seek **to remedy particularized discrimination, the Court reasoned that state and local governments "must identify that discrimination with some specificity before they may use race-conscious relief."**³⁶ The court's rationale for judging the sufficiency of the City's factual predicate for affirmative action legislation was **whether there existed a "strong basis in evidence for its [government's] conclusion that remedial action was necessary."**³⁷

The initial burden of production on the state or local governmental entity is to demonstrate that its race- and gender-conscious contract program is aimed at remedying identified past or present discrimination.³⁸ **Merely articulating a "benign" or "remedial" purpose does not constitute a "strong basis in evidence" that the remedial plan is necessary, nor does it establish a prima facie case of discrimination.**³⁹ Thus, the local government must not only identify the discrimination it seeks to redress, but also produce particularized findings of discrimination.⁴⁰

A governmental entity may, for example, establish an inference of discrimination by using empirical evidence of a significant statistical disparity between the number of qualified M/WBEs in the relevant market area and the number of M/WBE contractors awarded a contract by the governmental entity or brought in as subcontractors by prime contractors to which a public contract is awarded.⁴¹

The courts maintain that the quantum of evidence required for the governmental entity is to be determined on a case-by-case basis, and in the context and breadth of the M/WBE program it purports to advance.⁴² Once the governmental entity has shown acceptable proof of a compelling interest in remedying past discrimination and illustrated that its plan is narrowly tailored to achieve this goal, the party challenging the affirmative action plan bears the ultimate burden of proving that the plan is unconstitutional.⁴³

B. The Equal Protection Clause and Relevant Level of Judicial Scrutiny

The Fourteenth Amendment provides that “No state shall . . . deny to any person within its jurisdiction the equal protection of the laws”. U.S. Const. amend. XIV, § 1. Courts determine the appropriate standard of equal protection review by “[f]irst. . . [determining] whether a state or local government has developed the program, or whether Congress has authorized the program’s creation”, then by examining the protected classes embodied in the statute.⁴⁴

The Supreme Court has made clear that “all racial classifications imposed by government must be analyzed by a reviewing court under strict scrutiny.”⁴⁵ The Fourth Circuit previously put into sharp relief its view of the rationale for this level of judicial review:

Racial and ethnic distinctions of any sort are inherently suspect and thus call for the most exacting judicial examination. The rationale for this stringent standard of review is plain. Of all the criteria by which men and women can be judged, the most pernicious is that of race. The injustice of judging human beings by the color of their skin is so apparent that racial classifications cannot be rationalized by the casual invocation of benign remedial aims. While the inequities and indignities visited by past discrimination are undeniable, the use of race as a reparational device risks perpetuating the very race-consciousness such a remedy purports to overcome. It thus remains our constitutional premise that race is an impermissible arbiter of human fortunes.⁴⁶

Again, “[u]nder strict scrutiny, a racial classification must (1) serve a compelling state interest and (2) be narrowly tailored to achieve that interest.”⁴⁷

C. “Compelling Public Interest” Considerations

In order for a local government’s M/WBE contracting program to be constitutionally valid, it first must be rooted in a compelling governmental interest.

Although imposing a substantial burden, strict scrutiny is not automatically “fatal in fact.” *Adarand II*, 515 U.S. at 237, 115 S.Ct. 2097. After all, “[t]he unhappy persistence of both the practice and the lingering effects of racial discrimination against minority groups in this country is an unfortunate reality, and government is not disqualified from acting in response to it.” *Id.*; *Alexander*, 95 F.3d at 315. In so acting, a governmental entity must demonstrate it had a compelling interest in “remediating the effects of past or present racial discrimination.” *Shaw v. Hunt*, 517 U.S. 899, 909, 116 S.Ct. 1894, 135 L.Ed.2d 207 (1996).

Thus, to justify a race-conscious measure, a state must “identify that discrimination, public or private, with some specificity,” *Croson*, 488 U.S. at 504, 109 S.Ct. 706, and must have a “strong basis in evidence for its conclusion that remedial action [is] necessary,” *id.* at 500, 109 S.Ct. 706 (quoting *Wygant v. Jackson Bd. of Educ.*, 476 U.S. 267, 277, 106 S.Ct. 1842, 90 L.Ed.2d 260 (1986) (plurality opinion)); see also *Podberesky v. Kirwan*, 38 F.3d 147, 153 (4th Cir.1994). As courts have noted, “there is no ‘precise mathematical formula to assess the quantum of evidence that rises to the *Croson* ‘strong basis in evidence’ benchmark.” *Rothe Dev. Corp. v. Dep’t of Def.*, 545 F.3d 1023, 1049 (Fed.Cir.2008) (*Rothe II*).⁴⁸

This compelling interest must be proven by particularized findings of discrimination. –The strict scrutiny test ensures that **the means used to address the compelling goal of remedying discrimination “fit” so closely** that there is little likelihood that the motive for the racial classification is illegitimate racial prejudice or stereotype.⁴⁹

The relevant case law establishes that the compelling state interests of remedying past discrimination and of avoiding discrimination in the context of governmental procurement programs are well-accepted, and not controversial at this point.⁵⁰

1. The Extent of Participation in Discrimination by the Public Entity

The courts have uniformly held that general societal discrimination is insufficient to justify the use of race-based measures to satisfy a compelling governmental interest.⁵¹ Rather, there must be some showing of prior discrimination by the governmental actor involved, either as an “active” or “passive” participant.⁵² The upshot of this dual-faceted evaluation of the enacting governmental entity is that, even if the entity did not directly discriminate, it can take corrective action.⁵³

Subsequent lower court rulings have provided more guidance on passive participation by local governments. In *Concrete Works*, the Tenth Circuit held that it was sufficient for the local government to demonstrate that it engaged in passive participation in discrimination rather than showing that it actively participated in the discrimination:

Neither *Croson* nor its progeny clearly state whether private discrimination that is in no way funded with public tax dollars can, by itself, provide the requisite strong basis in evidence necessary to justify a municipality’s affirmative action program. Although we do not read *Croson* as requiring the municipality to identify an exact linkage between its award of public contracts and private discrimination, such evidence would at least enhance the municipality’s factual predicate for a race/gender-conscious program.⁵⁴

Thus, the desire for a government entity to prevent the infusion of public funds into a discriminatory industry is enough to satisfy the requirement. The next question, however, is whether a public entity has the requisite factual support for its MWBE program in order to satisfy the particularized showing of discrimination required by *Croson*. This factual support can be developed from anecdotal and statistical evidence, as discussed hereafter.

2. Types of Evidence

The types of evidence routinely presented to show the existence of a compelling interest include statistical and anecdotal evidence.⁵⁵ Where gross statistical disparities exist, they alone may constitute *prima facie* proof of a pattern or practice of discrimination. –Anecdotal evidence, such as testimony from minority contractors, is most useful as a supplement to strong statistical evidence, as it cannot carry the burden for the entity by itself.

For example, the majority decision in *Croson* implicitly endorsed the inclusion of personal accounts of discrimination, but *Croson* and subsequent decisions also make clear that selective anecdotal evidence about MBE/WBE experiences alone would not provide an ample basis in evidence to demonstrate public or private discrimination in a municipality’s construction industry.⁵⁶ Stated otherwise, personal accounts of actual discrimination or the effects of discriminatory practices are admissible and effective, and

anecdotal evidence of a governmental entity’s institutional practices that provoke discriminatory market conditions is particularly probative. To carry the day, however, such evidence must be supplemented with strong statistical proof:

A state need not conclusively prove the existence of past or present racial discrimination to establish a strong basis in evidence for concluding that remedial action is necessary. Instead, a state may meet its burden by relying on a significant statistical disparity between the availability of qualified, willing, and able minority subcontractors and the utilization of such subcontractors by the governmental entity or its prime contractors. We further require that such evidence be corroborated by significant anecdotal evidence of racial discrimination.⁵⁷

Accordingly, a combination of statistical disparities in the utilization of M/WBEs and particularized anecdotal accounts of discrimination by the M/WBEs (or others) are required to satisfy the factual predicate.⁵⁸

Of note, several courts have rejected assertions by plaintiffs attacking programs that anecdotal evidence must be verified to be considered as part of a governmental **entity’s** evidentiary proffer.⁵⁹

3. Statistical Data Generally

The Court in *Croson* explained that an inference of discrimination may be made with empirical evidence that demonstrates “**a significant statistical disparity between the number of qualified minority contractors . . . and the number of such contractors actually engaged by the locality or the locality’s prime contractors.**”⁶⁰ A predicate to governmental action is a demonstration that gross statistical disparities exist between the proportion of MBEs awarded government contracts and the proportion of MBEs in the local industry “**willing and able to do the work,**” in order to justify its use of race-conscious contract measures.⁶¹

In order to adequately assess statistical evidence, there must be information identifying the basic **qualifications of minority contractors “willing and able to do the job”** and the Court must determine, based upon these qualifications, the relevant statistical pool with which to make the appropriate statistical comparisons.⁶² Although subsequent lower court decisions have provided considerable guidelines for statistical analyses sufficient for satisfying the *Croson* factual predicate, there are multiple methods that the courts have accepted for conducting statistical analyses. The most prevalent of these are outlined hereafter.

4. Availability

The attempted methods of calculating M/WBE availability have varied from case to case. In *Contractors Association of Eastern Pennsylvania v. City of Philadelphia*,⁶³ the Third Circuit stated that available and qualified minority-owned **businesses comprise the “relevant statistical pool” for purposes of determining availability.**⁶⁴ The court permitted availability to be based on the metropolitan statistical area (MSA) and local list of the Office of Minority Opportunity for non-MBE/WBEs, which itself was based on census data.

In *Associated General Contractors of America v. City of Columbus*,⁶⁵ the **City’s** consultants collected data on the number of M/WBE firms in the Columbus MSA in order to calculate the percentage of available

M/WBE firms. **-Three sources were considered to determine the number of M/WBEs “ready, willing and able” to perform construction work for the city (the City Auditor Vendor Payment History file, Subcontractor Participation Reports, or Contract Document Database of the City).**⁶⁶ However, the Court found that none of these measures of availability purported to measure the number of M/WBEs who were qualified and willing to bid as a prime contractor on City construction projects because none of the three data sources relied upon were attentive to which firms were able to be responsible or provide either a bid bond or performance bond.⁶⁷ **The Court thus wrote “[t]here is no basis in the evidence for an inference that qualified M/WBE firms exist in the same proportions as they do in relation to all construction firms in the market.”**⁶⁸

In *H.B. Rowe*, availability was calculated using a vendor list that included: “**1**) subcontractors approved by the Department to perform subcontract work on state-funded projects, (2) subcontractors that performed such work during the study period, and (3) contractors qualified to perform prime construction work on state-funded contracts.”⁶⁹

The issue of availability also was examined by the Eleventh Circuit in *Contractors Association of South Florida*.⁷⁰ There, the court opined that when reliance is made upon statistical disparity, and special qualifications are necessary to undertake a particular task, the relevant statistical pool must include only those minority-owned firms qualified to provide the requested services.⁷¹ Moreover, these minority firms must be qualified, willing and able to provide the requested services.⁷² If the statistical analysis includes the proper pool of eligible minorities, any resulting disparity, in a proper case, may constitute *prima facie* proof of a pattern or practice of discrimination.⁷³

A common question in collecting and applying availability data is whether prime contractor and subcontractor data needs to be evaluated separately. Though the Sixth Circuit has not spoken on this particular question, the trend is to accept combined data.

NCI’s argument is that IDOT essentially abused its discretion under this regulation by failing to separate prime contractor availability from subcontractor availability. However, NCI has not identified any aspect of the regulations that requires such separation. Indeed, as the district court observed, the regulations require the local goal to be focused on overall DBE participation in the recipient’s DOT-assisted contracts. *See* 49 C.F.R. § 26.45(a)(1). It would make little sense to separate prime contractor and subcontractor availability as suggested by NCI when DBEs will also compete for prime contracts and any success will be reflected in the recipient’s calculation of success in meeting the overall goal.⁷⁴

Also, several courts have accepted the use of a “**custom census**” methodology for calculating availability. For example, in *Northern Contracting*, after identifying the relevant geographic market and product market **(transportation construction) the analyst “surveyed Dun & Bradstreet’s Marketplace, which is a comprehensive database of American businesses that identifies which businesses are minority or women-owned. Wainwright supplemented this survey with IDOT’s list of DBEs in Illinois.”**⁷⁵ In *Kossmann*, the consulting analyst “relied on data acquired from Dun & Bradstreet’s Hoovers subsidiary on the total number of businesses in the defined market area. Because the Dun & Bradstreet data did not adequately identify all MWBEs, NERA collected information on MWBEs in Texas and surrounding states through lists from public and private entities, as well as prior NERA studies, and culled records for MWBEs within the [City’s] defined market area.”⁷⁶

5. Utilization

Utilization is a natural corollary of availability, in terms of statistical calculation. Different courts have applied utilization rates to different base measures, including percentage-based analyses regarding contract awards and dollars paid.

In *Engineering Contractors*,⁷⁷ the City’s consultants calculated the percentage of City contracting dollars that were paid to MWBE construction firms.⁷⁸ In *Associated General Contractors v. California D.O.T.*, the State’s disparity study consultants calculated the percentage of contracting dollars that were paid to DBE firms.⁷⁹ This is referred to as the rate of utilization. From this point, one can determine if a disparity exists and, if so, to what extent. A similar methodology was utilized in *Associated General Contractors of America v. City of Columbus*.⁸⁰

In *Cone Corp. v. Hillsborough County*,⁸¹ the following utilization statistics were developed and presented to justify an MBE program:

The County documented the disparity between the percentage of MBE contractors in the area and the percentage of contracts awarded to those MBE contractors. Hillsborough County determined that the percentage of County construction dollars going to MBE contractors compared to the total percentage of County construction dollars spent. . . . The data extracted from the studies indicates that while ten percent of the businesses and twelve percent of the contractors in the County were minorities, only 7.89% of the County purchase orders, 1.22% of the County purchase dollars, 6.3% of the awarded bids, and 6.5% of the awarded dollars went to minorities. The statistical disparities between the total percentage of minorities involved in construction and the work going to minorities, therefore, varied from approximately four to ten percent, with a glaring 10.78% disparity between the percentage of minority contractors in the County and the percentage of County construction dollars awarded to minorities. Such a disparity clearly constitutes a prima facie case of discrimination indicating that the racial classification in the County plan were necessary.

The Sixth Circuit signaled in *Drabik*, however, that statistical proof of under-utilization would be insufficient in and of itself to supply the justification for the utilization of a non-race-neutral measure in public contracting practices.⁸² The *Drabik* court did not view *Croson* as permitting remedial action of a race-conscious type simply because of statistical findings of underutilization of those minority companies that were in the ready, willing, and able to perform a public contracting need category, but rather interpreted the *Croson* court as requiring that “governments . . . identify discrimination with some specificity before they may use race-conscious relief; explicit findings of a constitutional or statutory violation must be made.”⁸³

6. Disparity Indices

To demonstrate the under-utilization of M/WBEs in a particular area, parties can employ a statistical device known as the “disparity index.” The use of such an index was explained, and cited approvingly, in *H.B. Rowe*.⁸⁴

In *H.B. Rowe*, after noting the increasing use of disparity indices, the court explained that the State (through a consulting firm) calculated a disparity index for each relevant racial or gender group covered

by the M/WBE program, and further, conducted a standard deviation analysis on each of those indices using t-tests.⁸⁵ **The resulting calculations “demonstrated marked underutilization of African American and Native American subcontractors,” according to the court.**⁸⁶

The utility of disparity indices or similar measures to examine the utilization of minorities or women in a particular industry has been recognized by a number of federal circuit courts.⁸⁷ Specifically, courts have used these M/WBE disparity indices to apply the **“strong basis in evidence”** standard in *Croson*. As noted, the disparity index in *H.B. Rowe* was 0.46 for African Americans and was 0.48 for Native Americans.⁸⁸ Based on a disparity index of 0.22, the Ninth Circuit upheld the denial of a preliminary injunction to a challenger of the City of San Francisco’s MBE plan based upon an equal protection claim.⁸⁹ Similarly, the Third Circuit held that a disparity of 0.04 was “probative of discrimination in City contracting in the **Philadelphia construction industry.**”⁹⁰

7. Use of Standard Deviation

The number calculated via the disparity index (established above) is then tested for its validity through the application of a standard deviation analysis. Standard deviation analysis measures the probability that a result is a random deviation from the predicted result (the more standard deviations, the lower the probability the result is a random one). -Social scientists consider a finding of two standard deviations significant, meaning that there is about one chance in 20 that the explanation for the deviation could be random, so the deviation must be accounted for by some factor.

As noted above, standard deviations were applied by the State of North Carolina in the statistical analysis utilized to defend its MBE/WBE program in *H.B. Rowe*.⁹¹ The Fourth Circuit described the significance of the findings as follows:

For African Americans the t-value of 3.99 fell outside of two standard deviations from the mean and, therefore, was statistically significant at a 95 percent confidence level. In other words, there was at least a 95 percent probability that prime **contractors’ underutilization** of African American subcontractors was not the result of mere chance. For Native American subcontractors, the t-value of 1.41 was significant at a confidence level of approximately 85 percent.⁹²

Similarly, the Eleventh Circuit has directed that **“where the difference between the expected value and the observed number is greater than two or three standard deviations’, then the hypothesis that [employees] were hired without regard to race would be suspect.”**⁹³

8. Regression Analysis

The statistical significance of certain quantitative analyses was further evaluated in *H.B. Rowe*.⁹⁴ The *H.B. Rowe* court indicated that the appropriate test should resemble the one employed in *Engineering Contractors*, wherein two standard deviations or any disparity ratio that was higher than .80 (which is insignificant), should be used.⁹⁵

In evaluating the disparity evidence offered, and the regression analysis conducted by the State, the court favorably noted:

To corroborate the disparity data, MGT conducted a regression analysis studying the influence of certain company and business characteristics - with a particular focus on owner race and gender - on a firm's gross revenues. MGT obtained the data from a telephone survey of firms that conducted or attempted to conduct business with the Department. The survey pool consisted of a random sample of 647 such firms; of this group, 627 participated in the survey.

MGT used the firms' gross revenues as the dependent variable in the regression analysis to test the effect of other variables, including company age and number of full-time employees, and the owners' years of experience, level of education, race, ethnicity, and gender. The analysis revealed that minority and women ownership universally had a negative effect on revenue. African American ownership of a firm had the largest negative effect on that firm's gross revenue of all the independent variables included in the regression model. These findings led MGT to conclude that "for African Americans, in particular, the disparity in firm revenue was not due to capacity-related or managerial characteristics alone."⁹⁶

9. Geographic Scope

The *Crosbon* Court also observed that because discrimination varies across market areas, state and local governments cannot rely on national statistics of discrimination in the disputed industry to draw conclusions about prevailing market conditions in their respective regions.⁹⁷ However, to confine the **permissible data to a governmental entity's strict geographical borders would ignore the economic reality** that contracts are awarded to firms located in adjacent areas. Thus, courts closely scrutinize pertinent data related to the jurisdictional area of the state or municipality.

Generally, the scope of the statistical analyses pertains to the geographic market area from which the governmental entity offerors come. —In addition, disparities concerning utilization, firm size, and formation are also relevant in determining discrimination in a marketplace. —It has been deemed appropriate to examine the existence of discrimination against M/WBEs even when these areas go beyond the geographical boundaries of the local jurisdictions.⁹⁸

When utilizing evidence of discrimination from nearby public entities and from within the relevant private marketplace, however, extra-jurisdictional evidence must still pertain to the operation of an industry within geographic boundaries of the jurisdiction. As the court wrote in *Tennessee Asphalt v. Farris*, "[s]tates and lesser units of local government are limited to remedying sufficiently identified past and present discrimination within **their own spheres of authority.**"⁹⁹

D. Requirement for Narrowly-Tailored Remedies

Under the *Croson* framework, any race-conscious plan must be narrowly tailored to ameliorate the effects of past discrimination.¹⁰⁰ **“Generally, while ‘goals’ are permissible, unyielding preferential ‘quotas’ will normally doom an affirmative action plan.”**¹⁰¹

The Fourth Circuit addressed the parameters of this requirement in *Tuttle v. Arlington County*:
When reviewing whether a state racial classification is narrowly tailored, we consider factors such as: (1) the efficacy of alternative race-neutral policies, (2) the planned duration of the policy, (3) the relationship between the numerical goal and the percentage of minority group members in the relevant population or work force, (4) the flexibility of the policy, including the provision of waivers if the goal cannot be met, and (5) the burden of the policy on innocent third parties.¹⁰²

In *Croson*, the Court considered similar factors, including 1) whether the city has first considered race-neutral measures, but found them to be ineffective;¹⁰³ 2) the basis offered for the goals selected; 3) whether the program provides for waivers; and 4) whether the program applies only to MBEs who operate in the geographic jurisdiction covered by the program.¹⁰⁴

More refined guideposts are provided in several post-*Croson* cases wrestling with efforts to meet the **“narrowly tailored”** prong – which we simply list for ease of reference:

- Relief is limited to minority groups for which there is identified discrimination;
- Remedies are limited to redressing the discrimination within the boundaries of the enacting jurisdiction;
- The goals of the programs should be flexible and provide waiver provisions;
- Race and/or gender-neutral measures should be considered; and
- The program should include provisions or mechanisms for periodic review and sunset.

Recall that, as discussed earlier in this analysis, the Sixth Circuit in *Associated General Contractors v. Drabik* affirmed that Ohio’s MBEA statute was not narrowly tailored to remedy past discrimination because: (1) the MBEA suffered from under inclusiveness and over inclusiveness, (lumping together racial and ethnic groups without identified discrimination); (2) the MBEA lacked a sunset date; and (3) the state failed to provide specific evidence that Ohio had considered race-neutral alternatives before adopting the plan to increase minority participation.¹⁰⁵

Again, *Drabik* underscores that M/WBE Programs must be designed so that the benefits of the programs are targeted specifically toward those firms that faced discrimination in the local marketplace; to withstand a challenge, relief must extend only to those minority groups for which there is evidence of discrimination.¹⁰⁶

Inherent in the above discussion is the notion that M/WBE Programs and remedies must maintain flexibility with regard to local conditions in the public and private sectors. Courts have suggested project-by-project goal setting and waiver provisions as means of ensuring fairness to all vendors. **Finally, “review” or “sunset” provisions are strongly suggested components for an M/WBE program to guarantee that remedies do not out-live their intended remedial purpose.**¹⁰⁷

E. Conclusion

The *Croson* decision, handed down thirty years ago, continues to cast a long shadow over M/WBE and DBE programs and legislation. Significant refinement by the Supreme Court and the federal Circuit Courts of Appeal transpired in its wake, though, addressing the acceptable and proper methodologies for achieving the legal standards established by *Croson*. To be clear, the controlling legal precedents governing the City of Cambridge are limited to those cases decided by the Supreme Court and the 1st Circuit Court of Appeals. Case decisions from other Circuits (including the district courts therein) are addressed herein to provide insights into legal trends nationwide and to elucidate methodological developments in the law that may not yet have been analyzed by the Supreme Court or the 1st Circuit. They are, accordingly, not dispositive or controlling for the City or for the purposes of the present Disparity Study and should not be relied upon as such.

That said, the court in *Kossmann* **included in its opinion a lengthy legal overview of what it dubbed “*Croson’s Continuing Significance*.”** In this section of its decision, the court opined about why a statistical analysis like that presented by the City of Houston was necessary and proper under the Equal Protection scheme established by *Croson* and refined by its (continuing) progeny.¹⁰⁸ In many respects, this opinion provides a roadmap for success in implementing and defending a DBE or M/WBE program under the current state of the law, with appropriate attribution and reference to *Croson*. It is in this general legal environment – though established largely by non-binding case authorities -- that any M/WBE program or policy implemented by the City of Cambridge will be evaluated, including in the face of any legal/constitutional challenge.

Appendix C

Study Definitions

Appendix C - Study Definitions

Anecdotal: A reported personal experience or encounter, retold through interview, testimony, email, or survey. Not necessarily verified or based on research.

Availability Estimates: A term of art in Disparity Studies that refers to the percentage of ready, willing, and able firms in the entity's Relevant Market in each work category that is disaggregated by race/ethnicity/gender.

Certification: A designation as a Disadvantaged Business Enterprise (DBE), Minority Business Enterprise (MBE), Women Owned Business Enterprise (WBE), determined by any authorized certification agency that a company is a for-profit, independent operating business that is at least 51% owned, operated and controlled by minority person(s) and/or a woman or women or, in the case of a DBE, a socially and economically disadvantaged person. The ownership and control by minorities and women or a socially and economically disadvantaged person must be real and substantial.

City of Richmond v. J.A. Croson Company 488 U.S. 469 (1989) (“Croson”): – Laws that, on their face, favor one class of citizens over another, may run afoul of the Equal Protection Clause of the 14 Amendment of the U.S. Constitution even if those laws are meant to remedy discrimination. Such laws, including those that create race conscious programs, must withstand judicial “strict scrutiny” or they will be dismantled. In its Croson decision, the Supreme Court ruled that the City of Richmond’s Minority Business Enterprise (hereinafter “MBE”) program failed to satisfy the requirements of “strict scrutiny” review under the 14th Amendment “Strict scrutiny” review involves two co-equal considerations to determine whether a race conscious program can withstand the Strict Scrutiny: First, the need to demonstrate a compelling governmental interest (which may be established through periodic disparity studies); Second, implementation of a program or method narrowly-tailored to achieve/remedy the compelling interest. In Croson, the Supreme Court concluded that the City of Richmond failed to show that its minority set-aside program was “necessary” to remedy the effects of discrimination in the marketplace.

Disparity Index: A statistical measure demonstrated by the failure to meet parity between availability and Utilization. Disparity is calculated by comparing the utilization percentage to the availability percentage of each race/gender/ethnic group. Will result in either overutilization, underutilization or parity.

Disparity Study (“Study”): A tool, identified by the Supreme Court as necessary for satisfying the strict scrutiny threshold for race conscious programs and demonstrating the compelling governmental interest by “factual predicate” that identifies discrimination and a narrowly tailored remedy to redress any finding of discrimination. Must adhere to the legal requirements of U.S Supreme Court decisions like City of Richmond v. J.A. Croson Company, 488 U.S. 469 (1989) and its progeny. Disparity studies are not designed to be an analysis of any current remedial programs but an analysis of race, ethnicity, and gender status and how it affects participation in the procurement process and in the marketplace.

Fiscal Year (“FY”): The business year for the City of Cambridge for purchasing and accounting purposes. Measured by City of Cambridge from July 1, 2017 through June 30, 2021. The study period for this study is FY 2018-2021.

Industry Categories: Means, collectively, the industry categories included in the Disparity Study, which are: Professional Services, Other Services, and Supplies, as those Industry Categories are defined in this section.

Minority or Women-owned Business Enterprise (MWBE): Means a for-profit, independent operating business that is at least 51% owned, operated and controlled by minority person(s) and/or a woman or women. The ownership by minorities and women must be real and substantial. The minority group member(s) or women must have operational and managerial control, interest in capital and earnings commensurate with the percentage of ownership.

Other Services: For the purposes of the City of Cambridge Disparity Study means all services except those in Construction, Construction related Professional Services, and Other Professional Services. Examples of Other Services include printing, marketing, advertising, lawn service, janitorial, and IT. Other Services is one of the City of Cambridge Study Industry Categories.

Overutilization: The measure by which the utilization percentage is higher than the availability percentage and the Disparity Index is above 100. In order to be statistically significantly overutilized, the Disparity Index must be 100 or more.

Parity: The absence of disparity, demonstrated by the utilization percentage being equal to availability percentage and the Disparity Index equaling 100.

Prime Contractor: A business who has entered into a direct contractual relationship with the City of Cambridge, or other public or private entity to provide a good, service, or perform a scope of services.

Professional Services: For the purposes of the City of Cambridge Disparity Study means services performed by a person or persons having special skill that is associated with obtaining a degree or certification. Examples of Professional Services include consultants, doctors, lawyers, and financial services. Professional Services are one of the City of Cambridge Study Industry Categories.

Qualitative Analysis: Also known as anecdotal analysis. Referring to a measurement of quality (ex. how **good over how much**). **Typified through collection and analysis of constituents' anecdotal impressions**, such as interviews, public hearings, focus groups, and other forms of commentary.

Quantitative Analysis: Commonly referred to as statistical analysis. Referring to a measurement of quantity over quality (ex. how much over how good). Typified by analysis of mathematical or statistical modeling.

Regression Analysis: Statistical measure used to determine whether the race, ethnicity or gender status of a business owner are an impediment in contracting in the City of Cambridge marketplace and whether but for these, they would have the capacity to provide services on a higher level than is currently utilized.

Relevant Geographic Market Area: A term of art in disparity studies that refers to the geographical area in which the entity spends at least 75% of its dollars based upon firm location. For the City of Cambridge, the Relevant Market Area was the Boston Metropolitan Statistical Area.

Strict Scrutiny: The highest level of judicial scrutiny used in determining the constitutionality of laws.

Study Period: The period in which all City of Cambridge contract awards are subject to study analysis. For this study it has been defined as (July 1, 2017 – June 30, 2021) FY2018-FY2021.

Supplies: For the purposes of the City of Cambridge Disparity Study means commodities, materials, supplies, equipment. Supplies are one of the City of Cambridge Study Industry Categories.

Underutilization: The measure by which the utilization percentage is less than the availability percentage and the Disparity Index is below 100. In order to be statistically significantly underutilized, the Disparity Index must be 80 or less.

Utilization: **A review of the City of Cambridge's Awards to determine where and with whom Prime Contractor and Subcontractor were made.** The analysis is conducted both with regard to the number of firms and the dollars in each race, ethnicity, gender group during each year of the Study.

Utilization: A term of art in disparity studies that refers to the percentage dollars paid to firms during the Study Period in the Relevant Geographic and Product Markets disaggregated by race/ethnicity/gender.

Veteran Business Enterprise: Means a for-profit, independent operating business that is at least 51% owned, operated and controlled by a veteran(s). The ownership by veterans must be real and substantial. The veteran group member(s) must have operational and managerial control, interest in capital and earnings commensurate with the percentage of ownership.

Appendix D

Survey of Business Owners Results

Appendix D - Survey of Business Owners Results

Cambridge Disparity Study Survey of Business Owners

A brief note on how tables are calculated

Duplicate responses have been removed. Duplicate responses were removed based on businesses having either the same email address or same business name.

The total count of responses for each question includes only those participants who responded to that question. Participants who skipped or were not given a question are not included.

Table 1. Is your company a not-for-profit organization or a government entity?											
	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Yes	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
No	4	49	50	2	1	12	18	2	4	8	150
	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 2. Do you believe your company is ready, willing, and able to do business as a prime contractor with the City of Cambridge?

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Yes	4	39	42	2	1	10	18	2	3	6	127
	100 %	79.6 %	84 %	100 %	100 %	83.3 %	100 %	100 %	75 %	75 %	84.7 %
No	0	10	8	0	0	2	0	0	1	2	23
	0 %	20.4 %	16 %	0 %	0 %	16.7 %	0 %	0 %	25 %	25 %	15.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 3. Do you believe your company is ready, willing, and able to do business as a subcontractor with the City of Cambridge?

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Yes	3	44	46	2	1	9	18	2	4	6	135
	75 %	89.8 %	92 %	100 %	100 %	75 %	100 %	100 %	100 %	75 %	90 %
No	1	5	4	0	0	3	0	0	0	2	15
	25 %	10.2 %	8 %	0 %	0 %	25 %	0 %	0 %	0 %	25 %	10 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 4. Which one of the following is your company's primary line of business?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Construction	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Architecture & Engineering	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Professional Services	2	32	36	2	0	7	10	2	3	3	97
	50 %	65.3 %	72 %	100 %	0 %	58.3 %	55.6 %	100 %	75 %	37.5 %	64.7 %
Non-Professional Services (Other Services)	0	4	6	0	0	5	0	0	1	1	17
	0 %	8.2 %	12 %	0 %	0 %	41.7 %	0 %	0 %	25 %	12.5 %	11.3 %
Goods (Commodities such as office supplies, cleaning supplies)	2	13	8	0	1	0	8	0	0	4	36
	50 %	26.5 %	16 %	0 %	100 %	0 %	44.4 %	0 %	0 %	50 %	24 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 5. How long has your company been in operation?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Under 1 year	0	0	0	0	0	1	0	0	0	0	1
	0 %	0 %	0 %	0 %	0 %	8.3 %	0 %	0 %	0 %	0 %	0.7 %
1-5 years	0	8	18	1	0	4	7	0	1	2	41
	0 %	16.3 %	36 %	50 %	0 %	33.3 %	38.9 %	0 %	25 %	25 %	27.3 %
6-10 years	1	5	14	1	0	1	4	1	2	1	30
	25 %	10.2 %	28 %	50 %	0 %	8.3 %	22.2 %	50 %	50 %	12.5 %	20 %
11-15 years	0	6	2	0	0	2	1	0	0	1	12
	0 %	12.2 %	4 %	0 %	0 %	16.7 %	5.6 %	0 %	0 %	12.5 %	8 %
16-20 years	2	4	3	0	0	0	0	0	0	3	12
	50 %	8.2 %	6 %	0 %	0 %	0 %	0 %	0 %	0 %	37.5 %	8 %
Over 20 years	1	26	13	0	1	4	6	1	1	1	54
	25 %	53.1 %	26 %	0 %	100 %	33.3 %	33.3 %	50 %	25 %	12.5 %	36 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 6. Is at least 51% percent of your company owned and controlled by a woman or women?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Yes	0	49	29	1	1	10	8	2	4	4	108
	0 %	100 %	58 %	50 %	100 %	83.3 %	44.4 %	100 %	100 %	50 %	72 %
No	4	0	21	1	0	2	10	0	0	4	42
	100 %	0 %	42 %	50 %	0 %	16.7 %	55.6 %	0 %	0 %	50 %	28 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 7. Is at least 51% percent of your company owned and controlled by a veteran?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Yes	2	1	7	0	0	0	0	0	0	0	10
	50 %	2 %	14 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	6.7 %
No	2	48	43	2	1	12	18	2	4	8	140
	50 %	98 %	86 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	93.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 8. Which of the following categories would you consider to be the race or ethnic origin that the person or persons that own at least 51% of the company identify as? Would you say:

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
African American	0	0	50	0	0	0	0	0	0	0	50
	0 %	0 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	33.3 %
Asian American	0	0	0	0	0	12	0	0	0	0	12
	0 %	0 %	0 %	0 %	0 %	100 %	0 %	0 %	0 %	0 %	8 %
Hispanic American	0	0	0	0	0	0	18	0	0	0	18
	0 %	0 %	0 %	0 %	0 %	0 %	100 %	0 %	0 %	0 %	12 %
American Indian	0	0	0	0	1	0	0	0	0	0	1
	0 %	0 %	0 %	0 %	100 %	0 %	0 %	0 %	0 %	0 %	0.7 %
Cape Verdean	0	0	0	2	0	0	0	0	0	0	2
	0 %	0 %	0 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	1.3 %
Portuguese	0	0	0	0	0	0	0	2	0	0	2
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	100 %	0 %	0 %	1.3 %
Multi-Racial or Bi-Racial	0	0	0	0	0	0	0	0	4	0	4
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	100 %	0 %	2.7 %
Caucasian	4	49	0	0	0	0	0	0	0	0	53
	100 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	35.3 %

Table 8. Which of the following categories would you consider to be the race or ethnic origin that the person or persons that own at least 51% of the company identify as? Would you say:

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Other (specify):	0	0	0	0	0	0	0	0	0	8	8
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	100 %	5.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 9. What is your current single project bonding limit since July 1, 2017?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
\$24,999 or less	0	3	3	0	0	1	0	0	0	0	7
	0 %	6.1 %	6 %	0 %	0 %	8.3 %	0 %	0 %	0 %	0 %	4.7 %
\$25,000 - \$50,000	0	1	2	0	0	1	1	0	0	1	6
	0 %	2 %	4 %	0 %	0 %	8.3 %	5.6 %	0 %	0 %	12.5 %	4 %
\$50,001 - \$100,000	0	0	0	0	0	0	1	0	0	0	1
	0 %	0 %	0 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	0.7 %
\$100,001 - \$250,000	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
\$250,001 - \$500,000	0	0	1	0	0	0	3	1	0	0	5
	0 %	0 %	2 %	0 %	0 %	0 %	16.7 %	50 %	0 %	0 %	3.3 %
\$500,001 - \$750,000	0	0	1	0	1	0	0	0	1	0	3
	0 %	0 %	2 %	0 %	100 %	0 %	0 %	0 %	25 %	0 %	2 %
\$750,001 - \$1,000,000	0	1	3	0	0	0	0	0	0	0	4
	0 %	2 %	6 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	2.7 %
\$1,000,001 - \$2,500,000	0	2	6	0	0	1	2	0	0	0	11
	0 %	4.1 %	12 %	0 %	0 %	8.3 %	11.1 %	0 %	0 %	0 %	7.3 %
	0	0	2	0	0	0	1	1	0	0	4

Table 9. What is your current single project bonding limit since July 1, 2017?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
\$2,500,001 - \$5,000,000	0 %	0 %	4 %	0 %	0 %	0 %	5.6 %	50 %	0 %	0 %	2.7 %
\$5,000,001 to \$10,000,000	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Over \$10 million	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Do Not Know	2	7	10	1	0	3	2	0	1	3	29
	50 %	14.3 %	20 %	50 %	0 %	25 %	11.1 %	0 %	25 %	37.5 %	19.3 %
Not Applicable	2	35	22	1	0	6	8	0	2	4	80
	50 %	71.4 %	44 %	50 %	0 %	50 %	44.4 %	0 %	50 %	50 %	53.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 10. What is the largest single contract your company has been awarded since July 1, 2017?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
\$24,999 or less	0	5	9	0	0	2	1	0	1	0	18
	0 %	10.2 %	18 %	0 %	0 %	16.7 %	5.6 %	0 %	25 %	0 %	12 %
\$25,000 - \$50,000	0	3	2	0	0	3	1	0	0	0	9
	0 %	6.1 %	4 %	0 %	0 %	25 %	5.6 %	0 %	0 %	0 %	6 %
\$50,001 - \$100,000	0	4	5	0	0	0	3	0	1	3	16
	0 %	8.2 %	10 %	0 %	0 %	0 %	16.7 %	0 %	25 %	37.5 %	10.7 %
\$100,001 - \$250,000	1	6	4	0	0	0	2	1	1	0	15
	25 %	12.2 %	8 %	0 %	0 %	0 %	11.1 %	50 %	25 %	0 %	10 %
\$250,001 - \$500,000	1	3	3	0	0	2	3	0	1	1	14
	25 %	6.1 %	6 %	0 %	0 %	16.7 %	16.7 %	0 %	25 %	12.5 %	9.3 %
\$500,001 - \$750,000	0	2	3	0	0	0	0	1	0	0	6
	0 %	4.1 %	6 %	0 %	0 %	0 %	0 %	50 %	0 %	0 %	4 %
\$750,001 - \$1,000,000	0	2	0	0	0	0	0	0	0	0	2
	0 %	4.1 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1.3 %
\$1,000,001 - \$2,500,000	2	9	3	0	1	1	1	0	0	0	17
	50 %	18.4 %	6 %	0 %	100 %	8.3 %	5.6 %	0 %	0 %	0 %	11.3 %
	0	1	2	0	0	0	1	0	0	0	4

Table 10. What is the largest single contract your company has been awarded since July 1, 2017?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
\$2,500,001 - \$5,000,000	0 %	2 %	4 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	2.7 %
\$5,000,001 - \$10,000,000	0	1	2	0	0	0	1	0	0	0	4
	0 %	2 %	4 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	2.7 %
Over \$10 million	0	2	0	0	0	0	1	0	0	0	3
	0 %	4.1 %	0 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	2 %
Do Not Know	0	0	1	0	0	2	1	0	0	1	5
	0 %	0 %	2 %	0 %	0 %	16.7 %	5.6 %	0 %	0 %	12.5 %	3.3 %
Not Applicable	0	11	16	2	0	2	3	0	0	3	37
	0 %	22.4 %	32 %	100 %	0 %	16.7 %	16.7 %	0 %	0 %	37.5 %	24.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 11. Indicate what you have performed as on any government or private contract since July 1, 2017.

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Prime Contractor and Subcontractor	1	17	12	1	0	2	6	1	2	3	45
	25 %	34.7 %	24 %	50 %	0 %	16.7 %	33.3 %	50 %	50 %	37.5 %	30 %
Prime Contractor	2	12	8	0	1	2	3	0	2	0	30
	50 %	24.5 %	16 %	0 %	100 %	16.7 %	16.7 %	0 %	50 %	0 %	20 %
Subcontractor	0	9	7	0	0	2	2	0	0	1	21
	0 %	18.4 %	14 %	0 %	0 %	16.7 %	11.1 %	0 %	0 %	12.5 %	14 %
Neither	1	11	23	1	0	6	7	1	0	4	54
	25 %	22.4 %	46 %	50 %	0 %	50 %	38.9 %	50 %	0 %	50 %	36 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 12. On average, how many employees and regular independent contractors does your company keep on the payroll, including full-time and part-time staff? (Number of Employees)

Responses	Owners' Minority Status										Total
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
None	0	2	7	1	0	2	2	0	0	2	16
	0 %	4.1 %	14 %	50 %	0 %	16.7 %	11.1 %	0 %	0 %	25 %	10.7 %
1-10	2	32	30	1	0	9	13	1	3	5	96
	50 %	65.3 %	60 %	50 %	0 %	75 %	72.2 %	50 %	75 %	62.5 %	64 %
11-30	1	7	8	0	1	1	3	1	1	0	23
	25 %	14.3 %	16 %	0 %	100 %	8.3 %	16.7 %	50 %	25 %	0 %	15.3 %
31-50	1	4	2	0	0	0	0	0	0	1	8
	25 %	8.2 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	12.5 %	5.3 %
51-75	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
76-100	0	1	2	0	0	0	0	0	0	0	3
	0 %	2 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	2 %
101-300	0	2	0	0	0	0	0	0	0	0	2
	0 %	4.1 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1.3 %
Over 300	0	1	1	0	0	0	0	0	0	0	2
	0 %	2 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1.3 %

Table 12. On average, how many employees and regular independent contractors does your company keep on the payroll, including full-time and part-time staff? (Number of Employees)

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
<i>Total</i>	4	49	50	2	1	12	18	2	4	8	150

Table 13. What is the highest level of education completed by any owner of your company? Would you say:

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Some High School	0	0	0	0	1	0	0	0	0	0	1
	0 %	0 %	0 %	0 %	100 %	0 %	0 %	0 %	0 %	0 %	0.7 %
High School graduate	0	2	1	0	0	1	1	0	0	1	6
	0 %	4.1 %	2 %	0 %	0 %	8.3 %	5.6 %	0 %	0 %	12.5 %	4 %
Some College	0	7	5	0	0	0	3	1	0	0	16
	0 %	14.3 %	10 %	0 %	0 %	0 %	16.7 %	50 %	0 %	0 %	10.7 %
College Graduate	1	19	20	1	0	4	6	0	2	3	56
	25 %	38.8 %	40 %	50 %	0 %	33.3 %	33.3 %	0 %	50 %	37.5 %	37.3 %
Post Graduate Degree	3	21	24	1	0	7	8	1	2	4	71
	75 %	42.9 %	48 %	50 %	0 %	58.3 %	44.4 %	50 %	50 %	50 %	47.3 %
Trade or Technical Certificate	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Do Not Know	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 14. What is the greatest number of years of experience that any owners in your company's line of business have?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
None	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
1-5	0	1	3	0	0	2	0	0	0	2	8
	0 %	2 %	6 %	0 %	0 %	16.7 %	0 %	0 %	0 %	25 %	5.3 %
6-10	0	5	4	0	0	0	1	0	1	0	11
	0 %	10.2 %	8 %	0 %	0 %	0 %	5.6 %	0 %	25 %	0 %	7.3 %
11-15	0	0	8	1	0	2	3	1	2	1	18
	0 %	0 %	16 %	50 %	0 %	16.7 %	16.7 %	50 %	50 %	12.5 %	12 %
16-20	0	3	12	1	0	1	5	0	0	1	23
	0 %	6.1 %	24 %	50 %	0 %	8.3 %	27.8 %	0 %	0 %	12.5 %	15.3 %
More than 20	4	40	23	0	1	7	9	1	1	4	90
	100 %	81.6 %	46 %	0 %	100 %	58.3 %	50 %	50 %	25 %	50 %	60 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 15. Which of the following categories best approximates your company’s gross revenues for fiscal year 2018 (July 01, 2017 - June 30, 2018)? Your best estimate will suffice.

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
\$100,000 or less	0	7	24	2	0	4	6	1	1	0	45
	0 %	14.3 %	48 %	100 %	0 %	33.3 %	33.3 %	50 %	25 %	0 %	30 %
\$100,001 - \$250,000	0	8	6	0	0	3	3	0	2	1	23
	0 %	16.3 %	12 %	0 %	0 %	25 %	16.7 %	0 %	50 %	12.5 %	15.3 %
\$250,001 - \$500,000	0	6	6	0	0	3	0	0	1	2	18
	0 %	12.2 %	12 %	0 %	0 %	25 %	0 %	0 %	25 %	25 %	12 %
\$500,001 - \$750,000	1	1	2	0	0	0	1	0	0	0	5
	25 %	2 %	4 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	3.3 %
\$750,001 - \$1,000,000	0	5	1	0	0	1	1	0	0	2	10
	0 %	10.2 %	2 %	0 %	0 %	8.3 %	5.6 %	0 %	0 %	25 %	6.7 %
\$1,000,001 - \$1,320,000	0	3	1	0	0	0	0	0	0	0	4
	0 %	6.1 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	2.7 %
\$1,320,001 - \$1,500,000	1	3	1	0	0	0	1	0	0	0	6
	25 %	6.1 %	2 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	4 %
\$1,500,001 - \$5,000,000	2	7	2	0	1	0	0	1	0	0	13
	50 %	14.3 %	4 %	0 %	100 %	0 %	0 %	50 %	0 %	0 %	8.7 %

Table 15. Which of the following categories best approximates your company’s gross revenues for fiscal year 2018 (July 01, 2017 - June 30, 2018)? Your best estimate will suffice.

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
\$5,000,001 - \$10,000,000	0	2	1	0	0	0	1	0	0	0	4
	0 %	4.1 %	2 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	2.7 %
\$10,000,001 - \$15,000,000	0	1	0	0	0	0	1	0	0	0	2
	0 %	2 %	0 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	1.3 %
\$15,000,001 - \$20,000,000	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
\$20,000,001 - \$39,500,000	0	1	1	0	0	0	1	0	0	1	4
	0 %	2 %	2 %	0 %	0 %	0 %	5.6 %	0 %	0 %	12.5 %	2.7 %
Over \$39,500,000	0	1	0	0	0	0	0	0	0	0	1
	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0.7 %
Don't Know	0	2	1	0	0	1	1	0	0	0	5
	0 %	4.1 %	2 %	0 %	0 %	8.3 %	5.6 %	0 %	0 %	0 %	3.3 %
Company Out of Business	0	2	4	0	0	0	2	0	0	2	10
	0 %	4.1 %	8 %	0 %	0 %	0 %	11.1 %	0 %	0 %	25 %	6.7 %

Table 15. Which of the following categories best approximates your company's gross revenues for fiscal year 2018 (July 01, 2017 - June 30, 2018)? Your best estimate will suffice.

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
<i>Total</i>	4	49	50	2	1	12	18	2	4	8	150

Table 16. Which of the following categories best approximates your company’s gross revenues for fiscal year 2021 (July 01, 2020 - June 30, 2021)? Your best estimate will suffice.

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
\$100,000 or less	0	8	21	1	0	4	3	0	1	1	39
	0 %	16.3 %	42 %	50 %	0 %	33.3 %	16.7 %	0 %	25 %	12.5 %	26 %
\$100,001 - \$250,000	0	7	7	1	0	3	6	0	2	2	28
	0 %	14.3 %	14 %	50 %	0 %	25 %	33.3 %	0 %	50 %	25 %	18.7 %
\$250,001 - \$500,000	0	8	8	0	0	3	0	1	1	0	21
	0 %	16.3 %	16 %	0 %	0 %	25 %	0 %	50 %	25 %	0 %	14 %
\$500,001 - \$750,000	1	2	1	0	0	0	1	0	0	1	6
	25 %	4.1 %	2 %	0 %	0 %	0 %	5.6 %	0 %	0 %	12.5 %	4 %
\$750,001 - \$1,000,000	0	3	1	0	0	0	1	0	0	0	5
	0 %	6.1 %	2 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	3.3 %
\$1,000,001 - \$1,320,000	1	2	1	0	0	0	1	0	0	1	6
	25 %	4.1 %	2 %	0 %	0 %	0 %	5.6 %	0 %	0 %	12.5 %	4 %
\$1,320,001 - \$1,500,000	0	3	1	0	0	0	0	0	0	0	4
	0 %	6.1 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	2.7 %
\$1,500,001 - \$5,000,000	2	8	3	0	1	1	0	1	0	0	16
	50 %	16.3 %	6 %	0 %	100 %	8.3 %	0 %	50 %	0 %	0 %	10.7 %

Table 16. Which of the following categories best approximates your company’s gross revenues for fiscal year 2021 (July 01, 2020 - June 30, 2021)? Your best estimate will suffice.

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
\$5,000,001 - \$10,000,000	0	2	2	0	0	0	1	0	0	0	5
	0 %	4.1 %	4 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	3.3 %
\$10,000,001 - \$15,000,000	0	3	1	0	0	0	1	0	0	1	6
	0 %	6.1 %	2 %	0 %	0 %	0 %	5.6 %	0 %	0 %	12.5 %	4 %
\$15,000,001 - \$20,000,000	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
\$20,000,001 - \$39,500,000	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0.7 %
Over \$39,500,000	0	1	0	0	0	0	1	0	0	0	2
	0 %	2 %	0 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	1.3 %
Don't Know	0	2	3	0	0	1	1	0	0	0	7
	0 %	4.1 %	6 %	0 %	0 %	8.3 %	5.6 %	0 %	0 %	0 %	4.7 %
Company Out of Business	0	0	0	0	0	0	2	0	0	2	4
	0 %	0 %	0 %	0 %	0 %	0 %	11.1 %	0 %	0 %	25 %	2.7 %

Table 16. Which of the following categories best approximates your company's gross revenues for fiscal year 2021 (July 01, 2020 - June 30, 2021)? Your best estimate will suffice.

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Total	4	49	50	2	1	12	18	2	4	8	150

Table 17. Is your company registered with the State's COMMBUYS?

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Yes	4	37	36	1	1	7	15	1	2	2	106
	100 %	75.5 %	72 %	50 %	100 %	58.3 %	83.3 %	50 %	50 %	25 %	70.7 %
No	0	12	14	1	0	5	3	1	2	6	44
	0 %	24.5 %	28 %	50 %	0 %	41.7 %	16.7 %	50 %	50 %	75 %	29.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 18. Is your company registered with any other government entity (including but not limited to): City of Boston, MASSPORT, MASSDOT, etc.?

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Yes	3	32	29	0	1	6	14	2	3	5	95
	75 %	65.3 %	58 %	0 %	100 %	50 %	77.8 %	100 %	75 %	62.5 %	63.3 %
No	1	17	21	2	0	6	4	0	1	3	55
	25 %	34.7 %	42 %	100 %	0 %	50 %	22.2 %	0 %	25 %	37.5 %	36.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 19. If you answered "No" to "is your company registered with the State's COMMBUYS", why is your company not registered with COMMBUYS? Indicate all that apply. [I do not know how to register.]

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	0	9	11	0	0	2	1	1	2	4	30
	0 %	75 %	78.6 %	0 %	0 %	40 %	33.3 %	100 %	100 %	66.7 %	68.2 %
Selected	0	3	3	1	0	3	2	0	0	2	14
	0 %	25 %	21.4 %	100 %	0 %	60 %	66.7 %	0 %	0 %	33.3 %	31.8 %
Total	0	12	14	1	0	5	3	1	2	6	44

Table 20. I did not know there was a registry.

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	0	5	10	1	0	1	1	1	1	4	24
	0 %	41.7 %	71.4 %	100 %	0 %	20 %	33.3 %	100 %	50 %	66.7 %	54.5 %
Selected	0	7	4	0	0	4	2	0	1	2	20
	0 %	58.3 %	28.6 %	0 %	0 %	80 %	66.7 %	0 %	50 %	33.3 %	45.5 %
Total	0	12	14	1	0	5	3	1	2	6	44

Table 21. I do not see any benefit in registering.

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	0	10	14	1	0	5	3	1	2	6	42
	0 %	83.3 %	100 %	100 %	0 %	100 %	100 %	100 %	100 %	100 %	95.5 %
Selected	0	2	0	0	0	0	0	0	0	0	2
	0 %	16.7 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	4.5 %
Total	0	12	14	1	0	5	3	1	2	6	44

Table 22. I do not want to do business with government.

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	0	12	14	1	0	5	3	1	2	6	44
	0 %	100 %	100 %	100 %	0 %	100 %	100 %	100 %	100 %	100 %	100 %
Selected	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Total	0	12	14	1	0	5	3	1	2	6	44

Table 23. I do not want to do business in Massachusetts.

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	0	12	13	1	0	5	3	1	2	6	43
	0 %	100 %	92.9 %	100 %	0 %	100 %	100 %	100 %	100 %	100 %	97.7 %
Selected	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	7.1 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	2.3 %
Total	0	12	14	1	0	5	3	1	2	6	44

Table 24. I do not see opportunities in my field of work.

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	0	8	10	1	0	4	3	1	1	6	34
	0 %	66.7 %	71.4 %	100 %	0 %	80 %	100 %	100 %	50 %	100 %	77.3 %
Selected	0	4	4	0	0	1	0	0	1	0	10
	0 %	33.3 %	28.6 %	0 %	0 %	20 %	0 %	0 %	50 %	0 %	22.7 %
Total	0	12	14	1	0	5	3	1	2	6	44

Table 25. I do not believe my company would be awarded a contract.

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	0	11	12	1	0	4	3	1	2	6	40
	0 %	91.7 %	85.7 %	100 %	0 %	80 %	100 %	100 %	100 %	100 %	90.9 %
Selected	0	1	2	0	0	1	0	0	0	0	4
	0 %	8.3 %	14.3 %	0 %	0 %	20 %	0 %	0 %	0 %	0 %	9.1 %
Total	0	12	14	1	0	5	3	1	2	6	44

Table 26. Other (fill in blank)

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	0	12	12	1	0	5	3	0	2	4	39
	0 %	100 %	85.7 %	100 %	0 %	100 %	100 %	0 %	100 %	66.7 %	88.6 %
Selected	0	0	2	0	0	0	0	1	0	2	5
	0 %	0 %	14.3 %	0 %	0 %	0 %	0 %	100 %	0 %	33.3 %	11.4 %
Total	0	12	14	1	0	5	3	1	2	6	44

Table 27. If you answered "No" to "is your company registered with any other government entity (including but not limited to): City of Boston, MASSPORT, MASSDOT, etc.," why is your company not registered with City of Boston, MASSPORT, MASSDOT, etc.? Indicate all that apply. [I do not know how to register.]

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	0	13	15	0	0	2	2	0	1	2	35
	0 %	76.5 %	71.4 %	0 %	0 %	33.3 %	50 %	0 %	100 %	66.7 %	63.6 %
Selected	1	4	6	2	0	4	2	0	0	1	20
	100 %	23.5 %	28.6 %	100 %	0 %	66.7 %	50 %	0 %	0 %	33.3 %	36.4 %
Total	1	17	21	2	0	6	4	0	1	3	55

Table 28. I did not know there was a registry.

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	0	8	14	2	0	1	2	0	0	2	29
	0 %	47.1 %	66.7 %	100 %	0 %	16.7 %	50 %	0 %	0 %	66.7 %	52.7 %
Selected	1	9	7	0	0	5	2	0	1	1	26
	100 %	52.9 %	33.3 %	0 %	0 %	83.3 %	50 %	0 %	100 %	33.3 %	47.3 %
Total	1	17	21	2	0	6	4	0	1	3	55

Table 29. I do not see any benefit in registering.

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	1	14	17	2	0	6	4	0	1	3	48
	100 %	82.4 %	81 %	100 %	0 %	100 %	100 %	0 %	100 %	100 %	87.3 %
Selected	0	3	4	0	0	0	0	0	0	0	7
	0 %	17.6 %	19 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	12.7 %
Total	1	17	21	2	0	6	4	0	1	3	55

Table 30. I do not want to do business with government.

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	1	17	21	2	0	6	4	0	1	3	55
	100 %	100 %	100 %	100 %	0 %	100 %	100 %	0 %	100 %	100 %	100 %
Selected	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Total	1	17	21	2	0	6	4	0	1	3	55

Table 31. I do not want to do business in Massachusetts.

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	1	17	20	2	0	6	4	0	1	3	54
	100 %	100 %	95.2 %	100 %	0 %	100 %	100 %	0 %	100 %	100 %	98.2 %
Selected	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	4.8 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1.8 %
Total	1	17	21	2	0	6	4	0	1	3	55

Table 32. I do not see opportunities in my field of work.

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	1	11	17	2	0	5	2	0	1	3	42
	100 %	64.7 %	81 %	100 %	0 %	83.3 %	50 %	0 %	100 %	100 %	76.4 %
Selected	0	6	4	0	0	1	2	0	0	0	13
	0 %	35.3 %	19 %	0 %	0 %	16.7 %	50 %	0 %	0 %	0 %	23.6 %
Total	1	17	21	2	0	6	4	0	1	3	55

Table 33. I do not believe my company would be awarded a contract.

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	1	14	14	2	0	4	4	0	1	2	42
	100 %	82.4 %	66.7 %	100 %	0 %	66.7 %	100 %	0 %	100 %	66.7 %	76.4 %
Selected	0	3	7	0	0	2	0	0	0	1	13
	0 %	17.6 %	33.3 %	0 %	0 %	33.3 %	0 %	0 %	0 %	33.3 %	23.6 %
Total	1	17	21	2	0	6	4	0	1	3	55

Table 34. Other (fill in blank)

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	1	15	18	2	0	6	4	0	1	3	50
	100 %	88.2 %	85.7 %	100 %	0 %	100 %	100 %	0 %	100 %	100 %	90.9 %
Selected	0	2	3	0	0	0	0	0	0	0	5
	0 %	11.8 %	14.3 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	9.1 %
Total	1	17	21	2	0	6	4	0	1	3	55

Table 35. From July 1, 2017 through June 30, 2021, how many times has your company submitted bids or proposals for projects as a prime contractor on: [The City of Cambridge Government Projects]

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
None	1	41	41	2	1	10	16	1	4	8	125
	25 %	83.7 %	82 %	100 %	100 %	83.3 %	88.9 %	50 %	100 %	100 %	83.3 %
1-10	2	5	6	0	0	1	1	1	0	0	16
	50 %	10.2 %	12 %	0 %	0 %	8.3 %	5.6 %	50 %	0 %	0 %	10.7 %
11-25	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
26-50	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
51-100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Over 100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Do Not Know/NA	1	3	3	0	0	1	1	0	0	0	9
	25 %	6.1 %	6 %	0 %	0 %	8.3 %	5.6 %	0 %	0 %	0 %	6 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 36. Private Sector Projects

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
None	2	27	30	0	0	10	10	1	1	7	88
	50 %	55.1 %	60 %	0 %	0 %	83.3 %	55.6 %	50 %	25 %	87.5 %	58.7 %
1-10	1	12	10	1	0	1	6	0	2	0	33
	25 %	24.5 %	20 %	50 %	0 %	8.3 %	33.3 %	0 %	50 %	0 %	22 %
11-25	0	2	2	0	0	1	2	0	1	0	8
	0 %	4.1 %	4 %	0 %	0 %	8.3 %	11.1 %	0 %	25 %	0 %	5.3 %
26-50	0	1	1	0	0	0	0	1	0	0	3
	0 %	2 %	2 %	0 %	0 %	0 %	0 %	50 %	0 %	0 %	2 %
51-100	0	1	2	0	0	0	0	0	0	1	4
	0 %	2 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	12.5 %	2.7 %
Over 100	0	2	2	0	1	0	0	0	0	0	5
	0 %	4.1 %	4 %	0 %	100 %	0 %	0 %	0 %	0 %	0 %	3.3 %
Do Not Know/NA	1	4	3	1	0	0	0	0	0	0	9
	25 %	8.2 %	6 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %	6 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 37. Other Public Sector (non-City of Cambridge Projects)

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
None	1	27	31	1	0	10	11	1	2	7	91
	25 %	55.1 %	62 %	50 %	0 %	83.3 %	61.1 %	50 %	50 %	87.5 %	60.7 %
1-10	1	9	10	1	0	2	4	0	2	0	29
	25 %	18.4 %	20 %	50 %	0 %	16.7 %	22.2 %	0 %	50 %	0 %	19.3 %
11-25	1	3	1	0	0	0	0	1	0	0	6
	25 %	6.1 %	2 %	0 %	0 %	0 %	0 %	50 %	0 %	0 %	4 %
26-50	0	4	0	0	0	0	2	0	0	0	6
	0 %	8.2 %	0 %	0 %	0 %	0 %	11.1 %	0 %	0 %	0 %	4 %
51-100	0	1	2	0	0	0	0	0	0	0	3
	0 %	2 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	2 %
Over 100	0	0	2	0	1	0	1	0	0	1	5
	0 %	0 %	4 %	0 %	100 %	0 %	5.6 %	0 %	0 %	12.5 %	3.3 %
Do Not Know/NA	1	5	4	0	0	0	0	0	0	0	10
	25 %	10.2 %	8 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	6.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 38. From July 1, 2017 through June 30, 2021, how many times has your company been awarded contracts to perform as a prime contractor: [The City of Cambridge Government Projects]

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
None	2	40	47	2	1	10	17	1	4	8	132
	50 %	81.6 %	94 %	100 %	100 %	83.3 %	94.4 %	50 %	100 %	100 %	88 %
1-10	1	4	0	0	0	0	1	1	0	0	7
	25 %	8.2 %	0 %	0 %	0 %	0 %	5.6 %	50 %	0 %	0 %	4.7 %
11-25	0	0	2	0	0	0	0	0	0	0	2
	0 %	0 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1.3 %
26-50	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
51-100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Over 100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Do Not Know/NA	1	5	1	0	0	2	0	0	0	0	9
	25 %	10.2 %	2 %	0 %	0 %	16.7 %	0 %	0 %	0 %	0 %	6 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 39. Private Sector Projects

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
None	1	30	34	0	0	10	11	1	1	7	95
	25 %	61.2 %	68 %	0 %	0 %	83.3 %	61.1 %	50 %	25 %	87.5 %	63.3 %
1-10	2	12	9	1	0	2	5	0	2	0	33
	50 %	24.5 %	18 %	50 %	0 %	16.7 %	27.8 %	0 %	50 %	0 %	22 %
11-25	0	0	2	0	0	0	1	0	1	1	5
	0 %	0 %	4 %	0 %	0 %	0 %	5.6 %	0 %	25 %	12.5 %	3.3 %
26-50	0	1	0	0	0	0	1	1	0	0	3
	0 %	2 %	0 %	0 %	0 %	0 %	5.6 %	50 %	0 %	0 %	2 %
51-100	0	2	3	0	0	0	0	0	0	0	5
	0 %	4.1 %	6 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	3.3 %
Over 100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Do Not Know/NA	1	4	2	1	1	0	0	0	0	0	9
	25 %	8.2 %	4 %	50 %	100 %	0 %	0 %	0 %	0 %	0 %	6 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 40. Other Public Sector (non-City of Cambridge Projects)

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
None	1	28	39	1	0	9	12	1	3	7	101
	25 %	57.1 %	78 %	50 %	0 %	75 %	66.7 %	50 %	75 %	87.5 %	67.3 %
1-10	2	9	5	1	0	2	5	0	1	0	25
	50 %	18.4 %	10 %	50 %	0 %	16.7 %	27.8 %	0 %	25 %	0 %	16.7 %
11-25	0	5	2	0	0	0	0	1	0	0	8
	0 %	10.2 %	4 %	0 %	0 %	0 %	0 %	50 %	0 %	0 %	5.3 %
26-50	0	2	0	0	0	0	0	0	0	0	2
	0 %	4.1 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1.3 %
51-100	0	0	2	0	0	0	0	0	0	1	3
	0 %	0 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	12.5 %	2 %
Over 100	0	0	0	0	1	0	1	0	0	0	2
	0 %	0 %	0 %	0 %	100 %	0 %	5.6 %	0 %	0 %	0 %	1.3 %
Do Not Know/NA	1	5	2	0	0	1	0	0	0	0	9
	25 %	10.2 %	4 %	0 %	0 %	8.3 %	0 %	0 %	0 %	0 %	6 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 41. From July 1, 2017 through June 30, 2021 how many times has your company submitted bids or proposals for projects as a subcontractor on: [The City of Cambridge Government Projects]

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
None	2	41	43	2	1	11	17	2	3	8	130
	50 %	83.7 %	86 %	100 %	100 %	91.7 %	94.4 %	100 %	75 %	100 %	86.7 %
1-10	1	3	3	0	0	0	1	0	1	0	9
	25 %	6.1 %	6 %	0 %	0 %	0 %	5.6 %	0 %	25 %	0 %	6 %
11-25	0	1	1	0	0	0	0	0	0	0	2
	0 %	2 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1.3 %
26-50	0	0	1	0	0	1	0	0	0	0	2
	0 %	0 %	2 %	0 %	0 %	8.3 %	0 %	0 %	0 %	0 %	1.3 %
51-100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Over 100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Do Not Know/NA	1	4	2	0	0	0	0	0	0	0	7
	25 %	8.2 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	4.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 42. Private Sector Projects

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
None	2	25	33	1	0	10	12	1	1	7	92
	50 %	51 %	66 %	50 %	0 %	83.3 %	66.7 %	50 %	25 %	87.5 %	61.3 %
1-10	1	16	12	0	0	1	3	1	2	1	37
	25 %	32.7 %	24 %	0 %	0 %	8.3 %	16.7 %	50 %	50 %	12.5 %	24.7 %
11-25	0	2	3	0	0	0	1	0	1	0	7
	0 %	4.1 %	6 %	0 %	0 %	0 %	5.6 %	0 %	25 %	0 %	4.7 %
26-50	0	1	0	0	0	1	1	0	0	0	3
	0 %	2 %	0 %	0 %	0 %	8.3 %	5.6 %	0 %	0 %	0 %	2 %
51-100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Over 100	0	1	1	0	1	0	0	0	0	0	3
	0 %	2 %	2 %	0 %	100 %	0 %	0 %	0 %	0 %	0 %	2 %
Do Not Know/NA	1	4	1	1	0	0	1	0	0	0	8
	25 %	8.2 %	2 %	50 %	0 %	0 %	5.6 %	0 %	0 %	0 %	5.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 43. Other Public Sector (non-City of Cambridge Projects)

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
None	2	25	34	1	1	11	12	2	1	8	97
	50 %	51 %	68 %	50 %	100 %	91.7 %	66.7 %	100 %	25 %	100 %	64.7 %
1-10	1	13	11	0	0	1	4	0	3	0	33
	25 %	26.5 %	22 %	0 %	0 %	8.3 %	22.2 %	0 %	75 %	0 %	22 %
11-25	0	3	1	0	0	0	0	0	0	0	4
	0 %	6.1 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	2.7 %
26-50	0	0	1	0	0	0	1	0	0	0	2
	0 %	0 %	2 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	1.3 %
51-100	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0.7 %
Over 100	0	3	1	0	0	0	1	0	0	0	5
	0 %	6.1 %	2 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	3.3 %
Do Not Know/NA	1	5	1	1	0	0	0	0	0	0	8
	25 %	10.2 %	2 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %	5.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 44. From July 1, 2017 through June 30, 2021 how many times has your company been awarded contracts to perform as a subcontractor: [The City of Cambridge Government Projects]

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
None	2	42	46	2	1	9	17	1	4	8	132
	50 %	85.7 %	92 %	100 %	100 %	75 %	94.4 %	50 %	100 %	100 %	88 %
1-10	1	2	3	0	0	1	1	1	0	0	9
	25 %	4.1 %	6 %	0 %	0 %	8.3 %	5.6 %	50 %	0 %	0 %	6 %
11-25	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
26-50	0	0	0	0	0	1	0	0	0	0	1
	0 %	0 %	0 %	0 %	0 %	8.3 %	0 %	0 %	0 %	0 %	0.7 %
51-100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Over 100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Do Not Know/NA	1	5	1	0	0	1	0	0	0	0	8
	25 %	10.2 %	2 %	0 %	0 %	8.3 %	0 %	0 %	0 %	0 %	5.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 45. Private Sector Projects

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
None	2	27	35	1	1	10	14	1	2	8	101
	50 %	55.1 %	70 %	50 %	100 %	83.3 %	77.8 %	50 %	50 %	100 %	67.3 %
1-10	1	16	10	0	0	1	3	1	2	0	34
	25 %	32.7 %	20 %	0 %	0 %	8.3 %	16.7 %	50 %	50 %	0 %	22.7 %
11-25	0	1	2	0	0	1	0	0	0	0	4
	0 %	2 %	4 %	0 %	0 %	8.3 %	0 %	0 %	0 %	0 %	2.7 %
26-50	0	0	1	0	0	0	1	0	0	0	2
	0 %	0 %	2 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	1.3 %
51-100	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0.7 %
Over 100	0	1	0	0	0	0	0	0	0	0	1
	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0.7 %
Do Not Know/NA	1	4	1	1	0	0	0	0	0	0	7
	25 %	8.2 %	2 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %	4.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 46. Other Public Sector (non-City of Cambridge Projects)

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
None	2	30	38	1	1	11	13	1	2	8	107
	50 %	61.2 %	76 %	50 %	100 %	91.7 %	72.2 %	50 %	50 %	100 %	71.3 %
1-10	1	9	7	0	0	1	4	1	2	0	25
	25 %	18.4 %	14 %	0 %	0 %	8.3 %	22.2 %	50 %	50 %	0 %	16.7 %
11-25	0	2	3	0	0	0	0	0	0	0	5
	0 %	4.1 %	6 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	3.3 %
26-50	0	1	0	0	0	0	0	0	0	0	1
	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0.7 %
51-100	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0.7 %
Over 100	0	2	0	0	0	0	1	0	0	0	3
	0 %	4.1 %	0 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	2 %
Do Not Know/NA	1	5	1	1	0	0	0	0	0	0	8
	25 %	10.2 %	2 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %	5.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 47. How many times has your company been dropped from a project as a subcontractor from July 1, 2017 - June 30, 2021?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
None	3	42	37	2	1	9	12	2	4	6	118
	75 %	85.7 %	74 %	100 %	100 %	75 %	66.7 %	100 %	100 %	75 %	78.7 %
1-10	0	2	0	0	0	2	1	0	0	0	5
	0 %	4.1 %	0 %	0 %	0 %	16.7 %	5.6 %	0 %	0 %	0 %	3.3 %
11-25	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
26-50	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0.7 %
51-100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Over 100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Do not know	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Not Applicable	1	5	12	0	0	1	5	0	0	2	26
	25 %	10.2 %	24 %	0 %	0 %	8.3 %	27.8 %	0 %	0 %	25 %	17.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 48. The following is a list of things that may prevent companies from bidding or obtaining work on a project. In your experience, have any of the following been a barrier to your company obtaining work on projects for the City of Cambridge? (Check all that apply) [Pre-qualification requirements]

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	41	43	2	1	8	18	2	1	7	127
	100 %	83.7 %	86 %	100 %	100 %	66.7 %	100 %	100 %	25 %	87.5 %	84.7 %
Selected	0	8	7	0	0	4	0	0	3	1	23
	0 %	16.3 %	14 %	0 %	0 %	33.3 %	0 %	0 %	75 %	12.5 %	15.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 49. Performance bond requirements

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	43	46	2	1	11	17	2	3	7	136
	100 %	87.8 %	92 %	100 %	100 %	91.7 %	94.4 %	100 %	75 %	87.5 %	90.7 %
Selected	0	6	4	0	0	1	1	0	1	1	14
	0 %	12.2 %	8 %	0 %	0 %	8.3 %	5.6 %	0 %	25 %	12.5 %	9.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 50. Excessive paperwork

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	42	38	1	1	8	16	2	1	6	119
	100 %	85.7 %	76 %	50 %	100 %	66.7 %	88.9 %	100 %	25 %	75 %	79.3 %
Selected	0	7	12	1	0	4	2	0	3	2	31
	0 %	14.3 %	24 %	50 %	0 %	33.3 %	11.1 %	0 %	75 %	25 %	20.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 51. Bid bond requirements

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	43	44	2	1	11	14	2	4	7	132
	100 %	87.8 %	88 %	100 %	100 %	91.7 %	77.8 %	100 %	100 %	87.5 %	88 %
Selected	0	6	6	0	0	1	4	0	0	1	18
	0 %	12.2 %	12 %	0 %	0 %	8.3 %	22.2 %	0 %	0 %	12.5 %	12 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 52. Financing

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	46	41	2	1	10	16	2	3	7	132
	100 %	93.9 %	82 %	100 %	100 %	83.3 %	88.9 %	100 %	75 %	87.5 %	88 %
Selected	0	3	9	0	0	2	2	0	1	1	18
	0 %	6.1 %	18 %	0 %	0 %	16.7 %	11.1 %	0 %	25 %	12.5 %	12 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 53. Insurance requirements

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	45	44	2	1	11	18	2	2	7	136
	100 %	91.8 %	88 %	100 %	100 %	91.7 %	100 %	100 %	50 %	87.5 %	90.7 %
Selected	0	4	6	0	0	1	0	0	2	1	14
	0 %	8.2 %	12 %	0 %	0 %	8.3 %	0 %	0 %	50 %	12.5 %	9.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 54. Bid specifications

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	44	42	2	0	12	14	2	3	7	130
	100 %	89.8 %	84 %	100 %	0 %	100 %	77.8 %	100 %	75 %	87.5 %	86.7 %
Selected	0	5	8	0	1	0	4	0	1	1	20
	0 %	10.2 %	16 %	0 %	100 %	0 %	22.2 %	0 %	25 %	12.5 %	13.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 55. Lack of access to competitive supplier pricing

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	45	45	2	0	12	17	1	4	6	136
	100 %	91.8 %	90 %	100 %	0 %	100 %	94.4 %	50 %	100 %	75 %	90.7 %
Selected	0	4	5	0	1	0	1	1	0	2	14
	0 %	8.2 %	10 %	0 %	100 %	0 %	5.6 %	50 %	0 %	25 %	9.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 56. Limited time given to prepare bid package or quote

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	42	40	1	1	11	15	2	2	7	125
	100 %	85.7 %	80 %	50 %	100 %	91.7 %	83.3 %	100 %	50 %	87.5 %	83.3 %
Selected	0	7	10	1	0	1	3	0	2	1	25
	0 %	14.3 %	20 %	50 %	0 %	8.3 %	16.7 %	0 %	50 %	12.5 %	16.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 57. Limited knowledge of purchasing/contracting policies and procedures

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	37	35	2	0	9	12	1	1	6	107
	100 %	75.5 %	70 %	100 %	0 %	75 %	66.7 %	50 %	25 %	75 %	71.3 %
Selected	0	12	15	0	1	3	6	1	3	2	43
	0 %	24.5 %	30 %	0 %	100 %	25 %	33.3 %	50 %	75 %	25 %	28.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 58. Language Barriers

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	49	50	2	1	11	18	2	4	8	149
	100 %	100 %	100 %	100 %	100 %	91.7 %	100 %	100 %	100 %	100 %	99.3 %
Selected	0	0	0	0	0	1	0	0	0	0	1
	0 %	0 %	0 %	0 %	0 %	8.3 %	0 %	0 %	0 %	0 %	0.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 59. Lack of experience

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	3	44	43	2	1	11	17	1	2	6	130
	75 %	89.8 %	86 %	100 %	100 %	91.7 %	94.4 %	50 %	50 %	75 %	86.7 %
Selected	1	5	7	0	0	1	1	1	2	2	20
	25 %	10.2 %	14 %	0 %	0 %	8.3 %	5.6 %	50 %	50 %	25 %	13.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 60. Lack of personnel

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	4	43	48	1	1	11	17	2	2	7	136
	100 %	87.8 %	96 %	50 %	100 %	91.7 %	94.4 %	100 %	50 %	87.5 %	90.7 %
Selected	0	6	2	1	0	1	1	0	2	1	14
	0 %	12.2 %	4 %	50 %	0 %	8.3 %	5.6 %	0 %	50 %	12.5 %	9.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 61. Contract too large

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	43	47	2	1	12	15	2	2	8	136
	100 %	87.8 %	94 %	100 %	100 %	100 %	83.3 %	100 %	50 %	100 %	90.7 %
Selected	0	6	3	0	0	0	3	0	2	0	14
	0 %	12.2 %	6 %	0 %	0 %	0 %	16.7 %	0 %	50 %	0 %	9.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 62. Contract too expensive to bid

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	43	46	2	1	11	17	2	4	8	138
	100 %	87.8 %	92 %	100 %	100 %	91.7 %	94.4 %	100 %	100 %	100 %	92 %
Selected	0	6	4	0	0	1	1	0	0	0	12
	0 %	12.2 %	8 %	0 %	0 %	8.3 %	5.6 %	0 %	0 %	0 %	8 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 63. Selection process

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	45	45	2	0	12	14	1	4	8	135
	100 %	91.8 %	90 %	100 %	0 %	100 %	77.8 %	50 %	100 %	100 %	90 %
Selected	0	4	5	0	1	0	4	1	0	0	15
	0 %	8.2 %	10 %	0 %	100 %	0 %	22.2 %	50 %	0 %	0 %	10 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 64. Not certified

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	46	44	2	1	11	17	2	3	8	138
	100 %	93.9 %	88 %	100 %	100 %	91.7 %	94.4 %	100 %	75 %	100 %	92 %
Selected	0	3	6	0	0	1	1	0	1	0	12
	0 %	6.1 %	12 %	0 %	0 %	8.3 %	5.6 %	0 %	25 %	0 %	8 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 65. Competition with large companies

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	35	29	2	0	11	13	1	3	5	103
	100 %	71.4 %	58 %	100 %	0 %	91.7 %	72.2 %	50 %	75 %	62.5 %	68.7 %
Selected	0	14	21	0	1	1	5	1	1	3	47
	0 %	28.6 %	42 %	0 %	100 %	8.3 %	27.8 %	50 %	25 %	37.5 %	31.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 66. Other:

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	1	32	40	1	1	9	13	1	3	4	105
	25 %	65.3 %	80 %	50 %	100 %	75 %	72.2 %	50 %	75 %	50 %	70 %
Selected	3	17	10	1	0	3	5	1	1	4	45
	75 %	34.7 %	20 %	50 %	0 %	25 %	27.8 %	50 %	25 %	50 %	30 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 67. The following is a list of things that may prevent companies from bidding or obtaining work on a project. In your experience, have any of the following been a barrier to your company obtaining work on projects for any governmental entity in the Boston Metropolitan Area except the City of Cambridge? (Check all that apply) [Pre-qualification requirements]

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	4	42	42	2	1	6	16	2	1	7	123
	100 %	85.7 %	84 %	100 %	100 %	50 %	88.9 %	100 %	25 %	87.5 %	82 %
Selected	0	7	8	0	0	6	2	0	3	1	27
	0 %	14.3 %	16 %	0 %	0 %	50 %	11.1 %	0 %	75 %	12.5 %	18 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 68. Performance bond requirements

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	4	46	46	2	1	11	17	2	3	8	140
	100 %	93.9 %	92 %	100 %	100 %	91.7 %	94.4 %	100 %	75 %	100 %	93.3 %
Selected	0	3	4	0	0	1	1	0	1	0	10
	0 %	6.1 %	8 %	0 %	0 %	8.3 %	5.6 %	0 %	25 %	0 %	6.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 69. Excessive paperwork

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	41	40	1	1	6	17	2	1	6	119
	100 %	83.7 %	80 %	50 %	100 %	50 %	94.4 %	100 %	25 %	75 %	79.3 %
Selected	0	8	10	1	0	6	1	0	3	2	31
	0 %	16.3 %	20 %	50 %	0 %	50 %	5.6 %	0 %	75 %	25 %	20.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 70. Bid bond requirements

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	42	44	2	1	10	14	2	4	8	131
	100 %	85.7 %	88 %	100 %	100 %	83.3 %	77.8 %	100 %	100 %	100 %	87.3 %
Selected	0	7	6	0	0	2	4	0	0	0	19
	0 %	14.3 %	12 %	0 %	0 %	16.7 %	22.2 %	0 %	0 %	0 %	12.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 71. Financing

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	44	45	2	1	11	16	2	3	7	135
	100 %	89.8 %	90 %	100 %	100 %	91.7 %	88.9 %	100 %	75 %	87.5 %	90 %
Selected	0	5	5	0	0	1	2	0	1	1	15
	0 %	10.2 %	10 %	0 %	0 %	8.3 %	11.1 %	0 %	25 %	12.5 %	10 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 72. Insurance requirements

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	47	46	2	1	12	18	2	3	7	142
	100 %	95.9 %	92 %	100 %	100 %	100 %	100 %	100 %	75 %	87.5 %	94.7 %
Selected	0	2	4	0	0	0	0	0	1	1	8
	0 %	4.1 %	8 %	0 %	0 %	0 %	0 %	0 %	25 %	12.5 %	5.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 73. Bid specifications

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	3	43	41	2	0	11	16	2	4	6	128
	75 %	87.8 %	82 %	100 %	0 %	91.7 %	88.9 %	100 %	100 %	75 %	85.3 %
Selected	1	6	9	0	1	1	2	0	0	2	22
	25 %	12.2 %	18 %	0 %	100 %	8.3 %	11.1 %	0 %	0 %	25 %	14.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 74. Lack of access to competitive supplier pricing

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	42	45	2	0	11	16	1	4	7	132
	100 %	85.7 %	90 %	100 %	0 %	91.7 %	88.9 %	50 %	100 %	87.5 %	88 %
Selected	0	7	5	0	1	1	2	1	0	1	18
	0 %	14.3 %	10 %	0 %	100 %	8.3 %	11.1 %	50 %	0 %	12.5 %	12 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 75. Limited time given to prepare bid package or quote

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	41	40	1	1	8	14	2	1	7	119
	100 %	83.7 %	80 %	50 %	100 %	66.7 %	77.8 %	100 %	25 %	87.5 %	79.3 %
Selected	0	8	10	1	0	4	4	0	3	1	31
	0 %	16.3 %	20 %	50 %	0 %	33.3 %	22.2 %	0 %	75 %	12.5 %	20.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 76. Limited knowledge of purchasing/contracting policies and procedures

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	38	34	2	0	11	13	1	1	5	109
	100 %	77.6 %	68 %	100 %	0 %	91.7 %	72.2 %	50 %	25 %	62.5 %	72.7 %
Selected	0	11	16	0	1	1	5	1	3	3	41
	0 %	22.4 %	32 %	0 %	100 %	8.3 %	27.8 %	50 %	75 %	37.5 %	27.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 77. Language Barriers

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	49	49	2	1	11	18	2	4	8	148
	100 %	100 %	98 %	100 %	100 %	91.7 %	100 %	100 %	100 %	100 %	98.7 %
Selected	0	0	1	0	0	1	0	0	0	0	2
	0 %	0 %	2 %	0 %	0 %	8.3 %	0 %	0 %	0 %	0 %	1.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 78. Lack of experience

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	3	43	45	2	1	11	16	1	2	7	131
	75 %	87.8 %	90 %	100 %	100 %	91.7 %	88.9 %	50 %	50 %	87.5 %	87.3 %
Selected	1	6	5	0	0	1	2	1	2	1	19
	25 %	12.2 %	10 %	0 %	0 %	8.3 %	11.1 %	50 %	50 %	12.5 %	12.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 79. Lack of personnel

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Not Selected	4	44	47	1	1	10	16	2	2	8	135
	100 %	89.8 %	94 %	50 %	100 %	83.3 %	88.9 %	100 %	50 %	100 %	90 %
Selected	0	5	3	1	0	2	2	0	2	0	15
	0 %	10.2 %	6 %	50 %	0 %	16.7 %	11.1 %	0 %	50 %	0 %	10 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 80. Contract too large

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Not Selected	4	41	45	2	1	10	15	2	3	8	131
	100 %	83.7 %	90 %	100 %	100 %	83.3 %	83.3 %	100 %	75 %	100 %	87.3 %
Selected	0	8	5	0	0	2	3	0	1	0	19
	0 %	16.3 %	10 %	0 %	0 %	16.7 %	16.7 %	0 %	25 %	0 %	12.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 81. Contract too expensive to bid

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	45	45	2	1	10	16	2	4	8	137
	100 %	91.8 %	90 %	100 %	100 %	83.3 %	88.9 %	100 %	100 %	100 %	91.3 %
Selected	0	4	5	0	0	2	2	0	0	0	13
	0 %	8.2 %	10 %	0 %	0 %	16.7 %	11.1 %	0 %	0 %	0 %	8.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 82. Selection process

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	46	44	2	0	10	13	1	3	7	130
	100 %	93.9 %	88 %	100 %	0 %	83.3 %	72.2 %	50 %	75 %	87.5 %	86.7 %
Selected	0	3	6	0	1	2	5	1	1	1	20
	0 %	6.1 %	12 %	0 %	100 %	16.7 %	27.8 %	50 %	25 %	12.5 %	13.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 83. Not certified

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	48	45	2	1	11	17	2	4	7	141
	100 %	98 %	90 %	100 %	100 %	91.7 %	94.4 %	100 %	100 %	87.5 %	94 %
Selected	0	1	5	0	0	1	1	0	0	1	9
	0 %	2 %	10 %	0 %	0 %	8.3 %	5.6 %	0 %	0 %	12.5 %	6 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 84. Competition with large companies

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	4	34	31	2	0	9	13	0	3	5	101
	100 %	69.4 %	62 %	100 %	0 %	75 %	72.2 %	0 %	75 %	62.5 %	67.3 %
Selected	0	15	19	0	1	3	5	2	1	3	49
	0 %	30.6 %	38 %	0 %	100 %	25 %	27.8 %	100 %	25 %	37.5 %	32.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 85. Other:

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	2	35	39	1	1	11	13	2	3	4	111
	50 %	71.4 %	78 %	50 %	100 %	91.7 %	72.2 %	100 %	75 %	50 %	74 %
Selected	2	14	11	1	0	1	5	0	1	4	39
	50 %	28.6 %	22 %	50 %	0 %	8.3 %	27.8 %	0 %	25 %	50 %	26 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 86. What is the amount of time that it typically takes to receive payment, from the date you submit your invoice, from the City of Cambridge for your services on City of Cambridge projects?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
30 days or less	0	2	0	0	0	1	1	0	0	0	4
	0 %	22.2 %	0 %	0 %	0 %	50 %	100 %	0 %	0 %	0 %	22.2 %
31-60 days	2	2	1	0	0	0	0	0	0	0	5
	100 %	22.2 %	33.3 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	27.8 %
61-90 days	0	0	0	0	0	0	0	1	0	0	1
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	100 %	0 %	0 %	5.6 %
91-120 days	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Over 120 days	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	33.3 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	5.6 %
Do Not Know	0	1	0	0	0	0	0	0	0	0	1
	0 %	11.1 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	5.6 %
Not Applicable	0	4	1	0	0	1	0	0	0	0	6
	0 %	44.4 %	33.3 %	0 %	0 %	50 %	0 %	0 %	0 %	0 %	33.3 %
Total	2	9	3	0	0	2	1	1	0	0	18

Table 87. What is the amount of time that it typically takes to receive payment, from the date you submit your invoice, from the prime contractor for your services on the City of Cambridge projects?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
30 days or less	0	0	0	0	0	0	1	0	0	0	1
	0 %	0 %	0 %	0 %	0 %	0 %	100 %	0 %	0 %	0 %	5.6 %
31-60 days	2	1	2	0	0	0	0	0	0	0	5
	100 %	14.3 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	27.8 %
61-90 days	0	0	0	0	0	1	0	1	0	0	2
	0 %	0 %	0 %	0 %	0 %	33.3 %	0 %	100 %	0 %	0 %	11.1 %
91-120 days	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	25 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	5.6 %
Do Not Know	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Not Applicable	0	6	1	0	0	2	0	0	0	0	9
	0 %	85.7 %	25 %	0 %	0 %	66.7 %	0 %	0 %	0 %	0 %	50 %
Total	2	7	4	0	0	3	1	1	0	0	18

Table 88. Is your company a certified Minority or Woman-Owned business?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Yes	1	43	44	2	1	8	16	2	2	6	125
	25 %	87.8 %	88 %	100 %	100 %	66.7 %	88.9 %	100 %	50 %	75 %	83.3 %
No	3	6	6	0	0	4	2	0	2	2	25
	75 %	12.2 %	12 %	0 %	0 %	33.3 %	11.1 %	0 %	50 %	25 %	16.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 89. MBE (Minority Business Enterprise)

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Yes	0	3	43	2	0	8	16	1	2	5	80
	0 %	7 %	97.7 %	100 %	0 %	100 %	100 %	50 %	100 %	83.3 %	64 %
No	1	32	0	0	1	0	0	1	0	0	35
	100 %	74.4 %	0 %	0 %	100 %	0 %	0 %	50 %	0 %	0 %	28 %
N/A	0	8	1	0	0	0	0	0	0	1	10
	0 %	18.6 %	2.3 %	0 %	0 %	0 %	0 %	0 %	0 %	16.7 %	8 %
Total	1	43	44	2	1	8	16	2	2	6	125

Table 90. WBE (Women Business Enterprise)

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Yes	0	42	18	1	1	4	5	2	2	3	78
	0 %	97.7 %	40.9 %	50 %	100 %	50 %	31.2 %	100 %	100 %	50 %	62.4 %
No	1	0	20	1	0	4	9	0	0	2	37
	100 %	0 %	45.5 %	50 %	0 %	50 %	56.2 %	0 %	0 %	33.3 %	29.6 %
N/A	0	1	6	0	0	0	2	0	0	1	10
	0 %	2.3 %	13.6 %	0 %	0 %	0 %	12.5 %	0 %	0 %	16.7 %	8 %
Total	1	43	44	2	1	8	16	2	2	6	125

Table 91. VBE (Veteran Business Enterprise)

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Yes	1	0	5	0	0	0	0	0	0	0	6
	100 %	0 %	11.4 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	4.8 %
No	0	33	32	2	1	7	13	1	2	3	94
	0 %	76.7 %	72.7 %	100 %	100 %	87.5 %	81.2 %	50 %	100 %	50 %	75.2 %
N/A	0	10	7	0	0	1	3	1	0	3	25
	0 %	23.3 %	15.9 %	0 %	0 %	12.5 %	18.8 %	50 %	0 %	50 %	20 %
Total	1	43	44	2	1	8	16	2	2	6	125

Table 92. Why is your company not certified as a Minority, Woman, or Veteran business? Please check all that apply. [I do not understand the certification process]

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	2	2	4	0	0	2	0	0	1	2	13
	66.7 %	33.3 %	66.7 %	0 %	0 %	50 %	0 %	0 %	50 %	100 %	52 %
Selected	1	4	2	0	0	2	2	0	1	0	12
	33.3 %	66.7 %	33.3 %	0 %	0 %	50 %	100 %	0 %	50 %	0 %	48 %
Total	3	6	6	0	0	4	2	0	2	2	25

Table 93. We do not meet one or more of the requirements for certification

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	1	6	6	0	0	4	2	0	2	2	23
	33.3 %	100 %	100 %	0 %	0 %	100 %	100 %	0 %	100 %	100 %	92 %
Selected	2	0	0	0	0	0	0	0	0	0	2
	66.7 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	8 %
Total	3	6	6	0	0	4	2	0	2	2	25

Table 94. Certification is too expensive

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	3	5	5	0	0	3	2	0	2	1	21
	100 %	83.3 %	83.3 %	0 %	0 %	75 %	100 %	0 %	100 %	50 %	84 %
Selected	0	1	1	0	0	1	0	0	0	1	4
	0 %	16.7 %	16.7 %	0 %	0 %	25 %	0 %	0 %	0 %	50 %	16 %
Total	3	6	6	0	0	4	2	0	2	2	25

Table 95. I do not want governmental agencies to have information about my company

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	3	6	5	0	0	4	2	0	2	2	24
	100 %	100 %	83.3 %	0 %	0 %	100 %	100 %	0 %	100 %	100 %	96 %
Selected	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	16.7 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	4 %
Total	3	6	6	0	0	4	2	0	2	2	25

Table 96. I have not had time to get certified/the process is too time-consuming

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	3	2	4	0	0	2	2	0	0	1	14
	100 %	33.3 %	66.7 %	0 %	0 %	50 %	100 %	0 %	0 %	50 %	56 %
Selected	0	4	2	0	0	2	0	0	2	1	11
	0 %	66.7 %	33.3 %	0 %	0 %	50 %	0 %	0 %	100 %	50 %	44 %
Total	3	6	6	0	0	4	2	0	2	2	25

Table 97. Certification does not benefit and/or will negatively impact my company

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	3	5	6	0	0	4	2	0	2	2	24
	100 %	83.3 %	100 %	0 %	0 %	100 %	100 %	0 %	100 %	100 %	96 %
Selected	0	1	0	0	0	0	0	0	0	0	1
	0 %	16.7 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	4 %
Total	3	6	6	0	0	4	2	0	2	2	25

Table 98. Do not understand how certification can benefit my company

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	3	4	4	0	0	2	2	0	2	1	18
	100 %	66.7 %	66.7 %	0 %	0 %	50 %	100 %	0 %	100 %	50 %	72 %
Selected	0	2	2	0	0	2	0	0	0	1	7
	0 %	33.3 %	33.3 %	0 %	0 %	50 %	0 %	0 %	0 %	50 %	28 %
Total	3	6	6	0	0	4	2	0	2	2	25

Table 99. Between July 1, 2017 and June 30, 2021, did your company apply for and receive any of the following? [Business start-up loan?]

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Never Applied	4	46	48	2	1	12	18	2	4	8	145
	100 %	93.9 %	96 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	96.7 %
Applied, Never Approved	0	2	2	0	0	0	0	0	0	0	4
	0 %	4.1 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	2.7 %
Applied, Some Approved	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Applied, All Approved	0	1	0	0	0	0	0	0	0	0	1
	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 100. Operating capital loan?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Never Applied	3	38	42	2	1	10	15	1	4	8	124
	75 %	77.6 %	84 %	100 %	100 %	83.3 %	83.3 %	50 %	100 %	100 %	82.7 %
Applied, Never Approved	0	0	3	0	0	0	1	1	0	0	5
	0 %	0 %	6 %	0 %	0 %	0 %	5.6 %	50 %	0 %	0 %	3.3 %
Applied, Some Approved	0	3	1	0	0	1	1	0	0	0	6
	0 %	6.1 %	2 %	0 %	0 %	8.3 %	5.6 %	0 %	0 %	0 %	4 %
Applied, All Approved	1	8	4	0	0	1	1	0	0	0	15
	25 %	16.3 %	8 %	0 %	0 %	8.3 %	5.6 %	0 %	0 %	0 %	10 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 101. Equipment loan?

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Never Applied	4	41	43	2	0	12	18	2	4	7	133
	100 %	83.7 %	86 %	100 %	0 %	100 %	100 %	100 %	100 %	87.5 %	88.7 %
Applied, Never Approved	0	0	2	0	0	0	0	0	0	0	2
	0 %	0 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1.3 %
Applied, Some Approved	0	1	1	0	0	0	0	0	0	0	2
	0 %	2 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1.3 %
Applied, All Approved	0	7	4	0	1	0	0	0	0	1	13
	0 %	14.3 %	8 %	0 %	100 %	0 %	0 %	0 %	0 %	12.5 %	8.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 102. Commercial/Professional liability insurance?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Never Applied	1	19	25	1	0	6	8	1	1	8	70
	25 %	38.8 %	50 %	50 %	0 %	50 %	44.4 %	50 %	25 %	100 %	46.7 %
Applied, Never Approved	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0.7 %
Applied, Some Approved	0	1	2	0	0	0	0	0	0	0	3
	0 %	2 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	2 %
Applied, All Approved	3	29	22	1	1	6	10	1	3	0	76
	75 %	59.2 %	44 %	50 %	100 %	50 %	55.6 %	50 %	75 %	0 %	50.7 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 103. PPP (Paycheck Protection Program loan)?

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Never Applied	1	10	23	1	0	7	8	1	2	3	56
	25 %	20.4 %	46 %	50 %	0 %	58.3 %	44.4 %	50 %	50 %	37.5 %	37.3 %
Applied, Never Approved	0	1	2	0	0	0	0	1	0	0	4
	0 %	2 %	4 %	0 %	0 %	0 %	0 %	50 %	0 %	0 %	2.7 %
Applied, Some Approved	0	4	6	0	0	3	0	0	1	1	15
	0 %	8.2 %	12 %	0 %	0 %	25 %	0 %	0 %	25 %	12.5 %	10 %
Applied, All Approved	3	34	19	1	1	2	10	0	1	4	75
	75 %	69.4 %	38 %	50 %	100 %	16.7 %	55.6 %	0 %	25 %	50 %	50 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 104. Other local or state grant/loan program?

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Never Applied	4	34	20	1	1	8	12	2	2	2	86
	100 %	69.4 %	40 %	50 %	100 %	66.7 %	66.7 %	100 %	50 %	25 %	57.3 %
Applied, Never Approved	0	0	8	0	0	0	0	0	0	0	8
	0 %	0 %	16 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	5.3 %
Applied, Some Approved	0	1	9	0	0	3	4	0	1	2	20
	0 %	2 %	18 %	0 %	0 %	25 %	22.2 %	0 %	25 %	25 %	13.3 %
Applied, All Approved	0	14	13	1	0	1	2	0	1	4	36
	0 %	28.6 %	26 %	50 %	0 %	8.3 %	11.1 %	0 %	25 %	50 %	24 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 105. What was the largest commercial loan you received from July 1, 2017 through June 30, 2021?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
\$50,000 or less	0	6	8	0	0	2	4	0	1	4	25
	0 %	12.2 %	16 %	0 %	0 %	16.7 %	22.2 %	0 %	25 %	50 %	16.7 %
\$50,001 - \$100,000	0	4	3	0	1	1	0	0	1	0	10
	0 %	8.2 %	6 %	0 %	100 %	8.3 %	0 %	0 %	25 %	0 %	6.7 %
\$100,001 - \$300,000	1	4	3	0	0	1	0	0	0	0	9
	25 %	8.2 %	6 %	0 %	0 %	8.3 %	0 %	0 %	0 %	0 %	6 %
\$300,001 - \$500,000	0	3	4	0	0	0	0	1	0	0	8
	0 %	6.1 %	8 %	0 %	0 %	0 %	0 %	50 %	0 %	0 %	5.3 %
\$500,001 - \$1,000,000	0	2	1	0	0	0	0	0	0	0	3
	0 %	4.1 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	2 %
\$1,000,001 - \$3,000,000	0	1	1	0	0	0	0	0	0	0	2
	0 %	2 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1.3 %
\$3,000,001 - \$5,000,000	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
\$5,000,001 to \$10,000,000	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

Table 105. What was the largest commercial loan you received from July 1, 2017 through June 30, 2021?

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Over \$10,000,000	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0.7 %
Do Not Know	1	0	1	0	0	0	1	0	0	0	3
	25 %	0 %	2 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	2 %
Not Applicable	2	29	28	2	0	8	13	1	2	4	89
	50 %	59.2 %	56 %	100 %	0 %	66.7 %	72.2 %	50 %	50 %	50 %	59.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 106. How many times has your company been denied a commercial (business) bank loan from July 01, 2017, through June 30, 2021?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
None	3	21	15	0	1	3	8	0	1	4	56
	75 %	42.9 %	30 %	0 %	100 %	25 %	44.4 %	0 %	25 %	50 %	37.3 %
1-10	0	4	9	0	0	0	2	1	1	0	17
	0 %	8.2 %	18 %	0 %	0 %	0 %	11.1 %	50 %	25 %	0 %	11.3 %
11-25	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
26-50	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
51-100	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0.7 %
Over 100	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Do Not Know	0	0	2	0	0	0	0	0	0	0	2
	0 %	0 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1.3 %
Not Applicable	1	24	23	2	0	9	8	1	2	4	74
	25 %	49 %	46 %	100 %	0 %	75 %	44.4 %	50 %	50 %	50 %	49.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 107. Of the items your company was denied, what was the denial reason? (Please check all that apply) [Business start-up loan?] [Insufficient Documentation]

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	2	0	0	0	0	0	0	0	3
	0 %	50 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	75 %
Selected	0	1	0	0	0	0	0	0	0	0	1
	0 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	25 %
Total	0	2	2	0	0	0	0	0	0	0	4

Table 108. Insufficient Business History

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	2	0	0	0	0	0	0	0	0	2
	0 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	50 %
Selected	0	0	2	0	0	0	0	0	0	0	2
	0 %	0 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	50 %
Total	0	2	2	0	0	0	0	0	0	0	4

Table 109. Confusion about Process

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	2	0	0	0	0	0	0	0	3
	0 %	50 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	75 %
Selected	0	1	0	0	0	0	0	0	0	0	1
	0 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	25 %
Total	0	2	2	0	0	0	0	0	0	0	4

Table 110. Credit History

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	2	2	0	0	0	0	0	0	0	4
	0 %	100 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	100 %
Selected	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Total	0	2	2	0	0	0	0	0	0	0	4

Table 111. Do Not Know

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	2	1	0	0	0	0	0	0	0	3
	0 %	100 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	75 %
Selected	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	25 %
Total	0	2	2	0	0	0	0	0	0	0	4

Table 112. N/A

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	2	0	0	0	0	0	0	0	3
	0 %	50 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	75 %
Selected	0	1	0	0	0	0	0	0	0	0	1
	0 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	25 %
Total	0	2	2	0	0	0	0	0	0	0	4

Table 113. Of the items your company was denied, what was the denial reason? (Please check all that apply) [Operating capital loan?] [Insufficient Documentation]

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	3	4	0	0	1	2	1	0	0	11
	0 %	100 %	100 %	0 %	0 %	100 %	100 %	100 %	0 %	0 %	100 %
Selected	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Total	0	3	4	0	0	1	2	1	0	0	11

Table 114. Insufficient Business History

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	3	3	0	0	1	1	1	0	0	9
	0 %	100 %	75 %	0 %	0 %	100 %	50 %	100 %	0 %	0 %	81.8 %
Selected	0	0	1	0	0	0	1	0	0	0	2
	0 %	0 %	25 %	0 %	0 %	0 %	50 %	0 %	0 %	0 %	18.2 %
Total	0	3	4	0	0	1	2	1	0	0	11

Table 115. Confusion about Process

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	3	3	0	0	1	2	1	0	0	10
	0 %	100 %	75 %	0 %	0 %	100 %	100 %	100 %	0 %	0 %	90.9 %
Selected	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	25 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	9.1 %
Total	0	3	4	0	0	1	2	1	0	0	11

Table 116. Credit History

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	2	3	0	0	1	1	1	0	0	8
	0 %	66.7 %	75 %	0 %	0 %	100 %	50 %	100 %	0 %	0 %	72.7 %
Selected	0	1	1	0	0	0	1	0	0	0	3
	0 %	33.3 %	25 %	0 %	0 %	0 %	50 %	0 %	0 %	0 %	27.3 %
Total	0	3	4	0	0	1	2	1	0	0	11

Table 117. Do Not Know

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	3	4	0	0	1	2	1	0	0	11
	0 %	100 %	100 %	0 %	0 %	100 %	100 %	100 %	0 %	0 %	100 %
Selected	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Total	0	3	4	0	0	1	2	1	0	0	11

Table 118. N/A

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	3	0	0	0	1	0	0	0	5
	0 %	33.3 %	75 %	0 %	0 %	0 %	50 %	0 %	0 %	0 %	45.5 %
Selected	0	2	1	0	0	1	1	1	0	0	6
	0 %	66.7 %	25 %	0 %	0 %	100 %	50 %	100 %	0 %	0 %	54.5 %
Total	0	3	4	0	0	1	2	1	0	0	11

Table 119. Of the items your company was denied, what was the denial reason? (Please check all that apply) [Equipment loan?] [Insufficient Documentation]

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	3	0	0	0	0	0	0	0	4
	0 %	100 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	100 %
Selected	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Total	0	1	3	0	0	0	0	0	0	0	4

Table 120. Insufficient Business History

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	1	0	0	0	0	0	0	0	2
	0 %	100 %	33.3 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	50 %
Selected	0	0	2	0	0	0	0	0	0	0	2
	0 %	0 %	66.7 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	50 %
Total	0	1	3	0	0	0	0	0	0	0	4

Table 121. Confusion about Process

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	3	0	0	0	0	0	0	0	4
	0 %	100 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	100 %
Selected	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Total	0	1	3	0	0	0	0	0	0	0	4

Table 122. Credit History

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	2	0	0	0	0	0	0	0	3
	0 %	100 %	66.7 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	75 %
Selected	0	0	1	0	0	0	0	0	0	0	1
	0 %	0 %	33.3 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	25 %
Total	0	1	3	0	0	0	0	0	0	0	4

Table 123. Do Not Know

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	3	0	0	0	0	0	0	0	4
	0 %	100 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	100 %
Selected	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Total	0	1	3	0	0	0	0	0	0	0	4

Table 124. N/A

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	0	3	0	0	0	0	0	0	0	3
	0 %	0 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	75 %
Selected	0	1	0	0	0	0	0	0	0	0	1
	0 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	25 %
Total	0	1	3	0	0	0	0	0	0	0	4

Table 125. Of the items your company was denied, what was the denial reason? (Please check all that apply) [Commercial/Professional liability insurance?] [Insufficient Documentation]

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	3	0	0	0	0	0	0	0	4
	0 %	100 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	100 %
Selected	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Total	0	1	3	0	0	0	0	0	0	0	4

Table 126. Insufficient Business History

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	3	0	0	0	0	0	0	0	4
	0 %	100 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	100 %
Selected	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Total	0	1	3	0	0	0	0	0	0	0	4

Table 127. Confusion about Process

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	3	0	0	0	0	0	0	0	4
	0 %	100 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	100 %
Selected	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Total	0	1	3	0	0	0	0	0	0	0	4

Table 128. Credit History

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	0	1	3	0	0	0	0	0	0	0	4
	0 %	100 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	100 %
Selected	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Total	0	1	3	0	0	0	0	0	0	0	4

Table 129. Do Not Know

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Not Selected	0	1	1	0	0	0	0	0	0	0	2
	0 %	100 %	33.3 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	50 %
Selected	0	0	2	0	0	0	0	0	0	0	2
	0 %	0 %	66.7 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	50 %
Total	0	1	3	0	0	0	0	0	0	0	4

Table 130. N/A

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	0	2	0	0	0	0	0	0	0	2
	0 %	0 %	66.7 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	50 %
Selected	0	1	1	0	0	0	0	0	0	0	2
	0 %	100 %	33.3 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	50 %
Total	0	1	3	0	0	0	0	0	0	0	4

Table 131. Of the items your company was denied, what was the denial reason? (Please check all that apply) [PPP (Paycheck Protection Program Loan)?] [Insufficient Documentation]

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	4	8	0	0	3	0	1	1	1	18
	0 %	80 %	100 %	0 %	0 %	100 %	0 %	100 %	100 %	100 %	94.7 %
Selected	0	1	0	0	0	0	0	0	0	0	1
	0 %	20 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	5.3 %
Total	0	5	8	0	0	3	0	1	1	1	19

Table 132. Insufficient Business History

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	5	8	0	0	3	0	1	1	1	19
	0 %	100 %	100 %	0 %	0 %	100 %	0 %	100 %	100 %	100 %	100 %
Selected	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Total	0	5	8	0	0	3	0	1	1	1	19

Table 133. Confusion about Process

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	4	6	0	0	3	0	1	1	1	16
	0 %	80 %	75 %	0 %	0 %	100 %	0 %	100 %	100 %	100 %	84.2 %
Selected	0	1	2	0	0	0	0	0	0	0	3
	0 %	20 %	25 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	15.8 %
Total	0	5	8	0	0	3	0	1	1	1	19

Table 134. Credit History

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	5	8	0	0	3	0	1	1	1	19
	0 %	100 %	100 %	0 %	0 %	100 %	0 %	100 %	100 %	100 %	100 %
Selected	0	0	0	0	0	0	0	0	0	0	0
	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Total	0	5	8	0	0	3	0	1	1	1	19

Table 135. Do Not Know

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	5	4	0	0	3	0	1	1	1	15
	0 %	100 %	50 %	0 %	0 %	100 %	0 %	100 %	100 %	100 %	78.9 %
Selected	0	0	4	0	0	0	0	0	0	0	4
	0 %	0 %	50 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	21.1 %
Total	0	5	8	0	0	3	0	1	1	1	19

Table 136. N/A

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	6	0	0	0	0	0	0	0	7
	0 %	20 %	75 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	36.8 %
Selected	0	4	2	0	0	3	0	1	1	1	12
	0 %	80 %	25 %	0 %	0 %	100 %	0 %	100 %	100 %	100 %	63.2 %
Total	0	5	8	0	0	3	0	1	1	1	19

Table 137. Of the items your company was denied, what was the denial reason? (Please check all that apply) [Other local or state grant/loan program?] [Insufficient Documentation]

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	0	17	0	0	3	4	0	1	2	27
	0 %	0 %	100 %	0 %	0 %	100 %	100 %	0 %	100 %	100 %	96.4 %
Selected	0	1	0	0	0	0	0	0	0	0	1
	0 %	100 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	3.6 %
Total	0	1	17	0	0	3	4	0	1	2	28

Table 138. Insufficient Business History

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	16	0	0	3	3	0	1	2	26
	0 %	100 %	94.1 %	0 %	0 %	100 %	75 %	0 %	100 %	100 %	92.9 %
Selected	0	0	1	0	0	0	1	0	0	0	2
	0 %	0 %	5.9 %	0 %	0 %	0 %	25 %	0 %	0 %	0 %	7.1 %
Total	0	1	17	0	0	3	4	0	1	2	28

Table 139. Confusion about Process

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	14	0	0	3	4	0	1	2	25
	0 %	100 %	82.4 %	0 %	0 %	100 %	100 %	0 %	100 %	100 %	89.3 %
Selected	0	0	3	0	0	0	0	0	0	0	3
	0 %	0 %	17.6 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	10.7 %
Total	0	1	17	0	0	3	4	0	1	2	28

Table 140. Credit History

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	17	0	0	3	3	0	1	2	27
	0 %	100 %	100 %	0 %	0 %	100 %	75 %	0 %	100 %	100 %	96.4 %
Selected	0	0	0	0	0	0	1	0	0	0	1
	0 %	0 %	0 %	0 %	0 %	0 %	25 %	0 %	0 %	0 %	3.6 %
Total	0	1	17	0	0	3	4	0	1	2	28

Table 141. Do Not Know

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	0	11	0	0	3	4	0	1	2	21
	0 %	0 %	64.7 %	0 %	0 %	100 %	100 %	0 %	100 %	100 %	75 %
Selected	0	1	6	0	0	0	0	0	0	0	7
	0 %	100 %	35.3 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	25 %
Total	0	1	17	0	0	3	4	0	1	2	28

Table 142. N/A

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Not Selected	0	1	8	0	0	0	1	0	0	0	10
	0 %	100 %	47.1 %	0 %	0 %	0 %	25 %	0 %	0 %	0 %	35.7 %
Selected	0	0	9	0	0	3	3	0	1	2	18
	0 %	0 %	52.9 %	0 %	0 %	100 %	75 %	0 %	100 %	100 %	64.3 %
Total	0	1	17	0	0	3	4	0	1	2	28

Table 143. From July 1, 2017 through June 30, 2021, how often has your company experienced any racial, gender, or ethnicity discriminatory behavior from any private businesses within the Boston Metropolitan Area (i.e., non-governmental entities)?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Never	3	34	15	1	1	1	7	0	0	6	68
	75 %	69.4 %	30 %	50 %	100 %	8.3 %	38.9 %	0 %	0 %	75 %	45.3 %
Seldom	0	3	9	0	0	5	2	1	1	0	21
	0 %	6.1 %	18 %	0 %	0 %	41.7 %	11.1 %	50 %	25 %	0 %	14 %
Often	0	2	7	0	0	0	1	0	1	1	12
	0 %	4.1 %	14 %	0 %	0 %	0 %	5.6 %	0 %	25 %	12.5 %	8 %
Very Often	0	1	5	0	0	0	1	0	0	1	8
	0 %	2 %	10 %	0 %	0 %	0 %	5.6 %	0 %	0 %	12.5 %	5.3 %
Do Not Know	1	9	14	1	0	6	7	1	2	0	41
	25 %	18.4 %	28 %	50 %	0 %	50 %	38.9 %	50 %	50 %	0 %	27.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 144. From July 1, 2017 through June 30, 2021, how often has your company experienced any racial, gender, or ethnicity discriminatory behavior from The City of Cambridge?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Never	3	43	18	1	0	5	12	1	0	7	90
	75 %	87.8 %	36 %	50 %	0 %	41.7 %	66.7 %	50 %	0 %	87.5 %	60 %
Seldom	0	0	7	0	0	2	0	0	1	1	11
	0 %	0 %	14 %	0 %	0 %	16.7 %	0 %	0 %	25 %	12.5 %	7.3 %
Often	0	0	4	0	0	0	1	0	0	0	5
	0 %	0 %	8 %	0 %	0 %	0 %	5.6 %	0 %	0 %	0 %	3.3 %
Very Often	0	0	2	0	0	0	0	0	0	0	2
	0 %	0 %	4 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1.3 %
Do Not Know	1	6	19	1	1	5	5	1	3	0	42
	25 %	12.2 %	38 %	50 %	100 %	41.7 %	27.8 %	50 %	75 %	0 %	28 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 145. From July 1, 2017, through June 30, 2021, how often has your company experienced any racial, gender, or ethnicity discriminatory behavior from governmental entities within the Greater Boston Area other than the City of Cambridge?

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Never	2	40	16	1	0	4	10	0	1	6	80
	50 %	81.6 %	32 %	50 %	0 %	33.3 %	55.6 %	0 %	25 %	75 %	53.3 %
Seldom	0	2	6	0	0	2	1	1	0	1	13
	0 %	4.1 %	12 %	0 %	0 %	16.7 %	5.6 %	50 %	0 %	12.5 %	8.7 %
Often	1	0	6	0	0	0	2	0	0	1	10
	25 %	0 %	12 %	0 %	0 %	0 %	11.1 %	0 %	0 %	12.5 %	6.7 %
Very Often	0	1	4	0	0	0	0	0	0	0	5
	0 %	2 %	8 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	3.3 %
Do Not Know	1	6	18	1	1	6	5	1	3	0	42
	25 %	12.2 %	36 %	50 %	100 %	50 %	27.8 %	50 %	75 %	0 %	28 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 146. Do you believe there is an informal network of prime and subcontractors doing business with the City of Cambridge that monopolizes the public contracting process? Informal network are firms with an advantage due to their relationships in the City.

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Yes	2	20	39	1	1	8	12	2	4	1	90
	50 %	40.8 %	78 %	50 %	100 %	66.7 %	66.7 %	100 %	100 %	12.5 %	60 %
No	2	29	11	1	0	4	6	0	0	7	60
	50 %	59.2 %	22 %	50 %	0 %	33.3 %	33.3 %	0 %	0 %	87.5 %	40 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 147. Please tell us if you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with each of the following statements: [Double standards in qualifications and work performance make it more difficult for Minority and/or Woman-Owned businesses to win bids or contracts.]

Responses	<i>Owners' Minority Status</i>										<i>Total</i>
	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	
Strongly agree	0	8	21	1	0	2	6	2	1	1	42
	0 %	16.3 %	42 %	50 %	0 %	16.7 %	33.3 %	100 %	25 %	12.5 %	28 %
Agree	0	13	11	0	1	5	3	0	2	3	38
	0 %	26.5 %	22 %	0 %	100 %	41.7 %	16.7 %	0 %	50 %	37.5 %	25.3 %
Neither agree nor disagree	3	23	16	1	0	5	8	0	1	2	59
	75 %	46.9 %	32 %	50 %	0 %	41.7 %	44.4 %	0 %	25 %	25 %	39.3 %
Disagree	0	4	1	0	0	0	0	0	0	0	5
	0 %	8.2 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	3.3 %
Strongly disagree	1	1	1	0	0	0	1	0	0	2	6
	25 %	2 %	2 %	0 %	0 %	0 %	5.6 %	0 %	0 %	25 %	4 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 148. Please tell us if you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with each of the following statements: [The City of Cambridge is generally accommodating to the language needs of its vendor community.]

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	<i>Total</i>
Strongly agree	0	1	5	0	0	0	2	2	1	1	12
	0 %	2 %	10 %	0 %	0 %	0 %	11.1 %	100 %	25 %	12.5 %	8 %
Agree	1	11	15	0	0	4	6	0	2	3	42
	25 %	22.4 %	30 %	0 %	0 %	33.3 %	33.3 %	0 %	50 %	37.5 %	28 %
Neither agree nor disagree	3	37	28	2	1	8	8	0	1	2	90
	75 %	75.5 %	56 %	100 %	100 %	66.7 %	44.4 %	0 %	25 %	25 %	60 %
Disagree	0	0	1	0	0	0	2	0	0	0	3
	0 %	0 %	2 %	0 %	0 %	0 %	11.1 %	0 %	0 %	0 %	2 %
Strongly disagree	0	0	1	0	0	0	0	0	0	2	3
	0 %	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	25 %	2 %
Total	4	49	50	2	1	12	18	2	4	8	150

Table 149. Please tell us if you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with each of the following statements: [Sometimes, a prime contractor will contact a Minority and/or Woman-Owned company to ask for quotes, but never give the proposal sufficient review to consider giving that company the award.]

	<i>Owners' Minority Status</i>										
Responses	Caucasian	Woman	African American	Cape Verdean	American Indian	Asian American	Hispanic American	Portuguese	Multi-Racial or Bi-Racial	Other (specify):	Total
Strongly agree	0	9	16	0	1	3	7	1	2	3	42
	0 %	18.4 %	32 %	0 %	100 %	25 %	38.9 %	50 %	50 %	37.5 %	28 %
Agree	1	14	12	0	0	6	2	0	0	1	36
	25 %	28.6 %	24 %	0 %	0 %	50 %	11.1 %	0 %	0 %	12.5 %	24 %
Neither agree nor disagree	3	24	18	2	0	3	9	1	2	3	65
	75 %	49 %	36 %	100 %	0 %	25 %	50 %	50 %	50 %	37.5 %	43.3 %
Disagree	0	2	3	0	0	0	0	0	0	0	5
	0 %	4.1 %	6 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	3.3 %
Strongly disagree	0	0	1	0	0	0	0	0	0	1	2
	0 %	0 %	2 %	0 %	0 %	0 %	0 %	0 %	0 %	12.5 %	1.3 %
Total	4	49	50	2	1	12	18	2	4	8	150

Cambridge Disparity Study Survey of Business Owners

A brief note on how tables are calculated

Duplicate responses have been removed. Duplicate responses were removed based on businesses having either the same email address or same business name.

The total count of responses for each question includes only those participants who responded to that question. Participants who skipped or were not given a question are not included.

Table 1. Is your company a not-for-profit organization or a government entity?				
	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Yes	0	0	0	0
	0 %	0 %	0 %	0 %
No	2	1	7	10
	100 %	100 %	100 %	100 %
Total	2	1	7	10

Table 2. Do you believe your company is ready, willing, and able to do business as a prime contractor with the City of Cambridge?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Yes	2	1	6	9
	100 %	100 %	85.7 %	90 %
No	0	0	1	1
	0 %	0 %	14.3 %	10 %
Total	2	1	7	10

Table 3. Do you believe your company is ready, willing, and able to do business as a subcontractor with the City of Cambridge?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Yes	2	0	6	8
	100 %	0 %	85.7 %	80 %
No	0	1	1	2
	0 %	100 %	14.3 %	20 %
Total	2	1	7	10

Table 4. Which one of the following is your company's primary line of business?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Construction	0	0	0	0
	0 %	0 %	0 %	0 %
Architecture & Engineering	0	0	0	0
	0 %	0 %	0 %	0 %
Professional Services	1	1	3	5
	50 %	100 %	42.9 %	50 %
Non-Professional Services (Other Services)	0	0	0	0
	0 %	0 %	0 %	0 %
Goods (Commodities such as office supplies, cleaning supplie	1	0	4	5
	50 %	0 %	57.1 %	50 %
Total	2	1	7	10

Table 5. How long has your company been in operation?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Under 1 year	0	0	0	0
	0 %	0 %	0 %	0 %
1-5 years	0	1	2	3
	0 %	100 %	28.6 %	30 %
6-10 years	1	0	3	4
	50 %	0 %	42.9 %	40 %
11-15 years	0	0	0	0
	0 %	0 %	0 %	0 %
16-20 years	1	0	0	1
	50 %	0 %	0 %	10 %
Over 20 years	0	0	2	2
	0 %	0 %	28.6 %	20 %
Total	2	1	7	10

Table 6. Is at least 51% percent of your company owned and controlled by a woman or women?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Yes	0	1	4	5
	0 %	100 %	57.1 %	50 %
No	2	0	3	5
	100 %	0 %	42.9 %	50 %
Total	2	1	7	10

Table 7. Is at least 51% percent of your company owned and controlled by a veteran?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Yes	2	1	7	10
	100 %	100 %	100 %	100 %
No	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 8. Which of the following categories would you consider to be the race or ethnic origin that the person or persons that own at least 51% of the company identify as? Would you say:

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
African American	0	0	7	7
	0 %	0 %	100 %	70 %
Asian American	0	0	0	0
	0 %	0 %	0 %	0 %
Hispanic American	0	0	0	0
	0 %	0 %	0 %	0 %
American Indian	0	0	0	0
	0 %	0 %	0 %	0 %
Cape Verdean	0	0	0	0
	0 %	0 %	0 %	0 %
Portuguese	0	0	0	0
	0 %	0 %	0 %	0 %
Multi-Racial or Bi-Racial	0	0	0	0
	0 %	0 %	0 %	0 %
Caucasian	2	1	0	3
	100 %	100 %	0 %	30 %
Other (specify):	0	0	0	0

Table 8. Which of the following categories would you consider to be the race or ethnic origin that the person or persons that own at least 51% of the company identify as? Would you say:

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 9. What is your current single project bonding limit since July 1, 2017?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
\$24,999 or less	0	0	2	2
	0 %	0 %	28.6 %	20 %
\$25,000 - \$50,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$50,001 - \$100,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$100,001 - \$250,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$250,001 - \$500,000	0	0	1	1
	0 %	0 %	14.3 %	10 %
\$500,001 - \$750,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$750,001 - \$1,000,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$1,000,001 - \$2,500,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$2,500,001 - \$5,000,000	0	0	1	1
	0 %	0 %	14.3 %	10 %

Table 9. What is your current single project bonding limit since July 1, 2017?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
\$5,000,001 to \$10,000,000	0	0	0	0
	0 %	0 %	0 %	0 %
Over \$10 million	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know	1	1	0	2
	50 %	100 %	0 %	20 %
Not Applicable	1	0	3	4
	50 %	0 %	42.9 %	40 %
Total	2	1	7	10

Table 10. What is the largest single contract your company has been awarded since July 1, 2017?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
\$24,999 or less	0	0	0	0
	0 %	0 %	0 %	0 %
\$25,000 - \$50,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$50,001 - \$100,000	0	0	2	2
	0 %	0 %	28.6 %	20 %
\$100,001 - \$250,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$250,001 - \$500,000	0	0	1	1
	0 %	0 %	14.3 %	10 %
\$500,001 - \$750,000	0	0	1	1
	0 %	0 %	14.3 %	10 %
\$750,001 - \$1,000,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$1,000,001 - \$2,500,000	2	0	1	3
	100 %	0 %	14.3 %	30 %
\$2,500,001 - \$5,000,000	0	0	1	1
	0 %	0 %	14.3 %	10 %

Table 10. What is the largest single contract your company has been awarded since July 1, 2017?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
\$5,000,001 - \$10,000,000	0	0	0	0
	0 %	0 %	0 %	0 %
Over \$10 million	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know	0	0	0	0
	0 %	0 %	0 %	0 %
Not Applicable	0	1	1	2
	0 %	100 %	14.3 %	20 %
Total	2	1	7	10

Table 11. Indicate what you have performed as on any government or private contract since July 1, 2017.

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Prime Contractor and Subcontractor	0	0	5	5
	0 %	0 %	71.4 %	50 %
Prime Contractor	2	1	1	4
	100 %	100 %	14.3 %	40 %
Subcontractor	0	0	0	0
	0 %	0 %	0 %	0 %
Neither	0	0	1	1
	0 %	0 %	14.3 %	10 %
Total	2	1	7	10

Table 12. On average, how many employees and regular independent contractors does your company keep on the payroll, including full-time and part-time staff? (Number of Employees)

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
None	0	0	0	0
	0 %	0 %	0 %	0 %
1-10	1	1	3	5
	50 %	100 %	42.9 %	50 %
11-30	0	0	2	2
	0 %	0 %	28.6 %	20 %
31-50	1	0	1	2
	50 %	0 %	14.3 %	20 %
51-75	0	0	0	0
	0 %	0 %	0 %	0 %
76-100	0	0	1	1
	0 %	0 %	14.3 %	10 %
101-300	0	0	0	0
	0 %	0 %	0 %	0 %
Over 300	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 13. What is the highest level of education completed by any owner of your company? Would you say:

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Some High School	0	0	0	0
	0 %	0 %	0 %	0 %
High School graduate	0	0	0	0
	0 %	0 %	0 %	0 %
Some College	0	0	0	0
	0 %	0 %	0 %	0 %
College Graduate	0	0	3	3
	0 %	0 %	42.9 %	30 %
Post Graduate Degree	2	1	4	7
	100 %	100 %	57.1 %	70 %
Trade or Technical Certificate	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 14. What is the greatest number of years of experience that any owners in your company's line of business have?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
None	0	0	0	0
	0 %	0 %	0 %	0 %
1-5	0	0	0	0
	0 %	0 %	0 %	0 %
6-10	0	0	0	0
	0 %	0 %	0 %	0 %
11-15	0	0	2	2
	0 %	0 %	28.6 %	20 %
16-20	0	0	1	1
	0 %	0 %	14.3 %	10 %
More than 20	2	1	4	7
	100 %	100 %	57.1 %	70 %
Total	2	1	7	10

Table 15. Which of the following categories best approximates your company's gross revenues for fiscal year 2018 (July 01, 2017 - June 30, 2018)? Your best estimate will suffice.

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
\$100,000 or less	0	0	1	1
	0 %	0 %	14.3 %	10 %
\$100,001 - \$250,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$250,001 - \$500,000	0	0	2	2
	0 %	0 %	28.6 %	20 %
\$500,001 - \$750,000	1	0	0	1
	50 %	0 %	0 %	10 %
\$750,001 - \$1,000,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$1,000,001 - \$1,320,000	0	0	1	1
	0 %	0 %	14.3 %	10 %
\$1,320,001 - \$1,500,000	1	0	1	2
	50 %	0 %	14.3 %	20 %
\$1,500,001 - \$5,000,000	0	0	1	1
	0 %	0 %	14.3 %	10 %
\$5,000,001 - \$10,000,000	0	0	0	0

Table 15. Which of the following categories best approximates your company's gross revenues for fiscal year 2018 (July 01, 2017 - June 30, 2018)? Your best estimate will suffice.

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
	0 %	0 %	0 %	0 %
\$10,000,001 - \$15,000,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$15,000,001 - \$20,000,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$20,000,001 - \$39,500,000	0	0	1	1
	0 %	0 %	14.3 %	10 %
Over \$39,500,000	0	0	0	0
	0 %	0 %	0 %	0 %
Don't Know	0	1	0	1
	0 %	100 %	0 %	10 %
Company Out of Business	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 16. Which of the following categories best approximates your company's gross revenues for fiscal year 2021 (July 01, 2020 - June 30, 2021)? Your best estimate will suffice.

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
\$100,000 or less	0	0	2	2
	0 %	0 %	28.6 %	20 %
\$100,001 - \$250,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$250,001 - \$500,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$500,001 - \$750,000	1	0	0	1
	50 %	0 %	0 %	10 %
\$750,001 - \$1,000,000	0	0	1	1
	0 %	0 %	14.3 %	10 %
\$1,000,001 - \$1,320,000	1	0	0	1
	50 %	0 %	0 %	10 %
\$1,320,001 - \$1,500,000	0	0	1	1
	0 %	0 %	14.3 %	10 %
\$1,500,001 - \$5,000,000	0	0	2	2
	0 %	0 %	28.6 %	20 %
\$5,000,001 - \$10,000,000	0	0	0	0

Table 16. Which of the following categories best approximates your company's gross revenues for fiscal year 2021 (July 01, 2020 - June 30, 2021)? Your best estimate will suffice.

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
	0 %	0 %	0 %	0 %
\$10,000,001 - \$15,000,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$15,000,001 - \$20,000,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$20,000,001 - \$39,500,000	0	0	1	1
	0 %	0 %	14.3 %	10 %
Over \$39,500,000	0	0	0	0
	0 %	0 %	0 %	0 %
Don't Know	0	1	0	1
	0 %	100 %	0 %	10 %
Company Out of Business	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 17. Is your company registered with the State's COMMBUYS?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Yes	2	1	5	8
	100 %	100 %	71.4 %	80 %
No	0	0	2	2
	0 %	0 %	28.6 %	20 %
Total	2	1	7	10

Table 18. Is your company registered with any other government entity (including but not limited to): City of Boston, MASSPORT, MASSDOT, etc.?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Yes	1	1	4	6
	50 %	100 %	57.1 %	60 %
No	1	0	3	4
	50 %	0 %	42.9 %	40 %
Total	2	1	7	10

Table 19. If you answered “No” to "is your company registered with the State's COMMBUYS", why is your company not registered with COMMBUYS? Indicate all that apply. [I do not know how to register.]

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	2	2
	0 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	2	2

Table 20. I did not know there was a registry.

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	2	2
	0 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	2	2

Table 21. I do not see any benefit in registering.

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	0	0	2	2
	0 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	2	2

Table 22. I do not want to do business with government.

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	0	0	2	2
	0 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	2	2

Table 23. I do not want to do business in Massachusetts.

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	1	1
	0 %	0 %	50 %	50 %
Selected	0	0	1	1
	0 %	0 %	50 %	50 %
Total	0	0	2	2

Table 24. I do not see opportunities in my field of work.

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	1	1
	0 %	0 %	50 %	50 %
Selected	0	0	1	1
	0 %	0 %	50 %	50 %
Total	0	0	2	2

Table 25. I do not believe my company would be awarded a contract.

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	2	2
	0 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	2	2

Table 26. Other (fill in blank)

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	2	2
	0 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	2	2

Table 27. If you answered “No” to "is your company registered with any other government entity (including but not limited to): City of Boston, MASSPORT, MASSDOT, etc.," why is your company not registered with City of Boston, MASSPORT, MASSDOT, etc.? Indicate all that apply. [I do not know how to register.]

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	3	3
	0 %	0 %	100 %	75 %
Selected	1	0	0	1
	100 %	0 %	0 %	25 %
Total	1	0	3	4

Table 28. I did not know there was a registry.

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	2	2
	0 %	0 %	66.7 %	50 %
Selected	1	0	1	2
	100 %	0 %	33.3 %	50 %
Total	1	0	3	4

Table 29. I do not see any benefit in registering.

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	1	0	2	3
	100 %	0 %	66.7 %	75 %
Selected	0	0	1	1
	0 %	0 %	33.3 %	25 %
Total	1	0	3	4

Table 30. I do not want to do business with government.

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	1	0	3	4
	100 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	1	0	3	4

Table 31. I do not want to do business in Massachusetts.

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	1	0	2	3
	100 %	0 %	66.7 %	75 %
Selected	0	0	1	1
	0 %	0 %	33.3 %	25 %
Total	1	0	3	4

Table 32. I do not see opportunities in my field of work.

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	1	0	3	4
	100 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	1	0	3	4

Table 33. I do not believe my company would be awarded a contract.

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	1	0	3	4
	100 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	1	0	3	4

Table 34. Other (fill in blank)

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	1	0	3	4
	100 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	1	0	3	4

Table 35. From July 1, 2017 through June 30, 2021, how many times has your company submitted bids or proposals for projects as a prime contractor on: [The City of Cambridge Government Projects]

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
None	1	0	5	6
	50 %	0 %	71.4 %	60 %
1-10	1	0	2	3
	50 %	0 %	28.6 %	30 %
11-25	0	0	0	0
	0 %	0 %	0 %	0 %
26-50	0	0	0	0
	0 %	0 %	0 %	0 %
51-100	0	0	0	0
	0 %	0 %	0 %	0 %
Over 100	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know/NA	0	1	0	1
	0 %	100 %	0 %	10 %
Total	2	1	7	10

Table 36. Private Sector Projects

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
None	2	0	4	6
	100 %	0 %	57.1 %	60 %
1-10	0	0	1	1
	0 %	0 %	14.3 %	10 %
11-25	0	0	0	0
	0 %	0 %	0 %	0 %
26-50	0	0	1	1
	0 %	0 %	14.3 %	10 %
51-100	0	0	1	1
	0 %	0 %	14.3 %	10 %
Over 100	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know/NA	0	1	0	1
	0 %	100 %	0 %	10 %
Total	2	1	7	10

Table 37. Other Public Sector (non-City of Cambridge Projects)

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
None	1	0	3	4
	50 %	0 %	42.9 %	40 %
1-10	1	0	2	3
	50 %	0 %	28.6 %	30 %
11-25	0	0	0	0
	0 %	0 %	0 %	0 %
26-50	0	0	0	0
	0 %	0 %	0 %	0 %
51-100	0	0	1	1
	0 %	0 %	14.3 %	10 %
Over 100	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know/NA	0	1	1	2
	0 %	100 %	14.3 %	20 %
Total	2	1	7	10

Table 38. From July 1, 2017 through June 30, 2021, how many times has your company been awarded contracts to perform as a prime contractor: [The City of Cambridge Government Projects]

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
None	2	0	6	8
	100 %	0 %	85.7 %	80 %
1-10	0	0	0	0
	0 %	0 %	0 %	0 %
11-25	0	0	1	1
	0 %	0 %	14.3 %	10 %
26-50	0	0	0	0
	0 %	0 %	0 %	0 %
51-100	0	0	0	0
	0 %	0 %	0 %	0 %
Over 100	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know/NA	0	1	0	1
	0 %	100 %	0 %	10 %
Total	2	1	7	10

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
None	1	0	4	5
	50 %	0 %	57.1 %	50 %
1-10	1	0	1	2
	50 %	0 %	14.3 %	20 %
11-25	0	0	1	1
	0 %	0 %	14.3 %	10 %
26-50	0	0	0	0
	0 %	0 %	0 %	0 %
51-100	0	0	1	1
	0 %	0 %	14.3 %	10 %
Over 100	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know/NA	0	1	0	1
	0 %	100 %	0 %	10 %
Total	2	1	7	10

Table 40. Other Public Sector (non-City of Cambridge Projects)

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
None	1	0	4	5
	50 %	0 %	57.1 %	50 %
1-10	1	0	1	2
	50 %	0 %	14.3 %	20 %
11-25	0	0	1	1
	0 %	0 %	14.3 %	10 %
26-50	0	0	0	0
	0 %	0 %	0 %	0 %
51-100	0	0	1	1
	0 %	0 %	14.3 %	10 %
Over 100	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know/NA	0	1	0	1
	0 %	100 %	0 %	10 %
Total	2	1	7	10

Table 41. From July 1, 2017 through June 30, 2021 how many times has your company submitted bids or proposals for projects as a subcontractor on: [The City of Cambridge Government Projects]

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
None	2	0	4	6
	100 %	0 %	57.1 %	60 %
1-10	0	0	1	1
	0 %	0 %	14.3 %	10 %
11-25	0	0	0	0
	0 %	0 %	0 %	0 %
26-50	0	0	1	1
	0 %	0 %	14.3 %	10 %
51-100	0	0	0	0
	0 %	0 %	0 %	0 %
Over 100	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know/NA	0	1	1	2
	0 %	100 %	14.3 %	20 %
Total	2	1	7	10

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
None	2	0	5	7
	100 %	0 %	71.4 %	70 %
1-10	0	0	0	0
	0 %	0 %	0 %	0 %
11-25	0	0	2	2
	0 %	0 %	28.6 %	20 %
26-50	0	0	0	0
	0 %	0 %	0 %	0 %
51-100	0	0	0	0
	0 %	0 %	0 %	0 %
Over 100	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know/NA	0	1	0	1
	0 %	100 %	0 %	10 %
Total	2	1	7	10

Table 43. Other Public Sector (non-City of Cambridge Projects)

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
None	2	0	4	6
	100 %	0 %	57.1 %	60 %
1-10	0	0	1	1
	0 %	0 %	14.3 %	10 %
11-25	0	0	1	1
	0 %	0 %	14.3 %	10 %
26-50	0	0	1	1
	0 %	0 %	14.3 %	10 %
51-100	0	0	0	0
	0 %	0 %	0 %	0 %
Over 100	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know/NA	0	1	0	1
	0 %	100 %	0 %	10 %
Total	2	1	7	10

Table 44. From July 1, 2017 through June 30, 2021 how many times has your company been awarded contracts to perform as a subcontractor: [The City of Cambridge Government Projects]

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
None	2	0	5	7
	100 %	0 %	71.4 %	70 %
1-10	0	0	2	2
	0 %	0 %	28.6 %	20 %
11-25	0	0	0	0
	0 %	0 %	0 %	0 %
26-50	0	0	0	0
	0 %	0 %	0 %	0 %
51-100	0	0	0	0
	0 %	0 %	0 %	0 %
Over 100	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know/NA	0	1	0	1
	0 %	100 %	0 %	10 %
Total	2	1	7	10

Table 45. Private Sector Projects

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
None	2	0	5	7
	100 %	0 %	71.4 %	70 %
1-10	0	0	0	0
	0 %	0 %	0 %	0 %
11-25	0	0	1	1
	0 %	0 %	14.3 %	10 %
26-50	0	0	1	1
	0 %	0 %	14.3 %	10 %
51-100	0	0	0	0
	0 %	0 %	0 %	0 %
Over 100	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know/NA	0	1	0	1
	0 %	100 %	0 %	10 %
Total	2	1	7	10

Table 46. Other Public Sector (non-City of Cambridge Projects)

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
None	2	0	4	6
	100 %	0 %	57.1 %	60 %
1-10	0	0	0	0
	0 %	0 %	0 %	0 %
11-25	0	0	3	3
	0 %	0 %	42.9 %	30 %
26-50	0	0	0	0
	0 %	0 %	0 %	0 %
51-100	0	0	0	0
	0 %	0 %	0 %	0 %
Over 100	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know/NA	0	1	0	1
	0 %	100 %	0 %	10 %
Total	2	1	7	10

Table 47. How many times has your company been dropped from a project as a subcontractor from July 1, 2017 - June 30, 2021?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
None	1	1	4	6
	50 %	100 %	57.1 %	60 %
1-10	0	0	0	0
	0 %	0 %	0 %	0 %
11-25	0	0	0	0
	0 %	0 %	0 %	0 %
26-50	0	0	1	1
	0 %	0 %	14.3 %	10 %
51-100	0	0	0	0
	0 %	0 %	0 %	0 %
Over 100	0	0	0	0
	0 %	0 %	0 %	0 %
Do not know	0	0	0	0
	0 %	0 %	0 %	0 %
Not Applicable	1	0	2	3
	50 %	0 %	28.6 %	30 %
Total	2	1	7	10

Table 48. The following is a list of things that may prevent companies from bidding or obtaining work on a project. In your experience, have any of the following been a barrier to your company obtaining work on projects for the City of Cambridge? (Check all that apply) [Pre-qualification requirements]

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 49. Performance bond requirements

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 50. Excessive paperwork

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	5	8
	100 %	100 %	71.4 %	80 %
Selected	0	0	2	2
	0 %	0 %	28.6 %	20 %
Total	2	1	7	10

Table 51. Bid bond requirements

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 52. Financing

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	6	9
	100 %	100 %	85.7 %	90 %
Selected	0	0	1	1
	0 %	0 %	14.3 %	10 %
Total	2	1	7	10

Table 53. Insurance requirements

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 54. Bid specifications

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 55. Lack of access to competitive supplier pricing

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 56. Limited time given to prepare bid package or quote

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	5	8
	100 %	100 %	71.4 %	80 %
Selected	0	0	2	2
	0 %	0 %	28.6 %	20 %
Total	2	1	7	10

Table 57. Limited knowledge of purchasing/contracting policies and procedures

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 58. Language Barriers

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 59. Lack of experience

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	1	1	7	9
	50 %	100 %	100 %	90 %
Selected	1	0	0	1
	50 %	0 %	0 %	10 %
Total	2	1	7	10

Table 60. Lack of personnel

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 61. Contract too large

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 62. Contract too expensive to bid

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	6	9
	100 %	100 %	85.7 %	90 %
Selected	0	0	1	1
	0 %	0 %	14.3 %	10 %
Total	2	1	7	10

Table 63. Selection process

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 64. Not certified

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	2	1	5	8
	100 %	100 %	71.4 %	80 %
Selected	0	0	2	2
	0 %	0 %	28.6 %	20 %
Total	2	1	7	10

Table 65. Competition with large companies

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	2	0	7	9
	100 %	0 %	100 %	90 %
Selected	0	1	0	1
	0 %	100 %	0 %	10 %
Total	2	1	7	10

Table 66. Other:

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	1	1	4	6
	50 %	100 %	57.1 %	60 %
Selected	1	0	3	4
	50 %	0 %	42.9 %	40 %
Total	2	1	7	10

Table 67. The following is a list of things that may prevent companies from bidding or obtaining work on a project. In your experience, have any of the following been a barrier to your company obtaining work on projects for any governmental entity in the Boston Metropolitan Area except the City of Cambridge? (Check all that apply) [Pre-qualification requirements]

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 68. Performance bond requirements

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 69. Excessive paperwork

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	0	6	8
	100 %	0 %	85.7 %	80 %
Selected	0	1	1	2
	0 %	100 %	14.3 %	20 %
Total	2	1	7	10

Table 70. Bid bond requirements

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 71. Financing

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	6	9
	100 %	100 %	85.7 %	90 %
Selected	0	0	1	1
	0 %	0 %	14.3 %	10 %
Total	2	1	7	10

Table 72. Insurance requirements

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 73. Bid specifications

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	1	1	6	8
	50 %	100 %	85.7 %	80 %
Selected	1	0	1	2
	50 %	0 %	14.3 %	20 %
Total	2	1	7	10

Table 74. Lack of access to competitive supplier pricing

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	6	9
	100 %	100 %	85.7 %	90 %
Selected	0	0	1	1
	0 %	0 %	14.3 %	10 %
Total	2	1	7	10

Table 75. Limited time given to prepare bid package or quote

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	4	7
	100 %	100 %	57.1 %	70 %
Selected	0	0	3	3
	0 %	0 %	42.9 %	30 %
Total	2	1	7	10

Table 76. Limited knowledge of purchasing/contracting policies and procedures

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	5	8
	100 %	100 %	71.4 %	80 %
Selected	0	0	2	2
	0 %	0 %	28.6 %	20 %
Total	2	1	7	10

Table 77. Language Barriers

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 78. Lack of experience

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	1	1	7	9
	50 %	100 %	100 %	90 %
Selected	1	0	0	1
	50 %	0 %	0 %	10 %
Total	2	1	7	10

Table 79. Lack of personnel

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 80. Contract too large

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 81. Contract too expensive to bid

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 82. Selection process

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	2	1	7	10
	100 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 83. Not certified

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	2	1	5	8
	100 %	100 %	71.4 %	80 %
Selected	0	0	2	2
	0 %	0 %	28.6 %	20 %
Total	2	1	7	10

Table 84. Competition with large companies

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	5	8
	100 %	100 %	71.4 %	80 %
Selected	0	0	2	2
	0 %	0 %	28.6 %	20 %
Total	2	1	7	10

Table 85. Other:

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	2	1	5	8
	100 %	100 %	71.4 %	80 %
Selected	0	0	2	2
	0 %	0 %	28.6 %	20 %
Total	2	1	7	10

Table 86. What is the amount of time that it typically takes to receive payment, from the date you submit your invoice, from the City of Cambridge for your services on City of Cambridge projects?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
30 days or less	0	0	0	0
	0 %	0 %	0 %	0 %
31-60 days	0	0	0	0
	0 %	0 %	0 %	0 %
61-90 days	0	0	0	0
	0 %	0 %	0 %	0 %
91-120 days	0	0	0	0
	0 %	0 %	0 %	0 %
Over 120 days	0	0	1	1
	0 %	0 %	100 %	50 %
Do Not Know	0	0	0	0
	0 %	0 %	0 %	0 %
Not Applicable	0	1	0	1
	0 %	100 %	0 %	50 %
Total	0	1	1	2

Table 87. What is the amount of time that it typically takes to receive payment, from the date you submit your invoice, from the prime contractor for your services on the City of Cambridge projects?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
30 days or less	0	0	0	0
	0 %	0 %	0 %	0 %
31-60 days	0	0	1	1
	0 %	0 %	50 %	33.3 %
61-90 days	0	0	0	0
	0 %	0 %	0 %	0 %
91-120 days	0	0	1	1
	0 %	0 %	50 %	33.3 %
Do Not Know	0	0	0	0
	0 %	0 %	0 %	0 %
Not Applicable	0	1	0	1
	0 %	100 %	0 %	33.3 %
Total	0	1	2	3

Table 88. Is your company a certified Minority or Woman-Owned business?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Yes	1	1	5	7
	50 %	100 %	71.4 %	70 %
No	1	0	2	3
	50 %	0 %	28.6 %	30 %
Total	2	1	7	10

Table 89. MBE (Minority Business Enterprise)

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Yes	0	0	5	5
	0 %	0 %	100 %	71.4 %
No	1	1	0	2
	100 %	100 %	0 %	28.6 %
N/A	0	0	0	0
	0 %	0 %	0 %	0 %
Total	1	1	5	7

Table 90. WBE (Women Business Enterprise)

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Yes	0	1	0	1
	0 %	100 %	0 %	14.3 %
No	1	0	3	4
	100 %	0 %	60 %	57.1 %
N/A	0	0	2	2
	0 %	0 %	40 %	28.6 %
Total	1	1	5	7

Table 91. VBE (Veteran Business Enterprise)

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Yes	1	0	5	6
	100 %	0 %	100 %	85.7 %
No	0	0	0	0
	0 %	0 %	0 %	0 %
N/A	0	1	0	1
	0 %	100 %	0 %	14.3 %
Total	1	1	5	7

Table 92. Why is your company not certified as a Minority, Woman, or Veteran business? Please check all that apply. [I do not understand the certification process]

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	2	2
	0 %	0 %	100 %	66.7 %
Selected	1	0	0	1
	100 %	0 %	0 %	33.3 %
Total	1	0	2	3

Table 93. We do not meet one or more of the requirements for certification

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	1	0	2	3
	100 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	1	0	2	3

Table 94. Certification is too expensive

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	1	0	1	2
	100 %	0 %	50 %	66.7 %
Selected	0	0	1	1
	0 %	0 %	50 %	33.3 %
Total	1	0	2	3

Table 95. I do not want governmental agencies to have information about my company

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	1	0	1	2
	100 %	0 %	50 %	66.7 %
Selected	0	0	1	1
	0 %	0 %	50 %	33.3 %
Total	1	0	2	3

Table 96. I have not had time to get certified/the process is too time-consuming

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	1	0	2	3
	100 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	1	0	2	3

Table 97. Certification does not benefit and/or will negatively impact my company

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	1	0	2	3
	100 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	1	0	2	3

Table 98. Do not understand how certification can benefit my company

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	1	0	2	3
	100 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	1	0	2	3

Table 99. Between July 1, 2017 and June 30, 2021, did your company apply for and receive any of the following? [Business start-up loan?]				
Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Never Applied	2	0	7	9
	100 %	0 %	100 %	90 %
Applied, Never Approved	0	1	0	1
	0 %	100 %	0 %	10 %
Applied, Some Approved	0	0	0	0
	0 %	0 %	0 %	0 %
Applied, All Approved	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 100. Operating capital loan?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Never Applied	1	0	5	6
	50 %	0 %	71.4 %	60 %
Applied, Never Approved	0	0	1	1
	0 %	0 %	14.3 %	10 %
Applied, Some Approved	0	1	0	1
	0 %	100 %	0 %	10 %
Applied, All Approved	1	0	1	2
	50 %	0 %	14.3 %	20 %
Total	2	1	7	10

Table 101. Equipment loan?				
	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Never Applied	2	0	4	6
	100 %	0 %	57.1 %	60 %
Applied, Never Approved	0	0	1	1
	0 %	0 %	14.3 %	10 %
Applied, Some Approved	0	1	0	1
	0 %	100 %	0 %	10 %
Applied, All Approved	0	0	2	2
	0 %	0 %	28.6 %	20 %
Total	2	1	7	10

Table 102. Commercial/Professional liability insurance?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Never Applied	1	1	3	5
	50 %	100 %	42.9 %	50 %
Applied, Never Approved	0	0	0	0
	0 %	0 %	0 %	0 %
Applied, Some Approved	0	0	1	1
	0 %	0 %	14.3 %	10 %
Applied, All Approved	1	0	3	4
	50 %	0 %	42.9 %	40 %
Total	2	1	7	10

Table 103. PPP (Paycheck Protection Program loan)?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Never Applied	1	1	2	4
	50 %	100 %	28.6 %	40 %
Applied, Never Approved	0	0	0	0
	0 %	0 %	0 %	0 %
Applied, Some Approved	0	0	0	0
	0 %	0 %	0 %	0 %
Applied, All Approved	1	0	5	6
	50 %	0 %	71.4 %	60 %
Total	2	1	7	10

Table 104. Other local or state grant/loan program?				
Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Never Applied	2	1	4	7
	100 %	100 %	57.1 %	70 %
Applied, Never Approved	0	0	2	2
	0 %	0 %	28.6 %	20 %
Applied, Some Approved	0	0	0	0
	0 %	0 %	0 %	0 %
Applied, All Approved	0	0	1	1
	0 %	0 %	14.3 %	10 %
Total	2	1	7	10

Table 105. What was the largest commercial loan you received from July 1, 2017 through June 30, 2021?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
\$50,000 or less	0	0	1	1
	0 %	0 %	14.3 %	10 %
\$50,001 - \$100,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$100,001 - \$300,000	1	0	1	2
	50 %	0 %	14.3 %	20 %
\$300,001 - \$500,000	0	0	1	1
	0 %	0 %	14.3 %	10 %
\$500,001 - \$1,000,000	0	0	1	1
	0 %	0 %	14.3 %	10 %
\$1,000,001 - \$3,000,000	0	0	1	1
	0 %	0 %	14.3 %	10 %
\$3,000,001 - \$5,000,000	0	0	0	0
	0 %	0 %	0 %	0 %
\$5,000,001 to \$10,000,000	0	0	0	0
	0 %	0 %	0 %	0 %
Over \$10,000,000	0	0	1	1
	0 %	0 %	14.3 %	10 %

Table 105. What was the largest commercial loan you received from July 1, 2017 through June 30, 2021?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Do Not Know	1	0	0	1
	50 %	0 %	0 %	10 %
Not Applicable	0	1	1	2
	0 %	100 %	14.3 %	20 %
Total	2	1	7	10

Table 106. How many times has your company been denied a commercial (business) bank loan from July 01, 2017, through June 30, 2021?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
None	2	0	3	5
	100 %	0 %	42.9 %	50 %
1-10	0	0	1	1
	0 %	0 %	14.3 %	10 %
11-25	0	0	0	0
	0 %	0 %	0 %	0 %
26-50	0	0	0	0
	0 %	0 %	0 %	0 %
51-100	0	0	1	1
	0 %	0 %	14.3 %	10 %
Over 100	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know	0	0	1	1
	0 %	0 %	14.3 %	10 %
Not Applicable	0	1	1	2
	0 %	100 %	14.3 %	20 %
Total	2	1	7	10

Table 107. Of the items your company was denied, what was the denial reason? (Please check all that apply) [Business start-up loan?] [Insufficient Documentation]

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	1	0	1
	0 %	100 %	0 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	1	0	1

Table 108. Insufficient Business History

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	1	0	1
	0 %	100 %	0 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	1	0	1

Table 109. Confusion about Process

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	1	0	1
	0 %	100 %	0 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	1	0	1

Table 110. Credit History

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	1	0	1
	0 %	100 %	0 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	1	0	1

Table 111. Do Not Know

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	1	0	1
	0 %	100 %	0 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	1	0	1

Table 112. N/A

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Selected	0	1	0	1
	0 %	100 %	0 %	100 %
Total	0	1	0	1

Table 113. Of the items your company was denied, what was the denial reason? (Please check all that apply) [Operating capital loan?] [Insufficient Documentation]

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	1	1	2
	0 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	1	1	2

Table 114. Insufficient Business History

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	1	1	2
	0 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	1	1	2

Table 115. Confusion about Process

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	1	1	2
	0 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	1	1	2

Table 116. Credit History

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	1	0	1
	0 %	100 %	0 %	50 %
Selected	0	0	1	1
	0 %	0 %	100 %	50 %
Total	0	1	1	2

Table 117. Do Not Know

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	1	1	2
	0 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	1	1	2

Table 118. N/A

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	1	1
	0 %	0 %	100 %	50 %
Selected	0	1	0	1
	0 %	100 %	0 %	50 %
Total	0	1	1	2

Table 119. Of the items your company was denied, what was the denial reason? (Please check all that apply) [Equipment loan?] [Insufficient Documentation]

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	1	1	2
	0 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	1	1	2

Table 120. Insufficient Business History

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	1	1	2
	0 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	1	1	2

Table 121. Confusion about Process

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	1	1	2
	0 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	1	1	2

Table 122. Credit History

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	1	0	1
	0 %	100 %	0 %	50 %
Selected	0	0	1	1
	0 %	0 %	100 %	50 %
Total	0	1	1	2

Table 123. Do Not Know

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	1	1	2
	0 %	100 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	1	1	2

Table 124. N/A

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	1	1
	0 %	0 %	100 %	50 %
Selected	0	1	0	1
	0 %	100 %	0 %	50 %
Total	0	1	1	2

Table 125. Of the items your company was denied, what was the denial reason? (Please check all that apply) [Commercial/Professional liability insurance?] [Insufficient Documentation]

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	0	0	1	1
	0 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	1	1

Table 126. Insufficient Business History

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	0	0	1	1
	0 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	1	1

Table 127. Confusion about Process

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	0	0	1	1
	0 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	1	1

Table 128. Credit History

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	0	0	1	1
	0 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	1	1

Table 129. Do Not Know

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Selected	0	0	1	1
	0 %	0 %	100 %	100 %
Total	0	0	1	1

Table 130. N/A

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	1	1
	0 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	1	1

Table 131. Of the items your company was denied, what was the denial reason? (Please check all that apply) [PPP (Paycheck Protection Program Loan)?] [Insufficient Documentation]

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	0	0

Table 132. Insufficient Business History

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	0	0

Table 133. Confusion about Process

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	0	0

Table 134. Credit History

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	0	0

Table 135. Do Not Know

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	0	0

Table 136. N/A

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	0	0

Table 137. Of the items your company was denied, what was the denial reason? (Please check all that apply) [Other local or state grant/loan program?] [Insufficient Documentation]

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	0	0	2	2
	0 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	2	2

Table 138. Insufficient Business History

	<i>Owners' Minority Status</i>			
Responses	Caucasian	Woman	African American	Total
Not Selected	0	0	2	2
	0 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	2	2

Table 139. Confusion about Process

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	2	2
	0 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	2	2

Table 140. Credit History

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	2	2
	0 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	2	2

Table 141. Do Not Know

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Selected	0	0	2	2
	0 %	0 %	100 %	100 %
Total	0	0	2	2

Table 142. N/A

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Not Selected	0	0	2	2
	0 %	0 %	100 %	100 %
Selected	0	0	0	0
	0 %	0 %	0 %	0 %
Total	0	0	2	2

Table 143. From July 1, 2017 through June 30, 2021, how often has your company experienced any racial, gender, or ethnicity discriminatory behavior from any private businesses within the Boston Metropolitan Area (i.e., non-governmental entities)?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Never	1	0	3	4
	50 %	0 %	42.9 %	40 %
Seldom	0	0	0	0
	0 %	0 %	0 %	0 %
Often	0	0	2	2
	0 %	0 %	28.6 %	20 %
Very Often	0	0	1	1
	0 %	0 %	14.3 %	10 %
Do Not Know	1	1	1	3
	50 %	100 %	14.3 %	30 %
Total	2	1	7	10

Table 144. From July 1, 2017 through June 30, 2021, how often has your company experienced any racial, gender, or ethnicity discriminatory behavior from The City of Cambridge?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Never	1	0	3	4
	50 %	0 %	42.9 %	40 %
Seldom	0	0	0	0
	0 %	0 %	0 %	0 %
Often	0	0	2	2
	0 %	0 %	28.6 %	20 %
Very Often	0	0	0	0
	0 %	0 %	0 %	0 %
Do Not Know	1	1	2	4
	50 %	100 %	28.6 %	40 %
Total	2	1	7	10

Table 145. From July 1, 2017, through June 30, 2021, how often has your company experienced any racial, gender, or ethnicity discriminatory behavior from governmental entities within the Greater Boston Area other than the City of Cambridge?

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Never	0	0	4	4
	0 %	0 %	57.1 %	40 %
Seldom	0	0	0	0
	0 %	0 %	0 %	0 %
Often	1	0	1	2
	50 %	0 %	14.3 %	20 %
Very Often	0	0	1	1
	0 %	0 %	14.3 %	10 %
Do Not Know	1	1	1	3
	50 %	100 %	14.3 %	30 %
Total	2	1	7	10

Table 146. Do you believe there is an informal network of prime and subcontractors doing business with the City of Cambridge that monopolizes the public contracting process? Informal network are firms with an advantage due to their relationships in the City.

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Yes	2	0	5	7
	100 %	0 %	71.4 %	70 %
No	0	1	2	3
	0 %	100 %	28.6 %	30 %
Total	2	1	7	10

Table 147. Please tell us if you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with each of the following statements: [Double standards in qualifications and work performance make it more difficult for Minority and/or Woman-Owned businesses to win bids or contracts.]

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Strongly agree	0	0	3	3
	0 %	0 %	42.9 %	30 %
Agree	0	0	0	0
	0 %	0 %	0 %	0 %
Neither agree nor disagree	1	1	4	6
	50 %	100 %	57.1 %	60 %
Disagree	0	0	0	0
	0 %	0 %	0 %	0 %
Strongly disagree	1	0	0	1
	50 %	0 %	0 %	10 %
Total	2	1	7	10

Table 148. Please tell us if you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with each of the following statements: [The City of Cambridge is generally accommodating to the language needs of its vendor community.]

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Strongly agree	0	0	0	0
	0 %	0 %	0 %	0 %
Agree	0	0	2	2
	0 %	0 %	28.6 %	20 %
Neither agree nor disagree	2	1	5	8
	100 %	100 %	71.4 %	80 %
Disagree	0	0	0	0
	0 %	0 %	0 %	0 %
Strongly disagree	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Table 149. Please tell us if you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with each of the following statements: [Sometimes, a prime contractor will contact a Minority and/or Woman-Owned company to ask for quotes, but never give the proposal sufficient review to consider giving that company the award.]

Responses	<i>Owners' Minority Status</i>			<i>Total</i>
	Caucasian	Woman	African American	
Strongly agree	0	0	3	3
	0 %	0 %	42.9 %	30 %
Agree	1	0	1	2
	50 %	0 %	14.3 %	20 %
Neither agree nor disagree	1	1	3	5
	50 %	100 %	42.9 %	50 %
Disagree	0	0	0	0
	0 %	0 %	0 %	0 %
Strongly disagree	0	0	0	0
	0 %	0 %	0 %	0 %
Total	2	1	7	10

Appendix E

Availability Numbers

Appendix E - Availability Numbers

Tables E-1 through E-3 presents numbers on MWBE availability corresponding to the availability percentages in Figures 1- 3 in the Quantitative Analysis chapter. The availability methodology for creating the Master Vendor table for these availability tables is contained in the Quantitative Analysis chapter.

Table E-1: *Availability of Firms by Business Ownership in Market Area*
Professional Services - Master Vendor List
Cambridge Disparity Study

Business Ownership Classification	Number of Firms	Percent of Firms
Black American	1	0.43%
Asian American	0	0.00%
Hispanic American	1	0.43%
Native American	0	0.00%
Portuguese American	0	0.00%
TOTAL MBE	2	0.85%
Nonminority Female	10	4.26%
TOTAL M/WBE	12	5.11%
NON-M/WBE	223	94.89%
TOTAL FIRMS	235	100.00%

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Table E-2: *Availability of Firms by Business Ownership in Market Area*
Prime Data, Other Services - Master Vendor List
Cambridge Disparity Study

Business Ownership Classification	Number of Firms	Percent of Firms
Black American	14	1.12%
Asian American	24	1.92%
Hispanic American	11	0.88%
Native American	5	0.40%
Portuguese American	0	0.00%
TOTAL MBE	54	4.31%
Nonminority Female	61	4.87%
TOTAL M/WBE	115	9.18%
NON-M/WBE	1,138	90.82%
TOTAL FIRMS	1,253	100.00%

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Table E-3: *Availability of Firms by Business Ownership in Market Area*
 Prime Data, Supplies - Master Vendor
 List Cambridge Disparity Study

Business Ownership Classification	Number of Firms	Percent of Firms
Black American	1	0.09%
Asian American	1	0.09%
Hispanic American	2	0.19%
Native American	0	0.00%
Portuguese American	0	0.00%
TOTAL MBE	4	0.37%
Nonminority Female	29	2.72%
TOTAL M/WBE	33	3.09%
NON-M/WBE	1,035	96.91%
TOTAL FIRMS	1,068	100.00%

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Appendix F

Disparity Ratios

Appendix F - Disparity Ratios

The tables in Appendix F (Tables F-1 through F-3) presents prime disparity ratios on Cambridge projects by year over the Study Period, prime disparity ratios for projects less than \$500,000 (Tables F-4 through F-6), and prime disparity ratios for projects less than \$1,000,000 (Tables F-7 through F-9).

There was underutilization in prime contracts for all MWBEs groups, except Hispanic American owned firms in Professional Services.

There was disparity for all MWBE groups for prime payments less than \$500,000 and less than \$1 million for all procurement categories, except that Asian American **owned firms** were overutilized in Other Services for projects less than \$500,000 and less than \$1,000,000.

There was no availability for a MWBE group in boxes with a “n/a”.

Non-MWBEs were overutilized in Prime Utilization.

CAMBRIDGE, MA 2023 DISPARITY STUDY

Table F-1: Disparity Results, Relevant Market Area, Master Vendor List
 Business Ownership Classification by Fiscal Year, Prime Professional Services
 Using Payment Dollars, FY 2017-2021
 Cambridge Disparity Study

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2017	Black American	0.00%	0.42%	0.00	Underutilization	*	
	Asian American	0.00%	0.42%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.42%	0.00	Underutilization	*	
	Native American	0.00%	0.00%		n/a		
	Portuguese American	0.00%	0.00%		n/a		
	TOTAL MBE	0.00%	1.27%	0.00	Underutilization	*	
	Nonminority Female	0.87%	5.06%	17.16	Underutilization	*	
	TOTAL M/WBE	0.87%	6.33%	13.73	Underutilization	*	
Non M/WBE	99.13%	93.67%	105.83	Overutilization			
2018	Black American	0.00%	0.42%	0.00	Underutilization	*	
	Asian American	0.00%	0.42%	0.00	Underutilization	*	
	Hispanic American	5.13%	0.42%	1216.90	Overutilization		
	Native American	0.00%	0.00%		n/a		
	Portuguese American	0.00%	0.00%		n/a		
	TOTAL MBE	5.13%	1.27%	405.63	Overutilization		
	Nonminority Female	2.59%	5.06%	51.07	Underutilization	*	
	TOTAL M/WBE	7.72%	6.33%	121.98	Overutilization		
Non M/WBE	92.28%	93.67%	98.51	Underutilization			
2019	Black American	0.79%	0.42%	186.23	Overutilization		
	Asian American	0.00%	0.42%	0.00	Underutilization	*	
	Hispanic American	1.94%	0.42%	460.81	Overutilization		
	Native American	0.00%	0.00%		n/a		
	Portuguese American	0.00%	0.00%		n/a		
	TOTAL MBE	2.73%	1.27%	215.68	Overutilization		
	Nonminority Female	1.13%	5.06%	22.25	Underutilization	*	
	TOTAL M/WBE	3.86%	6.33%	60.94	Underutilization	*	
Non M/WBE	96.14%	93.67%	102.64	Overutilization			
2020	Black American	0.00%	0.42%	0.00	Underutilization	*	
	Asian American	0.00%	0.42%	0.00	Underutilization	*	
	Hispanic American	0.35%	0.42%	83.15	Underutilization		
	Native American	0.00%	0.00%		n/a		
	Portuguese American	0.00%	0.00%		n/a		
	TOTAL MBE	0.35%	1.27%	27.72	Underutilization	*	
	Nonminority Female	1.73%	5.06%	34.27	Underutilization	*	
	TOTAL M/WBE	2.09%	6.33%	32.96	Underutilization	*	
Non M/WBE	97.91%	93.67%	104.53	Overutilization			
2021	Black American	0.27%	0.42%	64.01	Underutilization	*	
	Asian American	0.00%	0.42%	0.00	Underutilization	*	
	Hispanic American	0.30%	0.42%	71.63	Underutilization	*	
	Native American	0.00%	0.00%		n/a		
	Portuguese American	0.00%	0.00%		n/a		
	TOTAL MBE	0.57%	1.27%	45.21	Underutilization	*	
	Nonminority Female	0.63%	5.06%	12.52	Underutilization	*	
	TOTAL M/WBE	1.21%	6.33%	19.06	Underutilization	*	
Non M/WBE	98.79%	93.67%	105.47	Overutilization			
Total	Black American	0.24%	0.42%	56.08	Underutilization	*	
	Asian American	0.00%	0.42%	0.00	Underutilization	*	p < .05
	Hispanic American	1.47%	0.42%	347.58	Overutilization		
	Native American	0.00%	0.00%		n/a		#DIV/0!
	Portuguese American	0.00%	0.00%		n/a		#DIV/0!
	TOTAL MBE	1.70%	1.27%	134.55	Overutilization		FALSE
	Nonminority Female	1.33%	0.00%		n/a		p < .05
	TOTAL M/WBE	3.03%	6.33%	47.85	Underutilization	*	p < .05
Non M/WBE	96.97%	93.67%	103.52	Overutilization			

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CAMBRIDGE, MA 2023 DISPARITY STUDY

Table F-2: Disparity Results, Relevant Market Area, Master Vendor List
 Business Ownership Classification by Fiscal Year, Prime Other Services
 Using Payment Dollars, FY 2017-2021
 Cambridge Disparity Study

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2017	Black American	0.00%	0.80%	0.00	Underutilization	*	
	Asian American	0.35%	1.92%	18.01	Underutilization	*	
	Hispanic American	0.00%	0.56%	0.00	Underutilization	*	
	Native American	0.03%	0.24%	10.45	Underutilization	*	
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	0.37%	3.52%	10.54	Under utilization	*	
	Nonminority Female	1.22%	4.00%	30.46	Underutilization	*	
	Unidentified Minority	#REF!	#REF!	-	n/a		
	TOTAL M/WBE	1.59%	7.52%	21.13	Under utilization	*	
	Non M/WBE	98.41%	92.48%	106.41	Overutilization		
2018	Black American	0.00%	0.80%	0.00	Underutilization	*	
	Asian American	0.28%	1.92%	14.63	Underutilization	*	
	Hispanic American	0.00%	0.56%	0.00	Underutilization	*	
	Native American	0.00%	0.24%	0.00	Underutilization	*	
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	0.28%	3.52%	7.98	Under utilization	*	
	Nonminority Female	0.79%	4.00%	19.64	Underutilization	*	
	Unidentified Minority	#REF!	#REF!	-	n/a		
	TOTAL M/WBE	1.07%	7.52%	14.18	Under utilization	*	
	Non M/WBE	98.93%	92.48%	106.98	Overutilization		
2019	Black American	0.00%	0.80%	0.00	Underutilization	*	
	Asian American	0.51%	1.92%	26.41	Underutilization	*	
	Hispanic American	0.00%	0.56%	0.00	Underutilization	*	
	Native American	0.00%	0.24%	0.00	Underutilization	*	
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	0.51%	3.52%	14.41	Under utilization	*	
	Nonminority Female	1.09%	4.00%	27.33	Underutilization	*	
	TOTAL M/WBE	1.60%	7.52%	21.28	Under utilization	*	
	Non M/WBE	98.40%	92.48%	106.40	Overutilization		
	2020	Black American	0.00%	0.80%	0.00	Underutilization	*
Asian American		0.88%	1.92%	45.60	Underutilization	*	
Hispanic American		0.00%	0.56%	0.00	Underutilization	*	
Native American		0.00%	0.24%	0.00	Underutilization	*	
Portuguese American		0.00%	0.00%	-	n/a		
TOTAL MBE		0.88%	3.52%	24.87	Under utilization	*	
Nonminority Female		0.14%	4.00%	3.43	Underutilization	*	
TOTAL M/WBE		1.01%	7.52%	13.47	Under utilization	*	
Non M/WBE		98.99%	92.48%	107.04	Overutilization		
2021		Black American	0.04%	0.80%	5.00	Underutilization	*
	Asian American	1.07%	1.92%	55.74	Underutilization	*	
	Hispanic American	0.00%	0.56%	0.00	Underutilization	*	
	Native American	0.00%	0.24%	0.00	Underutilization	*	
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	1.11%	3.52%	31.54	Under utilization	*	
	Nonminority Female	0.41%	4.00%	10.34	Underutilization	*	
	TOTAL M/WBE	1.52%	7.52%	20.26	Under utilization	*	
	Non M/WBE	98.48%	92.48%	106.48	Overutilization		
	Total	Black American	0.01%	0.80%	1.14	Underutilization	*
Asian American		0.64%	1.92%	33.47	Underutilization	*	p < .05
Hispanic American		0.00%	0.56%	0.00	Underutilization	*	p < .05
Native American		0.00%	0.24%	1.80	Underutilization	*	FALSE
Portuguese American		0.00%	0.00%	-	n/a		#0M/0I
TOTAL MBE		0.66%	3.52%	18.64	Under utilization	*	p < .05
Nonminority Female		0.70%	4.00%	17.44	Underutilization	*	p < .05
TOTAL M/WBE		1.35%	7.52%	18.00	Under utilization	*	p < .05
Non M/WBE		98.65%	92.48%	106.67	Overutilization		

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CAMBRIDGE, MA 2023 DISPARITY STUDY

Table F-3: Disparity Results, Relevant Market Area, Master Vendor List
 Business Ownership Classification by Fiscal Year, Prime Supplies
 Using Payment Dollars, FY 2017-2021
 Cambridge Disparity Study

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparity Impact of Utilization	Less than 80%	Statistical Significance
2017	Black American	0.00%	0.09%	0.00	Underutilization	*	
	Asian American	0.00%	0.09%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.19%	0.00	Underutilization	*	
	Native American	0.00%	0.00%	- n/a			
	Portuguese American	0.00%	0.00%	- n/a			
	TOTAL MBE	0.00%	0.37%	0.00	Underutilization	*	
	Nonminority Female	0.30%	2.72%	11.15	Underutilization	*	
	TOTAL M/WBE	0.30%	3.09%	9.80	Underutilization	*	
Non M/WBE	99.70%	96.91%	102.88	Overutilization			
2018	Black American	0.00%	0.09%	0.00	Underutilization	*	
	Asian American	0.00%	0.09%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.19%	0.00	Underutilization	*	
	Native American	0.00%	0.00%	- n/a			
	Portuguese American	0.00%	0.00%	- n/a			
	TOTAL MBE	0.00%	0.37%	0.00	Underutilization	*	
	Nonminority Female	0.18%	2.72%	6.70	Underutilization	*	
	TOTAL M/WBE	0.18%	3.09%	5.89	Underutilization	*	
Non M/WBE	99.82%	96.91%	103.00	Overutilization			
2019	Black American	0.00%	0.09%	0.00	Underutilization	*	
	Asian American	#REF!	0.09%	- n/a			
	Hispanic American	0.00%	0.19%	0.00	Underutilization	*	
	Native American	0.00%	0.00%	- n/a			
	Portuguese American	0.00%	0.00%	- n/a			
	TOTAL MBE	0.00%	0.37%	0.00	Underutilization	*	
	Nonminority Female	0.52%	2.72%	19.26	Underutilization	*	
	TOTAL M/WBE	0.52%	3.09%	16.92	Underutilization	*	
Non M/WBE	99.48%	96.91%	102.65	Overutilization			
2020	Black American	0.00%	0.09%	0.00	Underutilization	*	
	Asian American	0.00%	0.09%	0.00	Underutilization	*	
	Hispanic American	0.14%	0.19%	72.59	Underutilization	*	
	Native American	0.00%	0.00%	- n/a			
	Portuguese American	0.00%	0.00%	- n/a			
	TOTAL MBE	0.14%	0.37%	36.29	Underutilization	*	
	Nonminority Female	1.06%	2.72%	39.08	Underutilization	*	
	TOTAL M/WBE	1.20%	3.09%	38.74	Underutilization	*	
Non M/WBE	98.80%	96.91%	101.95	Overutilization			
2021	Black American	0.00%	0.09%	0.00	Underutilization	*	
	Asian American	0.00%	0.09%	0.00	Underutilization	*	
	Hispanic American	0.01%	0.19%	3.72	Underutilization	*	
	Native American	0.00%	0.00%	- n/a			
	Portuguese American	0.00%	0.00%	- n/a			
	TOTAL MBE	0.01%	0.37%	1.86	Underutilization	*	
	Nonminority Female	0.21%	2.72%	7.66	Underutilization	*	
	Unidentified Minority	#REF!	#REF!	- n/a			
TOTAL M/WBE	0.21%	3.09%	6.96	Underutilization	*		
Non M/WBE	99.79%	96.91%	102.97	Overutilization			
Total	Black American	0.00%	0.09%	0.00	Underutilization	*	FALSE
	Asian American	0.00%	0.09%	0.00	Underutilization	*	FALSE
	Hispanic American	0.03%	0.19%	15.13	Underutilization	*	FALSE
	Native American	0.00%	0.00%	- n/a			#DIV/0!
	Portuguese American	0.00%	0.00%	- n/a			#DIV/0!
	TOTAL MBE	0.03%	0.37%	7.57	Underutilization	*	p < .05
	Nonminority Female	0.43%	2.72%	16.01	Underutilization	*	p < .05
	TOTAL M/WBE	0.46%	3.09%	14.99	Underutilization	*	p < .05
Non M/WBE	99.54%	96.91%	102.71	Overutilization			

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CAMBRIDGE, MA 2023 DISPARITY STUDY

Table F-4: *Disparity Results, Relevant Market Area, Master Vendor List*
 Business Ownership Classification by Fiscal Year, Professional Services
 Using Awards Dollars, FY 2017-2021, Less than \$500,000
 Cambridge Disparity Study

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2017	Black American	#DIV/0!	0.42%	-	n/a		
	Asian American	#DIV/0!	0.42%	-	n/a		
	Hispanic American	#DIV/0!	0.42%	-	n/a		
	Native American	#DIV/0!	0.00%	-	n/a		
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	#DIV/0!	1.27%	-	n/a		
	Non minority Female	#DIV/0!	5.06%	-	n/a		
	TOTAL M/WBE	#DIV/0!	6.33%	-	n/a		
Non M/WBE	#DIV/0!	93.67%	-	n/a			
2018	Black American	0.00%	0.42%	0.00	Underutilization	*	
	Asian American	0.00%	0.42%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.42%	0.00	Underutilization	*	
	Native American	0.00%	0.00%	-	n/a		
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	0.00%	1.27%	0.00	Underutilization	*	
	Non minority Female	0.00%	5.06%	0.00	Underutilization	*	
	TOTAL M/WBE	0.00%	6.33%	0.00	Underutilization	*	
Non M/WBE	100.00%	93.67%	106.76	Overutilization			
2019	Black American	0.00%	0.42%	0.00	Underutilization	*	
	Asian American	0.00%	0.42%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.42%	0.00	Underutilization	*	
	Native American	0.00%	0.00%	-	n/a		
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	0.00%	1.27%	0.00	Underutilization	*	
	Non minority Female	0.00%	5.06%	0.00	Underutilization	*	
	TOTAL M/WBE	0.00%	6.33%	0.00	Underutilization	*	
Non M/WBE	100.00%	93.67%	106.76	Overutilization			
2020	Black American	0.00%	0.42%	0.00	Underutilization	*	
	Asian American	0.00%	0.42%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.42%	0.00	Underutilization	*	
	Native American	0.00%	0.00%	-	n/a		
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	0.00%	1.27%	0.00	Underutilization	*	
	Non minority Female	4.48%	5.06%	88.58	Underutilization		
	TOTAL M/WBE	4.48%	6.33%	70.86	Underutilization	*	
Non M/WBE	95.52%	93.67%	101.97	Overutilization			
2021	Black American	0.00%	0.42%	0.00	Underutilization	*	
	Asian American	0.00%	0.42%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.42%	0.00	Underutilization	*	
	Native American	0.00%	0.00%	-	n/a		
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	0.00%	1.27%	0.00	Underutilization	*	
	Non minority Female	0.00%	5.06%	0.00	Underutilization	*	
	TOTAL M/WBE	0.00%	6.33%	0.00	Underutilization	*	
Non M/WBE	100.00%	93.67%	106.76	Overutilization			
Total	Black American	0.00%	0.42%	0.00	Underutilization	*	p < .05
	Asian American	0.00%	0.42%	0.00	Underutilization	*	p < .05
	Hispanic American	0.00%	0.42%	0.00	Underutilization	*	p < .05
	Native American	0.00%	0.00%	-	n/a		#DIV/0!
	Portuguese American	0.00%	0.00%	-	n/a		#DIV/0!
	TOTAL MBE	0.00%	1.27%	0.00	Underutilization	*	p < .05
	Non minority Female	0.00%	5.06%	-	n/a		p < .05
	TOTAL M/WBE	0.42%	6.33%	6.60	Underutilization	*	p < .05
Non M/WBE	99.58%	93.67%	106.31	Overutilization			

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CAMBRIDGE, MA 2023 DISPARITY STUDY

Table F-5: Disparity Results, Relevant Market Area, Master Vendor List
 Business Ownership Classification by Fiscal Year, Other Services
 Using Awards Dollars, FY 2017-2021, Less than \$500,000
 Cambridge Disparity Study

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2017	Black American	0.00%	0.80%	0.00	Underutilization	*	
	Asian American	0.00%	1.92%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.56%	0.00	Underutilization	*	
	Native American	0.00%	0.24%	0.00	Underutilization	*	
	Portuguese American	0.00%	0.00%				
	TOTAL MBE	0.00%	3.52%	0.00	Underutilization	*	
	Nonminority Female	2.60%	4.00%	65.02	Underutilization	*	
	TOTAL M/WBE	2.60%	7.52%	34.58	Underutilization	*	
	Non M/WBE	97.40%	92.48%	105.32	Ove rutilization		
	2018	Black American	0.00%	0.80%	0.00	Underutilization	*
Asian American		0.91%	1.92%	47.35	Underutilization	*	
Hispanic American		0.00%	0.56%	0.00	Underutilization	*	
Native American		0.00%	0.24%	0.00	Underutilization	*	
Portuguese American		0.00%	0.00%		n/a		
TOTAL MBE		0.91%	3.52%	25.83	Underutilization	*	
Nonminority Female		4.45%	4.00%	11.125	Ove rutilization		
TOTAL M/WBE		5.36%	7.52%	7.127	Underutilization	*	
Non M/WBE		94.64%	92.48%	102.34	Ove rutilization		
2019		Black American	0.00%	0.80%	0.00	Underutilization	*
	Asian American	1.79%	1.92%	93.00	Underutilization	*	
	Hispanic American	0.00%	0.56%	0.00	Underutilization	*	
	Native American	0.00%	0.24%	0.00	Underutilization	*	
	Portuguese American	0.00%	0.00%		n/a		
	TOTAL MBE	1.79%	3.52%	50.73	Underutilization	*	
	Nonminority Female	0.00%	4.00%	0.00	Underutilization	*	
	TOTAL M/WBE	1.79%	7.52%	23.75	Underutilization	*	
	Non M/WBE	98.21%	92.48%	106.20	Ove rutilization		
	2020	Black American	0.00%	0.80%	0.00	Underutilization	*
Asian American		4.67%	1.92%	243.08	Ove rutilization		
Hispanic American		0.00%	0.56%	0.00	Underutilization	*	
Native American		0.00%	0.24%	0.00	Underutilization	*	
Portuguese American		0.00%	0.00%		n/a		
TOTAL MBE		4.67%	3.52%	132.59	Ove rutilization		
Nonminority Female		0.00%	4.00%	0.00	Underutilization	*	
TOTAL M/WBE		4.67%	7.52%	62.06	Underutilization	*	
Non M/WBE		95.33%	92.48%	103.08	Ove rutilization		
2021		Black American	0.00%	0.80%	0.00	Underutilization	*
	Asian American	5.69%	1.92%	296.22	Ove rutilization		
	Hispanic American	0.00%	0.56%	0.00	Underutilization	*	
	Native American	0.00%	0.24%	0.00	Underutilization	*	
	Portuguese American	0.00%	0.00%		n/a		
	TOTAL MBE	5.69%	3.52%	161.58	Ove rutilization		
	Nonminority Female	0.84%	4.00%	21.03	Underutilization	*	
	TOTAL M/WBE	6.53%	7.52%	86.82	Underutilization	*	
	Non M/WBE	93.47%	92.48%	101.07	Ove rutilization		
	Total	Black American	0.00%	0.80%	0.00	Underutilization	*
Asian American		3.42%	1.92%	178.04	Ove rutilization		
Hispanic American		0.00%	0.56%	0.00	Underutilization	*	p < .05
Native American		0.00%	0.24%	0.00	Underutilization	*	FALSE
Portuguese American		0.00%	0.00%		n/a		#DIV/0!
TOTAL MBE		3.42%	3.52%	97.11	Underutilization		FALSE
Nonminority Female		1.25%	4.00%	31.34	Underutilization	*	p < .05
TOTAL M/WBE		4.67%	7.52%	62.13	Underutilization	*	p < .05
Non M/WBE		95.33%	92.48%	103.08	Ove rutilization		

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CAMBRIDGE, MA 2023 DISPARITY STUDY

Table F-6: *Disparity Results, Relevant Market Area, Master Vendor List*
 Business Ownership Classification by Fiscal Year, Supplies
 Using Awards Dollars, FY 2017-2021, Less than \$500,000
 Cambridge Disparity Study

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2017	Black American	0.00%	0.10%	0.00	Underutilization	*	
	Asian American	0.00%	0.10%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.20%	0.00	Underutilization	*	
	Native American	0.00%	0.00%	-	n/a		
	Portuguese American	0.00%	0.00%				
	TOTAL MBE	0.00%	0.39%	0.00	Underutilization	*	
	Nonminority Female	0.00%	2.86%	0.00	Underutilization	*	
	TOTAL M/WBE	0.00%	3.26%	0.00	Underutilization	*	
Non-M/WBE	100.00%	96.74%	103.37	Overutilization			
2018	Black American	0.00%	0.10%	0.00	Underutilization	*	
	Asian American	0.00%	0.10%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.20%	0.00	Underutilization	*	
	Native American	0.00%	0.00%	-	n/a		
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	0.00%	0.39%	0.00	Underutilization	*	
	Nonminority Female	0.00%	2.86%	0.00	Underutilization	*	
	TOTAL M/WBE	0.00%	3.26%	0.00	Underutilization	*	
Non-M/WBE	100.00%	96.74%	103.37	Overutilization			
2019	Black American	0.00%	0.10%	0.00	Underutilization	*	
	Asian American	0.00%	0.10%	0.00	Underutilization	*	
	Hispanic American	0.38%	0.20%	193.92	Overutilization		
	Native American	0.00%	0.00%	-	n/a		
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	0.38%	0.39%	96.96	Underutilization		
	Nonminority Female	0.00%	2.86%	0.00	Underutilization	*	
	TOTAL M/WBE	0.38%	3.26%	11.75	Underutilization	*	
Non-M/WBE	99.62%	96.74%	102.97	Overutilization			
2020	Black American	0.00%	0.10%	0.00	Underutilization	*	
	Asian American	0.00%	0.10%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.20%	0.00	Underutilization	*	
	Native American	0.00%	0.00%	-	n/a		
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	0.00%	0.39%	0.00	Underutilization	*	
	Nonminority Female	0.61%	2.86%	21.32	Underutilization	*	
	TOTAL M/WBE	0.61%	3.26%	18.74	Underutilization	*	
Non-M/WBE	99.39%	96.74%	102.74	Overutilization			
2021	Black American	0.00%	0.10%	0.00	Underutilization	*	
	Asian American	0.00%	0.10%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.20%	0.00	Underutilization	*	
	Native American	0.00%	0.00%	-	n/a		
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	0.00%	0.39%	0.00	Underutilization	*	
	Nonminority Female	0.00%	2.86%	0.00	Underutilization	*	
	TOTAL M/WBE	0.00%	3.26%	0.00	Underutilization	*	
Non-M/WBE	100.00%	96.74%	103.37	Overutilization			
Total	Black American	0.00%	0.10%	0.00	Underutilization	*	FALSE
	Asian American	0.00%	0.10%	0.00	Underutilization	*	FALSE
	Hispanic American	0.10%	0.20%	48.12	Underutilization	*	FALSE
	Native American	0.00%	0.00%	-	n/a		n/a
	Portuguese American	0.00%	0.00%	-	n/a		n/a
	TOTAL MBE	0.10%	0.39%	24.06	Underutilization	*	FALSE
	Nonminority Female	0.15%	2.86%	5.22	Underutilization	*	p < .05
	TOTAL M/WBE	0.24%	3.26%	7.50	Underutilization	*	p < .05
	Non-M/WBE	99.76%	96.74%	103.11	Overutilization		

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CAMBRIDGE, MA 2023 DISPARITY STUDY

Table F-7: Disparity Results, Relevant Market Area, Master Vendor List
 Business Ownership Classification by Fiscal Year, Professional Services
 Using Awards Dollars, FY 2017-2021, Less than \$1,000,000
 Cambridge Disparity Study

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2017	Black American	#DIV/0!	0.42%		n/a		
	Asian American	#DIV/0!	0.42%		n/a		
	Hispanic American	#DIV/0!	0.42%		n/a		
	Native American	#DIV/0!	0.00%		n/a		
	Portuguese American	0.00%	0.00%		n/a		
	TOTAL MBE	#DIV/0!	1.27%		n/a		
	Nonminority Female	#DIV/0!	5.06%		n/a		
	TOTAL M/WBE	#DIV/0!	6.33%		n/a		
2018	Black American	#DIV/0!	93.67%		n/a		
	Black American	0.00%	0.42%	0.00	Undertutilization	*	
	Asian American	0.00%	0.42%	0.00	Undertutilization	*	
	Hispanic American	0.00%	0.42%	0.00	Undertutilization	*	
	Native American	0.00%	0.00%		n/a		
	Portuguese American	0.00%	0.00%		n/a		
	TOTAL MBE	0.00%	1.27%	0.00	Undertutilization	*	
	Nonminority Female	0.00%	5.06%	0.00	Undertutilization	*	
2019	TOTAL M/WBE	0.00%	6.33%	0.00	Undertutilization	*	
	Black American	0.00%	0.42%	0.00	Undertutilization	*	
	Asian American	0.00%	0.42%	0.00	Undertutilization	*	
	Hispanic American	0.00%	0.42%	0.00	Undertutilization	*	
	Native American	0.00%	0.00%		n/a		
	Portuguese American	0.00%	0.00%		n/a		
	TOTAL MBE	0.00%	1.27%	0.00	Undertutilization	*	
	Nonminority Female	0.00%	5.06%	0.00	Undertutilization	*	
2020	TOTAL M/WBE	0.00%	6.33%	0.00	Undertutilization	*	
	Black American	0.00%	0.42%	0.00	Undertutilization	*	
	Asian American	0.00%	0.42%	0.00	Undertutilization	*	
	Hispanic American	0.00%	0.42%	0.00	Undertutilization	*	
	Native American	0.00%	0.00%		n/a		
	Portuguese American	0.00%	0.00%		n/a		
	TOTAL MBE	0.00%	1.27%	0.00	Undertutilization	*	
	Nonminority Female	4.48%	5.06%	88.58	Undertutilization	*	
2021	TOTAL M/WBE	4.48%	6.33%	70.86	Undertutilization	*	
	Black American	0.00%	0.42%	0.00	Undertutilization	*	
	Asian American	0.00%	0.42%	0.00	Undertutilization	*	
	Hispanic American	0.00%	0.42%	0.00	Undertutilization	*	
	Native American	0.00%	0.00%		n/a		
	Portuguese	0.00%	0.00%		n/a		
	TOTAL MBE	0.00%	1.27%	0.00	Undertutilization	*	
	Nonminority Female	0.00%	5.06%	0.00	Undertutilization	*	
Total	TOTAL M/WBE	0.00%	6.33%	0.00	Undertutilization	*	
	Black American	0.00%	0.42%	0.00	Undertutilization	*	p < .05
	Asian American	0.00%	0.42%	0.00	Undertutilization	*	p < .05
	Hispanic American	0.00%	0.42%	0.00	Undertutilization	*	p < .05
	Native American	0.00%	0.00%		n/a		#DIV/0!
	Portuguese American	0.00%	0.00%		n/a		#DIV/0!
	TOTAL MBE	0.00%	1.27%	0.00	Undertutilization	*	p < .05
	Nonminority Female	0.42%	5.06%	8.25	Undertutilization	*	p < .05
Total	TOTAL M/WBE	0.42%	6.33%	6.60	Undertutilization	*	p < .05
	Non M/WBE	99.58%	93.67%	106.31	Overutilization		

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Table F-8: Disparity Results, Relevant Market Area, Master Vendor List
 Business Ownership Classification by Fiscal Year, Other Services
 Using Awards Dollars, FY 2017-2021, Less than \$1,000,000
 Cambridge Disparity Study

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2017	Black American	0.00%	0.80%	0.00	Underutilization	*	
	Asian American	0.00%	1.92%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.56%	0.00	Underutilization	*	
	Native American	0.00%	0.24%	0.00	Underutilization	*	
	Portuguese American	0.00%	0.00%		n/a		
	TOTAL MBE	0.00%	3.52%	0.00	Underutilization	*	
	Nonminority Female	1.57%	4.00%	39.22	Underutilization	*	
	TOTAL M/WBE	1.57%	7.52%	20.86	Underutilization	*	
	Non M/WBE	98.43%	92.48%	106.44	Overtutilization		
	2018	Black American	0.00%	0.80%	0.00	Underutilization	*
Asian American		0.78%	1.92%	40.65	Underutilization	*	
Hispanic American		0.00%	0.56%	0.00	Underutilization	*	
Native American		0.00%	0.24%	0.00	Underutilization	*	
Portuguese American		0.00%	0.00%		n/a		
TOTAL MBE		0.78%	3.52%	22.17	Underutilization	*	
Nonminority Female		3.82%	4.00%	95.50	Underutilization	*	
TOTAL M/WBE		4.60%	7.52%	61.18	Underutilization	*	
Non M/WBE		95.40%	92.48%	103.16	Overtutilization		
2019		Black American	0.00%	0.80%	0.00	Underutilization	*
	Asian American	0.78%	1.92%	40.84	Underutilization	*	
	Hispanic American	0.00%	0.56%	0.00	Underutilization	*	
	Native American	0.00%	0.24%	0.00	Underutilization	*	
	Portuguese American	0.00%	0.00%		n/a		
	TOTAL MBE	0.78%	3.52%	22.28	Underutilization	*	
	Nonminority Female	0.00%	4.00%	0.00	Underutilization	*	
	TOTAL M/WBE	0.78%	7.52%	10.43	Underutilization	*	
	Non M/WBE	99.22%	92.48%	107.28	Overtutilization		
	2020	Black American	0.00%	0.80%	0.00	Underutilization	*
Asian American		3.42%	1.92%	178.02	Overtutilization		
Hispanic American		0.00%	0.56%	0.00	Underutilization	*	
Native American		0.00%	0.24%	0.00	Underutilization	*	
Portuguese American		0.00%	0.00%		n/a		
TOTAL MBE		3.42%	3.52%	97.10	Underutilization	*	
Nonminority Female		0.00%	4.00%	0.00	Underutilization	*	
TOTAL M/WBE		3.42%	7.52%	45.45	Underutilization	*	
Non M/WBE		96.58%	92.48%	104.44	Overtutilization		
2021		Black American	0.00%	0.80%	0.00	Underutilization	*
	Asian American	4.46%	1.92%	232.32	Overtutilization		
	Hispanic American	0.00%	0.56%	0.00	Underutilization	*	
	Native American	0.00%	0.24%	0.00	Underutilization	*	
	Portuguese American	0.00%	0.00%		n/a		
	TOTAL MBE	4.46%	3.52%	126.72	Overtutilization		
	Nonminority Female	0.96%	4.00%	16.50	Underutilization	*	
	TOTAL M/WBE	5.12%	7.52%	68.09	Underutilization	*	
	Non M/WBE	94.88%	92.48%	102.59	Overtutilization		
	Total	Black American	0.00%	0.80%	0.00	Underutilization	*
Asian American		2.29%	1.92%	119.21	Overtutilization		FALSE
Hispanic American		0.00%	0.56%	0.00	Underutilization	*	p < .05
Native American		0.00%	0.24%	0.00	Underutilization	*	FALSE
Portuguese American		0.00%	0.00%		n/a		#DIV/0!
TOTAL MBE		2.29%	3.52%	65.03	Underutilization	*	p < .05
Nonminority Female		0.84%	4.00%	20.98	Underutilization	*	p < .05
TOTAL M/WBE		3.13%	7.52%	41.60	Underutilization	*	p < .05
Non M/WBE		96.87%	92.48%	104.75	Overtutilization		

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CAMBRIDGE, MA 2023 DISPARITY STUDY

Table F-9: *Disparity Results, Relevant Market Area, Master Vendor List*
 Business Ownership Classification by Fiscal Year, Supplies
 Using Awards Dollars, FY 2017-2021, Less than \$1,000,000
 Cambridge Disparity Study

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2017	Black American	0.00%	0.09%	0.00	Underutilization	*	
	Asian American	0.00%	0.09%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.19%	0.00	Underutilization	*	
	Native American	0.00%	0.00%	-	n/a		
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	0.00%	0.37%	0.00	Underutilization	*	
	Nonminority Female	0.00%	2.72%	0.00	Underutilization	*	
	TOTAL M/WBE	0.00%	3.09%	0.00	Underutilization	*	
	Non-M/WBE	100.00%	96.91%	103.19	Overutilization		
2018	Black American	0.00%	0.09%	0.00	Underutilization	*	
	Asian American	0.00%	0.09%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.19%	0.00	Underutilization	*	
	Native American	0.00%	0.00%	-	n/a		
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	0.00%	0.37%	0.00	Underutilization	*	
	Nonminority Female	0.00%	2.72%	0.00	Underutilization	*	
	TOTAL M/WBE	0.00%	3.09%	0.00	Underutilization	*	
	Non-M/WBE	100.00%	96.91%	103.19	Overutilization		
2019	Black American	0.00%	0.09%	0.00	Underutilization	*	
	Asian American	#REF!	0.09%	-	n/a		
	Hispanic American	0.31%	0.19%	163.43	Overutilization		
	Native American	0.00%	0.00%	-	n/a		
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	0.31%	0.37%	81.71	Underutilization		
	Nonminority Female	0.00%	2.72%	0.00	Underutilization	*	
	TOTAL M/WBE	0.31%	3.09%	9.90	Underutilization	*	
	Non-M/WBE	99.69%	96.91%	102.87	Overutilization		
2020	Black American	0.00%	0.09%	0.00	Underutilization	*	
	Asian American	0.00%	0.09%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.19%	0.00	Underutilization	*	
	Native American	0.00%	0.00%	-	n/a		
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	0.00%	0.37%	0.00	Underutilization	*	
	Nonminority Female	0.58%	2.72%	21.30	Underutilization	*	
	TOTAL M/WBE	0.58%	3.09%	18.72	Underutilization	*	
	Non-M/WBE	99.42%	96.91%	102.59	Overutilization		
2021	Black American	0.00%	0.09%	0.00	Underutilization	*	
	Asian American	0.00%	0.09%	0.00	Underutilization	*	
	Hispanic American	0.00%	0.19%	0.00	Underutilization	*	
	Native American	0.00%	0.00%	-	n/a		
	Portuguese American	0.00%	0.00%	-	n/a		
	TOTAL MBE	0.00%	0.37%	0.00	Underutilization	*	
	Nonminority Female	0.00%	2.72%	0.00	Underutilization	*	
	TOTAL M/WBE	0.00%	3.09%	0.00	Underutilization	*	
	Non-M/WBE	100.00%	96.91%	103.19	Overutilization		
Total	Black American	0.00%	0.09%	0.00	Underutilization	*	FALSE
	Asian American	0.00%	0.09%	0.00	Underutilization	*	FALSE
	Hispanic American	0.09%	0.19%	45.92	Underutilization	*	FALSE
	Native American	0.00%	0.00%	-	n/a		n/a
	Portuguese American	0.00%	0.00%	-	n/a		n/a
	TOTAL MBE	0.09%	0.37%	22.96	Underutilization	*	FALSE
	Nonminority Female	0.14%	2.72%	4.98	Underutilization	*	p < .05
	TOTAL M/WBE	0.22%	3.09%	7.16	Underutilization	*	p < .05
	Non-M/WBE	99.78%	96.91%	102.96	Overutilization		

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Appendix G

Expanded Regression Analysis

Appendix G - Detailed Regression Analysis

The tables in Appendix G (Tables 1 through 17) reports additional regression results. The regression specifications and parameter estimates attempt to identify the possibly causal factors that explain public contracting disparities, after controlling for a variety of race neutral capacity factors in the City of Cambridge Market area.

The results of the GSPC disparity analysis provide a framework to rationalize observed disparities in public contracting outcomes/success with the City of Cambridge between MWBEs and non-MWBEs in the City of Cambridge Market Area. The regression analysis suggests that any observed disparities in public contracting outcomes between MWBEs and non-MWBEs are not explained by differential capacities for public contracting success with the City of Cambridge. Our regression specifications control for firm public contracting capacity by including measures such as the education level of the firm owner, the age and market tenure of the firm, the size of the firm with respect to the number of employees and revenues, firm bonding capacity, willingness and ability to do business with the City of Cambridge, registration status, and firm financial standing. This inclusion of these control covariates in our regression specifications permits an assessment of public contracting success/failure conditional on MWBE and non- MWBE public contracting capacity. The existence of public contracting success disparities between MWBEs and non-**MWBEs**— particularly when disaggregating by the racial/ethnic/gender status of owners even after controlling for capacity suggests that relative to non-MWBEs, MWBEs face barriers independent of their capacity—or their ability—in securing public contracts and subcontracts with the City of Cambridge.

Perhaps most indicative of racial/ethnic disparities in public contracting outcomes in the City of Cambridge Market Area, our results reveal that the likelihood of MWBEs that are owned by African Americans, **Hispanic Americans and Women, are more likely to have “never” been a prime contractor or subcontractor** relative to non-MWBEs over the time period under consideration in our analysis. This suggests that these types of MWBEs face barriers in securing prime contracts and subcontracts from the City of Cambridge. GSPC also finds that in the City of Cambridge Market Area, firms owned by African Americans and Hispanic Americans submit fewer prime bids. This suggests that any public contracting disparities between these types of MWBEs and non-MWBEs can be explained, at least in part, by lower bid submission of these type of MWBEs, relative to non-MWBEs. Coupled with the findings of perceived private sector discrimination and informal contracting network exclusion being higher for some MWBEs, the results are also consistent with observed disparities in securing prime contracts and subcontracts with the City of Cambridge being driven, at least in part, by discrimination and public contracting network exclusion against MWBEs that undermines their ability to secure prime contracts and subcontracts with the City of Cambridge.

A. Statistical and Econometric Framework

Methodologically, the GSPC statistical and econometric analysis of possible MWBE public contracting disparities with the City of Cambridge utilizes both a standard Regression Model framework and a Categorical Regression Model (CRM) framework.¹ As the covariates measuring public contracting activity/outcomes and other respondent characteristics in Table 1 are categorical responses to questionnaire items (e.g. public contracting bid ranges, yes, no), a CRM views the categories as latent variables with likelihood thresholds that are conditioned on other covariates. In the case where there are more than two categories and the succession of categories have a natural ranking, a CRM permits a determination as to how particular covariates condition the likelihood/probability of being in the highest valued category relative to the lower-valued categories. In the case of just two categorical but not naturally ordered categories, the CRM reduces to a Binary Regression Model (BRM).²

We first use a relevant CRM/BRM to estimate the linear predictions of particular ordinal-ranked **outcomes as a function of the presumably “race-neutral” capacity of the firm. The motivation** here is to initially determine how particular market and public sector contracting outcomes are determined by factors other than the ethnicity/race/gender and MWBE classification status of the firm. The estimated *linear predictions* are then *standardized* and utilized in regression specification where the regressors are the binary ethnicity/race/gender and MWBE indicators for individuals. The estimated coefficients inform the extent to which ethnicity/race/gender and MWBE status impact the likelihood of an outcome, on average, relative to White-owned firms and non-MWBEs.³

In those instances in which we report **CRM/BRM parameter estimates, we report them as “odds ratios”**, which measure the ratio of the probability of success and the probability of failure relative to the omitted group in all our specifications—nonminority owned firms.⁴ When the odds ratio is greater (less) than unity for a parameter, the measured characteristic of interest to the outcome of interest has the effect of increasing (decreasing) the likelihood of the outcome under consideration relative to nonminority owned

¹ For overview of the CRM, See: Richard D. McKelvey and William Zavoina. 1975. “A Statistical Model for the Analysis of Ordinal Level Dependent Variables,” *Journal of Mathematical Sociology*, 4: pp. 103 - 120.

² More formally, if the latent realization of an outcome is Y_i^* , ranging from $-\infty$ to ∞ , a structural and conditional specification for Y_i^* is $Y_i^* = X_i \beta + \varepsilon_i$, where X is a vector of exogenous covariates, β is a vector of coefficients measuring the effects of particular covariates on the realization of Y_i^* , and ε_i is a random error. For categorical and ordinal outcomes $m = 1 \dots J$, $Y_i = m$ if $\tau_{m-1} \leq Y_i^* < \tau_m$, where the τ_i are thresholds for the particular realizations of $Y_i^* = m$. Conditional on X the likelihood/probability that Y_i takes on a particular realization is $Pr(Y_i = m | X) = \Phi(\tau_m - X\beta) - \Phi(\tau_{m-1} - X\beta)$, where Φ is the cumulative density function of ε . The GSPC methodology utilizes covariates that control and/or proxy for the education level of the firm owner, the age of the firm, the size of the firm with respect to the number of employees and revenues, firm bonding capacity, and firm financial standing.

³ In particular, let y^p_i be the predicted linear probability for a particular ordinal outcome estimate from a CRM or BRM, the regressand in the regression model is $p^i = [y^p_i - \mu_y]/\sigma_y$, where μ_y is the mean of y^p_i , and σ_y is the standard deviation of y^p_i .

⁴ An “odds-ratio” is also a measure of “effect size” in that in addition to the statistical significance of a parameter, the “odds-ratio” provides a measure of a parameter estimate’s “practical magnitude.” For an “odds-ratio” the practical magnitude is the absolute value of 1 minus the “odds-ratio”, measuring the percentage change in the likelihood of observing the dependent outcome.

firms. We determine **statistical significance on the basis of the estimated coefficient's probability value**—or P-value. The P-value is the probability of obtaining an estimate of the coefficient by chance alone, assuming that the null hypothesis of the variable having a zero effect is true. As a convention, GSPC rejects the null hypothesis of no effect, and concludes the estimated coefficient is statistically significant as long as **P-value \leq .05**, which we highlight in bold for all parameter estimates. In all instances, the **estimated standard errors are "cluster robust" with respect to heteroskedasticity**. Our regression strategy also reports on two different specifications of the outcome of interest. The first one includes a broad classification of non-white firms as measured by whether or not they are certified and/or deemed as MWBEs. Each category in this regression approach will have overlap of firms owned by particular racial/ethnic groups and Women. As this overlap might mask differences in outcomes for particular non-white minorities and Women, the second specification disaggregates the broad categories by consideration categorization by specific racial/ethnic group and gender (e.g. Asian Americans, Black Americans, Hispanic Americans, Women). The exposition and discussion of the results are, in general, couched in terms of whether the outcome of interest suggests that broad MWBE and race/ethnicity/gender characteristics of a firm is a possible driver or not of public contracting and other relevant disparities in the City of Cambridge Market Area. In particular, we do not necessarily posit upon the statistical insignificance of MWBE status in a regression if it is not uniform across all the various categories, as the absence of such a uniformity suggests that for particular MWBEs, or on average, the outcome of interest is a driver of public contracting disparities in the City of Cambridge market area, and can be at least partially explained by MWBE status.

B. GSPC Survey of Business Owners Data

The City of Cambridge disparity analysis is based on survey data compiled by GSPC and constitutes a sample of firms from the vendor lists provided by the City of Cambridge. The GSPC survey was a questionnaire that captured data on firm and individual owner characteristics in the City of Cambridge market area. The questionnaire was sent to certified firms and vendors. Table 1 reports, for the 150 survey responses captured, a statistical summary of the variables that are relevant to the GSPC regression-based analysis of outcomes relevant to, and informative of, public procurement disparities in the City of Cambridge Market Area. The variables marked with an asterisk are those utilized **as factors determining a firm's "race-neutral capacity to compete in both the private and public sector of the City of Cambridge Relevant Market Area.**

magnitude is the absolute value of 1 minus the **"odds-ratio"**, measuring the percentage change in the likelihood of observing the dependent outcome.

Table 1
Statistical Summary of Variables

Covariate	Description	Mean	Standard Deviation	Number of Observations
Firm entered market within past five years	<i>Binary Variable:</i> 1 = yes	.273	.447	150
Number of times denied a commercial bank loan	<i>Ordinal Variable:</i> 1 = 0 2 = 1 – 10 3 = 11 – 25 4 = 26 – 50 5 = 51 – 100 6 = Over 100	.633	.772	150
Number of prime bids submitted on the City of Cambridge projects	<i>Ordinal Variable:</i> 1 = 0 2 = 1 – 10 3 = 11 – 25 4 = 26 – 50 5 = 51 – 100 6 = Over 100	1.047	.407	150
Number of City of Cambridge prime contracts awarded between 7/1/17 - 8/30/22	<i>Ordinal Variable:</i> 1 = 0 2 = 1 – 10 3 = 11 – 25 4 = 26 – 50 5 = 51 – 100 6 = Over 100	1.013	.401	150
Number of City of Cambridge subcontracts awarded between 7/1/17 - 8/30/22	<i>Ordinal Variable:</i> 1 = 0 2 = 1 – 10 3 = 11 – 25 4 = 26 – 50 5 = 51 – 100 6 = Over 100	1.027	.417	150
Did not serve as a contractor or subcontractor on the City of Cambridge projects between 7/1/17 - 8/30/22	<i>Binary Variable:</i> 1 = Yes	.36	.482	150
Firm has experienced private sector discrimination	<i>Binary Variable:</i> 1 = Yes	.133	.341	150
Firm has experienced discrimination at City of Cambridge	<i>Binary Variable:</i> 1 = Yes	.047	.212	150
Firm owner believes informal networks enables business with City of Cambridge	<i>Binary Variable:</i> 1 = Yes	.6	.492	150
Owner has more than 20 years of experience	<i>Binary Variable:</i> 1 = Yes	.6	.492	150

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Firm has more than 10 employees*	<i>Binary Variable</i> 1 = Yes	.253	.436	150
Firm owner has a baccalaureate/post-graduate degree*	<i>Binary Variable:</i> 1 =Yes	.373	.485	150
Firm gross revenue greater than \$1,500,000*	<i>Binary Variable:</i> 1 = Yes	.18	.385	150
Firm bonding limit greater than \$1,500,000*	<i>Binary Variable:</i> 1 = Yes	.827	.381	150
Financing is a Barrier to Submitting* Bids and Securing Contracts From City of Cambridge	<i>Binary Variable:</i> 1 = Yes	.88	.326	150
Firm is in the construction sector*	<i>Binary Variable:</i> 1 = Yes	0.00	0.00	150
Firm is registered to do business with City of Cambridge	<i>Binary Variable:</i> 1 = Yes	.707	.457	150
Firm is willing and able to do business with City of Cambridge as a prime contractor*	<i>Binary Variable:</i> 1 = Yes	.847	.362	150
Firm is willing and able to do business with City of Cambridge as a subcontractor*	<i>Binary Variable:</i> 1 = Yes	.901	.301	150
Firm is a certified Minority Business Enterprise	<i>Binary Variable:</i> 1 = Yes	.533	.501	150
Firm is a certified Woman business enterprise	<i>Binary Variable:</i> 1 = Yes	.520	.501	150
Firm is a certified Veteran Business Enterprise	<i>Binary Variable:</i> 1 = Yes	.041	.197	150
Majority Firm Owner is African American	<i>Binary Variable:</i> 1 = Yes	.333	.492	150
Majority Firm Owner is Hispanic American	<i>Binary Variable:</i> 1 = Yes	.120	.326	150
Majority Firm Owner is Asian	<i>Binary Variable:</i> 1 = Yes	.081	.271	150
Majority Firm Owner is Native American	<i>Binary Variable:</i> 1 = Yes	.007	.082	150
Majority Firm Owner is Biracial/multiracial	<i>Binary Variable:</i> 1 =Yes	.013	.115	150
Majority Firm Owner is Other Race	<i>Binary Variable:</i> 1 = Yes	.353	.480	150
Majority Firm Owner is a Veteran	<i>Binary Variable:</i> 1 = Yes	.067	.250	150
Majority Firm Owner is a Woman	<i>Binary Variable:</i> 1 = Yes	.720	.451	150

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C. MWBE Status and Firm Entry in the City of Cambridge Market Area

To determine if MWBE status is a barrier to the formation of new businesses in the City of Cambridge Market Area, Tables 2 - 3 report, for each of the distinct MWBEs and owner self-reported race/ethnicity in the GSPC sample, the estimated parameters of an Ordinary Least Square Regression with the standardized linear probability of being a new firm as the dependent variable. As a goodness-of-fit measure, R^2 is reported.

The parameter estimates in Tables 2 suggest that relative to White-owned firms, MWBEs in the City of Cambridge Market Area are neither more nor less likely to be new firms. As the excluded group is non-MWBEs, to the extent that market experience is an important determinant of and correlated with success in bidding and securing public contracts, this suggests that for MWBEs, relative inexperience in the market cannot explain any disparities in public contracting between them and non-MWBEs in the City of Cambridge Market Area, as tenure in the market also implies similar knowledge/experience about bidding and securing public contracts.

When disaggregated by race, the estimated coefficient suggest that firms owned by Native Americans and Other Race Americans in the City of Cambridge Market Area are less likely to be new firms. This suggests that any public contracting disparities between non-MWBEs and firms owned by this type of MWBEs can't be explained by differential rates of market experience.

Table 2
Ordinary Least Parameter Estimates-Firm Entry:
MWBE Status and New Firm Entry Probabilities
in the City of Cambridge Market Area

	Coefficient	P-value
<i>Regressand:</i> Standardized linear prediction that firm is a new entrant to market		
Firm is a certified minority business enterprise: (Binary)	0.6224	0.0232
Firm is a certified woman enterprise: (Binary)	0.0391	0.7643
Firm is a service-disabled veteran business enterprise	-0.4507	0.2321
Constant	-0.3342	0.0347
Number of Observations	150	
R^2	0.0978	

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Table 3
 Ordinary Least Parameter Estimates-Firm Entry:
 Race/Ethnicity/Gender Status and New Firm Entry Probabilities
 in the City of Cambridge Market Area

	Coefficient	P-value
<i>Regressand:</i> Standardized linear prediction that firm is a new entrant to market		
Firm is African American-owned: (Binary)	0.0280	0.8980
Firm is Hispanic American-owned: (Binary)	0.1971	0.2977
Firm is Asian American-owned: (Binary)	-0.1342	0.7815
Firm is Native American-owned: (Binary)	-1.1056	0.0186
Firm is bi/multiracial-owned: (Binary)	-0.5097	0.0795
Firm is other race-owned: (Binary)	-0.8158	0.0269
Firm is Veteran-owned	-0.1881	0.4650
Firm is Woman-owned: (Binary)	0.4064	0.3014
Constant	0.0001	0.9997
Number of Observations	150	
R^2	0.1535	

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D. MWBE Status and Number of Prime Bid Submissions In the City of Cambridge Market Area

One reason disparities in public contracting outcomes between MWBEs and non-MWBEs could exist is that relative to non-MWBEs, MWBEs may be less interested in, and/or less likely to submit bids for public contracts. To determine if this is the case in the City of Cambridge Market Area, Tables 4 - 5 report Ordinal Logit parameter estimates of a CRM with the number of prime contracting bids submitted by a firm to the City of Cambridge between 2013 - 2019 as the dependent variable, for each of the distinct MWBEs in the GSPC sample.

The estimated regression coefficients with statistical significance in Table 4 reveal that relative to non-MWBEs, certified Veteran-owned firms have higher prime bid submission rates. This suggests that any disparities between non-MWBEs and certified Veteran-owned firms cannot be explained by differential prime bid submission rates. When disaggregating by race/ethnicity/gender, the results in Table 5 reveal that firms owned by Native Americans and Bi/multiracial Americans are more likely to submit prime bids relative to non-MWBEs. This suggests that any disparities in public procurement outcomes between these types of MWBEs and non-MWBEs in the City of Cambridge Market Area can't be explained by relatively lower prime bid submissions rates.

Table 4
 Ordinary Least Parameter Estimates-Prime Submissions:
 MWBE Status and Number of Prime Bid Submissions
 In the City of Cambridge Market Area

	Coefficient	P-value
<i>Regressand:</i> Standardized linear prediction of number of prime bid submissions		
Firm is a certified minority business enterprise: (Binary)	0.1527	0.3705
Firm is a certified woman enterprise: (Binary)	0.3675	0.1318
Firm is a service-disabled veteran business enterprise	0.8093	0.0376
Constant	-0.3049	0.1875
Number of Observations	150	
R^2	0.0522	

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Table 5
 Ordinary Least Parameter Estimates-Prime Submissions:
 Race/Ethnicity/Gender Status and Number of Prime Bid Submissions
 In the City of Cambridge Market Area

	Coefficient	P-value
<i>Regressand:</i> Standardized linear prediction of number of prime bid submissions		
Firm is African American-owned: (Binary)	0.3523	0.1956
Firm is Hispanic American-owned: (Binary)	0.3630	0.5346
Firm is Asian American-owned: (Binary)	0.1469	0.4804
Firm is Native American-owned: (Binary)	2.2648	0.0068
Firm is bi/multiracial-owned: (Binary)	1.2709	0.0212
Firm is other race-owned: (Binary)	0.5967	0.1137
Firm is Veteran-owned	0.4418	0.1455
Firm is Woman-owned: (Binary)	-0.1789	0.5890
Constant	-0.3163	0.5634
Number of Observations	150	
R^2	0.0808	

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E. MWBE Status and Number of Prime Contracts Awarded In the City of Cambridge Market Area

To the extent that frequency of public contract bids reflects past experience as a prime contractor, MWBEs can potentially become frequent prime contract bidders by actually gaining experience as successful prime contractors. As such, the frequency of prime bids by MWBEs firms need not be a concern if they are actually gaining valuable experience as prime contractors that will translate into frequent contract bids and success later. To explore if this is the case in the City of Cambridge Market Area, Tables 6 - 7 report Ordinal Logit BRM parameter estimates where the dependent variable is the number of City of Cambridge prime contracts awarded to the firm since July 2017.

The estimated regression coefficients with statistical significance in Table 6 suggest that there is no difference between MWBEs and non-MWBEs in the probability of receiving a prime contract award from the City of Cambridge. When disaggregating by the race/ethnicity/gender of firm owners in Table 7, the estimated regression coefficients with statistical significance suggest that relative to non-MWBEs, firms owned by Native Americans are more likely to receive a prime contract award from the City of Cambridge. This suggests that at least for firms owned by Native Americans, any contracting disparities between them and non-MWBEs can't be explained by past, and possibly discriminatory constraints on them successfully winning prior prime contracts which could translate into future capacity to secure prime contracts.

Table 6
 Ordinary Least Parameter Estimates-Prime Awards:
 MWBE Status and Number of Prime Contracts Awarded
 In the City of Cambridge Market Area

	Coefficient	P-value
<i>Regressand:</i> Standardized linear prediction of number of prime contracts awarded		
Firm is a certified minority business enterprise: (Binary)	-0.2141	0.2338
Firm is a certified woman enterprise: (Binary)	0.1356	0.4055
Firm is a service-disabled veteran business enterprise	0.3866	0.2633
Constant	0.0282	0.7614
Number of Observations	150	
R^2	0.0195	

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Table 7
 Ordinary Least Parameter Estimates-Prime Awards:
 Race/Ethnicity/Gender Status and Number of Prime Contracts Awarded
 In the City of Cambridge Market Area

	Coefficient	P-value
<i>Regressand:</i> Standardized linear prediction of number of prime contracts awarded		
Firm is African American-owned: (Binary)	0.1879	0.5402
Firm is Hispanic American-owned: (Binary)	-0.0510	0.9356
Firm is Asian American-owned: (Binary)	-0.1963	0.6032
Firm is Native American-owned: (Binary)	1.9415	0.0116
Firm is bi/multiracial-owned: (Binary)	0.8974	0.0512
Firm is other race-owned: (Binary)	0.3593	0.5193
Firm is Veteran-owned	-0.4064	0.0956
Firm is Woman-owned: (Binary)	-0.0955	0.7101
Constant	-0.0968	0.8428
Number of Observations	150	
R^2	0.0638	

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F. MWBE Status and Number of Subcontracts Awarded In the City of Cambridge Market Area

To the extent that submitting and winning public contract bids requires experience, which can also be gained through subcontracting with lead prime firms with City of Cambridge contracts, MWBEs can potentially become more frequent and successful prime contract bidders by acquiring experience as subcontractors. As such, the low-frequency of prime bid submission and lower likelihood of being a prime contractor by MWBEs need not be a concern if they are gaining valuable subcontracting experience that will translate into high frequency contract bids and success later. To explore if this is the case in the City of Cambridge Market Area, Tables 8 - 9 report Ordinal Logit BRM parameter estimates where the dependent variable is the number of City of Cambridge subcontracts awarded to the firm.

The estimated regression coefficients with statistical significance in Table 8 suggest that relative to non-MWBEs, certified Minority-owned firms are less likely to have been awarded subcontracts. When disaggregating by the race/ethnicity/gender of firm owners in Table 9, relative to non-MWBEs, the estimated coefficients statistical significance suggest that firms owned by Veterans are relatively less likely to receive a City of Cambridge subcontract award. To the extent that success in public contracting is proportional to having prior subcontracts, the parameter estimates this suggest that any contracting disparities between non-MWBEs and certified Minority-owned firms, and firms owned by Veterans can be explained, at least in part, by relative deficits in contracting experience gained by subcontracting experience.

Table 8
 Ordinary Least Parameter Estimates-Subcontractor Awards:
 SMWBE Status and Number of Subcontracts Awarded
 In the City of Cambridge Market Area

	Coefficient	P-value
<i>Regressand:</i> Standardized linear prediction of number of subcontracts awarded		
Firm is a certified minority business enterprise: (Binary)	-0.4880	0.0302
Firm is a certified woman enterprise: (Binary)	-0.0709	0.7373
Firm is a service-disabled veteran business enterprise	-0.0933	0.7700
Constant	0.3009	0.1778
Number of Observations	150	
R^2	0.0600	

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Table 9
 Ordinary Least Parameter Estimates-Subcontractor Awards:
 Owner Racial/Ethnic Status and Number of Subcontracts Awarded
 In the City of Cambridge Market Area

	Coefficient	P-value
<i>Regressand:</i> Standardized linear prediction of number of subcontracts awarded		
Firm is African American-owned: (Binary)	-0.0996	0.7600
Firm is Hispanic American-owned: (Binary)	-0.1866	0.6156
Firm is Asian American-owned: (Binary)	-0.4062	0.2679
Firm is Native American-owned: (Binary)	0.5330	0.1835
Firm is bi/multiracial-owned: (Binary)	0.3169	0.3564
Firm is other race-owned: (Binary)	0.1617	0.6462
Firm is Veteran-owned	-0.6479	0.0411
Firm is Woman-owned: (Binary)	-0.0133	0.9371
Constant	0.0760	0.8331
Number of Observations	150	
R^2	0.0582	

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G. MWBE Status and Never Serving as Contractor/Subcontractor In the City of Cambridge Market Area

As the results in Tables 10 - 11 reflect only the effect of MWBE status on the number of City of Cambridge contracts and subcontracts, it may obscure the effects of, and the distribution of, zero outcomes never having secured a City of Cambridge contract of subcontract. Tables 10 – 11 report OLS parameter estimates where the dependent variable is the standardized probability of whether the firm “never” served as a prime contractor or subcontractor for the City of Cambridge.

The estimated regression coefficients in Table 10 suggest that with the exception of certified Veteran-owned firms, there is no difference in the probability of never serving as a contractor or subcontractor with the City of Cambridge between MWBEs and non-MWBEs, and the regression coefficients are not statistically significant. When disaggregating by race/ethnicity/gender, the results in Table 11 suggest that firms owned by Native Americans, Bi/multiracial Americans, and Other Race Americans are relatively less likely to have never received and City of Cambridge contract or subcontract. To the extent that success in public contracting is proportional to having prior prime contracts or subcontracts, this suggest that any contracting disparities between non-MWBEs and certified Veteran-owned firms, and firms owned by **Native Americans, Bi/multiracial Americans, and Other Race Americans, can’t be explained by** past and possibly discriminatory constraints on prior success in securing prime contracts or subcontracts from the City of Cambridge.

Table 10
 Ordinary Least Parameter Estimates-No Prime/Subcontractor Awards:
 MWBE Status and Never Serving as Contractor/Subcontractor
 In the City of Cambridge Market Area

	Coefficient	P-value
<i>Regressand:</i> Standardized linear prediction of number of never serving as contractor/subcontractor		
Firm is a certified minority business enterprise: (Binary)	-0.0124	0.7348
Firm is a certified woman enterprise: (Binary)	-0.3995	0.0892
Firm is a service-disabled veteran business enterprise	-0.7685	0.0382
Constant	0.2451	0.2176
Number of Observations	150	
R^2	0.0500	

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Table 11
 Ordinary Least Parameter Estimates-No Prime/Subcontractor Awards:
 Race/Ethnicity/Gender Status and Never Serving as Contractor/Subcontractor
 In the City of Cambridge Market Area

	Coefficient	P-value
<i>Regressand:</i> Standardized linear prediction of number of never serving as contractor/subcontractor		
Firm is African American-owned: (Binary)	-0.3775	0.0680
Firm is Hispanic American-owned: (Binary)	-0.3132	0.1011
Firm is Asian American-owned: (Binary)	0.0554	0.7098
Firm is Native American-owned: (Binary)	-1.2215	0.0009
Firm is bi/multiracial-owned: (Binary)	-0.5757	0.0041
Firm is other race-owned: (Binary)	-0.9097	0.0002
Firm is Veteran-owned	-0.0403	0.9077
Firm is Woman-owned: (Binary)	0.2864	0.2083
Constant	0.2927	0.2156
Number of Observations	150	
R^2	0.1141	

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H. MWBE Status and Perceived Discrimination in the City of Cambridge Private Sector

Disparate contracting and subcontracting outcomes between MWBEs and non-MWBEs could reflect, at least in part, the effects of discrimination against them by private sector firms, which discourages their entry into the market, and/or undermines their capacity to compete for public sector projects. In Tables 12 – 13, GSPC reports OLS parameter estimates of the effects of MWBE status on the standardized probability having experienced discrimination in particular the perception of having experienced discrimination in the private sector of the City of Cambridge Market Area.

If perceptions of discrimination correlate positively with actual discrimination in the private sector, the estimated coefficients with statistical significance suggest that relative to non-MWBEs, certified Minority-owned firms are more likely to experience discrimination in the private sector of the City of Cambridge Market Area. When disaggregated by the race/ethnicity/gender of firm owners, the statistically coefficients in Table 13, ratios suggest that relative to non-MWBE, firms owned by Native Americans, and Bi/multiracial Americans experience less discrimination in the private sector of the City of Cambridge market Area. To the extent that private sector discrimination can undermine the capacity of MWBEs to compete for public sector procurement, this suggests that, at least in the City of Cambridge Market Area, private sector discrimination may have some explanatory power in explaining public contracting disparities between firms owned by certified Minority-owned firms and non-MWBEs.

Table 12
 Ordinary Least Parameter Estimates-Private Sector Discrimination
 MWBE Status and Perceived Discrimination in the Private Sector

	Coefficient	P-value
<i>Regressand:</i> Standardized linear prediction of experiencing perceived discrimination in the private sector		
Firm is a certified minority business enterprise: (Binary)	0.2804	0.0084
Firm is a certified woman enterprise: (Binary)	-0.0810	0.6745
Firm is a service-disabled veteran business enterprise	-0.7452	0.4089
Constant	-0.0776	0.6112
Number of Observations	150	
R^2	0.0366	

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Table 13
 Ordinary Least Parameter Estimates-Private Sector Discrimination
 Race/Ethnicity/Gender Status and Perceived Discrimination in the Private Sector

	Coefficient	P-value
<i>Regressand:</i> Standardized linear prediction of experiencing perceived discrimination in the private sector		
Firm is African American-owned: (Binary)	-0.1737	0.4091
Firm is Hispanic American-owned: (Binary)	-0.4569	0.4480
Firm is Asian American-owned: (Binary)	-0.3843	0.1440
Firm is Native American-owned: (Binary)	-3.5813	0.0019
Firm is bi/multiracial-owned: (Binary)	-1.7282	0.0081
Firm is other race-owned: (Binary)	-0.7359	0.1031
Firm is Veteran-owned	-0.0955	0.7294
Firm is Woman-owned: (Binary)	0.4065	0.2519
Constant	0.1641	0.7097
Number of Observations	150	
R^2	0.1575	

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I. MWBE Status and Perceived Discrimination at the City of Cambridge

Disparate contracting and subcontracting outcomes between MWBEs and non-MWBEs could reflect, at least in part, the effects of perceived discrimination against them by the City of Cambridge, which conditions their entry into the market, and opportunities for success at the City of Cambridge.⁵ In Tables 14 – 15, GSPC reports OLS parameter estimates of the effects of MWBE status on the standardized probability of having experienced discrimination in particular the perception of having experienced discrimination at the City of Cambridge.

If perceptions of discrimination correlate positively with actual discrimination in the City of Cambridge, the estimated coefficients with statistical significance in Table 14 suggest that relative to non-MWBEs, certified Minority-owned firms are more likely to perceive experience discrimination in the private sector of the City of Cambridge Market Area. When disaggregated by the race/ethnicity/gender of firm owners, the statistically coefficients in Table 15, ratios suggest that relative to non-MWBE, firms owned by Native Americans, and Bi/multiracial Americans have a perception of experiencing less discrimination in the City of Cambridge market Area. To the extent that the perception of discrimination in the City of Cambridge can undermine the capacity of MWBEs to compete for public sector procurement, this suggests that, at least in the City of Cambridge Market Area, private sector discrimination may explain public contracting disparities between firms owned by certified Minority-owned firms and non-MWBEs

Table 14
Ordinary Least Parameter Estimates-City of Cambridge Discrimination
MWBE Status and Perceived Discrimination at the City of Cambridge

	Coefficient	P-value
<i>Regressand:</i> Standardized linear prediction of experiencing perceived discrimination at the City of Cambridge		
Firm is a certified minority business enterprise: (Binary)	0.3223	0.0348
Firm is a certified woman enterprise: (Binary)	-0.1164	0.4041
Firm is a service-disabled veteran business enterprise	-0.6313	0.2684
Constant	-0.0861	0.6354
Number of Observations	150	
<i>R</i> ²	0.0392	

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⁵ For the effects that discrimination can have upon the entry and performance of minority-owned firms. See: Borjas, George J., and Stephen G. Bronars. 1989. "Consumer Discrimination and Self-employment." *Journal of Political Economy*, 97: pp. 581-605.

Table 15
 Ordinary Least Parameter Estimates-City of Cambridge Discrimination
 Race/Ethnicity/Gender Status and Perceived Discrimination at the City of Cambridge

	Coefficient	P-value
<i>Regressand:</i> Standardized linear prediction of experiencing perceived discrimination at the City of Cambridge		
Firm is African American-owned: (Binary)	-0.1393	0.3863
Firm is Hispanic American-owned: (Binary)	-0.0795	0.8232
Firm is Asian American-owned: (Binary)	-0.1740	0.2485
Firm is Native American-owned: (Binary)	-2.5922	0.0018
Firm is bi/multiracial-owned: (Binary)	-1.2264	0.0082
Firm is other race-owned: (Binary)	-0.8350	0.1124
Firm is Veteran-owned	0.0660	0.5399
Firm is Woman-owned: (Binary)	0.4943	0.0828
Constant	0.0383	0.8632
Number of Observations	150	
R^2	0.1505	

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J. MWBE Status and the Perception of Informal Contracting Networks In the City of Cambridge Market Area

Similar to the perception of discrimination at the City of Cambridge, the perception of the existence of informal public contracting networks that confer advantages to insiders in securing public contracts and subcontracts, and exclude MWBEs, could possibly have an adverse effect on MWBEs ability to secure public contracts and subcontracts with the City of Cambridge.⁶ To explore the role of such informal networks, Tables 16 - 17 report OLS parameter estimates where the dependent variable is the standardized linear probability that the firm owner agrees that informal networks enable success in public contracting with the City of Cambridge.

The estimated coefficients in Table 16 with statistical significance suggest that relative to non-MWBEs, firms certified as Minority are more likely to perceive that informal networks enable contracting success with the City of Cambridge. When disaggregated by the race/ethnicity/gender of firm owners, the estimated coefficients estimates with statistical significance in Table 17 suggest that relative to non- MWBEs, firms owned by Hispanic Americans are more likely to perceive that informal networks enable contracting success with the City of Cambridge. This suggests that, at least for these types of MWBEs,

⁶ For evidence that access to informal networks can increase the likelihood of success in securing public contracting See: Sedita, Silvia Rita, and Roberta Apa. 2015. "The Impact of Inter-organizational Relationships on Contractors' Success in Winning Public Procurement Projects: The Case of the Construction Industry in the Veneto Region." *International Journal of Project Management*, 33: pp. 1548

contracting disparities between them and non-MWBEs may be explained, at least in part, by their exclusion from the City of Cambridge public contracting networks that reduces their ability to secure prime contracts and subcontracts.

Table 16
 Ordinary Least Parameter Estimates-City Informal Contracting Networks
 MWBE Status and Informal Contracting Networks
 In the City of Cambridge Market Area

	Coefficient	P-value
<i>Regressand:</i> Standardized linear prediction of agreeing that informal networks are important for securing contracts		
Firm is a certified minority business enterprise: (Binary)	0.6125	0.0229
Firm is a certified woman enterprise: (Binary)	0.1583	0.3177
Firm is a service-disabled veteran business enterprise	-0.2106	0.5220
Constant	-0.4006	0.1998
Number of Observations	150	
R^2	0.0943	

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Table 17
 Ordinary Least Parameter Estimates-City Informal Contracting Networks
 Race/Ethnicity/Gender Status and Informal Contracting Networks
 In the City of Cambridge Market Area

	Coefficient	P-value
<i>Regressand:</i> Standardized linear prediction of agreeing that informal networks are important for securing contracts		
Firm is African American-owned: (Binary)	0.3359	0.3645
Firm is Hispanic American-owned: (Binary)	0.4423	0.0504
Firm is Asian American-owned: (Binary)	-0.1667	0.5948
Firm is Native American-owned: (Binary)	-0.3348	0.3669
Firm is bi/multiracial-owned: (Binary)	-0.2629	0.4596
Firm is other race-owned: (Binary)	-0.2164	0.2588
Firm is Veteran-owned	-0.0996	0.7415
Firm is Woman-owned: (Binary)	0.2269	0.1521
Constant	-0.2262	0.6191
Number of Observations	150	
R^2	0.0652	

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Appendix H

Data Assessment Report

Appendix H - Data Assessment Report

Griffin & Strong, P.C. (“GSPC”) conducted a data assessment meeting on April 29th, 2022, regarding the City of Cambridge, MA (“City”, “Cambridge”) 2023 Disparity Study. This report summarizes that meeting and sets forth action items and preliminary questions to be answered. It is necessary to issue a data assessment report prior to completing the data collection plan to confirm that GSPC has the correct understanding of how and where data is kept by County.

In Attendance:

- Michele Clark Jenkins – Project Manager, GSPC
- Susan Johnson – Director of Project Development, GSPC
- Delmarie Griffin – Co-Executive, GSPC
- Dr. Vince Eagan – Principal Investigator, GSPC
- Ariel Reynolds – Data Analyst, GSPC
- Jerrica Lighting – Deputy Project Manager, GSPC
- David Maher – Legal & Policy Review, GSPC

- Pardis Saffari – Director of Economic Development, City of Cambridge, MA
- Liz Unger - Purchasing Agent, City of Cambridge, MA

- Shuo Wang – Assistant Purchasing Agent for Goods and Services, City of Cambridge, MA

I. Scope Statement

The City of Cambridge, MA contracted with Griffin & Strong, P.C. (GSPC) to determine and analyze the **City’s utilization of minority-owned business enterprises (“MBEs”), women-owned business enterprises (“WBEs”) and veteran-owned businesses enterprises (“VBEs”) in the Market Area. The City wants to determine whether a legally defensible Sheltered Market Program is justified or needed. For avoidance of doubt or confusion, all supplies and services procurements are conducted in conformance with the definitions contained in G.L. c. 30B, § 18 (“Section 30B”).**

The City has an internal list of defined Industry Categories and will be able to provide it to GSPC. The Disparity Study will collect and analyze relevant data on the following Industry Categories:

- Supplies
- Services
- Professional Services (services that are exempt from Section 30B and are relevant to the Study)

The Study Period for the Disparity Study has been determined to be a four (4) year period beginning, July 1, 2017 - June 30, 2021 (FY2018 through FY2021).

The Study includes Minority, Women, and Veteran owned firms.

425 CMR: State Office of Minority and Women Business Assistance provides the following definition of Minority Owned firms:

Minority means a person who meets one or more of the following definitions:

- (a) American Indian or Native American means: all persons having origins in any of the original peoples of North America and who are recognized as an Indian by a tribe or tribal organization.
- (b) Asian means: All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian sub-continent, or the Pacific Islands, including, but not limited to China, Japan, Korea, Samoa, India, and the Philippine Islands.
- (c) Black means: All persons having origins in any of the Black racial groups of Africa, including, but not limited to, African-Americans, and all persons having origins in any of the original peoples of the Cape Verdean Islands.

(d) Eskimo or Aleut means: All persons having origins in any of the peoples of Northern Canada, Greenland, Alaska, and Eastern Siberia.

(e) Hispanic means: All persons having their origins in any of the Spanish-speaking peoples of Mexico, Puerto Rico, Cuba, Central or South America, or the Caribbean Islands.

(f) Portuguese means: All persons having Portuguese origin. Portuguese persons shall only be included in the definition of minority if specifically set forth in programs funded by state transportation bond statutes which include such persons as eligible participants

It has been determined that the following departments will be included in the Disparity Study:

- 22-CityView
- Cambridge Animal Commission
- Assessing Department
- City Auditor
- Budget Office
- Cambridge Arts Council
- Cambridge Fire Department
- Cambridge Police Department (CPD)
- Cambridge Public Library (CPL)
- Cambridge Retirement System (CRS)
- City Clerk
- City Council
- City Manager
- Cambridge Commission for Persons with Disabilities (CCPD)
- Commission on Immigrant Rights & Citizenship (CIRC)
- Community Development Department (CDD)
- Community Preservation Act (CPA)
- **Consumers'** Council
- Domestic and Gender Based Violence Prevention Initiative
- Election Commission
- Electrical Department
- Emergency Communications Department
- Department of Equity & Inclusion
- Finance Department
- Cambridge GIS
- Cambridge Historical Commission (CHC)
- Cambridge Human Rights Commission (CHRC)
- Department of Human Service Programs (DHSP)
- Information Technology Department (ITD)
- Inspectional Services Department (ISD)
- Law Department
- Lesbian, Gay, Bisexual, Transgender, Queer, Plus (LGBTQ+) Commission
- Cambridge License Commission
- The **Mayor's** Office
- Office of the Housing Liaison
- Open Data
- Cambridge Peace Commission
- Personnel Department
- Police Review & Advisory Board (PRAB)
- Cambridge Public Health Department
- Cambridge Public Schools (CPS)
- Cambridge Department of Public Works (DPW)

- Purchasing Office
- Traffic, Parking and Transportation Department (TP+T)
- Department of **Veterans’** Services (DVS)
- Cambridge Water Department (CWD)
- Department of Weights and Measures
- Cambridge Commission on the Status of Women

No airports or museums will be included. (There are buses and trains that goes through Cambridge, MA but they are not under the City procurement).

Preliminary Purchasing Practices

A. Procurement Thresholds:

- i. Less than \$10,000.00 is a sound business practice; informal.
- ii. Between \$10,000.01 and \$50,000.00 require a written request for quotes where solicitation for quotes must go out to at least 3 vendors.
- iii. More than \$50,000.01 denotes for a formal invitation bid to be advertised and a competitive process to occur. If an informal bid comes back at \$50,000.01 it has to be canceled and formally bid.

B. Cooperative contracts may be procured by other governmental state vendors within or outside of the state of Massachusetts. Only supplies can be purchased and not services.

C. The City has its own commodity codes (not NIGP, NAICS or other standard codes). Shuo Wang will work with IT to provide a list of commodity codes.

D. If using state contract or pre-procured, the thresholds do not uphold and do have to go through this process. **There’s a portion of Section 30B that allows a local governmental body to purchase from a contract that has already been procured by the state of Massachusetts’ Purchasing Agent** complies.

II. Specific Data Files

A. It was determined in this meeting that GSPC will need the following data files from the City of Cambridge, MA:

- i. Certified Vendor List (current)
- ii. Vendors & Suppliers List (current)
- iii. Awards & Contracts (during Study Period)
- iv. Payments (during Study Period)
- v. P-Cards (excluded from study)
- vi. Bidders (during the Study Period)
- vii. Subcontractor data (during the Study Period)
- viii. Commodity Codes (current)

1. Certified Vendor List

- The City does not certify.
- Vendor certifications are obtained from the State of Massachusetts and City of Boston.

2. Vendors & Suppliers List

- The City provides externally facing vendor registration and vendors provide a narrative description of the work they do.
- The City matches the **vendor’s** input with an internal list of similar vendors and assigns commodity codes.
- Vendors self-identify if they are MBE or WBE (but does not identify ethnicity) for purchasing purposes and for business certificates.

- When firms register for a business certificate, the clerk provides the information to Pardis Saffari who contacts those businesses to get registered with the City.
 - Pardis Saffari can pull business certificate information in Excel, but it will only be one year worth of data of firms that apply to do business.
 - An internal vendor list is in PeopleSoft and Jim Monagle can retrieve this list. May not be all vendors and include some workers comp and legal settlements.
 - The vendors in PeopleSoft are those who have been paid or are awaiting payment.
3. Awards & Contracts
- The best source of award data is the Contract Tracking Sheet. The base and the renewal amount of a contract will be in an internal contract tracking Excel spreadsheet which is used once the vendor has won and includes their name, their commodity code, and when it was sent. Data is split into different formats. Data from July 2017 to March 2021 are in an Excel file while data from April 2021 to June 2021 are kept on a Smartsheet. Data will include all **award data regardless of vendor's status**.
 - The total amount of an award would appear on the bid tab sheet but may not include its full amount. If the contract is amended within its lifespan, Section 30B allows for an additional 25% of the award to be utilized but will not be on the tab sheets.
 - The value of awards will only reflect the amount from the first year. Award tabs won't capture multi-year contracts. **Multi years doesn't exceed 3 years**. If longer than 3 years, there must be permission granted by the state to surpass 3 but no more than 5 under Section 30B.
 - The Cambridge Public Schools has some delegated authority to purchase so some award data may have to be solicited from their procurement staff directly, but payments come through the centralized financial system.
4. Payments
- The **City's** general ledger code includes a Project Code that describes what the payment was for.
 - Data is split into different formats. Data from July 2017 to April 2021 are in an Excel file while data from May 2021 to June 2021 are kept on a Smartsheet.
 - Data may also reside in PeopleSoft and can be pulled for GSPC.
5. P-Cards
- The City does not generally use P-Cards and P-cards will be excluded from the Disparity Study.
 - There are a few individuals in the City (the school superintendent, along with **the City's Purchasing Agents**) that have **\$2,000-\$3,000** debit cards for various things that do not go through purchase orders and are very limited.
6. Bidders
- Tab sheets will identify the bidders and are in Excel format. They are not centralized and will come in individual Excel files. Shuo Wang will talk to IT to determine if there is a way to get all tabs on one sheet.
 - A vendor does not have to be prequalified to bid on any contracts.
 - Vendors do not need to register to bid.
 - If a bid is advertised, the City sends out Green Cards as a notification of a bid that may be within a **vendor's** commodity code. The Green Cards have

been sent electronically but there are hard copies as well. All vendors within that commodity code will receive a Green Card.

7. Subcontractor Data

- There may not be enough data to use since Construction and Construction-related Services are not included in the Disparity Study.
- Vendors may subcontract other vendors but may not officially report it to the City.

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