



City
of
Milwaukee

OFFICE OF
**EQUITY AND
INCLUSION**

2023 Disparity Study

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STRONG** &

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I. INTRODUCTION

A. Scope of Work

In 2021, the City of Milwaukee, Wisconsin (“City”) contracted with Griffin & Strong, P.C. (“GSPC”) to conduct a comprehensive disparity study in accordance with the Scope of Work, to determine whether or not statistically significant disparity exists between the number of minority and women owned businesses that are ready, willing, and able to provide or perform goods, services (professional and non-professional) and construction services and the number of majority concerns currently participating in these same types of contracts with the City of Milwaukee.

Toward achievement of these ends, GSPC has analyzed the prime contractor contracting and subcontracting activities for the City’s purchases in the Industry Categories of Construction, Architecture & Engineering (“A&E”), Professional Services, Other Services, and Goods during the five (5) year Study Period January 1, 2015 through December 31, 2019 (CY2015-CY2019) (“Study Period”).

B. Objectives

The principal questions of this Study were:

1. Is there a statistically significant disparity within the relevant geographic markets between the percentage of certified Minority- and Women-owned businesses willing and able to provide goods or services to the City in each of the categories of contracts and the percentage of dollars spent by the City or the City contractors with such firms?
2. If a statistically significant disparity exists, have factors other than race and gender been ruled out as the cause of the disparity?
3. Can the disparity be adequately remedied with race- and gender-neutral remedies?
4. If race- and gender-neutral remedies are not sufficient, does the evidence from the Study legally support race- and/or gender-conscious remedial program elements?
5. Are the proposed remedies narrowly tailored to the findings of the Study?

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.

- Establishing data parameters and finalizing a work plan;
- Legal analysis;
- Reviewing policy and procurement processes;
- Collecting electronic data, inputting manual data, organizing and cleaning data, and 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;
- Establishing findings of fact regarding the existence and nature of marketplace discrimination and/or other barriers to minority and women owned business participation in City 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.

D. Report Organization

This report is organized into the following sections, which provide the results of GSPC's analytical findings and offer 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 programs;
- Chapter V, which presents the methodology used in the collection of statistical data from the City and the analyses of the data regarding relative MWBE Availability and Utilization analyses, and includes a discussion on levels of disparity for the City's prime contractors and subcontractors;
- Chapter VI, which analyzes whether present or ongoing effects of past discrimination are affecting the City's marketplace; and
- Chapter VII outlines the qualitative analyses: the analysis of anecdotal data collected from the online survey, anecdotal interviews, focus groups and public meetings.

Study definitions are in Appendix J.

II. EXECUTIVE SUMMARY OF FINDINGS AND RECOMMENDATIONS

This chapter presents the findings and recommendations resulting from the Study for the City of Milwaukee, WS related to Construction, Architecture & Engineering (A&E), Professional Services, Other Services, and Goods for CY2015-CY2019.

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 some statistically significant Underutilization of some Minority owned firms and Nonminority Woman owned firms in each of the five (5) work categories that GSPC 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 City of Milwaukee's marketplace.

A. FINDINGS

1. Legal Finding

FINDING 1: LEGAL FINDING

Consistent with the “narrow tailoring” aspect of the strict scrutiny analysis discussed in the Legal Chapter, the City of Milwaukee continues to implement race and gender-neutral measures to try to increase Utilization of MWBE firms, but the present Study shows that those measures have not been effective in resolving or significantly reducing the identified disparities.¹ Accordingly, the City has a basis to introduce race and gender conscious remedies or policies toward that goal.²

Moreover, the use of a regression analysis and consideration of the contracting environment in the private sector as part of this Study permit the City to demonstrate that factors other than MWBE status cannot fully account for the statistical disparities found. Stated otherwise, the City of Milwaukee can show that MWBE 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.

¹ See *City of Richmond v. J. A. Croson Company*, 488 U.S. 469, 507-508; 109 S. Ct. 706 (1989).

² *Id.*

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 and an inference of discrimination has been identified.³

2. Policy Findings

FINDING 2: NO RACE OR GENDER-CONSCIOUS PROGRAM ELEMENTS

Milwaukee does not currently have a program that employs percentage-based Utilization goals, project/contract set-asides, bid preferences, or similar advantages for Minority owned or Women owned Business Enterprises. The City agreed in 2013 as part of the settlement of a federal lawsuit to discontinue a race and gender conscious program that the City had implemented following a 2009 disparity study.

FINDING 3: THRESHOLDS

Informal procurement methods generally can be used by the City for contracts and purchases less than \$50,000. Informal methods include the use of Procurement Cards by user departments for purchases up to \$5,000; purchase orders approved by the Purchasing Division for purchases under \$10,000; and informal bids for purchases between \$10,000 and \$50,000.

For construction projects and purchases of goods and services costing more than \$50,000, competitive bidding is required consistent with the City ordinances. The Public Works department does its own purchasing, including construction services, but appears to follow the same monetary thresholds.

FINDING 4: APPRENTICESHIP REQUIREMENTS

The City has a requirement that contractors awarded public works construction contracts valued above \$100,000 utilize apprenticeships and on-the-job training as part of their workforce. Apprenticeship programs must be registered with the City; there is no requirement that only union apprentices be used, but interviews indicated that there are few non-union apprenticeship programs currently. This policy may therefore present a barrier to increased participation by SBEs and MWBEs.

For contracts over \$500,000 there is the additional requirement that 25% of the apprentices or on-the-job trainees be unemployed or underemployed City residents.

³ Id.; see also H.B. Rowe Company, Inc. v. W. Lindo Tippet, 615 F.3d 233, 256-58 (4th Cir. 2010) (finding strong basis in evidence for remedial action for African American and Native American firms, but no similar basis for inclusion of other minority groups (including women-owned businesses) in the remedial policy).

FINDING 5: LOCAL PREFERENCE PROGRAM

The Local Business Enterprise Contracting Program provides a 5% bid preference in competitively-bid contracts (i.e., valued over \$50,000), and stipulates that in the event of a tie between a local and non-local bidder the award goes to the local bidder. Where the local business is also a certified small business enterprise (SBE), the bid preference is raised to 10%. The program and attendant bid preference does not apply to public works contracts, however.

FINDING 6: SMALL BUSINESS PREFERENCE PROGRAM

The Office of Small Business Development (part of OEI) administers the City’s Small Business Enterprise (SBE) Program, including certification of SBEs for the program. It is a goals-based program, requiring the following participation levels for SBEs for contracts or subcontracts with the City: 25% participation for construction; 25% participation for goods; and 18% participation for professional services. There are no set-aside projects or programs for SBEs.

There is no legislative Good Faith Effort (GFE) requirement or policy for the SBE goals program, but interviewees reported that a bidder / contractor can be deemed non-responsive for failure to meet the goal. This appears inconsistent, in part, with a provision in the standard “Terms and Conditions” for City contracts, which requires “best efforts” toward meeting an established goal – implying that failure to meet a goal does not, in and of itself, make a bid non-responsive. Certification for the SBE Program is conducted by the City, and it does not accept certifications from other entities – governmental or private. Staff interviews indicated that it is accepted practice in the City (OEI) to certify SBEs by specific NAICS Code(s).

FINDING 7: REVOLVING LOAN PROGRAM FOR SBES

The Office of Equity and Inclusion for the City oversees the Revolving Loan Program, which is “designed to assist SBE-certified firms with financing for prime and subcontracts awarded to them by the City of Milwaukee.” The loans can be granted for up to 25% of the contract value, can be used for working capital or bonding, and carry a 5% fixed interest rate.

FINDING 8: SOCIALLY-RESPONSIBLE CONTRACTORS (SRC) PROGRAM

For contracts in excess of \$50,000, bid preference is given to contractors who satisfy the requirements for the Socially-Responsible Contractors (SRC) Program. An SRC is defined as a contractor that has “implemented a program to eliminate, or significantly reduce, barriers to employment for current and prospective employees of the contractor,” including implementation of at least 3 of the 13 enumerated actions or programs – such as hiring persons with felony convictions, assistance in earning a high school diploma, childcare or transportation assistance, disability accommodations, training, etc. A qualifying SRC is granted the preference where its bid does not exceed the lowest bid by more than 5% or \$25,000.

FINDING 9: CONTRACT BUNDLING/UNBUNDLING

Policy interviews revealed that project unbundling is occasional and decided at the departmental level, but that there is a general belief that it is easier to manage larger projects from a contract administration perspective. One area in which unbundling has been used is in forestry contracts, under the purview of Public Works.

FINDING 10: BONDING AND INSURANCE

Performance bonds are required for construction projects, including in public works projects. Staff interviews revealed that the Purchasing Director is authorized to adjust or waive bonding requirements for contracts procured through Purchasing.

Anecdotal interviews indicated that there were some complaints by bidders or potential bidders that bonds requirements were a barrier to participation in City contracting. In the Survey of Business Owners, 12% of survey respondents said that performance bonds were a barrier to obtaining work on project for the City, while 14.9% said bid bonds were a barrier and 11.1% said that insurance requirements were a barrier.

Insurance requirements are set forth in the Terms and Conditions documents. The City must be added to the policy(ies) as a named insured, and coverage for worker's compensation, general liability, automobiles/vehicles, umbrella excess coverage, pollution liability, and cyber insurance are required. As with bonding, staff interviews revealed that the Purchasing Director has discretion to adjust insurance levels for contracts procured through Purchasing. Insurance likewise was occasionally cited in interviews as a potential barrier to participation.

FINDING 11: PROMPT PAYMENT

The City has established its own prompt payment policy, which also incorporates state law with respect to payment of subcontractors. The policy requires the City to pay primes within 30 days, and primes to pay subcontractors within 7 days of its receipt of payment by the City. There is also a prompt payment provision for the payment of subcontractors in the Small Business Enterprise Program, which expressly requires primes to pay their SBE subcontractors within 7 days of receipt of payment by the City.

3. Quantitative Findings***FINDING 12: 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 Milwaukee spending with vendors takes place. The Geographic Relevant Market was the Milwaukee Metropolitan Statistical Area (MSA) counties of Milwaukee, Ozaukee, Washington, and Waukesha Counties, based on the following percentages of spending:

- In Construction, 97.13 %
- In A&E, 79.11%
- In Professional Services, 81.19%
- In Other Services, 80.94%
- In Goods, 69.92%

Given that 84.58% of all Milwaukee spending was with firms located in this relevant market (and 89.16% of spending excluding Goods), GSPC determined that one consistent Relevant Geographic Market across all Industry Categories was appropriate.

FINDING 13: AVAILABILITY

The measures of Availability utilized in this Study incorporate all of 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 Milwaukee makes certain purchases.
- The firm's owner has taken steps to demonstrate interest in doing business with government.
- The firm is located within a relevant geographical area such that it can do business with Milwaukee.

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

Table 1: Availability Estimates by Work Category

In the Relevant Market

(Based upon the Master Vendor File)

Milwaukee Disparity Study

Business Ownership Classification	Construction	A&E	Professional Services	Other Services	Goods
Black American	24.95%	13.39%	16.79%	18.98%	5.44%
Asian American	1.13%	14.29%	2.86%	1.49%	0.91%
Hispanic American	19.14%	2.68%	1.79%	3.80%	1.36%
Native American	1.88%	3.57%	0.71%	0.50%	0.68%
TOTAL MBE	47.09%	33.93%	22.14%	24.75%	8.39%
Nonminority Female	8.63%	18.75%	9.64%	8.25%	3.63%
TOTAL M/WBE	55.72%	52.68%	31.79%	33.00%	12.02%
NON-M/WDBE	44.28%	47.32%	68.21%	67.00%	87.98%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%	100.00%

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FINDING 14: MWBE PRIME UTILIZATION

As Table 2 below shows, Milwaukee paid a total of \$500.3 million in prime construction spending in the Relevant Market during the Study Period and \$44.9 million of this amount, or 8.55% was paid to MWBE firms as prime contractors. MWBEs were paid 9.55% of A&E Services, 6.69% of Professional Services, 4.07% of Other Services, and 8.11% of Goods. MWBEs won 7.40% of prime payments across all purchasing categories.

Table 2: Summary of Prime Utilization by Work Category

In the Relevant Market

(Based upon Payments CY2015-CY2019)

Milwaukee Disparity Study

Business Ownership Classification	Construction (\$)	A&E (\$)	Professional Services (\$)	Other Services (\$)	Goods (\$)	Total (\$)
Black American	\$15,089,502	\$3,173,453	\$3,146,218	\$2,671,381	\$15,605,588	\$39,686,142
Asian American	\$1,766,595	\$294,987	\$38,714	\$1,179,458	\$ -	\$3,279,754
Hispanic American	\$10,726,962	\$22,457	\$8,969	\$486,388	\$123,832	\$11,368,608
Native American	\$15,171,166	\$ -	\$ -	\$ -	\$ -	\$15,171,166
TOTAL MINORITY	\$42,754,224	\$3,490,896	\$3,193,901	\$4,337,227	\$15,729,420	\$69,505,668
Nonminority Female	\$2,152,663	\$710,615	\$ -	\$7,981,815	\$2,056,004	\$12,901,097
TOTAL M/WBE	\$44,906,888	\$4,201,511	\$3,193,901	\$12,319,043	\$17,785,424	\$82,406,767
NON-M/WBE	\$455,416,207	\$39,805,182	\$44,526,240	\$290,134,227	\$201,475,530	\$1,031,357,386
TOTAL FIRMS	\$500,323,095	\$44,006,694	\$47,720,141	\$302,453,270	\$219,260,954	\$1,113,764,154
Business Ownership Classification	Construction (%)	A&E (%)	Professional Services (%)	Other Services (%)	Goods (%)	Total (%)
Black American	3.02%	7.21%	6.59%	0.88%	7.12%	3.56%
Asian American	0.35%	0.67%	0.08%	0.39%	0.00%	0.29%
Hispanic American	2.14%	0.05%	0.02%	0.16%	0.06%	1.02%
Native American	3.03%	0.00%	0.00%	0.00%	0.00%	1.36%
TOTAL MINORITY	8.55%	7.93%	6.69%	1.43%	7.17%	6.24%
Nonminority Female	0.43%	1.61%	0.00%	2.64%	0.94%	1.16%
TOTAL M/WBE	8.98%	9.55%	6.69%	4.07%	8.11%	7.40%
NON-M/WBE	91.02%	90.45%	93.31%	95.93%	91.89%	92.60%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

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FINDING 15: MWBE TOTAL UTILIZATION

Total Utilization (prime plus subcontracting) i20s represented in Table 3. MWBEs received 16.08% of Total Construction dollars, 13.21% of Total A&E dollars and 7.01% of Other Services dollars and 8.12 of Goods There was little to no subcontract dollars in Professional Services, which is common.

Table 3: Total Utilization- Construction Services, A&E, Other Services

In the Relevant Geographic Market

Distribution of Dollars by Business Ownership and Fiscal Year

(Using Payment Dollars, CY 2015-2019)

Milwaukee Disparity Study

Business Ownership Classification	Construction	A&E	Other Services	Goods
	(\$)	(\$)	(\$)	(\$)
Black American	\$30,212,769	\$3,748,407	\$7,909,116	\$15,608,418
Asian American	\$1,791,601	\$347,967	\$1,179,458	\$ -
Hispanic American	\$17,603,496	\$584,680	\$1,205,358	\$140,727
Native American	\$16,420,569	\$20,670	\$379,124	\$ -
TOTAL MINORITY	\$66,028,435	\$4,701,722	\$10,673,056	\$15,749,145
Nonminority Female	\$14,445,083	\$1,111,657	\$10,520,169	\$2,056,004
TOTAL M/WBE	\$80,473,518	\$5,813,379	\$21,193,225	\$17,805,149
NON-M/WBE	\$419,849,577	\$38,193,315	\$281,260,044	\$201,455,805
TOTAL FIRMS	\$500,323,095	\$44,006,694	\$302,453,270	\$219,260,954
Business Ownership Classification	Construction	A&E	Other Services	Goods
	(%)	(%)	(%)	(%)
Black American	6.04%	8.52%	2.61%	7.12%
Asian American	0.36%	0.79%	0.39%	0.00%
Hispanic American	3.52%	1.33%	0.40%	0.06%
Native American	3.28%	0.05%	0.13%	0.00%
TOTAL MINORITY	13.20%	10.68%	3.53%	7.18%
Nonminority Female	2.89%	2.53%	3.48%	0.94%
TOTAL M/WBE	16.08%	13.21%	7.01%	8.12%
NON-M/WBE	83.92%	86.79%	92.99%	91.88%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%

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FINDING 16: SUMMARY OF DISPARITY ANALYSIS FOR CY2015-CY2019

Table 4 below indicates those MWBE groups where a statistically significant disparity (X) was found in prime Utilization for Construction, A&E Services, Professional Services, Other Services, or Goods. There was Underutilization in prime contracts for all MWBEs groups, except Black Americans in Goods and Native Americans in Construction Services.

Table 4: Summary of Statistically Significant Underutilization of MWBEs in Prime Contracting

Milwaukee Disparity Study

Business Owner Classification	Construction	A&E	Professional Services	Other Services	Goods
Black American	X	X	X	X	
Asian American	X	X	X	X	X
Hispanic American	X	X	X	X	X
Native American		X	X	X	X
Women	X	X	X	X	X

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Disparity was also examined eliminating larger prime projects. For prime payments less than \$1 million for MWBEs were underutilized in all procurement categories, except Native Americans in Construction for projects less than \$1,000,000 (Asian Americans were underutilized but it was not substantial).

For prime payments less than \$500,000 MWBEs were underutilized in all procurement categories, except and Native Americans and Asian American in Construction and Black Americans in A&E.

For Total Utilization (prime plus subcontracting) there was disparity for all MWBE groups except Black Americans in Goods and Native Americans in Construction Services (Table 5).

Table 5: Summary of Statistically Significant Underutilization of MWBEs in Total Utilization

Milwaukee Disparity Study

Business Owner Classification	Construction	A&E	Professional Services	Other Services	Goods
Black American	X	X	X	X	
Asian American	X	X	X	X	X
Hispanic American	X	X	X	X	X
Native American		X	X	X	X
Nonminority Women	X	X	X	X	X

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4. Anecdotal Findings

FINDING 17: PRIME CONTRACTORS CIRCUMVENTING SBE GOALS

Study participants expressed concern about prime contractors using pass-throughs and fronts to sidestep the City’s 25% SBE hiring goals. More than one-third of the firms participating in the anecdotal interview portion of this Study (13 out of 32) outlined experiences in which they encountered prime contractors using subcontractors to skirt participation goals or feign good faith efforts to win contracts with the City. More than a third of the respondents to the GSPC Survey of Business Owners – 36.1% – of the 208 firms queried for this portion of the survey believed to some degree that prime contractors would include a Small Business subcontractor on a bid to meet the goals, then drop the subcontractor after winning the bid.

FINDING 18: PROMPT PAY

A number of firms participating in the Study found a problem receiving prompt pay from the City. Just over 14% of the 64 respondents to the question about timely pay for purchase order numbers said they were paid by the City in less than 30 days of invoicing. More than 42% said it could take up to 31- 59 days to receive payment. 12.5% reported waiting as long as 89 days – nearly three months – to be paid for City work, and 1.6% stated they were paid 120 days or more.

FINDING 19: UNFAIR COMPETITION AGAINST LARGE FIRMS

Firms noted a consistent tendency for City agencies and the primes they contract with to typically hire larger firms and often overlook small firms despite SBE program requirements. In fact 27.4% of survey respondents, which included 36.7% of Black respondents said there was unfair competition with large companies that they saw as a barrier for MWBE firms.

FINDING 20: INFORMAL NETWORKS

When asked if they believe there is an informal network of prime and subcontractors doing business with the City that monopolizes the public contracting process, 67.3% answered in the affirmative, including 82.3% of Black respondents and 62.5% of Women respondents.

FINDING 21: REGISTRATION AND CERTIFICATION

About two-thirds (66.3%) of Study survey participants reported being registered in E-Notify to receive notifications of procurements from the City. This is slightly higher than those same firms reported registration with other public agencies at 58.7%. Of those unregistered firms (there were 38), 55.3% told the study team that they did not know there was a registry and 18.4% said they did not believe they would be awarded a contract.

When asked why they were not certified, 21% of survey respondents said they didn't understand the certification process, which included 48% of Black and 15.8% of Women respondents. 17.4%, including 36.8% of Women and 20% of Black respondents said certification was too time consuming. 29.3%, including 48% Black and 42% Women said they did not understand how certification would benefit their company.

FINDING 22: EXPERIENCED DISCRIMINATION WITH THE CITY

About 16% of Study participants said they experienced discrimination in dealing with the City. A Hispanic business owner said his expertise was undervalued citing that someone asked for a “Mexican discount.” and a Woman owned firm say she was underpaid, again citing discrimination as the reason. Further, 67.3% of all respondents to the Survey of Business Owners said that double standards in qualifications and work performance make it more difficult for Minority, Women, Disadvantaged and Small businesses to win bids or contracts. This included 82.3% of Black, 62.5% of Women, and 51.9% of Nonminority respondents.

5. Private Sector Findings

FINDING 23 : LOWER REVENUES

Relative to non-SMWDBEs, (Small, Minority, Women, and Disadvantaged Business Enterprises) the estimated revenue shares of SMWDBEs never exceeds 5.4%. With the exception of Hispanic owned firms, SMWDBEs have estimated revenue shares far smaller than their firm representation shares.

Relative to non-SMWDBEs, in the City of Milwaukee Market Area (which is the Milwaukee MSA), exclusive of Women owned firms—some of whom are White—the SMWDBE revenue shares are substantially below their estimated 16% (approximate) firm representation shares. This is consistent with and suggestive of, but not necessarily causal evidence for, SMWDBEs facing discriminatory barriers in the private sector of the City of Milwaukee Market Area.

FINDING 24 : LESS LIKELY TO BE SELF-EMPLOYED

Relative to non-SMWDBEs, firms owned by Black Americans are less likely to be self-employed in the City of Milwaukee Market Area. This is suggestive of Black American owned firms facing barriers to self-employment in the City of Milwaukee Market Area.

The lower self-employment likelihood of Black American owned firms in the City of Milwaukee Market Area could reflect disparities in public contracting as there is research evidence that the self-employment rate of Black Americans is increasing with respect to the provisioning and establishment of SMWDBE public procurement programs.

Relative to non-SMWDBEs, firms owned by Native Americans and Asian Pacific Americans are less likely to be self-employed in the City of Milwaukee Market Area construction sector. This is suggestive of these firms facing barriers to self-employment in the City of Milwaukee Market Area construction sector.

The lower self-employment likelihood of these types of SMWDBEs being self-employed in the construction sector in the City of Milwaukee Market Area could reflect disparities in public contracting, as there is research evidence that the self-employment rate of SMWDBEs in construction is increasing with respect to the provisioning and establishment of SMWDBE public construction procurement programs.

FINDING 25 : DOMINANCE OF NON-SMWDBES IN PRIVATE SECTOR CONSTRUCTION

Non-SMWDBEs account for approximately 90 % of building permits in the City of Milwaukee during the 2018 - 2021 calendar years.

To the extent that experience acquired by participating in the private sector translates into an enhanced capacity to compete in the market for public sector contracts and subcontracts, the almost complete

dominance of Non-SMWDBEs in securing building permits suggest the presence of private sector barriers faced by SMWDBEs.

FINDING 26: CREDIT MARKET DISPARITIES

Relative to non-SMWDBEs, firms certified as disadvantaged, and those owned by Black Americans and Asian Americans 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.

FINDING 27 : SMWDBES LESS LIKELY TO BE NEW FIRMS

Relative to non-SMWDBEs, certified DBE firms, and those owned by Hispanic Americans are less likely to be new firms. This suggests that any public contracting disparities between non-SMWDBEs and these type of SMWDBEs cannot be explained by differences in market experience.

FINDING 28 : BID SUBMISSION RATES DO NOT DIFFER

Relative to non-SMWDBEs, SMWDBEs do not differ with respect to the submission of bids for prime contracts with the City of Milwaukee. This suggests that any disparities in public contracting outcomes between SMWDBEs and non-SMWDBEs in the City of Milwaukee Market Area cannot be explained by SMWDBEs submitting fewer prime contract bids relative to non-SMWDBEs.

FINDING 29 : WOMAN OWNED FIRMS LESS LIKELY TO HAVE RECEIVE PRIME OR SUBCONTRACTS

Relative to non-SMWDBEs, firms owned by Women received fewer City of Milwaukee prime contracts. To the extent that success in public contracting is proportional to having prior prime awards, this suggests that any contracting disparities between non-SMWDBEs and Women owned firms can possibly be explained, at least in part, by past, and possibly discriminatory constraints on these types of SMWDBEs successfully winning prior prime contracts from the City of Milwaukee, which could translate into future capacity to secure prime contracts.

Relative to non-SMWDBEs firms certified as Women owned received fewer City of Milwaukee subcontracts. To the extent that success in public contracting is proportional to having prior subcontracts, this suggest that any contracting disparities between non-SMWDBEs and Women owned firms can possibly be explained, at least in part, by pas, and possibly discriminatory constraints on subcontracting, which could constrain their future capacity to secure prime contracts.

FINDING 30: CERTIFIED MBES, BLACK AND ASIAN AMERICANS MORE LIKELY TO HAVE NEVER RECEIVED A PRIME OR A SUBCONTRACT

Relative to non-SMWDBEs, certified MBEs and firms owned by Black Americans and Asian Americans are more likely to have never received a City of Milwaukee prime contract or subcontract. To the extent that success in public contracting is proportional to having prior prime contracts or subcontracts, this suggests

that any City of Milwaukee public contracting disparities between non-SMWDBEs, and these types of SMWDBEs can possibly be explained by their relative disadvantage in having secured prior prime contracts or subcontracts from the City of Milwaukee.

FINDING 31: BLACK OWNED FIRMS MORE LIKELY TO PERCEIVE DISCRIMINATION

Relative to non-SMWDBEs, firms owned by Black Americans are relatively more likely to experience perceived discrimination by the City of Milwaukee. This suggests that, at least for SMWDBEs owned by Black Americans, City of Milwaukee public contracting disparities may at least in part be explained by perceived discrimination, which could possibly disincentivize prime bid submissions that lower chances at successfully winning prime contracts with the City of Milwaukee.

FINDING 32: MBEs, ASIAN AMERICANS, OTHER RACE MORE LIKELY TO PERCEIVE INFORMAL NETWORKS

Relative to non-SMWDBEs, firms certified as MBEs, and those owned by Asian Americans and Other Race are more likely to perceive that informal networks enable contracting success with the City of Milwaukee. This suggests that for these types of SMWDBEs, City of Milwaukee contracting disparities between them and non-SMWDBEs can be potentially explained by their exclusion from the City of Milwaukee public contracting networks that reduces their ability to secure prime contracts and subcontracts.

B. COMMENDATIONS

Commendations
Commendation 1: Revolving Loan Program for SBEs
Commendation 2: Bid preference is given to contractors who satisfy the requirements for the Socially-Responsible Contractors (SRC) Program
Commendation 3: Good and useable payment and subcontractor data
Commendation 4: The City provides recognition of contractors that have “implemented a program to eliminate, or significantly reduce, barriers to employment for current and prospective employees of the contractor,” through its Socially-Responsible Contractor Program.
Commendation 5: Forecasting - the City publishes a five-year Buying Plan (“Forecast of Contracting Opportunities”), designed to notify vendors and potential vendors of upcoming opportunities to do business with the City.

C. RECOMMENDATIONS

The findings of this Study demonstrate that there is a factual predicate that supports the establishment of race and gender conscious program elements, along with race and gender-neutral tools. As a result, GSPC makes the following recommendations to assist the City in remedying the disparities found to ensure that all Available firms within the Relevant Market are given every chance to succeed in doing business with the City.

RECOMMENDATION 1: ALLOCATING RESOURCES AND STAFFING

The following recommendations represent the need for an increase in both resources and staffing. The City should consider the allocation of sufficient resources in its plan to adopt GSPC's recommendations. This may include additional staffing. GSPC is aware that additional funding may be delayed due to the budgeting process. However, until resources can be applied, this time can be utilized with:

1. Accepting the Study and its Recommendations;
2. Conducting a Gap Analysis (What needs new legislation and what can be implemented under current authority)
3. Plan for Implementation (Steps, Phases, and Tasks)
4. Draft New Program Plan
5. Determine Budget and Staffing Needs for New Program Elements
6. Develop a Training Protocol and Train Staff

RECOMMENDATION 2: SET ANNUAL INTERNAL MBE AND WBE GOALS BASED UPON AVAILABILITY

Availability is the benchmark for attainment on an annual basis for all categories. Annual Internal Goals are an internal measure for the City to determine if the participation of firms in each race, ethnicity, and gender group is what should be expected based upon Availability. Although Annual Internal Goals are based upon Availability, the City may not be expected to achieve full Availability immediately, but may need to ramp up, depending on what current attainment has been in each of the Industry Categories. GSPC can work with the City to set separate annual goals for the first year and the formula for succeeding years for MBEs and WBEs.

RECOMMENDATION 3: MWBE SUBCONTRACTING GOALS

(a) Contract-by-Contract Goals –

MWBE groups were statistically significantly underutilized except Native American owned firms in Construction and Black American owned firms in Goods. For those groups that were not the exception, the Study provides a basis for the City to create a robust race and gender conscious subcontractor program that establishes MBE and WBE goals on a contract-by-contract basis.

The City should set separate MBE and WBE goals and no longer set SBE goals. Race and gender discrimination are different and GSPC has suggested other measures to enhance SBEs instead of subcontracting goals since there is no reason to believe that SBEs are not already used as subcontractors when subcontractors are utilized. Also, if an SBE goal is set, it is continuing a goal that includes Non-MWBEs when that group was overutilized in every work category during the Study Period.

The MBE contract goals should be based upon the combined Availability of all ethnic groups in order to gain an incentive for Prime Contractors to utilize firms owned by all ethnic minority groups. However, it is equally important for the City to monitor those contract goals and adjust them if the relative balance of the utilization of minority groups is out of line with the individual race/ethnicity group Availability.

If firms do not meet the MBE or WBE contract-by-contract goals, they should demonstrate Good Faith Efforts. The State of North Carolina has a 50-point system to measure Good Faith Efforts that can be modified to meet the City's objectives. If a firm does meet the MBE or WBE goals or does not satisfy Good Faith Efforts, they should be deemed non-responsive and their cost proposal should not be opened.

For those categories that were not underutilized, the City should still have internal aspirational goals equal to Availability that should be monitored to make sure that Native American owned firms continue to be utilized when MBE Construction subcontractor goals are set.

(b) Aspirational Subcontracting Goals

For those contracts where contract-by-contract goals cannot be utilized (such as under Wisconsin Act 12), the City should still set aspirational subcontracting goals.

Similar to Wisconsin Act 12, The State of Washington has Initiative 200 which requires that, "The state shall not discriminate against, or grant preferential treatment to, any individual or group on the basis of race, sex, color, ethnicity, or national origin in the operation of public employment, public education, or public contracting." However, the City of Seattle has successfully utilized the following language in its RFPs:

The Mayor's Executive Order and City ordinance require the maximum practicable opportunity for successful participation of minority and women-owned subcontracts. All Proposers must agree to SMC Chapter 20.42 and seek meaningful subconsultant opportunities with WMBE firms. The City requires a plan for including minority- and women-owned firms, which becomes a material part of the contract. The Plan must be responsive in the opinion of the City, which means a meaningful and successful search and commitments to include WMBE firms for subcontracting work. The City reserves the right to improve the Plan with the winning Consultant before contract execution. Consultants should use selection methods and strategies sufficiently effective for successful WMBE participation. At City request, Consultants must furnish evidence such as copies of agreements with WMBE subconsultants either before contract execution or during contract performance. The winning Consultant must request written approval for changes to the Inclusion Plan once it is agreed upon. This includes changes to goals, subconsultant awards and efforts.

In solicitations the City would state the aspirational MBE and WBE goals for the contract and ask the respondent to tell the City what it can do to assist the City in reaching its aspirational goals. The City may additionally request that the respondent document what efforts it made to include MWBEs as subcontractors.

The respondent is not penalized for not meeting the goal provided that it does not violate the Commercial Non-Discrimination Policy set forth in Recommendation 4 below. However, once the respondent identifies its intentions to utilize MWBEs, that proposed utilization should become a contract commitment, if the respondent is the awardee.

(c) Contract Compliance

To effectively administer an MWBE subcontracting program, the City must institute all aspects of contract compliance including robust monitoring to make sure that prime contractors utilize firms as committed to in their bid package. This includes:

- **Assessment** – An initial assessment of MWBE availability and capacity should be performed to determine what firms are actively capable of performing the required scopes or that could be prepared to perform certain scopes. To the extent possible, this should be done with interested firms on a one-on-one basis.
- **Outreach** – It is important that the City let the MWBE business community 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 them in building capacity.
- **Certification/Verification** –The City should begin to certify Minority and Women owned firms and should accept certifications from other agencies, particularly state agencies for MBEs, WBEs, and SBEs. This will reduce administrative costs to the City and the increased burden on business owners in having to obtain multiple certifications. Further, the City should encourage and assist firms in getting certified.
- **Procurement** – The City should carefully consider the development of bid packages to ensure that each one supports maximum opportunities for MWBE participation, as a direct contractor or by other means such as subcontractor, supplier, joint venturers, or mentor-protégé. This means that contract compliance should be brought into the procurement process as team members to actively participate in the bid development, including the method of procurement.
- **Monitoring** – It is essential that there is close monitoring and the efficient closeout of projects to verify that MWBE firms are actually performing the work that they were promised in the bid and that they are compensated timely and, in the amounts, committed.

RECOMMENDATION 4: ESTABLISH A PROCUREMENT NON-DISCRIMINATION POLICY TO INVESTIGATE POSSIBLE DISCRIMINATION

A Procurement Non-Discrimination Policy is particularly useful when there are no goals set on a project or where goals cannot be set on a project because of factors, such as Wisconsin Act 12. It allows the City to assess and take action if it is concerned that a prime contractor may be actively discriminating in its

utilization of MWBE subcontractors. It is GSPC's recommendation that the City implement a policy permitting an investigation into possible intentional discrimination in cases where there is a reported complaint of possible discrimination and/or where the lowest bidding prime contractor has failed to reach a certain percentage of MWBE participation that might be expected on a project based upon a review of the Availability for the Industry and the relevant scopes of work. This is not a preference provision but is intended to prevent the City from passively and/or unwittingly participating in or funding private discriminatory conduct.

Specifically, passive participation can be found where a governmental entity fails to adjust its procurement practices to account for the effects of private discrimination on the availability and utilization of minority- and women-owned businesses. Stated otherwise, the governmental entity can refuse to essentially fund private discrimination in the award of public contracts (i.e., infusing funds into a discriminatory industry). GSPC submits that a significant failure to achieve or approach the expected participation of MWBEs in a project raises the potential for private discrimination such that the City risks becoming a passive participant to discrimination if it fails to inquire further about the potential for intentional discrimination before awarding a contract implicating public monies. One mechanism for determining whether a prime has potentially discriminated against MWBEs is to require them to demonstrate what efforts they made to consider MWBE firms, such as:

- (a) Outreach to MWBE firms;
- (b) Provide plans to MWBE firms;
- (c) Give serious consideration to quotes provided by MWBE firms (this is particularly true if MWBE subcontractors provided the low bid, but were still not utilized by a prime vendor);
- (d) Negotiated in good faith with interested minority businesses and did not reject them as unqualified without sound reasons based on their capabilities. This tool does not have to be used for every project but should be consistently utilized for larger projects in which bidders submit little to no proposed MWBE utilization.

A contractor who is found to have engaged in discrimination may be subject to any or all contract remedies available to the City, including but not limited to:

- (a) Suspension from or cancellation of the eligible project and/or rescission of the contract.
- (b) Debarment from the award of all future contracts or subcontracts with the City for a minimum of one year and a maximum of five years from the date upon which this penalty is imposed.

RECOMMENDATION 5: RACE AND GENDER-NEUTRAL SMALL BUSINESS RESERVE PROGRAM

GSPC heard complaints that small businesses, which is what many MWBEs are, have to compete unfairly with large companies. The first step to remedy this inequity is to institute a race and gender-neutral program that designates certain contracts that can only be bid on by small businesses. This is an excellent way to get firms that have only worked as subcontractors to bid as prime contractors and grow their capacity. This will ultimately result in more competition in the marketplace. This will take the place of the SBE subcontractor goal program. But it is important to provide supportive services to firms making this transition.

RECOMMENDATION 6: RAISE THE THRESHOLD FOR THE APPRENTICESHIP PROGRAM

The City requires that for construction contracts valued over \$100,000, bidders must utilize an apprenticeship program and on the job training. This requirement, on its face is a barrier to small, minority and women owned businesses that do not have the resources to have an internal apprenticeship program and may not be members of the unions that have these programs. Therefore, GSPC recommends that the City eliminate this requirement, or at least raise the threshold to contracts over \$1,000,000.

The City should maintain the requirement that it has on construction contracts over \$500,000 that requires 25% of the apprentices or on-the-job trainees be unemployed or underemployed City residents but apply it to contracts over \$1,000,000.

RECOMMENDATION 7: STREAMLINE THE REGISTRATION AND CERTIFICATION PROCESS & INITIATE A CAMPAIGN TO FOR MWBE FIRMS TO CERTIFY

The anecdotal evidence indicates that MWBEs find the E-notify registration and certification processes with the City to be burdensome. In initiating a new race and gender conscious program, this would be an ideal time to being a campaign to get minority and women owned firms to get certified by the City and provide more streamlined applications along with assistance in getting registered and certified. The most important aspect of such a campaign should be to educate firms on how certification with benefit them. The City should also review ways to expedite certification.

RECOMMENDATION 8: STRENGTHEN OUTREACH AND FACILITATE COMMUNICATIONS WITH PROSPECTIVE BIDDERS

Planning plays an important role in establishing and maintaining effective remedial programs. This begins with understanding what services and goods the City will be buying in the year to come and effectively communicating contracting opportunities to prospective bidders, including SBEs and MWBEs.

- **Targeted Outreach-** Annual forecasting will enable the contract compliance personnel to target firms that are capable of doing the work for notification of the work. This is important so that firms, including those outside of construction are aware of upcoming opportunities;
- **Encourage Teaming-** Knowing ahead of time what work will be presented in the coming year will give room for contract compliance to schedule networking events and encourage firms to team. It also gives more time for mandatory pre-bid conferences where potential prime contractors can meet potential subcontractors.
- **Reduce Perception of Informal Network** – Anecdotal evidence showed strong perceptions of an informal network based upon relationships at the City. One impact of informal networks is that certain firms find out about bids before they are issued to the public. With forecasting, every firm will know ahead of time what bids are coming up. This is particularly important since 20.7% of all survey respondents said that the limited time to prepare a bid was a barrier to them obtaining work on projects for the City.

RECOMMENDATION 9: SUPPORTIVE SERVICES

Supportive services may be offered internally in coordination with other agencies, the Small Business Administration bonding program, and the Small Business Development Centers. This is particularly important for the City's large capital projects to ensure diverse supplier participation.

RECOMMENDATION 10: PROMPT PAY ORDINANCE

Despite a 30-day prompt pay act, firms reported getting paid well after the 30-day period. GSPC recommends that the City analyze payments at the departmental level to improve the time for prime contractors to get paid. It was stated that payments are delayed because the City is not getting valid invoices. Since this seems to be a pattern, the City may need to do more outreach and training of vendors on this issue. Process improvement may also be needed.

RECOMMENDATION 11: BONDING AND INSURANCE WAIVERS

Although the City's Purchasing Director has the authority to waive certain bonding and insurance requirements, GSPC still heard some complaints. Therefore the City should continue to review bonding and insurance levels on a project-by-project basis to make sure that the limits are necessary.

RECOMMENDATION 12: DATA MAINTENANCE REFORM

- **Cohesive Tracking of Awards** - Award data was the most difficult data to collect for the Study because it was maintained in different departments and in different systems. The City should house its award data in a centralized system. In particular, repairs through the Department of Housing were not included in procurement's tracking.
- **Intentional Use of Commodity Codes** - The City should intentionally use commodity codes to identify vendors and awards.
- **Bidders Register as Vendors** - The City should require all bidders to register as vendors. This will provide the City with access to more available firms that it can notify about bid opportunities, as well as provide more information about the firms that are bidding with the City.

III. LEGAL ANALYSIS – HISTORICAL OVERVIEW

A. Introduction

The City of Milwaukee, Wisconsin (hereafter “City” or “Milwaukee”) has engaged Griffin & Strong, P.C. (GSPC) to conduct this Disparity Study addressing the City’s procurement policies, procedures, and overall purchasing environment.

Milwaukee does not currently have an inclusion program that employs percentage-based utilization goals, project/contract set-asides, bid preferences, or similar advantages for Minority owned or Women owned Business Enterprises (collectively “MWBEs”). The City does have goals-based programs for small businesses (SBEs) in the City,⁴ and for local businesses,⁵ however.

Of note, the City previously commissioned a disparity study in 2009; the study was conducted by D. Wilson Consulting Group. It was recommended in light of the study that the City institute race- and gender-conscious goals for City purchasing, but the programs/ordinances were ultimately challenged in federal court.⁶ The City opted to settle that litigation by, among other remedies, agreeing to suspend and later repeal the race- and gender-conscious goal provisions of the relevant ordinances and agreeing “not [to] enact any new race- or gender-based contract preference goals based upon the Study.”⁷

To provide background and context, the Legal Analysis provided herein by GSPC for this Study will first present the important historical background guiding the development of disparity studies generally, which effectively began in the United States Supreme Court thirty years ago and has been carried forward to the present time by federal and state courts faced with legal challenges to Minority and Women Owned Business Enterprise (MWBE) programs and policies.

Because the parameters of the current study of Milwaukee’s procurement policies and practices, and the various qualitative and quantitative methodologies employed therein are the product of developing case law and decades of practical experience, GSPC will then provide a more comprehensive discussion of the bedrock judicial decisions inviting increased use (and development) of disparity studies, and a deeper look into the legal considerations and related evidentiary requirements for sustaining inclusion programs in the face of a challenge on constitutional grounds.

⁴ Code of Ordinances, City of Milwaukee, Chapter 370 (“Small Business Enterprise Program”).

⁵ Code of Ordinances, City of Milwaukee, Chapter 365 (“Local Business Enterprise Contracting Program”).

⁶ Hispanic Chamber of Commerce of Wisconsin, Inc., et. al. v. City of Milwaukee, et. al., Case No. 12-cv-545 (E.D. Wisc.).

⁷ See June 2013 Settlement Agreement and Mutual Releases in above-referenced HCCW litigation.

In each of these analyses, GSPC specifically includes discussion of key decisions from the United States Court of Appeals for the Seventh Circuit, as these decisions highlight the legal foundation under which a challenge to any of the City's policies or programs would be analyzed.

Lastly, upon completion of the Study, GSPC will provide the City with proposed findings and recommendations regarding procurement policies and procedures, with reference to legal considerations that may support or otherwise be implicated by a particular recommendation, including one that includes race-conscious or gender-conscious policies or remedies. This underscores the importance of the following historical overview and the subsequent expanded legal analysis for full consideration by the City of Milwaukee.

B. Historical Development of the Relevant Law Regarding DBE and MWBE Programs

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 were effectively invited by the United States Supreme Court in rendering its seminal decision in City of Richmond v. J. A. Croson Company, 488 U.S. 469; 109 S. Ct. 706; 102 L. Ed. 2d 854 (1989), and subsequent judicial decisions have drawn a direct line between Croson and the utilization of disparity studies. See, for example, Adarand Constructors, Inc. v. Slater (Adarand III), 228 F.3d 1147, 1172-73 (10th Cir. 2000) (“Following the Supreme Court's decision in Croson, numerous state and local governments have undertaken statistical studies to assess the disparity, if any, between availability and utilization of minority-owned businesses in government contracting.”).

Disparity studies have therefore 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. Croson

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

Laws that, on their face, favor one class of citizens over another, may run afoul of the Equal Protection Clause of the Fourteen Amendment. DBE/MBE/WBE programs and legislation are among the types of laws invoking such concerns. Depending on the nature of the differentiation (e.g., based on race, ethnicity, gender), courts evaluating the constitutionality of a minority business program will apply a particular level of judicial scrutiny. As explained at greater length below, race-based programs are evaluated under a “strict scrutiny” standard, and gender-based programs may be subject to strict scrutiny or under a less-rigorous “intermediate scrutiny” standard, depending on the federal circuit within which the entity sits.

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." "Strict scrutiny" review involves two co-equal considerations: First, the need to demonstrate a compelling governmental interest; 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.

In fact, the Court found that the City of Richmond had not established the necessary factual predicate to infer that discrimination in contracting had occurred in the first place. The Court reasoned that a mere statistical disparity between the overall minority population in Richmond (50 percent Black American) and awards of prime contracts to minority-owned firms (0.67 percent to Black American firms) was an irrelevant statistical comparison and insufficient to raise an inference of discrimination.

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 and emphasized that "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

Accordingly, 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 MBE program. 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. [Croson, 488 U.S. at 509]

Stated otherwise, the statistical comparison should be between the percentage of MWBEs 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.

Additionally, the Court in Croson stated that identified anecdotal accounts of past discrimination also could provide a basis for establishing a compelling interest for local governments to enact race-conscious remedies. However, conclusory claims of discrimination by City officials, alone, would not suffice, nor

⁸ Croson, 488 U.S. at 480.

would an amorphous claim of societal discrimination, simple legislative assurances of good intention, or congressional findings of discrimination in the national economy. In order to uphold a race- or ethnicity-based program, the Court held, there must be a determination that a strong basis in evidence exists to support the conclusion that the remedial use of race is necessary.

Regarding the second prong of the strict scrutiny test, the Croson Court ruled that Richmond's MBE program was not narrowly tailored to redress the effects of discrimination. First, the Court held 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. Thus, the scope of the City's program was too broad.

Second, the Court ruled that the thirty percent (30%) goal for MBE participation in the Richmond program was a rigid quota not related to identified discrimination. Specifically, the Court criticized the City for its lack of inquiry into whether a particular minority business, seeking racial preferences, had suffered from the effects of past discrimination.

Third, the Court expressed disappointment that the City failed to consider race-neutral alternatives to remedy the under-representation of minorities in contract awards. Finally, the Court highlighted the fact that the City's MBE program contained no sunset provisions for a periodic review process intended to assess the continued need for the program.⁹

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 a DBE/MBE/WBE program which will assist in protecting the program from constitutional challenge under a strict scrutiny analysis. These recommendations have in many respects provided a roadmap of sorts for disparity studies and are therefore discussed in greater detail below.

2. The Supreme Court's Decision in Adarand 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 minority business program, in Adarand Constructors, Inc. v. Peña, 515 U.S. 200 (1995) (Adarand II). This time, however, a DBE program enacted by the federal government was at issue, thus implicating the Fifth Amendment rather than the Fourteenth Amendment analysis required for the local (State) program in Croson.

Reversing the decision of the Tenth Circuit, the Supreme Court ruled that federal programs are not reviewed for constitutionality under a more lenient standard (as had been indicated in some prior Supreme Court

⁹ Croson, 488 U.S. at 500.

opinions); strict scrutiny is likewise to be applied to such programs.¹⁰ Because the district court and the Tenth Circuit had not applied the proper standard of review, the Supreme Court remanded the case back to the district court to apply strict scrutiny to the program, consistent with Croson.¹¹

On remand, the district court (D. Colo.) essentially ruled that no program can meet the strict scrutiny standard --- i.e., it is “fatal in fact.” The Tenth Circuit disagreed, upholding the federal program even under a strict scrutiny standard, finding a compelling state interest, and the required narrow tailoring to achieve such compelling interest.¹²

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.” [Adarand III, 228 F.3d at 1164]

If satisfied that the compelling state interest prong had been met, the court then needed to determine whether the federal DBE program was narrowly tailored, as required under Croson (and strict scrutiny jurisprudence generally).¹³

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” – met the standard.¹⁴

As for the “strong basis in evidence” that remedial action was necessary, the court in Adarand III found that the government established that minority contractors faced significant discriminatory *barriers to entry* into the disbursement programs, such as a classic “old boy” network of contractors, denial of access to

¹⁰ Id. at 222-26.

¹¹ Id.

¹² Adarand Constructors, Inc. v. Slater, 228 F.3d 1147 (10th Cir. 2000) (Adarand III).

¹³ Id. at 1176-77.

¹⁴ Id. at 1164-65 (“[W]e readily conclude that the federal government has a compelling interest in not perpetuating the effects of racial discrimination in its own distribution of federal funds and in remedying the effects of past discrimination in the government contracting markets created by its disbursements.”).

capital, and denial of or difficulty in obtaining union membership to assist in access.¹⁵ The government also demonstrated, the court found, that existing minority contractors faced *barriers to competition*, owing to various methods of “discrimination by prime contractors, private sector customers, business networks, suppliers, and bonding companies[.]”¹⁶

In support of its position, the government produced statistical and anecdotal evidence, both direct and circumstantial, 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.¹⁷

The Adarand III court went on to discuss at length its reasoning that the government also adequately demonstrated that its program was narrowly tailored to achieve the compelling interest discussed previously.¹⁸ 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.”¹⁹

The case was therefore returned to the district court for further proceedings “consistent with this opinion.”²⁰

3. The Seventh Circuit’s Decisions in Milwaukee County Pavers²¹ and Midwest Fence²²

The Seventh Circuit, having the benefit of the Supreme Court’s reasoning in Croson, first addressed the constitutionality of state or local MWBE and/or DBE programs providing for race-, ethnicity-, or gender-conscious measures for public contracts in Milwaukee County Pavers. This case was significant in that it involved a successful constitutional attack on a state affirmative action program immediately post-Croson, but because the State of Wisconsin had not conducted a disparity study in order to support or justify the affirmative action remedies at issue in the case, it is of limited guidance regarding the best methods for designing and implementing remedial programs or policies consistent with the blueprint provided in Croson.

The court in Milwaukee County Pavers was faced with a challenge to race-conscious program remedies that were applied (or could be applied) to projects/contracts that were funded in whole or in part by federal

¹⁵ 228 F.3d at 1168-69.

¹⁶ Id. at 1170-72.

¹⁷ Id. at 1174-75.

¹⁸ 228 F.3d at 1176-1187.

¹⁹ Id. at 1177. These remedial concepts are covered in greater detail below.

²⁰ Id.

²¹ Milwaukee County Pavers Assoc. v. Fiedler, 922 F.2d 419 (7th Cir. 1991).

²² Midwest Fence Corp. v. U.S. D.O.T., 840 F.3d 932 (7th Cir. 2016).

transportation monies, but also to projects/contracts that were funded wholly at the state level.²³ Finding insufficient evidence of discrimination (or the present effects of past discrimination) – in large part due to the lack of a disparity study – the district court enjoined the state from continuing the race-based program for state funded projects, reasoning:

[I]nsofar as defendants are required by federal law to spend state funds on primarily federally funded projects, the use of state funds does not alter the fact that the state is implementing a constitutional federal affirmative action program. However, the state's use of race-conscious relief is outside the bounds of federal authority and therefore unconstitutional in three respects: (1) in setting goals for disadvantaged business subcontractor participation in projects funded exclusively by the state, (2) in requiring disadvantaged business prime contractors to make good faith efforts to use disadvantaged business subcontractors, and (3) in extending the Wisconsin set-aside program past the date for which the 1987 Surface Transportation Act disadvantaged business enterprise program is authorized. [*Id.* at 1399]

On appeal, applying the strict scrutiny standard required by Croson to the state's race-based policies, the Seventh Circuit adopted the reasoning of the district court that the state exceeded its federal authority (under the federal DBE program) by applying the “disadvantaged” business enterprise presumption to increase inclusion on state projects or contracts not funded by federal monies, and affirmed the district court's ruling without significant analysis (effectively adopting the reasons provided in the lower court opinion.²⁴

More recently, the Seventh Circuit again addressed race-conscious and gender-conscious programs in Midwest Fence, one of the most recent circuit-level decisions on the federal DBE program for the U.S. Department of Transportation, and state adjunct programs. The court ultimately upheld the federal and state programs in the face of a facial and as-applied challenge by an aggrieved non-DBE subcontractor.²⁵

Before addressing the programs themselves, the court first reasoned that Midwest Fence had the requisite standing to level its challenges:

The plaintiff need only demonstrate that it is able and ready to bid on contracts and that a discriminatory policy prevents it from doing so on an equal basis. Causation and redressability follow from this definition of injury: causation, because the theory is that the policy prevents equal competition; redressability, because invalidating the policy will again place the plaintiff on equal footing for competitive purposes.

The district court correctly found that Midwest Fence has standing[.] By alleging and then offering evidence of lost bids, decreased revenue, and difficulties keeping its business afloat

²³ Milwaukee County Pavers Assoc. v. Fiedler, 731 F. Supp. 1395, 1397-1399 (E.D. Wisc. 1990). The court was presented with state policies that were either discontinued by the time of the court's decision, or which the state represented had never been implemented despite having been passed by its legislature. *Id.* at 1399, 1405-1406.

²⁴ Milwaukee County Pavers, 922 F.2d at 424-425.

²⁵ 840 F.3d at 935, 946, 956.

as a result of the DBE program and its inability to compete for contracts on an equal footing with DBEs, Midwest Fence showed both causation and redressability. [Id. at 940]

Addressing next the constitutionality of the DBE programs, the court reiterated the strict scrutiny standard, with the recognition that several courts (including the U.S. Supreme Court) have ruled that remedying past discrimination is a compelling government interest, thus satisfying the first prong of the analysis:

The federal DBE program authorizes and to some extent requires state governments to rely on racial classifications in awarding government contracts. Accordingly, the equal protection challenge requires the government to show that the program can survive strict scrutiny, meaning that the program serves a compelling government interest and is narrowly tailored to advance that interest. Adarand Constructors, 515 U.S. at 235; Northern Contracting, Inc. v. Illinois, 473 F.3d 715, 720 (7th Cir. 2007). Remedying the effects of past or present discrimination can be a compelling governmental interest. Shaw, 517 U.S. at 909. In this appeal, Midwest Fence does not challenge the national compelling interest in remedying past discrimination. We therefore focus on whether the federal program is narrowly tailored. . . . Narrow tailoring requires “a close match between the evil against which the remedy is directed and the terms of the remedy.” [Id. at 941-942]

Next, applying the standardized considerations for narrow tailoring discussed in Croson and Adarand II (among several others), the Seventh Circuit aligned itself with the Circuit Courts of Appeals for the Eighth, Ninth, and Tenth Circuits, concluding that the federal DOT program narrowly tailored to achieve its race- and gender-based governmental interests.²⁶

Lastly, in its evaluation of the state DBE programs, the Midwest Fence court provided a detailed analysis of the various types of statistical evidence proffered, including availability and utilization data analysis and anecdotal evidence.²⁷ For example, the state (IDOT) relied on a DBE availability study in which both a list-based approach and a “custom census” approach to availability were used,²⁸ and on a full disparity study which included a capacity analysis, use of disparity ratios, and a regression analysis designed to control for other factors besides race that could explain any disparity found.²⁹

As noted, decisions by the Seventh Circuit are particularly important when addressing/evaluating any MWBE program implementation and administration that the City of Milwaukee may undertake pursuant to, or after completion of, this Study.

An expanded legal analysis can be found in Appendix H.

²⁶ Id. at 946.

²⁷ Id. at 948-953.

²⁸ These methodologies for availability are discussed at length herein, below.

²⁹ Id. at 948-953.

IV. PURCHASING POLICIES, PRACTICES, AND PROCEDURES REVIEW

A. Introduction

This chapter is designed to review the written policies and practices of the City of Milwaukee (hereafter “City” or “Milwaukee”) with respect to purchasing and contracting, including related programs or efforts to enhance inclusion of Minority and Women Owned Business Enterprises (MWBES).

Milwaukee does not currently have a program that employs percentage-based utilization goals, project/contract set-asides, bid preferences, or similar advantages for Minority or Women Business Enterprises. The City agreed in 2013 as part of the settlement of a federal lawsuit to discontinue a race and gender conscious program that the City had implemented following a 2009 disparity study.³⁰

The City does have a number of race and gender-neutral inclusion programs and policies, however, including a local business program, a small business program, a “residents preference” employment program, a socially conscious contractors’ program, and a commodities program incentivizing local (City and county) and American-made goods.³¹

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 or differing interpretations of policies in order to determine whether there may be any effect on participation of small businesses, including those owned by Minorities and Women.

At the end of the present Disparity Study, specific findings about the City of Milwaukee’s policies, practices, and procedures will be provided, and formal recommendations for improvement of the overall procurement program and greater achievement of its goals given the findings.

B. Document Review and Personnel Interviews

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

- Code of Ordinances for the City of Milwaukee, including Chapters 16, 309, 310, 365, 370, and 375
- Wisconsin state statutes relating to contracting and procurement
- The City of Milwaukee Purchasing Liaison Manual
- The City of Milwaukee Purchasing Internal Procedures
- City of Milwaukee – “Purchasing at a Glance” guide

³⁰ See *infra*. The study at issue was not conducted by GSPC.

³¹ Each of these programs is discussed more fully hereafter in Section E.

- City Vendors Guide, 2020 Buying Plan, sample RFP packets, and sample contract documents
- The government website, including Purchasing, Department of Administration, and the Office of Equity and Inclusion webpages
- Other publicly available resources relating to City of Milwaukee purchasing

GSPC conducted policy interviews between April and May 2021 with decision makers and officials regularly engaging in purchasing and contracting for Milwaukee. Included in these interviews were personnel in Purchasing, Public Works / Construction, the Office of Equity and Inclusion (OEI), and the City Attorney’s Office.

C. Overview of City of Milwaukee Purchasing

Procurement with the City of Milwaukee is centered in the Purchasing Division, with the City Purchasing Director providing oversight, as shown in the Organizational Charts provided below. The Department of Public Works directs some purchases for that department, however, such as engineering and construction contracts.

Greater flexibility is provided to City departments for ProCard purchases (up to \$5,000), but procurement with the City is otherwise significantly centralized; most procurement requests from City departments above \$5,000 require the submission of a requisition to the DOA-Purchasing Division. This includes competitive solicitations such as “jumpstart” contracts/solicitations (\$5,000 to \$9,999) and informal bids/requisitions (\$10,000 to \$49,999).

The Purchasing Division plays the central role in both informal and formal procurement, as noted above, with some approval responsibilities designated to the Finance and Personnel Committee consisting of various members of the Common Council.

City ordinances establish the different departmental controls over procurement:

There is created a purchasing division in the department of administration. The division shall be under the direction and control of the City purchasing director, except as provided in Section 16-07, who shall be subject to the direction and control of the director of administration.³²

The commissioner of public works shall have full power and authority over contracts for public works as provided in ch. 7, including those contracts where materials, supplies or equipment are furnished by the contractor as part of the contract.³³

³² Milwaukee Code of Ordinances, Chapter 16, Section 16-05(1)(a).

³³ Milwaukee Code of Ordinances, Chapter 16, Section 16-07(1).

The commissioner of neighborhood services shall have full power and authority to provide and contract for the demolition of any building or structure or part thereof being razed pursuant to the Wisconsin Statutes[.]³⁴

Through the City Purchasing Director, “the Purchasing Division’s mission is to procure Commodities and Services for City departments in the most cost effective, efficient, and impartial manner within the appropriate guidelines. Purchasing maintains the highest commitment to racial equity, transparency, and innovation while supporting programs and initiatives that empower City residents to become involved in the contracting opportunities available at the City”³⁵

The City Purchasing Director shall have full power, subject to s. 16-02, to purchase or to provide for the purchase of all materials, supplies, equipment, and services for the use of all user agencies, including those funded through such special purpose accounts as the common council may indicate, except when otherwise specifically provided by local or state law. Purchases shall be made upon requisition by the proper officials of user agencies from funds provided by the common council, provided that nothing in this section shall be construed to prevent the City purchasing director from making purchases or contracts in anticipation of the needs of user agencies or from maintaining store of commodities in anticipation of needs.³⁶

The City has also codified its commitment to ethical procurement:

Ethical Procurement: The common council finds that: a. It is in the City’s best interest to procure items and services from responsible vendors and manufacturers who provide a safe, non-discriminatory work environment, and who compensate their employees with non-poverty wages. b. Many manufacturers, both domestic and international, are engaged in practices that result in poverty wages, violations of worker’s rights and unsafe and unhealthy working conditions. c. Minimum standards for worker’s and human rights should be extended to all workers, and it is the responsibility of the City of Milwaukee to ensure that it is not expending funds in ways that contribute to violation of worker’s rights and the perpetuation of poverty. d. As a participant in the marketplace, the City chooses to expend its purchasing dollars to enhance the economic and social well-being of people, while acquiring the best possible quality goods and services at the lowest cost.³⁷

The Office of Equity and Inclusion, which is housed in the Department of Administration, is tasked with administering and implementing the City’s Small Business Enterprise (SBE) Program, including certification of SBEs for the program. The Small Business office has two (2) full time staff members and a third staff member that is shared with the Office of Equity and Inclusion (OEI). The office reports to the Director of the Department of Administration, and also regularly provides SBE participation figures – received from the various City departments.

³⁴ Milwaukee Code of Ordinances, Chapter 16, Section 16-07(2). The Department of City Development (DCD), the Port of Milwaukee, and the Library Board have some independent purchasing authority as well.

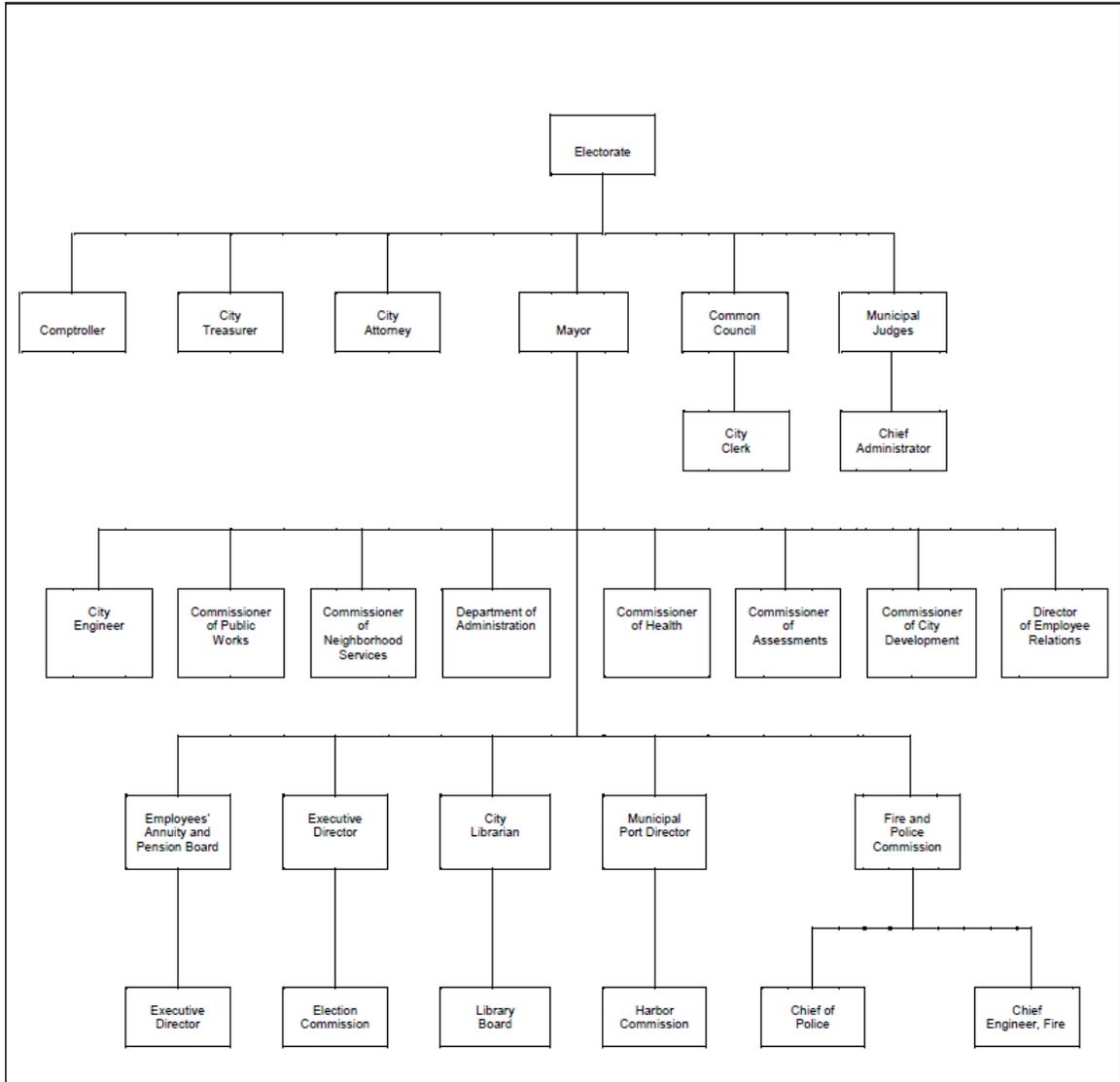
³⁵ City of Milwaukee Purchasing Division webpage, “About Us.”

³⁶ Milwaukee Code of Ordinances, Chapter 16, Section 16-05(1)(a).

³⁷ Milwaukee Code of Ordinances, Chapter 310, Section 310-17 See also Purchasing Liaison Manual, p. 4 (“Ethical Purchasing Requirements”), citing Section 310-17.

The Organizational Chart below shows the overall City government structure, including the Mayor’s Office, the Common Council, and the Department of Administration, which includes the Purchasing Division.

**CITY OF MILWAUKEE
ORGANIZATION CHART
DECEMBER 31, 2019**



Milwaukee Comprehensive Annual Financial Report (12/2020), p. 12.

As an initial consideration, the City publishes a five-year Buying Plan (“Forecast of Contracting Opportunities”), designed to notify vendors and potential vendors of upcoming opportunities to do business with the City. The first of these Buying Plans was published for the years 2018-2022, and the present Plan runs through 2027.

With respect to contract thresholds, informal procurement methods generally can be used by the City for contracts and purchases less than or equal to \$50,000.³⁸ Informal methods include: the use of Procurement Cards (or ProCards) by user departments for purchases up to \$5,000;³⁹ “Jumpstart” purchases for amounts between \$5,000 and \$9,999;⁴⁰ and informal bids for purchases between \$10,000 and \$49,999.⁴¹ Contracts and purchases totaling \$50,000 or more require use of formal procurement methods set forth in the City ordinances (addressed below).

1. Informal Procurement

Generally, informal procurement is used by the City for purchases of goods and non-professional services costing more than \$5,000 but less than \$50,000, as further broken down below.

The City has a formal ProCard program, which is governed by established rules and procedures and administered by the Procurement Manager of the DOA-Purchasing Division.⁴² ProCards permit a City user department to make point-of-sale or on-line purchases utilizing the cards for smaller, informal purchases of goods and services (up to a \$5,000 single transaction purchase limit).⁴³ Interviews revealed that MWBE participation in ProCard purchases is not tracked.

Informal purchases between \$5,000 and \$10,000 (“Jumpstart” contracts) are approved by the City Purchasing Director and finalized through issuance of a contract. In these situations, the user department must obtain at least three (3) competitive quotes, and one of those quotes should be from an SBE, if possible – but SBE participation requirements do not apply to these purchases. For contracts and purchases between \$10,001 and \$50,000, informal bids are obtained and the City Purchasing Director awards the contract to the lowest responsive, responsible bidder complying with the bid specifications.

There are no MWBE bid preferences, set-asides, or other race based or gender-based benefits in these informal procurement methods.

³⁸ See generally, “City of Milwaukee – Purchasing at a Glance,” Purchasing Liaison Manual, pp. 14-15, 18, 30-32.

³⁹ Purchasing Liaison Manual, pp. 30-32.

⁴⁰ Purchasing Liaison Manual, pp. 18.

⁴¹ Purchasing Liaison Manual, p. 14-15.

⁴² Purchasing Liaison Manual, pp. 30-32.

⁴³ City of Milwaukee website, Purchasing Division, “ProCard.”

2. Formal Procurement

For Construction projects and purchases of Goods and Services valued at more than \$50,000 formal competitive bidding is required consistent with the City ordinances.⁴⁴ The Public Works department does some of its own purchasing, including primarily construction and engineering services, but follows the same monetary thresholds. DOA-Purchasing typically procures commodities and supplier services used by the Department of Public Works.⁴⁵

As discussed below, certain construction contracts require participation through apprenticeships or on-the-job training, and/or utilization of City residents in the Residents Preference Program (RPP).⁴⁶

Again, there are no MWBE bid preferences, set-asides, or other race based or gender-based benefits in formal procurement.

3. Apprenticeship Requirements

The City has, by ordinance, a requirement for contractors awarded public works construction contracts valued above \$100,000 to utilize apprenticeships and on-the-job training as part of their workforce.⁴⁷ Apprenticeship programs must be registered with the City; there is no requirement that only union apprentices be used, but interviews indicated that there are few non-union apprenticeship programs currently. This policy may therefore present a barrier to increased participation by SBEs and MWBEs, per interviewees.

For Public Works construction contracts in excess of \$500,000 there is the additional requirement that 25% of the apprentices or on-the-job trainees be unemployed or underemployed City residents (as defined in Section 309-41 and the RPP).⁴⁸

4. Exceptions to Formal Bidding Requirements

Exceptions from the City's formal competitive bidding procedures are established by City ordinances.⁴⁹ Exceptions include, but are not limited to: Professional Services contracts, purchases requiring creative or artistic talents, sole or single source purchases, cooperative or joint purchases subject to competitive bids from other governmental entities (federal, state, or municipal), and emergency purchases.⁵⁰

⁴⁴ Milwaukee Code of Ordinances, Chapter 16, Section 16-05(2). See also, Purchasing Liaison Manual, pp. 9-12; "City of Milwaukee – Purchasing at a Glance." These contracts are advertisement in the City's publication ("The Daily Reporter").

⁴⁵ See generally, Code of Ordinances, Chapter 309.

⁴⁶ See infra.

⁴⁷ Milwaukee Code of Ordinances, Section 309-38(2).

⁴⁸ Milwaukee Code of Ordinances, Section 309-38(2)(b).

⁴⁹ Milwaukee Code of Ordinances, Chapter 16, Sections 16-05(3), (4) and (5).

⁵⁰ Id.

5. Qualifications-Based Procurement

Policy interviews indicated that contracts for Professional Services, which are exempt from the competitive bidding requirements of the City purchasing ordinances, are generally procured through competitive Requests for Proposals (RFPs) or Requests for Quotations (RFQs) where the work is more specialized.⁵¹ There are generally no pre-qualification lists, the exception being engineering services (which has a “master list” of approved firms).

6. Sole Source and Single Source

Sole Source and Single Source purchases are among the exceptions to the above-described procurement methods for goods and non-professional services, including purchases over \$50,000.⁵² Sole Source purchasing is permitted when “work, services, materials, supplies, equipment, items or commodities can be furnished from only one source[,]” while Single Source selection is appropriate when “there are other vendors who could potentially provide the Good or Service, but the particular vendor is especially suited to comply with the specifications.”⁵³ The requirement can be waived based on the nature of the work, the duration of the contract, or where the contract requires trades for which apprenticeship or training is not common.⁵⁴ All service contracts over \$50,000 must be presented and/or approved by the Finance & Personnel committee of the Common Council. This does not apply to commodity contracts.

7. Cooperative Purchasing

When competitively bid by another governmental entity or otherwise exempt, the City is permitted to purchase on the same terms as the other government entity for purchases in excess of \$50,000 as a cooperative purchase; joint purchasing permits the entities to procure together, whether through formal competitive bidding or not.⁵⁵

8. Bundling and Unbundling

Policy interviews revealed that project unbundling is occasional and decided at the departmental level, but that there is a general belief that it is easier to manage larger projects from a contract administration perspective. Areas in which unbundling has been used are in forestry contracts, under the purview of Public Works, and janitorial services and tree whip bids under DOA-Purchasing. Unbundling has also been utilized in the DOA-Purchasing for procurements with multiple line-items, such as for safety supplies. In addition, oftentimes DOA-Purchasing will allow for multiple bid/contractor awards.

⁵¹ See generally, Purchasing Liaison Manual, pp. 33-34; “City of Milwaukee – Purchasing at a Glance.”

⁵² Milwaukee Code of Ordinances, Chapter 16, Sections 16-01(4) and (5); 16-05(4). See also, Purchasing Liaison Manual, pp. 6-7 (“Exemption from the competitive bid process for the purchase of goods and services is permitted only when the goods or services to be purchased are impossible or impractical to procure through competitive purchasing. . . . The Purchasing Division requires justification to the exception to bidding process each time that a commodity/service is purchased.”).

⁵³ Milwaukee Code of Ordinances, Chapter 16, Sections 16-01(4) and (5).

⁵⁴ Id., Section 309-38(2)(c).

⁵⁵ Id.

D. Bonding, Insurance, and Prompt Pay Issues

1. Bonding and Insurance

Performance bonds are required for Construction projects, including in public works projects.⁵⁶ Staff interviews revealed that the Purchasing Director is authorized to adjust or waive bonding requirements for contracts procured through Purchasing, but this discretion does not appear to be codified in the relevant code section or manuals.

Anecdotal interviews indicated that there were some complaints by bidders or potential bidders that bonds requirements were a barrier to participation in City contracting, but anecdotal interviews may reveal such concerns and will be addressed (if appropriate) in the Anecdotal Chapter.

Insurance requirements are set forth in the Terms and Conditions documents.⁵⁷ In brief, the City must be added to the policy(ies) as a named insured, and typically coverage for worker's compensation and general liability are required.⁵⁸ Automobile/vehicle, umbrella excess coverage, pollution liability, and cyber insurance may also be required based on the nature of the procurement. As with bonding, staff interviews revealed that the Purchasing Director has discretion to adjust insurance levels for contracts procured through Purchasing.

Insurance likewise was occasionally cited in interviews as a potential barrier to participation, but vendor input on these issues will be addressed in the Anecdotal Chapter of the Study.

2. Prompt Payment

The City has established its own prompt payment policy, which also incorporates state law with respect to payment of subcontractors.

It is the City's policy to pay all invoices within 30 days. If the City does not make payment within 45 days after receipt of a properly completed supporting payment and other required contract documentation, the City shall pay simple interest beginning with the 31st calendar day at the rate of one percent each month[.] . . . If there are subcontractors, consistent with s. 66.0135(3), Wis. Stats., the prime contractor must pay the subcontractors for satisfactory work within seven days of the contractor's receipt of payment from the City of Milwaukee, or seven days from receipt of a properly submitted and approved invoice from the subcontractor, whichever is later.⁵⁹

⁵⁶ Department of Administration – Purchasing Division Contract Template Terms and Conditions, Section 14.8.

⁵⁷ Department of Administration – Purchasing Division Terms and Conditions, Section 14; see also, Purchasing Liaison Manual, pp. 16-17.

⁵⁸ Id., Sections 14.3, 14.7.

⁵⁹ Purchasing Division website, "Payment Policies." See also, Department of Administration – Purchasing Division Terms and Conditions, Section 4.1.

Again, any vendor input on prompt payment concerns will be addressed in the Anecdotal Chapter of the Study.

E. Race and Gender-Neutral Programs

The City of Milwaukee has a number of race and gender-neutral programs which it implements under the umbrella of “Socioeconomic Contracting Programs.”

1. Local Business Enterprise Contracting Program

The City Purchasing Director and DOA-Purchasing Division is tasked with overseeing the Local Business Enterprise (LBE) Contracting Program.⁶⁰ The Program provides a 5% bid preference, not to exceed \$25,000, for local bidders who submit an LBE affidavit in competitively-bid contracts (*i.e.*, valued over \$50,000), and stipulates that ties between a local and non-local bidder will result in award to the local.⁶¹ Where the local business is also a certified small business enterprise (SBE), the bid preference is raised to 10%.⁶² The program and attendant bid preference does not apply to public works contracts, however.⁶³

2. Small Business Enterprise Program

The Office of Equity and Inclusion, which is housed in the Department of Administration, is tasked with administering and implementing the City’s Small Business Enterprise (SBE) Program, including certification of SBEs for the program.⁶⁴ It is a goals-based program, requiring the following participation levels for SBEs for contracts or subcontracts with the City: 25% participation for Construction; 25% participation for Goods; and 18% participation for Professional Services.⁶⁵ There are no set-aside projects or programs for SBEs.

The City does not have a legislative Good Faith Effort (GFE) policy. On the other hand, the City includes SBE participation requirements in its bids if there are enough SBE firms certified in a particular industry. Interviewees reported that a bidder / contractor can be deemed non-responsive for failure to meet the requirement.

Certification for the SBE Program is conducted by the City, and it does not accept certifications from other entities – governmental or private. Staff interviews indicated that it is accepted practice in the City (OEI)

⁶⁰ Milwaukee Code of Ordinances, Chapter 365.

⁶¹ Milwaukee Code of Ordinances, Chapter 365, Sections 365-7(1)(a)-(e).

⁶² Milwaukee Code of Ordinances, Chapter 365, Section 365-7(1)(f).

⁶³ Milwaukee Code of Ordinances, Chapter 365, Section 365-4.

⁶⁴ Milwaukee Code of Ordinances, Chapter 370, Sections 370-3, 370-23, 370-25.

⁶⁵ Milwaukee Code of Ordinances, Chapter 370, Section 370-5(1) (addressing goals on individual solicitations); Section 370-27 (addressing annual goal achievement by the City).

to certify SBEs by specific NAICS Code(s). SBEs must recertify every three years. The City has expressly adopted the federal SBA size standards for its SBE certification and program.⁶⁶

The Small Business office has two (2) full time staff members and a third staff member that is shared with the Office of Equity and Inclusion (OEI).⁶⁷ The office reports to the Director of the Department of Administration, and also regularly provides SBE participation figures – received from the various City departments.⁶⁸

3. Ethical Purchasing Requirements

As part of City of Milwaukee purchasing, vendors are required to satisfy the City’s “ethical purchasing requirements”:

City of Milwaukee Code of Ordinances 310-17 provides that all items (commodities) purchased by the City of Milwaukee are purchased from vendors who:

- Comply with all applicable local, state, and national laws,
- Comply with the principles of the fundamental conventions of the International Labor Organization regarding forced labor, child labor and freedom of association,
- Provide a safe workplace for their employees,
- Provide a healthy workplace for their employees,
- Are non-discriminatory in the work environment,
- Compensate their employees with non-poverty wages,
- Do not violate workers’ rights,
- Terminate employees only with just cause, and
- Provide a mechanism for the resolution of workplace disputes that are not regulated by the National Labor Relations Act.⁶⁹

4. Socially Responsible Contractors (SRC) Program

The City Purchasing Director and DOA-Purchasing Division are tasked with overseeing the Socially Responsible Contractors (SRC) Program. For contracts in excess of \$50,000, bid preference is given to contractors who satisfy the requirements of the SRC Program.⁷⁰ An SRC is defined as a contractor that has “implemented a program to eliminate, or significantly reduce, barriers to employment for current and prospective employees of the contractor,” including implementation of at least 3 of the 13 enumerated actions or programs – such as hiring persons with felony convictions, assistance in earning a high school diploma, child care or transportation assistance, disability accommodations, training, *etc.*⁷¹ A qualifying SRC is granted the preference where its bid does not exceed the lowest bid by more than 5% or \$25,000.⁷²

⁶⁶ Milwaukee Code of Ordinances, Chapter 370, Section 370-25(2).

⁶⁷ OEI has eight (8) full time staff positions, including the three tasked with SBE administration.

⁶⁸ MWBE participation is not similarly tracked or reported.

⁶⁹ Purchasing Liaison Manual, pp. 4-5; Milwaukee Code of Ordinances, Section 301-17.

⁷⁰ Milwaukee Code of Ordinances, Chapter 310, Section 310-10.

⁷¹ *Id.*

⁷² The SRC is granted additional points equal to 5% of the maximum number of points used in the evaluation of requests for proposals. Section 310-10(5).

5. Made in Milwaukee, Milwaukee County, America

The City Purchasing Director and DOA-Purchasing Division is tasked with overseeing the Buy American Program. Bid preference is given for providing Goods/Commodities to the City that are Milwaukee-Made, Milwaukee County-Made, or American-Made.⁷³ Where the supplied goods fit any of these descriptions, “[c]ontracts shall be awarded to the lowest responsible bidder proposing to supply [such] goods provided that the bid does not exceed the lowest bid by more than 12% or \$25,000, which shall be increased by 1% annually by the City clerk on March 1 of every year.”⁷⁴

6. Residents Preference Program

The City of Milwaukee helps underemployed and unemployed residents gain access to employment opportunities through its Residents Preference Program (RPP). The RPP certification is designed to promote the use of City residents as part of a contractor’s or developer’s workforce on certain City-funded construction and private development projects. Contractors bidding on public works projects and development projects financed with public tax dollars must hire a percentage of RPP-certified City of Milwaukee residents to work on those projects.⁷⁵

The City’s RPP is implicated in a number of contracting scenarios: public works projects under Section 309-41; private development projects under Section 355-7; housing infrastructure projects under Section 309-41; and demolition projects under Section 309-41.⁷⁶ Participation requirements are typically 40% (of employee hours worked), and certification is done by several third-party providers.⁷⁷

7. Living Wage Requirement

City of Milwaukee Code of Ordinances, Section 310-13 establishes a living wage requirement for persons employed in the performance of certain service contracts for the City of Milwaukee.⁷⁸ The ordinance requires the City Clerk to annually adjust the minimum hourly wage amount annually based on the poverty guidelines established by the U.S. Department of Health and Human Services.⁷⁹

8. Revolving Loan Program

The Office of Equity and Inclusion for the City oversees the Revolving Loan Program, which is “designed to assist SBE-certified firms with financing for prime and subcontracts awarded to them by the City of

⁷³ Milwaukee Code of Ordinances, Chapter 310, Section 310-18.9.

⁷⁴ Milwaukee Code of Ordinances, Chapter 310, Section 310-18.9(2), (3), and (4).

⁷⁵ Office of Equity and Inclusion website, “Residents Preference Program (RPP).”

⁷⁶ Office of Equity and Inclusion website, “Residents Preference Program (RPP).”

⁷⁷ Id.

⁷⁸ See also, Purchasing Liaison Manual, p. 19.

⁷⁹ Id.

Milwaukee.”⁸⁰ The loans can be granted for up to 25% of the contract value, can be used for working capital or bonding, and carry a 5% fixed interest rate.⁸¹

9. Slavery Disclosure Requirements

Lastly, the City requires all vendors to provide a disclosure verifying whether the vendor (or a predecessor company) profited from slavery.⁸² Specifically, “[a] contractors awarded a contract on behalf of the City of Milwaukee, whether or not subject to a competitive bid, shall complete an affidavit prior to entering into the contract verifying that the contractor has searched any and all records of the company and or any predecessor company regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era.”⁸³

F. Race Conscious Program

The City does not currently have a race conscious program or policy. The City previously commissioned a disparity study in 2009, which was conducted by D. Wilson Consulting Group. It was recommended based on the Study that the City institute race and gender conscious goals for City purchasing, but the programs/ordinances were ultimately challenged in federal court.⁸⁴ The City opted to settle that litigation by, among other remedies, agreeing to suspend and later repeal the race and gender conscious goals provisions of the relevant ordinances and agreeing “not [to] enact any new race- or gender-based contract preference goals based upon the Study.”⁸⁵

Of note, the City has established the Office of Black American Affairs, in the Office of the Common Council.⁸⁶ This office is tasked, among other duties, to “present recommendations to the common council for changes in existing programs and ordinances that disparately impact Black American residents of the City[,]” and to “[i]dentify barriers faced by Black American residents of the City to existing government resources and services and present recommendations for removing those barriers.”⁸⁷

G. Conclusion

City of Milwaukee procurement is governed by comprehensive municipal ordinances, a Liaison Manual, and Internal Procedures. The number and scope of race and gender-neutral programs implemented by the City indicate an intention toward inclusion and broad-based participation by several potentially

⁸⁰ Office of Equity and Inclusion website, “Resources.”

⁸¹ Id.

⁸² See Milwaukee Code of Ordinances, Section 310-14.

⁸³ Purchasing Liaison Manual, p. 50.

⁸⁴ Hispanic Chamber of Commerce of Wisconsin, Inc., et. al. v. City of Milwaukee, et. al., Case No. 12-cv-545 (E.D. Wisc.).

⁸⁵ See June 2013 Settlement Agreement and Mutual Releases in above-referenced HCCW litigation.

⁸⁶ Milwaukee Code of Ordinances, Chapter 375, Section 375-1.

⁸⁷ Milwaukee Code of Ordinances, Chapter 375, Section 375-5.

underserved groups, but it is not clear the extent to which the City tracks MWBE participation in these programs.

At present, the City does not have any race or gender conscious programs or program elements, in part due to past litigation attacking the MWBE program instituted as a result of the 2009 disparity study conducted for the City.

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 Milwaukee geographical and product market areas to the utilization of each race/ethnicity/gender group, measured by the payments to these groups by Milwaukee, Wisconsin.

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 Geographic Market, and the percentage of dollars spent with MWBE firms during the Study Period?

The outcome of the comparison shows us whether there is a disparity between availability and utilization and whether that disparity is an overutilization, an underutilization, or in parity (the amount to be expected). 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 creates an inference of discrimination adversely affecting the participation of the underutilized firms. Finally, the regression analysis contained in the Chapter V Private Sector Analysis tests for other explanations for the disparity to determine if it is likely that the disparity is caused by race/ethnicity/gender status, or other factors. If there is statistically significant underutilization of MWBEs that is likely caused by race/ethnicity/gender, then GSPC will determine as part of its findings whether there is a basis for an inference of discrimination and consideration by Milwaukee for 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 Milwaukee data. The objective of the meetings was for GSPC to get a better understanding of how Milwaukee procurement data was 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.

All the data requested was in electronic format and no data had to be collected manually in hard-copies or PDF. The requested data were uploaded to GSPC where they were catalogued and stored in GSPC's cloud repository. The collected data were used to develop data files containing purchasing history for each major purchasing category, that is, Construction, Architecture & Engineering (A&E), Professional Services, Other Services, and Goods. City of Milwaukee provided limited subcontract utilization data which could be linked to actual contracts with Contract and Purchase Order numbers. The subcontract data, however, were limited to certified minority subcontractors.

In addition, GSPC worked on verification of gender and ethnicity of vendors and completed necessary information about vendor address, work categories, and other related areas. Gender and ethnicity

verification were based on official certification listings. GSPC uses vendor zip codes to identify the county where the businesses were located to determine whether a vendor will be included in the Relevant Geographic Market Area analysis. Vendor addresses were also used for conducting vendor surveys. Some files submitted by Milwaukee did not contain the necessary information, including vendor physical addresses, which were compensated for by obtaining them from Dun and Bradstreet databases or simply by searching the business name on the internet.

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. The cleanup phase also included the following five (5) tasks:

- Assigning and verifying ethnicity, race & gender of each firm;
- Assigning each firm to one or more NAICS codes based upon the kind of work the firm performs;
- 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 work category;
- Filling in any additional necessary data on firms.

File cleanup was first done electronically by linking information provided by Milwaukee 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 produced a lower total amount than the designated budget for each category since many vendors/purchases were excluded from the study, as payments went to local governments, utility companies, not-for profits, and universities/colleges.

1. Assignment of Ethnicity and Gender

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

- City of Milwaukee Certification Program
- DBE-Uniform Certification Program Directory
- Wisconsin Department of Administration MWBE Program

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. For example, a woman owned Asian American firm was categorized as Asian American rather than a woman owned business. Nonminority Women owned firms were categorized individually by their race and gender. Nonminority male owned firms, and publicly owned corporations are categorized as Non-MWBE firms. Vendors were identified as MBE or WBE if they were certified through an official certification process either by the of City of Milwaukee Certification Program, DBE-Uniform Certification Program Directory, or Wisconsin Department of Administration MWBE Program.

2. Assignment of Industry Categories

In order to place firms into the proper Industry Categories, GSPC initially used the internal City of Milwaukee business classification but verified the results after assigning vendors into Construction, Architecture and Engineering, Professional Services, Other Services and Goods categories. Several data summaries were provided by GSPC for joint reviews with Milwaukee. Due to those steps some vendors were reclassified based on additional information provided by the City. In the final analysis, GSPC and the City of Milwaukee Project Managers agreed 100% on the classification and accuracy of vendors in various categories. As a point of clarification, it is imperative to note that in determining vendor classification, GSPC utilized various strategies to reach its the final classifications. For instance, GSPC used both internal coding of vendors in NIGP by Milwaukee and converting those into NAICS to classify the vendors. This strategy was adopted since a large proportion of vendors did not have NIGP code. For those with missing NIGP codes, GSPC obtained NAICS codes from the Dun and Bradstreet (commonly known as Hoovers data) database (D&B does not provide NIGP code but offers NAICS code for each vendor). It is important to note that Hoover data offers the largest publicly available database of business establishments in the U.S. In addition to providing information about the vendors, Hoovers provide some essential information about the business name, work category, business address, phone number, NAICS code, business type, and other descriptive relevant information. Hoovers data is continuously updated and verified, thus providing accurate and updated information about vendors. Following the above steps, GSPC used both NIGP and NAICS codes to categorize vendors into Construction, Architectural & Engineering, Professional Services, Other Services and Goods.

D. Master Vendor File

The City of Milwaukee 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 showing utilization data while the other produced information about available list of vendors. The utilization master file contained all information for disparity analysis while the availability master file included the listing of all firms who were ready, willing, and able to engage in providing goods and services for Milwaukee. In doing that, GSPC combined information from several files into a single availability file. As mentioned before, files were linked to maximize the available information since some were submitted without required information. In order to produce a valid and comprehensive listing of all available vendors, GSPC included other listing of vendors such as the list of Prequalified Vendors published by the Wisconsin Department of Transportation, Wisconsin Department of Administration W/MBE List, and DBE Uniform Certification Program List. Finally, the utilization and availability files were compared to confirm that they were in

reference to ethnicity, firm ownership, location, type of work, and other related information. Following is the list of resources used in generating the availability master file:

- Bidder Data-Wisconsin
- Bonfire Bidders
- City of Milwaukee Certification Program List
- Contract Ledger
- DBE-Uniform Certification Program List
- Milwaukee Certification List
- Prime Procurement Data
- Subcontract Vendors
- Wisconsin-DOT Prequalified Vendor List

E. Relevant Geographic Market Area Analysis

The commonly-held idea that the Relevant Geographic Market Area should encompass at least seventy-five to eighty-five percent of the "qualified" vendors that serve a particular sector has its origins in antitrust lawsuits.⁸⁸ In line with antitrust precepts, United States Supreme Court, Justice Sandra Day O'Connor in Croson, specifically criticized Richmond, Virginia, for making Minority Business Enterprises (MBEs) all over the country eligible to participate in its set-aside programs.⁸⁹ The Court reasoned that a mere statistical disparity between the overall minority population in Richmond, Virginia, which was 50% Black American, and the award of prime contracts to minority owned firms, 0.67% of which were Black 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 Minority Business Enterprises in the marketplace [or *Relevant Geographic 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 Relevant Geographic Market Area has been determined for each of the major purchasing categories:

- Construction
- Architecture and Engineering
- Professional Services
- Other Services
- Goods

For each purchasing category GSPC measured the "Relevant Geographic Market Area" as the area where at least 75% of the City of Milwaukee 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. As a common methodology, identification of the Relevant Geographic Market Area starts with

⁸⁸ 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)

⁸⁹ City of Richmond v. J.A. Croson Company, 488 U.S. 469, 709 S. Ct. 706 (1989)

the main county (Milwaukee County in this study) and radiates out to include other neighboring counties to reach to that 75% intended goal in each procurement category. In this study, the Relevant Geographic Market Area was limited to Milwaukee, Ozaukee, Washington, and Waukesha Counties in Wisconsin, since most procurement categories reached and/or exceeded the required 75% requirement.

The results of Relevant Geographic Market Area are presented in Tables 6 through 10. Table 6 shows that 97.13% of all construction related procurements, during the study period, were paid to vendors within Milwaukee, Ozaukee, Washington, and Waukesha Counties. Only 1.93% of the total construction expenditure was done with vendors in other counties within the State of Wisconsin, followed by 0.94% with vendors located outside the State of Wisconsin (Please see Table A-1 in Appendix A for the list of counties and the associated amount).

Table 6: Relevant Geographic Market Area, Prime Construction

Procurement by Market Area Counties and State

(Using Payment Dollars, CY 2015-2019)

Market Area	Dollar	Percent	Cumulative Dollar	Cumulative Percent
Milwaukee, Ozaukee, Washington, and Waukesha Counties	\$ 500,323,095	97.13%	\$ 500,323,095	97.13%
Rest of Counties in Wisconsin	\$ 9,944,702	1.93%	\$ 510,267,797	99.06%
Other States in the USA	\$ 4,859,190	0.94%	\$ 515,126,987	100.00%
Canada	\$ -	0.00%	\$ -	
Outside USA and Canada	\$ -	0.00%	\$ -	
Internet	\$ -	0.00%	\$ -	
Total	\$ 515,126,987	100.00%		

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Table 7 shows the distribution of procurement amount in the Architectural and Engineering category. As portrayed in the table, over 79% of procurement in that category was conducted through vendors within Milwaukee, Ozaukee, Washington, and Waukesha Counties. The analysis of data revealed that 14.13% of Architectural and Engineering was spent with vendors in other Wisconsin Counties and only 6.7% of the total expenditure was spent with vendors outside of the State of Wisconsin. (Please see Table A-2 in Appendix A for the list of counties and the associated amount).

**Table 7: Relevant Geographic Market Area, Prime Architectural and Engineering
Procurement by Market Area Counties and State
(Using Payment Dollars, CY 2015-2019)**

Market Area	Dollar	Percent	Cumulative Dollar	Cumulative Percent
Milwaukee, Ozaukee, Washington, and Waukesha Counties	\$ 44,006,694	79.11%	\$ 44,006,694	79.11%
Rest of Counties in Wisconsin	\$ 7,858,769	14.13%	\$ 51,865,463	93.24%
Other States in the USA	\$ 3,761,830	6.76%	\$ 55,627,292	100.00%
Canada	\$ -	0.00%	\$ -	
Outside USA and Canada	\$ -	0.00%	\$ -	
Internet	\$ -	0.00%	\$ -	
Total	\$ 55,627,292	100.00%		

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The same as Architectural and Engineering category, the Professional Services category met and exceeded the 75% legally required threshold. As depicted in Table 8, over 81% of all Professional Services procurement activities were done with vendors within the four counties of Milwaukee, Ozaukee, Washington, and Waukesha, in Wisconsin. Little over 4.07% were procured from vendors with other counties in Wisconsin and 14.73% with vendors outside the State of Wisconsin. In addition a small amount was spent with Professional Services businesses in Canada. Please see Table A-3 in Appendix A for the list of counties and the associated amount.

Table 8: Relevant Geographic Market Area, Prime Professional Services
Procurement by Market Area Counties and State
(Using Payment Dollars, CY 2015-2019)

Market Area	Dollar	Percent	Cumulative Dollar	Cumulative Percent
Milwaukee, Ozaukee, Washington, and Waukesha Counties	\$ 47,720,141	81.19%	\$ 47,720,141	81.19%
Rest of Counties in Wisconsin	\$ 2,394,450	4.07%	\$ 50,114,592	85.26%
Other States in the USA	\$ 8,660,444	14.73%	\$ 58,775,036	100.00%
Canada	\$ 2,750	0.00%	\$ -	
Outside USA and Canada	\$ -	0.00%	\$ -	
Internet	\$ -	0.00%	\$ -	
Total	\$ 58,777,786	100.00%		

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In reference to Other Services category, as shown in Table 9, close to 11% was utilized with businesses within Milwaukee, Ozaukee, Washington, and Waukesha, in Wisconsin counties. Only 3.35% of the total amount was spent with vendors in other counties within the State and 15.69% with vendors out of the State of Wisconsin. Procurement from Canada accounted for 0.02% of the total amount (Please see Table A-4 in Appendix A for the list of counties and the associated amount).

Table 9: Relevant Geographic Market Area, Prime Other Services

Procurement by Market Area Counties and State

(Using Payment Dollars, CY 2015-2019)

Market Area	Dollar	Percent	Cumulative Dollar	Cumulative Percent
Milwaukee, Ozaukee, Washington, and Waukesha Counties	\$ 302,453,270	80.94%	\$ 302,453,270	80.94%
Rest of Counties in Wisconsin	\$ 12,519,895	3.35%	\$ 314,973,165	84.29%
Other States in the USA	\$ 58,627,348	15.69%	\$ 373,600,513	99.98%
Canada	\$ 80,094	0.02%	\$ -	
Outside USA and Canada	\$ -	0.00%	\$ -	
Internet	\$ -	0.00%	\$ -	
Total	\$ 373,680,607	100.00%		

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The distribution of amount spent in the Goods category is depicted in Table 10. The analysis of procurement data revealed that close to 70% of total procurement in Goods were conducted with vendors within Milwaukee, Ozaukee, Washington, and Waukesha, in Wisconsin counties and 4.06% with vendors in other Wisconsin counties. A little over 26% of procurement was conducted with vendor in other states and 0.01% with Canadian businesses. (Please see Table A-5 in Appendix A for the list of counties and the associated amount).

Table 10: Relevant Geographic Market Area, Prime Goods

Procurement by Market Area Counties and State

(Using Payment Dollars, CY 2015-2019)

Market Area	Dollar	Percent	Cumulative Dollar	Cumulative Percent
Milwaukee, Ozaukee, Washington, and Waukesha Counties	\$ 219,260,954	69.92%	\$ 219,260,954	69.92%
Rest of Counties in Wisconsin	\$ 12,729,269	4.06%	\$ 231,990,224	73.98%
Other States in the USA	\$ 81,572,039	26.01%	\$ 313,562,262	99.99%
Canada	\$ 19,500	0.01%	\$ -	
Outside USA and Canada	\$ -	0.00%	\$ -	
Internet	\$ -	0.00%	\$ -	
Total	\$ 313,581,762	100.00%		

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F. 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 Geographic 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 goods or services to the City of Milwaukee.

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 City of Milwaukee makes certain purchases.
- The firm's owner has taken steps (such as bidding, certification, prequalification, etc.) to demonstrate interest in doing business with government.
- The firm is located within a relevant geographical market area such that it can do business with City of Milwaukee.

MWBE availability is a percentage and is computed by dividing the number of firms in each MWBE group by the total number of businesses in the pool of firms for that procurement category. Once these Availability Estimates were calculated, GSPC compared them to the percentage of firms utilized in the respective Industry Categories in order 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 geographic market and in the relevant procurement categories. 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 V – Private Sector Analysis below. The regression analysis shows whether race/ethnicity/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 goods and services on a level higher than what is presently being utilized.

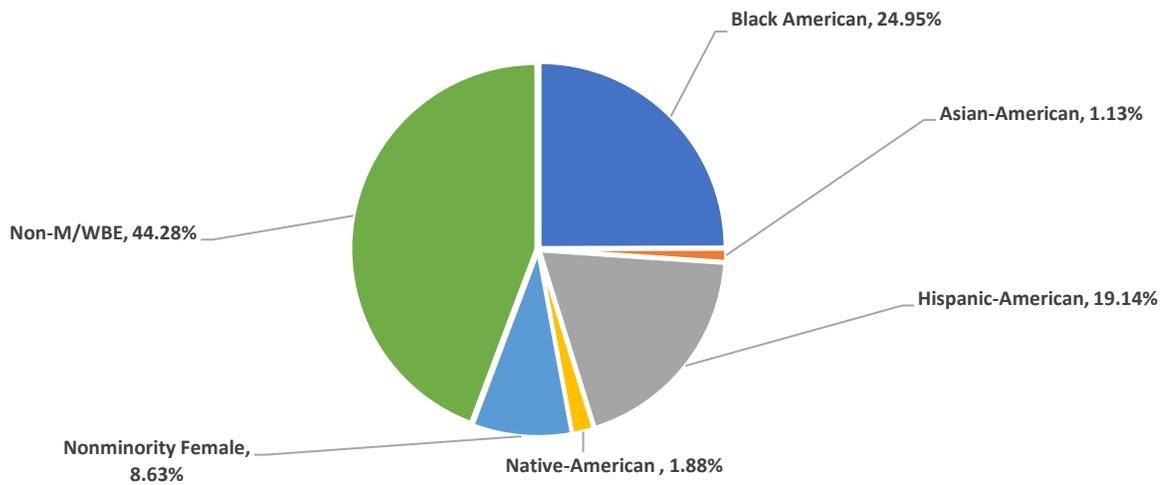
4. Availability Estimates

Below are the Availability Estimates for the Study. The data is separated into the five (5) major Industry Categories. Tables 11 through 15 show the number of firms by race/gender/ethnicity as compared with the total number of firms. Please see Table B-1 through B-5 in Appendix B for detailed availability information including the breakdown by procurement category and ethnicity of the firm owners.

The availability analyzed from the Master Vendor File includes all unique vendors in each work category.

The City of Milwaukee Relevant Geographic Market Area availability for construction is shown in Table 11. As depicted in the Table, Non-MWBE owned firms were 44.28% of all construction firms followed by 24.95% of the firms owned by Black Americans. Nonminority Woman owned firms represented 8.63%, Hispanic American owned firms were 19.14%, while Asian and Native Americans owned firms reflected 1.13% and 1.88% of total construction availability, respectively. A total of 535 vendors were available in construction area. Please see Table B-1 in Appendix B for the actual number of businesses in each category.

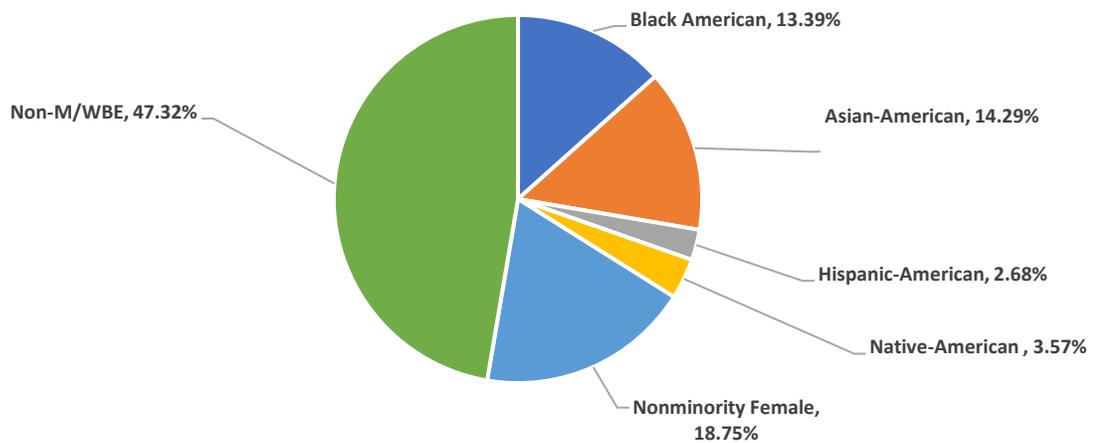
**Table 11: Availability Estimates – Construction
In the Relevant Geographic Market Area**



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Availability of Architectural and Engineering Firms by Ownership in the Relevant Geographic Area is presented in Table 12. GSPC recorded 112 vendors in that area. As the Table reflects, 47.32% of the vendors were Non-MWBEs while 13.39% of business owere Black Americans. Likewise, as depicted in Table 12, Nonminority Women represented 18.75% of total firms in that category while Asian Americans showed 14.29%. The percentage of A&E businesses for Asian American and Native Americans were 14.29% and 3.57% respectively. GSPC also recorded 2.68% of the business in A&E category were Hispanic Americans. Please see Table B-2 in Appendix B for the actual number of businesses in each Industry Category.

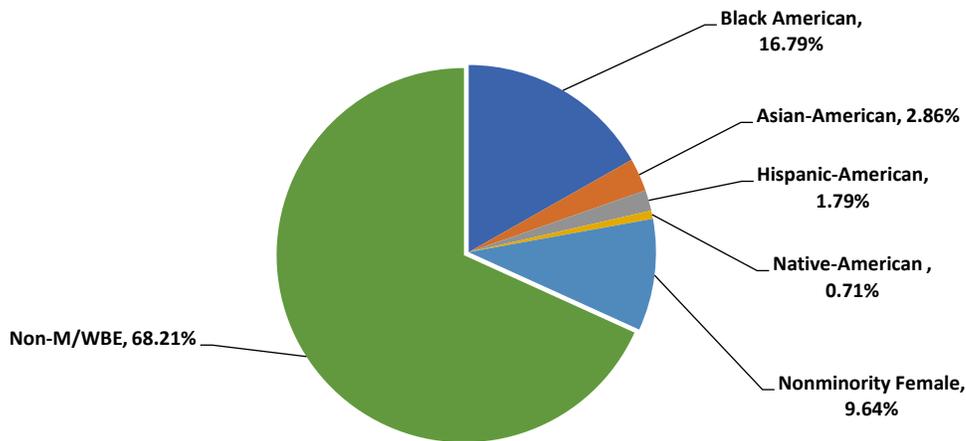
**Table 12: Availability Estimates – A & E
In the Relevant Geographic Market Area**



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In reference to Professional Services, GSPC recorded 280 businesses in the Relevant Geographic Market Area. As depicted in the Table 13, 68.21% of firm owners were Non-MWBEs while 16.79% were Black Americans. Nonminority Women made up 9.64% of the firms' ownership and Asian American represented 2.86%. Hispanic American and Native Americans accounted for 1.79%, and 0.714%, respectively. Please see Table B-3 in Appendix B for the actual number of businesses in each Industry Category.

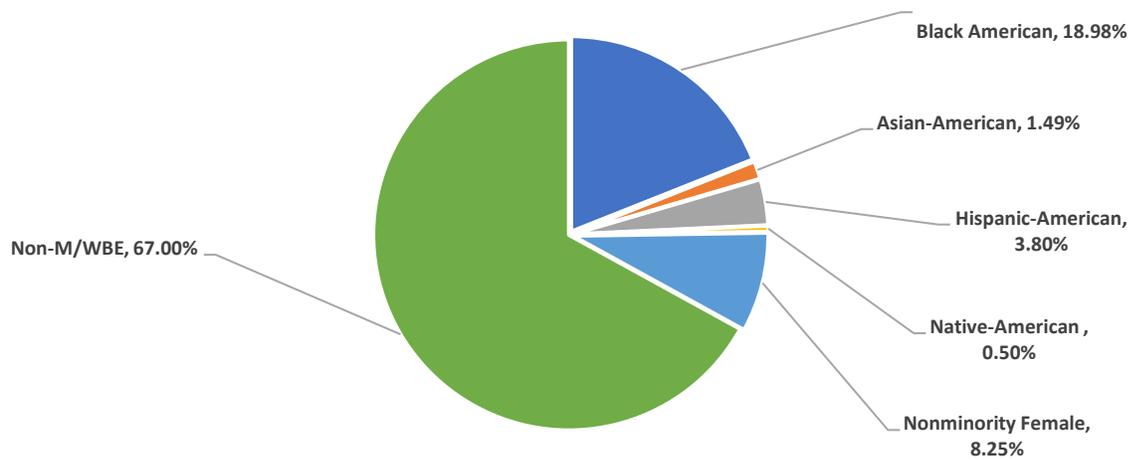
**Table 13: Availability Estimates – Professional Services
In the Relevant Geographic Market Area**



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Availability of Other Services firms in the Relevant Geographic Market Area is presented in Table 14. There were a total of 606 firms in that category (please refer to the complete listing in Appendix B). As depicted in Table 14, 67.00% of the firms were Non-MWBEs and 18.98% were Black Americans. The Nonminority Women consisted of 8.25% while Hispanic Americans made up 3.80% of the firms. Asian and Native Americans reflected 1.49% and 0.50%, respectively.

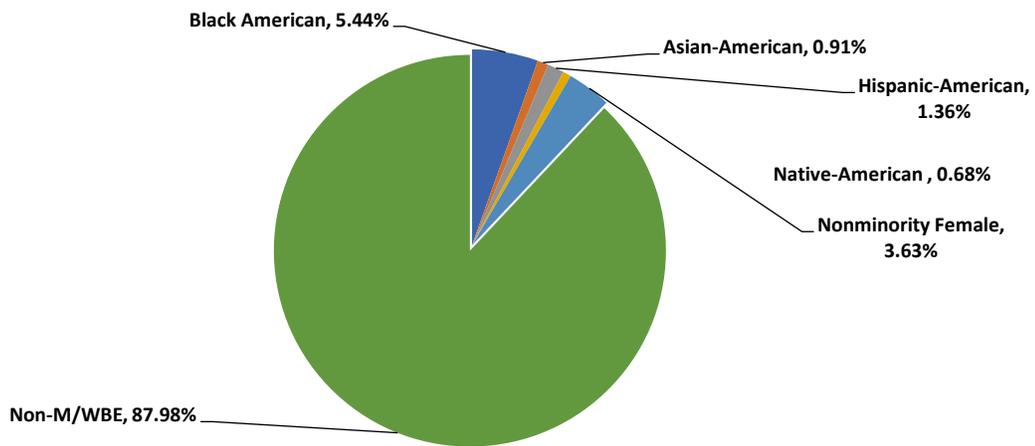
**Table 14: Availability Estimates –Other Services
In the Relevant Geographic Market Area**



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Availability of firms in the Goods category is presented in Table 15. There were a total of 441 vendors in that category. As shown in Table 15, 87.98% of firms were Non-MWBEs while 5.44% were Black Americans. Nonminority Women owned firms accounted for 3.63% of the total, Asian Americans reflected 0.91%, Hispanic Americans were 1.36%, and Native American accounted for 0.68% of the firms. Please see Table B-5 in Appendix B for the actual number of businesses in each Industry Category.

**Table 15: Availability Estimates – Goods
In the Relevant Geographic Market Area**



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G. Utilization Analysis

1. Prime Utilization

The relevant payment history for the City of Milwaukee has been recorded based upon the paid amounts provided by the City. In the Prime Utilization tables below, the dollars and percentage of dollars paid in each of the five (5) major procurement categories have been broken out by race/ethnicity and gender

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

for each year of the Study Period. The total of each race/ethnicity and gender group represented in the MWBE category will, when added to the Non-MWBE Category, equal the Total Column.

As shown in Tables 16 and 17, only 8.98% of procurement in construction was spent with MWBEs. Further, from the total of \$500,323,095 spent total construction procurement, only \$15,089,502 was spent with Black Americans (3.02 Percent). The proportion was even lower for Nonminority Women which they received \$2,152, 663 (0.43 percent). Table 16, in particular, shows a very limited number of MWBE vendors were utilized in construction area as compared to Non-MWBEs, 54 and 178, respectively. The average pay for Black American businesses in construction category was \$656,065 compared to \$2,558,518 for Non-MWBE vendors. In the same vein, the average expenditure with Nonminority Women was only \$307,523 per vendor.

Table 16: Number of Businesses by Business Ownership and Fiscal Year, Construction Prime Data (Using Payment Dollars, CY 2015-2019)

Fiscal Year	Black American		Asian American		Hispanic American		Native American		Total MBE		Nonminority Woman		Total MWBE		Non-MWBE		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
2015	16	13.22%	4	3.31%	11	9.09%	3	2.48%	34	28.10%	3	2.48%	37	30.58%	84	69.42%	12	20.75%
2016	12	10.26%	3	2.56%	8	6.84%	3	2.56%	26	22.22%	3	2.56%	29	24.79%	88	75.21%	11	20.07%
2017	14	11.76%	4	3.36%	8	6.72%	3	2.52%	29	24.37%	3	2.52%	32	26.89%	87	73.11%	11	20.41%
2018	14	12.39%	4	3.54%	9	7.96%	2	1.77%	29	25.66%	3	2.65%	32	28.32%	81	71.68%	11	19.38%
2019	16	14.16%	4	3.54%	10	8.85%	1	0.88%	31	27.43%	3	2.65%	34	30.09%	79	69.91%	11	19.38%
Total	72	12.35%	1	3.26%	46	7.89%	1	2.06%	14	25.56%	1	2.57%	164	28.13%	41	71.87%	58	100.00%
Total	23	9.91%	4	1.72%	16	6.90%	4	1.72%	47	20.26%	7	3.02%	54	23.28%	17	76.72%	23	100.00%

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Table 17: Utilization of Prime Analysis in Relevant Market Area, Construction

Prime Data (Using Payment Dollars, CY 2015-2019)

Business Ownership	2015	2016	2017	2018	2019	TOTAL
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Black American	\$ 2,934,470	\$ 979,448	\$ 1,354,455	\$ 1,578,680	\$ 8,242,448	\$ 15,089,502
Asian American	\$ 73,817	\$ 421,815	\$ 614,404	\$ 478,670	\$ 177,888	\$ 1,766,595
Hispanic American	\$ 802,230	\$ 2,071,371	\$ 421,225	\$ 6,302,063	\$ 1,130,072	\$ 10,726,962
Native American	\$ 5,125,111	\$ 1,492,979	\$ 1,547,918	\$ 4,805,866	\$ 2,199,293	\$ 15,171,166
TOTAL MINORITY	\$ 8,935,629	\$ 4,965,613	\$ 3,938,002	\$13,165,280	\$11,749,701	\$ 42,754,224
Nonminority	\$ 1,383,011	\$ 510,123	\$ 83,635	\$ 133,504	\$ 42,390	\$ 2,152,663
TOTAL MWBE	\$ 10,318,639	\$ 5,475,736	\$ 4,021,637	\$13,298,784	\$11,792,091	\$ 44,906,888
NON-MWBE	\$123,047,311			\$59,128,237	\$80,408,619	\$455,416,207
TOTAL FIRMS	\$133,365,951			\$72,427,021	\$92,200,710	\$500,323,095
Business Ownership	2015	2016	2017	2018	2019	TOTAL
	(%)	(%)	(%)	(%)	(%)	(%)
Black American	2.20%	0.69%	2.22%	2.18%	8.94%	3.02%
Asian American	0.06%	0.30%	1.01%	0.66%	0.19%	0.35%
Hispanic American	0.60%	1.47%	0.69%	8.70%	1.23%	2.14%
Native American	3.84%	1.06%	2.54%	6.64%	2.39%	3.03%
TOTAL MINORITY	6.70%	3.51%	6.45%	18.18%	12.74%	8.55%
Nonminority	1.04%	0.36%	0.14%	0.18%	0.05%	0.43%
TOTAL MWBE	7.74%	3.87%	6.59%	18.36%	12.79%	8.98%
NON-MWBE	92.26%	96.13%	93.41%	81.64%	87.21%	91.02%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

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Table 18 depicts the number of businesses utilized in the Architectural and Engineering category by the City of Milwaukee during the study period. Overall, 46 vendors were utilized in the A&E category during the study period in which only 12 were MWBEs (26.09 percent). On average, the Non-MWBEs earned \$1,170,741 per vendor during the study time frame, compared to \$793,363 and \$177,654 for Black Americans and Nonminority Women, respectively (please consult Table 19). Likewise, the average earning for Asian American businesses in Architectural and Engineering was as low as \$98,329 per vendor. Altogether, the MWBE businesses earned 9.55% of the procurement expenditure in Architectural and Engineering as compared to 90.45% for Non-MWBEs.

Table 18: Number of Businesses by Business Ownership and Fiscal Year, Architectural & Engineering

Prime Data (Using Payment Dollars, CY 2015-2019)

Fiscal Year	Black		Asian		Hispanic		Native		Total MBE		Nonminority		Total MWBE		Non-MWBE		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
2015	3	11.54%	3	11.54%	0	0.00%	0	0.00%	6	23.08%	1	3.85%	7	26.92%	19	73.08%	26	23.21%
2016	4	18.18%	2	9.09%	0	0.00%	0	0.00%	6	27.27%	0	0.00%	6	27.27%	16	72.73%	22	19.64%
2017	3	11.54%	1	3.85%	0	0.00%	0	0.00%	4	15.38%	3	11.54%	7	26.92%	19	73.08%	26	23.21%
2018	2	10.53%	1	5.26%	0	0.00%	0	0.00%	3	15.79%	2	10.53%	5	26.32%	14	73.68%	19	16.96%
2019	2	10.53%	1	5.26%	1	5.26%	0	0.00%	4	21.05%	2	10.53%	6	31.58%	13	68.42%	19	16.96%
Total 2015-	14	12.50%	8	7.14%	0	0.00%	0	0.00%	23	20.54%	8	7.14%	31	27.68%	81	72.32%	112	100.00%
Total Unique	4	8.70%	3	6.52%	1	2.17%	0	0.00%	8	17.39%	4	8.70%	12	26.09%	34	73.91%	46	100.00%

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Table 19: Utilization of Prime Analysis in Relevant Market Area, Architectural & Engineering

Prime Data (Using Payment Dollars, CY 2015-2019)

Business Ownership Classification	2015 (\$)	2016 (\$)	2017 (\$)	2018 (\$)	2019 (\$)	TOTAL (\$)
Black American	\$ 922,171	\$ 596,050	\$ 593,533	\$ 360,177	\$ 701,522	\$ 3,173,453
Asian American	\$ 159,509	\$ 22,343	\$ 69,945	\$ 36,179	\$ 7,011	\$ 294,987
Hispanic American	\$ -	\$ -	\$ -	\$ -	\$ 22,457	\$ 22,457
Native American	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL MINORITY	\$ 1,081,679	\$ 618,393	\$ 663,478	\$ 396,355	\$ 730,990	\$ 3,490,896
Nonminority Woman	\$ 63,230	\$ -	\$ 88,282	\$ 335,703	\$ 223,400	\$ 710,615
TOTAL MWBE	\$ 1,144,909	\$ 618,393	\$ 751,760	\$ 732,058	\$ 954,391	\$ 4,201,511
NON-MWBE	\$10,957,580	\$12,152,084	\$8,535,790	\$4,491,086	\$3,668,642	\$39,805,182
TOTAL FIRMS	\$12,102,490	\$12,770,477	\$9,287,550	\$5,223,145	\$4,623,033	\$44,006,694
Business Ownership Classification	2015 (%)	2016 (%)	2017 (%)	2018 (%)	2019 (%)	TOTAL (%)
Black American	7.62%	4.67%	6.39%	6.90%	15.17%	7.21%
Asian American	1.32%	0.17%	0.75%	0.69%	0.15%	0.67%
Hispanic American	0.00%	0.00%	0.00%	0.00%	0.49%	0.05%
Native American	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY	8.94%	4.84%	7.14%	7.59%	15.81%	7.93%
Nonminority Woman	0.52%	0.00%	0.95%	6.43%	4.83%	1.61%
TOTAL MWBE	9.46%	4.84%	8.09%	14.02%	20.64%	9.55%
NON-MWBE	90.54%	95.16%	91.91%	85.98%	79.36%	90.45%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

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As shown in Tables 20 and 21, only 6.69% of procurement in Professional Services was spent with MWBEs. Further, from the total of \$47,720,141 spent, only 6.59% was spent with Black American businesses and no procurement with Nonminority Women during the study period. Table 20, in particular, shows a very limited number of MWBE vendors were utilized in Professional Services area (7 firms) as compared to Non-MWBE vendor (135).

Table 20: Number of Businesses by Business Ownership and Fiscal Year, Professional Services

Prime Data (Using Payment Dollars, CY 2015-2019)

Fiscal Year	Black		Asian		Hispanic		Native		Total MBE		Nonminority		Total MWBE		Non-MWBE		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
2015	2	4.08%	0	0.00%	1	2.04%	0	0.00%	3	6.12%	0	0.00%	3	6.12%	46	93.88%	49	19.44%
2016	2	5.56%	1	2.78%	1	2.78%	0	0.00%	4	11.11%	0	0.00%	4	11.11%	32	88.89%	36	14.29%
2017	2	3.28%	0	0.00%	0	0.00%	0	0.00%	2	3.28%	0	0.00%	2	3.28%	59	96.72%	61	24.21%
2018	2	3.70%	0	0.00%	0	0.00%	0	0.00%	2	3.70%	0	0.00%	2	3.70%	52	96.30%	54	21.43%
2019	3	5.77%	1	1.92%	0	0.00%	0	0.00%	4	7.69%	0	0.00%	4	7.69%	48	92.31%	52	20.63%
Total 2015-2019	11	4.37%	2	0.79%	0	0.00%	0	0.00%	15	5.95%	0	0.00%	15	5.95%	237	94.05%	252	100.00%
Total Unique	4	2.82%	2	1.41%	1	0.70%	0	0.00%	7	4.93%	0	0.00%	7	4.93%	135	95.07%	142	100.00%

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Table 21: Utilization of Prime Analysis in Relevant Market Area, Professional Services

Prime Data (Using Payment Dollars, CY 2015-2019)

Business Ownership	2015	2016	2017	2018	2019	TOTAL
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Black American	\$ 386,237	\$ 672,329	\$ 908,090	\$ 579,028	\$ 600,533	\$ 3,146,218
Asian American	\$ -	\$ 35,111	\$ -	\$ -	\$ 3,603	\$ 38,714
Hispanic American	\$ 1,500	\$ 7,469	\$ -	\$ -	\$ -	\$ 8,969
Native American	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL MINORITY	\$ 387,737	\$ 714,909	\$ 908,090	\$ 579,028	\$ 604,136	\$ 3,193,901
Nonminority	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL MWBE	\$ 387,737	\$ 714,909	\$ 908,090	\$ 579,028	\$ 604,136	\$ 3,193,901
NON-MWBE	\$9,468,132	\$ 9,523,462	\$7,198,421	\$8,531,568	\$ 9,804,658	\$44,526,240
TOTAL FIRMS	\$9,855,869	\$10,238,372	\$8,106,511	\$9,110,596	\$10,408,794	\$47,720,141
Business Ownership	2015	2016	2017	2018	2019	TOTAL
	(%)	(%)	(%)	(%)	(%)	(%)
Black American	3.92%	6.57%	11.20%	6.36%	5.77%	6.59%
Asian American	0.00%	0.34%	0.00%	0.00%	0.03%	0.08%
Hispanic American	0.02%	0.07%	0.00%	0.00%	0.00%	0.02%
Native American	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY	3.93%	6.98%	11.20%	6.36%	5.80%	6.69%
Nonminority	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL MWBE	3.93%	6.98%	11.20%	6.36%	5.80%	6.69%
NON-MWBE	96.07%	93.02%	88.80%	93.64%	94.20%	93.31%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

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The number of firms utilized and the associated amounts for Other Services are presented in Tables 22 and 23. Comparatively speaking, the number of Non-MWBEs utilized in that category was only 6.29% of total number of businesses utilized in the Professional Services category. The same trend was observed in reference to expenditure. As reflected in Table 23, only 0.88% of the total procurement was conducted with Black American business owners and 20.64% with Nonminority Women businesses.

Table 22: Number of Businesses by Business Ownership and Fiscal Year, Other Services

Prime Data (Using Payment Dollars, CY 2015-2019)

Fiscal Year	Black American		Asian American		Hispanic American		Native American		Total MBE		Nonminority Woman		Total MWBE		Non-MWBE		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
2015	5	3.47%	1	0.69%	2	1.39%	0	0.00%	8	5.56%	4	2.78%	12	8.33%	132	91.67%	144	19.86%
2016	3	2.19%	1	0.73%	1	0.73%	0	0.00%	5	3.65%	6	4.38%	11	8.03%	126	91.97%	137	18.90%
2017	2	1.27%	1	0.63%	1	0.63%	0	0.00%	4	2.53%	5	3.16%	9	5.70%	149	94.30%	158	21.79%
2018	1	0.66%	1	0.66%	2	1.32%	0	0.00%	4	2.65%	6	3.97%	10	6.62%	141	93.38%	151	20.83%
2019	3	2.22%	1	0.74%	2	1.48%	0	0.00%	6	4.44%	5	3.70%	11	8.15%	124	91.85%	135	18.62%
Total 2015-	14	1.93%	5	0.69%	0	0.00%	0	0.00%	27	3.72%	26	3.59%	53	7.31%	672	92.69%	725	100.00%
Total	8	2.65%	1	0.33%	2	0.66%	0	0.00%	11	3.64%	8	2.65%	19	6.29%	283	93.71%	302	100.00%

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Table 23: Utilization of Prime Analysis in Relevant Market Area, Other Services

Prime Data (Using Payment Dollars, CY 2015-2019)

Business Ownership Classification	2015 (\$)	2016 (\$)	2017 (\$)	2018 (\$)	2019 (\$)	TOTAL (\$)
Black American	\$ 45,166	\$ 616,973	\$ 1,042,590	\$ 507,849	\$ 458,803	\$ 2,671,381
Asian American	\$ 11,240	\$ 502,794	\$ 175,296	\$ 245,128	\$ 245,000	\$ 1,179,458
Hispanic American	\$ 97,177	\$ 57,465	\$ 16,801	\$ 112,409	\$ 202,536	\$ 486,388
Native American	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL MINORITY	\$ 153,583	\$ 1,177,232	\$ 1,234,688	\$ 865,385	\$ 906,339	\$ 4,337,227
Nonminority Woman	\$ 792,077	\$ 1,401,828	\$ 1,582,618	\$ 1,683,339	\$ 2,521,954	\$ 7,981,815
TOTAL MWBE	\$ 945,660	\$ 2,579,060	\$ 2,817,305	\$ 2,548,724	\$ 3,428,293	\$ 12,319,043
NON-MWBE	\$58,561,927	\$52,056,452	\$53,896,843	\$63,585,788	\$62,033,218	\$290,134,227
TOTAL FIRMS	\$59,507,587	\$54,635,512	\$56,714,148	\$66,134,512	\$65,461,511	\$302,453,270
Business Ownership Classification	2015 (%)	2016 (%)	2017 (%)	2018 (%)	2019 (%)	TOTAL (%)
Black American	0.08%	1.13%	1.84%	0.77%	0.70%	0.88%
Asian American	0.02%	0.92%	0.31%	0.37%	0.37%	0.39%
Hispanic American	0.16%	0.11%	0.03%	0.17%	0.31%	0.16%
Native American	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY	0.26%	2.15%	2.18%	1.31%	1.38%	1.43%
Nonminority Woman	1.33%	2.57%	2.79%	2.55%	3.85%	2.64%
TOTAL MWBE	1.59%	4.72%	4.97%	3.85%	5.24%	4.07%
NON-MWBE	98.41%	95.28%	95.03%	96.15%	94.76%	95.93%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

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The same trend was observed with respect to businesses in the Goods category. As depicted in Table 24, only 8 Black American owned businesses were utilized during the study period, as compared to 283 Non-MWBE businesses. The same proportionality was recorded in reference Nonminority Women businesses. Only 8 nonminority Women businesses were utilized during the course of the study. The analysis of data revealed a similar trend in reference to total expenditure. As shown in Table 25, Black American businesses gained a little over \$15.6 million in contracting with the City of Milwaukee compared with over \$201 million spent with Non-MWBEs during the same time frame. The average gain per vendor for Nonminority Women owned businesses was \$257,000 and \$711,928 per Non-MWBE businesses.

Table 24: Number of Businesses by Business Ownership and Fiscal Year, Goods

Prime Data (Using Payment Dollars, CY 2015-2019)

Fiscal Year	Black		Asian		Hispanic		Native		Total MBE		Nonminority		Total MWBE		Non-MWBE		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
2015	5	3.47%	1	0.69%	2	1.39%	0	0.00%	8	5.56%	4	2.78%	12	8.33%	132	91.67%	144	19.86%
2016	3	2.19%	1	0.73%	1	0.73%	0	0.00%	5	3.65%	6	4.38%	11	8.03%	126	91.97%	137	18.90%
2017	2	1.27%	1	0.63%	1	0.63%	0	0.00%	4	2.53%	5	3.16%	9	5.70%	149	94.30%	158	21.79%
2018	1	0.66%	1	0.66%	2	1.32%	0	0.00%	4	2.65%	6	3.97%	10	6.62%	141	93.38%	151	20.83%
2019	3	2.22%	1	0.74%	2	1.48%	0	0.00%	6	4.44%	5	3.70%	11	8.15%	124	91.85%	135	18.62%
Total 2015-2019	14	1.93%	5	0.69%	0	0.00%	0	0.00%	27	3.72%	26	3.59%	53	7.31%	672	92.69%	725	100.00 %
Total Unique	8	2.65%	1	0.33%	2	0.66%	0	0.00%	11	3.64%	8	2.65%	19	6.29%	283	93.71%	302	100.00 %

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Table 25: Utilization of Prime Analysis in Relevant Market Area, Goods

Prime Data (Using Payment Dollars, CY 2015-2019)

Business Ownership Classification	2015 (\$)	2016 (\$)	2017 (\$)	2018 (\$)	2019 (\$)	TOTAL (\$)
Black American	\$	\$	\$	\$ 3,486,473	\$	\$ 15,605,588
Asian American	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hispanic American	\$ -	\$ -	\$ -	\$ -	\$ 123,832	\$ 123,832
Native American	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL MINORITY	\$	\$	\$	\$ 3,486,473	\$	\$ 15,729,420
Nonminority Woman	\$ 371,176	\$ 384,756	\$ 520,960	\$ 445,956	\$ 333,156	\$ 2,056,004
TOTAL MWBE	\$	\$	\$	\$ 3,932,429	\$	\$ 17,785,424
NON-MWBE				\$44,638,400		\$201,475,530
TOTAL FIRMS				\$48,570,829		\$219,260,954
Business Ownership Classification	2015 (%)	2016 (%)	2017 (%)	2018 (%)	2019 (%)	TOTAL (%)
Black American	6.57%	6.95%	0.00%	7.18%	7.43%	7.12%
Asian American	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Hispanic American	0.00%	0.00%	0.00%	0.00%	0.24%	0.06%
Native American	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY	6.57%	6.95%	7.32%	7.18%	7.67%	7.17%
Nonminority Woman	0.94%	1.03%	1.23%	0.92%	0.64%	0.94%
TOTAL MWBE	7.51%	7.99%	8.55%	8.10%	8.32%	8.11%
NON-MWBE	92.49%	92.01%	91.45%	91.90%	91.68%	91.89%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

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H. Total Utilization (Prime and Subcontractor Payments)

The City of Milwaukee tracks subcontracting dollars allocated to MWBEs but does not completely track Non-MWBE subcontractors. GSPC conducted a total utilization analysis by combining prime contract dollars with subcontract dollars, after subtracting subcontract dollars from prime contract dollars on a contract by contract basis.⁹⁰ This analysis was only conducted for Construction,

TOTAL UTILIZATION is the percentage of dollars awarded to combined Prime Contractors (in the Relevant Market) and Subcontractors, by ethnic/gender category, after removing subcontract dollars from prime dollars on a contract-by-contract basis.

⁹⁰ So, for example, if there was one Asian American owned prime (\$100) with one nonminority subcontractor (\$30) and two Asian subcontractors had \$20 in subcontracts, then in total utilization: (\$100-\$50)=\$50 attributed to Asian American prime dollars and \$20 attributed to Asian American subcontractor dollars for a total of \$70 paid to Asian American owned firms.

Architecture & Engineering, Other Services, and Goods contracts which had levels of subcontracting reported. There was no recorded subcontracting amount for Professional Services category.

Table 26 shows the amount of prime and subcontract combined for construction category. Altogether, \$35,566,630 was added as subcontracting amount of which \$15,123,267 was earned by Black American businesses followed by \$12,292,419 for Nonminority Women. The subcontract earning for Hispanic American and Asian American businesses were \$6876,534 and \$25,227, respectively. Native American businesses earned \$1,249,403 in subcontracting during the study period.

**Table 26: Total Utilization of Construction
(Prime + Subcontract) Analysis in Relevant Market Area
(Using Payment Dollars, CY 2015-2019)**

Business Ownership Classification	2015	2016	2017	2018	2019	TOTAL
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Black American	\$ 4,537,867	\$ 2,738,053	\$ 4,589,951	\$ 6,487,703	\$11,859,196	\$ 30,212,769
Asian American	\$ 73,817	\$ 421,815	\$ 614,404	\$ 478,670	\$ 202,895	\$ 1,791,601
Hispanic American	\$ 2,979,130	\$ 3,385,093	\$ 2,018,986	\$ 7,095,356	\$ 2,124,930	\$ 17,603,496
Native American	\$ 5,236,860	\$ 1,746,989	\$ 1,742,430	\$ 5,029,410	\$ 2,664,881	\$ 16,420,569
TOTAL MINORITY	\$ 12,827,674	\$ 8,291,949	\$ 8,965,771	\$19,091,139	\$16,851,901	\$ 66,028,435
Nonminority Woman	\$ 2,046,288	\$ 2,234,857	\$ 1,826,286	\$ 4,107,651	\$ 4,230,000	\$ 14,445,083
TOTAL MWBE	\$ 14,873,962	\$ 10,526,806	\$10,792,058	\$23,198,790	\$21,081,902	\$ 80,473,518
NON-MWBE	\$118,491,989	\$130,792,451	\$50,218,098	\$49,228,230	\$71,118,808	\$419,849,577
TOTAL FIRMS	\$133,365,951	\$141,319,257	\$61,010,156	\$72,427,021	\$92,200,710	\$500,323,095
Business Ownership Classification	2015	2016	2017	2018	2019	TOTAL
	(%)	(%)	(%)	(%)	(%)	(%)
Black American	3.40%	1.94%	7.52%	8.96%	12.86%	6.04%
Asian American	0.06%	0.30%	1.01%	0.66%	0.22%	0.36%
Hispanic American	2.23%	2.40%	3.31%	9.80%	2.30%	3.52%
Native American	3.93%	1.24%	2.86%	6.94%	2.89%	3.28%
TOTAL MINORITY	9.62%	5.87%	14.70%	26.36%	18.28%	13.20%
Nonminority Woman	1.53%	1.58%	2.99%	5.67%	4.59%	2.89%
TOTAL MWBE	11.15%	7.45%	17.69%	32.03%	22.87%	16.08%
NON-MWBE	88.85%	92.55%	82.31%	67.97%	77.13%	83.92%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

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Total utilization amount for Architectural & Engineering is depicted in Table 27. Altogether, \$1,611,868 was added as subcontract amount to the prime expenditure in this category. The breakdown of subcontract payments shows \$574,954 spent with Black American and \$562,223 with Hispanic American subcontractors. In addition, the Nonminority Women subcontract earning was \$401,042 and the Asian American subcontractors gained \$52,980 in A&E category. Native American businesses earned \$20670 in subcontracting during the study period.

Table 27: Total Utilization of Architectural & Engineering (Prime + Subcontract) Analysis in Relevant Market Area (Using Payment Dollars, CY 2015-2019)

Business Ownership Classification	2015 (\$)	2016 (\$)	2017 (\$)	2018 (\$)	2019 (\$)	TOTAL (\$)
Black American	\$ 981,566	\$ 755,191	\$ 736,502	\$ 518,503	\$ 756,644	\$ 3,748,407
Asian American	\$ 159,509	\$ 52,368	\$ 87,370	\$ 39,509	\$ 9,211	\$ 347,967
Hispanic American	\$ 14,546	\$ 146,106	\$ 158,183	\$ 185,004	\$ 80,841	\$ 584,680
Native American	\$ -	\$ -	\$ 20,670	\$ -	\$ -	\$ 20,670
TOTAL MINORITY	\$ 1,155,620	\$ 953,666	\$1,002,725	\$ 743,016	\$ 846,696	\$ 4,701,722
Nonminority Woman	\$ 63,230	\$ 396,847	\$ 88,282	\$ 335,703	\$ 227,595	\$ 1,111,657
TOTAL MWBE	\$ 1,218,850	\$ 1,350,512	\$1,091,007	\$1,078,719	\$1,074,291	\$ 5,813,379
NON-MWBE	\$10,883,639	\$11,419,964	\$8,196,543	\$4,144,426	\$3,548,742	\$38,193,315
TOTAL FIRMS	\$12,102,490	\$12,770,477	\$9,287,550	\$5,223,145	\$4,623,033	\$44,006,694
Business Ownership Classification	2015 (%)	2016 (%)	2017 (%)	2018 (%)	2019 (%)	TOTAL (%)
Black American	8.11%	5.91%	7.93%	9.93%	16.37%	8.52%
Asian American	1.32%	0.41%	0.94%	0.76%	0.20%	0.79%
Hispanic American	0.12%	1.14%	1.70%	3.54%	1.75%	1.33%
Native American	0.00%	0.00%	0.22%	0.00%	0.00%	0.05%
TOTAL MINORITY	9.55%	7.47%	10.80%	14.23%	18.31%	10.68%
Nonminority Woman	0.52%	3.11%	0.95%	6.43%	4.92%	2.53%
TOTAL MWBE	10.07%	10.58%	11.75%	20.65%	23.24%	13.21%
NON-MWBE	89.93%	89.42%	88.25%	79.35%	76.76%	86.79%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

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Table 28 depicts the total utilization for Other Services category. Altogether, \$8,874,183 subcontracting amount was added to the prime amount in this category. The analysis of added subcontract payments showed \$5,237,735 subcontracting with Black American and \$2,538,354 with Nonminority Woman businesses. In addition, the Hispanic American subcontract earning was \$718,970 and the Native American subcontractors gained \$379,124 in Other Services. There was no subcontracting with Asian American businesses in Other Services category. Table 29 shows the amount of prime and subcontract combined for Goods category. Altogether, \$19,725 was added as subcontracting amount of which \$16,895 was earned by Hispanic American businesses followed by \$2,830 by Black American subcontracts.

**Table 28: Total Utilization of Other Services
(Prime + Subcontract) Analysis in Relevant Market Area
(Using Payment Dollars, CY 2015-2019)**

Business Ownership Classification	2015 (\$)	2016 (\$)	2017 (\$)	2018 (\$)	2019 (\$)	TOTAL (\$)
Black American	\$ 1,265,017	\$ 1,821,873	\$ 2,354,776	\$ 1,219,281	\$ 1,248,169	\$ 7,909,116
Asian American	\$ 11,240	\$ 502,794	\$ 175,296	\$ 245,128	\$ 245,000	\$ 1,179,458
Hispanic American	\$ 452,163	\$ 158,305	\$ 63,637	\$ 279,854	\$ 251,399	\$ 1,205,358
Native American	\$ -	\$ -	\$ -	\$ 379,124	\$ -	\$ 379,124
TOTAL MINORITY	\$ 1,728,420	\$ 2,482,973	\$ 2,593,709	\$ 2,123,387	\$ 1,744,568	\$ 10,673,056
Nonminority Woman	\$ 925,593	\$ 1,491,323	\$ 1,992,002	\$ 3,147,137	\$ 2,964,115	\$ 10,520,169
TOTAL MWBE	\$ 2,654,013	\$ 3,974,296	\$ 4,585,711	\$ 5,270,524	\$ 4,708,683	\$ 21,193,225
NON-MWBE	\$56,853,575	\$50,661,216	\$52,128,437	\$60,863,988	\$60,752,828	\$281,260,044
TOTAL FIRMS	\$59,507,587	\$54,635,512	\$56,714,148	\$66,134,512	\$65,461,511	\$302,453,270
Business Ownership Classification	2015 (%)	2016 (%)	2017 (%)	2018 (%)	2019 (%)	TOTAL (%)
Black American	2.13%	3.33%	4.15%	1.84%	1.91%	2.61%
Asian American	0.02%	0.92%	0.31%	0.37%	0.37%	0.39%
Hispanic American	0.76%	0.29%	0.11%	0.42%	0.38%	0.40%
Native American	0.00%	0.00%	0.00%	0.57%	0.00%	0.13%
TOTAL MINORITY	2.90%	4.54%	4.57%	3.21%	2.67%	3.53%
Nonminority Woman	1.56%	2.73%	3.51%	4.76%	4.53%	3.48%
TOTAL MWBE	4.46%	7.27%	8.09%	7.97%	7.19%	7.01%
NON-MWBE	95.54%	92.73%	91.91%	92.03%	92.81%	92.99%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

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Table 29 shows the amount of prime and subcontract combined for Goods category. Altogether, \$19,725 was added as subcontracting amount of which \$16,895 was earned by Hispanic American businesses followed by \$2,830 by Black American subcontracts.

**Table 29: Total Utilization of Goods
(Prime + Subcontract) Analysis in Relevant Market Area
(Using Payment Dollars, CY 2015-2019)**

Business Ownership Classification	2015 (\$)	2016 (\$)	2017 (\$)	2018 (\$)	2019 (\$)	TOTAL (\$)
Black American	\$ 2,587,835	\$ 2,594,483	\$ 3,096,216	\$ 3,486,473	\$ 3,843,411	\$ 15,608,418
Asian American	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hispanic American	\$ -	\$ -	\$ -	\$ -	\$ 140,727	\$ 140,727
Native American	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL MINORITY	\$ 2,587,835	\$ 2,594,483	\$ 3,096,216	\$ 3,486,473	\$ 3,984,138	\$ 15,749,145
Nonminority Woman	\$ 371,176	\$ 384,756	\$ 520,960	\$ 445,956	\$ 333,156	\$ 2,056,004
TOTAL MWBE	\$ 2,959,011	\$ 2,979,239	\$ 3,617,177	\$ 3,932,429	\$ 4,317,293	\$ 17,805,149
NON-MWBE		\$34,325,588	\$38,687,299	\$44,638,400	\$47,360,607	\$201,455,805
TOTAL FIRMS		\$37,304,828	\$42,304,475	\$48,570,829	\$51,677,900	\$219,260,954
Business Ownership Classification	2015 (%)	2016 (%)	2017 (%)	2018 (%)	2019 (%)	TOTAL (%)
Black American	6.57%	6.95%	7.32%	7.18%	7.44%	7.12%
Asian American	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Hispanic American	0.00%	0.00%	0.00%	0.00%	0.27%	0.06%
Native American	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY	6.57%	6.95%	7.32%	7.18%	7.71%	7.18%
Nonminority Woman	0.94%	1.03%	1.23%	0.92%	0.64%	0.94%
TOTAL MWBE	7.51%	7.99%	8.55%	8.10%	8.35%	8.12%
NON-MWBE	92.49%	92.01%	91.45%	91.90%	91.65%	91.88%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

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I. 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 City of Milwaukee marketplace.

DISPARITY INDICES calculate the difference between the percentage of City of Milwaukee’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. Overutilization is when the Disparity Index is over one. Parity or the absence of disparity is when the Disparity Index is one (1.00) 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 1.10 is considered to be a statistically significant 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 and the Transportation Research Board approach to statistical significance in disparity studies.

The existence of a statistically significant disparity between the availability and utilization of minority or Nonminority 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/gender-neutral remedies for this discrimination to give all firms equal access to public contracting within the City of Milwaukee. GSPC will also, if appropriate, recommend narrowly tailored race/ethnicity/gender-conscious remedies to remedy 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 of Milwaukee.

a) Prime Disparity Indices

The results of our statistical analysis of utilization data for five procure categories are presented in Table 30. The outcomes of the statistical tests are colorized for easy understanding. As reflected in the Table, Black Americans were overutilized in Goods, and Native American businesses were overutilized in Construction. On the other hand, all WMBE categories were significantly underutilized in all procurement categories. The Table also shows that no statistical conclusions could be reached for Native American businesses in Goods due to small numbers in both Utilization and Availability categories. Please see tables showing detailed analysis of this section in Appendix C, Tables C-1 through C-5.

**Table 30: Disparity Indices- Prime Utilization Analysis Summary
(Using Payment Dollars, CY 2015-2019)**

Firm Ownership	Procurement Categories				
	Construction	Architectural & Engineering	Professional Services	Other Services	Goods
Black American	12.09*	53.84*	39.28*	4.65*	102.41
Asian American	31.37*	4.69*	2.84*	20.26*	0.0*
Hispanic American	11.2*	1.91*	1.05)	4.24*	4.15*
Native American	161.62	0.0*	0.0*	0.0*	**
TOTAL MBE	18.15*	23.38*	30.23*	5.79*	85.50
Nonminority Woman	4.99*	8.61*	0.0*	31.98*	25.85*
TOTAL MWBE	16.11*	18.12*	21.06*	23.34*	67.49*
Non-MWBE	205.58	191.15	136.79	143.18	104.44

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Legend:

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

**Very small number to produce statistical significance

Significant Underutilization Disparity (Disparity percentage below 80%).

Disparity (Disparity percentage 80% to 99.9%).

Overutilized (Disparity percentage over 100%).

No color is parity

b) Disparity Indices – Total Utilization (Prime plus Subcontractor)

Adding subcontract dollars to the prime amount did not make a significant change in the overall disparity analysis outcome. As shown in Table 31, the same the prime procurement analysis, Black American in Goods and Native American in Construction showed overutilization. The rest of the categories remained with statistically significant disparity at the 0.05 level. Please see tables showing detailed analysis of this section in Appendix D, Tables D-1 through D-5.

Table 31: Disparity Indices -Total Utilization Analysis Summary (Prime + Subcontract) (Using Payment Dollars, CY 2015-2019)

Firm Ownership	Procurement Categories				
	Construction	Architectural & Engineering	Professional Services	Other Services	Goods
Black American	24.20*	63.6*	39.28*	13.78*	102.43
Asian American	31.81*	5.53*	2.84*	26.26*	0.0*
Hispanic American	18.39*	49.60*	1.05*	10.50*	4.72*
Native American	174.93	1.32*	0.0*	25.32*	**
TOTAL MBE	28.02*	31.49*	30.23*	14.26*	85.61
Nonminority Woman	33.45*	13.47*	0.0*	42.16*	25.85*
TOTAL MWBE	28.87*	25.08*	21.06*	21.23*	67.57*
Non-MWBE	189.52	183.40	136.79	138.80	104.43

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Legend:

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

**Very small number to produce statistical significance

Significant Underutilization Disparity (Disparity percentage below 80%).

Disparity (Disparity percentage 80% to 99.9%).

Overutilized (Disparity percentage over 100%).

No color is parity

J. Threshold and Contract Size Analysis

This section of the report addresses the crucial question of whether, controlling or excluding outliers impacts the analysis results and/or does it narrow the gap in disparity.

Threshold and Contract Size Analysis show the outliers in each procurement category and provides an opportunity to *Control or Exclude* them prior to conducting statistical analysis.

1. Methodology

To control for outliers and to reexamine the analysis of disparity after removing large contracts, GSPC, conducted three sets of statistical analysis:

- Threshold analysis of all contracts over \$5,000 value.
- Statistical analysis of all contracts with less than \$1 million total amount.
- Statistical analysis of all contracts with less than \$500 total amount.

The above procedures, individually and collectively show the contract sizing and the potential capacity of minority owned firms in engaging and receiving those contracts.

2. Threshold Analysis:

GSPC conducted threshold analysis on all contracts with a total value of \$5,000 or higher during the study period (CY 2015-2019). It is imperative to note that threshold analysis is a practical way of showing the contract size by simply eliminating or controlling for outliers. Table 32 depicts the results of threshold analysis for construction contracts. As shown in the table the average construction contracts with over \$5000, value was \$234,728 with median value of \$16,180, meaning that 50% of construction contracts were less than the median amount. The Table also reflects that 77.82% of construction contracts were small contracts with less than \$100,000 total value. Only 4.12% of construction contracts fell in interval over \$1 million.

Table 32: Threshold Analysis, Relevant Market Area, Construction

Number of Awards, Prime Utilization (Using Contract Dollars over \$5,000, CY 2015-2019)

Contract Threshold	Number of Contracts	Percent of Contracts	Dollars	Percent of Dollars
5,000 to 10,000	582	27.58%	\$ 4,305,894	0.87%
10,001 to 50,000	974	46.16%	\$ 20,466,539	4.13%
50,001 to 100,000	86	4.08%	\$ 6,384,196	1.29%
100,001 to 250,000	94	4.45%	\$ 15,511,726	3.13%
250,001 to 500,000	146	6.92%	\$ 53,237,642	10.75%
500,001 to 750,000	88	4.17%	\$ 53,895,358	10.88%
750,001 to 1,000,000	53	2.51%	\$ 45,258,503	9.14%
1,000,001 to 1,500,000	48	2.27%	\$ 56,865,864	11.48%
1,500,001 to 2,000,000	14	0.66%	\$ 23,423,096	4.73%
2,000,001 to 2,500,000	11	0.52%	\$ 24,356,494	4.92%
2,500,001 to 5,000,000	9	0.43%	\$ 35,679,774	7.20%
Over 5,000,000	5	0.24%	\$155,890,718	31.48%
Total	2,110	100.00%	\$495,275,804	100.00%
Mean = \$234,728				
Median = \$16,180				

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The threshold analysis of Architectural and Engineering (A&E) contracts are presented in Table 33. Of the total 479 contracts/purchase orders analyzed in this study, close to 82% fell between \$5,000 and \$50,000 category. The Table also shows that only 0.63% of the A&E contracts were \$1 million or higher. The average contract/Purchase order had a value of \$88,812 with median of \$23,652.

Table 33: Threshold Analysis, Relevant Market Area, Architectural & Engineering

Number of Awards, Prime Utilization (Using Contract Dollars over \$5,000, CY 2015-2019)

Contract Threshold	Number of Contracts	Percent of Contracts	Dollars	Percent of Dollars
5,000 to 10,000	195	40.71%	\$ 1,366,867	3.21%
10,001 to 50,000	197	41.13%	\$ 4,034,380	9.48%
50,001 to 100,000	14	2.92%	\$ 927,272	2.18%
100,001 to 250,000	22	4.59%	\$ 4,018,781	9.45%
250,001 to 500,000	19	3.97%	\$ 6,698,256	15.75%
500,001 to 750,000	20	4.18%	\$12,529,102	29.45%
750,001 to 1,000,000	9	1.88%	\$ 8,227,765	19.34%
1,000,001 to 1,500,000	1	0.21%	\$ 1,078,506	2.54%
1,500,001 to 2,000,000	2	0.42%	\$ 3,660,067	8.60%
2,000,001 to 2,500,000	0	0.00%	\$ -	0.00%
2,500,001 to 5,000,000	0	0.00%	\$ -	0.00%
Over 5,000,000	0	0.00%	\$ -	0.00%
Total	479	100.00%	\$42,540,996	100.00%
Mean = \$88,812				
Median = \$23,652				

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In reference to Professional Services, GSPC analysis recorded a higher percentage of contracts in the lower amount categories. As shown in Table 34, over 87% of Professional Services contracts fell below \$50,000. As the Table shows the average Professional Services contract was \$76,789 with a median of \$17068. Only 1.17% of the contract were \$1 million or higher.

Table 34: Threshold Analysis, Relevant Market Area, Professional Services

Number of Awards, Prime Utilization (Using Contract Dollars over \$5,000, CY 2015-2019)

Contract Threshold	Number of Contracts	Percent of Contracts	Dollars	Percent of Dollars
5,000 to 10,000	187	31.32%	\$ 1,354,079	2.95%
10,001 to 50,000	336	56.28%	\$ 7,892,853	17.22%
50,001 to 100,000	47	7.87%	\$ 3,318,219	7.24%
100,001 to 250,000	13	2.18%	\$ 1,874,415	4.09%
250,001 to 500,000	5	0.84%	\$ 1,772,117	3.87%
500,001 to 750,000	2	0.34%	\$ 1,279,274	2.79%
750,001 to 1,000,000	0	0.00%	\$ -	0.00%
1,000,001 to 1,500,000	0	0.00%	\$ -	0.00%
1,500,001 to 2,000,000	0	0.00%	\$ -	0.00%
2,000,001 to 2,500,000	1	0.17%	\$ 2,016,173	4.40%
2,500,001 to 5,000,000	6	1.01%	\$26,335,628	57.45%
Over 5,000,000	0	0.00%	\$ -	0.00%
Total	597	100.00%	\$45,842,758	100.00%
Mean = \$76,789				
Median = \$17,068				

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GSPC recorded a similar trend following the threshold analysis of Other Services contracts. As reflected in Table 35, of 3,083 Other Services contracts, close to 85% were within the \$5,000 and \$50,000 value. Only 1.85% of Other Services contracts had a price tag of \$1 million or higher. The average contract price was \$93,691 and median of \$13,000

Table 35: Threshold Analysis, Relevant Market Area, Other Services

Number of Awards, Prime Utilization (Using Contract Dollars over \$5,000, CY 2015-2019)

Contract Threshold	Number of Contracts	Percent of Contracts	Dollars	Percent of Dollars
5,000 to 10,000	1,186	38.47%	\$ 8,574,582	2.97%
10,001 to 50,000	1,388	45.02%	\$ 29,023,647	10.05%
50,001 to 100,000	147	4.77%	\$ 10,250,913	3.55%
100,001 to 250,000	168	5.45%	\$ 26,272,923	9.10%
250,001 to 500,000	72	2.34%	\$ 27,270,600	9.44%
500,001 to 750,000	38	1.23%	\$ 22,444,818	7.77%
750,001 to 1,000,000	27	0.88%	\$ 23,560,980	8.16%
1,000,001 to 1,500,000	27	0.88%	\$ 32,708,908	11.32%
1,500,001 to 2,000,000	14	0.45%	\$ 23,934,805	8.29%
2,000,001 to 2,500,000	5	0.16%	\$ 11,143,237	3.86%
2,500,001 to 5,000,000	5	0.16%	\$ 14,811,750	5.13%
Over 5,000,000	6	0.19%	\$ 58,852,221	20.37%
Total	3,083	100.00%	\$288,849,384	100.00%
Mean = \$93,691				
Median = \$13,000				

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The results of Goods threshold analysis contracts are presented in Table 36. As with the previous contract categories, Goods Contracts were positioned in the lower amount categories. As shown in the Table, nearly 87% of Goods and contracts fell between \$5,000 and \$50,000 interval. Only 0.43% of the Goods contracts were over \$1 million.

Table 36: Threshold Analysis, Relevant Market Area, Goods

Number of Awards, Prime Utilization (Using Contract Dollars over \$5,000, CY 2015-2019)

Contract Threshold	Number of Contracts	Percent of Contracts	Dollars	Percent of Dollars
5,000 to 10,000	1,995	40.71%	\$ 13,781,932	7.34%
10,001 to 50,000	2,259	46.09%	\$ 51,066,368	27.19%
50,001 to 100,000	340	6.94%	\$ 23,298,780	12.40%
100,001 to 250,000	200	4.08%	\$ 29,385,714	15.64%
250,001 to 500,000	59	1.20%	\$ 20,343,446	10.83%
500,001 to 750,000	20	0.41%	\$ 11,556,378	6.15%
750,001 to 1,000,000	7	0.14%	\$ 6,005,281	3.20%
1,000,001 to 1,500,000	14	0.29%	\$ 17,691,964	9.42%
1,500,001 to 2,000,000	3	0.06%	\$ 5,003,995	2.66%
2,000,001 to 2,500,000	2	0.04%	\$ 4,411,795	2.35%
2,500,001 to 5,000,000	2	0.04%	\$ 5,287,206	2.81%
Over 5,000,000	0	0.00%	\$ -	0.00%
Total	4,901	100.00%	\$187,832,859	100.00%
Mean = \$38,325				
Median = \$12,943				

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3. Contract Size Analysis

In this set of analyses, GSPC used a statistical control procedure by excluding contracts over \$1 million to investigate the potential disparity. The results are presented in a summary Table 37 for easy comparison with the full Prime Data analysis results (Section E of this chapter). As shown in Table, most categories showed significant disparity. The percentages in the table show the correlation between the amounts spent with each firm ownership and the total number of firms ready willing and able available in the relevant

geographic market area (please see the formula in Section F of this chapter). Comparing this table with the statistical analysis for all prime data, one can simply observe an improved disparity index, particularly for the Asian American business in construction. Please see tables showing detailed analysis of this section in Appendix E, Tables E-1 through E-5.

**Table 37: Prime Data Disparity Results for Contract Less than \$1 million
(Using Payment Dollars, CY 2015-2019)**

Disparity Results, all Prime Awards

Firm Ownership	Procurement Categories				
	Construction	Architectural & Engineering	Professional Services	Other Services	Goods
Black American	13.07*	67.61*	7.42*	15.41*	56.29*
Asian American	83.19	5.82*	3.22*	0.0*	0.0*
Hispanic American	16.52*	2.39*	0.0*	13.88*	19.91*
Native American	182.30	0.0*	0.0*	0.0*	0.0*
TOTAL MBE	22.89*	29.33*	6.04*	13.95*	49.86*
Nonminority Woman	13.75*	10.74*	0.0*	36.62*	23.29*
TOTAL MWBE	21.47*	22.71*	4.21*	19.61*	41.84*
Non-MWBE	198.82	186.04	144.64	139.60	107.94

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Legend:

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

**Very small number to produce statistical significance

Significant Underutilization Disparity (Disparity percentage below 80%).

Disparity (Disparity percentage 80% to 99.9%).

Overutilized (Disparity percentage over 100%).

No color is parity

Finally, GSPC analyzed all contracts under \$500K to detect and record the sources of disparity. As shown in Table 38, the disparity for Black American businesses in Architectural and Engineering was removed but created disparity in Goods. The appearance of Disparity in Goods category for Black American businesses was due to statistical control of a large contract (between \$500K and \$1 million). By comparing this summary and the one presented in Table 37, one can simply determine where and to what extent the size of a contract had on MWBEs in receiving contracts. Please see tables showing detailed analysis of this section in Appendix F, Tables F-1 through F-5.

**Table 38: Prime Data Disparity Results for Contract Less than \$500K
(Using Payment Dollars, CY 2015-2019)**

Disparity Results, all Prime Awards

Firm Ownership	Procurement Categories				
	Construction	Architectural & Engineering	Professional Services	Other Services	Goods
Black American	20.20*	165.83	8.98*	29.09*	73.88*
Asian American	179.67	14.28*	3.90*	0.0*	0.0*
Hispanic American	24.01*	5.87*	0.0*	26.20*	26.13*
Native American	15.22*	0.0*	0.0*	0.0*	0.0*
TOTAL MBE	31.10*	71.93*	7.31*	26.32*	65.44*
Nonminority Woman	11.12*	26.34*	0.0*	69.10*	30.57*
TOTAL MWBE	28.00*	55.71*	5.09*	37.01*	54.91*
Non-MWBE	19.60	149.31	144.22	131.03	106.16

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Legend:

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

**Very small number to produce statistical significance

Significant Underutilization Disparity (Disparity percentage below 80%).

Disparity (Disparity percentage 80% to 99.9%).

Overutilized (Disparity percentage over 100%).

No color is parity

It is important to add that the above three sets of statistical analyses, both individually and collectively, provide a response to some concerns about contract outliers and contract size in the analysis of disparity. It is imperative to note that even with contracts lower than \$500K, GSPC recorded disparity in most procurement categories for Black Americans and in all categories for Nonminority Women businesses.

K. Conclusion

Our analysis of the number of vendors utilized in each procurement category along with the total utilization for the categories revealed a proportionately smaller number of MWBE businesses were utilized in all procurement categories.

The threshold and contract sizing analysis revealed that most contracts in construction, Architectural and Engineering, Professional Services, Other Services, and Goods were valued between \$5,000 and \$50,000. In addition, after controlling for contracts over \$1 million, the disparity in utilization appeared in most categories. The disparity remained with most contract categories for MWBE businesses when the analysis was limited to only contracts under \$500K.

Finally, with the exception of Black American in Goods and Asian American in Architectural & Engineering, every MWBE group was significantly underutilized in each category throughout the Study Period as prime contractors.

VI. ANALYSIS OF MARKETPLACE CONTRACTING DISPARITIES IN THE CITY OF MILWAUKEE MARKET AREA

A. Introduction

In this section GSPC considers the market entry, private sector, public contracting and subcontracting outcomes, and other relevant market experiences of Minority and Women owned firms relative to Non-MWBE firms in the City of Milwaukee Market Area⁹¹. Our analysis utilizes data from businesses that are willing, able, or have actually contracted/subcontracted in the City of Milwaukee Market Area, with the aim of determining if the likelihood of successful contracting/subcontracting opportunities—actual and perceived—in the City of Milwaukee Market Area 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 confounders⁹² 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 I.

Our 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 heterogeneity 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 Milwaukee 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 analyses in the “but-for” justification. Ian Ayres and City of Milwaukee 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

⁹¹ Washington-Arlington-Alexandria Metropolitan Statistical Area (“MSA”) from the US Census Bureau.

⁹² 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.

to Non-Minority owned businesses.⁹³ This private discrimination 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 39 below reports on firm ownership type and “proxied” sales revenue for the Milwaukee Metropolitan Statistical area—the relevant market area—from the US Census Bureau’s 2019 Annual Business Survey (ABS).⁹⁴ We proxy revenues with total reported payroll as the ABS reports revenue in categorical ranges, and for a firm, payroll is proportional to sales revenue. 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. 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, publicly held, and other firms not classifiable by sex, ethnicity, race, and veteran status.

For the City of Milwaukee Market Area, Table 39 reveals that relative to White American owned firms, the estimated revenue shares of each Minority-owned firm never exceed 5.4% (Women).⁹⁵ With the exception of Hispanic-owned firms, MWBEs have estimated revenue shares far smaller than their firm representation shares. Relative to firms owned by White Americans in the City of Milwaukee Market Area, exclusive of Women owned firms—some of whom are White—the MWBE revenue shares are of a large order of magnitude below their estimated 16% (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 Milwaukee Market Area.⁹⁶

Table 39: Firm Ownership Type and Revenue Characteristics

⁹³ See: Ayres, Ian, and Fredrick E. Vars. 1998, "When does private discrimination justify public affirmative action?" *Columbia Law Review*, 98: 1577-1641.

⁹⁴ ABS data are publicly available at <https://www.census.gov/programs-surveys/abs/data.html>. 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.

⁹⁵ The percentages do not “add-up” to one, as the Women ownership category is not “mutually exclusive” of the other race/ethnicity/gender categories.

⁹⁶ 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 Asians, 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 are more “revenue underrepresented” with respect to their firm share.

**City of Milwaukee Market Area:
2019 Annual Business Survey**

Ownership Structure	Number of Firms	Percentage of all Firms (approximate)	Market Area Total Payroll (\$1,000)	Percentage of Market Area Total Payroll (approximate)	Ratio of Firm Share to Proxied Revenue Share (approximate)
All	28,533	100	\$41,481,397	100	1.0
Women	5,057	.177	\$2,238,144	.054	3.28
White American	24,041	.843	\$15,266,241	.368	2.29
Black American	54	.002	\$57,883	.001	2.0
American Indian & Alaskan Native	Suppressed ^a	Suppressed ^a	Suppressed ^a	Suppressed ^a	Suppressed ^a
Asian	979	.034	\$360,462	.009	3.78
Native Hawaiian & Other Pacific Islanders	Suppressed ^a	Suppressed ^a	Suppressed ^a	Suppressed ^a	Suppressed ^a
Hispanic	262	.009	\$138,709	.003	3.0
Publicly Held and not classifiable by race, gender, ethnicity	2,451	.086	\$25,731,516	.620	.139

Source: US Census Bureau 2019 Annual Business Survey. ^aValue 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 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 39 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 firm share to revenue share may be more informative of disparities.⁹⁷ For example, in the case of firms owned by Women, this ratio is (.177)/(.054) or approximately 3.28, suggesting that the revenue share of firms owned by Women would have to increase by a factor of approximately 3.28 to achieve firm share parity in the City of Milwaukee Market Area. For firms owned by White Americans this ratio is approximately 2.29. Thus, relative to White American -owned firms, those owned by Women are revenue underrepresented in the City of Milwaukee Market Area by a factor of approximately $3.28/2.29 = 1.43$ or approximately 143%. In general, the estimates suggest that the majority of firms owned by MWBEs in the City of Milwaukee Market Area are revenue underrepresented relative to White American owned firms.

Overall, the descriptive summary in Table 39 suggests that in the City of Milwaukee Market Area private sector, MWBEs face barriers that translate into lower firm revenues. In general, if being an MWBE in the

⁹⁷ 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.

City of Milwaukee 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 in the City of Milwaukee 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 is potentially a passive participant in private discrimination against MWBEs 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.”⁹⁸

To explicitly examine potential disparities in the rates of business ownership in the City of Milwaukee Market Area, GSPC estimated the parameters of a Logit regression model using 2019 American Community Survey (ACS) data from the Integrated Public Use Microdata Series (IPUMS) housed at the University of Minnesota.⁹⁹ 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 2019 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.¹⁰⁰ 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 we highlight in bold in the tables for all parameter estimates.

Our ACS data defines the City of Milwaukee Market Area as the Milwaukee-Waukesha-West Allis Metropolitan Statistical Area (MSA). In particular, we 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.

⁹⁸ *Concrete Works v. City and County of Denver*, 321 F.3 950 (10th Cir 2003).

⁹⁹ 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*

¹⁰⁰ 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.

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 characteristic increases (or decreases) the likelihood of being self-employed. In the case of the MWBE status indicators (e.g. Black American, Woman), the excluded category is White American Males, and a positive (or negative) odds ratio indicates that relative to White American Males, having that MWBE characteristic increases (or decreases) the likelihood of being self-employed in the City of Milwaukee Market Area. The MWBE status indicators 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 capture fundamental capabilities associated with a firm's capacity to produce and sell a good/service effectively and efficiently.

Table 40 reports parameter estimates across all business sectors in the City of Milwaukee Market Area. Relative to White Americans, Other Race individuals are more likely to be self-employed, as the estimated odds ratio is greater than unity and statistically significant in these instances. The estimated odds ratios less than unity with statistical significance suggest that relative to firms owned by White Americans, firms owned by Black American are less likely to be self-employed in the City of Milwaukee Market Area. This is suggestive of these firms facing barriers to self-employment in the City of Milwaukee Market Area. The lower self-employment likelihood of these type of MWBEs in the City of Milwaukee Market Area could reflect disparities in public contracting as Chatterji, Chay, and Fairlie (2014) find that the self-employment rate of Black Americans is increasing with respect to the provisioning and establishment of MWBE public procurement programs.¹⁰¹

Table 41 reports parameter estimates for Construction in the City of Milwaukee Market Area—an important sector in the market for public procurement. The estimated odds ratios less than unity with statistical significance suggest that relative to firms owned by White Americans, firms owned by Native Americans, Pacific Islanders, and the disabled are less likely to be self-employed in the City of Milwaukee Market Area construction sector. This is suggestive of these firms facing barriers to self-employment in the City of Milwaukee Market Area construction sector. The lower likelihood of these type of MWBEs being self-employed in the construction sector in the City of Milwaukee Market Area could reflect disparities in public contracting, as Marion (2009) finds that the self-employment rate of Black Americans in construction is increasing with respect to the provisioning and establishment of MWBE public construction procurement programs.¹⁰²

¹⁰¹ 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.

¹⁰² Marion, Justin. 2009. "Firm Racial Segregation and Affirmative Action in the Highway Construction Industry." *Small Business Economics* 33: Article 441.

Table 40: Self-Employment/Business Ownership in City of Milwaukee Market Area:
Logit Parameter Odds Ratio Estimates From The 2019 American Community Survey

	Coefficient	P-value
<i>Regression: Self Employment in The City of Milwaukee Market Area (Binary)</i>		
Age	1.0721	0.0000
Age Squared	0.9997	0.0299
Respondent is Married: Binary	0.9891	0.9359
Respondent is Female: Binary	0.6444	0.0008
Respondent is Non-Hispanic Black: Binary	0.6059	0.0283
Respondent is Non-White Hispanic: Binary	0.7314	0.2754
Respondent is Native American: Binary	1.1332	0.7831
Respondent is a Pacific Islander: Binary	0.0008	0.0000
Respondent is Asian: Binary	1.5754	0.1422
Respondent is Other Race: Binary	2.3765	0.0085
Respondent is veteran: Binary	0.5817	0.1002
Respondent has a 4-year degree: Binary	0.9179	0.5289
Respondent speaks only English: Binary	1.2069	0.4632
Respondent is Disabled: Binary	0.4201	0.4257
Value of Home	1.1431	0.0991
Interest, Dividend, and Rental Income	1.2132	0.7053
Mortgage Payment	1.0002	0.0036
Number of Observations	4,226	
Pseudo R ²	0.0533	

Source of Data: American Community Survey 2019, IPUMs USA

Table 41: Construction Sector Self-Employment/Business Ownership in City of Milwaukee Market Area:

Logit Parameter Odds Ratio Estimates From The 2019 American Community Survey

	Coefficient	P-value
<i>Regression: Self Employment in The City of Milwaukee Market Area (Binary)</i>		
Age	1.1740	0.0012
Age Squared	0.9987	0.0153
Respondent is Married: Binary	0.5853	0.1640
Respondent is Female: Binary	0.0863	0.0000
Respondent is Non-Hispanic Black: Binary	0.5760	0.3754
Respondent is Non-White Hispanic: Binary	0.6200	0.3470
Respondent is Native American: Binary	0.0013	0.0000
Respondent is a Pacific Islander: Binary	0.0038	0.0000
Respondent is Asian: Binary	0.4283	0.3753
Respondent is Other Race: Binary	1.7476	0.4594
Respondent is veteran: Binary	0.3650	0.0964
Respondent has a 4-year degree: Binary	0.4669	0.0000
Respondent speaks only English: Binary	0.7807	0.4689
Respondent is Disabled: Binary	0.1438	0.0000
Value of Home	1.1273	0.6040
Interest, Dividend, and Rental Income	1.0934	0.4138
Mortgage Payment	1.0002	0.0723
Observations	4,224	
Pseudo R ²	0.1201	

Source of Data: American Community Survey 2019, IPUMs USA

D. Building Permit Analysis

To enable a closer look at the extent of MWDBE participation in the overall City of Milwaukee relevant market area, Table 42 reports on the distribution of building permits by identifiable firm type in City of Milwaukee for the 2018 -2021 calendar years. While building permits are directly related to the construction industry, construction activities are a vital component of an economy, and engender spending on other economic activities. As such, an analysis of the distribution of building permits by firm type can inform the extent to which MWDBEs are participating in the market economy of a given political jurisdiction such as the City of Milwaukee.

Our analysis of commercial building permits in the City of Milwaukee relevant market area linked rosters of identified MWBE firms to submitted building permits for the 2018 – 2021 calendar years. GSPC utilized a Fuzzy Matching (FM) procedure to link the text strings of firm names in the certified vendor matching list, along with any race, ethnicity and gender identifiers to the firm names in the building permit applications. FM enables linking two data sets together that do not have a unique identifier common to both data sets to produce one that is common across a particular alphabetic string such as the name of a business/firm. A Python-enabled FM was utilized to identify Minority, Woman, and Black business enterprises (MWBE) firms from the City of Milwaukee building permit data for the 2018 – 20121 calendar years, which ultimately consisted of 1,406 entries with text strings indicating the names of businesses/firms that submitted commercial building permit applications.

Given GSPC's FM-enabled identification of MWBE firms, Table 42 reports the distribution of building permits by firm type for the 2018 – 2021 calendar years in the City of Milwaukee. Our matching algorithm enable the identification of firms broadly classified as MWBE, and those who are owned by Asian Americans, Black Americans, Hispanic Americans and Women. In the case of the race/gender identifications, there is no inherent mutual exclusivity with the MWBE classification, with some of the firms identified as being owned by Black and Women not necessarily certified as MWBEs.

The distribution of commercial building permits reported in Table 42 reveal that for the 2018 - 2021 calendar years, the total number of building permits going to any of the firm types classified as MWBE was 138, which constituted approximately .098 or 10% of all commercial building permits issued. For firms identified as Asian-owned, not necessarily certified as MWBE, 1 permit was secured, constituting approximately, and significantly less than 1% of all building permits. In the case of firms identified as being Hispanic-owned, a total of 2 permits were secured, constituting approximately, and significantly less than 1% of all building permits.

The estimated low commercial building permit shares for MWBEs, and for firms identified as Asian-owned and Hispanic-owned suggests that, in the City of Milwaukee there are private sector barriers that constrain the ability of these type of firm to participate in the economy. Our estimates suggest that firms not classified as MWBEs account for approximately 90% of building permits in the City of Milwaukee during the 2018 - 2021 calendar years. To the extent that experience acquired by participating in the private sector translates into an enhanced capacity to compete in the market for public sector contracts and subcontracts, the almost dominance of Non-MWBEs in securing building permits suggest the presence of private sector barriers faced by MWBEs. This could undermine the ability of MWBEs to compete for public contracts and subcontracts. In this context, if there are any public contracting/subcontracting disparities between

MWBEs and non-MWBEs in the City of Milwaukee relevant Market Area, it could constitute passive discrimination against MWBEs, as the disparities could reflect the barriers, possibly discriminatory, that MWBEs face in the private sector that serve to undermine their capacity to compete for contracts and subcontracts with the City of Milwaukee.

Table 42: Distribution of Building Permits

In City of Milwaukee Market Area

Calendar Years 2018 - 2021

Business/Firm Type	Number of Building Permits^a	Percent of Building Permits^b
MWBE	48	0.034
Asian-owned	1	0.0007
Black-owned	45	0.032
Hispanic-owned	2	0.0014
Women-owned	42	0.29
Total MWBE, or Asian, Black , Hispanic, or Women Owned	138	0.098
Total Non-MWDBE	1,268	0.9018
Total	1,406	1.000

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Notes: ^a Rounded to nearest integer

^b Rounded to nearest 10 thousandth

E. Bank Loan Denials

To the extent that Small, Minority, Women, and Disadvantaged firms (SMWDBEs) are credit-constrained as a result of facing discrimination in private lending markets, their capacity to compete for and execute public project could be compromised. In this context, a political jurisdiction that awards public contracts is potentially a passive participant in discrimination as SMWDBEs 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 SMWDBEs in the private sector credit markets can rationalize targeted public contracting programs by political jurisdictions, and the capacity and growth of SMWDBEs could be enhanced with access to public contracting opportunities (Bates, 2009).¹⁰³

To determine if SMWDBEs face barriers in the private credit market in the City of Milwaukee Market Area, Tables 43-44 report, for each of the distinct SMWDBEs and owner self-reported race/ethnicity/gender ownership characteristics in the GSPC sample, the estimated parameters of an Ordinal Logit BRM with the dependent variable being a categorical variable for the number of times the firm was denied a private commercial bank loan firm between the years 2014 – 2019.

The estimated odds ratios in Table 43 reveal that for the four distinct broadly classified SMWDBEs in the GSPC sample, relative to non-SMWDBEs—the excluded group in the CRM specification— certified disadvantaged firms have more commercial bank loan denials. This suggests that these type of SMWDBEs, face barriers in the private credit market. When disaggregated by the race/ethnicity/gender of owners, the results in Table 44 suggest that firms owned by Black Americans and Asian Americans have more commercial bank loan denials relative to non-SMWDBEs as the estimated odds ratio is greater than unity and statistically significant in these instances. This suggests that among SMWDBEs in the City of Milwaukee Market Area, firms that are owned by Black Americans and Asian Americans 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.

¹⁰³ 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.

Table 43: Ordinal Logit Parameter Estimates-Bank Loan Denials (Odds Ratio):

Owner Racial/Ethnic Status and Commercial Bank Loan Denials

In City of Milwaukee Market Area

	Coefficient	P-value
Regressand: Number of times denied commercial bank loan: (Ordinal)		
Firm owner has more than 20 years' experience: (Binary)	0.9360	0.8320
Firm has more than 10 employees: (Binary)	1.0790	0.8465
Firm owner has a baccalaureate degree: (Binary)	0.9514	0.8681
Firm gross revenue greater than 1.5 million: (Binary)	0.9778	0.9592
Firm Bonding limit greater than 1.5 million: (Binary)	1.2571	0.4413
Financing is a barrier for securing City of Milwaukee projects: (Binary)	0.3734	0.0215
Firm is in the construction sector: (Binary)	1.0676	0.8505
Firm is registered to do business with City of Milwaukee: (Binary)	1.1578	0.6286
Firm is a willing/able prime contractor for City of Milwaukee: (Binary)	1.4911	0.4126
Firm is a willing/able subcontractor for City of Milwaukee: (Binary)	0.7292	0.5605
Firm is a certified minority business enterprise: (Binary)	0.5694	0.1544
Firm is a certified woman enterprise: (Binary)	0.8875	0.7540
Firm is a certified disadvantaged business enterprise: (Binary)	3.1138	0.0260
Firm is a certified small business enterprise: (Binary)	1.6273	0.1995
Number of Observations	208	
Pseudo R ²	0.0522	

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Table 44: Ordinal Logit Parameter Estimates-SMWBE Commercial Bank Loan Denials

SMWBE Status and Commercial Bank Loan Denials
 In City of Milwaukee Market Area

	Coefficient	P-value
Number of times denied commercial bank loan: (Ordinal)		
Firm owner has more than 20 years' experience: (Binary)	1.0623	0.8537
Firm has more than 10 employees: (Binary)	1.0445	0.9149
Firm owner has a baccalaureate degree: (Binary)	1.0012	0.9968
Firm gross revenue greater than 1.5 million: (Binary)	1.3648	0.4922
Firm Bonding limit greater than 1.5 million: (Binary)	1.3600	0.0039
Financing is a barrier for securing City of Milwaukee projects: (Binary)	0.3941	0.0357
Firm is in the construction sector: (Binary)	1.3256	0.4229
Firm is registered to do business with City of Milwaukee: (Binary)	1.4319	0.0268
Firm is a willing/able prime contractor for City of Milwaukee: (Binary)	1.5533	0.3657
Firm is a willing/able subcontractor for City of Milwaukee: (Binary)	0.7260	0.5555
Firm is Black-owned: (Binary)	1.5364	0.0140
Firm is Hispanic-owned: (Binary)	5.3374	0.0568
Firm is Asian-owned: (Binary)	3.1708	0.0109
Firm is Native American-owned: (Binary)	0.7167	0.7012
Firm is bi/multiracial-owned: (Binary)	1.0000	.
Firm is other race-owned: (Binary)	0.3649	0.4919
Firm is Woman-owned: (Binary)	0.7290	0.2911
Number of Observations	208	
Pseudo R ²	0.0521	

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F. Conclusion

A descriptive and inferential private sector analysis of the City of Milwaukee Market Area revealed that in general, being an MWBE in the City of Milwaukee Market Area is associated with lower firm revenue relative to non-MWBE firms. For firms owned by the Native Americans, Pacific Islanders, and the Disabled, lower 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 Milwaukee Market Area are suggestive of private sector discrimination that undermines their capacity to enter the market and compete with non-SMWDBEs firms for public contracting and subcontracting opportunities. An analysis of the distribution of building permits reveals that non-MWBEs dominate economic activity in the City of Milwaukee market area. The dominance of Non-MWBEs in securing building permits suggests the presence of private sector barriers faced by MWBEs, that inhibit their ability to gain access to contracting/subcontracting opportunities with the City of Milwaukee.

In other relevant outcomes, the regression results reported in Appendix G provide specific detail on which particular SMWDBEs in the broad City of Milwaukee Market Area are potentially constrained by discrimination that could translate into lower likelihoods of winning prime contracts. In general, the regression results suggest that disadvantaged business enterprises, and firms owned by Black Americans, Bi/multiracial Americans, and other races are particularly harmed by perceived discrimination against them by City of Milwaukee. Firms owned by other races are also relatively more likely to have never secured a City of Milwaukee prime or subcontract. We also find that that among SMWDBEs in the City of Milwaukee Market Area, firms certified/classified as Disadvantaged, and those owned by Black Americans and Asian Americans 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, as suggested by differential commercial bank loan denials.

VII. ANECDOTAL EVIDENCE

A. Introduction

This chapter of the Disparity Study offers anecdotal evidence to support the Study team's overall findings from an analysis of the perspectives, viewpoints, opinions, beliefs, and experiences provided by business owners, community organizations, and other stakeholders that contract, do business, or interact commercially with the City of Milwaukee ("City") or operate within the City of Milwaukee and within its marketplace. The Study team gathered qualitative data by using a variety of methods, including tracking frequently occurring responses and engaging a wide spectrum of individuals to participate in the Study. The team began the process by conducting an informational meeting to educate community members on the Study's role and its methods. Next, the Study team invited stakeholders to participate in a variety of forums, including three public hearings hosted online, two online focus groups, one-on-one interviews, an online Survey of Business Owners, virtual meetings with area industry organizations, and solicitation of email commentary.

In many cases, the expressions of the participants and interviewees may not comport with the policies, procedures, and practices of the City of Milwaukee and may not include acknowledgements of programs already provided by the City. Although GSPC encourages the reader to review the policy chapter of this Study, anecdotal evidence represents the valid perceptions and experiences of those giving evidence.

The Study team circulated an online Survey of Business Owners widely throughout the City's marketplace, requesting feedback about both anecdotal and demographic experiences, and engaged with a randomly selected, diverse group of local vendors and businesses for approximately 30-minute virtual interviews. GSPC convened two virtual focus groups of randomly selected stakeholders to draw from discussions about working with the City, as well as three virtual public hearings that the Study team widely publicized through social media, press releases to area media, email blasts, and announcement on the Study website. The Study team also interviewed members of eight community and business organizations to gain insight into the general business environment in the City of Milwaukee and the surrounding metropolitan area. Finally, Email commentary was collected throughout the duration of the Study. The goal of the online interaction for all aspects of anecdotal evidence collection was to adhere to safe social distancing practices recommended by state and federal governments during the ongoing COVID-19 crisis.

What follows is a combination of the feedback the Study team received from the various information gathering methods that are arranged according to subject matter and type of analysis. It should be noted again that these are the experiences and perceptions of each of the commenters which may not align with The City of Milwaukee's policies or practices.

B. Anecdotal Interviews

The Study collected opinions and insight from diverse and randomly sampled vendors and business owners working and operating within the marketplace, as responded to invitations to participate. The demographic makeup of interview subjects was as follows: three (3) Native American or Alaska Native owned business, six (6) Black owned businesses, nine (9) Hispanic American owned business, two (2) Non-minority owned businesses, seven (7) Woman owned businesses, and five (5) Asian owned businesses. Participating business segments included construction materials supply, engineering, advertising, trucking, furniture design and sales, logistics, leadership development, metallurgy, painting, architecture, plumbing, HVAC, real estate development, construction, materials testing, concrete cutting, construction materials hauling, interior design, transportation, marketing, parking, equipment sales, and engineering. Each interview covered a variety of topics, ranging from business origins to barriers to working with the City of Milwaukee. The following narratives represent the subjects most frequently mentioned.

1. Loopholes

Several firms identified what they perceive as loopholes that larger firms owned by Non-Minority owned companies – often prime contractors – use to avoid hiring SBE businesses as subcontractors or sharing any percentage of a contract with smaller, less established firms. While it should be noted that the City of Milwaukee does not have any race or gender-based bid preferences, set-asides, or benefits for formal or informal procurement, almost all of the firms that identified such loopholes for this portion of the chapter are MWBEs. The City's Small Business Enterprise program does, however, call for percentage-based goals of up to 25% for firms participating in the program (see Policy Chapter).

More than one-third of the firms participating in the anecdotal interview portion of this Study (13 out of 32) outlined experiences in which they encountered prime contractors using subcontractors skirt participation goals or feign good faith efforts to win contracts with the City. In some cases, firms said prime or general contractors engaged subcontractors to be pass-throughs, or certified businesses paid by primes to purchase goods or services on behalf of the prime contractor so that the larger company can claim to employ and SBE and meet a participation goal, frequently without the consent or knowledge of the subcontracting firm. Other firms described prime contractors who established fronts – firms classified for certification, but whose majority owner with a qualifying identity is not directly involved in the business – to win contracts with the City. Some of the loopholes and workarounds recalled by participants in the study went further, even, than this, with assertions that firms were creating subsidiaries and manipulating their structure to qualify for SBE status.

According to GSPC Survey of Business Owners nearly 46% of the 208 firms queried for this portion of the survey believed to some degree that prime contractors would include a Small Business subcontractor on a bid to meet the goals, then drop the subcontractor after winning the bid (see Anecdotal Table 1 below and Appendix I:Table 109 from the Survey of Business Owners). This reflects 46.8% of Black owned firms, 32.5% of Woman owned firms, and 56.2% of Hispanic American owned firms, and 14.4% of Non-minority owned firms that agreed or strongly agreed. Nearly 40% survey respondents (see Anecdotal Table 2 below and Table 107 in Appendix I) said they either agreed or strongly agreed with the idea that prime contractors

would sometimes contact Minority, Woman, Disadvantaged or Small subcontractors to ask for quotes but never give the proposal sufficient review to consider giving that firm the award. Among those agreeing responses were 20% of Woman owned businesses and 22.8% of Black owned firms, while those strongly agreeing included 31.6% of Black owned firms and 10% of Woman owned companies.

Several firms said they have either been approached by primes trying to embroil them in passthrough schemes or have sought what they believed to be legitimate subcontracting jobs with prime contractors that made them into passthroughs. “You always get approached by some weird company that asks you to be a pass-through,” AI-14, a Hispanic America owned electronics installation firm said. “Once or twice a year I might get a call from someone asking, ‘do you mind running an invoice through?’” However, these schemes are not lucrative for the subcontractor, as AI-5, a Black owned general contracting firm owner, pointed out. “Sometimes, they’ll buy materials in the minority firm’s name,” he said. “It happened to me. They cut me a check for \$60,000, but then that money had to go to the vendor. I have to cash the check and go pay the vendor. I make money and I get no experience.” He said if a subcontractor is signed on to work a project and needs some work and money, they are often at the whim of the prime contractor. “Some firms will then the subcontractor, ‘this is what we’re going to give you,’” AI-5 said.

Woman owned airport concessionaire AI-30 said that primes will hire a maintenance worker at and allow them to buy goods or equipment. “They’ll set them up to be the conduit for purchasing equipment like advertising displays or digital monitors,” she said. “Just flow it through them and pay the commission just to show that they paid an [Airport Concessions Disadvantaged Business Enterprise].” In one such instance, a firm owner said that she was sent to collections when a prime used her company to purchase materials but was slow to pay. “A company contacts me and says they were told that (the prime) would pay me to pay the invoice,” Hispanic American owned trucking company AI-20 said. “Then I get a collection call saying the invoice is 90 days past due, and they don’t care if the prime hasn’t paid me, and perhaps I should make a partial payment.”

Some SBE firms said that if they do get a bid from a prime contractor, the amount of work they receive is meaningless or short lived. Hispanic American dump truck driver AI-13 said a prime offered to hire his truck with the promise of steady, continuous work, but only wanted to have access to his SBE certification. “They sweet-talk you, and say, ‘hey, I need you. Can we get your paperwork?’” he said. “Then after a couple of days you’re on the backburner. When they get the project, they push us [to] the side, and they do the work.” Similarly, woman-owned marketing and advertising firm AI-27 said that she has had “bad experiences” as a subcontractor because they just wanted her certification. “I saw very little work out of it. But they have to fill the DBE requirements, so they’ll find a partner and have you do work that’s not a good use of your time. I told someone recently I was not going to be an admin.”

While some have experienced firms “complying” with the program’s certification requirements in name only, others recounted contractors attempting to side-step good faith efforts to hire Minority, Woman, Disadvantaged, or Small businesses entirely. Asian owned structural metal firm AI-10 said she heard about it before she came to Wisconsin. “Contractors accept good faith efforts without making much effort to locate a competent minority firm,” AI-27 expressed a similar sentiment, stating that “The primes feel like they can do the job themselves and don’t really work hard at finding someone who can do the work.” However Non-minority owned painting firm AI-24 said the current Governor of Wisconsin, Tony Evers has put a stop to that behavior since taking office in 2019. “They used to do that before Evers got into office,” he said

about wayward prime contractors. “All they were doing was writing a letter saying, ‘we tried and couldn’t find anybody.’”

AI-16, a Hispanic American HVAC owned firm described labor brokers that he claims will hire subcontractors and pass and their certifications off to primes, regardless of the skillset required for the job. “They may be a painter by trade, and suddenly they’re doing electrical, concrete or HVAC, working with a larger firm and putting the larger firm’s mechanic on their payroll,” AI-16 said. “I’m not sure if the prime contractors are aware of it, but it’s almost like for whatever is easiest and most convenient, they’ll put blinders on.”

More business owners described how prime companies either keep work to themselves or get around hiring Minority, Women, Disadvantaged or Small businesses. AI-1, AI-12, AI-5, AI-9, and AI-13 say there are versions that involve spouses, and others that involve creating jobs. “People hire their wives and set up a separate company to take advantage of the opportunity,” AI-1, a Black owned real estate appraisal company said. “They play the system really well,” Hispanic American dump truck driver AI-13 said. “They gain the project that way, but it doesn’t help out the Hispanic or Black companies.”

Black owned general contractor AI-5 said that when “the wife owns 51% of the business. They can meet the minority requirement for the job.” He added that some firms may even merge with a disadvantaged company. “Some also connect with minority firms just to obtain that certification,” he said. “But the minority firms don’t really do the work.” This practice satisfies the minority participation goal while often giving large prime vendors with lots of resources free reign on a project that shuts out smaller potential subcontractors. “Now you’ve got this huge company that 30, 40 or 50 employees, 20 to 40 fans, 10 estimators and sales reps, and it is a ‘minority’ company,” he said. “That’s the way it is. They found the loophole.”

Some firms claimed that the ways around goals were even more creative. AI-9, an Asian owned architecture firm, described primes that create subsidiaries. “They’ll create a sub-company to a prime then register it as an SBE,” he said. “A lot of the primes do this to gain and control access over a project.” Woman owned architecture firm AI-32 said she has seen companies try to use a promotion and stock options to create a front. “In one case a woman became the CEO, and they said they were woman owned,” she said. “No, she’s not. She owns just a fraction of the company, and they are owned by a conglomerate.”

2. Timely Pay

Payment is a vital part of the transactional nature of doing business with any governmental entity. Receiving payment in a timely manner allows firms contracting with the City to pay workers, and buy materials, fuel and or equipment needed to continue to operate. Particularly for smaller firms that do not readily have access to capital to maintain operations while awaiting pay, prompt payment can be a lifeline to successfully doing business. The City’s policy is to pay invoices within 30 days and no later than 45 days before a clause calling for “simple interest” to be paid beginning on the 31st day (see Policy Chapter). Prime subcontractors are required to pay subcontractors that are part of the City’s Small Business Enterprise program within seven days of receiving pay from the City, or within seven days of receipt of an SBE subcontractor’s invoice, whichever is latest.

According to the Survey of Business Owners, only a little more than 14% of the 64 respondents to the question about timely pay for purchase order numbers said they were paid by the City in less than 30 days of invoicing (See Anecdotal Table 3 below and Appendix I Survey of Business Owners: Table 58). More than 42% said they received payment between 30 and 59 days, and over 12% said payment took up to 89 days. Regarding timely pay from prime contractors, 11.5% of firms polled said they got paid in under 30 days (See Anecdotal Table 4 below and Appendix I Survey of Business Owners: Table 59). Nearly 33% said payment arrived in between 30 and 59 days, and 16.4% say pay took up to 89 days to arrive.

Asian owned metallurgical testing firm AI-7 was one of several firms that applauded the City's ability to pay contractors on time. "I keep working with Milwaukee Water Works and have no problems with payment," she said. Unfortunately, other interviewees cited issues with payments both from the City and prime contractors. Native American owned construction firm AI-21 said that the company has gone into debt while waiting for payments from the City. "We have to borrow money to pay our vendors and employees and our employees' benefits," she said. "Even if we don't get paid, we have to pay them." AI-24, the Non-minority owned commercial painting firm, said that since the COVID-19 pandemic, he gets paid every 70 days. "I'm not a bank," he said. "I've got 65 guys I've got to pay every Friday to the tune of \$1,400. "I've got \$70,000 in receivables out there and it's 60 days late." According to AI-8, an Asian owned concrete cutting firm, new businesses looking to work with the City of Milwaukee cannot be successful with the way payments are timed out. "The smaller guys will get crushed if they think they will get paid in 35 days and they get paid in 80 to 90 days," he said. "They're putting them in danger. If they're paying their contractors in 80 days, there's a problem."

AI-14, the Hispanic American owned electronics firm said prime contractors force subcontractors into milestone payments that remove any control around being paid from the sub and create trouble for those smaller companies. "When you're attached to their milestone payments, if you did your part but they didn't do their part, you're still waiting," AI-14 said. "I'm not saying bigger firms don't face that, but they can take it. It's harder for smaller firms."

3. Informal Networks

Informal networks go beyond the typical relationship-building and networking that all business owners must do to survive. An informal network is a *closed* network in which certain firms are afforded an advantage due to their relationships inside the hiring agency or organization, in this case the City of Milwaukee, or with regular contractors. At their most innocuous, informal networks can be the result of previous working arrangements with an agency, providing the agency with familiarity and consistency but reducing opportunities for competition and broad engagement with the business community. However, in their most problematic formulations, informal networks become back channels to information and give a leg up to firms in what is intended to be a transparent process. These networks serve to exclude the entrance of new firms into doing business with a public agency, which can disparately affect MWBE firms. While private sector firms can legitimately and exclusively use the same firms repeatedly, that practice is not permissible with publicly funded work because it feeds a continuing practice of exclusion of underutilized tax-paying populations.

Some firms in the Milwaukee marketplace that could potentially do business with the City of Milwaukee said just such an informal network is what precluded their efforts to win contracts. According to the GSPC Survey of Business Owners, 67.3% of 208 respondents answered “yes” when asked if they believed that some form of an informal network monopolized public contracting with the City (See Anecdotal Table 5 below and Appendix I Survey of Business Owners: Table 105). Of that percentage, 82.3% of Black American owned businesses, and 62.5% of Woman owned businesses responded in the affirmative.

Several firms, while not critical of informal networks in and around the City, expressed that they had themselves benefitted from being a known entity. For instance, AI-19, a Hispanic American owned remodeling firm, stated that he has continuous work with the City of Milwaukee because his wife works in a City department “I don’t have to advertise myself because the job leads are provided by the City,” he said. “All I have to is call the City and tell them I’m done with a job, and they’ll just give me another job.”

However, other firms, such as woman-owned marketing firm AI-27 and black owned leadership development company AI-4, felt that they were on the outside. “I don’t run with the movers and the shakers,” AI-27 said. “Sometimes it what you know and who you know. If you’re not in those circles, you’re not going to get the work.” AI-4 said that, while he benefits from networking, his networks aren’t the ones that he would need to do business with the City. “I mostly rely on referral business, and that’s 80 to 90 percent of my business,” he said, but acknowledged that he does not try to win business with the City because his network does not connect him with prime contractors. “There are people who know people and participate together.” AI-9, an Asian owned engineering firm, said he cannot get hired as a prime contractor because he does not know the right people. “The projects we are qualified for we usually don’t get,” he said. “They usually go to a non-SBE, non-Woman, Non-minority company. Many companies have established relationships where we can’t break in.”

Woman owned towing company said she did not win contracts because people in her industry are less likely to network with a woman. “It’s who you know,” she said. Another woman-owned firm, AI-29 said she has not had a contract with the City because she has not been able to get through to “the right people at the right time” to build a rapport. “Some people have a prior and established relationship,” she said. “I’m at a disadvantage because they don’t know me.”

Black owned real estate development firm AI-6 said he sees prime contractors work across industries to help one another, but only let in those firms they know. “They have all the established relationships with one another,” he said. “They have banking relationships, accounting relationships, legal relationships. For small companies, we have to be nimble to still be able to win bids.”

The formalized network of labor unions was identified as a source of concern by Business owners responding to the anecdotal interviews who described the organizations intended to provide collective bargaining for workers as an obstacle to gaining work with the City of Milwaukee. “Certain jobs require a union shop,” one Hispanic American-owned electrical contractor said. “Some of the larger primes would not even look at us because they’ve got their eyes on the big union shops.” AI-3, a Black owned commercial plumbing company, feels that unions are monopolizing work in its industry. “Unions are responsible for 80

percent of the work, and that is why we don't have any contracts with the City," he said. "The special interest groups give special treatment to apprenticeship participants." AI-3 believes that what he calls "union interference" stunts minority business growth and said that unions "don't want you to grow to become a threat to them in terms of business."

4. Discrimination

While not widely remarked upon during the anecdotal interviews, there were instances in which business owners identified experiences with discrimination. The Survey of Business Owners showed that 15.9% of business owners polled acknowledged experiencing some amount of discriminatory behavior when doing business with the City of Milwaukee (See Anecdotal Table 6 below and Appendix I Survey of Business Owners: Table 104). Of those businesses surveyed, Black owned businesses reflected the largest percentage of experience with discriminatory behavior at 26.6%. Of that number, 13.9% described those experiences as happening "often," while 12.7% said those experiences happened "very often." Nearly 19% of Hispanic or Latinx owned firms described being exposed to discriminatory behavior while doing business with the County, with 6.2% saying they had experienced such behavior "often," and 12.5% saying their experience happened "very often."

Non-minority owned commercial painting contractor AI-24 said a white contractor on a job site had an outburst at one of his employees. "He looked at a Hispanic girl who works for me and told her to take her (self) back to Mexico," AI-24 said. Including AI-24, who said he experienced discriminatory behavior "regularly," four business owners identified discrimination as a common occurrence, although he gave the most detail. "That's an everyday thing," AI-6, a Black owned real estate development company said. Black owned commercial plumbing company AI-3 said, "it's a big part of being in business," while AI-4, the Black owned leadership development firm said, "I experience it every day." AI-9, an Asian owned architecture firm said his experience with discrimination resulted in "not being selected for bids even though we're qualified."

Equal pay was raised as a concern among some minority- and women-owned businesses. Hispanic American owned trucking company AI-20 said that, because she is a minority and a woman, prime contractors do not pay her well. "Discrimination for me is unequal pay for my work," she said. AI-23, a Native American owned research firm, said that minority women are marginalized in the Milwaukee marketplace:

"There's discrimination every day I don't get paid the same as a man," she said. "Brown women are underrepresented because they don't sit on any boards. There is systemic racism. Only white men sit on the boards that control the outcome of projects."

Hispanic American owned electrical contracting business AI-12 said primes undervalue his work because he is a minority. "I will get someone who calls and says, 'I heard you were Hispanic. Can I get a Mexican discount?'" he said. "And I've heard people say, 'your bid is lower than the other guy, but you're not a big-named company, so you've still got to come down.'" AI-12 said people assume he cannot do the work. "People are not recognizing us as the same level as some other non-minority contractor," he said. "If they're

going to hire us, why do we have to be (paid) lower than them? The same price they pay for breakers is the same price I have to pay. Why should my labor be less?”

Other business owners say that certifications intended to help provide an advantage are often used as a flag prime contractors can use to discriminate. “There is a stigma out there of SBE and DBE firms that they don’t pay their bills or pay their employees,” Native American owned construction firm AI-21 said. “We automatically have to prove ourselves that much more,” Hispanic American owned HVAC business AI-16 said. “When they see that SBE or MBE behind our company name, that automatically puts a misperception in some people’s minds.”

5. Bidding Process

Businesses participating in the anecdotal interviews identified the processes for conducting business with the City, from registering to do business with the City to getting the SBE certified, and even finding out how to bid, as obstacles.

In the survey of vendors and potential vendors, more than 66% of the 208 firms polled (See Anecdotal Table 7 below and Appendix I Survey of Business Owners: Table 16) said they were registered in E-Notify to receive procurement notifications from the City of Milwaukee. Nearly 90% of the 38 unregistered firms (See Anecdotal Table 8 below and Appendix I Survey of Business Owners: Table 18) said they did not know how to register with the City. More than 44% (See Anecdotal Table 9 below and Appendix I Survey of Business Owners: Table 60) of survey respondents of the 208 businesses surveyed said they were not certified as a Minority, Woman, Disadvantaged or Small business, with more than 78% of those uncertified businesses citing a lack of understanding of the certification process (See Anecdotal Table 10 below and Appendix I Survey of Business Owners: Table 66).

Asian American owned structural metal company AI-10 said she had help getting her certification with the City after receiving an email invitation. “But it was not a user-friendly process,” she said. “I would’ve had to spend 10 times as much time if I didn’t have help.”

Hispanic American owned electrical contracting company AI-12 said the process for bidding on projects requires more time than it is worth. “It’s just too much process to go through sometimes to get work,” he said. “There are too many things to gather compared to older bidding sites. Ninety percent of the time you put in an estimate you might not get the job. We’re wasting a lot of hours.”

AI-5, a Black owned general contractor, also acknowledged that the process for bidding with the City took a lot of time and resources. “It’s challenging,” he said. “It’s hard for a small business to do the documentation. It was so cumbersome and slowed things down.” But he said the work to complete bidding with the City pays off, so created a role in his company dedicated to bidding. “That’s a \$63,000 investment just to be able to bid on these projects. It does add money to the job. For me, it’s well worth it.”

C. Public Hearings

GSPC convened three virtual public hearings with two on August 10, 2021, and a third on October 15, 2021, to allow for comment from community and business stakeholders. The events were conducted virtually to allow participants to safely observe social distancing guidelines established by state and local authorities to protect against COVID-19. At each engagement meeting, a GSPC representative introduced the Study by outlining the purpose of the meeting before opening the floor for participants to speak. In this forum, GSPC does not respond to comments or answer questions except to clarify items for the record so as to avoid influencing anyone's perspectives.

A total of 60 local business owners or area stakeholders attended the three meetings, with 10 in the early session on August 10, 8 in the later session, and 45 in the October 15 session. The Study team sent invitations via email blast to business owner and press releases were distributed in the community and to local civic and trade organizations to solicit their participation. Because a recording of each meeting was produced, each participant who spoke was asked to state their name for the record. During each session, the Study team listened to a collection of business advocacy organizations and area businesses who offered specific ideas and opinions about the City of Milwaukee's business programming or barriers to participation, and ideas for improvement.

Not all participants in the three public hearings voiced their opinions in the virtual forum, although they were encouraged to do so verbally or by typing a comment into the virtual platform's messaging board. Other participants spoke up only to acknowledge their attendance in and support for the respective hearing. What follows in this section reflects comments given pertaining to contracting with the City.

PH-1, a Black owned engineering firm, said bonding and insurance are more expensive for work done in the City than in other municipalities across the state. For smaller companies that is an obstacle to doing business with the City of Milwaukee.

1. Loopholes

Business owners indicated an ongoing problem with prime contractors making efforts to avoid the City's SBE participation goals. For instance, black owned engineering firm PH-1 reported that a prime hired the company to meet its SBE goals, using the small company as a passthrough by paying to make purchases through firm without using the firm's staff for actual engineering functions. "They ordered materials, put it in our company's name, and then wrote a check to cover the materials with 1.5% above the actual cost," PH-1 said. "We never had any guys out there working."

PH-2, a Black owned law firm and business advocate, said the City needs to have more oversight to, among other things, prevent loopholes. "There needs to be an independent monitor," he said. "There needs to be someone with the authority to resolve issues."

PH-5, a woman owned marketing firm, said she avoids doing work with all but a few prime contractors because “they barely give you any work,” comparing the work many primes expect SBEs to do to fulfill participation goals to “intern work.”

2. Informal Networks and Unions

Businesses told the Study team about concerns that they were being excluded from participation in the contract process by informal networks which, in some cases, included extended relationships between people working for the City and preferred vendors or contractors, and in other cases connections between prime contractors and favored businesses.

Woman owned graphic design firm PH-3 lamented that for all the work she does to complete RFPs, she likely would not win a bid. After coming in fourth to a Woman owned firm, she said had done a lot of work with the City, PH-3 said she was led “to believe that perhaps the City of Milwaukee is putting out RFPs even though they already know who they might be hiring.”

PH-6, a Black owned plumbing business, said unions dictate who gets work in his industry in the City, including education. He said that minorities receive a disproportionate amount of learning in their field. “They control how much a minority is taught,” PH-6 said. “From the beginning from the first day to the apprenticeship.”

3. Process for Conducting Business with the City

The process for doing business with the City of Milwaukee was a source of comment during the public hearings, from the amount of time it takes to bid to the steps required to register or become a certified SBE. While some business owners felt that the City’s procurement processes were ideal for their needs, others expressed a need for changes.

Black owned business consulting firm PH-7 told the Study team that the City should review the criteria for and time it takes to become SBE certified because the current process “limits the pool of firms available to get certified.” Basing the qualifications to be considered “disadvantaged” on location in the small so-called renewal area, education, employment, or social disadvantage is “pretty subjective and not cut and dry,” she said. “You have to be a creative writer to talk about why you’re just at a disadvantage due to education or employment or social disadvantage.”

Woman owned general contracting firm PH-11 said minority and women owned companies have been losing certification with the City because of what she called the “evolving” certification criteria. “The City has inadvertently created a stigma for their program because they’re asking people for these crazy educational requirements, or that you have to be in business for three years,” she said. “Most businesses aren’t going to make it three years if they can’t get these contracts.”

PH-8, a Black owned marketing firm, said she stopped bidding on projects with the City of Milwaukee because of the unclear certification criteria. “When you talk about disadvantages related to education, we have high educational accomplishments compared to my peers in the industry who are not [of] color. I am still disadvantaged,” she said. “Certification only means that you're certified and does not guarantee contracts.”

Black owned engineering firm PH-10 also was denied certification because he could not meet the educational disadvantage criteria. “I am an engineer,” he said. “How can I have an educational disadvantage and do good quality engineering and recruit other good quality engineers?” He said the criteria forced him to not only deal with the setback of not being educationally disadvantaged, but with the “disadvantages that come inherently with being a minority.”

For other business owners, successfully completing the RFP process became an obstacle to doing business with the City. PH-3, a Woman owned graphic design company and sole proprietor, said it took her 40 hours to properly bid on a contract. “for somebody who works alone, that's obviously a significant amount of time,” she said. “The amount of time that the RFPs require, it doesn't seem like it's homed in to people like me that are working by themselves.”

PH-5, a woman owned marketing firm, said getting accustomed to correctly completing RFPs for the City calls for trial and error. She said she has had good experiences doing business with the City and has “won some and lost some” over the years of filing RFPs. “It can be daunting, especially for people who are first-timers,” PH-5 said. “So, I suspect that if people have negative experiences, it's because they're not experienced with how to participate on the RFP.”

Black owned design company PH-12 also said after overcoming “growing pains” of initially starting to work with the City. “Now that I'm in and it's done things are good,” she said. “I've worked with the City for the past five years. It's been great, recently.”

4. Prompt Pay

PH-12 said one of the biggest obstacles she encountered when she began doing business with the City, however, was delays in pay. “It took about six months for me to get paid on a project that was taking up about 75% of my time,” she said.

Black owned plumbing firm PH-6 said that after complaining about a contract he felt he lost unfairly to a higher-bidding white woman owned company, the City “slow-paid me” leaving unpaid invoices totaling \$197,000 for over a year.

D. Focus Groups

GSPC hosted two virtual focus groups on September 15. The Study team facilitated the groups using an online meeting platform to provide a safe social distancing option for attendees and team members.

Potential participants for each group were selected from a random group of vendors for each MWBE group in a database comprised of businesses in the City's marketplace. The purpose of each focus group was to engage participants of varying MWBE backgrounds in dialogue in a semi-anonymous environment. Twenty-four (24) individuals confirmed for the event, and 15 participants joined the two sessions – 12 in the early session and three (3) in the evening session.

1. Process of Doing Business with the City

Hispanic American owned construction company FG-6 purchased the business from her former employer 20 years ago and has done business with the City for most of that time. However, she said that as certifications with the City evolved, she was eventually decertified. "I think they need to stop trying to reinvent the wheel about what's considered a disadvantaged business," she said. She qualified for certification as an emerging business during the first change, then as a small business after the second change. But as of 2016, "I am presently not certified with the City of Milwaukee."

FG-4, a woman owned insulation installing company, recalled her surprise when she was unable to get recertified. "They may find that they don't have a lot of people anymore that fit that very pool," she said, pointing out the disadvantaged criteria- neighborhood, education, employment and social – established to select SBE businesses. She called the final changes, which came as the result of a federal lawsuit settlement to end gender and race conscious procurement programming, "surprising." "No one else is doing it in the country."

FG-2, a Black owned construction supply company, said he moved into the City looking to take advantage of incentives for local businesses, but learned that not only did his education disqualify him but that the neighborhood he was based in also precluded him from being certified. "We're paying about \$ 30,000 in property taxes," he said, when he could be paying half of that. FG-2 emailed his alderman to pass on the message he received from the City that "if I wanted to be certified, they're saying I should move out of your district."

Black owned engineering and IT firm FG-7 said he wanted to "expose the irony" of the disadvantaged education criteria and its impact on his business. "It's hard to be an engineer and not have an education," he said he told City officials when he pushed back against certification denial. As a result of the SBE criteria, he said "a lot of talent is being left on the sidelines."

2. Outreach and Visibility

FG-2, the Black owned construction supply company, said he aggressively bid on an RFP for personal protective equipment for City staff. After months of watching and waiting for a response, the bid “disappeared.” Attempts to reach out to procurement officials were futile, but he finally learned that the City had so many responses to the RFP “that they didn't have the resources” to respond to inquiries. “I've never seen any other organization that we've worked with locally or nationally conduct themselves in this type of manner where you don't communicate, you don't respond” FG-2 said.

Some firms said they were recipients of RFP and bid opportunity notifications at varying degrees from the City. FG-14, a Woman owned marketing company, said the emails from the City were bolstered by contacts who also would tell her about opportunities. “If you've worked with certain department, they'll let you know that an RFP is coming out so you can watch for it.” Woman owned wholesale produce company FG-15 said she frequently received emails notifying her of contract opportunities. However, “I was receiving all these bids through email for construction,” she said.

Native American owned roofing business FG-10 said the City should provide an ongoing opportunity for successful SBE subcontractors to be reviewed by potential prime contractors. He suggested “some way that contractors and suppliers that have successfully performed on a contract to be spotlighted across the procurement group.” Those successful firms, FG-10 said, should be added to a priority short list to be recommended to primes needing specific services.

3. Timely Payment

Black owned construction supply company FG-2 said in addition to challenges with a bid that seemed to go nowhere, he pushed back and eventually won a contract to provide personal protective equipment to City construction sites. Now, several months after being awarded the contract, he said “we have not been invoiced one penny.”

FG-13, a Black owned landscaping and plumbing company, said one prime contractor working for a City department paid well and initially paid him quickly during the five years he contracted for the department. Eventually, invoices began lagging to as much as 300 days behind. “Towards the end, for years, every February I will be begging them for money, because they would just start panning for the fourth quarter in February of the following year.”

Other firms gave a different view of payment time frames from the City, however. FG-6, the Hispanic American construction firm, said City officials who disburse payments “make sure that you get paid at a certain time” and AI-5 said that the “follow-up on payments was really good.”

E. Organizational Meetings

The Study team reached out to business and community organizations serving the City of Milwaukee area to draw out insight and opinions on behalf of the businesses in the marketplace. Representatives from two (10) organizations agreed to be interviewed to offer diverse viewpoints of area businesses about working with the City and about the general atmosphere of the marketplace.

OM-5 is the area chapter of the national trade organization serving its members through advocacy and lobbying research, safety and management training programs, workforce development, civic engagement, and networking resources. The organization works with local industry and governments to promote hiring. Members are engaged through the organization website, a bi-monthly electronic newsletter, and email blasts on varying topics, among other things. Barriers to growth identified by members include cash flow, a dearth of skilled professional staff, including project managers and CFOs, and lack of will on the part of some members to be progressive.

OM-2 advocates for its members as a statewide business organization providing business certification and business development programming. A membership analysis revealed a diverse representation of business segments and industries, and the organization employs a staff member to assist with technical tasks like business plan development, marketing, and planning. A business boot camp is planned to help member companies develop and sustain growth.

OM-7 is a statewide organization that works with a handful of local agencies around Wisconsin to certify businesses. The organization primarily focuses on Disadvantaged Business Enterprise certifications. Three other prongs certify DBE, Targeted Business Enterprises, and airport concessionaire DBEs. State law provides the United Certification Program that ensures that one agency does not bear the load of all of the certifications in Wisconsin.

Statewide nonprofit OM-3 serves as a resource for building fruitful business connections for its members. The organization sponsors events that avail local, state, and federal assistance to businesses, and conducts fundraisers for scholarships. Concerns the organization hears from its members include certifications for City or state agencies, competing with firms that have longstanding relationships, and education. The majority of OM-3's members live outside of Milwaukee.

OM-4 serves members across the state of Wisconsin working to enhance their economic opportunities and business development. The organization maintains social media, a Website and a member network, and hosts periodic webinars. A primary concern expressed in working with the City is late or slow pay, and the organization works to help its members prepare for and adjust to pay delays. Barriers to growth for OM-4 members include limited access to capital through financial institutions, internal networks, the language barrier, and the City's certification process.

OM-6 helps to support a protected class of business owners with more than two dozen programs to aid members, their families, and the business and work community around them. Members represent a broad swath of industries, specialties, and vocational backgrounds. Programing includes business expos, accelerator/incubator programs, an annual workforce summit, seminars for corporate HR teams, networking events, live stream programs and podcasts, and marketing materials. General barriers to growth identified by members include lack of sustainable businesses, limited access to capital, lack of technical training, and a need for more professional networking.

OM-1 is a nonprofit that identifies itself as a chamber of commerce, helping bridge the gap for its members with both private and public sector business opportunities, but offering a semblance of business incubation services as well. The organization has a partnership with a financial institution to be able to microlending to businesses needing equipment. They have very few members who can do City work and none that can afford to be prime contractors. OM-1's goals for serving its members include aiding with bidding paperwork, helping to get members of its community full-time work with the City procurement staff, and mitigating disparity in hiring.

F. Survey of Business Owners

As a part of the Anecdotal evidence gathering, the Study team polled 208 area firms contacted from a database of firms doing business in the City of Milwaukee and the Milwaukee County area via an online survey. The survey findings align with the concerns raised in other anecdotal sources regarding the current state of business in the City and in the surrounding marketplace. Vendors expressed concerns about prime contractors circumventing aspirational goals, consistent timely pay, internal networks blocking opportunity for all but a few selected firms, discrimination, and an arduous process for doing business with the City of Milwaukee.

What follows is a sampling of those results. The full view of the results of the Survey of Business Owners can be found in Appendix I.

We asked survey respondents if prime contractors include small business owned subcontractors to meet participation goals, then drop them upon winning the award. Of the 208 survey respondents, more than 35% agreed to some degree with the proposed statement. Of the respondents who indicated a degree of agreement, 25% of woman respondents and 17.7% of Black respondents who agreed, with 29.1% of Black respondents and 7.5% of woman respondents strongly agreeing.

Table 1: Sometimes, a prime contractor will include a Small Business Subcontractor on a bid to meet participation goals, then drop the company as a subcontractor after winning the award.

	Owners' Status									Minority	Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company		
Strongly agree	1 1.9 %	3 7.5 %	23 29.1 %	2 33.3 %	1 14.3 %	5 31.2 %	1 33.3 %	1 25 %	0 0 %	37 17.8 %	
Agree	7 13.5 %	10 25 %	14 17.7 %	2 33.3 %	0 0 %	4 25 %	0 0 %	1 25 %	0 0 %	38 18.3 %	
Neither agree nor disagree	36 69.2 %	23 57.5 %	37 46.8 %	2 33.3 %	6 85.7 %	4 25 %	2 66.7 %	2 50 %	0 0 %	112 53.8 %	
Disagree	3 5.8 %	1 2.5 %	2 2.5 %	0 0 %	0 0 %	1 6.2 %	0 0 %	0 0 %	1 100 %	8 3.8 %	
Strongly disagree	5 9.6 %	3 7.5 %	3 3.8 %	0 0 %	0 0 %	2 12.5 %	0 0 %	0 0 %	0 0 %	13 6.2 %	
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %	

Griffin & Strong, P.C. 2021

When 208 business owners were asked to either agree or disagree with the statement, “Sometimes, a prime contractor will contact a Minority, Woman, Disadvantaged or Small business to ask for quotes but never give the proposal sufficient review to consider giving that firm the award,” 39% of the respondents agreed to some extent. Among the polled business owners who agreed were 22.8% of Black business owners and 20% of Woman business owners. Strongly agreeing respondents included 31.6% of Black business owners and 10% of Woman business owners.

Table 2: Sometimes, a prime contractor will contact a Minority, Woman, Disadvantaged or Small business to ask for quotes but never give the proposal sufficient review to consider giving that firm the award.

	Owners' Status									Minority	Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company		
Strongly agree	1 1.9 %	4 10 %	25 31.6 %	2 33.3 %	1 14.3 %	4 25 %	0 0 %	1 25 %	0 0 %	38 18.3 %	
Agree	7 13.5 %	8 20 %	18 22.8 %	2 33.3 %	0 0 %	5 31.2 %	1 33.3 %	1 25 %	1 100 %	43 20.7 %	
Neither agree nor disagree	36 69.2 %	22 55 %	32 40.5 %	1 16.7 %	5 71.4 %	4 25 %	2 66.7 %	2 50 %	0 0 %	104 50 %	
Disagree	4 7.7 %	2 5 %	2 2.5 %	0 0 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	0 0 %	10 4.8 %	
Strongly disagree	4 7.7 %	4 10 %	2 2.5 %	1 16.7 %	0 0 %	2 12.5 %	0 0 %	0 0 %	0 0 %	13 6.2 %	
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %	

Griffin & Strong, P.C. 2021

Sixty-four businesses responded to a question about timely payment on valid purchase order numbers for services on City of Milwaukee projects. Of that number 14.1% said they were paid in less than 30 days, including 27.3% of Woman owned firms and 11.1% of the Black owned firms polled. Another 42.2% of all respondents said that they received pay between 30 and 59 days. This included 36.4% of Woman owned business polled and 44.4% of Black owned businesses.

Table 3: What is the amount of time that it typically takes to receive payment from the date you submit your invoice with a valid purchase order number listed, from City of Milwaukee for your services on City of Milwaukee projects?

	Owners' Status									Minority	Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company		
Less than 30 days	2 9.5 %	3 27.3 %	2 11.1 %	0 0 %	0 0 %	1 16.7 %	1 100 %	0 0 %	0 0 %	9 14.1 %	
30-59 days	8 38.1 %	4 36.4 %	8 44.4 %	2 100 %	2 66.7 %	3 50 %	0 0 %	0 0 %	0 0 %	27 42.2 %	
60-89 days	2 9.5 %	1 9.1 %	2 11.1 %	0 0 %	1 33.3 %	1 16.7 %	0 0 %	0 0 %	1 100 %	8 12.5 %	
90-119 days	1 4.8 %	0 0 %	1 5.6 %	0 0 %	0 0 %	1 16.7 %	0 0 %	0 0 %	0 0 %	3 4.7 %	
120 days or more	1 4.8 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 1.6 %	
Don't Know/NA	7 33.3 %	3 27.3 %	5 27.8 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	0 0 %	16 25 %	
Total	21 100 %	11 100 %	18 100 %	2 100 %	3 100 %	6 100 %	1 100 %	1 100 %	1 100 %	64 100 %	

Griffin & Strong, P.C. 2021

Responding to the question about how long it takes to receive payment from prime contractors for services on City of Milwaukee projects, 11.5% of survey respondents said they were paid in less than 30 days, including 25% of Woman owned businesses and 9.1% of Black owned firms. Waiting between 30 and 59 days were 32.8% of the firms surveyed, including 45.5% of Black owned businesses and 16.7% of Woman owned firms.

Table 4: 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 City of Milwaukee projects?

	Owners' Status									Minority	Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company		
Less than 30 days	1 5 %	3 25 %	1 9.1 %	0 0 %	0 0 %	2 25 %	0 0 %	0 0 %	0 0 %	7 11.5 %	
30-59 days	8 40 %	2 16.7 %	5 45.5 %	0 0 %	1 25 %	3 37.5 %	0 0 %	1 50 %	0 0 %	20 32.8 %	
60-89 days	2 10 %	2 16.7 %	2 18.2 %	3 100 %	0 0 %	1 12.5 %	0 0 %	0 0 %	0 0 %	10 16.4 %	
90-119 days	1 5 %	1 8.3 %	0 0 %	0 0 %	1 25 %	1 12.5 %	0 0 %	0 0 %	0 0 %	4 6.6 %	
120 days or more	1 5 %	0 0 %	0 0 %	0 0 %	0 0 %	1 12.5 %	0 0 %	0 0 %	1 100 %	3 4.9 %	
Don't Know/NA	7 35 %	4 33.3 %	3 27.3 %	0 0 %	2 50 %	0 0 %	0 0 %	1 50 %	0 0 %	17 27.9 %	
Total	20 100 %	12 100 %	11 100 %	3 100 %	4 100 %	8 100 %	0 100 %	2 100 %	1 100 %	61 100 %	

Griffin & Strong, P.C. 2021

When the full survey pool was asked if they believed that an informal network of prime and subcontractors doing business with the City monopolized the public contracting process, 67.3% of the respondents answered in the affirmative. That percentage includes 82.3% of Black business owners polled, 62.5% of Women business owners, and 51.9% of Non-minority business owners.

Table 5: Do you believe there is an informal network of prime and subcontractors doing business with City of Milwaukee that monopolizes the public contracting process? Informal network is defined as firms that have an advantage due to their relationships inside the City of Milwaukee.

	Owners' Status									Minority	Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company		
Yes	27 51.9 %	25 62.5 %	65 82.3 %	6 100 %	3 42.9 %	8 50 %	2 66.7 %	4 100 %	0 0 %	140 67.3 %	
No	25 48.1 %	15 37.5 %	14 17.7 %	0 0 %	4 57.1 %	8 50 %	1 33.3 %	0 0 %	1 100 %	68 32.7 %	
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %	

Griffin & Strong, P.C. 2021

During the five-year period reviewed by the Study, nearly 16% of the businesses polled indicated that they had experienced discriminatory behavior based upon race, gender, or ethnicity from the City of Milwaukee? This includes 12.7% of Black American owned businesses who believe this happened very often and 13.9% who believe this happened often.

Table 6: From January 1, 2015, through December 31, 2019, how often has your company experienced any racial, gender, or ethnicity discriminatory behavior from the City of Milwaukee?

	<i>Owners' Status</i>									<i>Minority</i>	<i>Total</i>
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company		
Never	41 78.8 %	25 62.5 %	33 41.8 %	3 50 %	5 71.4 %	10 62.5 %	2 66.7 %	1 25 %	0 0 %	120 57.7 %	
Seldom	4 7.7 %	1 2.5 %	9 11.4 %	1 16.7 %	1 14.3 %	0 0 %	0 0 %	0 0 %	1 100 %	17 8.2 %	
Often	1 1.9 %	1 2.5 %	11 13.9 %	0 0 %	0 0 %	1 6.2 %	0 0 %	1 25 %	0 0 %	15 7.2 %	
Very Often	2 3.8 %	1 2.5 %	10 12.7 %	2 33.3 %	0 0 %	2 12.5 %	0 0 %	1 25 %	0 0 %	18 8.7 %	
Don't Know	4 7.7 %	12 30 %	16 20.3 %	0 0 %	1 14.3 %	3 18.8 %	1 33.3 %	1 25 %	0 0 %	38 18.3 %	
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %	

Griffin & Strong, P.C. 2021

More than 66% of the total pool of respondents, including 74.7% of Black business owners, 65.4% of Non-minority business owners, and 50% of Woman business owners said they were registered in E-Notify to receive procurement notifications from the City.

Table 7: Is your company registered in E-Notify to receive notifications of procurements from the City of Milwaukee?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Yes	34 65.4 %	20 50 %	59 74.7 %	5 83.3 %	6 85.7 %	10 62.5 %	2 66.7 %	1 25 %	1 100 %	138 66.3 %
No	8 15.4 %	10 25 %	13 16.5 %	0 0 %	1 14.3 %	3 18.8 %	1 33.3 %	2 50 %	0 0 %	38 18.3 %
Not sure	10 19.2 %	10 25 %	7 8.9 %	1 16.7 %	0 0 %	3 18.8 %	0 0 %	1 25 %	0 0 %	32 15.4 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Griffin & Strong, P.C. 2021

Of the firms that acknowledged that they were not registered to do business with the City of Milwaukee, 89.5% said they did not know how to register. This includes 100% of Woman business owners, 84.6% of Black business owners and 75% of Non-minority business owners.

Table 8: Why is your company not registered in E-Notify to get notifications from the City of Milwaukee? Indicate all that apply. [Do not know how to register.]

	Owners' Status									Minority	Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company		
Not Selected	6 75 %	10 100 %	11 84.6 %	0 0 %	1 100 %	3 100 %	1 100 %	2 100 %	0 0 %	34 89.5 %	
Selected	2 25 %	0 0 %	2 15.4 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	4 10.5 %	
Total	8 100 %	10 100 %	13 100 %	0 100 %	1 100 %	3 100 %	1 100 %	2 100 %	0 100 %	38 100 %	

Griffin & Strong, P.C. 2021

Of the firms surveyed, more than 55% are a certified Minority, Woman, Disadvantaged or Small business. That percentage includes 68.4% of Black business owners, 52.5% of Woman business owners, and 25% of Non-minority business owners.

Table 9: Is your company a certified Minority, Woman, Disadvantaged or Small business?

	Owners' Status									Minority	Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company		
Yes	13 25 %	21 52.5 %	54 68.4 %	5 83.3 %	6 85.7 %	13 81.2 %	2 66.7 %	2 50 %	0 0 %	116 55.8 %	
No	39 75 %	19 47.5 %	25 31.6 %	1 16.7 %	1 14.3 %	3 18.8 %	1 33.3 %	2 50 %	1 100 %	92 44.2 %	
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %	

Griffin & Strong, P.C. 2021

Ninety-two (92) of the businesses, or just under half, are not certified. Respondents indicated multiple reasons for not being certified. Of those, 78.3%, including 89.7% of Non-minority businesses, 84.2% of Woman businesses, and 52% of Black businesses did not register because they did not understand the process.

Table 10: Why is your company not certified as a Minority, Woman, Disadvantaged or Small business? (Please check all that apply) [I do not understand the certification process]

	<i>Owners' Status</i>									<i>Minority</i>	<i>Total</i>
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company		
Not Selected	35 89.7 %	16 84.2 %	13 52 %	1 100 %	1 100 %	2 66.7 %	1 100 %	2 100 %	1 100 %	72 78.3 %	
Selected	4 10.3 %	3 15.8 %	12 48 %	0 0 %	0 0 %	1 33.3 %	0 0 %	0 0 %	0 0 %	20 21.7 %	
Total	39 100 %	19 100 %	25 100 %	1 100 %	1 100 %	3 100 %	1 100 %	2 100 %	1 100 %	92 100 %	

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Survey respondents who said they did not have time or that the certification process was too time consuming made up 82.6%, including 97.4% of Non-minority businesses polled, 80% of Black business owners, and 63.2%.

Table 11: I have not had time to get certified/the process is too time-consuming

	Owners' Status									Minority	Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company		
Not Selected	38 97.4 %	12 63.2 %	20 80 %	1 100 %	1 100 %	2 66.7 %	0 0 %	1 50 %	1 100 %	76 82.6 %	
Selected	1 2.6 %	7 36.8 %	5 20 %	0 0 %	0 0 %	1 33.3 %	1 100 %	1 50 %	0 0 %	16 17.4 %	
Total	39 100 %	19 100 %	25 100 %	1 100 %	1 100 %	3 100 %	1 100 %	2 100 %	1 100 %	92 100 %	

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Survey results for uncertified businesses either doubting a benefit or concerned about a negative impact was 98.8% and included 100% of Woman owned firms, 97.4% of Non-minority owned businesses, and 96% of Black business owners.

Table 12: Certification does not benefit and/or will negatively impact my company

	Owners' Status									Minority	Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company		
Not Selected	38 97.4 %	19 100 %	24 96 %	1 100 %	1 100 %	3 100 %	1 100 %	2 100 %	1 100 %	90 97.8 %	
Selected	1 2.6 %	0 0 %	1 4 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 2.2 %	
Total	39 100 %	19 100 %	25 100 %	1 100 %	1 100 %	3 100 %	1 100 %	2 100 %	1 100 %	92 100 %	

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Half of the survey respondents (50%) agreed to some degree that double standards in qualifications and work standards make it more difficult for Minority, Woman, Disadvantaged or Small businesses to win contracts with the City. 40% of those affirmative responses from White females included 22.5% who agree and 17.5% who strongly agree. 77.3% of the Black owned firms agreed to some extent, including 24.1% who merely agree and 53.2% who strongly agree.

Table 106: Double standards in qualifications and work performance make it more difficult for a Minority, Woman, Disadvantaged or Small business to win bids or contracts.

	Owners' Status									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Strongly agree	2 3.8 %	7 17.5 %	42 53.2 %	2 33.3 %	1 14.3 %	5 31.2 %	1 33.3 %	1 25 %	1 100 %	62 29.8 %
Agree	6 11.5 %	9 22.5 %	19 24.1 %	2 33.3 %	2 28.6 %	2 12.5 %	0 0 %	2 50 %	0 0 %	42 20.2 %
Neither agree nor disagree	29 55.8 %	15 37.5 %	15 19 %	2 33.3 %	2 28.6 %	5 31.2 %	2 66.7 %	1 25 %	0 0 %	71 34.1 %
Disagree	4 7.7 %	5 12.5 %	1 1.3 %	0 0 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	0 0 %	12 5.8 %
Strongly disagree	11 21.2 %	4 10 %	2 2.5 %	0 0 %	1 14.3 %	3 18.8 %	0 0 %	0 0 %	0 0 %	21 10.1 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Griffin & Strong, P.C. 2021

G. Email Comments

For the duration of the Study, the Study team asked business owners who were either active or seeking to be active in the City of Milwaukee and the surrounding marketplace to respond to the email address MilwaukeeStudy@gspclaw.com to provide commentary and offer further insight. The Study team monitored the email address to supplement the broader compilation of data collected gathered. This method proved highly effective in obtaining commentary from business owners who may not have been

randomly selected for focus groups or interviews or may have missed the public engagement meetings. Commentary received in this manner reflects opinions about doing business with the City as well as the Study itself.

Referring to the outcome of the 2013 federal lawsuit settlement that ended a gender and race-based participation program in the City and the disparity study that preceded it, EC-3 requested that any implementation to arise from this Study lead to equitable goals. “Based on findings of a previous disparity study, the MWBE program implemented by the City of Milwaukee provided the greatest inclusion goals to non-minority women. The program implemented by the City was challenged by the Hispanic Chamber of Commerce with support from the Native American Chamber and Black Business organizations.

“If your study will award the highest inclusion goals to non-minority women, I hope the City of Milwaukee will choose not to implement a program with this result.”

EC-1 shared his recent discover of his Native American heritage and interest in expanding his business to connect with an aspect of the tribal community in Milwaukee. “With the casino in Milwaukee, I would have a connection there to reach out, but with Covid, I haven’t been that active in travelling.

EC-4 once worked on the City’s staff before starting her own small specialty engineering firm. When invited by the City Manager to employ her team to solve a problem for which her firm was uniquely prepared, she encountered a problem that she says too many small firms run into when seeking to do business with the City:

“As a civil engineering specialty firm, we perform services that are very specific (stormwater/ water quality/drainage design). The City hires engineers to perform these services through DPW’s annual master engineering agreement process. The process excludes small specialty companies because they require many services be performed by one firm, and do not allow teaming on the master agreements. Procurement rules prohibit the City departments from hiring us to perform these services if we don’t have a master services agreement. We have had at least two scenarios in the past two years where two departments wished to hire us to perform design and construction management services in our area of expertise, because we are the best, and because we save the City money, but they were unable because the master agreements do not allow us to compete.

“Long story, but in short, we received a call from one city manager, asking that we meet him onsite to help correct a construction/project management issue they were experiencing, knowing that we have the most knowledge and experience with water quality grants in the City. We proceeded to assist with site direction, attended meetings, and wrote a proposal to help alleviate the issues. When it came time to initiate the contract, he was told he couldn’t contract with us because we didn’t have the annual master agreement. He tried to coordinate a teaming relationship between our firm and a larger firm who has the master service agreement, so that we could provide our background and expertise on the project (which is how other departments are getting around this rule). While his intentions may have been good, the “master” firm felt that they would just take over the project and “hire us to fulfill an 18% SBE”, which in this case was less

than the 30 hours we had already dedicated to the project. It was insulting to take over what we had started, and basically push us out.”

EC-4 offered this remedy: “Two solutions exist to this small issue: allow for smaller contracts to be provided to companies who are not considered “full service” (i.e., specialty companies), and/or allow for a teaming relationship to submit the master agreement proposal (two engineering firms team to submit as one).”

Woman owned sole proprietor EC-2 expressed her frustration with having to carry workers compensation insurance as part a stipulation for contracting with the City. “The state of Wisconsin allows businesses like mine to opt out of workers comp coverage, and I have done so for over 20 years. The City of Milwaukee refuses to recognize this exemption. If I want to accept the work, I am FORCED to get this coverage that I do not want or need. I do carry other types of business insurance coverage. As a result of the City’s mandate on this issue, though, I must either take a financial hit and absorb that extra insurance cost or pass it along to them in the cost of the work project proposal (which just raises the costs to the taxpayers.). Why can’t the City allow businesses who have legitimately waived out of workers comp insurance work with the City without these forced costs? I have never been able to get a satisfactory response about this.”

Black owned general contractor EC-5 wrote about an idea to curb what he described as a growing occurrence of non-local business fronts – that is, prime contractors from outside Milwaukee naming a non-active wife or daughter as the primary owner of the company or a subcontractor firm to certify as woman-owned, keep all the revenue on a job, and avoid hiring an SBE or “true” MWBE.

“One of the ways we can level out the unlevel playing field is to require every part of a project, Plumbing, electrical, mechanical, etc., when a firm is doing a Milwaukee Gov founded project. MBE’s firm base is in Racine or some other city and has no working physical locality within the City limits, that is 51% of their total workforce. Then they would be required to engage a LOC, aka locally owned firm with a City of Milwaukee SBE cert for one-third of its value.

“For example, if a plumbing firm with an MBE, i.e., WOB cert not based in Milwaukee, is doing a City, MPS, etc., project and their part of the contract is \$100,000, and they are using their DBE cert for their 25% requirements. Then 30% of that 25% must be paid to a LOC based in Milwaukee. However, if the firm is a Milwaukee based SBE firm that holds the whole plumbing phase, then it is fine. That way, some of the money stays in Milwaukee, and the LOC firm gets experience working on a larger project in preparation to engage on their own someday.”

H. Conclusion

Findings from the Study reflect anecdotal evidence of efforts by prime contractors to avoid hiring certified Small Business Enterprises (SBEs) as subcontractors, a need to improve and streamline certification and bidding processes, the need to assure that all contractors are paid in a timely manner, a need to address and prevent instances of discrimination, as well as an informal network excluding all but a few select firms, typically Non-Minority owned firms, from participation in public contracting.

Study participants described methods that prime contractors used to avoid complying with the City's SBE participation goal, by creating fronts, employing (sometimes through coercion) passthroughs, assigning minimal or low-level project tasks, or simply dropping the subcontractor from the contract. In addition, the study team found anecdotal evidence of an entrenched informal network that excludes SBEs (primarily cited by Women and minority owned businesses) from obtaining contracts at any level. Further, the prevalence in the Milwaukee marketplace of labor unions, while formal, created another exclusionary boundary for minority and Woman owned businesses seeking to work with the City.

The Study also found that the process for bidding on contract opportunities is seen as unwieldy and overly time-consuming, precluding participation in the City's contracting for some firms because the process demands dedicated time and attention that may small businesses do not have. Also, some find the certification difficult to understand because of evolving changes over years and requires an excessive amount of time of business owners, thus leading some small firms to opt out of being certified. While many firms said they learned about opportunities to do business with the City, they were concerned that the information was inconsistent from administration to administration. The inconsistencies, from changing registration processes to institutional knowledge of local firms, could leave firms going years without winning contract bids with the City. Findings from the Study also evidenced a need for dedicated oversight to ensure that the City prime contractors are paying subcontractors consistently and in a timely manner.

There were a number of firm respondents who reflected on positive experiences doing business with the City of Milwaukee. Some SBE firms expressed that they enjoyed prompt and consistent pay while several said that once they became accustomed to the bidding process, they found their experiences conducting business with the City to be positive.

APPENDIX A

**Prime Vendor Spend by County:
City of Milwaukee 2022 Disparity Study
List of Counties and States in the Prime Data**

CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table A-1
City of Milwaukee Disparity Study
List of Counties and States in the Prime Data
Construction

County, State	Amount	Percent	Cumulative Percent
MILWAUKEE COUNTY, WI	\$ 325,487,998	63.19%	63.19%
WAUKESHA COUNTY, WI	\$ 173,438,922	33.67%	96.86%
OZAUKEE COUNTY, WI	\$ 1,312,960	0.25%	97.11%
WASHINGTON COUNTY, WI	\$ 83,215	0.02%	97.13%
RACINE COUNTY, WI	\$ 3,982,562	0.77%	97.90%
BROWN COUNTY, WI	\$ 2,931,045	0.57%	98.47%
DANE COUNTY, WI	\$ 1,084,786	0.21%	98.68%
KENOSHA COUNTY, WI	\$ 1,037,980	0.20%	98.88%
SAUK COUNTY, WI	\$ 519,339	0.10%	98.98%
OUTAGAMIE COUNTY, WI	\$ 209,385	0.04%	99.02%
WINNEBAGO COUNTY, WI	\$ 152,736	0.03%	99.05%
IOWA COUNTY, WI	\$ 13,500	0.00%	99.05%
DODGE COUNTY, WI	\$ 6,000	0.00%	99.06%
SHEBOYGAN COUNTY, WI	\$ 5,710	0.00%	99.06%
ADAMS COUNTY, WI	\$ 1,660	0.00%	99.06%
COOK COUNTY, IL	\$ 2,824,111	0.55%	99.60%
MARICOPA COUNTY, AZ	\$ 774,905	0.15%	99.76%
WAYNE COUNTY, MI	\$ 330,980	0.06%	99.82%
DAKOTA COUNTY, MN	\$ 247,482	0.05%	99.87%
DAVIDSON COUNTY, NC	\$ 206,395	0.04%	99.91%
SANTA CLARA COUNTY, CA	\$ 121,411	0.02%	99.93%
CUYAHOGA COUNTY, OH	\$ 76,900	0.01%	99.95%
HOUSTON COUNTY, MN	\$ 59,700	0.01%	99.96%
DUPAGE COUNTY, IL	\$ 49,889	0.01%	99.97%
NEW HAVEN COUNTY, CT	\$ 42,905	0.01%	99.98%
MIDDLESEX COUNTY, CT	\$ 25,439	0.00%	99.98%
YAMHILL COUNTY, OR	\$ 22,463	0.00%	99.99%
HILLSBOROUGH COUNTY, FL	\$ 19,992	0.00%	99.99%
DESCHUTES COUNTY, OR	\$ 19,800	0.00%	99.99%
STEPHENSON COUNTY, IL	\$ 16,088	0.00%	100.00%
YORK COUNTY, VA	\$ 14,989	0.00%	100.00%
ALLEGHENY COUNTY, PA	\$ 5,740	0.00%	100.00%
Total	\$ 515,126,987	100.00%	

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table A-2
City of Milwaukee Disparity Study
List of Counties and States in the Prime Data
Architectural & Engineering

County, State	Amount	Percent	Cumulative Percent
WAUKESHA COUNTY, WI	\$ 23,314,318	41.91%	41.91%
MILWAUKEE COUNTY, WI	\$ 20,665,494	37.15%	79.06%
OZAUKEE COUNTY, WI	\$ 26,881	0.05%	79.11%
DANE COUNTY, WI	\$ 5,796,845	10.42%	89.53%
PORTAGE COUNTY, WI	\$ 644,390	1.16%	90.69%
KENOSHA COUNTY, WI	\$ 523,585	0.94%	91.63%
BROWN COUNTY, WI	\$ 474,960	0.85%	92.48%
WAUSHARA COUNTY, WI	\$ 240,000	0.43%	92.92%
EAU CLAIRE COUNTY, WI	\$ 122,261	0.22%	93.14%
SAUK COUNTY, WI	\$ 56,729	0.10%	93.24%
LOS ANGELES COUNTY, CA	\$ 1,748,089	3.14%	96.38%
COOK COUNTY, IL	\$ 702,591	1.26%	97.64%
COLLIN COUNTY, TX	\$ 300,000	0.54%	98.18%
CHAMPAIGN COUNTY, IL	\$ 141,811	0.25%	98.44%
DUPAGE COUNTY, IL	\$ 121,655	0.22%	98.66%
WASHINGTON COUNTY, MN	\$ 109,750	0.20%	98.85%
SUFFOLK COUNTY, MA	\$ 95,000	0.17%	99.02%
DALLAS COUNTY, TX	\$ 94,629	0.17%	99.19%
DELAWARE COUNTY, OH	\$ 86,120	0.15%	99.35%
LAKE COUNTY, IL	\$ 67,260	0.12%	99.47%
HILLSBOROUGH COUNTY, NH	\$ 62,160	0.11%	99.58%
IONIA COUNTY, MI	\$ 53,250	0.10%	99.68%
NEW YORK COUNTY, NY	\$ 49,246	0.09%	99.77%
RAMSEY COUNTY, MN	\$ 40,700	0.07%	99.84%
MIDDLESEX COUNTY, MA	\$ 30,094	0.05%	99.89%
ALLEGHENY COUNTY, PA	\$ 25,714	0.05%	99.94%
CLERMONT COUNTY, OH	\$ 22,100	0.04%	99.98%
HENNEPIN COUNTY, MN	\$ 5,010	0.01%	99.99%
SAINT LOUIS CITY COUNTY, MO	\$ 4,500	0.01%	100.00%
SANTA CLARA COUNTY, CA	\$ 2,151	0.00%	100.00%
Total	\$ 55,627,292		

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table A-3
City of Milwaukee Disparity Study
List of Counties and States in the Prime Data
Professional Services

County, State	Amount	Percent	Cumulative Percent
MILWAUKEE COUNTY, WI	\$ 39,982,150	68.02%	68.02%
WAUKESHA COUNTY, WI	\$ 6,803,314	11.57%	79.60%
OZAUKEE COUNTY, WI	\$ 914,474	1.56%	81.15%
WASHINGTON COUNTY, WI	\$ 20,203	0.03%	81.19%
DANE COUNTY, WI	\$ 1,121,408	1.91%	83.10%
ROCK COUNTY, WI	\$ 906,437	1.54%	84.64%
LA CROSSE COUNTY, WI	\$ 116,268	0.20%	84.84%
BROWN COUNTY, WI	\$ 81,648	0.14%	84.97%
KENOSHA COUNTY, WI	\$ 60,000	0.10%	85.08%
JEFFERSON COUNTY, WI	\$ 49,500	0.08%	85.16%
RACINE COUNTY, WI	\$ 27,450	0.05%	85.21%
DODGE COUNTY, WI	\$ 25,740	0.04%	85.25%
MARATHON COUNTY, WI	\$ 6,000	0.01%	85.26%
COOK COUNTY, IL	\$ 2,355,975	4.01%	89.27%
HILLSBOROUGH COUNTY, FL	\$ 1,197,915	2.04%	91.31%
PINELLAS COUNTY, FL	\$ 571,736	0.97%	92.28%
LAKE COUNTY, IL	\$ 401,403	0.68%	92.96%
NEW YORK COUNTY, NY	\$ 391,595	0.67%	93.63%
DALLAS COUNTY, TX	\$ 366,468	0.62%	94.25%
RAMSEY COUNTY, MN	\$ 266,511	0.45%	94.71%
ADA COUNTY, ID	\$ 257,328	0.44%	95.14%
SAN FRANCISCO COUNTY, CA	\$ 215,000	0.37%	95.51%
DUPAGE COUNTY, IL	\$ 201,411	0.34%	95.85%
SAN DIEGO COUNTY, CA	\$ 201,324	0.34%	96.19%
ORANGE COUNTY, CA	\$ 188,800	0.32%	96.52%
FULTON COUNTY, GA	\$ 162,136	0.28%	96.79%
ALBANY COUNTY, NY	\$ 156,000	0.27%	97.06%
OAKLAND COUNTY, MI	\$ 153,000	0.26%	97.32%
DELAWARE COUNTY, PA	\$ 147,973	0.25%	97.57%
INGHAM COUNTY, MI	\$ 116,398	0.20%	97.77%
LOS ANGELES COUNTY, CA	\$ 105,900	0.18%	97.95%
MARICOPA COUNTY, AZ	\$ 96,009	0.16%	98.11%
HENNEPIN COUNTY, MN	\$ 92,755	0.16%	98.27%
SALT LAKE COUNTY, UT	\$ 84,785	0.14%	98.41%
ALLEGHENY COUNTY, PA	\$ 80,907	0.14%	98.55%
BRONX COUNTY, NY	\$ 75,000	0.13%	98.68%
JEFFERSON COUNTY, LA	\$ 73,775	0.13%	98.80%
CLARK COUNTY, NV	\$ 66,400	0.11%	98.92%
MULTNOMAH COUNTY, OR	\$ 51,401	0.09%	99.00%
VIRGINIA BEACH CITY COUNTY, VA	\$ 50,692	0.09%	99.09%
GWINNETT COUNTY, GA	\$ 48,878	0.08%	99.17%
HARRISON COUNTY, KY	\$ 45,000	0.08%	99.25%
MECKLENBURG COUNTY, NC	\$ 41,460	0.07%	99.32%
SAINT TAMMANY COUNTY, LA	\$ 36,600	0.06%	99.38%
DURHAM COUNTY, NC	\$ 32,553	0.06%	99.44%
ARLINGTON COUNTY, VA	\$ 31,531	0.05%	99.49%
FAIRFAX COUNTY, VA	\$ 30,000	0.05%	99.54%
HAMILTON COUNTY, TN	\$ 30,000	0.05%	99.59%
MARION COUNTY, IN	\$ 28,718	0.05%	99.64%
ARAPAHOE COUNTY, CO	\$ 26,040	0.04%	99.69%
COLUMBIANA COUNTY, OH	\$ 25,742	0.04%	99.73%
JEFFERSON COUNTY, CO	\$ 24,114	0.04%	99.77%

CITY OF MILWAUKEE 2023 DISPARITY STUDY

ITASCA COUNTY, MN	\$ 23,700	0.04%	99.81%
SUFFOLK COUNTY, MA	\$ 23,492	0.04%	99.85%
JACKSON COUNTY, MO	\$ 21,200	0.04%	99.89%
HAMILTON COUNTY, OH	\$ 20,342	0.03%	99.92%
KENDALL COUNTY, TX	\$ 12,047	0.02%	99.94%
ERIE COUNTY, NY	\$ 12,000	0.02%	99.96%
ORLEANS COUNTY, NY	\$ 10,990	0.02%	99.98%
WAKE COUNTY, NC	\$ 5,672	0.01%	99.99%
MANATEE COUNTY, FL	\$ 1,225	0.00%	99.99%
BALTIMORE CITY COUNTY, MD	\$ 546	0.00%	100.00%
CANADA	\$ 2,750	0.00%	100.00%
Total	\$ 58,777,786	100.00%	

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table A-4
City of Milwaukee Disparity Study
List of Counties and States in the Prime Data
Other Services

County, State	Amount	Percent	Cumulative Percent
MILWAUKEE COUNTY, WI	\$ 174,973,437	46.82%	46.82%
WAUKESHA COUNTY, WI	\$ 63,617,756	17.02%	63.85%
WASHINGTON COUNTY, WI	\$ 62,471,585	16.72%	80.57%
OZAUKEE COUNTY, WI	\$ 1,390,492	0.37%	80.94%
DANE COUNTY, WI	\$ 5,301,473	1.42%	82.36%
KENOSHA COUNTY, WI	\$ 4,469,510	1.20%	83.55%
BROWN COUNTY, WI	\$ 772,522	0.21%	83.76%
SAUK COUNTY, WI	\$ 631,463	0.17%	83.93%
OUTAGAMIE COUNTY, WI	\$ 319,702	0.09%	84.02%
ROCK COUNTY, WI	\$ 256,356	0.07%	84.08%
MARATHON COUNTY, WI	\$ 253,800	0.07%	84.15%
RACINE COUNTY, WI	\$ 120,866	0.03%	84.18%
CALUMET COUNTY, WI	\$ 98,437	0.03%	84.21%
COLUMBIA COUNTY, WI	\$ 81,192	0.02%	84.23%
PORTAGE COUNTY, WI	\$ 50,761	0.01%	84.25%
WALWORTH COUNTY, WI	\$ 47,923	0.01%	84.26%
EAU CLAIRE COUNTY, WI	\$ 46,747	0.01%	84.27%
SHEBOYGAN COUNTY, WI	\$ 38,651	0.01%	84.28%
MANITOWOC COUNTY, WI	\$ 10,290	0.00%	84.28%
SAINT CROIX COUNTY, WI	\$ 6,946	0.00%	84.29%
WOOD COUNTY, WI	\$ 4,728	0.00%	84.29%
DODGE COUNTY, WI	\$ 4,310	0.00%	84.29%
WINNEBAGO COUNTY, WI	\$ 4,219	0.00%	84.29%
COOK COUNTY, IL	\$ 9,349,391	2.50%	86.79%
FULTON COUNTY, GA	\$ 7,575,481	2.03%	88.82%
DUPAGE COUNTY, IL	\$ 6,447,773	1.73%	90.54%
SAN FRANCISCO COUNTY, CA	\$ 5,059,345	1.35%	91.90%
CONTRA COSTA COUNTY, CA	\$ 3,711,213	0.99%	92.89%
SEMINOLE COUNTY, FL	\$ 3,577,531	0.96%	93.85%
DALLAS COUNTY, TX	\$ 2,050,422	0.55%	94.40%
ORANGE COUNTY, CA	\$ 2,032,440	0.54%	94.94%
LAKE COUNTY, IL	\$ 1,552,043	0.42%	95.36%
MCHENRY COUNTY, IL	\$ 1,054,815	0.28%	95.64%
DOUGLAS COUNTY, NE	\$ 1,031,445	0.28%	95.91%
FAIRFAX COUNTY, VA	\$ 957,836	0.26%	96.17%
DENTON COUNTY, TX	\$ 912,326	0.24%	96.42%
MONTGOMERY COUNTY, MD	\$ 753,506	0.20%	96.62%
MCLEOD COUNTY, MN	\$ 705,566	0.19%	96.81%
DELAWARE COUNTY, PA	\$ 687,764	0.18%	96.99%
HILLSBOROUGH COUNTY, FL	\$ 675,241	0.18%	97.17%
DEKALB COUNTY, GA	\$ 608,579	0.16%	97.33%
SAN DIEGO COUNTY, CA	\$ 569,538	0.15%	97.49%
LEE COUNTY, IL	\$ 549,662	0.15%	97.63%

CITY OF MILWAUKEE 2023 DISPARITY STUDY

HENNEPIN COUNTY, MN	\$ 495,674	0.13%	97.77%
CENTRE COUNTY, PA	\$ 461,284	0.12%	97.89%
JEFFERSON COUNTY, IN	\$ 459,286	0.12%	98.01%
FRANKLIN COUNTY, OH	\$ 448,218	0.12%	98.13%
TULSA COUNTY, OK	\$ 393,953	0.11%	98.24%
MARION COUNTY, IN	\$ 379,512	0.10%	98.34%
BERGEN COUNTY, NJ	\$ 340,567	0.09%	98.43%
HARRIS COUNTY, TX	\$ 260,225	0.07%	98.50%
SANTA BARBARA COUNTY, CA	\$ 252,835	0.07%	98.57%
NEW YORK COUNTY, NY	\$ 251,933	0.07%	98.63%
DENVER COUNTY, CO	\$ 247,216	0.07%	98.70%
LINN COUNTY, IA	\$ 245,239	0.07%	98.77%
SCOTT COUNTY, IA	\$ 237,826	0.06%	98.83%
OAKLAND COUNTY, MI	\$ 233,673	0.06%	98.89%
DAVIDSON COUNTY, TN	\$ 220,340	0.06%	98.95%
PULASKI COUNTY, AR	\$ 213,889	0.06%	99.01%
DAKOTA COUNTY, MN	\$ 206,069	0.06%	99.06%
POLK COUNTY, IA	\$ 198,800	0.05%	99.12%
SOMERSET COUNTY, NJ	\$ 194,000	0.05%	99.17%
BAY COUNTY, MI	\$ 180,000	0.05%	99.22%
SALT LAKE COUNTY, UT	\$ 155,317	0.04%	99.26%
VIRGINIA BEACH CITY COUNTY, VA	\$ 139,700	0.04%	99.30%
WASHTENAW COUNTY, MI	\$ 134,200	0.04%	99.33%
JEFFERSON COUNTY, AL	\$ 131,896	0.04%	99.37%
MECKLENBURG COUNTY, NC	\$ 114,298	0.03%	99.40%
PASSAIC COUNTY, NJ	\$ 112,474	0.03%	99.43%
SAGINAW COUNTY, MI	\$ 111,103	0.03%	99.46%
BEXAR COUNTY, TX	\$ 111,009	0.03%	99.49%
GUILFORD COUNTY, NC	\$ 105,463	0.03%	99.52%
HOWARD COUNTY, MD	\$ 101,721	0.03%	99.54%
WHATCOM COUNTY, WA	\$ 98,820	0.03%	99.57%
PHILADELPHIA COUNTY, PA	\$ 92,586	0.02%	99.59%
LEON COUNTY, FL	\$ 88,194	0.02%	99.62%
MARICOPA COUNTY, AZ	\$ 87,593	0.02%	99.64%
PLYMOUTH COUNTY, MA	\$ 81,383	0.02%	99.66%
OKLAHOMA COUNTY, OK	\$ 76,111	0.02%	99.68%
OUACHITA COUNTY, LA	\$ 70,726	0.02%	99.70%
KING COUNTY, WA	\$ 67,994	0.02%	99.72%
GWINNETT COUNTY, GA	\$ 67,657	0.02%	99.74%
FAIRFIELD COUNTY, CT	\$ 67,518	0.02%	99.76%
LANCASTER COUNTY, PA	\$ 64,628	0.02%	99.77%
KANE COUNTY, IL	\$ 57,055	0.02%	99.79%
PINELLAS COUNTY, FL	\$ 56,282	0.02%	99.80%
LOS ANGELES COUNTY, CA	\$ 53,343	0.01%	99.82%
ROANOKE CITY COUNTY, VA	\$ 49,796	0.01%	99.83%
UTAH COUNTY, UT	\$ 43,580	0.01%	99.84%
ORANGE COUNTY, FL	\$ 40,043	0.01%	99.85%
PAYNE COUNTY, OK	\$ 36,484	0.01%	99.86%

CITY OF MILWAUKEE 2023 DISPARITY STUDY

LANCASTER COUNTY, NE	\$ 35,952	0.01%	99.87%
MIDDLESEX COUNTY, MA	\$ 31,916	0.01%	99.88%
ALLEGHENY COUNTY, PA	\$ 27,299	0.01%	99.89%
PALM BEACH COUNTY, FL	\$ 27,200	0.01%	99.90%
SCOTT COUNTY, MN	\$ 22,103	0.01%	99.90%
TALLADEGA COUNTY, AL	\$ 21,680	0.01%	99.91%
SUFFOLK COUNTY, MA	\$ 21,551	0.01%	99.91%
CLARK COUNTY, IL	\$ 21,210	0.01%	99.92%
BERKS COUNTY, PA	\$ 18,835	0.01%	99.92%
EL DORADO COUNTY, CA	\$ 17,443	0.00%	99.93%
TRAVIS COUNTY, TX	\$ 17,083	0.00%	99.93%
CUYAHOGA COUNTY, OH	\$ 16,724	0.00%	99.94%
ESSEX COUNTY, MA	\$ 14,500	0.00%	99.94%
RAMSEY COUNTY, MN	\$ 12,836	0.00%	99.95%
ORANGE COUNTY, TX	\$ 12,711	0.00%	99.95%
HAMILTON COUNTY, OH	\$ 11,994	0.00%	99.95%
ALAMEDA COUNTY, CA	\$ 11,918	0.00%	99.96%
MERCER COUNTY, NJ	\$ 11,025	0.00%	99.96%
MERCER COUNTY, PA	\$ 10,300	0.00%	99.96%
WHITESIDE COUNTY, IL	\$ 9,200	0.00%	99.96%
NIAGARA COUNTY, NY	\$ 9,075	0.00%	99.97%
SACRAMENTO COUNTY, CA	\$ 8,700	0.00%	99.97%
KENT COUNTY, MI	\$ 8,335	0.00%	99.97%
LARIMER COUNTY, CO	\$ 7,547	0.00%	99.97%
MONMOUTH COUNTY, NJ	\$ 6,480	0.00%	99.97%
WORCESTER COUNTY, MA	\$ 5,980	0.00%	99.98%
LEWIS COUNTY, WA	\$ 3,674	0.00%	99.98%
WAKE COUNTY, NC	\$ 1,722	0.00%	99.98%
SHERBURNE COUNTY, MN	\$ 1,045	0.00%	99.98%
LYON COUNTY, MN	\$ 686	0.00%	99.98%
BROOME COUNTY, NY	\$ 553	0.00%	99.98%
SANTA CLARA COUNTY, CA	\$ 326	0.00%	99.98%
ALLEN COUNTY, IN	\$ 312	0.00%	99.98%
CANADA	\$ 80,094	0.02%	100.00%
Total	\$ 373,680,607	100.00%	

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table A-5
City of Milwaukee Disparity Study
List of Counties and States in the Prime Data
Goods

County, State	Amount	Percent	Cumulative Percent
MILWAUKEE COUNTY, WI	\$ 140,502,280	44.81%	44.81%
WAUKESHA COUNTY, WI	\$ 40,256,632	12.84%	57.64%
WASHINGTON COUNTY, WI	\$ 38,157,095	12.17%	69.81%
OZAUKEE COUNTY, WI	\$ 344,948	0.11%	69.92%
WINNEBAGO COUNTY, WI	\$ 2,731,542	0.87%	70.79%
DANE COUNTY, WI	\$ 2,377,829	0.76%	71.55%
OUTAGAMIE COUNTY, WI	\$ 1,693,867	0.54%	72.09%
RACINE COUNTY, WI	\$ 1,693,594	0.54%	72.63%
WALWORTH COUNTY, WI	\$ 1,058,039	0.34%	72.97%
DODGE COUNTY, WI	\$ 985,077	0.31%	73.28%
LA CROSSE COUNTY, WI	\$ 722,735	0.23%	73.51%
JEFFERSON COUNTY, WI	\$ 467,565	0.15%	73.66%
BROWN COUNTY, WI	\$ 250,111	0.08%	73.74%
ROCK COUNTY, WI	\$ 236,755	0.08%	73.82%
MARATHON COUNTY, WI	\$ 139,547	0.04%	73.86%
WOOD COUNTY, WI	\$ 129,248	0.04%	73.90%
PEPIN COUNTY, WI	\$ 56,217	0.02%	73.92%
CALUMET COUNTY, WI	\$ 53,400	0.02%	73.94%
DOOR COUNTY, WI	\$ 43,118	0.01%	73.95%
MARINETTE COUNTY, WI	\$ 37,500	0.01%	73.96%
COLUMBIA COUNTY, WI	\$ 27,130	0.01%	73.97%
MANITOWOC COUNTY, WI	\$ 24,148	0.01%	73.98%
PORTAGE COUNTY, WI	\$ 853	0.00%	73.98%
RUSK COUNTY, WI	\$ 738	0.00%	73.98%
ONEIDA, WI	\$ 255	0.00%	73.98%
ALLEGHENY COUNTY, PA	\$ 25,499,873	8.13%	82.11%
MARICOPA COUNTY, AZ	\$ 8,341,851	2.66%	84.77%
BREVARD COUNTY, FL	\$ 7,514,805	2.40%	87.17%
SPOKANE COUNTY, WA	\$ 5,449,027	1.74%	88.91%
COOK COUNTY, IL	\$ 4,896,245	1.56%	90.47%
HAMILTON COUNTY, TN	\$ 2,622,701	0.84%	91.30%
CULPEPER COUNTY, VA	\$ 2,121,566	0.68%	91.98%
LA SALLE COUNTY, IL	\$ 1,955,145	0.62%	92.60%
RAMSEY COUNTY, MN	\$ 1,802,081	0.57%	93.18%
MIDDLESEX COUNTY, NJ	\$ 1,599,049	0.51%	93.69%
DALLAS COUNTY, TX	\$ 1,129,120	0.36%	94.05%
ROCKDALE COUNTY, GA	\$ 1,078,781	0.34%	94.39%
FULTON COUNTY, GA	\$ 870,897	0.28%	94.67%
CLARK COUNTY, IN	\$ 836,815	0.27%	94.94%
HENNEPIN COUNTY, MN	\$ 763,922	0.24%	95.18%
NEW YORK COUNTY, NY	\$ 664,365	0.21%	95.39%
SAINT LOUIS COUNTY, MO	\$ 661,473	0.21%	95.60%
LINCOLN COUNTY, TN	\$ 617,634	0.20%	95.80%
HARRIS COUNTY, TX	\$ 587,676	0.19%	95.99%
WICHITA COUNTY, TX	\$ 557,508	0.18%	96.17%
CUMBERLAND COUNTY, NC	\$ 535,532	0.17%	96.34%
HAMILTON COUNTY, OH	\$ 531,599	0.17%	96.51%
LA PORTE COUNTY, IN	\$ 518,681	0.17%	96.67%
LEWIS COUNTY, WA	\$ 494,118	0.16%	96.83%
SANGAMON COUNTY, IL	\$ 451,464	0.14%	96.97%
SAINT LOUIS CITY COUNTY, MO	\$ 449,779	0.14%	97.12%
SCOTT COUNTY, MN	\$ 429,852	0.14%	97.25%

CITY OF MILWAUKEE 2023 DISPARITY STUDY

ERIE COUNTY, NY	\$ 422,895	0.13%	97.39%
SUFFOLK COUNTY, MA	\$ 365,006	0.12%	97.51%
SAN DIEGO COUNTY, CA	\$ 351,339	0.11%	97.62%
KANKAKEE COUNTY, IL	\$ 316,568	0.10%	97.72%
CHESTER COUNTY, PA	\$ 298,788	0.10%	97.81%
LAKE COUNTY, IL	\$ 295,342	0.09%	97.91%
HILLSBOROUGH COUNTY, FL	\$ 295,017	0.09%	98.00%
SHELBY COUNTY, AL	\$ 293,922	0.09%	98.10%
BUTLER COUNTY, PA	\$ 290,537	0.09%	98.19%
KALAMAZOO COUNTY, MI	\$ 269,785	0.09%	98.27%
BERKSHIRE COUNTY, MA	\$ 255,125	0.08%	98.36%
NEW CASTLE COUNTY, DE	\$ 219,187	0.07%	98.43%
DUPAGE COUNTY, IL	\$ 218,768	0.07%	98.50%
CUMBERLAND COUNTY, ME	\$ 200,855	0.06%	98.56%
JO DAVIESS COUNTY, IL	\$ 196,335	0.06%	98.62%
PHILADELPHIA COUNTY, PA	\$ 175,467	0.06%	98.68%
KANE COUNTY, IL	\$ 173,214	0.06%	98.73%
WESTCHESTER COUNTY, NY	\$ 168,009	0.05%	98.79%
UNION COUNTY, NJ	\$ 166,671	0.05%	98.84%
DELAWARE COUNTY, IA	\$ 151,336	0.05%	98.89%
WINONA COUNTY, MN	\$ 148,698	0.05%	98.94%
BERGEN COUNTY, NJ	\$ 145,395	0.05%	98.98%
MECKLENBURG COUNTY, NC	\$ 139,100	0.04%	99.03%
FRANKLIN COUNTY, OH	\$ 136,815	0.04%	99.07%
MONTGOMERY COUNTY, PA	\$ 136,296	0.04%	99.11%
WAKE COUNTY, NC	\$ 125,708	0.04%	99.15%
MIDDLESEX COUNTY, MA	\$ 121,255	0.04%	99.19%
CLARKE COUNTY, IA	\$ 100,556	0.03%	99.22%
LARIMER COUNTY, CO	\$ 99,101	0.03%	99.26%
JACKSON COUNTY, MO	\$ 97,829	0.03%	99.29%
ROSS COUNTY, OH	\$ 94,332	0.03%	99.32%
ONTARIO COUNTY, NY	\$ 91,770	0.03%	99.35%
DEKALB COUNTY, IL	\$ 89,426	0.03%	99.38%
LAPEER COUNTY, MI	\$ 83,000	0.03%	99.40%
KENT COUNTY, MI	\$ 75,099	0.02%	99.43%
OCEAN COUNTY, NJ	\$ 74,322	0.02%	99.45%
ESSEX COUNTY, NJ	\$ 72,834	0.02%	99.47%
ORANGE COUNTY, CA	\$ 70,967	0.02%	99.50%
CLACKAMAS COUNTY, OR	\$ 69,961	0.02%	99.52%
DUBUQUE COUNTY, IA	\$ 65,842	0.02%	99.54%
OAKLAND COUNTY, MI	\$ 62,381	0.02%	99.56%
GRANVILLE COUNTY, NC	\$ 57,365	0.02%	99.58%
BALTIMORE CITY COUNTY, MD	\$ 57,151	0.02%	99.59%
CUYAHOGA COUNTY, OH	\$ 56,674	0.02%	99.61%
SANTA BARBARA COUNTY, CA	\$ 55,900	0.02%	99.63%
MULTNOMAH COUNTY, OR	\$ 52,395	0.02%	99.65%
TRAVIS COUNTY, TX	\$ 49,035	0.02%	99.66%
ANDERSON COUNTY, TN	\$ 45,490	0.01%	99.68%
PICKAWAY COUNTY, OH	\$ 44,559	0.01%	99.69%
MARION COUNTY, OR	\$ 43,862	0.01%	99.71%
WAYNE COUNTY, MI	\$ 42,690	0.01%	99.72%
SIOUX COUNTY, IA	\$ 42,044	0.01%	99.73%
YORK COUNTY, VA	\$ 40,889	0.01%	99.75%
ATLANTIC COUNTY, NJ	\$ 40,500	0.01%	99.76%
TARRANT COUNTY, TX	\$ 40,384	0.01%	99.77%
SAINT CHARLES COUNTY, MO	\$ 39,455	0.01%	99.78%
OLMSTED COUNTY, MN	\$ 34,504	0.01%	99.80%
SOMERSET COUNTY, NJ	\$ 33,423	0.01%	99.81%
WASHINGTON COUNTY, OR	\$ 30,280	0.01%	99.82%
HENRICO COUNTY, VA	\$ 28,499	0.01%	99.82%
SURRY COUNTY, NC	\$ 26,433	0.01%	99.83%

CITY OF MILWAUKEE 2023 DISPARITY STUDY

CENTRE COUNTY, PA	\$ 25,795	0.01%	99.84%
HUMBOLDT COUNTY, IA	\$ 25,596	0.01%	99.85%
DELAWARE COUNTY, PA	\$ 25,110	0.01%	99.86%
COBB COUNTY, GA	\$ 25,070	0.01%	99.87%
JEFFERSON COUNTY, KY	\$ 25,000	0.01%	99.87%
LOS ANGELES COUNTY, CA	\$ 24,250	0.01%	99.88%
SCOTT COUNTY, IA	\$ 23,919	0.01%	99.89%
CHICKASAW COUNTY, IA	\$ 23,726	0.01%	99.90%
HARVEY COUNTY, KS	\$ 22,563	0.01%	99.90%
LINCOLN COUNTY, MO	\$ 22,418	0.01%	99.91%
JEFFERSON COUNTY, MO	\$ 19,000	0.01%	99.92%
DESOTO COUNTY, MS	\$ 17,086	0.01%	99.92%
SAN FRANCISCO COUNTY, CA	\$ 16,980	0.01%	99.93%
MINNEHAHA COUNTY, SD	\$ 14,992	0.00%	99.93%
DAKOTA COUNTY, MN	\$ 12,432	0.00%	99.94%
WINNEBAGO COUNTY, IL	\$ 12,200	0.00%	99.94%
LICKING COUNTY, OH	\$ 11,725	0.00%	99.94%
PROVIDENCE COUNTY, RI	\$ 11,712	0.00%	99.95%
SEMINOLE COUNTY, FL	\$ 11,274	0.00%	99.95%
SHELBY COUNTY, TN	\$ 10,462	0.00%	99.95%
MARION COUNTY, IN	\$ 10,345	0.00%	99.96%
SNOHOMISH COUNTY, WA	\$ 9,990	0.00%	99.96%
GRAND TRAVERSE COUNTY, MI	\$ 8,400	0.00%	99.96%
SACRAMENTO COUNTY, CA	\$ 8,237	0.00%	99.97%
JOHNSON COUNTY, KS	\$ 7,969	0.00%	99.97%
SANTA CLARA COUNTY, CA	\$ 6,585	0.00%	99.97%
GREENVILLE COUNTY, SC	\$ 6,475	0.00%	99.97%
MORGAN COUNTY, AL	\$ 6,367	0.00%	99.98%
CARSON CITY COUNTY, NV	\$ 6,288	0.00%	99.98%
OTTAWA COUNTY, MI	\$ 5,851	0.00%	99.98%
CLARK COUNTY, NV	\$ 5,633	0.00%	99.98%
PALM BEACH COUNTY, FL	\$ 5,598	0.00%	99.98%
DENVER COUNTY, CO	\$ 5,587	0.00%	99.98%
NEW HAVEN COUNTY, CT	\$ 5,207	0.00%	99.99%
HENDRICKS COUNTY, IN	\$ 5,094	0.00%	99.99%
WALKER COUNTY, AL	\$ 4,318	0.00%	99.99%
BARBER COUNTY, KS	\$ 4,235	0.00%	99.99%
DURHAM COUNTY, NC	\$ 2,930	0.00%	99.99%
SALT LAKE COUNTY, UT	\$ 2,700	0.00%	99.99%
ONONDAGA COUNTY, NY	\$ 1,530	0.00%	99.99%
PINELLAS COUNTY, FL	\$ 1,327	0.00%	99.99%
BRISTOL COUNTY, RI	\$ 598	0.00%	99.99%
KINGS COUNTY, NY	\$ 406	0.00%	99.99%
MERCER COUNTY, OH	\$ 398	0.00%	99.99%
JEFFERSON COUNTY, LA	\$ 364	0.00%	99.99%
RICHLAND COUNTY, SC	\$ 133	0.00%	99.99%
TAZEWELL COUNTY, IL	\$ 112	0.00%	99.99%
SAN BERNARDINO COUNTY, CA	\$ 108	0.00%	99.99%
CANADA	\$ 19,500	0.01%	100.00%
Total	\$ 313,581,762	100.00%	

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APPENDIX B

**Detailed Availability:
City of Milwaukee 2022 Disparity Study
Availability of Firms by Business Ownership in Market Area**

Table B-1
City of Milwaukee Disparity Study
Availability of Firms by Business Ownership in Market Area
Construction

Business Ownership Classification	Number of Firms	Percent of Firms
Black American	133	24.95%
Asian American	6	1.13%
Hispanic American	102	19.14%
Native American	10	1.88%
TOTAL MBE	251	47.09%
Nonminority Female	46	8.63%
TOTAL M/WBE	297	55.72%
NON-M/WDBE	236	44.28%
TOTAL FIRMS	533	100.00%

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Table B-2
City of Milwaukee Disparity Study
Availability of Firms by Business Ownership in Market Area
Architectural & Engineering

Business Ownership Classification	Number of Firms	Percent of Firms
Black American	15	13.39%
Asian American	16	14.29%
Hispanic American	3	2.68%
Native American	4	3.57%
TOTAL MBE	38	33.93%
Nonminority Female	21	18.75%
TOTAL M/WBE	59	52.68%
NON-M/WDBE	53	47.32%
TOTAL FIRMS	112	100.00%

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Table B-3
City of Milwaukee Disparity Study
Availability of Firms by Business Ownership in Market Area
Professional Services

Business Ownership Classification	Number of Firms	Percent of Firms
Black American	47	16.79%
Asian American	8	2.86%
Hispanic American	5	1.79%
Native American	2	0.71%
TOTAL MBE	62	22.14%
Nonminority Female	27	9.64%
TOTAL M/WBE	89	31.79%
NON-M/WDBE	191	68.21%
TOTAL FIRMS	280	100.00%

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Table B-4
City of Milwaukee Disparity Study
Availability of Firms by Business Ownership in Market Area
Other Services

Business Ownership Classification	Number of Firms	Percent of Firms
Black American	115	18.98%
Asian American	9	1.49%
Hispanic American	23	3.80%
Native American	3	0.50%
TOTAL MBE	150	24.75%
Nonminority Female	50	8.25%
TOTAL M/WBE	200	33.00%
NON-M/WDBE	406	67.00%
TOTAL FIRMS	606	100.00%

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Table B-5
City of Milwaukee Disparity Study
Availability of Firms by Business Ownership in Market Area
Goods

Business Ownership Classification	Number of Firms	Percent of Firms
Black American	24	5.44%
Asian American	4	0.91%
Hispanic American	6	1.36%
Native American	3	0.68%
TOTAL MBE	37	8.39%
Nonminority Female	16	3.63%
TOTAL M/WBE	53	12.02%
NON-M/WDBE	388	87.98%
TOTAL FIRMS	441	100.00%

APPENDIX C

Prime Disparity Ratios:

**City of Milwaukee 2022 Disparity Study
Disparity Analysis of Prime Data
Distribution of Dollars by Business Ownership and Fiscal Year**

CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table C-1
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Prime Construction
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2015	Black American	2.20%	24.95%	8.82	Underutilization	*	
	Asian American	0.06%	1.13%	4.92	Underutilization	*	
	Hispanic American	0.60%	19.14%	3.14	Underutilization	*	
	Native American	3.84%	1.88%	204.83	Overutilization		
	TOTAL MBE	6.70%	47.09%	14.23	Underutilization	*	
	Nonminority Female	1.04%	8.63%	12.02	Underutilization	*	
	TOTAL M/WBE	7.74%	55.72%	13.89	Underutilization	*	
	Non-M/WBE	92.26%	44.28%	208.37	Overutilization		
2016	Black American	0.69%	24.95%	2.78	Underutilization	*	
	Asian American	0.30%	1.13%	26.52	Underutilization	*	
	Hispanic American	1.47%	19.14%	7.66	Underutilization	*	
	Native American	1.06%	1.88%	56.31	Underutilization	*	
	TOTAL MBE	3.51%	47.09%	7.46	Underutilization	*	
	Nonminority Female	0.36%	8.63%	4.18	Underutilization	*	
	TOTAL M/WBE	3.87%	55.72%	6.95	Underutilization	*	
	Non-M/WBE	96.13%	44.28%	217.10	Overutilization		
2017	Black American	2.22%	24.95%	8.90	Underutilization	*	
	Asian American	1.01%	1.13%	89.46	Underutilization		
	Hispanic American	0.69%	19.14%	3.61	Underutilization	*	
	Native American	2.54%	1.88%	135.23	Overutilization		
	TOTAL MBE	6.45%	47.09%	13.71	Underutilization	*	
	Nonminority Female	0.14%	8.63%	1.59	Underutilization	*	
	TOTAL M/WBE	6.59%	55.72%	11.83	Underutilization	*	
	Non-M/WBE	93.41%	44.28%	210.96	Overutilization		
2018	Black American	2.18%	24.95%	8.74	Underutilization	*	
	Asian American	0.66%	1.13%	58.71	Underutilization	*	
	Hispanic American	8.70%	19.14%	45.47	Underutilization	*	
	Native American	6.64%	1.88%	353.67	Overutilization		
	TOTAL MBE	18.18%	47.09%	38.60	Underutilization	*	
	Nonminority Female	0.18%	8.63%	2.14	Underutilization	*	
	TOTAL M/WBE	18.36%	55.72%	32.95	Underutilization	*	
	Non-M/WBE	81.64%	44.28%	184.38	Overutilization		
2019	Black American	8.94%	24.95%	35.83	Underutilization	*	
	Asian American	0.19%	1.13%	17.14	Underutilization	*	
	Hispanic American	1.23%	19.14%	6.40	Underutilization	*	
	Native American	2.39%	1.88%	127.14	Overutilization		
	TOTAL MBE	12.74%	47.09%	27.06	Underutilization	*	
	Nonminority Female	0.05%	8.63%	0.53	Underutilization	*	
	TOTAL M/WBE	12.79%	55.72%	22.95	Underutilization	*	
	Non-M/WBE	87.21%	44.28%	196.96	Overutilization		
Total	Black American	3.02%	24.95%	12.09	Underutilization	*	p <.05
	Asian American	0.35%	1.13%	31.37	Underutilization	*	p <.05
	Hispanic American	2.14%	19.14%	11.20	Underutilization	*	p <.05
	Native American	3.03%	1.88%	161.62	Overutilization		
	TOTAL MBE	8.55%	47.09%	18.15	Underutilization	*	p <.05
	Nonminority Female	0.43%	8.63%	4.99	Underutilization	*	p <.05
	TOTAL M/WBE	8.98%	55.72%	16.11	Underutilization	*	p <.05
	Non-M/WBE	91.02%	44.28%	205.58	Overutilization		

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table C-2
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Prime A&E
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2015	Black American	7.62%	13.39%	56.89	Underutilization	*	
	Asian American	1.32%	14.29%	9.23	Underutilization	*	
	Hispanic American	0.00%	2.68%	0.00	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	8.94%	33.93%	26.34	Underutilization	*	
	Nonminority Female	0.52%	18.75%	2.79	Underutilization	*	
	TOTAL M/WBE	9.46%	52.68%	17.96	Underutilization	*	
	Non-M/WBE	90.54%	47.32%	191.33	Overutilization		
2016	Black American	4.67%	13.39%	34.85	Underutilization	*	
	Asian American	0.17%	14.29%	1.22	Underutilization	*	
	Hispanic American	0.00%	2.68%	0.00	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	4.84%	33.93%	14.27	Underutilization	*	
	Nonminority Female	0.00%	18.75%	0.00	Underutilization	*	
	TOTAL M/WBE	4.84%	52.68%	9.19	Underutilization	*	
	Non-M/WBE	95.16%	47.32%	201.09	Overutilization		
2017	Black American	6.39%	13.39%	47.72	Underutilization	*	
	Asian American	0.75%	14.29%	5.27	Underutilization	*	
	Hispanic American	0.00%	2.68%	0.00	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	7.14%	33.93%	21.06	Underutilization	*	
	Nonminority Female	0.95%	18.75%	5.07	Underutilization	*	
	TOTAL M/WBE	8.09%	52.68%	15.37	Underutilization	*	
	Non-M/WBE	91.91%	47.32%	194.22	Overutilization		
2018	Black American	6.90%	13.39%	51.49	Underutilization	*	
	Asian American	0.69%	14.29%	4.85	Underutilization	*	
	Hispanic American	0.00%	2.68%	0.00	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	7.59%	33.93%	22.37	Underutilization	*	
	Nonminority Female	6.43%	18.75%	34.28	Underutilization	*	
	TOTAL M/WBE	14.02%	52.68%	26.61	Underutilization	*	
	Non-M/WBE	85.98%	47.32%	181.70	Overutilization		
2019	Black American	15.17%	13.39%	113.30	Overutilization		
	Asian American	0.15%	14.29%	1.06	Underutilization	*	
	Hispanic American	0.49%	2.68%	18.14	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	15.81%	33.93%	46.60	Underutilization	*	
	Nonminority Female	4.83%	18.75%	25.77	Underutilization	*	
	TOTAL M/WBE	20.64%	52.68%	39.19	Underutilization	*	
	Non-M/WBE	79.36%	47.32%	167.70	Overutilization		
Total	Black American	7.21%	13.39%	53.84	Underutilization	*	p < .05
	Asian American	0.67%	14.29%	4.69	Underutilization	*	p < .05
	Hispanic American	0.05%	2.68%	1.91	Underutilization	*	p < .05
	Native American	0.00%	3.57%	0.00	Underutilization	*	p < .05
	TOTAL MBE	7.93%	33.93%	23.38	Underutilization	*	p < .05
	Nonminority Female	1.61%	18.75%	8.61	Underutilization	*	p < .05
	TOTAL M/WBE	9.55%	52.68%	18.12	Underutilization	*	p < .05
	Non-M/WBE	90.45%	47.32%	191.15	Overutilization		

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table C-3
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year,
Prime Professional Services
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2015	Black American	3.92%	16.79%	23.35	Underutilization	*	
	Asian American	0.00%	2.86%	0.00	Underutilization	*	
	Hispanic American	0.02%	1.79%	0.85	Underutilization	*	
	Native American	0.00%	0.71%	0.00	Underutilization	*	
	TOTAL MBE	3.93%	22.14%	17.77	Underutilization	*	
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	
	TOTAL M/WBE	3.93%	31.79%	12.38	Underutilization	*	
	Non-M/WBE	96.07%	68.21%	140.83	Overutilization		
2016	Black American	6.57%	16.79%	39.12	Underutilization	*	
	Asian American	0.34%	2.86%	12.00	Underutilization	*	
	Hispanic American	0.07%	1.79%	4.09	Underutilization	*	
	Native American	0.00%	0.71%	0.00	Underutilization	*	
	TOTAL MBE	6.98%	22.14%	31.53	Underutilization	*	
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	
	TOTAL M/WBE	6.98%	31.79%	21.97	Underutilization	*	
	Non-M/WBE	93.02%	68.21%	136.36	Overutilization		
2017	Black American	11.20%	16.79%	66.74	Underutilization	*	
	Asian American	0.00%	2.86%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*	
	Native American	0.00%	0.71%	0.00	Underutilization	*	
	TOTAL MBE	11.20%	22.14%	50.59	Underutilization	*	
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	
	TOTAL M/WBE	11.20%	31.79%	35.24	Underutilization	*	
	Non-M/WBE	88.80%	68.21%	130.18	Overutilization		
2018	Black American	6.36%	16.79%	37.86	Underutilization	*	
	Asian American	0.00%	2.86%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*	
	Native American	0.00%	0.71%	0.00	Underutilization	*	
	TOTAL MBE	6.36%	22.14%	28.70	Underutilization	*	
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	
	TOTAL M/WBE	6.36%	31.79%	19.99	Underutilization	*	
	Non-M/WBE	93.64%	68.21%	137.28	Overutilization		
2019	Black American	5.77%	16.79%	34.37	Underutilization	*	
	Asian American	0.03%	2.86%	1.21	Underutilization	*	
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*	
	Native American	0.00%	0.71%	0.00	Underutilization	*	
	TOTAL MBE	5.80%	22.14%	26.21	Underutilization	*	
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	
	TOTAL M/WBE	5.80%	31.79%	18.26	Underutilization	*	
	Non-M/WBE	94.20%	68.21%	138.09	Overutilization		
Total	Black American	6.59%	16.79%	39.28	Underutilization	*	p < .05
	Asian American	0.08%	2.86%	2.84	Underutilization	*	p < .05
	Hispanic American	0.02%	1.79%	1.05	Underutilization	*	p < .05
	Native American	0.00%	0.71%	0.00	Underutilization	*	p < .05
	TOTAL MBE	6.69%	22.14%	30.23	Underutilization	*	p < .05
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	p < .05
	TOTAL M/WBE	6.69%	31.79%	21.06	Underutilization	*	p < .05
	Non-M/WBE	93.31%	68.21%	136.79	Overutilization		

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table C-4
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Prime Other Services
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business	Percent	Percent of		Disparate		Statistical
2015	Black American	0.00	0.19	0.40	Underutilization	*	
	Asian American	0.00	0.01	1.27	Underutilization	*	
	Hispanic American	0.00	0.04	4.30	Underutilization	*	
	Native American	-	0.00	-	Underutilization	*	
	TOTAL MBE	0.00	0.25	1.04	Underutilization	*	
	Nonminority Female	0.01	0.08	16.13	Underutilization	*	
	TOTAL M/WBE	0.02	0.33	4.82	Underutilization	*	
2016	Black American	0.01	0.19	5.95	Underutilization	*	
	Asian American	0.01	0.01	61.96	Underutilization	*	
	Hispanic American	0.00	0.04	2.77	Underutilization	*	
	Native American	-	0.00	-	Underutilization	*	
	TOTAL MBE	0.02	0.25	8.70	Underutilization	*	
	Nonminority Female	0.03	0.08	31.10	Underutilization	*	
	TOTAL M/WBE	0.05	0.33	14.30	Underutilization	*	
2017	Black American	0.02	0.19	9.69	Underutilization	*	
	Asian American	0.00	0.01	20.81	Underutilization	*	
	Hispanic American	0.00	0.04	0.78	Underutilization	*	
	Native American	-	0.00	-	Underutilization	*	
	TOTAL MBE	0.02	0.25	8.80	Underutilization	*	
	Nonminority Female	0.03	0.08	33.82	Underutilization	*	
	TOTAL M/WBE	0.05	0.33	15.05	Underutilization	*	
2018	Black American	0.01	0.19	4.05	Underutilization	*	
	Asian American	0.00	0.01	24.96	Underutilization	*	
	Hispanic American	0.00	0.04	4.48	Underutilization	*	
	Native American	-	0.00	-	Underutilization	*	
	TOTAL MBE	0.01	0.25	5.29	Underutilization	*	
	Nonminority Female	0.03	0.08	30.85	Underutilization	*	
	TOTAL M/WBE	0.04	0.33	11.68	Underutilization	*	
2019	Black American	0.01	0.19	3.69	Underutilization	*	
	Asian American	0.00	0.01	25.20	Underutilization	*	
	Hispanic American	0.00	0.04	8.15	Underutilization	*	
	Native American	-	0.00	-	Underutilization	*	
	TOTAL MBE	0.01	0.25	5.59	Underutilization	*	
	Nonminority Female	0.04	0.08	46.69	Underutilization	*	
	TOTAL M/WBE	0.05	0.33	15.87	Underutilization	*	
Total	Black American	0.01	0.19	4.65	Underutilization	*	p < .05
	Asian American	0.00	0.01	26.26	Underutilization	*	p < .05
	Hispanic American	0.00	0.04	4.24	Underutilization	*	p < .05
	Native American	-	0.00	-	Underutilization	*	p < .05
	TOTAL MBE	0.01	0.25	5.79	Underutilization	*	p < .05
	Nonminority Female	0.03	0.08	31.98	Underutilization	*	p < .05
	TOTAL M/WBE	0.04	0.33	12.34	Underutilization	*	p < .05
	Non-M/WBE	0.96	0.67	143.18	Overutilization		

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table C-5
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Prime Goods
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2015	Black American	6.57%	6.95%	94.50	Underutilization		
	Asian American	0.00%	0.91%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.36%	0.00	Underutilization	*	
	Native American	0.00%	0.68%	0.00	Underutilization	*	
	TOTAL MBE	6.57%	8.39%	78.28	Underutilization	*	
	Nonminority Female	0.94%	3.63%	25.96	Underutilization	*	
	TOTAL M/WBE	7.51%	12.02%	62.49	Underutilization	*	
	Non-M/WBE	92.49%	87.98%	105.12	Overutilization		
2016	Black American	6.95%	6.95%	100.07	Overutilization		
	Asian American	0.00%	0.91%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.36%	0.00	Underutilization	*	
	Native American	0.00%	0.68%	0.00	Underutilization	*	
	TOTAL MBE	6.95%	8.39%	82.89	Underutilization		
	Nonminority Female	1.03%	3.63%	28.43	Underutilization	*	
	TOTAL M/WBE	7.99%	12.02%	66.45	Underutilization	*	
	Non-M/WBE	92.01%	87.98%	104.58	Overutilization		
2017	Black American	0.00%	6.95%	0.00	Underutilization	*	
	Asian American	#REF!	0.91%	-	n/a		
	Hispanic American	0.00%	1.36%	0.00	Underutilization	*	
	Native American	0.00%	0.68%	0.00	Underutilization	*	
	TOTAL MBE	7.32%	8.39%	87.23	Underutilization		
	Nonminority Female	1.23%	3.63%	33.94	Underutilization	*	
	TOTAL M/WBE	8.55%	12.02%	71.15	Underutilization	*	
	Non-M/WBE	91.45%	87.98%	103.94	Overutilization		
2018	Black American	7.18%	6.95%	103.28	Overutilization		
	Asian American	0.00%	0.91%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.36%	0.00	Underutilization	*	
	Native American	0.00%	0.68%	0.00	Underutilization	*	
	TOTAL MBE	7.18%	8.39%	85.56	Underutilization		
	Nonminority Female	0.92%	3.63%	25.31	Underutilization	*	
	TOTAL M/WBE	8.10%	12.02%	67.37	Underutilization	*	
	Non-M/WBE	91.90%	87.98%	104.46	Overutilization		
2019	Black American	7.43%	6.95%	106.93	Overutilization		
	Asian American	0.00%	0.91%	0.00	Underutilization	*	
	Hispanic American	0.24%	1.36%	17.61	Underutilization	*	
	Native American	0.00%	0.68%	0.00	Underutilization	*	
	TOTAL MBE	7.67%	8.39%	91.43	Underutilization		
	Nonminority Female	0.64%	3.63%	17.77	Underutilization	*	
	TOTAL M/WBE	8.32%	12.02%	69.20	Underutilization	*	
	Non-M/WBE	91.68%	87.98%	104.21	Overutilization		
Total	Black American	7.12%	6.95%	102.41	Overutilization		
	Asian American	0.00%	0.91%	0.00	Underutilization	*	p < .05
	Hispanic American	0.06%	1.36%	4.15	Underutilization	*	p < .05
	Native American	0.00%	0.68%	0.00	Underutilization	*	Small Number
	TOTAL MBE	7.17%	8.39%	85.50	Underutilization		
	Nonminority Female	0.94%	3.63%	25.85	Underutilization	*	p < .05
	TOTAL M/WBE	8.11%	12.02%	67.49	Underutilization	*	p < .05
	Non-M/WBE	91.89%	87.98%	104.44	Overutilization		

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APPENDIX D

**Total Utilization Disparity Ratios:
City of Milwaukee 2022 Disparity Study
Disparity Analysis of Total Utilization (Prime + Subcontract)
Distribution of Dollars by Business Ownership and Fiscal Year**

CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table D-1
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Total Utilization, Construction
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance	
2015	Black American	2.20%	24.95%	8.82	Underutilization	*		
	Asian American	0.06%	1.13%	4.92	Underutilization	*		
	Hispanic American	0.60%	19.14%	3.14	Underutilization	*		
	Native American	3.84%	1.88%	204.83	Overutilization			
	TOTAL MBE	6.70%	47.09%	14.23	Underutilization	*		
	Nonminority Female	1.04%	8.63%	12.02	Underutilization	*		
	TOTAL M/WBE	7.74%	55.72%	13.89	Underutilization	*		
2016	Non-M/WBE	92.26%	44.28%	208.37	Overutilization			
	Black American	1.94%	24.95%	7.76	Underutilization	*		
	Asian American	0.30%	1.13%	26.52	Underutilization	*		
	Hispanic American	2.40%	19.14%	12.52	Underutilization	*		
	Native American	1.24%	1.88%	65.89	Underutilization	*		
	TOTAL MBE	5.87%	47.09%	12.46	Underutilization	*		
	Nonminority Female	1.58%	8.63%	18.32	Underutilization	*		
2017	TOTAL M/WBE	7.45%	55.72%	13.37	Underutilization	*		
	Non-M/WBE	92.55%	44.28%	209.02	Overutilization			
	Black American	7.52%	24.95%	30.15	Underutilization	*		
	Asian American	1.01%	1.13%	89.46	Underutilization			
	Hispanic American	3.31%	19.14%	17.29	Underutilization	*		
	Native American	2.86%	1.88%	152.22	Overutilization			
	TOTAL MBE	14.70%	47.09%	31.21	Underutilization	*		
2018	Nonminority Female	2.99%	8.63%	34.68	Underutilization	*		
	TOTAL M/WBE	17.69%	55.72%	31.74	Underutilization	*		
	Non-M/WBE	82.31%	44.28%	185.90	Overutilization			
	Black American	8.96%	24.95%	35.90	Underutilization	*		
	Asian American	0.66%	1.13%	58.71	Underutilization	*		
	Hispanic American	9.80%	19.14%	51.19	Underutilization	*		
	Native American	6.94%	1.88%	370.12	Overutilization			
2019	TOTAL MBE	26.36%	47.09%	55.97	Underutilization	*		
	Nonminority Female	5.67%	8.63%	65.71	Underutilization	*		
	TOTAL M/WBE	32.03%	55.72%	57.48	Underutilization	*		
	Non-M/WBE	67.97%	44.28%	153.51	Overutilization			
	Black American	12.86%	24.95%	51.55	Underutilization	*		
	Asian American	0.22%	1.13%	19.55	Underutilization	*		
	Hispanic American	2.30%	19.14%	12.04	Underutilization	*		
2019	Native American	2.89%	1.88%	154.05	Overutilization			
	TOTAL MBE	18.28%	47.09%	38.81	Underutilization	*		
	Nonminority Female	4.59%	8.63%	53.16	Underutilization	*		
	TOTAL M/WBE	22.87%	55.72%	41.03	Underutilization	*		
	Non-M/WBE	77.13%	44.28%	174.21	Overutilization			
	Total	Black American	6.04%	24.95%	24.20	Underutilization	*	p <.05
		Asian American	0.36%	1.13%	31.81	Underutilization	*	p <.05
Hispanic American		3.52%	19.14%	18.39	Underutilization	*	p <.05	
Native American		3.28%	1.88%	174.93	Overutilization			
TOTAL MBE		13.20%	47.09%	28.02	Underutilization	*	p <.05	
Nonminority Female		2.89%	8.63%	33.45	Underutilization	*	p <.05	
TOTAL M/WBE		16.08%	55.72%	28.87	Underutilization	*	p <.05	
Non-M/WBE	83.92%	44.28%	189.52	Overutilization				

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table D-2
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Total Utilization, A&E
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2015	Black American	8.11%	13.39%	60.56	Underutilization	*	
	Asian American	1.32%	14.29%	9.23	Underutilization	*	
	Hispanic American	0.12%	2.68%	4.49	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	9.55%	33.93%	28.14	Underutilization	*	
	Nonminority Female	0.52%	18.75%	2.79	Underutilization	*	
	TOTAL M/WBE	10.07%	52.68%	19.12	Underutilization	*	
2016	Black American	5.91%	13.39%	44.15	Underutilization	*	
	Asian American	0.41%	14.29%	2.87	Underutilization	*	
	Hispanic American	1.14%	2.68%	42.71	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	7.47%	33.93%	22.01	Underutilization	*	
	Nonminority Female	3.11%	18.75%	16.57	Underutilization	*	
	TOTAL M/WBE	10.58%	52.68%	20.08	Underutilization	*	
2017	Black American	7.93%	13.39%	59.21	Underutilization	*	
	Asian American	0.94%	14.29%	6.59	Underutilization	*	
	Hispanic American	1.70%	2.68%	63.59	Underutilization	*	
	Native American	0.22%	3.57%	6.23	Underutilization	*	
	TOTAL MBE	10.80%	33.93%	31.82	Underutilization	*	
	Nonminority Female	0.95%	18.75%	5.07	Underutilization	*	
	TOTAL M/WBE	11.75%	52.68%	22.30	Underutilization	*	
2018	Black American	88.25%	47.32%	186.50	Overutilization		
	Black American	9.93%	13.39%	74.12	Underutilization	*	
	Asian American	0.76%	14.29%	5.29	Underutilization	*	
	Hispanic American	3.54%	2.68%	132.23	Overutilization		
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	14.23%	33.93%	41.93	Underutilization	*	
	Nonminority Female	6.43%	18.75%	34.28	Underutilization	*	
2019	Black American	20.65%	47.32%	39.21	Underutilization	*	
	Black American	16.37%	13.39%	122.21	Overutilization		
	Asian American	0.20%	14.29%	1.39	Underutilization	*	
	Hispanic American	1.75%	2.68%	65.28	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	18.31%	33.93%	53.98	Underutilization	*	
	Nonminority Female	4.92%	18.75%	26.26	Underutilization	*	
Total	TOTAL M/WBE	23.24%	52.68%	44.11	Underutilization	*	
	Non-M/WBE	76.76%	47.32%	162.21	Overutilization		
	Black American	8.52%	13.39%	63.60	Underutilization	*	p < .05
	Asian American	0.79%	14.29%	5.53	Underutilization	*	p < .05
	Hispanic American	1.33%	2.68%	49.60	Underutilization	*	p < .05
	Native American	0.05%	3.57%	1.32	Underutilization	*	p < .05
	TOTAL MBE	10.68%	33.93%	31.49	Underutilization	*	p < .05
Nonminority Female	2.53%	18.75%	13.47	Underutilization	*	p < .05	
TOTAL M/WBE	13.21%	52.68%	25.08	Underutilization	*	p < .05	
Non-M/WBE	86.79%	47.32%	183.40	Overutilization			

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table D-3
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Total Utilization, Professional Services
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%
2015	Black American	3.92%	16.79%	23.35	Underutilization	*
	Asian American	0.00%	2.86%	0.00	Underutilization	*
	Hispanic American	0.02%	1.79%	0.85	Underutilization	*
	Native American	0.00%	0.71%	0.00	Underutilization	*
	TOTAL MBE	3.93%	22.14%	17.77	Underutilization	*
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*
	TOTAL M/WBE	3.93%	31.79%	12.38	Underutilization	*
2016	Non-M/WBE	96.07%	68.21%	140.83	Overutilization	
	Black American	6.57%	16.79%	39.12	Underutilization	*
	Asian American	0.34%	2.86%	12.00	Underutilization	*
	Hispanic American	0.07%	1.79%	4.09	Underutilization	*
	Native American	0.00%	0.71%	0.00	Underutilization	*
	TOTAL MBE	6.98%	22.14%	31.53	Underutilization	*
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*
2017	TOTAL M/WBE	6.98%	31.79%	21.97	Underutilization	*
	Non-M/WBE	93.02%	68.21%	136.36	Overutilization	
	Black American	11.20%	16.79%	66.74	Underutilization	*
	Asian American	0.00%	2.86%	0.00	Underutilization	*
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*
	Native American	0.00%	0.71%	0.00	Underutilization	*
	TOTAL MBE	11.20%	22.14%	50.59	Underutilization	*
2018	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*
	TOTAL M/WBE	11.20%	31.79%	35.24	Underutilization	*
	Non-M/WBE	88.80%	68.21%	130.18	Overutilization	
	Black American	6.36%	16.79%	37.86	Underutilization	*
	Asian American	0.00%	2.86%	0.00	Underutilization	*
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*
	Native American	0.00%	0.71%	0.00	Underutilization	*
2019	TOTAL MBE	6.36%	22.14%	28.70	Underutilization	*
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*
	TOTAL M/WBE	6.36%	31.79%	19.99	Underutilization	*
	Non-M/WBE	93.64%	68.21%	137.28	Overutilization	
	Black American	5.77%	16.79%	34.37	Underutilization	*
	Asian American	0.03%	2.86%	1.21	Underutilization	*
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*
2020	Native American	0.00%	0.71%	0.00	Underutilization	*
	TOTAL MBE	5.80%	22.14%	26.21	Underutilization	*
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*
	TOTAL M/WBE	5.80%	31.79%	18.26	Underutilization	*
	Non-M/WBE	94.20%	68.21%	138.09	Overutilization	
	Black American	6.59%	16.79%	39.28	Underutilization	*
	Asian American	0.08%	2.86%	2.84	Underutilization	*
Total	Hispanic American	0.02%	1.79%	1.05	Underutilization	*
	Native American	0.00%	0.71%	0.00	Underutilization	*
	TOTAL MBE	6.69%	22.14%	30.23	Underutilization	*
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*
	TOTAL M/WBE	6.69%	31.79%	21.06	Underutilization	*
	Non-M/WBE	93.31%	68.21%	136.79	Overutilization	

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table D-4
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Total Utilization, Other Services
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2015	Black American	2.13%	18.98%	11.20	Underutilization	*	
	Asian American	0.02%	1.49%	1.27	Underutilization	*	
	Hispanic American	0.76%	3.80%	20.02	Underutilization	*	
	Native American	0.00%	0.50%	0.00	Underutilization	*	
	TOTAL MBE	2.90%	24.75%	11.73	Underutilization	*	
	Nonminority Female	1.56%	8.25%	18.85	Underutilization	*	
	TOTAL M/WBE	4.46%	33.00%	13.51	Underutilization	*	
2016	Non-M/WBE	95.54%	67.00%	142.60	Overutilization		
	Black American	3.33%	18.98%	17.57	Underutilization	*	
	Asian American	0.92%	1.49%	61.96	Underutilization	*	
	Hispanic American	0.29%	3.80%	7.63	Underutilization	*	
	Native American	0.00%	0.50%	0.00	Underutilization	*	
	TOTAL MBE	4.54%	24.75%	18.36	Underutilization	*	
	Nonminority Female	2.73%	8.25%	33.08	Underutilization	*	
2017	TOTAL M/WBE	7.27%	33.00%	22.04	Underutilization	*	
	Non-M/WBE	92.73%	67.00%	138.40	Overutilization		
	Black American	4.15%	18.98%	21.88	Underutilization	*	
	Asian American	0.31%	1.49%	20.81	Underutilization	*	
	Hispanic American	0.11%	3.80%	2.96	Underutilization	*	
	Native American	0.00%	0.50%	0.00	Underutilization	*	
	TOTAL MBE	4.57%	24.75%	18.48	Underutilization	*	
2018	Nonminority Female	3.51%	8.25%	42.57	Underutilization	*	
	TOTAL M/WBE	8.09%	33.00%	24.50	Underutilization	*	
	Non-M/WBE	91.91%	67.00%	137.19	Overutilization		
	Black American	1.84%	18.98%	9.72	Underutilization	*	
	Asian American	0.37%	1.49%	24.96	Underutilization	*	
	Hispanic American	0.42%	3.80%	11.15	Underutilization	*	
	Native American	0.57%	0.50%	115.80	Overutilization		
2019	TOTAL MBE	3.21%	24.75%	12.97	Underutilization	*	
	Nonminority Female	4.76%	8.25%	57.68	Underutilization	*	
	TOTAL M/WBE	7.97%	33.00%	24.15	Underutilization	*	
	Non-M/WBE	92.03%	67.00%	137.37	Overutilization		
	Black American	1.91%	18.98%	10.05	Underutilization	*	
	Asian American	0.37%	1.49%	25.20	Underutilization	*	
	Hispanic American	0.38%	3.80%	10.12	Underutilization	*	
Total	Native American	0.00%	0.50%	0.00	Underutilization	*	
	TOTAL MBE	2.67%	24.75%	10.77	Underutilization	*	
	Nonminority Female	4.53%	8.25%	54.88	Underutilization	*	
	TOTAL M/WBE	7.19%	33.00%	21.79	Underutilization	*	
	Non-M/WBE	92.81%	67.00%	138.52	Overutilization		
	Black American	2.61%	18.98%	13.78	Underutilization	*	p < .05
	Asian American	0.39%	1.49%	26.26	Underutilization	*	p < .05
Hispanic American	0.40%	3.80%	10.50	Underutilization	*	p < .05	
Native American	0.13%	0.50%	25.32	Underutilization	*	p < .05	
TOTAL MBE	3.53%	24.75%	14.26	Underutilization	*	p < .05	
Nonminority Female	3.48%	8.25%	42.16	Underutilization	*	p < .05	
TOTAL M/WBE	7.01%	33.00%	21.23	Underutilization	*	p < .05	
Non-M/WBE	92.99%	67.00%	138.80	Overutilization			

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table D-5
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Total Utilization, Goods
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2015	Black American	6.57%	6.95%	94.50	Underutilization		
	Asian American	0.00%	0.91%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.36%	0.00	Underutilization	*	
	Native American	0.00%	0.68%	0.00	Underutilization	*	
	TOTAL MBE	6.57%	8.39%	78.28	Underutilization	*	
	Nonminority Female	0.94%	3.63%	25.96	Underutilization	*	
	TOTAL M/WBE	7.51%	12.02%	62.49	Underutilization	*	
	Non-M/WBE	92.49%	87.98%	105.12	Overutilization		
2016	Black American	6.95%	6.95%	100.07	Overutilization		
	Asian American	0.00%	0.91%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.36%	0.00	Underutilization	*	
	Native American	0.00%	0.68%	0.00	Underutilization	*	
	TOTAL MBE	6.95%	8.39%	82.89	Underutilization		
	Nonminority Female	1.03%	3.63%	28.43	Underutilization	*	
	TOTAL M/WBE	7.99%	12.02%	66.45	Underutilization	*	
	Non-M/WBE	92.01%	87.98%	104.58	Overutilization		
2017	Black American	7.32%	6.95%	105.31	Overutilization		
	Asian American	0.00%	0.91%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.36%	0.00	Underutilization	*	
	Native American	0.00%	0.68%	0.00	Underutilization	*	
	TOTAL MBE	7.32%	8.39%	87.23	Underutilization		
	Nonminority Female	1.23%	3.63%	33.94	Underutilization	*	
	TOTAL M/WBE	8.55%	12.02%	71.15	Underutilization	*	
	Non-M/WBE	91.45%	87.98%	103.94	Overutilization		
2018	Black American	7.18%	6.95%	103.28	Overutilization		
	Asian American	0.00%	0.91%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.36%	0.00	Underutilization	*	
	Native American	0.00%	0.68%	0.00	Underutilization	*	
	TOTAL MBE	7.18%	8.39%	85.56	Underutilization		
	Nonminority Female	0.92%	3.63%	25.31	Underutilization	*	
	TOTAL M/WBE	8.10%	12.02%	67.37	Underutilization	*	
	Non-M/WBE	91.90%	87.98%	104.46	Overutilization		
2019	Black American	7.44%	6.95%	107.01	Overutilization		
	Asian American	0.00%	0.91%	0.00	Underutilization	*	
	Hispanic American	0.27%	1.36%	20.02	Underutilization	*	
	Native American	0.00%	0.68%	0.00	Underutilization	*	
	TOTAL MBE	7.71%	8.39%	91.89	Underutilization		
	Nonminority Female	0.64%	3.63%	17.77	Underutilization	*	
	TOTAL M/WBE	8.35%	12.02%	69.51	Underutilization	*	
	Non-M/WBE	91.65%	87.98%	104.16	Overutilization		
Total	Black American	7.12%	6.95%	102.43	Overutilization		
	Asian American	0.00%	0.91%	0.00	Underutilization	*	p < .05
	Hispanic American	0.06%	1.36%	4.72	Underutilization	*	p < .05
	Native American	0.00%	0.68%	0.00	Underutilization	*	Small Number
	TOTAL MBE	7.18%	8.39%	85.61	Underutilization		
	Nonminority Female	0.94%	3.63%	25.85	Underutilization	*	p < .05
	TOTAL M/WBE	8.12%	12.02%	67.57	Underutilization	*	p < .05
	Non-M/WBE	91.88%	87.98%	104.43	Overutilization		

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APPENDIX E

**Prime Disparity Ratios <\$1 Million
City of Milwaukee 2022 Disparity Study
Disparity Analysis of Prime Data (Less than \$ 1 million Contracts)
Distribution of Dollars by Business Ownership and Fiscal Year**

CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table E-1
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Prime Construction (Less than \$1 million Contracts)
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%
2015	Black American	7.37%	24.95%	29.53	Underutilization	*
	Asian American	0.18%	1.13%	15.80	Underutilization	*
	Hispanic American	2.07%	19.14%	10.83	Underutilization	*
	Native American	3.51%	1.88%	187.34	Overutilization	
	TOTAL MBE	13.13%	47.09%	27.89	Underutilization	*
	Nonminority Female	3.91%	8.63%	45.36	Underutilization	*
	TOTAL M/WBE	17.05%	55.72%	30.59	Underutilization	*
	Non-M/WBE	82.95%	44.28%	187.35	Overutilization	
2016	Black American	0.75%	24.95%	3.00	Underutilization	*
	Asian American	0.79%	1.13%	70.00	Underutilization	*
	Hispanic American	3.88%	19.14%	20.29	Underutilization	*
	Native American	2.90%	1.88%	154.33	Overutilization	
	TOTAL MBE	8.32%	47.09%	17.66	Underutilization	*
	Nonminority Female	0.99%	8.63%	11.46	Underutilization	*
	TOTAL M/WBE	9.30%	55.72%	16.70	Underutilization	*
	Non-M/WBE	90.70%	44.28%	204.83	Overutilization	
2017	Black American	1.73%	24.95%	6.94	Underutilization	*
	Asian American	1.97%	1.13%	175.18	Overutilization	
	Hispanic American	1.30%	19.14%	6.78	Underutilization	*
	Native American	5.05%	1.88%	269.01	Overutilization	
	TOTAL MBE	10.05%	47.09%	21.34	Underutilization	*
	Nonminority Female	0.27%	8.63%	3.16	Underutilization	*
	TOTAL M/WBE	10.32%	55.72%	18.52	Underutilization	*
	Non-M/WBE	89.68%	44.28%	202.54	Overutilization	
2018	Black American	2.44%	24.95%	9.78	Underutilization	*
	Asian American	1.40%	1.13%	124.78	Overutilization	
	Hispanic American	4.59%	19.14%	24.00	Underutilization	*
	Native American	4.46%	1.88%	237.69	Overutilization	
	TOTAL MBE	12.90%	47.09%	27.39	Underutilization	*
	Nonminority Female	0.40%	8.63%	4.68	Underutilization	*
	TOTAL M/WBE	13.30%	55.72%	23.87	Underutilization	*
	Non-M/WBE	86.70%	44.28%	195.81	Overutilization	
2019	Black American	5.16%	24.95%	20.69	Underutilization	*
	Asian American	0.52%	1.13%	46.36	Underutilization	*
	Hispanic American	3.52%	19.14%	18.39	Underutilization	*
	Native American	1.46%	1.88%	77.68	Underutilization	*
	TOTAL MBE	10.66%	47.09%	22.64	Underutilization	*
	Nonminority Female	0.14%	8.63%	1.59	Underutilization	*
	TOTAL M/WBE	10.80%	55.72%	19.38	Underutilization	*
	Non-M/WBE	89.20%	44.28%	201.46	Overutilization	
Total	Black American	3.26%	24.95%	13.07	Underutilization	*
	Asian American	0.94%	1.13%	83.19	Underutilization	
	Hispanic American	3.16%	19.14%	16.52	Underutilization	*
	Native American	3.42%	1.88%	182.30	Overutilization	
	TOTAL MBE	10.78%	47.09%	22.89	Underutilization	*
	Nonminority Female	1.19%	8.63%	13.75	Underutilization	*
	TOTAL M/WBE	11.97%	55.72%	21.47	Underutilization	*
	Non-M/WBE	88.03%	44.28%	198.82	Overutilization	

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table E-2
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Prime A&E (Less than \$1 million Contracts)
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2015	Black American	9.89%	13.39%	73.82	Underutilization	*	
	Asian American	1.71%	14.29%	11.97	Underutilization	*	
	Hispanic American	0.00%	2.68%	0.00	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	11.60%	33.93%	34.18	Underutilization	*	
	Nonminority Female	0.68%	18.75%	3.62	Underutilization	*	
	TOTAL M/WBE	12.28%	52.68%	23.30	Underutilization	*	
	Non-M/WBE	87.72%	47.32%	185.38	Overutilization		
2016	Black American	6.07%	13.39%	45.34	Underutilization	*	
	Asian American	0.23%	14.29%	1.59	Underutilization	*	
	Hispanic American	0.00%	2.68%	0.00	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	6.30%	33.93%	18.57	Underutilization	*	
	Nonminority Female	0.00%	18.75%	0.00	Underutilization	*	
	TOTAL M/WBE	6.30%	52.68%	11.96	Underutilization	*	
	Non-M/WBE	93.70%	47.32%	198.01	Overutilization		
2017	Black American	8.46%	13.39%	63.20	Underutilization	*	
	Asian American	1.00%	14.29%	6.98	Underutilization	*	
	Hispanic American	0.00%	2.68%	0.00	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	9.46%	33.93%	27.89	Underutilization	*	
	Nonminority Female	1.19%	18.75%	6.33	Underutilization	*	
	TOTAL M/WBE	10.65%	52.68%	20.22	Underutilization	*	
	Non-M/WBE	89.35%	47.32%	188.82	Overutilization		
2018	Black American	7.36%	13.39%	54.98	Underutilization	*	
	Asian American	0.74%	14.29%	5.18	Underutilization	*	
	Hispanic American	0.00%	2.68%	0.00	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	8.10%	33.93%	23.88	Underutilization	*	
	Nonminority Female	6.86%	18.75%	36.60	Underutilization	*	
	TOTAL M/WBE	14.97%	52.68%	28.41	Underutilization	*	
	Non-M/WBE	85.03%	47.32%	179.69	Overutilization		
2019	Black American	17.54%	13.39%	130.97	Overutilization		
	Asian American	0.09%	14.29%	0.61	Underutilization	*	
	Hispanic American	0.56%	2.68%	20.96	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	18.19%	33.93%	53.61	Underutilization	*	
	Nonminority Female	5.59%	18.75%	29.79	Underutilization	*	
	TOTAL M/WBE	23.78%	52.68%	45.13	Underutilization	*	
	Non-M/WBE	76.22%	47.32%	161.08	Overutilization		
Total	Black American	9.06%	13.39%	67.61	Underutilization	*	p < .05
	Asian American	0.83%	14.29%	5.82	Underutilization	*	p < .05
	Hispanic American	0.06%	2.68%	2.39	Underutilization	*	p < .05
	Native American	0.00%	3.57%	0.00	Underutilization	*	p < .05
	TOTAL MBE	9.95%	33.93%	29.33	Underutilization	*	p < .05
	Nonminority Female	2.01%	18.75%	10.74	Underutilization	*	p < .05
	TOTAL M/WBE	11.96%	52.68%	22.71	Underutilization	*	p < .05
	Non-M/WBE	88.04%	47.32%	186.04	Overutilization		

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table E-3
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Prime Professional Services (Less than \$1 million Contracts)
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2015	Black American	0.00%	16.79%	0.00	Underutilization	*	
	Asian American	0.00%	2.86%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*	
	Native American	0.00%	0.71%	0.00	Underutilization	*	
	TOTAL MBE	0.00%	22.14%	0.00	Underutilization	*	
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	
	TOTAL M/WBE	0.00%	31.79%	0.00	Underutilization	*	
	Non-M/WBE	100.00%	68.21%	146.60	Overutilization		
2016	Black American	0.00%	16.79%	0.00	Underutilization	*	
	Asian American	0.00%	2.86%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*	
	Native American	0.00%	0.71%	0.00	Underutilization	*	
	TOTAL MBE	0.00%	22.14%	0.00	Underutilization	*	
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	
	TOTAL M/WBE	0.00%	31.79%	0.00	Underutilization	*	
	Non-M/WBE	100.00%	68.21%	146.60	Overutilization		
2017	Black American	8.89%	16.79%	52.98	Underutilization	*	
	Asian American	0.00%	2.86%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*	
	Native American	0.00%	0.71%	0.00	Underutilization	*	
	TOTAL MBE	8.89%	22.14%	40.16	Underutilization	*	
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	
	TOTAL M/WBE	8.89%	31.79%	27.98	Underutilization	*	
	Non-M/WBE	91.11%	68.21%	133.56	Overutilization		
2018	Black American	0.00%	16.79%	0.00	Underutilization	*	
	Asian American	0.00%	2.86%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*	
	Native American	0.00%	0.71%	0.00	Underutilization	*	
	TOTAL MBE	0.00%	22.14%	0.00	Underutilization	*	
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	
	TOTAL M/WBE	0.00%	31.79%	0.00	Underutilization	*	
	Non-M/WBE	100.00%	68.21%	146.60	Overutilization		
2019	Black American	0.00%	16.79%	0.00	Underutilization	*	
	Asian American	0.74%	2.86%	26.03	Underutilization	*	
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*	
	Native American	0.00%	0.71%	0.00	Underutilization	*	
	TOTAL MBE	0.74%	22.14%	3.36	Underutilization	*	
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	
	TOTAL M/WBE	0.74%	31.79%	2.34	Underutilization	*	
	Non-M/WBE	99.26%	68.21%	145.51	Overutilization		
Total	Black American	1.25%	16.79%	7.42	Underutilization	*	p < .05
	Asian American	0.09%	2.86%	3.22	Underutilization	*	p < .05
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*	p < .05
	Native American	0.00%	0.71%	0.00	Underutilization	*	p < .05
	TOTAL MBE	1.34%	22.14%	6.04	Underutilization	*	p < .05
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	p < .05
	TOTAL M/WBE	1.34%	31.79%	4.21	Underutilization	*	p < .05
	Non-M/WBE	98.66%	68.21%	144.64	Overutilization		

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table E-4
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Prime Other Services (Less than \$1 million Contracts)
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2015	Black American	0.17%	18.98%	0.90	Underutilization	*	
	Asian American	0.00%	1.49%	0.00	Underutilization	*	
	Hispanic American	0.44%	3.80%	11.51	Underutilization	*	
	Native American	0.00%	0.50%	0.00	Underutilization	*	
	TOTAL MBE	0.61%	24.75%	2.46	Underutilization	*	
	Nonminority Female	1.18%	8.25%	14.34	Underutilization	*	
	TOTAL M/WBE	1.79%	33.00%	5.43	Underutilization	*	
2016	Black American	3.39%	18.98%	17.84	Underutilization	*	
	Asian American	0.00%	1.49%	0.00	Underutilization	*	
	Hispanic American	0.32%	3.80%	8.32	Underutilization	*	
	Native American	0.00%	0.50%	0.00	Underutilization	*	
	TOTAL MBE	3.70%	24.75%	14.95	Underutilization	*	
	Nonminority Female	3.37%	8.25%	40.89	Underutilization	*	
	TOTAL M/WBE	7.07%	33.00%	21.44	Underutilization	*	
2017	Black American	5.99%	18.98%	31.59	Underutilization	*	
	Asian American	0.00%	1.49%	0.00	Underutilization	*	
	Hispanic American	0.10%	3.80%	2.55	Underutilization	*	
	Native American	0.00%	0.50%	0.00	Underutilization	*	
	TOTAL MBE	6.09%	24.75%	24.61	Underutilization	*	
	Nonminority Female	5.17%	8.25%	62.60	Underutilization	*	
	TOTAL M/WBE	11.26%	33.00%	34.11	Underutilization	*	
2018	Black American	3.71%	18.98%	19.56	Underutilization	*	
	Asian American	0.00%	1.49%	0.00	Underutilization	*	
	Hispanic American	0.80%	3.80%	20.95	Underutilization	*	
	Native American	0.00%	0.50%	0.00	Underutilization	*	
	TOTAL MBE	4.51%	24.75%	18.21	Underutilization	*	
	Nonminority Female	3.59%	8.25%	43.52	Underutilization	*	
	TOTAL M/WBE	8.10%	33.00%	24.54	Underutilization	*	
2019	Black American	2.34%	18.98%	12.32	Underutilization	*	
	Asian American	0.00%	1.49%	0.00	Underutilization	*	
	Hispanic American	1.02%	3.80%	26.84	Underutilization	*	
	Native American	0.00%	0.50%	0.00	Underutilization	*	
	TOTAL MBE	3.36%	24.75%	13.56	Underutilization	*	
	Nonminority Female	2.47%	8.25%	29.97	Underutilization	*	
	TOTAL M/WBE	5.83%	33.00%	17.66	Underutilization	*	
Total	Black American	2.93%	18.98%	15.41	Underutilization	*	p < .05
	Asian American	0.00%	1.49%	0.00	Underutilization	*	p < .05
	Hispanic American	0.53%	3.80%	13.88	Underutilization	*	p < .05
	Native American	0.00%	0.50%	0.00	Underutilization	*	p < .05
	TOTAL MBE	3.45%	24.75%	13.95	Underutilization	*	p < .05
	Nonminority Female	3.02%	8.25%	36.62	Underutilization	*	p < .05
	TOTAL M/WBE	6.47%	33.00%	19.61	Underutilization	*	p < .05
	Non-M/WBE	93.53%	67.00%	139.60	Overutilization		

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table E-5
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Prime Goods (Less than \$1 million Contracts)
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2015	Black American	32.94%	6.95%	473.89	Overutilization		
	Asian American	0.00%	0.91%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.36%	0.00	Underutilization	*	
	Native American	0.00%	0.68%	0.00	Underutilization	*	
	TOTAL MBE	32.94%	8.39%	392.55	Overutilization		
	Nonminority Female	0.00%	3.63%	0.00	Underutilization	*	
	TOTAL M/WBE	32.94%	12.02%	274.04	Overutilization		
2016	Black American	0.00%	6.95%	0.00	Underutilization	*	
	Asian American	0.00%	0.91%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.36%	0.00	Underutilization	*	
	Native American	0.00%	0.68%	0.00	Underutilization	*	
	TOTAL MBE	0.00%	8.39%	0.00	Underutilization	*	
	Nonminority Female	0.21%	3.63%	5.75	Underutilization	*	
	TOTAL M/WBE	0.21%	12.02%	1.74	Underutilization	*	
2017	Black American	0.00%	6.95%	0.00	Underutilization	*	
	Asian American	#REF!	0.91%	-	n/a		
	Hispanic American	0.00%	1.36%	0.00	Underutilization	*	
	Native American	0.00%	0.68%	0.00	Underutilization	*	
	TOTAL MBE	2.51%	8.39%	29.90	Underutilization	*	
	Nonminority Female	1.01%	3.63%	27.91	Underutilization	*	
	TOTAL M/WBE	3.52%	12.02%	29.30	Underutilization	*	
2018	Black American	96.48%	87.98%	109.66	Overutilization		
	Asian American	3.45%	6.95%	49.65	Underutilization	*	
	Hispanic American	0.00%	1.36%	0.00	Underutilization	*	
	Native American	0.00%	0.68%	0.00	Underutilization	*	
	TOTAL MBE	3.45%	8.39%	41.13	Underutilization	*	
	Nonminority Female	1.19%	3.63%	32.88	Underutilization	*	
	TOTAL M/WBE	4.64%	12.02%	38.64	Underutilization	*	
2019	Black American	95.36%	87.98%	108.38	Overutilization		
	Asian American	3.84%	6.95%	55.21	Underutilization	*	
	Hispanic American	0.00%	0.91%	0.00	Underutilization	*	
	Native American	0.81%	1.36%	59.17	Underutilization	*	
	TOTAL MBE	4.64%	8.39%	55.33	Underutilization	*	
	Nonminority Female	0.72%	3.63%	19.79	Underutilization	*	
	TOTAL M/WBE	5.36%	12.02%	44.60	Underutilization	*	
Total	Black American	94.64%	87.98%	107.57	Overutilization		
	Asian American	3.91%	6.95%	56.29	Underutilization	*	p < .05
	Hispanic American	0.00%	0.91%	0.00	Underutilization	*	p < .05
	Native American	0.27%	1.36%	19.91	Underutilization	*	p < .05
	TOTAL MBE	4.18%	8.39%	49.86	Underutilization	*	p < .05
	Nonminority Female	0.85%	3.63%	23.29	Underutilization	*	p < .05
	TOTAL M/WBE	5.03%	12.02%	41.84	Underutilization	*	p < .05
Non-M/WBE	94.97%	87.98%	107.94	Overutilization			

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APPENDIX F

**Prime Disparity Ratios <\$500,000:
City of Milwaukee 2022 Disparity Study
Disparity Analysis of Prime Data (Less than \$ 500K Contracts)
Distribution of Dollars by Business Ownership and Fiscal Year**

CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table F-1
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Prime Construction (Less than \$500K Contracts)
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2015	Black American	9.79%	24.95%	39.23	Underutilization	*	
	Asian American	0.35%	1.13%	31.39	Underutilization	*	
	Hispanic American	4.12%	19.14%	21.51	Underutilization	*	
	Native American	3.22%	1.88%	171.41	Overutilization		
	TOTAL MBE	17.48%	47.09%	37.11	Underutilization	*	
	Nonminority Female	0.21%	8.63%	2.39	Underutilization	*	
	TOTAL M/WBE	17.68%	55.72%	31.73	Underutilization	*	
2016	Black American	1.56%	24.95%	6.24	Underutilization	*	
	Asian American	1.64%	1.13%	145.55	Overutilization		
	Hispanic American	4.20%	19.14%	21.96	Underutilization	*	
	Native American	2.54%	1.88%	135.58	Overutilization		
	TOTAL MBE	9.94%	47.09%	21.11	Underutilization	*	
	Nonminority Female	2.06%	8.63%	23.84	Underutilization	*	
	TOTAL M/WBE	12.00%	55.72%	21.53	Underutilization	*	
2017	Black American	3.16%	24.95%	12.66	Underutilization	*	
	Asian American	3.60%	1.13%	319.48	Overutilization		
	Hispanic American	2.37%	19.14%	12.36	Underutilization	*	
	Native American	1.92%	1.88%	102.33	Overutilization		
	TOTAL MBE	11.04%	47.09%	23.44	Underutilization	*	
	Nonminority Female	0.50%	8.63%	5.76	Underutilization	*	
	TOTAL M/WBE	11.54%	55.72%	20.71	Underutilization	*	
2018	Black American	5.70%	24.95%	22.84	Underutilization	*	
	Asian American	3.28%	1.13%	291.37	Overutilization		
	Hispanic American	4.26%	19.14%	22.25	Underutilization	*	
	Native American	3.78%	1.88%	201.27	Overutilization		
	TOTAL MBE	17.01%	47.09%	36.13	Underutilization	*	
	Nonminority Female	0.94%	8.63%	10.93	Underutilization	*	
	TOTAL M/WBE	17.96%	55.72%	32.23	Underutilization	*	
2019	Black American	7.36%	24.95%	29.48	Underutilization	*	
	Asian American	1.54%	1.13%	136.73	Overutilization		
	Hispanic American	10.38%	19.14%	54.23	Underutilization	*	
	Native American	4.30%	1.88%	229.13	Overutilization		
	TOTAL MBE	23.57%	47.09%	50.06	Underutilization	*	
	Nonminority Female	0.41%	8.63%	4.70	Underutilization	*	
	TOTAL M/WBE	23.98%	55.72%	43.03	Underutilization	*	
Total	Black American	5.04%	24.95%	20.20	Underutilization	*	p <.05
	Asian American	2.02%	1.13%	179.67	Overutilization		
	Hispanic American	4.59%	19.14%	24.01	Underutilization	*	p <.05
	Native American	2.99%	1.88%	159.22	Overutilization		
	TOTAL MBE	14.64%	47.09%	31.10	Underutilization	*	p <.05
	Nonminority Female	0.96%	8.63%	11.12	Underutilization	*	p <.05
	TOTAL M/WBE	15.60%	55.72%	28.00	Underutilization	*	p <.05
	Non-M/WBE	84.40%	44.28%	190.60	Overutilization		

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table F-2
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Prime A&E (Less than \$500K Contracts)
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2015	Black American	32.37%	13.39%	241.67	Overutilization		
	Asian American	5.60%	14.29%	39.19	Underutilization	*	
	Hispanic American	0.00%	2.68%	0.00	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	37.96%	33.93%	111.90	Overutilization		
	Nonminority Female	2.22%	18.75%	11.84	Underutilization	*	
	TOTAL M/WBE	40.18%	52.68%	76.28	Underutilization	*	
2016	Black American	19.40%	13.39%	144.87	Overutilization		
	Asian American	0.73%	14.29%	5.09	Underutilization	*	
	Hispanic American	0.00%	2.68%	0.00	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	20.13%	33.93%	59.33	Underutilization	*	
	Nonminority Female	0.00%	18.75%	0.00	Underutilization	*	
	TOTAL M/WBE	20.13%	52.68%	38.21	Underutilization	*	
2017	Black American	12.67%	13.39%	94.60	Underutilization		
	Asian American	1.49%	14.29%	10.45	Underutilization	*	
	Hispanic American	0.00%	2.68%	0.00	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	14.16%	33.93%	41.74	Underutilization	*	
	Nonminority Female	1.78%	18.75%	9.48	Underutilization	*	
	TOTAL M/WBE	15.94%	52.68%	30.26	Underutilization	*	
2018	Black American	25.32%	13.39%	189.09	Overutilization		
	Asian American	2.54%	14.29%	17.81	Underutilization	*	
	Hispanic American	0.00%	2.68%	0.00	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	27.87%	33.93%	82.14	Underutilization		
	Nonminority Female	23.60%	18.75%	125.88	Overutilization		
	TOTAL M/WBE	51.47%	52.68%	97.71	Underutilization		
2019	Black American	31.03%	13.39%	231.71	Overutilization		
	Asian American	0.16%	14.29%	1.09	Underutilization	*	
	Hispanic American	0.99%	2.68%	37.09	Underutilization	*	
	Native American	0.00%	3.57%	0.00	Underutilization	*	
	TOTAL MBE	32.18%	33.93%	94.85	Underutilization		
	Nonminority Female	9.88%	18.75%	52.71	Underutilization	*	
	TOTAL M/WBE	42.06%	52.68%	79.85	Underutilization	*	
Total	Black American	22.21%	13.39%	165.83	Overutilization		
	Asian American	2.04%	14.29%	14.28	Underutilization	*	p < .05
	Hispanic American	0.16%	2.68%	5.87	Underutilization	*	p < .05
	Native American	0.00%	3.57%	0.00	Underutilization	*	p < .05
	TOTAL MBE	24.41%	33.93%	71.93	Underutilization	*	p < .05
	Nonminority Female	4.94%	18.75%	26.34	Underutilization	*	p < .05
	TOTAL M/WBE	29.34%	52.68%	55.71	Underutilization	*	p < .05
	Non-M/WBE	70.66%	47.32%	149.31	Overutilization		

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CITY OF MILWAUKEE 2023 DISPARITY STUDY

Table F-3
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Prime Professional Services (Less than \$500K Contracts)
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2015	Black American	0.00%	16.79%	0.00	Underutilization	*	
	Asian American	0.00%	2.86%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*	
	Native American	0.00%	0.71%	0.00	Underutilization	*	
	TOTAL MBE	0.00%	22.14%	0.00	Underutilization	*	
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	
	TOTAL M/WBE	0.00%	31.79%	0.00	Underutilization	*	
	Non-M/WBE	100.00%	68.21%	146.60	Overutilization		
2016	Black American	0.00%	16.79%	0.00	Underutilization	*	
	Asian American	0.00%	2.86%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*	
	Native American	0.00%	0.71%	0.00	Underutilization	*	
	TOTAL MBE	0.00%	22.14%	0.00	Underutilization	*	
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	
	TOTAL M/WBE	0.00%	31.79%	0.00	Underutilization	*	
	Non-M/WBE	100.00%	68.21%	146.60	Overutilization		
2017	Black American	8.89%	16.79%	52.98	Underutilization	*	
	Asian American	0.00%	2.86%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*	
	Native American	0.00%	0.71%	0.00	Underutilization	*	
	TOTAL MBE	8.89%	22.14%	40.16	Underutilization	*	
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	
	TOTAL M/WBE	8.89%	31.79%	27.98	Underutilization	*	
	Non-M/WBE	91.11%	68.21%	133.56	Overutilization		
2018	Black American	0.00%	16.79%	0.00	Underutilization	*	
	Asian American	0.00%	2.86%	0.00	Underutilization	*	
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*	
	Native American	0.00%	0.71%	0.00	Underutilization	*	
	TOTAL MBE	0.00%	22.14%	0.00	Underutilization	*	
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	
	TOTAL M/WBE	0.00%	31.79%	0.00	Underutilization	*	
	Non-M/WBE	100.00%	68.21%	146.60	Overutilization		
2019	Black American	0.00%	16.79%	0.00	Underutilization	*	
	Asian American	0.74%	2.86%	26.03	Underutilization	*	
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*	
	Native American	0.00%	0.71%	0.00	Underutilization	*	
	TOTAL MBE	0.74%	22.14%	3.36	Underutilization	*	
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	
	TOTAL M/WBE	0.74%	31.79%	2.34	Underutilization	*	
	Non-M/WBE	99.26%	68.21%	145.51	Overutilization		
Total	Black American	1.51%	16.79%	8.98	Underutilization	*	p < .05
	Asian American	0.11%	2.86%	3.90	Underutilization	*	p < .05
	Hispanic American	0.00%	1.79%	0.00	Underutilization	*	p < .05
	Native American	0.00%	0.71%	0.00	Underutilization	*	p < .05
	TOTAL MBE	1.62%	22.14%	7.31	Underutilization	*	p < .05
	Nonminority Female	0.00%	9.64%	0.00	Underutilization	*	p < .05
	TOTAL M/WBE	1.62%	31.79%	5.09	Underutilization	*	p < .05
	Non-M/WBE	98.38%	68.21%	144.22	Overutilization		

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Table F-4
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Prime Other Services (Less than \$500K Contracts)
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance
2015	Black American	0.46%	18.98%	2.41	Underutilization	*	
	Asian American	0.00%	1.49%	0.00	Underutilization	*	
	Hispanic American	1.17%	3.80%	30.76	Underutilization	*	
	Native American	0.00%	0.50%	0.00	Underutilization	*	
	TOTAL MBE	1.63%	24.75%	6.57	Underutilization	*	
	Nonminority Female	3.16%	8.25%	38.32	Underutilization	*	
	TOTAL M/WBE	4.79%	33.00%	14.51	Underutilization	*	
2016	Non-M/WBE	95.21%	67.00%	142.12	Overutilization		
	Black American	6.05%	18.98%	31.90	Underutilization	*	
	Asian American	0.00%	1.49%	0.00	Underutilization	*	
	Hispanic American	0.56%	3.80%	14.88	Underutilization	*	
	Native American	0.00%	0.50%	0.00	Underutilization	*	
	TOTAL MBE	6.62%	24.75%	26.74	Underutilization	*	
	Nonminority Female	6.03%	8.25%	73.11	Underutilization	*	
2017	TOTAL M/WBE	12.65%	33.00%	38.33	Underutilization	*	
	Non-M/WBE	87.35%	67.00%	130.38	Overutilization		
	Black American	10.02%	18.98%	52.79	Underutilization	*	
	Asian American	0.00%	1.49%	0.00	Underutilization	*	
	Hispanic American	0.16%	3.80%	4.25	Underutilization	*	
	Native American	0.00%	0.50%	0.00	Underutilization	*	
	TOTAL MBE	10.18%	24.75%	41.12	Underutilization	*	
2018	Nonminority Female	8.63%	8.25%	104.62	Overutilization		
	TOTAL M/WBE	18.81%	33.00%	57.00	Underutilization	*	
	Non-M/WBE	81.19%	67.00%	121.18	Overutilization		
	Black American	6.01%	18.98%	31.69	Underutilization	*	
	Asian American	0.00%	1.49%	0.00	Underutilization	*	
	Hispanic American	1.29%	3.80%	33.94	Underutilization	*	
	Native American	0.00%	0.50%	0.00	Underutilization	*	
2019	TOTAL MBE	7.30%	24.75%	29.50	Underutilization	*	
	Nonminority Female	5.82%	8.25%	70.50	Underutilization	*	
	TOTAL M/WBE	13.12%	33.00%	39.75	Underutilization	*	
	Non-M/WBE	86.88%	67.00%	129.68	Overutilization		
	Black American	4.20%	18.98%	22.12	Underutilization	*	
	Asian American	0.00%	1.49%	0.00	Underutilization	*	
	Hispanic American	1.83%	3.80%	48.19	Underutilization	*	
2020	Native American	0.00%	0.50%	0.00	Underutilization	*	
	TOTAL MBE	6.03%	24.75%	24.35	Underutilization	*	
	Nonminority Female	4.44%	8.25%	53.82	Underutilization	*	
	TOTAL M/WBE	10.47%	33.00%	31.71	Underutilization	*	
	Non-M/WBE	89.53%	67.00%	133.64	Overutilization		
	Black American	5.52%	18.98%	29.09	Underutilization	*	p < .05
	Asian American	0.00%	1.49%	0.00	Underutilization	*	p < .05
Total	Hispanic American	0.99%	3.80%	26.20	Underutilization	*	p < .05
	Native American	0.00%	0.50%	0.00	Underutilization	*	p < .05
	TOTAL MBE	6.51%	24.75%	26.32	Underutilization	*	p < .05
	Nonminority Female	5.70%	8.25%	69.10	Underutilization	*	p < .05
	TOTAL M/WBE	12.22%	33.00%	37.01	Underutilization	*	p < .05
	Non-M/WBE	87.78%	67.00%	131.03	Overutilization		

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Table F-5
City of Milwaukee Disparity Study
Distribution of Dollars by Business Ownership and Fiscal Year
Prime Goods (Less than \$500K Contracts)
(Using Payment Dollars, FY 2015-2019)

Fiscal Year	Business Ownership	Percent of Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Less than 80%	Statistical Significance	
2015	Black American	32.94%	6.95%	473.89	Overutilization			
	Asian American	0.00%	0.91%	0.00	Underutilization	*		
	Hispanic American	0.00%	1.36%	0.00	Underutilization	*		
	Native American	0.00%	0.68%	0.00	Underutilization	*		
	TOTAL MBE	32.94%	8.39%	392.55	Overutilization			
	Nonminority Female	0.00%	3.63%	0.00	Underutilization	*		
	TOTAL M/WBE	32.94%	12.02%	274.04	Overutilization			
2016	Non-M/WBE	67.06%	87.98%	76.23	Underutilization	*		
	Black American	0.00%	6.95%	0.00	Underutilization	*		
	Asian American	0.00%	0.91%	0.00	Underutilization	*		
	Hispanic American	0.00%	1.36%	0.00	Underutilization	*		
	Native American	0.00%	0.68%	0.00	Underutilization	*		
	TOTAL MBE	0.00%	8.39%	0.00	Underutilization	*		
	Nonminority Female	0.25%	3.63%	6.75	Underutilization	*		
2017	TOTAL M/WBE	0.25%	12.02%	2.04	Underutilization	*		
	Non-M/WBE	99.75%	87.98%	113.38	Overutilization			
	Black American	0.00%	6.95%	0.00	Underutilization	*		
	Asian American	#REF!	0.91%	-	n/a			
	Hispanic American	0.00%	1.36%	0.00	Underutilization	*		
	Native American	0.00%	0.68%	0.00	Underutilization	*		
	TOTAL MBE	3.43%	8.39%	40.85	Underutilization	*		
2018	Nonminority Female	1.38%	3.63%	38.13	Underutilization	*		
	TOTAL M/WBE	4.81%	12.02%	40.03	Underutilization	*		
	Non-M/WBE	95.19%	87.98%	108.19	Overutilization			
	Black American	4.31%	6.95%	62.07	Underutilization	*		
	Asian American	0.00%	0.91%	0.00	Underutilization	*		
	Hispanic American	0.00%	1.36%	0.00	Underutilization	*		
	Native American	0.00%	0.68%	0.00	Underutilization	*		
2019	TOTAL MBE	4.31%	8.39%	51.42	Underutilization	*		
	Nonminority Female	1.49%	3.63%	41.10	Underutilization	*		
	TOTAL M/WBE	5.81%	12.02%	48.30	Underutilization	*		
	Non-M/WBE	94.19%	87.98%	107.06	Overutilization			
	Black American	5.45%	6.95%	78.44	Underutilization	*		
	Asian American	0.00%	0.91%	0.00	Underutilization	*		
	Hispanic American	1.14%	1.36%	84.06	Underutilization	*		
2019	Native American	0.00%	0.68%	0.00	Underutilization	*		
	TOTAL MBE	6.60%	8.39%	78.61	Underutilization	*		
	Nonminority Female	1.02%	3.63%	28.12	Underutilization	*		
	TOTAL M/WBE	7.62%	12.02%	63.37	Underutilization	*		
	Non-M/WBE	92.38%	87.98%	105.00	Overutilization			
	Total	Black American	5.13%	6.95%	73.88	Underutilization	*	p < .05
		Asian American	0.00%	0.91%	0.00	Underutilization	*	p < .05
Hispanic American		0.36%	1.36%	26.13	Underutilization	*	p < .05	
Native American		0.00%	0.68%	0.00	Underutilization	*	p < .05	
TOTAL MBE		5.49%	8.39%	65.44	Underutilization	*	p < .05	
Nonminority Female		1.11%	3.63%	30.57	Underutilization	*	p < .05	
TOTAL M/WBE		6.60%	12.02%	54.91	Underutilization	*	p < .05	
Non-M/WBE	93.40%	87.98%	106.16	Overutilization				

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APPENDIX G

Expanded Regression Analysis: City of Milwaukee 2022 Disparity Study

APPENDIX G: Expanded Regression Analysis

The tables in this Appendix G (Tables 1 through 17) reports additional regression results on marketplace disparities controlling for a variety of capacity factors in the City of Milwaukee (Wisconsin) 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 Milwaukee between SMWDBEs and non-SMWDBEs in the City of Milwaukee Market Area. Our regression analysis enables a determination of whether any observed disparities in public contracting outcomes between SMWDBEs and non-SMWDBEs are not explained by differential capacities for public contracting success with the City of Milwaukee. All 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 Milwaukee, registration status, and firm financial standing. This inclusion of control covariates in our regression specifications permits an assessment of public contracting success/failure conditional on SMWDBE and non-SMWDBE public contracting capacity. The existence of public contracting success disparities between SMWDBEs and non-SMWDBEs— particularly when disaggregating by the racial/ethnic/gender status of owners—even after controlling for capacity suggests that relative to non-SMWDBEs, SMWDBEs face barriers independent of their capacity—or their ability—in securing public contracts and subcontracts with the City of Milwaukee.

Perhaps most indicative of racial/ethnic disparities in public contracting outcomes in the City of Milwaukee Market Area, our results reveal that the likelihood of SMWDBEs that are classified as Minority, and those owned by Black Americans and Asian are more likely to have “never” been a prime contractor or subcontractor relative to non-SMWDBEs over the time period under consideration in our analysis. Firms classified as Women-owned also received, relative to non-SMWDBEs, few prime contracts. This suggests that these type of SMWDBEs face barriers in securing prime contracts and subcontracts from the City of Milwaukee. We also find that in the City of Milwaukee Market area, relative to non-SMWDBEs, the prime bid submission rate for SMWDBEs is no different. This suggests that for these types of SMWDBEs, while interventions to increase prime bid submissions by SMWDBE rate could potentially mitigate public contracting disparities between them and non-SMWDBEs, differential prime bid submission rates may not have any explanatory power. Lastly, we find evidence of perceived private sector discrimination and informal contracting network exclusion being higher for some SMWDBEs. As such, our results are also consistent with observed disparities between SMWDBEs and non-SMWDBEs in securing prime contracts and subcontracts with the City of Milwaukee being driven, at least in part, by discrimination and public contracting network exclusion against SMWDBEs that undermines their ability to secure prime contracts and subcontracts with the City of Milwaukee.

A. Statistical and Econometric Framework

Methodologically, the GSPC statistical and econometric analysis of possible SMWDBE public contracting disparities with the City of Milwaukee utilizes a Categorical Regression Model (CRM) framework.¹ As the

¹ 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.

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

For all the CRM/BRM parameter estimates below, 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.³ 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 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 ≤ .05, which we highlight in bold for all parameter estimates.

We report/discuss in all instances, the effects of the firm minority status indicators on the outcome of interest. The other regressors, while included in the parameter estimates, are not discussed. Their inclusion in the specification are simply to control for unobserved variables that may determine a firm’s capacity, that if omitted, would cause bias in the estimates of the effect of a firm’s minority status. The analytical exposition of the results also focuses on the instances in which the parameter estimates suggest that Small, Minority, and Women owned firms (SMWDBEs) fare worse relative to non-SMWDBEs for the outcomes under consideration.

Our regression strategy also reports on two different specifications of the outcome of interest. The first one

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 $Y_i^* = \mathbf{X}_i \beta + \varepsilon_i$, where \mathbf{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 \mathbf{X} the likelihood/probability that Y_i takes on a particular realization is $Pr(Y_i = m | \mathbf{X}) = \Phi(\tau_m - \mathbf{X}\beta) - \Phi(\tau_{m-1} - \mathbf{X}\beta)$, 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 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.

includes a broad classification of non-white firms as measured by whether or not they are certified and/or deemed as SMWDBEs. 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 SMWDBE and race/ethnicity/gender characteristics of a firm is a possible driver or not of public contracting and other relevant disparities—relative to non-SMWDBEs—in the City of Milwaukee Market Area. In particular, we do not necessarily exposit upon the statistical insignificance of SMWDBE 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 SMWDBEs, or on average, the outcome of interest is a driver of public contracting disparities in the City of Milwaukee market area, and can be at least partially explained by SMWDBE status.

As nonresponse probabilities in the GSPC survey are unknown, we estimate all parameters from our CRM/BRM specifications with standard errors clustered on the firm’s primary line of business classification to minimize/eliminate the bias that can result from the sample being unrepresentative of the population of interest due to nonresponse and clustered selection into MWDBE treatment.⁴ To the extent that clustered standard errors enable consistent estimation of parameters given misspecification that could result from the omission of sampling and nonresponse weights, CRM/BRM parameter estimates with bootstrapped standard errors effects can mitigate/eliminate the bias caused by a sample that may not be fully representative of the population of interest.⁵

B. GSPC Survey of Business Owners Data

Our City of Milwaukee disparity analysis is based on survey data compiled by GSPC, and constitutes a sample of firms from various governmental agencies’ bidder and vendor lists.. The GSPC survey was a questionnaire that captured data on firm and individual owner characteristics, and relevant outcomes in the City of Milwaukee market area during the FY2015 – 2019 time period. The questionnaire was sent to certified firms, prequalified firms, awardees, and subcontractors. Table 1 reports, for the 208 survey responses captured, a statistical summary of the covariates that are relevant to the regression analysis.

⁴ See: Abadie, Alberto, Susan Athey, Guido W. Imbens, and Jeffrey Wooldridge. *When should you adjust standard errors for clustering?*. Working Paper w24003. National Bureau of Economic Research, 2017, Cambridge, M

⁵ See: Abadie, Alberto, Susan Athey, Guido W. Imbens, and Jeffrey Wooldridge. *When should you adjust standard errors for clustering?*. Working Paper w24003. National Bureau of Economic Research, 2017, Cambridge, M

Table 1
Covariate Summary

Covariate	Description	Mean	Standard Deviation	Number of Observations
Firm entered market within past five years	<i>Binary Variable:</i> 1 = yes	.197	.399	208
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	.971	.722	208
Number of prime bids submitted on City of Milwaukee projects	<i>Ordinal Variable:</i> 1 = 0 2 = 1 – 10 3 = 11 – 25 4 = 26 – 50 5 = 51 – 100 6 = Over 100	1.46	.967	208
Number of City of Milwaukee prime contracts awarded between 1/1/15 - 12/31/21	<i>Ordinal Variable:</i> 1 = 0 2 = 1 – 10 3 = 11 – 25 4 = 26 – 50 5 = 51 – 100 6 = Over 100	1.23	.763	208
Number of City of Milwaukee subcontracts awarded between 1/1/15 - 12/31/21	<i>Ordinal Variable:</i> 1 = 0 2 = 1 – 10 3 = 11 – 25 4 = 26 – 50 5 = 51 – 100 6 = Over 100	1.41	.425	208
Did not serve as a contractor or subcontractor on City of Milwaukee projects between 1/1/15 – 12/31/21	<i>Binary Variable:</i> 1 = Yes	.264	.442	208
Firm has experienced private sector discrimination	<i>Binary Variable:</i> 1 = Yes	.452	.499	208
Firm has experienced discrimination at City of Milwaukee	<i>Binary Variable:</i> 1 = Yes	.451	.498	208
Firm owner believes informal networks enables business with City of Milwaukee	<i>Binary Variable:</i> 1 = Yes	.673	.470	208
Owner has more than 20 years of experience	<i>Binary Variable:</i> 1 = Yes	.659	.475	208
Firm has more than 10 employees	<i>Binary Variable:</i> 1 = Yes	.341	.475	208
Firm owner has a baccalaureate/post-graduate degree	<i>Binary Variable:</i> 1 = Yes	.303	.461	208
Firm gross revenue greater than \$1,500,000	<i>Binary Variable:</i> 1 = Yes	.207	.406	208
Firm bonding limit greater than \$1,500,000	<i>Binary Variable:</i> 1 = Yes	.370	.484	208
Financing is a Barrier to Submitting Bids and Securing	<i>Binary Variable:</i> 1 = Yes	.846	.362	208

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Contracts From				
City of Milwaukee				
Firm is in the construction sector	<i>Binary Variable:1 = Yes</i>	.236	.425	208
Firm is registered to do business with City of Milwaukee	<i>Binary Variable:1 = Yes</i>	.587	.494	208
Firm is willing and able to do business with City of Milwaukee as a prime contractor	<i>Binary Variable:1 = Yes</i>	.856	.352	208
Firm is willing and able to do business with City of Milwaukee as a subcontractor	<i>Binary Variable:1 = Yes</i>	.885	.320	208
Firm is a certified Minority Business Enterprise	<i>Binary Variable:1 = Yes</i>	.322	.468	208
Firm is a certified Woman business enterprise	<i>Binary Variable:1 = Yes</i>	.197	.399	208
Firm is a certified Small Business Enterprise	<i>Binary Variable:1 = Yes</i>	.385	.488	208
Firm is a certified Disadvantaged Business Enterprise	<i>Binary Variable:1 = Yes</i>	.274	.447	208
Majority Firm Owner is Black American	<i>Binary Variable:1=Yes</i>	.399	.491	208
Majority Firm Owner is Hispanic American	<i>Binary Variable:1 = Yes</i>	.029	.168	208
Majority Firm Owner is Asian/Pacific Islander	<i>Binary Variable:1 = Yes</i>	.379	.486	208
Majority Firm Owner is Native American	<i>Binary Variable:1 = Yes</i>	.034	.181	208
Majority Firm Owner is Other Race	<i>Binary Variable:1 =Yes</i>	.014	.119	208
Majority Firm Owner is a Woman	<i>Binary Variable:1 = Yes</i>	.509	.501	208

Source: Griffin & Strong, P.C. 2022

C. SMWDBE Status and Firm Entry in the City of Milwaukee Market Area

To determine if SMWDBE status is a barrier to the formation of new businesses in the City of Milwaukee Market Area, Tables 2 - 3 report, for each of the distinct SMWDBEs and owner self-reported race/ethnicity in the GSPC sample, the estimated parameters of a Logit BRM with a binary variable for a firm establishing itself between within the past 5 years as the dependent variable. As standard control covariates we include measures of, or proxies for, the firm’s owner’s experience, the size of the firm having, firm gross revenue, firm bonding status, firm financial standing, whether or not the firm is in the construction/construction services sector, and the education of the firm owner. As a goodness-of-fit measure, Pseudo- R^2 is reported.⁶

The parameter estimates with odds ratio greater than unity in Tables 2 suggest that relative to White American owned firms, certified Minority-owned firms in the City of Milwaukee Market Area are more likely to be new firms. As the excluded group is non-SMWDBEs, 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 certified Minority firms, relative inexperience in the market may at least partially explain

⁶ Pseudo- R^2 is not to be interpreted as the R^2 in standard Ordinary Least Squares (OLS) estimation, as OLS proceeds by minimizing variance to get parameter estimates. Logit specifications are likelihood-based, and higher values of Pseudo- R^2 indicate that the specified model is an increasingly better alternative to a null model with only an intercept.

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disparities in public contracting between them and non-SMWDBEs in the City of Milwaukee Market Area, as tenure in the market also implies similar knowledge/experience about bidding and securing public contracts. When disaggregated by race/gender/ethnicity, the parameter estimates in Table 3 also suggest that relative to White American owned firms, firms owned by Hispanics are more or likely to be new firms. This further suggests that any public contracting disparities between non-SMWDBEs and SMWDBEs can at least in part be explained by differential rates of market experience.

The parameter estimates with odds ratio less than unity in Tables 2 suggest that relative to White American owned firms, certified Disadvantaged firms in the City of Milwaukee Market Area are less likely to be new firms. When disaggregated by race/gender/ethnicity, the parameter estimates in Table 3 also suggest that relative to White American owned firms, firms owned by Hispanics are less likely to be new firms. This further suggests that any public contracting disparities between non-SMWDBEs and firms classified as Disadvantaged and owned by Women cannot be explained by lower of market experience relative to White American owned firms.

Table 2
Logit Parameter Estimates (Odds Ratio):
SMWDBE Status and Firm Entry in the City of Milwaukee Market Area

	Coefficient	P-value
<i>Regression:</i> Firm entered market within past 5 years: (Binary)		
Firm owner has more than 20 years experience: (Binary)	0.1163	0.0000
Firm has more than 10 employees: (Binary)	0.1841	0.0718
Firm owner has a baccalaureate degree: (Binary)	0.9732	0.9589
Firm gross revenue greater than 1.5 million: (Binary)	0.0000	0.9886
Firm Bonding limit greater than 1.5 million: (Binary)	0.3605	0.0403
Financing is a barrier for securing City of Milwaukee projects: (Binary)	1.8088	0.3265
Firm is in the construction sector: (Binary)	0.5927	0.4151
Firm is registered to do business with City of Milwaukee: (Binary)	0.9445	0.9054
Firm is a certified minority business enterprise: (Binary)	7.0706	0.0089
Firm is a certified woman enterprise: (Binary)	0.2947	0.1080
Firm is a certified disadvantaged business enterprise: (Binary)	0.0941	0.0134
Firm is a certified small business enterprise: (Binary)	1.2752	0.6987
Number of Observations	208	
Pseudo R ²	0.3912	

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Table 3
 Logit Parameter Estimates (Odds Ratio):
 Owner Racial/Ethnic Status and Firm Entry in the City of Milwaukee Market Area

	Coefficient	P-value
<i>Regressand</i> : Firm entered market within past 5 years: (Binary)		
Firm owner has more than 20 years' experience: (Binary)	0.1000	0.0000
Firm has more than 10 employees: (Binary)	0.3441	0.0276
Firm owner has a baccalaureate degree: (Binary)	0.9145	0.8744
Firm gross revenue greater than 1.5 million: (Binary)	0.0000	0.9944
Firm Bonding limit greater than 1.5 million: (Binary)	0.2558	0.0157
Financing is a barrier for securing City of Milwaukee projects: (Binary)	1.8652	0.2995
Firm is in the construction sector: (Binary)	0.5168	0.2929
Firm is registered to do business with City of Milwaukee: (Binary)	0.6577	0.3942
Firm is Black-owned: (Binary)	0.7993	0.7922
Firm is Hispanic-owned: (Binary)	5.2419	0.0345
Firm is Asian-owned: (Binary)	2.6945	0.1768
Firm is Native American-owned: (Binary)	4.0481	0.4283
Firm is other race-owned: (Binary)	3.3488	0.4678
Firm is Woman-owned: (Binary)	0.3345	0.0429
Number of Observations	208	
Pseudo R^2	0.3821	

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D. SMWDBE Status and Number of Prime Bid Submissions In the City of Milwaukee Market Area

One reason disparities in public contracting outcomes between SMWDBEs and non-SMWDBEs could exist is that relative to non-SMWDBEs, SMWDBEs 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 Milwaukee 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 Milwaukee between 2015 - 2019 as the dependent variable, for each of the distinct SMWDBEs in the GSPC sample.

The parameter estimates in Tables 4 - 5 indicate that in no instances are the estimated odds ratios statistically significant, implying that relative to non-SMWDBEs, SMWDBEs do not differ with respect to the submission of bids for prime contracts with the City of Milwaukee. This suggests that any disparities in public contracting outcomes between SMWDBEs and non-SMWDBEs in the City of Milwaukee market cannot be explained by SMWDBEs submitting fewer prime contract bids relative to non-SMWDBEs.

Table 4
 Ordinal Logit Parameter Estimates (Odds Ratio):
 SMWDBE Status and Number of Prime Bid Submissions
 In the City of Milwaukee Market Area

	Coefficient	P-value
<i>Regressand</i> : Number of prime bids on City of Milwaukee projects: (Ordinal)		
Firm owner has more than 20 years' experience: (Binary)	1.3175	0.3931
Firm has more than 10 employees: (Binary)	1.7385	0.1789
Firm owner has a baccalaureate degree: (Binary)	1.4079	0.2897
Firm gross revenue greater than 1.5 million: (Binary)	1.8453	0.0375
Firm Bonding limit greater than 1.5 million: (Binary)	0.7060	0.2714
Financing is a barrier for securing City of Milwaukee projects: (Binary)	1.3047	0.0302
Firm is in the construction sector: (Binary)	0.9443	0.8755
Firm is registered to do business with City of Milwaukee: (Binary)	2.1063	0.0226
Firm is a willing/able prime contractor for City of Milwaukee: (Binary)	2.3670	0.0065
Firm is a willing/able subcontractor for City of Milwaukee: (Binary)	0.5654	0.3302
Firm is a certified minority business enterprise: (Binary)	1.4911	0.3168
Firm is a certified woman enterprise: (Binary)	0.5138	0.0927
Firm is a certified disadvantaged business enterprise: (Binary)	2.0974	0.1434
Firm is a certified small business enterprise: (Binary)	0.8272	0.6311
Number of Observations	208	
Pseudo R^2	0.0879	

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Table 5
Ordinal Logit Parameter Estimates (Odds Ratio):
SMWDBE Status and Number of Prime Bid Submissions
In the City of Milwaukee Market Area

	Coefficient	P-value
<i>Regressand:</i> Number of prime bids on City of Milwaukee projects: (Ordinal)		
Firm owner has more than 20 years' experience: (Binary)	1.5404	0.1970
Firm has more than 10 employees: (Binary)	1.3867	0.0417
Firm owner has a baccalaureate degree: (Binary)	1.5316	0.1933
Firm gross revenue greater than 1.5 million: (Binary)	2.1587	0.0962
Firm Bonding limit greater than 1.5 million: (Binary)	0.6233	0.0397
Financing is a barrier for securing City of Milwaukee projects: (Binary)	1.1004	0.0311
Firm is in the construction sector: (Binary)	1.1388	0.7251
Firm is registered to do business with City of Milwaukee: (Binary)	2.2484	0.0116
Firm is a willing/able prime contractor for City of Milwaukee: (Binary)	2.4392	0.1030
Firm is a willing/able subcontractor for City of Milwaukee: (Binary)	0.5977	0.3911
Firm is Black-owned: (Binary)	0.6925	0.4170
Firm is Hispanic-owned: (Binary)	1.0595	0.9517
Firm is Asian-owned: (Binary)	0.9950	0.9916
Firm is Native American-owned: (Binary)	4.0092	0.0794
Firm is other race-owned: (Binary)	0.1346	0.1279
Firm is woman-owned: (Binary)	0.7147	0.2797
Number of Observations	208	
Pseudo R ²	0.0933	

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E. SMWDBE Status and Number of Prime Contracts Awarded In the City of Milwaukee Market Area

To the extent that frequency of public contract bids reflects past experience as a prime contractor, SMWDBEs can potentially become frequent prime contract bidders by actually gaining experience as successful prime contractors. As such, the frequency of prime bids by SMWDBEs 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 Milwaukee Market Area, Tables 6 - 7 report Ordinal Logit BRM parameter estimates where the dependent variable is the number of City of Milwaukee prime contracts awarded to the firm since July 2015.

The estimated odds ratio less than unity with statistical significance in Table 6 suggest that relative to non-SMWDBEs certified Women-owned firms received fewer City of Milwaukee prime contracts since July of 2015. When disaggregating by the race/ethnicity/gender of firm owners in Table 7, relative to non-SMWDBEs, the estimated odds ratio less than unity with statistical significance suggest that firms owned by Women received fewer City of Milwaukee prime contracts since July 2015. To the extent that success in public contracting is proportional to having prior prime awards, the parameter estimates in Tables 6 – 7 suggest that any contracting disparities between non-SMWDBEs and Women-owned firms can possibly be explained by past, and possibly discriminatory constraints on these type of SMWDBEs successfully winning prior prime contracts from the City of Milwaukee, which could translate into future capacity to secure prime contracts.

Table 6
Ordinal Logit Parameter Estimates (Odds Ratio):
SMWDBE Status and Number of Prime Contracts Awarded
In the City of Milwaukee Market Area

	Coefficient	P-value
<i>Regression: # of City of Milwaukee prime contracts awarded since July 2015: (Ordinal)</i>		
Firm owner has more than 20 years' experience: (Binary)	0.7816	0.4830
Firm has more than 10 employees: (Binary)	1.1976	0.7010
Firm owner has a baccalaureate degree: (Binary)	1.0952	0.7912
Firm gross revenue greater than 1.5 million: (Binary)	3.1043	0.0259
Firm Bonding limit greater than 1.5 million: (Binary)	0.7113	0.0225
Financing is a barrier for securing City of Milwaukee projects: (Binary)	1.8269	0.1977
Firm is in the construction sector: (Binary)	1.0224	0.9554
Firm is registered to do business with City of Milwaukee: (Binary)	1.3610	0.3856
Firm is a willing/able prime contractor for City of Milwaukee: (Binary)	1.8756	0.1854
Firm is a certified minority business enterprise: (Binary)	0.7724	0.5501
Firm is a certified woman enterprise: (Binary)	0.4139	0.0383
Firm is a certified disadvantaged business enterprise: (Binary)	4.0293	0.0150
Firm is a certified small business enterprise: (Binary)	0.9184	0.8488
Number of Observations	208	
Pseudo R ²	0.0934	

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Table 7
 Ordinal Logit Parameter Estimates (Odds Ratio):
 SMWDBE Status and Number of Prime Contracts Awarded
 In the City of Milwaukee Market Area

	Coefficient	P-value
<i>Regression: # of City of Milwaukee prime contracts awarded since July 2015: (Ordinal)</i>		
Firm owner has more than 20 years' experience: (Binary)	0.8758	0.7139
Firm has more than 10 employees: (Binary)	0.8697	0.7695
Firm owner has a baccalaureate degree: (Binary)	1.1007	0.7815
Firm gross revenue greater than 1.5 million: (Binary)	3.6778	0.0103
Firm Bonding limit greater than 1.5 million: (Binary)	0.6970	0.2927
Financing is a barrier for securing City of Milwaukee projects: (Binary)	1.6106	0.0436
Firm is in the construction sector: (Binary)	1.3534	0.0390
Firm is registered to do business with City of Milwaukee: (Binary)	1.7601	0.1019
Firm is a willing/able prime contractor for City of Milwaukee: (Binary)	1.9896	0.1498
Firm is Black-owned: (Binary)	1.2625	0.6344
Firm is Hispanic-owned: (Binary)	2.5014	0.3547
Firm is Asian-owned: (Binary)	1.3160	0.5923
Firm is Native American-owned: (Binary)	2.8597	0.2363
Firm is other race-owned: (Binary)	0.3828	0.4797
Firm is woman-owned: (Binary)	0.5908	0.0357
Number of Observations	208	
Pseudo R ²	0.0816	

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F. SMWDBE Status and Number of Subcontracts Awarded In the City of Milwaukee Market Area

To the extent that submitting and winning public contract bids requires experience, SMWDBEs can potentially become more frequent and successful prime contract bidders by acquiring experience by subcontracting with lead, prime firm with City contracts. As such, the low-frequency of prime bid submission and lower likelihood of being a prime contractor by SMWDBEs 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 Milwaukee Market Area, Tables 8 - 9 report Ordinal Logit BRM parameter estimates where the dependent variable is the number of City of Milwaukee subcontracts awarded to the firm between 2015 – 2019.

The estimated odds ratio that are less than unity with statistical significance in Table 8 suggest that relative to non-SMWDBEs, firms certified as Women-owned received fewer City of Milwaukee subcontracts awarded since July of 2015. When disaggregating by the race/ethnicity/gender of firm owners in Table 9, relative to non-SMWDBEs, the estimated odds ratio less than unity with statistical significance suggest that firms owned by Women received fewer City of Milwaukee subcontracts. To the extent that success in public contracting is proportional to having prior subcontracts, the parameter estimates in Tables 8– 9 suggest that any contracting disparities between non-SMWDBEs and Women-owned firms can possibly be explained by past, and possibly discriminatory constraints on subcontracting, which could constrain their future capacity to secure prime contracts.

Table 8
Ordinal Logit Parameter Estimates (Odds Ratio):
SMWDBE Status and Number of Subcontracts Awarded
In the City of Milwaukee Market Area

	Coefficient	P-value
<i>Regression: # of City of Milwaukee subcontracts awarded since July 2015: (Ordinal)</i>		
Firm owner has more than 20 years' experience: (Binary)	0.3166	0.0000
Firm has more than 10 employees: (Binary)	0.6886	0.3378
Firm owner has a baccalaureate degree: (Binary)	0.9710	0.9138
Firm gross revenue greater than 1.5 million: (Binary)	2.4438	0.0417
Firm Bonding limit greater than 1.5 million: (Binary)	0.6692	0.1363
Financing is a barrier for securing City of Milwaukee projects: (Binary)	1.6690	0.1396
Firm is in the construction sector: (Binary)	1.0501	0.8818
Firm is registered to do business with City of Milwaukee: (Binary)	1.1597	0.5812
Firm is a willing/able subcontractor for City of Milwaukee: (Binary)	1.8515	0.1045
Firm is a certified minority business enterprise: (Binary)	0.7810	0.4846
Firm is a certified woman enterprise: (Binary)	0.4342	0.0148
Firm is a certified disadvantaged business enterprise: (Binary)	2.6560	0.0288
Firm is a certified small business enterprise: (Binary)	0.7587	0.4183
Number of Observations	208	
Pseudo R ²	0.0279	

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Table 9
Ordinal Logit Parameter Estimates (Odds Ratio):
Owner Racial/Ethnic Status and Number of Subcontracts Awarded
In the City of Milwaukee Market Area

	Coefficient	P-value
<i>Regression: # of City of Milwaukee subcontracts awarded since July 2015: (Ordinal)</i>		
Firm owner has more than 20 years' experience: (Binary)	0.3119	0.0001
Firm has more than 10 employees: (Binary)	0.6723	0.3093
Firm owner has a baccalaureate degree: (Binary)	1.0892	0.7578
Firm gross revenue greater than 1.5 million: (Binary)	2.8182	0.0264
Firm Bonding limit greater than 1.5 million: (Binary)	0.6924	0.1752
Financing is a barrier for securing City of Milwaukee projects: (Binary)	1.3966	0.3619
Firm is in the construction sector: (Binary)	1.2469	0.4992
Firm is registered to do business with City of Milwaukee: (Binary)	1.1741	0.0438
Firm is a willing/able subcontractor for City of Milwaukee: (Binary)	1.5065	0.2865
Firm is Black-owned: (Binary)	2.7324	0.0160
Firm is Hispanic-owned: (Binary)	2.5414	0.2452
Firm is Asian-owned: (Binary)	3.3696	0.0041
Firm is Native American-owned: (Binary)	2.7848	0.2460
Firm is other race-owned: (Binary)	0.5092	0.5085
Firm is woman-owned: (Binary)	0.6732	0.0281
Number of Observations	208	
Pseudo R ²	0.0301	

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G. SMWDBE Status and Never Serving as Contractor/Subcontractor In the City of Milwaukee Market Area

As the results in Tables 10 - 11 reflect only the effect of SMWDBE status on the number of City of Milwaukee contracts and subcontracts, it may obscure the effects of, and the distribution of, zero outcomes—never having secured a City of Milwaukee contract or subcontract. Tables 10 – 11 report Logit parameter estimates where the dependent variable is whether the firm “never” served since July 2015 as a prime contractor or subcontractor for the City of Milwaukee. The estimated odds ratios that are positive with statistical significance in Table 10 suggest that relative to non-SMWDBEs, certified Minority Business Enterprises, are more likely to have never received a City of Milwaukee prime contract or subcontract. Disaggregating by race/ethnicity/gender, the estimated odds ratios that are positive with statistical significance in Table 11 suggest that firms owned by Black Americans and Asians are more likely to have “never” been a prime

contractor or subcontractor with the City of Milwaukee.⁷ To the extent that success in public contracting is proportional to having prior prime contracts or subcontracts, the parameter estimates in Tables 10 – 11 suggest that any City of Milwaukee public contracting disparities between non-SMWDBEs, and firms certified as Minority, or owned by Black Americans and Asians, can possibly be explained by their relative disadvantage in having secured prior prime contracts or subcontracts from the City of Milwaukee.

Table 10
 Logit Parameter Estimates (Odds Ratio):
 SMWDBE Status and Never Serving as Contractor/Subcontractor
 In the City of Milwaukee Market Area

	Coefficient	P-value
<i>Regression:</i> Served as neither contractor/subcontractor on contract since July 2015: (Binary)		
Firm owner has more than 20 years' experience: (Binary)	0.6165	0.2489
Firm has more than 10 employees: (Binary)	0.3265	0.0764
Firm owner has a baccalaureate degree: (Binary)	1.0071	0.9867
Firm gross revenue greater than 1.5 million: (Binary)	0.5859	0.5175
Firm Bonding limit greater than 1.5 million: (Binary)	1.5362	0.3067
Financing is a barrier for securing City of Milwaukee projects: (Binary)	0.3401	0.0314
Firm is in the construction sector: (Binary)	0.0565	0.0009
Firm is registered to do business with City of Milwaukee: (Binary)	0.8275	0.6410
Firm is a willing/able prime contractor for City of Milwaukee: (Binary)	0.2209	0.0129
Firm is a certified minority business enterprise: (Binary)	1.2634	0.0386
Firm is a certified woman enterprise: (Binary)	1.0610	0.9273
Firm is a certified disadvantaged business enterprise: (Binary)	1.0412	0.9612
Firm is a certified small business enterprise: (Binary)	0.4040	0.1194
Number of Observations	208	
Pseudo R ²	0.3032	

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⁷ As there were missing observations among the covariates for Native American and Other Race owners, this firm ownership category is omitted from the parameter estimates.

Table 11
 Logit Parameter Estimates (Odds Ratio):
 SMWDBE Status and Never Serving as Contractor/Subcontractor
 In the City of Milwaukee Market Area

	Coefficient	P-value
<i>Regression:</i> Served as neither contractor/subcontractor on contract since July 2015: (Binary)		
Firm owner has more than 20 years' experience: (Binary)	0.5818	0.2073
Firm has more than 10 employees: (Binary)	0.3298	0.0786
Firm owner has a baccalaureate degree: (Binary)	1.2965	0.0452
Firm gross revenue greater than 1.5 million: (Binary)	0.5329	0.4474
Firm Bonding limit greater than 1.5 million: (Binary)	1.9811	0.0993
Financing is a barrier for securing City of Milwaukee projects: (Binary)	0.4122	0.0153
Firm is in the construction sector: (Binary)	0.0399	0.0004
Firm is registered to do business with City of Milwaukee: (Binary)	0.5613	0.1501
Firm is a willing/able prime contractor for City of Milwaukee: (Binary)	0.1899	0.0045
Firm is Black-owned: (Binary)	2.6168	0.0397
Firm is Hispanic-owned: (Binary)	0.6680	0.7923
Firm is Asian-owned: (Binary)	4.1870	0.0442
Firm is Native American-owned: (Binary)	0.6960	0.8216
Firm is other race-owned: (Binary)	0.8566	0.9192
Firm is woman-owned: (Binary)	0.5934	0.2158
Number of Observations	208	
Pseudo R ²	0.2758	

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H. SMWDBE Status and Perceived Discrimination at the City of Milwaukee

Disparate contracting and subcontracting outcomes between SMWDBEs and non-SMWDBEs could reflect, at least in part, the effects of discrimination against them by the City of Milwaukee, which conditions their entry into the market, and opportunities for success at the City of Milwaukee.⁸ In Tables 12 – 13, we report Logit parameter estimates of the effects of SMWDBE status on having experienced discrimination—in particular the perception of having experienced discrimination at the City of Milwaukee.

To the extent that perceptions of discrimination correlate positively with actual discrimination at the City of Milwaukee, the absence of odds ratio estimates in Table 12 that are positive with statistical significance

⁸ 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.

suggest that relative to non-SMWDBEs, SMWDBEs do not experience any discrimination with the City of Milwaukee. When disaggregated by the race/ethnicity/gender of firm owners, the positive odds ratio estimates with statistical significance in Table 13 suggest that relative to non-SMWDBEs, firms owned by Black Americans are relatively more likely to experience discrimination by the City of Milwaukee. In general, the parameter estimates suggest that, at least for SMWDBEs owned by Black Americans, City of Milwaukee public contracting disparities may at least in part be explained by perceived discrimination, which could possibly disincentivize prime bid submissions, that lower chances at successfully winning prime contracts at City of Milwaukee.

Table 14
 Logit Parameter Estimates (Odds Ratio):
 SMWDBE Status and Perceived Discrimination at City of Milwaukee

	Coefficient	P-value
<i>Regression:</i> Experienced perceived discrimination at City of Milwaukee: (Binary)		
Firm owner has more than 20 years' experience: (Binary)	1.0074	0.9841
Firm has more than 10 employees: (Binary)	0.9484	0.0138
Firm owner has a baccalaureate degree: (Binary)	1.3093	0.4622
Firm gross revenue greater than 1.5 million: (Binary)	1.6165	0.3907
Firm Bonding limit greater than 1.5 million: (Binary)	1.9096	0.0705
Financing is a barrier for securing City of Milwaukee projects: (Binary)	3.2929	0.0243
Firm is in the construction sector: (Binary)	1.6832	0.2490
Firm is registered to do business with City of Milwaukee: (Binary)	1.4221	0.0284
Firm is a willing/able prime contractor for City of Milwaukee: (Binary)	0.5775	0.2733
Firm is a certified minority business enterprise: (Binary)	0.6810	0.4045
Firm is a certified woman enterprise: (Binary)	1.3063	0.5967
Firm is a certified disadvantaged business enterprise: (Binary)	0.1129	0.0010
Firm is a certified small business enterprise: (Binary)	0.6164	0.2818
Number of Observations	208	
Pseudo R ²	0.2080	

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Table 15
 Logit Parameter Estimates (Odds Ratio):
 SMWDBE Status and Perceived Discrimination at City of Milwaukee

	Coefficient	P-value
<i>Regression: Experienced perceived discrimination at City of Milwaukee: (Binary)</i>		
Firm owner has more than 20 years' experience: (Binary)	0.3339	0.0548
Firm has more than 10 employees: (Binary)	1.1139	0.0362
Firm owner has a baccalaureate degree: (Binary)	0.9280	0.8700
Firm gross revenue greater than 1.5 million: (Binary)	0.5822	0.0399
Firm Bonding limit greater than 1.5 million: (Binary)	0.9969	0.9949
Financing is a barrier for securing City of Milwaukee projects: (Binary)	0.9293	0.9306
Firm is in the construction sector: (Binary)	0.7680	0.6647
Firm is registered to do business with City of Milwaukee: (Binary)	5.3745	0.0052
Firm is a willing/able prime contractor for City of Milwaukee: (Binary)	0.7359	0.6756
Firm is Black-owned: (Binary)	2.8531	0.0207
Firm is Hispanic-owned: (Binary)	1.5418	0.1514
Firm is Asian-owned: (Binary)	2.9251	0.1139
Firm is other race-owned: (Binary)	1.1354	0.0631
Firm is woman-owned: (Binary)	0.8766	0.7623
Number of Observations	153	
Pseudo R ²	0.1706	

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I. SMWDBE Status and Informal Contracting Networks In the Fredrick Market Area

Similar to discrimination at the City of Milwaukee, the existence of informal public contracting networks that confer advantages to insiders in securing public contracts and subcontracts, and exclude SMWDBEs, could possibly have an adverse effect on SMWDBEs ability to secure public contracts and subcontracts with the City of Milwaukee.⁹ To explore the role of such informal networks, Tables 16 - 17 report Logit parameter

⁹ For evidence that shows 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. 1548-1562.

estimates where the dependent variable is if the firm owner agrees that informal networks enable success in public contracting with the City of Milwaukee.

The odd ratio estimates in Table 16 that are positive with statistical significance suggest that relative to non-SMWDBEs, firms certified as Minority are more likely to perceive that informal networks enable contracting success with the City of Milwaukee. When disaggregated by the race/ethnicity/gender of firm owners, the positive odds ratio estimates with statistical significance in Table 17 suggest that relative to non-SMWDBEs, firms owned by Asians and Other Race are more likely to perceive that informal networks enable contracting success with the City of Milwaukee. This suggests that, at least for firms classified as Minority, and firms owned by Asians and Other Race, City of Milwaukee contracting disparities between them and non-SMWDBEs can potentially be explained by their exclusion from the City of Milwaukee public contracting networks that reduces their ability to secure prime contracts and subcontracts.

Table 16
 Logit Parameter Estimates (Odds Ratio):
 SMWDBE Status and Informal Contracting Networks
 In the City of Milwaukee Market Area

	Coefficient	P-value
<i>Regression:</i> Yes, there is an informal network that enables business with City of Milwaukee:		
Firm owner has more than 20 years' experience: (Binary)	0.7674	0.4937
Firm has more than 10 employees: (Binary)	0.3217	0.0150
Firm owner has a baccalaureate degree: (Binary)	1.3681	0.3864
Firm gross revenue greater than 1.5 million: (Binary)	1.2973	0.6049
Firm Bonding limit greater than 1.5 million: (Binary)	0.8214	0.5722
Financing is a barrier for securing City of Milwaukee projects: (Binary)	0.0625	0.0085
Firm is in the construction sector: (Binary)	0.5554	0.1697
Firm is registered to do business with City of Milwaukee: (Binary)	1.0644	0.8695
Firm is a willing/able prime contractor for City of Milwaukee: (Binary)	1.4609	0.4200
Firm is a certified minority business enterprise: (Binary)	1.3836	0.0240
Firm is a certified woman enterprise: (Binary)	1.3557	0.5316
Firm is a certified disadvantaged business enterprise: (Binary)	0.7988	0.7341
Firm is a certified small business enterprise: (Binary)	1.7817	0.2478
Number of Observations	208	
Pseudo R ²	0.1482	

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Table 17
 Logit Parameter Estimates (Odds Ratio):
 SMWDBE Status and Informal Contracting Networks
 In the City of Milwaukee Market Area

	Coefficient	P-value
<i>Regression:</i> Yes, there is an informal network that enables business with City of Milwaukee:		
Firm owner has more than 20 years' experience: (Binary)	0.9173	0.8326
Firm has more than 10 employees: (Binary)	0.4569	0.1003
Firm owner has a baccalaureate degree: (Binary)	1.3497	0.4122
Firm gross revenue greater than 1.5 million: (Binary)	1.2759	0.6310
Firm Bonding limit greater than 1.5 million: (Binary)	0.8780	0.7125
Financing is a barrier for securing City of Milwaukee projects: (Binary)	0.0832	0.0199
Firm is in the construction sector: (Binary)	0.6090	0.0240
Firm is registered to do business with City of Milwaukee: (Binary)	1.0995	0.0136
Firm is a willing/able prime contractor for City of Milwaukee: (Binary)	1.3363	0.5509
Firm is Black-owned: (Binary)	0.9157	0.8565
Firm is Hispanic-owned: (Binary)	3.9087	0.9872
Firm is Asian-owned: (Binary)	1.8915	0.0384
Firm is Native American-owned: (Binary)	0.7399	0.7368
Firm is other race-owned: (Binary)	2.8984	0.0328
Firm is woman-owned: (Binary)	1.3950	0.3513
Number of Observations	208	
Pseudo R ²	0.1670	

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APPENDIX H

Expanded Legal Analysis: City of Milwaukee 2022 Disparity Study

APPENDIX H- Expanded Legal Analysis

Having provided a historical overview of the significance and initial development of disparity studies, the following underscores the legal benefit to such studies should an M/WBE program or initiative be challenged in a court of law. There are several important legal standards and considerations which arise when a constitutional challenge to an M/WBE program is initiated, and each is addressed in turn.

Following this discussion, GSPC provides in this analysis an overview of some of the key aspects of its own Study methodology for gathering and analyzing statistical and anecdotal evidence (which provides the “factual predicate” for any remedial program/policy), and discussion of the underlying legal basis for these methodological features.

A. Equal Protection and Levels 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. S. J. Groves & Sons Company v. Fulton County et al, 920 F.2d 752, 767 (11th Cir. 1991).

When a program or ordinance provides race-based policies or remedies, equal protection considerations are triggered, and the court will apply what is referred to as “strict scrutiny” in evaluating its constitutional legitimacy. When gender-based, the program (or policy) will be reviewed under the less-stringent “intermediate scrutiny” standard, as detailed below.

B. Racial Classifications

“We have held that all racial classifications imposed by government must be analyzed by a reviewing court under strict scrutiny.” Grutter v. Bollinger, 539 U.S. 306, 326 (2003).¹⁰ The Eleventh Circuit previously explained its view of the rationale for this level of judicial review:

Because the [Black Business Enterprise] and [Hispanic Business Enterprise] programs create preferences based on race and ethnicity, the relevant constitutional standard applicable to those programs is the strict scrutiny test articulated in City of Richmond v. J.A. Croson Co., 488 U.S. 469, 109 S.Ct. 706, 102 L.Ed.2d 854 (1989). That test requires a “searching judicial inquiry” into the justification for the preference, because without that kind of close analysis “there is simply no way of determining what classifications are ‘benign’ or ‘remedial’ and what classifications are in fact motivated by illegitimate notions of racial inferiority or simple racial politics.” Id. at 493, 109 S.Ct. at 721. Accordingly, strict scrutiny is designed both to “‘smoke out’ illegitimate uses of race by assuring that the legislative body is pursuing a goal important enough to warrant use of a highly suspect tool” and to “ensure that the means chosen ‘fit’ this compelling goal so closely that there is little

¹⁰ See also Adarand II, 515 U.S. at 212 (same).

or no possibility that the motive for the classification was illegitimate racial prejudice or stereotype.” Id.

Under strict scrutiny, an affirmative action program must be based upon a “compelling governmental interest” and must be “narrowly tailored” to achieve that interest. E.g., Ensley Branch, 31 F.3d at 1564 (citations omitted). As we have observed: In practice, the interest that is alleged in support of racial preferences is almost always the same--remedying past or present discrimination. That interest is widely accepted as compelling. As a result, the true test of an affirmative action program is usually not the nature of the government’s interest, but rather the adequacy of the evidence of discrimination offered to show that interest. Id. at 1565 (citations and internal quotation marks omitted). [Engineering Contractors, 122 F.3d at 906]¹¹

Thus, under strict scrutiny, a racial or ethnic classification must (1) serve a compelling state interest and (2) be narrowly tailored to achieve that interest.¹² These concepts are covered in greater depth below.

C. Gender Classifications

To date, the Seventh Circuit has not definitively ruled on whether programs with gender-based classifications are evaluated for constitutionality under a more relaxed level of scrutiny than race-based ones, i.e., intermediate scrutiny, but it strongly indicated that it sees no logical or legal reason to do so:

Another unresolved issue is whether a different, and specifically a more permissive, standard is applicable to preferential treatment on the basis of sex rather than race or ethnicity. . . . As the court said in the VMI case, “parties who seek to defend gender-based government action must demonstrate and ‘exceedingly persuasive’ justification for that action,” and, realistically, the law can ask no more of race-based remedies either. Engineering Contractors Ass’n creates the paradox that a public agency can provide stronger remedies for sex discrimination than for race discrimination; it is difficult to see what sense that makes. But, since here, as in Milwaukee County Pavers, the County does not argue for a different standard for the minority and women’s set-aside programs, the women’s program must clear the same forum hurdles as the minority program. Neither clears any of them. [Builders Association of Chicago v. County of Cook, 256 F.3d 642, 644-645 (7th Cir. 2001)]

In light of the above, GSPC assumes for the purposes of this Study that any gender-based classification component in a Milwaukee program would be analyzed under a strict scrutiny standard.

¹¹ See also Reynolds v. Alabama D.O.T., 996 F. Supp. 1118, 1127 (M.D. Ala. 1998) (citing Croson).

¹² Id., at 906.

D. Government as Active or Passive Participant in Discrimination

The Supreme Court has uniformly held that general societal discrimination is insufficient to justify the use of race-based measures to satisfy a compelling governmental interest.¹³ Rather, there must be some showing of prior discrimination by the governmental actor involved, either as an “active” or “passive” participant.¹⁴ The upshot of this dual-faceted (active/passive) evaluation of the enacting governmental entity is that, even if the entity did not directly discriminate, it can take corrective action.¹⁵

Subsequent lower court rulings have provided more guidance on passive participation by local governments. For example, in Builders Association of Chicago v. County of Cook, the Seventh Circuit stated as follows:

The County reminds us of the suggestion in Croson that a state or local government might be permitted to adopt a discriminatory remedy if it had been a “passive participant” in the private discrimination against which the remedy is directed. If prime contractors on County projects were discriminating against minorities and this was known to the County, whose funding of the contracts thus knowingly perpetuated the discrimination, the County might be deemed sufficiently complicit (a kind of joint tortfeasor, coconspirator, or aider and abettor) to be entitled to take remedial action. [256 F.3d at 645 (citations omitted)]

In Concrete Works of Colorado, Inc. v. City of Denver, 36 F.3d 1513 (10th Cir. 1994), the Tenth Circuit using similar reasoning 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. [Concrete Works, 36 F.3d at 1529]

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 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.

¹³ Adarand II, 515 U.S. at 227; Croson, 488 U.S. at 496-97.

¹⁴ Croson, 488 U.S. at 498.

¹⁵ Engineering Contractors, 122 F.3d at 907 (“[I]f the County could show that it had essentially become a ‘passive participant’ in a system of racial exclusion practiced by elements of the local construction industry, the Supreme Court has made it clear that the [County] could take affirmative steps to dismantle such a system.”); Croson, 488 U.S. at 492 (“Thus, if the city could show that it had essentially become a ‘passive participant’ in a system of racial exclusion practiced by elements of the local construction industry, we think it clear that the city could take affirmative steps to dismantle such a system.”).

E. Burdens of Production/Proof

As noted above, the Croson 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.¹⁶ Since the Fourteenth Amendment only allows race-conscious programs that narrowly seek to remedy particularized discrimination, the Court held that state and local governments “must identify that discrimination . . . with some specificity before they may use race-conscious relief.” 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.”¹⁷

The initial burden of production on the state or local governmental entity is to demonstrate a “strong basis in evidence” that its race- and gender-conscious contract program is aimed at remedying identified past or present discrimination. Merely stating 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. Thus, the local government must identify the discrimination it seeks to redress and produce particularized findings of discrimination.¹⁸

A governmental entity may, for example, establish an inference of discrimination by using empirical evidence that proves a significant statistical disparity between the number of qualified M/WBEs, the number of M/WBE contractors actually awarded a contract by the governmental entity, or M/WBEs brought in as subcontractors by prime contractors to which a contract is awarded. 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.¹⁹ If the governmental body is able to do this, then the burden shifts to the challenging party to rebut the showing.²⁰

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. Sherbrooke Turf, Inc. v. Minnesota D.O.T., 345 F.3d 964, 971 (8th Cir. 2003) (“Sherbrooke and Gross Seed have the ultimate burden of establishing that the DBE program is not narrowly tailored.”); Geyer Signal, Inc. v. Minnesota D.O.T., 2014 WL 1309092, *26 (D. Minn. 2014) (“The party challenging the constitutionality of the DBE program bears the burden of demonstrating that the government’s evidence did not support an inference of prior discrimination.”).²¹

¹⁶ Croson, 488 U.S. at 498-506.

¹⁷ Croson, 488 U.S. at 500 (quoting Wygant v. Jackson Bd. of Educ., 476 U.S. 267, 277, 106 S.Ct. 1842, 1849 (1986)).

¹⁸ Croson, 488 U.S. at 500-01.

¹⁹ See Concrete Works, 36 F.3d 1513 (10th Cir. 1994).

²⁰ Id.

²¹ Citing Adarand III, 228 F.3d at 1166.

F. “Compelling Public Interest” Considerations

Although imposing a substantial burden, strict scrutiny is not automatically “fatal in fact.” Adarand, 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 “remedying 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) (quoting W.H. Scott Constr. Co. v. City of Jackson, 199 F.3d 206, 218 n. 11 (5th Cir.1999)). [H.B. Rowe Company, Incorporated v. W. Lyndo Tippett, 615 F.3d 233, 241 (4th Cir. 2010)]

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.

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. *See* W.H. Scott Const. Co. v. City of Jackson, 199 F.3d 206, 217 (5th Cir. 1999) (“Combatting racial discrimination is a compelling government interest.”).²²

G. Statistical Data and Anecdotal Evidence Combine to Establish Compelling Interest

The types of evidence routinely presented to show the existence of a compelling interest include statistical and anecdotal evidence.²³ 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 or female business owners, is most useful as a *supplement* to strong statistical evidence, as it cannot carry the burden for the entity by itself. *See infra*.

²² *See also* Croson, 488 U.S. at 492 (“It is beyond dispute that any public entity, state or federal, has a compelling interest in assuring that public dollars, drawn from the tax contributions of all citizens, do not serve to finance the evils of private prejudice.”); Adarand II, 515 U.S. at 237 (“The 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.”).

²³ Croson, 488 U.S. at 501.

For example, the Croson majority implicitly endorsed the value of personal accounts of discrimination, but Croson and subsequent decisions also make clear that selective anecdotal evidence about M/WBE experiences *alone* would not provide an ample basis in evidence to demonstrate public or private discrimination in a municipality's construction industry.²⁴

Thus, 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. In order to carry the day, however, such evidence must be supplemented with strong statistical proof:

As we explained in Ensley Branch, “[c]ertain aspects of this inquiry are well established.” 31 F.3d at 1565. A “strong basis in evidence” cannot rest on “an amorphous claim of societal discrimination, on simple legislative assurances of good intention, or on congressional findings of discrimination in the national economy.” Id. (citing and applying Croson) (internal quotation marks omitted). However, a governmental entity can “justify affirmative action by demonstrating ‘gross statistical disparities’ between the proportion of minorities hired . . . and the proportion of minorities willing and able to do the work.” Id. (citations omitted). “Anecdotal evidence may also be used to document discrimination, especially if buttressed by relevant statistical evidence.” Id. [Engineering Contractors, 122 F.3d at 906-907]²⁵

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.²⁶

²⁴ Croson, 488 U.S. at 480 (noting as a weakness in the City's case that the Richmond City Council heard “no direct evidence of race-conscious 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”); See also Coral Construction Co. v. King County, 941 F.2d 910, 919 (9th Cir. 1991) (“While anecdotal evidence may suffice to prove individual claims of discrimination, rarely, if ever, can such evidence show a systematic pattern of discrimination necessary for the adoption of an affirmative action plan.”).

²⁵ See also id. at 925 (citing Cone Corp. v. Hillsborough, 908 F.2d at 916); Midwest Fence, 840 F.3d at 953 (“Midwest Fence also attacks the anecdotal evidence defendants have offered. For the sake of argument, even if we assume that such anecdotal complaints by themselves could not supply the strong basis in evidence needed to institute a race- or gender-conscious remedy, those complaints here just bolster defendants’ statistical analysis.”).

²⁶ Associated General Contractors of America, San Diego Chapter v. California D.O.T., 713 F.3d 1187, 1196-1197 (9th Cir. 2013) (“AGC contends that the anecdotal evidence has little or no probative value in identifying discrimination because it is not verified. AGC cites to no controlling authority for a verification requirement. Both the Fourth and Tenth Circuits have rejected the need to verify anecdotal evidence.”), citing H.B. Rowe, 615 F.3d at 249; Concrete Works, 321 F.3d at 989. See also Kossman Contracting Co. v. City of Houston, Case No. H-14-1203, at 58 (S.D. Texas 2016) (“Plaintiff criticizes the anecdotal evidence with which NERA supplemented its statistical analysis as not having been verified and investigated. Anecdotes are not the sole or even primary evidence of discrimination in this case. . . . One reason anecdotal evidence is valuable supplemental evidence is that it reaches what statistics cannot: a witness’ narrative of an incident told from the witness’ perspective and including the witness’ perceptions.”) (quotations and citations omitted).

H. Statistical Data Generally

In Croson, the court 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.”²⁷ A predicate to governmental action is a demonstration that gross statistical disparities exist between the proportion of M/WBEs awarded government contracts and the proportion of M/WBEs in the local industry “willing and able to do the work,” in order to justify its use of race-conscious contract measures.²⁸ In other words, a disparity study is intended to evaluate whether there is a statistically-significant disconnect – *i.e.*, disparity – between the availability of and utilization of women- or minority-owned firms in public contracting.

In order to adequately assess statistical evidence, there must be information identifying the basic qualifications of minority (or women) contractors “willing and able to do the job” and a court must determine, based upon these qualifications, the relevant statistical pool with which to make the appropriate statistical comparisons.²⁹

1. Availability

The attempted methods of calculating M/WBE (or DBE) availability have varied from case to case. In Contractors Association of Eastern Pennsylvania v. City of Philadelphia, 6 F.3d 990 (3rd Cir. 1993), the Third Circuit stated that available and qualified minority-owned businesses comprise the “relevant statistical pool” for purposes of determining availability. The Court permitted availability to be based on the metropolitan statistical area (MSA) and local list of the Office of Minority Opportunity for non-M/WBEs, which itself was based on census data.

In Associated General Contractors v. City of Columbus,³⁰ 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. However, the Court found that none of the 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 neither the City Auditor Vendor Payment History file, Subcontractor Participation Reports, or Contract Document Database of the City were attentive to which firms were able to be responsible or provide either a bid bond or performance bond. The Court 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.”³¹

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

²⁷Croson, 488 U.S. at 509.

²⁸ Ensley Branch N.A.A.C.P. v. Seibels, 31 F.3d 1548, 1565 (11th Cir. 1994).

²⁹ See e.g., Northern Contracting, 473 F.3d at 723; Associated General Contractors v. California D.O.T., 713 F.3d at 1197-1199.

³⁰ Associated General Contractors of America v. City of Columbus, 936 F. Supp. 1363 (1996), reversed on related grounds, 172 F.3d 411 (6th Cir. 1999).

³¹ Associated General Contractors, 936 F. Supp. at 1389. The Court also questioned why the City did not simply use the records it already maintains “of all firms which have submitted bids on prime contracts” since it represents “a ready source of information regarding the identity of the firms which are qualified to provide contracting services as prime contractors.” Id.

such work during the study period, and (3) contractors qualified to perform prime construction work on state-funded contracts.”³²

Similarly, in Associated General Contractors v. California D.O.T., the court noted with approval that in the course of conducting its disparity study for Caltrans “[t]he research firm gathered extensive data to calculate disadvantaged business availability in the California transportation contracting industry”[,] and used “public records, interviews and assessments as to whether a firm could be considered available for Caltrans contracts[.]”³³

A common question in collecting and applying availability data is whether prime contractor and subcontractor data needs to be evaluated separately; the trend – including in the Seventh Circuit -- 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. [Northern Contracting, Inc. v. Illinois D.O.T., 473 F.3d 715, 723 (7th Cir. 2007)]³⁴

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.”³⁵ In Kossmann, for example, 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.”³⁶

³² 615 F.3d at 244.

³³ 713 F.3d at 1191-92. Cf. Engineering Contractors, 122 F.3d 895 (when 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).

³⁴ See Associated General Contractors v. California D.O.T., 713 F.3d at 1199 (citing Northern Contracting); Kossmann, at 58 (“Separately considering prime contractors and subcontractors is not only unnecessary but may be misleading. The anecdotal evidence indicates that construction firms had served, on different contracts, as both.”). See also H.B.Rowe, 615 F.3d at 245 (court accepted combined data based on experts’ explanation that prime contractors are also qualified to do subcontracting work, and often do).

³⁵ 473 F.3d at 718. A custom census approach was also cited with approval in Midwest Fence, 840 F.3d at 949-950.

³⁶ Id. at 5. See also Midwest Fence Corp. v. U.S. D.O.T., 840 F.3d at 950 (discussing and approving custom census method).

2. Utilization

Utilization is a natural corollary to 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.

For example, in H.B. Rowe, the state demonstrated statistical disparity using subcontracting dollars won by minority subcontractors.³⁷ 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.³⁸ This is referred to as the rate of utilization. From this point, one could determine if a disparity exists and, if so, to what extent.

In Cone Corp. v. Hillsborough County, 908 F.3d 908 (11th Cir. 1990), 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. [Id. at 915-16]

3. Disparity Indices

Once the statistical data has been collected and preliminarily assessed, further analysis must be done to evaluate whether any disparity identified is statistically significant. Reviewing courts have approved the use of disparity indices and standard deviations for this purpose, and GSPC will be utilizing them in the present Study.

³⁷ 615 F.3d at 241, 250-51 (“[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.”), citing Croson, 488 U.S. at 509, 109 S.Ct. 706.

³⁸ 713 F.3d at 1191-1193. In Kossmann v. City of Houston, NERA used both “award amounts” and “paid amounts” to determine utilization. Id. at 3, n. 10. The court, in approving the statistical proffer, looked only at the award amounts to “simplify matters.” Id.

One way to demonstrate the under-utilization of M/WBEs (or DBEs) in a particular area is to employ a statistical device known as the “disparity index.”³⁹ The use of such an index was explained, and cited approvingly, in H.B. Rowe, 615 F.3d at 243-44. In that case, 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 DBE program, and further, conducted a standard deviation analysis on each of those indices using t-tests.⁴⁰ The resulting calculations “demonstrated marked underutilization of [] African American and Native American subcontractors,” according to the court.⁴¹

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.⁴² Specifically, courts have used these 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.⁴³ 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.⁴⁴ Similarly, the Third Circuit held that a disparity of 0.04 was “probative of discrimination in City contracting in the Philadelphia construction industry.”⁴⁵

4. Standard Deviations

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 M/WBE program in H.B. Rowe.⁴⁶ The Fourth Circuit described the significance of the findings as follows:

³⁹ See Engineering Contractors, 122 F.3d at 914 (“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.”).

⁴⁰ Id. at 244. The disparity index is calculated by dividing the percentage of available M/WBE participation (amount of contract dollars) by the percentage of M/WBEs in the relevant population of local firms. A disparity index of one (1.0) demonstrates full M/WBE participation, whereas the closer the index is to zero, the greater the under-utilization. See Midwest Fence, 840 F.3d at 950 (“A figure below .80 is generally considered solid evidence of systemic under-utilization calling for affirmative action to correct it.”). Some courts multiply the disparity index by 100, thereby creating a scale between 0 and 100, with 100 representing full utilization. Engineering Contractors, 122 F.3d at 914.

⁴¹ Id.

⁴² See Associated General Contractors v. California D.O.T., 713 F.3d at 1191, citing H.B. Rowe; Concrete Works, 36 F.3d at 1523 n. 10 (10th Cir.1994) (employing disparity index); Contractors Ass’n, 6 F.3d at 1005 (3d Cir.1993) (employing disparity index).

⁴³ Id. at 245.

⁴⁴ AGC v. Coal. for Economic Equity, 950 F.2d 1401, 1414 (9th Cir. 1991).

⁴⁵ Contractors Ass’n, 6 F.3d at 1005.

⁴⁶ 615 F.3d at 244-45.

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. [*Id.* at 245]

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.” *Peightal v. Metropolitan Dade County*, 26 F.3d 1545, 1556 (11th Cir. 1994) (quoting *Castaneda v. Partida*, 430 U.S. 482, 497 n.17, 97 S.Ct. 1272, 1281 n.17, (1977)).

5. Regression Analyses

In conducting its statistical analysis of Milwaukee’s purchasing, GSPC will also be employing a regression analysis, which essentially seeks to control for numerous factors *other than discrimination*, e.g., firm size, experience level, which may be causing or contributing to any disparity identified. This aspect of the GSPC methodology likewise has the support of several courts as a current “best practice” for disparity studies.

For example, after the Fourth Circuit in *H.B. Rowe* noted the statistical significance of certain quantitative analyses showing two standard deviations or a disparity ratio higher than .80, it addressed the value of a regression analysis as a further evaluative tool. Specifically, in discussing the disparity evidence offered 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.” [*Id.* at 245-46; 250]

In *Kossman v. City of Houston*, the key feature of the supporting study was an analysis addressing business formation, earnings, and capital markets.⁴⁷ Using both statistical and anecdotal evidence, the study ultimately concluded that “business discrimination against M/WBEs existed in the geographic and industry markets for [the City’s] awarding of construction contracts”:

⁴⁷ *Id.* at pp. 2-10.

[W]e conclude that there is strong evidence of large, adverse, and frequently statistically significant disparities between minority and female participation in business enterprise activity in [Defendant's] relevant market area and the actual current availability of those businesses. **We further conclude that these disparities cannot be explained solely, or even primarily, by difference between M/WBE and non-M/WBE business populations in factors untainted by discrimination, and that these differences therefore give rise to a strong inference of the continued presence of discrimination in [Defendant's] market area.** There is also strong anecdotal evidence of continuing barriers to the full and fair participation of M/WBEs on [Defendant] contracts and subcontracts, despite the implementation of the M/W/SBE Program, and in the wider Houston construction economy. Remedial efforts remain necessary to ensure that Houston does not function as a passive participant in discrimination. [Kossman, at p. 11 (emphasis added)]

The Seventh Circuit also noted favorably the use of a regression analysis in Midwest Fence:

The 2006 NERA study also used regression analysis to assess differences in wages, business-owner earnings, and business formation rates between white men and minorities and women in the wider construction economy. The study found significant disparities remained between white men and other groups, even controlling for various independent variables such as age (as a proxy for experience), education, location, industry affiliation, and time. The disparities, according to NERA, were consistent with a market affected by discrimination.” [840 F.3d at 950-951]

I. Requirement for a Narrowly Tailored Remedy

Under the Croson framework, any race-conscious plan or remedy must also be narrowly tailored to ameliorate the effects of past discrimination on (and only on) the protected groups identified as significantly underutilized in the study. See Michigan Road Builders Ass’n v. Milliken, 834 F.2d 583, 589-90 (6th Cir. 1987).⁴⁸ “Generally, while ‘goals’ are permissible, unyielding preferential ‘quotas’ will normally doom an affirmative action plan.” Virdi v. DeKalb County School District, 135 Fed. Appx. 262 (2005).⁴⁹

The Seventh Circuit addressed the parameters of this requirement in Midwest Fence:

Like the district court, we look to the Paradise factors: (a) “the necessity for the relief and the efficacy of alternative [race-neutral] remedies,” (b) “the flexibility and duration of the relief, including the availability of waiver provisions,” (c) “the relationship of the numerical goals to the relevant labor [or here, contracting] market,” and (d) “the impact of the relief on third parties.” [840 F.3d at 942, 953]⁵⁰

⁴⁸ See also, Midwest Fence, 840 F.3d at 953 (requiring “a close match between the evil against which the remedy is directed and the terms of the remedy”), citing Builders Ass’n of Chicago, 256 F.3d at 646.

⁴⁹ See also Dunnet Bay Construction Co. v. Borggren, 799 F.3d 676, 680 (7th Cir. 2015); Sherbrooke Turf, 345 F.3d at 972 (citing Croson, 488 U.S. at 496).

⁵⁰ Citing United States v. Paradise, 480 U.S. 149, at 171; see also Croson, 488 U.S. at 507-08; Sherbrooke Turf, 345 F.3d at 971-72 (“Narrow tailoring does not require exhaustion of every conceivable race-neutral

Similar guideposts are provided in several post-Croson cases addressing or evaluating 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 to the extent reasonably possible; and
- The program should include provisions or mechanisms for periodic review and sunset.⁵¹

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. Both of these were features of the program ultimately upheld by the Eleventh Circuit in Cone v. Hillsborough County:

The GSC sets goals for each individual project based on the number of *qualified* MBE subcontractors available for each subcontractable area. If there are not at least three qualified MBE subcontractors available for the subcontractable area, no goal is set in that area. In areas where goals are set, no goal may ever exceed fifty percent MBE participation. At any time prior to advertisement of the project, the goals can be waived. A low bidder who does not meet the plan goals still can obtain a contract simply by demonstrating a good-faith effort to find MBE contractors. Even absent such good faith efforts, the contractor may still receive the contract if the next lowest bid is either \$100,000 or fifteen percent higher than the non-responsive bidder. [908 F.2d at 917 (italics in original)]

Lastly, “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. As stated in Builders Ass’n of Chicago:

If a state of local government had in consequence of its former discrimination limited the percentage of minority contractors on public projects to 10 percent, and in the absence of discrimination the percentage would have been 20 percent, the government could not, by way of remedy, establish a minority quota of 50 percent. At least it could not do that indefinitely, so that long after the minorities had caught up, their percentage of contracts would continue to swell, until they ended up with two and a half times (50 percent divided by 20 percent) more contracts than they would have had if the government had never discriminated against them. [256 F.3d at 647]

alternative, but it does require serious, good faith consideration of workable race-neutral alternatives.”); Adarand III, at 1177; Reynolds v. Alabama D.O.T., 996 F. Supp. at 1127.

⁵¹ Sherbrooke Turf, 345 F.3d at 971 (“In determining whether a race-conscious remedy is narrowly tailored, we look to factors such as the efficacy of alternative remedies, the flexibility and duration of the race-conscious remedy, the relationship of the numerical goals to the relevant labor market, and the impact of the remedy on third parties.”).

Similarly, the Fourth Circuit had little problem rejecting a challenged college scholarship program because it had no “sunset” provision.⁵² In H.B. Rowe, however, the Court specifically noted with approval the mandatory review and sunset provisions included in the North Carolina statute at issue in that case.⁵³

J. 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.

In fact, the Court in Kossman recently 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.⁵⁴ 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 legal environment that any M/WBE program or policy implemented by the City of Milwaukee will be evaluated, including in the face of any legal/constitutional challenge.

⁵² Podberesky v. Kirwin, 38 F.3d 147, 160 (4th Cir. 1994) (“The program thus could remain in force indefinitely based on arbitrary statistics unrelated to constitutionally permissible purposes.”).

⁵³ 615 F.3d at 239.

⁵⁴ Id. at pp. 34-49, and 53-62.

TABLE OF CASES AND AUTHORITIES

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- Adarand Constructors, Inc. v. Slater, 228 F.3d 1147 (10th Cir. 2000) (Adarand III)
- Associated General Contractors of America v. City of Columbus, 936 F. Supp. 1363 (1996), reversed on related grounds, 172 F.3d 411 (6th Cir. 1999)
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- Milwaukee County Pavers Assoc. v. Fiedler, 731 F. Supp. 1395 (E.D. Wisc. 1990)
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S. J. Groves & Sons Company v. Fulton County, 920 F.2d 752 (11th Cir. 1991)

Viridi v. DeKalb County School District, 135 Fed. Appx. 262 (2005)

W.H. Scott Const. Co. v. City of Jackson, 199 F.3d 206 (5th Cir. 1999)

Wygant v. Jackson Bd. of Educ., 476 U.S. 267 (1986)

U.S. Const. art. III, § 2, cl. 1

U.S. Const. amend. XIV §1

APPENDIX I

Survey of Business Owners Responses City of Milwaukee 2022 Disparity Study

City of Milwaukee Disparity Study

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>									<i>Total</i>
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Yes	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
No	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 2: Is your firm ready, willing, and able to do business as a prime contractor with City of Milwaukee?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Yes	39 75 %	36 90 %	72 91.1 %	4 66.7 %	6 85.7 %	13 81.2 %	3 100 %	4 100 %	1 100 %	178 85.6 %
No	13 25 %	4 10 %	7 8.9 %	2 33.3 %	1 14.3 %	3 18.8 %	0 0 %	0 0 %	0 0 %	30 14.4 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 3: Is your firm ready, willing, and able to do business as a subcontractor with City of Milwaukee?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Yes	42 80.8 %	34 85 %	76 96.2 %	5 83.3 %	6 85.7 %	13 81.2 %	3 100 %	4 100 %	1 100 %	184 88.5 %
No	10 19.2 %	6 15 %	3 3.8 %	1 16.7 %	1 14.3 %	3 18.8 %	0 0 %	0 0 %	0 0 %	24 11.5 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

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

	<i>Owners' Minority Status</i>									<i>Total</i>
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Construction (including demolition)	14 26.9 %	9 22.5 %	16 20.3 %	2 33.3 %	0 0 %	7 43.8 %	1 33.3 %	0 0 %	0 0 %	49 23.6 %
Architecture & Engineering	3 5.8 %	3 7.5 %	1 1.3 %	1 16.7 %	2 28.6 %	0 0 %	0 0 %	0 0 %	1 100 %	11 5.3 %
Professional Services	15 28.8 %	18 45 %	34 43 %	0 0 %	3 42.9 %	4 25 %	1 33.3 %	1 25 %	0 0 %	76 36.5 %
Other Services	11 21.2 %	7 17.5 %	24 30.4 %	2 33.3 %	1 14.3 %	4 25 %	1 33.3 %	3 75 %	0 0 %	53 25.5 %
Goods	9 17.3 %	3 7.5 %	4 5.1 %	1 16.7 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	0 0 %	19 9.1 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

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

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Under 1 year	0 0 %	2 5 %	5 6.3 %	0 0 %	0 0 %	3 18.8 %	0 0 %	1 25 %	0 0 %	11 5.3 %
1-5 years	5 9.6 %	3 7.5 %	27 34.2 %	2 33.3 %	1 14.3 %	1 6.2 %	1 33.3 %	1 25 %	0 0 %	41 19.7 %
6-10 years	3 5.8 %	9 22.5 %	14 17.7 %	1 16.7 %	1 14.3 %	1 6.2 %	1 33.3 %	1 25 %	0 0 %	31 14.9 %
11-15 years	4 7.7 %	7 17.5 %	9 11.4 %	0 0 %	0 0 %	2 12.5 %	1 33.3 %	0 0 %	0 0 %	23 11.1 %
15-20 years	7 13.5 %	5 12.5 %	12 15.2 %	0 0 %	0 0 %	2 12.5 %	0 0 %	0 0 %	0 0 %	26 12.5 %
Over 20 years	33 63.5 %	14 35 %	12 15.2 %	3 50 %	5 71.4 %	7 43.8 %	0 0 %	1 25 %	1 100 %	76 36.5 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

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

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Yes	0 0 %	40 100 %	53 67.1 %	3 50 %	1 14.3 %	6 37.5 %	1 33.3 %	2 50 %	0 0 %	106 51 %
No	52 100 %	0 0 %	26 32.9 %	3 50 %	6 85.7 %	10 62.5 %	2 66.7 %	2 50 %	1 100 %	102 49 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 7: 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>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
White American	45 86.5 %	38 95 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	83 39.9 %
Black	0 0 %	0 0 %	79 100 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	79 38 %
American Indian or Alaska Native	0 0 %	0 0 %	0 0 %	6 100 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	6 2.9 %
Asian	0 0 %	0 0 %	0 0 %	0 0 %	7 100 %	0 0 %	0 0 %	0 0 %	0 0 %	7 3.4 %
Native Hawaiian or Other Pacific Islander	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
American Hispanic or Latinx	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	15 93.8 %	0 0 %	0 0 %	0 0 %	15 7.2 %
Multi-Racial	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 100 %	0 0 %	0 0 %	3 1.4 %
Bi-Racial	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 75 %	0 0 %	3 1.4 %
Publicly Traded Company	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
Other	7 13.5 %	2 5 %	0 0 %	0 0 %	0 0 %	1 6.2 %	0 0 %	1 25 %	1 100 %	12 5.8 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 8: What is your current single project bonding limit?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
\$100,000 or less	5 9.6 %	3 7.5 %	10 12.7 %	1 16.7 %	0 0 %	1 6.2 %	2 66.7 %	0 0 %	0 0 %	22 10.6 %
\$100,001 - \$250,000	1 1.9 %	2 5 %	5 6.3 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	8 3.8 %
\$250,001 - \$500,000	1 1.9 %	1 2.5 %	2 2.5 %	0 0 %	0 0 %	1 6.2 %	0 0 %	0 0 %	0 0 %	5 2.4 %
\$500,001 - \$750,000	1 1.9 %	0 0 %	0 0 %	0 0 %	0 0 %	1 6.2 %	0 0 %	0 0 %	0 0 %	2 1 %
\$750,001 - \$1,000,000	2 3.8 %	4 10 %	8 10.1 %	1 16.7 %	1 14.3 %	0 0 %	0 0 %	1 25 %	0 0 %	17 8.2 %
\$1,000,001 - \$2,500,000	4 7.7 %	5 12.5 %	10 12.7 %	2 33.3 %	1 14.3 %	2 12.5 %	0 0 %	0 0 %	0 0 %	24 11.5 %
\$2,500,001 - \$5,000,000	4 7.7 %	2 5 %	5 6.3 %	0 0 %	0 0 %	2 12.5 %	0 0 %	0 0 %	0 0 %	13 6.2 %
\$5,000,001 - \$10,000,000	2 3.8 %	1 2.5 %	1 1.3 %	0 0 %	1 14.3 %	2 12.5 %	0 0 %	0 0 %	0 0 %	7 3.4 %
Over \$10 million	3 5.8 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 1.4 %
Don't Know	10 19.2 %	6 15 %	19 24.1 %	0 0 %	0 0 %	3 18.8 %	1 33.3 %	1 25 %	0 0 %	40 19.2 %
Not Applicable	19 36.5 %	16 40 %	19 24.1 %	2 33.3 %	4 57.1 %	4 25 %	0 0 %	2 50 %	1 100 %	67 32.2 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 9: What is the largest single contract your firm has been awarded since January 1, 2015?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
\$25,000 or less	9 17.3 %	8 20 %	18 22.8 %	1 16.7 %	1 14.3 %	0 0 %	3 100 %	0 0 %	0 0 %	40 19.2 %
\$25,001 - \$50,000	2 3.8 %	3 7.5 %	6 7.6 %	1 16.7 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	12 5.8 %
\$50,001 - \$100,000	4 7.7 %	3 7.5 %	6 7.6 %	0 0 %	0 0 %	1 6.2 %	0 0 %	1 25 %	0 0 %	15 7.2 %
\$100,001 - \$250,000	3 5.8 %	3 7.5 %	6 7.6 %	0 0 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	0 0 %	14 6.7 %
\$250,001 - \$500,000	2 3.8 %	3 7.5 %	6 7.6 %	1 16.7 %	0 0 %	1 6.2 %	0 0 %	1 25 %	0 0 %	14 6.7 %
\$500,001 - \$750,000	2 3.8 %	0 0 %	3 3.8 %	0 0 %	1 14.3 %	2 12.5 %	0 0 %	0 0 %	0 0 %	8 3.8 %
\$750,001 - \$1,000,000	1 1.9 %	7 17.5 %	4 5.1 %	0 0 %	1 14.3 %	0 0 %	0 0 %	0 0 %	0 0 %	13 6.2 %
\$1,000,001 - \$2,500,000	4 7.7 %	4 10 %	2 2.5 %	0 0 %	1 14.3 %	3 18.8 %	0 0 %	1 25 %	0 0 %	15 7.2 %
\$2,500,001 - \$5,000,000	6 11.5 %	1 2.5 %	4 5.1 %	1 16.7 %	0 0 %	3 18.8 %	0 0 %	0 0 %	1 100 %	16 7.7 %
\$5,000,001 - \$10,000,000	2 3.8 %	0 0 %	1 1.3 %	1 16.7 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	0 0 %	6 2.9 %
Over \$10 million	3 5.8 %	0 0 %	0 0 %	0 0 %	1 14.3 %	0 0 %	0 0 %	0 0 %	0 0 %	4 1.9 %
Don't Know	3 5.8 %	3 7.5 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	6 2.9 %
Not applicable	11 21.2 %	5 12.5 %	23 29.1 %	1 16.7 %	0 0 %	4 25 %	0 0 %	1 25 %	0 0 %	45 21.6 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 10: Indicate what you have performed as on any public or private contract since January 1, 2015.

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Prime Contractor and Subcontractor	16 30.8 %	18 45 %	33 41.8 %	1 16.7 %	3 42.9 %	7 43.8 %	1 33.3 %	1 25 %	1 100 %	81 38.9 %
Prime Contractor	12 23.1 %	9 22.5 %	13 16.5 %	1 16.7 %	2 28.6 %	3 18.8 %	2 66.7 %	1 25 %	0 0 %	43 20.7 %
Subcontractor	8 15.4 %	6 15 %	5 6.3 %	3 50 %	1 14.3 %	5 31.2 %	0 0 %	1 25 %	0 0 %	29 13.9 %
Neither	16 30.8 %	7 17.5 %	28 35.4 %	1 16.7 %	1 14.3 %	1 6.2 %	0 0 %	1 25 %	0 0 %	55 26.4 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 11: 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>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
None	7 13.5 %	8 20 %	13 16.5 %	0 0 %	0 0 %	2 12.5 %	1 33.3 %	1 25 %	0 0 %	32 15.4 %
1-10	19 36.5 %	17 42.5 %	54 68.4 %	5 83.3 %	2 28.6 %	4 25 %	2 66.7 %	2 50 %	0 0 %	105 50.5 %
11-30	9 17.3 %	11 27.5 %	8 10.1 %	0 0 %	2 28.6 %	6 37.5 %	0 0 %	0 0 %	0 0 %	36 17.3 %
31-50	1 1.9 %	1 2.5 %	2 2.5 %	1 16.7 %	2 28.6 %	2 12.5 %	0 0 %	0 0 %	0 0 %	9 4.3 %
51-75	4 7.7 %	0 0 %	1 1.3 %	0 0 %	0 0 %	0 0 %	0 0 %	1 25 %	0 0 %	6 2.9 %
76-100	4 7.7 %	0 0 %	1 1.3 %	0 0 %	0 0 %	1 6.2 %	0 0 %	0 0 %	0 0 %	6 2.9 %
101-300	8 15.4 %	3 7.5 %	0 0 %	0 0 %	0 0 %	1 6.2 %	0 0 %	0 0 %	1 100 %	13 6.2 %
Over 300	0 0 %	0 0 %	0 0 %	0 0 %	1 14.3 %	0 0 %	0 0 %	0 0 %	0 0 %	1 0.5 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 12: What is the highest level of education completed by any owner of your company? Would you say:

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Some High School	1 1.9 %	0 0 %	0 0 %	0 0 %	0 0 %	2 12.5 %	0 0 %	0 0 %	0 0 %	3 1.4 %
High School graduate	2 3.8 %	2 5 %	1 1.3 %	2 33.3 %	0 0 %	5 31.2 %	0 0 %	0 0 %	0 0 %	12 5.8 %
Some College	7 13.5 %	8 20 %	24 30.4 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	39 18.8 %
College Graduate	22 42.3 %	16 40 %	16 20.3 %	1 16.7 %	0 0 %	4 25 %	1 33.3 %	3 75 %	0 0 %	63 30.3 %
Post Graduate Degree	14 26.9 %	10 25 %	30 38 %	0 0 %	7 100 %	3 18.8 %	1 33.3 %	0 0 %	1 100 %	66 31.7 %
Trade or Technical Certificate	4 7.7 %	4 10 %	8 10.1 %	2 33.3 %	0 0 %	2 12.5 %	1 33.3 %	1 25 %	0 0 %	22 10.6 %
Don't Know	2 3.8 %	0 0 %	0 0 %	1 16.7 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 1.4 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 13: What is the greatest number of years of experience that any owners in your company's line of business have?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
None	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
1-5	0 0 %	1 2.5 %	5 6.3 %	0 0 %	1 14.3 %	1 6.2 %	1 33.3 %	1 25 %	0 0 %	10 4.8 %
6-10	1 1.9 %	4 10 %	12 15.2 %	0 0 %	1 14.3 %	2 12.5 %	0 0 %	0 0 %	0 0 %	20 9.6 %
11-15	2 3.8 %	6 15 %	10 12.7 %	1 16.7 %	0 0 %	1 6.2 %	1 33.3 %	0 0 %	0 0 %	21 10.1 %
16-20	1 1.9 %	2 5 %	12 15.2 %	1 16.7 %	0 0 %	3 18.8 %	1 33.3 %	0 0 %	0 0 %	20 9.6 %
More than 20	48 92.3 %	27 67.5 %	40 50.6 %	4 66.7 %	5 71.4 %	9 56.2 %	0 0 %	3 75 %	1 100 %	137 65.9 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 14: Which of the following categories best approximates your company’s gross revenues for the calendar year 2019. Your best estimate will suffice.

	<i>Owners’ Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
\$100,000 or less	9 17.3 %	11 27.5 %	41 51.9 %	1 16.7 %	1 14.3 %	1 6.2 %	2 66.7 %	2 50 %	0 0 %	68 32.7 %
\$100,001 - \$250,000	6 11.5 %	4 10 %	12 15.2 %	0 0 %	0 0 %	2 12.5 %	1 33.3 %	0 0 %	0 0 %	25 12 %
\$250,001 - \$500,000	3 5.8 %	2 5 %	7 8.9 %	0 0 %	0 0 %	2 12.5 %	0 0 %	0 0 %	0 0 %	14 6.7 %
\$500,001 - \$750,000	2 3.8 %	1 2.5 %	4 5.1 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	7 3.4 %
\$750,001 - \$1,000,000	1 1.9 %	3 7.5 %	2 2.5 %	0 0 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	0 0 %	8 3.8 %
\$1,000,001 - \$1,320,000	3 5.8 %	2 5 %	0 0 %	1 16.7 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	0 0 %	8 3.8 %
\$1,320,001 - \$1,500,000	1 1.9 %	1 2.5 %	1 1.3 %	0 0 %	0 0 %	0 0 %	0 0 %	1 25 %	0 0 %	4 1.9 %
\$1,500,001 - \$5,000,000	4 7.7 %	9 22.5 %	4 5.1 %	1 16.7 %	0 0 %	4 25 %	0 0 %	0 0 %	0 0 %	22 10.6 %
\$5,000,001 - \$10,000,000	3 5.8 %	3 7.5 %	3 3.8 %	0 0 %	2 28.6 %	2 12.5 %	0 0 %	1 25 %	0 0 %	14 6.7 %
\$10,000,001 - \$15,000,000	6 11.5 %	0 0 %	1 1.3 %	0 0 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	0 0 %	9 4.3 %
\$15,000,001 - \$20,000,000	3 5.8 %	1 2.5 %	0 0 %	1 16.7 %	0 0 %	1 6.2 %	0 0 %	0 0 %	0 0 %	6 2.9 %
\$20,000,001 - \$39,500,000	3 5.8 %	0 0 %	0 0 %	0 0 %	1 14.3 %	0 0 %	0 0 %	0 0 %	1 100 %	5 2.4 %
Over \$39,500,000	2 3.8 %	1 2.5 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 1.4 %
Don’t Know	6 11.5 %	2 5 %	4 5.1 %	2 33.3 %	0 0 %	1 6.2 %	0 0 %	0 0 %	0 0 %	15 7.2 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 15: Which of the following categories best approximates your company’s gross revenues for the calendar year 2020. Your best estimate will suffice.

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
\$100,000 or less	10 19.2 %	13 32.5 %	43 54.4 %	1 16.7 %	1 14.3 %	3 18.8 %	2 66.7 %	2 50 %	0 0 %	75 36.1 %
\$100,001 - \$250,000	6 11.5 %	2 5 %	11 13.9 %	0 0 %	0 0 %	1 6.2 %	1 33.3 %	0 0 %	0 0 %	21 10.1 %
\$250,001 - \$500,000	4 7.7 %	3 7.5 %	6 7.6 %	0 0 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	0 0 %	15 7.2 %
\$500,001 - \$750,000	2 3.8 %	0 0 %	5 6.3 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	7 3.4 %
\$750,001 - \$1,000,000	2 3.8 %	2 5 %	3 3.8 %	1 16.7 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	8 3.8 %
\$1,000,001 - \$1,320,000	1 1.9 %	0 0 %	1 1.3 %	1 16.7 %	1 14.3 %	2 12.5 %	0 0 %	1 25 %	0 0 %	7 3.4 %
\$1,320,001 - \$1,500,000	2 3.8 %	5 12.5 %	1 1.3 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	8 3.8 %
\$1,500,001 - \$5,000,000	4 7.7 %	8 20 %	2 2.5 %	1 16.7 %	1 14.3 %	4 25 %	0 0 %	0 0 %	0 0 %	20 9.6 %
\$5,000,001 - \$10,000,000	3 5.8 %	3 7.5 %	3 3.8 %	0 0 %	1 14.3 %	2 12.5 %	0 0 %	1 25 %	0 0 %	13 6.2 %
\$10,000,001 - \$15,000,000	4 7.7 %	1 2.5 %	0 0 %	1 16.7 %	2 28.6 %	2 12.5 %	0 0 %	0 0 %	0 0 %	10 4.8 %
\$15,000,001 - \$20,000,000	3 5.8 %	0 0 %	1 1.3 %	0 0 %	0 0 %	1 6.2 %	0 0 %	0 0 %	0 0 %	5 2.4 %
\$20,000,001 - \$39,500,000	2 3.8 %	1 2.5 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	4 1.9 %
Over \$39,500,000	3 5.8 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 1.4 %
Don't Know	6 11.5 %	2 5 %	3 3.8 %	1 16.7 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	12 5.8 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 16: Is your company registered in E-Notify to receive notifications of procurements from the City of Milwaukee?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Yes	34 65.4 %	20 50 %	59 74.7 %	5 83.3 %	6 85.7 %	10 62.5 %	2 66.7 %	1 25 %	1 100 %	138 66.3 %
No	8 15.4 %	10 25 %	13 16.5 %	0 0 %	1 14.3 %	3 18.8 %	1 33.3 %	2 50 %	0 0 %	38 18.3 %
Not sure	10 19.2 %	10 25 %	7 8.9 %	1 16.7 %	0 0 %	3 18.8 %	0 0 %	1 25 %	0 0 %	32 15.4 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 17: Is your company registered to get notifications or to do business with any other government entity (including but not limited to): State of Wisconsin, Wisconsin DOT, Milwaukee County, etc.?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Yes	30 57.7 %	19 47.5 %	52 65.8 %	4 66.7 %	4 57.1 %	12 75 %	0 0 %	0 0 %	1 100 %	122 58.7 %
No	22 42.3 %	21 52.5 %	27 34.2 %	2 33.3 %	3 42.9 %	4 25 %	3 100 %	4 100 %	0 0 %	86 41.3 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 20: Do not see any benefit in registering.

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	6 75 %	8 80 %	13 100 %	0 0 %	1 100 %	3 100 %	0 0 %	1 50 %	0 0 %	32 84.2 %
Selected	2 25 %	2 20 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	1 50 %	0 0 %	6 15.8 %
<i>Total</i>	8 100 %	10 100 %	13 100 %	0 100 %	1 100 %	3 100 %	1 100 %	2 100 %	0 100 %	38 100 %

Table 21: Do not want to do business with government.

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	7 87.5 %	9 90 %	13 100 %	0 0 %	1 100 %	3 100 %	1 100 %	2 100 %	0 0 %	36 94.7 %
Selected	1 12.5 %	1 10 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 5.3 %
<i>Total</i>	8 100 %	10 100 %	13 100 %	0 100 %	1 100 %	3 100 %	1 100 %	2 100 %	0 100 %	38 100 %

Table 22: Do not want to do business with City of Milwaukee.

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	8 100 %	9 90 %	13 100 %	0 0 %	1 100 %	3 100 %	1 100 %	2 100 %	0 0 %	37 97.4 %
Selected	0 0 %	1 10 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 2.6 %
<i>Total</i>	8 100 %	10 100 %	13 100 %	0 100 %	1 100 %	3 100 %	1 100 %	2 100 %	0 100 %	38 100 %

Table 23: Do not see opportunities in my field of work.

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	7 87.5 %	10 100 %	11 84.6 %	0 0 %	0 0 %	3 100 %	0 0 %	2 100 %	0 0 %	33 86.8 %
Selected	1 12.5 %	0 0 %	2 15.4 %	0 0 %	1 100 %	0 0 %	1 100 %	0 0 %	0 0 %	5 13.2 %
<i>Total</i>	8 100 %	10 100 %	13 100 %	0 100 %	1 100 %	3 100 %	1 100 %	2 100 %	0 100 %	38 100 %

Table 24: Do not believe firm would be awarded contract.

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	6 75 %	9 90 %	11 84.6 %	0 0 %	1 100 %	3 100 %	1 100 %	0 0 %	0 0 %	31 81.6 %
Selected	2 25 %	1 10 %	2 15.4 %	0 0 %	0 0 %	0 0 %	0 0 %	2 100 %	0 0 %	7 18.4 %
<i>Total</i>	8 100 %	10 100 %	13 100 %	0 100 %	1 100 %	3 100 %	1 100 %	2 100 %	0 100 %	38 100 %

Table 25: Other, please specify

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	7 87.5 %	9 90 %	12 92.3 %	0 0 %	1 100 %	2 66.7 %	1 100 %	2 100 %	0 0 %	34 89.5 %
Selected	1 12.5 %	1 10 %	1 7.7 %	0 0 %	0 0 %	1 33.3 %	0 0 %	0 0 %	0 0 %	4 10.5 %
<i>Total</i>	8 100 %	10 100 %	13 100 %	0 100 %	1 100 %	3 100 %	1 100 %	2 100 %	0 100 %	38 100 %

Table 26: From January 1, 2015, through December 31, 2019, how many times has your company submitted bids or proposals for projects as prime contractor on: [City Of Milwaukee Projects]

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
None	26 50 %	25 62.5 %	49 62 %	4 66.7 %	1 14.3 %	8 50 %	2 66.7 %	3 75 %	0 0 %	118 56.7 %
1-10	16 30.8 %	8 20 %	26 32.9 %	1 16.7 %	5 71.4 %	5 31.2 %	1 33.3 %	0 0 %	0 0 %	62 29.8 %
11-25	2 3.8 %	2 5 %	1 1.3 %	0 0 %	0 0 %	1 6.2 %	0 0 %	0 0 %	1 100 %	7 3.4 %
26-50	0 0 %	1 2.5 %	0 0 %	0 0 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	0 0 %	3 1.4 %
51-100	2 3.8 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 1 %
Over 100	1 1.9 %	1 2.5 %	0 0 %	1 16.7 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 1.4 %
Don't Know/NA	5 9.6 %	3 7.5 %	3 3.8 %	0 0 %	0 0 %	1 6.2 %	0 0 %	1 25 %	0 0 %	13 6.2 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 27: From January 1, 2015, through December 31, 2019, how many times has your company been awarded contracts to perform as a prime contractor: [City Of Milwaukee Projects]

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
None	17 32.7 %	20 50 %	41 51.9 %	4 66.7 %	1 14.3 %	7 43.8 %	2 66.7 %	1 25 %	1 100 %	94 45.2 %
1-10	8 15.4 %	7 17.5 %	24 30.4 %	1 16.7 %	0 0 %	1 6.2 %	0 0 %	1 25 %	0 0 %	42 20.2 %
11-25	3 5.8 %	2 5 %	5 6.3 %	1 16.7 %	3 42.9 %	2 12.5 %	0 0 %	0 0 %	0 0 %	16 7.7 %
26-50	3 5.8 %	2 5 %	3 3.8 %	0 0 %	3 42.9 %	0 0 %	0 0 %	0 0 %	0 0 %	11 5.3 %
51-100	4 7.7 %	3 7.5 %	2 2.5 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	9 4.3 %
Over 100	8 15.4 %	4 10 %	2 2.5 %	0 0 %	0 0 %	2 12.5 %	0 0 %	1 25 %	0 0 %	17 8.2 %
Don't Know/NA	9 17.3 %	2 5 %	2 2.5 %	0 0 %	0 0 %	4 25 %	1 33.3 %	1 25 %	0 0 %	19 9.1 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 28: Other Public Sector (non-City of Milwaukee Projects)

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
None	26 50 %	19 47.5 %	49 62 %	4 66.7 %	1 14.3 %	7 43.8 %	2 66.7 %	1 25 %	0 0 %	109 52.4 %
1-10	6 11.5 %	9 22.5 %	24 30.4 %	1 16.7 %	2 28.6 %	3 18.8 %	0 0 %	2 50 %	0 0 %	47 22.6 %
11-25	1 1.9 %	2 5 %	2 2.5 %	0 0 %	4 57.1 %	2 12.5 %	0 0 %	0 0 %	0 0 %	11 5.3 %
26-50	5 9.6 %	2 5 %	1 1.3 %	1 16.7 %	0 0 %	1 6.2 %	0 0 %	0 0 %	0 0 %	10 4.8 %
51-100	2 3.8 %	2 5 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	4 1.9 %
Over 100	2 3.8 %	4 10 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	7 3.4 %
Don't Know/NA	10 19.2 %	2 5 %	3 3.8 %	0 0 %	0 0 %	3 18.8 %	1 33.3 %	1 25 %	0 0 %	20 9.6 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 29: From January 1, 2015, through December 31, 2019, how many times has your company submitted bids or proposals for projects as a subcontractor on: [City Of Milwaukee Public Projects]

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
None	31 59.6 %	29 72.5 %	61 77.2 %	4 66.7 %	4 57.1 %	10 62.5 %	2 66.7 %	3 75 %	0 0 %	144 69.2 %
1-10	10 19.2 %	7 17.5 %	14 17.7 %	1 16.7 %	2 28.6 %	5 31.2 %	1 33.3 %	0 0 %	1 100 %	41 19.7 %
11-25	1 1.9 %	0 0 %	0 0 %	0 0 %	1 14.3 %	0 0 %	0 0 %	0 0 %	0 0 %	2 1 %
26-50	1 1.9 %	1 2.5 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 1 %
51-100	2 3.8 %	0 0 %	0 0 %	1 16.7 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 1.4 %
Over 100	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
Don't Know/NA	7 13.5 %	3 7.5 %	4 5.1 %	0 0 %	0 0 %	1 6.2 %	0 0 %	1 25 %	0 0 %	16 7.7 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 30: From January 1, 2015, through December 31, 2019, how many times has your company been awarded contracts to perform as a subcontractor: [City Of Milwaukee Public Projects]

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
None	20 38.5 %	19 47.5 %	47 59.5 %	4 66.7 %	1 14.3 %	8 50 %	3 100 %	1 25 %	1 100 %	104 50 %
1-10	8 15.4 %	7 17.5 %	16 20.3 %	2 33.3 %	3 42.9 %	2 12.5 %	0 0 %	1 25 %	0 0 %	39 18.8 %
11-25	2 3.8 %	1 2.5 %	7 8.9 %	0 0 %	1 14.3 %	0 0 %	0 0 %	0 0 %	0 0 %	11 5.3 %
26-50	3 5.8 %	6 15 %	4 5.1 %	0 0 %	1 14.3 %	0 0 %	0 0 %	0 0 %	0 0 %	14 6.7 %
51-100	1 1.9 %	2 5 %	0 0 %	0 0 %	0 0 %	1 6.2 %	0 0 %	0 0 %	0 0 %	4 1.9 %
Over 100	9 17.3 %	2 5 %	2 2.5 %	0 0 %	0 0 %	1 6.2 %	0 0 %	1 25 %	0 0 %	15 7.2 %
Don't Know/NA	9 17.3 %	3 7.5 %	3 3.8 %	0 0 %	1 14.3 %	4 25 %	0 0 %	1 25 %	0 0 %	21 10.1 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 31: Other Public Sector (non-City of Milwaukee Projects)

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
None	26 50 %	21 52.5 %	55 69.6 %	4 66.7 %	1 14.3 %	8 50 %	2 66.7 %	3 75 %	0 0 %	120 57.7 %
1-10	4 7.7 %	7 17.5 %	16 20.3 %	1 16.7 %	4 57.1 %	3 18.8 %	0 0 %	0 0 %	0 0 %	35 16.8 %
11-25	8 15.4 %	1 2.5 %	3 3.8 %	1 16.7 %	1 14.3 %	0 0 %	0 0 %	0 0 %	0 0 %	14 6.7 %
26-50	2 3.8 %	4 10 %	0 0 %	0 0 %	0 0 %	2 12.5 %	0 0 %	0 0 %	1 100 %	9 4.3 %
51-100	1 1.9 %	2 5 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 1.4 %
Over 100	1 1.9 %	2 5 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 1.4 %
Don't Know/NA	10 19.2 %	3 7.5 %	5 6.3 %	0 0 %	1 14.3 %	3 18.8 %	1 33.3 %	1 25 %	0 0 %	24 11.5 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 32: City of Milwaukee Public Projects

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
None	30 57.7 %	28 70 %	59 74.7 %	3 50 %	3 42.9 %	7 43.8 %	3 100 %	2 50 %	0 0 %	135 64.9 %
1-10	10 19.2 %	5 12.5 %	13 16.5 %	1 16.7 %	3 42.9 %	4 25 %	0 0 %	1 25 %	1 100 %	38 18.3 %
11-25	1 1.9 %	2 5 %	3 3.8 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	6 2.9 %
26-50	4 7.7 %	1 2.5 %	0 0 %	0 0 %	1 14.3 %	2 12.5 %	0 0 %	0 0 %	0 0 %	8 3.8 %
51-100	0 0 %	1 2.5 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 0.5 %
Over 100	0 0 %	2 5 %	1 1.3 %	2 33.3 %	0 0 %	1 6.2 %	0 0 %	0 0 %	0 0 %	6 2.9 %
Don't Know/NA	7 13.5 %	1 2.5 %	3 3.8 %	0 0 %	0 0 %	2 12.5 %	0 0 %	1 25 %	0 0 %	14 6.7 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 33: Private Sector Projects

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
None	23 44.2 %	22 55 %	51 64.6 %	3 50 %	2 28.6 %	8 50 %	3 100 %	2 50 %	1 100 %	115 55.3 %
1-10	5 9.6 %	5 12.5 %	17 21.5 %	1 16.7 %	1 14.3 %	1 6.2 %	0 0 %	1 25 %	0 0 %	31 14.9 %
11-25	2 3.8 %	3 7.5 %	5 6.3 %	2 33.3 %	1 14.3 %	0 0 %	0 0 %	0 0 %	0 0 %	13 6.2 %
26-50	6 11.5 %	4 10 %	1 1.3 %	0 0 %	0 0 %	1 6.2 %	0 0 %	0 0 %	0 0 %	12 5.8 %
51-100	1 1.9 %	0 0 %	1 1.3 %	0 0 %	1 14.3 %	0 0 %	0 0 %	0 0 %	0 0 %	3 1.4 %
Over 100	7 13.5 %	5 12.5 %	2 2.5 %	0 0 %	2 28.6 %	3 18.8 %	0 0 %	0 0 %	0 0 %	19 9.1 %
Don't Know/NA	8 15.4 %	1 2.5 %	2 2.5 %	0 0 %	0 0 %	3 18.8 %	0 0 %	1 25 %	0 0 %	15 7.2 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 34: Other Public Sector (non-City of Milwaukee Projects)

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
None	27 51.9 %	23 57.5 %	53 67.1 %	3 50 %	2 28.6 %	7 43.8 %	3 100 %	3 75 %	0 0 %	121 58.2 %
1-10	7 13.5 %	7 17.5 %	18 22.8 %	1 16.7 %	2 28.6 %	3 18.8 %	0 0 %	0 0 %	0 0 %	38 18.3 %
11-25	4 7.7 %	0 0 %	2 2.5 %	0 0 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	0 0 %	8 3.8 %
26-50	3 5.8 %	4 10 %	1 1.3 %	1 16.7 %	2 28.6 %	0 0 %	0 0 %	0 0 %	0 0 %	11 5.3 %
51-100	1 1.9 %	1 2.5 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	3 1.4 %
Over 100	1 1.9 %	4 10 %	1 1.3 %	1 16.7 %	0 0 %	2 12.5 %	0 0 %	0 0 %	0 0 %	9 4.3 %
Don't Know/NA	9 17.3 %	1 2.5 %	4 5.1 %	0 0 %	0 0 %	3 18.8 %	0 0 %	1 25 %	0 0 %	18 8.7 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 35: City of Milwaukee Public Projects

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
None	32 61.5 %	28 70 %	68 86.1 %	3 50 %	3 42.9 %	8 50 %	3 100 %	2 50 %	0 0 %	147 70.7 %
1-10	11 21.2 %	6 15 %	6 7.6 %	1 16.7 %	3 42.9 %	5 31.2 %	0 0 %	1 25 %	1 100 %	34 16.3 %
11-25	1 1.9 %	0 0 %	1 1.3 %	0 0 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	0 0 %	4 1.9 %
26-50	1 1.9 %	1 2.5 %	0 0 %	1 16.7 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 1.4 %
51-100	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
Over 100	0 0 %	2 5 %	1 1.3 %	1 16.7 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	4 1.9 %
Don't Know/NA	7 13.5 %	3 7.5 %	3 3.8 %	0 0 %	0 0 %	2 12.5 %	0 0 %	1 25 %	0 0 %	16 7.7 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 36: Private Sector Projects

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
None	22 42.3 %	21 52.5 %	53 67.1 %	3 50 %	2 28.6 %	8 50 %	3 100 %	2 50 %	1 100 %	115 55.3 %
1-10	8 15.4 %	7 17.5 %	15 19 %	2 33.3 %	1 14.3 %	1 6.2 %	0 0 %	1 25 %	0 0 %	35 16.8 %
11-25	3 5.8 %	3 7.5 %	2 2.5 %	1 16.7 %	2 28.6 %	1 6.2 %	0 0 %	0 0 %	0 0 %	12 5.8 %
26-50	4 7.7 %	2 5 %	2 2.5 %	0 0 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	0 0 %	10 4.8 %
51-100	1 1.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 0.5 %
Over 100	6 11.5 %	5 12.5 %	2 2.5 %	0 0 %	1 14.3 %	2 12.5 %	0 0 %	0 0 %	0 0 %	16 7.7 %
Don't Know/NA	8 15.4 %	2 5 %	5 6.3 %	0 0 %	0 0 %	3 18.8 %	0 0 %	1 25 %	0 0 %	19 9.1 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 37: Other Public Sector (non-City of Milwaukee Projects)

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
None	27 51.9 %	24 60 %	59 74.7 %	3 50 %	2 28.6 %	8 50 %	3 100 %	3 75 %	0 0 %	129 62 %
1-10	7 13.5 %	6 15 %	12 15.2 %	1 16.7 %	4 57.1 %	3 18.8 %	0 0 %	0 0 %	0 0 %	33 15.9 %
11-25	5 9.6 %	3 7.5 %	2 2.5 %	1 16.7 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	11 5.3 %
26-50	2 3.8 %	2 5 %	1 1.3 %	0 0 %	1 14.3 %	0 0 %	0 0 %	0 0 %	1 100 %	7 3.4 %
51-100	1 1.9 %	0 0 %	0 0 %	1 16.7 %	0 0 %	1 6.2 %	0 0 %	0 0 %	0 0 %	3 1.4 %
Over 100	1 1.9 %	3 7.5 %	0 0 %	0 0 %	0 0 %	1 6.2 %	0 0 %	0 0 %	0 0 %	5 2.4 %
Don't Know/NA	9 17.3 %	2 5 %	5 6.3 %	0 0 %	0 0 %	3 18.8 %	0 0 %	1 25 %	0 0 %	20 9.6 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 38: 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 firm obtaining work on projects for the City of Milwaukee? (Check all that apply) [Pre-qualification requirements]

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	45 86.5 %	30 75 %	63 79.7 %	5 83.3 %	4 57.1 %	14 87.5 %	2 66.7 %	2 50 %	1 100 %	166 79.8 %
Selected	7 13.5 %	10 25 %	16 20.3 %	1 16.7 %	3 42.9 %	2 12.5 %	1 33.3 %	2 50 %	0 0 %	42 20.2 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 39: Performance bond requirements

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	48 92.3 %	36 90 %	67 84.8 %	4 66.7 %	7 100 %	16 100 %	2 66.7 %	2 50 %	1 100 %	183 88 %
Selected	4 7.7 %	4 10 %	12 15.2 %	2 33.3 %	0 0 %	0 0 %	1 33.3 %	2 50 %	0 0 %	25 12 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 40: Excessive paperwork

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	38 73.1 %	27 67.5 %	53 67.1 %	3 50 %	5 71.4 %	12 75 %	3 100 %	3 75 %	0 0 %	144 69.2 %
Selected	14 26.9 %	13 32.5 %	26 32.9 %	3 50 %	2 28.6 %	4 25 %	0 0 %	1 25 %	1 100 %	64 30.8 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 41: Bid bond requirements

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	46 88.5 %	36 90 %	63 79.7 %	4 66.7 %	7 100 %	16 100 %	2 66.7 %	2 50 %	1 100 %	177 85.1 %
Selected	6 11.5 %	4 10 %	16 20.3 %	2 33.3 %	0 0 %	0 0 %	1 33.3 %	2 50 %	0 0 %	31 14.9 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 42: Financing

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	50 96.2 %	39 97.5 %	57 72.2 %	5 83.3 %	7 100 %	15 93.8 %	1 33.3 %	1 25 %	1 100 %	176 84.6 %
Selected	2 3.8 %	1 2.5 %	22 27.8 %	1 16.7 %	0 0 %	1 6.2 %	2 66.7 %	3 75 %	0 0 %	32 15.4 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 43: Insurance requirements

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	48 92.3 %	35 87.5 %	72 91.1 %	5 83.3 %	6 85.7 %	15 93.8 %	2 66.7 %	1 25 %	1 100 %	185 88.9 %
Selected	4 7.7 %	5 12.5 %	7 8.9 %	1 16.7 %	1 14.3 %	1 6.2 %	1 33.3 %	3 75 %	0 0 %	23 11.1 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 44: Bid specifications

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	46 88.5 %	36 90 %	68 86.1 %	6 100 %	7 100 %	15 93.8 %	3 100 %	1 25 %	1 100 %	183 88 %
Selected	6 11.5 %	4 10 %	11 13.9 %	0 0 %	0 0 %	1 6.2 %	0 0 %	3 75 %	0 0 %	25 12 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 45: Lack of access to competitive supplier pricing

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	48 92.3 %	34 85 %	60 75.9 %	3 50 %	7 100 %	14 87.5 %	3 100 %	2 50 %	1 100 %	172 82.7 %
Selected	4 7.7 %	6 15 %	19 24.1 %	3 50 %	0 0 %	2 12.5 %	0 0 %	2 50 %	0 0 %	36 17.3 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 46: Limited time given to prepare bid package or quote

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	47 90.4 %	31 77.5 %	62 78.5 %	4 66.7 %	5 71.4 %	10 62.5 %	3 100 %	3 75 %	0 0 %	165 79.3 %
Selected	5 9.6 %	9 22.5 %	17 21.5 %	2 33.3 %	2 28.6 %	6 37.5 %	0 0 %	1 25 %	1 100 %	43 20.7 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 47: Limited knowledge of purchasing/contracting policies and procedures

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	45 86.5 %	32 80 %	62 78.5 %	6 100 %	6 85.7 %	13 81.2 %	3 100 %	3 75 %	1 100 %	171 82.2 %
Selected	7 13.5 %	8 20 %	17 21.5 %	0 0 %	1 14.3 %	3 18.8 %	0 0 %	1 25 %	0 0 %	37 17.8 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 48: Language Barriers

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	52 100 %	40 100 %	77 97.5 %	5 83.3 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	205 98.6 %
Selected	0 0 %	0 0 %	2 2.5 %	1 16.7 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 1.4 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 49: Lack of experience

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	51 98.1 %	35 87.5 %	74 93.7 %	6 100 %	7 100 %	14 87.5 %	1 33.3 %	3 75 %	1 100 %	192 92.3 %
Selected	1 1.9 %	5 12.5 %	5 6.3 %	0 0 %	0 0 %	2 12.5 %	2 66.7 %	1 25 %	0 0 %	16 7.7 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 50: Lack of personnel

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	49 94.2 %	38 95 %	73 92.4 %	6 100 %	6 85.7 %	16 100 %	2 66.7 %	2 50 %	0 0 %	192 92.3 %
Selected	3 5.8 %	2 5 %	6 7.6 %	0 0 %	1 14.3 %	0 0 %	1 33.3 %	2 50 %	1 100 %	16 7.7 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 51: Contract too large

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	50 96.2 %	34 85 %	69 87.3 %	5 83.3 %	7 100 %	15 93.8 %	2 66.7 %	2 50 %	1 100 %	185 88.9 %
Selected	2 3.8 %	6 15 %	10 12.7 %	1 16.7 %	0 0 %	1 6.2 %	1 33.3 %	2 50 %	0 0 %	23 11.1 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 52: Contract too expensive to bid

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	49 94.2 %	38 95 %	69 87.3 %	4 66.7 %	7 100 %	15 93.8 %	2 66.7 %	2 50 %	1 100 %	187 89.9 %
Selected	3 5.8 %	2 5 %	10 12.7 %	2 33.3 %	0 0 %	1 6.2 %	1 33.3 %	2 50 %	0 0 %	21 10.1 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 53: Selection process

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	45 86.5 %	36 90 %	59 74.7 %	6 100 %	6 85.7 %	15 93.8 %	3 100 %	4 100 %	0 0 %	174 83.7 %
Selected	7 13.5 %	4 10 %	20 25.3 %	0 0 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	1 100 %	34 16.3 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 54: Not a Union Member

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	44 84.6 %	37 92.5 %	63 79.7 %	3 50 %	7 100 %	12 75 %	2 66.7 %	3 75 %	1 100 %	172 82.7 %
Selected	8 15.4 %	3 7.5 %	16 20.3 %	3 50 %	0 0 %	4 25 %	1 33.3 %	1 25 %	0 0 %	36 17.3 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 55: Not certified

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	48 92.3 %	38 95 %	65 82.3 %	5 83.3 %	7 100 %	16 100 %	1 33.3 %	2 50 %	1 100 %	183 88 %
Selected	4 7.7 %	2 5 %	14 17.7 %	1 16.7 %	0 0 %	0 0 %	2 66.7 %	2 50 %	0 0 %	25 12 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 56: Unfair competition with large firms

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	44 84.6 %	32 80 %	50 63.3 %	1 16.7 %	6 85.7 %	12 75 %	2 66.7 %	3 75 %	1 100 %	151 72.6 %
Selected	8 15.4 %	8 20 %	29 36.7 %	5 83.3 %	1 14.3 %	4 25 %	1 33.3 %	1 25 %	0 0 %	57 27.4 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 57: None of the above

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	31 59.6 %	27 67.5 %	62 78.5 %	6 100 %	4 57.1 %	10 62.5 %	3 100 %	3 75 %	1 100 %	147 70.7 %
Selected	21 40.4 %	13 32.5 %	17 21.5 %	0 0 %	3 42.9 %	6 37.5 %	0 0 %	1 25 %	0 0 %	61 29.3 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 58: What is the amount of time that it typically takes to receive payment from the date you submit your invoice with a valid purchase order number listed, from City of Milwaukee for your services on City of Milwaukee projects?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Less than 30 days	2 9.5 %	3 27.3 %	2 11.1 %	0 0 %	0 0 %	1 16.7 %	1 100 %	0 0 %	0 0 %	9 14.1 %
30-59 days	8 38.1 %	4 36.4 %	8 44.4 %	2 100 %	2 66.7 %	3 50 %	0 0 %	0 0 %	0 0 %	27 42.2 %
60-89 days	2 9.5 %	1 9.1 %	2 11.1 %	0 0 %	1 33.3 %	1 16.7 %	0 0 %	0 0 %	1 100 %	8 12.5 %
90-119 days	1 4.8 %	0 0 %	1 5.6 %	0 0 %	0 0 %	1 16.7 %	0 0 %	0 0 %	0 0 %	3 4.7 %
120 days or more	1 4.8 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 1.6 %
Don't Know/NA	7 33.3 %	3 27.3 %	5 27.8 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	0 0 %	16 25 %
Total	21 100 %	11 100 %	18 100 %	2 100 %	3 100 %	6 100 %	1 100 %	1 100 %	1 100 %	64 100 %

Table 59: 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 City of Milwaukee projects?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Less than 30 days	1 5 %	3 25 %	1 9.1 %	0 0 %	0 0 %	2 25 %	0 0 %	0 0 %	0 0 %	7 11.5 %
30-59 days	8 40 %	2 16.7 %	5 45.5 %	0 0 %	1 25 %	3 37.5 %	0 0 %	1 50 %	0 0 %	20 32.8 %
60-89 days	2 10 %	2 16.7 %	2 18.2 %	3 100 %	0 0 %	1 12.5 %	0 0 %	0 0 %	0 0 %	10 16.4 %
90-119 days	1 5 %	1 8.3 %	0 0 %	0 0 %	1 25 %	1 12.5 %	0 0 %	0 0 %	0 0 %	4 6.6 %
120 days or more	1 5 %	0 0 %	0 0 %	0 0 %	0 0 %	1 12.5 %	0 0 %	0 0 %	1 100 %	3 4.9 %
Don't Know/NA	7 35 %	4 33.3 %	3 27.3 %	0 0 %	2 50 %	0 0 %	0 0 %	1 50 %	0 0 %	17 27.9 %
Total	20 100 %	12 100 %	11 100 %	3 100 %	4 100 %	8 100 %	0 100 %	2 100 %	1 100 %	61 100 %

Table 60: Is your company a certified Minority, Woman, Disadvantaged or Small business?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Yes	13 25 %	21 52.5 %	54 68.4 %	5 83.3 %	6 85.7 %	13 81.2 %	2 66.7 %	2 50 %	0 0 %	116 55.8 %
No	39 75 %	19 47.5 %	25 31.6 %	1 16.7 %	1 14.3 %	3 18.8 %	1 33.3 %	2 50 %	1 100 %	92 44.2 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 61: What is your certification? (Check all that apply) [MBE (Minority Business Enterprise)]

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Yes	0 0 %	0 0 %	41 75.9 %	5 100 %	6 100 %	12 92.3 %	2 100 %	1 50 %	0 0 %	67 57.8 %
No	11 84.6 %	15 71.4 %	8 14.8 %	0 0 %	0 0 %	1 7.7 %	0 0 %	0 0 %	0 0 %	35 30.2 %
N/A	2 15.4 %	6 28.6 %	5 9.3 %	0 0 %	0 0 %	0 0 %	0 0 %	1 50 %	0 0 %	14 12.1 %
Total	13 100 %	21 100 %	54 100 %	5 100 %	6 100 %	13 100 %	2 100 %	2 100 %	0 100 %	116 100 %

Table 62: WBE (Women Business Enterprise)

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Yes	0 0 %	16 76.2 %	20 37 %	2 40 %	1 16.7 %	1 7.7 %	1 50 %	0 0 %	0 0 %	41 35.3 %
No	11 84.6 %	4 19 %	27 50 %	2 40 %	5 83.3 %	9 69.2 %	1 50 %	1 50 %	0 0 %	60 51.7 %
N/A	2 15.4 %	1 4.8 %	7 13 %	1 20 %	0 0 %	3 23.1 %	0 0 %	1 50 %	0 0 %	15 12.9 %
Total	13 100 %	21 100 %	54 100 %	5 100 %	6 100 %	13 100 %	2 100 %	2 100 %	0 100 %	116 100 %

Table 63: DBE (Disadvantaged Business Enterprise)

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Yes	1 7.7 %	8 38.1 %	32 59.3 %	3 60 %	3 50 %	8 61.5 %	1 50 %	1 50 %	0 0 %	57 49.1 %
No	9 69.2 %	8 38.1 %	16 29.6 %	2 40 %	3 50 %	3 23.1 %	1 50 %	0 0 %	0 0 %	42 36.2 %
N/A	3 23.1 %	5 23.8 %	6 11.1 %	0 0 %	0 0 %	2 15.4 %	0 0 %	1 50 %	0 0 %	17 14.7 %
Total	13 100 %	21 100 %	54 100 %	5 100 %	6 100 %	13 100 %	2 100 %	2 100 %	0 100 %	116 100 %

Table 64: SBE (Small Business Enterprise)

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Yes	11 84.6 %	16 76.2 %	34 63 %	5 100 %	4 66.7 %	8 61.5 %	1 50 %	1 50 %	0 0 %	80 69 %
No	1 7.7 %	4 19 %	13 24.1 %	0 0 %	2 33.3 %	4 30.8 %	1 50 %	0 0 %	0 0 %	25 21.6 %
N/A	1 7.7 %	1 4.8 %	7 13 %	0 0 %	0 0 %	1 7.7 %	0 0 %	1 50 %	0 0 %	11 9.5 %
Total	13 100 %	21 100 %	54 100 %	5 100 %	6 100 %	13 100 %	2 100 %	2 100 %	0 100 %	116 100 %

Table 65: Other, please specify

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Yes	1 10 %	3 25 %	12 33.3 %	1 33.3 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	17 24.3 %
No	2 20 %	4 33.3 %	9 25 %	0 0 %	1 100 %	3 50 %	0 0 %	0 0 %	0 0 %	19 27.1 %
N/A	7 70 %	5 41.7 %	15 41.7 %	2 66.7 %	0 0 %	3 50 %	1 100 %	1 100 %	0 0 %	34 48.6 %
Total	10 100 %	12 100 %	36 100 %	3 100 %	1 100 %	6 100 %	1 100 %	1 100 %	0 100 %	70 100 %

Table 66: Why is your company not certified as a Minority, Woman, Disadvantaged or Small business? (Please check all that apply) [I do not understand the certification process]

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	35 89.7 %	16 84.2 %	13 52 %	1 100 %	1 100 %	2 66.7 %	1 100 %	2 100 %	1 100 %	72 78.3 %
Selected	4 10.3 %	3 15.8 %	12 48 %	0 0 %	0 0 %	1 33.3 %	0 0 %	0 0 %	0 0 %	20 21.7 %
Total	39 100 %	19 100 %	25 100 %	1 100 %	1 100 %	3 100 %	1 100 %	2 100 %	1 100 %	92 100 %

Table 67: We do not meet one or more of the requirements for certification

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	11 28.2 %	17 89.5 %	24 96 %	0 0 %	1 100 %	2 66.7 %	1 100 %	1 50 %	0 0 %	57 62 %
Selected	28 71.8 %	2 10.5 %	1 4 %	1 100 %	0 0 %	1 33.3 %	0 0 %	1 50 %	1 100 %	35 38 %
<i>Total</i>	39 100 %	19 100 %	25 100 %	1 100 %	1 100 %	3 100 %	1 100 %	2 100 %	1 100 %	92 100 %

Table 68: Certification is too expensive

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	39 100 %	18 94.7 %	22 88 %	1 100 %	1 100 %	3 100 %	1 100 %	2 100 %	1 100 %	88 95.7 %
Selected	0 0 %	1 5.3 %	3 12 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	4 4.3 %
<i>Total</i>	39 100 %	19 100 %	25 100 %	1 100 %	1 100 %	3 100 %	1 100 %	2 100 %	1 100 %	92 100 %

Table 69: I do not want governmental agencies to have information about my company

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	39 100 %	16 84.2 %	25 100 %	1 100 %	0 0 %	3 100 %	1 100 %	2 100 %	1 100 %	88 95.7 %
Selected	0 0 %	3 15.8 %	0 0 %	0 0 %	1 100 %	0 0 %	0 0 %	0 0 %	0 0 %	4 4.3 %
<i>Total</i>	39 100 %	19 100 %	25 100 %	1 100 %	1 100 %	3 100 %	1 100 %	2 100 %	1 100 %	92 100 %

Table 70: I have not had time to get certified/the process is too time-consuming

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	38 97.4 %	12 63.2 %	20 80 %	1 100 %	1 100 %	2 66.7 %	0 0 %	1 50 %	1 100 %	76 82.6 %
Selected	1 2.6 %	7 36.8 %	5 20 %	0 0 %	0 0 %	1 33.3 %	1 100 %	1 50 %	0 0 %	16 17.4 %
<i>Total</i>	39 100 %	19 100 %	25 100 %	1 100 %	1 100 %	3 100 %	1 100 %	2 100 %	1 100 %	92 100 %

Table 71: Certification does not benefit and/or will negatively impact my company

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	38 97.4 %	19 100 %	24 96 %	1 100 %	1 100 %	3 100 %	1 100 %	2 100 %	1 100 %	90 97.8 %
Selected	1 2.6 %	0 0 %	1 4 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 2.2 %
<i>Total</i>	39 100 %	19 100 %	25 100 %	1 100 %	1 100 %	3 100 %	1 100 %	2 100 %	1 100 %	92 100 %

Table 72: Do not understand how certification can benefit my firm.

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	34 87.2 %	11 57.9 %	13 52 %	1 100 %	1 100 %	2 66.7 %	0 0 %	2 100 %	1 100 %	65 70.7 %
Selected	5 12.8 %	8 42.1 %	12 48 %	0 0 %	0 0 %	1 33.3 %	1 100 %	0 0 %	0 0 %	27 29.3 %
<i>Total</i>	39 100 %	19 100 %	25 100 %	1 100 %	1 100 %	3 100 %	1 100 %	2 100 %	1 100 %	92 100 %

Table 73: Between January 1, 2015, through December 31, 2019, did your company apply and receive any of the following? [Business start-up loan?]

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Never Applied	49 94.2 %	39 97.5 %	69 87.3 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	194 93.3 %
Applied, Never Approved	2 3.8 %	1 2.5 %	9 11.4 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	12 5.8 %
Applied, Some Approved	1 1.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 0.5 %
Applied, All Approved	0 0 %	0 0 %	1 1.3 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 0.5 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 74: Operating capital loan?

	<i>Owners' Minority Status</i>									<i>Total</i>
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Never Applied	39 75 %	32 80 %	62 78.5 %	5 83.3 %	4 57.1 %	14 87.5 %	2 66.7 %	3 75 %	1 100 %	162 77.9 %
Applied, Never Approved	1 1.9 %	0 0 %	10 12.7 %	0 0 %	0 0 %	0 0 %	1 33.3 %	0 0 %	0 0 %	12 5.8 %
Applied, Some Approved	4 7.7 %	1 2.5 %	1 1.3 %	0 0 %	1 14.3 %	0 0 %	0 0 %	1 25 %	0 0 %	8 3.8 %
Applied, All Approved	8 15.4 %	7 17.5 %	6 7.6 %	1 16.7 %	2 28.6 %	2 12.5 %	0 0 %	0 0 %	0 0 %	26 12.5 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 75: Equipment loan?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Never Applied	42 80.8 %	34 85 %	65 82.3 %	5 83.3 %	6 85.7 %	14 87.5 %	3 100 %	3 75 %	1 100 %	173 83.2 %
Applied, Never Approved	1 1.9 %	0 0 %	7 8.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	8 3.8 %
Applied, Some Approved	2 3.8 %	0 0 %	2 2.5 %	0 0 %	0 0 %	1 6.2 %	0 0 %	0 0 %	0 0 %	5 2.4 %
Applied, All Approved	7 13.5 %	6 15 %	5 6.3 %	1 16.7 %	1 14.3 %	1 6.2 %	0 0 %	1 25 %	0 0 %	22 10.6 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 76: Commercial/Professional liability insurance?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Never Applied	21 40.4 %	13 32.5 %	30 38 %	5 83.3 %	3 42.9 %	7 43.8 %	2 66.7 %	1 25 %	1 100 %	83 39.9 %
Applied, Never Approved	1 1.9 %	0 0 %	6 7.6 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	7 3.4 %
Applied, Some Approved	2 3.8 %	1 2.5 %	5 6.3 %	0 0 %	0 0 %	2 12.5 %	0 0 %	1 25 %	0 0 %	11 5.3 %
Applied, All Approved	28 53.8 %	26 65 %	38 48.1 %	1 16.7 %	4 57.1 %	7 43.8 %	1 33.3 %	2 50 %	0 0 %	107 51.4 %
<i>Total</i>	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 77: What was the largest commercial loan you received from January 1, 2015 through December 31, 2019?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
\$50,000 or less	13 25 %	5 12.5 %	17 21.5 %	1 16.7 %	0 0 %	1 6.2 %	0 0 %	0 0 %	0 0 %	37 17.8 %
\$50,001 - \$100,000	2 3.8 %	4 10 %	2 2.5 %	0 0 %	0 0 %	0 0 %	1 33.3 %	0 0 %	0 0 %	9 4.3 %
\$100,001 - \$300,000	4 7.7 %	3 7.5 %	3 3.8 %	0 0 %	2 28.6 %	2 12.5 %	0 0 %	1 25 %	0 0 %	15 7.2 %
\$300,001 - \$500,000	1 1.9 %	3 7.5 %	4 5.1 %	1 16.7 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	0 0 %	11 5.3 %
\$500,001 - \$1,000,000	2 3.8 %	0 0 %	1 1.3 %	1 16.7 %	0 0 %	2 12.5 %	0 0 %	0 0 %	0 0 %	6 2.9 %
\$1,000,001 - \$3,000,000	4 7.7 %	0 0 %	0 0 %	0 0 %	0 0 %	1 6.2 %	0 0 %	0 0 %	0 0 %	5 2.4 %
\$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 %
\$5,000,001 to \$10,000,000	1 1.9 %	1 2.5 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 1 %
Over \$10,000,000	1 1.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 0.5 %
Don't Know/NA	24 46.2 %	24 60 %	52 65.8 %	3 50 %	4 57.1 %	9 56.2 %	2 66.7 %	3 75 %	1 100 %	122 58.7 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 78: How many times have you been denied a commercial (business) bank loan from January 1, 2015 through December 31, 2019?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
None	34 65.4 %	22 55 %	33 41.8 %	2 33.3 %	3 42.9 %	9 56.2 %	2 66.7 %	1 25 %	0 0 %	106 51 %
1-10	5 9.6 %	6 15 %	27 34.2 %	3 50 %	1 14.3 %	2 12.5 %	0 0 %	1 25 %	0 0 %	45 21.6 %
11-25	1 1.9 %	0 0 %	1 1.3 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 1 %
26-50	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 %
Over 100	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
Don't Know/NA	12 23.1 %	12 30 %	18 22.8 %	1 16.7 %	3 42.9 %	5 31.2 %	1 33.3 %	2 50 %	1 100 %	55 26.4 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 87: Confusion about Process

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	5 100 %	1 100 %	9 81.8 %	0 0 %	1 100 %	0 0 %	1 100 %	1 100 %	0 0 %	18 90 %
Selected	0 0 %	0 0 %	2 18.2 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 10 %
<i>Total</i>	5 100 %	1 100 %	11 100 %	0 100 %	1 100 %	0 100 %	1 100 %	1 100 %	0 100 %	20 100 %

Table 88: Credit History

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	5 100 %	1 100 %	7 63.6 %	0 0 %	1 100 %	0 0 %	1 100 %	1 100 %	0 0 %	16 80 %
Selected	0 0 %	0 0 %	4 36.4 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	4 20 %
<i>Total</i>	5 100 %	1 100 %	11 100 %	0 100 %	1 100 %	0 100 %	1 100 %	1 100 %	0 100 %	20 100 %

Table 89: Don't Know

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	3 60 %	1 100 %	10 90.9 %	0 0 %	1 100 %	0 0 %	1 100 %	1 100 %	0 0 %	17 85 %
Selected	2 40 %	0 0 %	1 9.1 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 15 %
<i>Total</i>	5 100 %	1 100 %	11 100 %	0 100 %	1 100 %	0 100 %	1 100 %	1 100 %	0 100 %	20 100 %

Table 90: N/A

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	2 40 %	0 0 %	7 63.6 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	0 0 %	10 50 %
Selected	3 60 %	1 100 %	4 36.4 %	0 0 %	1 100 %	0 0 %	1 100 %	0 0 %	0 0 %	10 50 %
<i>Total</i>	5 100 %	1 100 %	11 100 %	0 100 %	1 100 %	0 100 %	1 100 %	1 100 %	0 100 %	20 100 %

Table 93: Confusion about Process

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	3 100 %	0 0 %	8 88.9 %	0 0 %	0 0 %	1 100 %	0 0 %	0 0 %	0 0 %	12 92.3 %
Selected	0 0 %	0 0 %	1 11.1 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 7.7 %
<i>Total</i>	3 100 %	0 100 %	9 100 %	0 100 %	0 100 %	1 100 %	0 100 %	0 100 %	0 100 %	13 100 %

Table 94: Credit History

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	3 100 %	0 0 %	5 55.6 %	0 0 %	0 0 %	1 100 %	0 0 %	0 0 %	0 0 %	9 69.2 %
Selected	0 0 %	0 0 %	4 44.4 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	4 30.8 %
<i>Total</i>	3 100 %	0 100 %	9 100 %	0 100 %	0 100 %	1 100 %	0 100 %	0 100 %	0 100 %	13 100 %

Table 95: Don't Know

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	2 66.7 %	0 0 %	7 77.8 %	0 0 %	0 0 %	1 100 %	0 0 %	0 0 %	0 0 %	10 76.9 %
Selected	1 33.3 %	0 0 %	2 22.2 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 23.1 %
<i>Total</i>	3 100 %	0 100 %	9 100 %	0 100 %	0 100 %	1 100 %	0 100 %	0 100 %	0 100 %	13 100 %

Table 96: N/A

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	1 33.3 %	0 0 %	7 77.8 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	8 61.5 %
Selected	2 66.7 %	0 0 %	2 22.2 %	0 0 %	0 0 %	1 100 %	0 0 %	0 0 %	0 0 %	5 38.5 %
<i>Total</i>	3 100 %	0 100 %	9 100 %	0 100 %	0 100 %	1 100 %	0 100 %	0 100 %	0 100 %	13 100 %

Table 99: Confusion about Process

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	2 66.7 %	1 100 %	10 90.9 %	0 0 %	0 0 %	2 100 %	0 0 %	1 100 %	0 0 %	16 88.9 %
Selected	1 33.3 %	0 0 %	1 9.1 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 11.1 %
<i>Total</i>	3 100 %	1 100 %	11 100 %	0 100 %	0 100 %	2 100 %	0 100 %	1 100 %	0 100 %	18 100 %

Table 100: Credit History

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	2 66.7 %	1 100 %	7 63.6 %	0 0 %	0 0 %	2 100 %	0 0 %	1 100 %	0 0 %	13 72.2 %
Selected	1 33.3 %	0 0 %	4 36.4 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	5 27.8 %
<i>Total</i>	3 100 %	1 100 %	11 100 %	0 100 %	0 100 %	2 100 %	0 100 %	1 100 %	0 100 %	18 100 %

Table 101: Don't Know

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	2 66.7 %	1 100 %	10 90.9 %	0 0 %	0 0 %	2 100 %	0 0 %	0 0 %	0 0 %	15 83.3 %
Selected	1 33.3 %	0 0 %	1 9.1 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	0 0 %	3 16.7 %
<i>Total</i>	3 100 %	1 100 %	11 100 %	0 100 %	0 100 %	2 100 %	0 100 %	1 100 %	0 100 %	18 100 %

Table 102: N/A

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Not Selected	2 66.7 %	0 0 %	8 72.7 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	0 0 %	11 61.1 %
Selected	1 33.3 %	1 100 %	3 27.3 %	0 0 %	0 0 %	2 100 %	0 0 %	0 0 %	0 0 %	7 38.9 %
<i>Total</i>	3 100 %	1 100 %	11 100 %	0 100 %	0 100 %	2 100 %	0 100 %	1 100 %	0 100 %	18 100 %

Table 103: From January 1, 2015, through December 31, 2019, how often has your company experienced any racial, gender, or ethnicity discriminatory behavior from the private sector (i.e., non-governmental entities)?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Never	42 80.8 %	23 57.5 %	17 21.5 %	1 16.7 %	4 57.1 %	5 31.2 %	2 66.7 %	0 0 %	0 0 %	94 45.2 %
Seldom	4 7.7 %	2 5 %	18 22.8 %	2 33.3 %	0 0 %	4 25 %	0 0 %	2 50 %	1 100 %	33 15.9 %
Often	1 1.9 %	6 15 %	15 19 %	0 0 %	2 28.6 %	1 6.2 %	0 0 %	0 0 %	0 0 %	25 12 %
Very Often	0 0 %	0 0 %	9 11.4 %	3 50 %	0 0 %	2 12.5 %	0 0 %	1 25 %	0 0 %	15 7.2 %
Don't Know	5 9.6 %	9 22.5 %	20 25.3 %	0 0 %	1 14.3 %	4 25 %	1 33.3 %	1 25 %	0 0 %	41 19.7 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 104: From January 1, 2015, through December 31, 2019, how often has your company experienced any racial, gender, or ethnicity discriminatory behavior from the City of Milwaukee?

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Never	41 78.8 %	25 62.5 %	33 41.8 %	3 50 %	5 71.4 %	10 62.5 %	2 66.7 %	1 25 %	0 0 %	120 57.7 %
Seldom	4 7.7 %	1 2.5 %	9 11.4 %	1 16.7 %	1 14.3 %	0 0 %	0 0 %	0 0 %	1 100 %	17 8.2 %
Often	1 1.9 %	1 2.5 %	11 13.9 %	0 0 %	0 0 %	1 6.2 %	0 0 %	1 25 %	0 0 %	15 7.2 %
Very Often	2 3.8 %	1 2.5 %	10 12.7 %	2 33.3 %	0 0 %	2 12.5 %	0 0 %	1 25 %	0 0 %	18 8.7 %
Don't Know	4 7.7 %	12 30 %	16 20.3 %	0 0 %	1 14.3 %	3 18.8 %	1 33.3 %	1 25 %	0 0 %	38 18.3 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 105: Do you believe there is an informal network of prime and subcontractors doing business with City of Milwaukee that monopolizes the public contracting process? Informal network is defined as firms that have an advantage due to their relationships inside th

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Yes	27 51.9 %	25 62.5 %	65 82.3 %	6 100 %	3 42.9 %	8 50 %	2 66.7 %	4 100 %	0 0 %	140 67.3 %
No	25 48.1 %	15 37.5 %	14 17.7 %	0 0 %	4 57.1 %	8 50 %	1 33.3 %	0 0 %	1 100 %	68 32.7 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 106: Double standards in qualifications and work performance make it more difficult for a Minority, Woman, Disadvantaged or Small business to win bids or contracts.

	<i>Owners' Minority Status</i>									<i>Total</i>
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Strongly agree	2 3.8 %	7 17.5 %	42 53.2 %	2 33.3 %	1 14.3 %	5 31.2 %	1 33.3 %	1 25 %	1 100 %	62 29.8 %
Agree	6 11.5 %	9 22.5 %	19 24.1 %	2 33.3 %	2 28.6 %	2 12.5 %	0 0 %	2 50 %	0 0 %	42 20.2 %
Neither agree nor disagree	29 55.8 %	15 37.5 %	15 19 %	2 33.3 %	2 28.6 %	5 31.2 %	2 66.7 %	1 25 %	0 0 %	71 34.1 %
Disagree	4 7.7 %	5 12.5 %	1 1.3 %	0 0 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	0 0 %	12 5.8 %
Strongly disagree	11 21.2 %	4 10 %	2 2.5 %	0 0 %	1 14.3 %	3 18.8 %	0 0 %	0 0 %	0 0 %	21 10.1 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 107: 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 a Minority, Woman, Disadvantaged or Small business to win bids or contracts.]

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Strongly agree	5 9.6 %	3 7.5 %	7 8.9 %	0 0 %	1 14.3 %	1 6.2 %	2 66.7 %	0 0 %	0 0 %	19 9.1 %
Agree	11 21.2 %	10 25 %	20 25.3 %	1 16.7 %	2 28.6 %	6 37.5 %	0 0 %	0 0 %	0 0 %	50 24 %
Neither agree nor disagree	36 69.2 %	25 62.5 %	35 44.3 %	3 50 %	4 57.1 %	8 50 %	1 33.3 %	4 100 %	1 100 %	117 56.2 %
Disagree	0 0 %	1 2.5 %	11 13.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	12 5.8 %
Strongly disagree	0 0 %	1 2.5 %	6 7.6 %	2 33.3 %	0 0 %	1 6.2 %	0 0 %	0 0 %	0 0 %	10 4.8 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 108: Sometimes, a prime contractor will contact a Minority, Woman, Disadvantaged or Small business to ask for quotes but never give the proposal sufficient review to consider giving that firm the award.

	<i>Owners' Minority Status</i>									<i>Total</i>
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Strongly agree	1 1.9 %	4 10 %	25 31.6 %	2 33.3 %	1 14.3 %	4 25 %	0 0 %	1 25 %	0 0 %	38 18.3 %
Agree	7 13.5 %	8 20 %	18 22.8 %	2 33.3 %	0 0 %	5 31.2 %	1 33.3 %	1 25 %	1 100 %	43 20.7 %
Neither agree nor disagree	36 69.2 %	22 55 %	32 40.5 %	1 16.7 %	5 71.4 %	4 25 %	2 66.7 %	2 50 %	0 0 %	104 50 %
Disagree	4 7.7 %	2 5 %	2 2.5 %	0 0 %	1 14.3 %	1 6.2 %	0 0 %	0 0 %	0 0 %	10 4.8 %
Strongly disagree	4 7.7 %	4 10 %	2 2.5 %	1 16.7 %	0 0 %	2 12.5 %	0 0 %	0 0 %	0 0 %	13 6.2 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

Table 109: Sometimes, a prime contractor will include a Small Business Subcontractor on a bid to meet participation goals, then drop the company as a subcontractor after winning the award.

	<i>Owners' Minority Status</i>									Total
	Non-Minority	Woman	Black	American Indian or Alaska Native	Asian	Hispanic or Latinx	Multi-Racial	Bi-Racial	Publicly Traded Company	
Strongly agree	1 1.9 %	3 7.5 %	23 29.1 %	2 33.3 %	1 14.3 %	5 31.2 %	1 33.3 %	1 25 %	0 0 %	37 17.8 %
Agree	7 13.5 %	10 25 %	14 17.7 %	2 33.3 %	0 0 %	4 25 %	0 0 %	1 25 %	0 0 %	38 18.3 %
Neither agree nor disagree	36 69.2 %	23 57.5 %	37 46.8 %	2 33.3 %	6 85.7 %	4 25 %	2 66.7 %	2 50 %	0 0 %	112 53.8 %
Disagree	3 5.8 %	1 2.5 %	2 2.5 %	0 0 %	0 0 %	1 6.2 %	0 0 %	0 0 %	1 100 %	8 3.8 %
Strongly disagree	5 9.6 %	3 7.5 %	3 3.8 %	0 0 %	0 0 %	2 12.5 %	0 0 %	0 0 %	0 0 %	13 6.2 %
Total	52 100 %	40 100 %	79 100 %	6 100 %	7 100 %	16 100 %	3 100 %	4 100 %	1 100 %	208 100 %

APPENDIX J

Study Definitions: City of Milwaukee 2022 Disparity Study

APPENDIX J – STUDY DEFINITIONS

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

Architectural & Engineering Services (“A&E”) for the purposes of the Disparity Study refers specifically to Construction-related professional services [i.e., architectural, engineering, land surveying services, and certain inspection and testing services (mechanical, structural, geotechnical, construction materials)]. Architectural & Engineering Services is one of the City’s Industry Categories.

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 Geographic and Product Markets in each Industry Category that is disaggregated by race/ethnicity/gender.

Calendar Year (“FY”) – The business year for City for purchasing and accounting purposes. Measured by City from January 1, 2015 through December 31, 2019. The study period for this Study is five (5) years (FY 2016-2020).

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.

Construction for the purposes of the City’s Disparity Study means the construction, erection, repair, renovation, or demolition of a public structure, building, street, road, and other public improvements. Construction is one of City’s Industry Categories.

Disadvantaged Business Enterprise (DBE) means a for-profit independent operating small business concern:

a) That is at least fifty-one percent owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which 51 percent of the stock is owned by one or more such individuals; and

b) Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

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.

Good Faith Efforts (“GFE”) – The documentation and verification process to ensure that prime contractors are soliciting and negotiating with MWBEs in “good faith” for potential subcontracting opportunities.

Goods for the purposes of the City’s Disparity Study means commodities, materials, supplies, and equipment. Examples of Goods include office supplies, safety supplies, and janitorial services. Goods is one of the City’s Industry Categories.

Industry Categories means, collectively, the industry categories included in the City’s Disparity Study, which are: Construction, Architectural & Engineering (A&E), Professional Services, Other Services, and Goods, as those Industry Categories may be further defined in the Study Report.

Minority Business Enterprise (MBE) - A business which has been certified as an MBE under any recognized MBE program.

Minority Person means a citizen or legal resident alien of the United States who is: African American, Hispanic American, Asian American, or Native American.

Other Services for the purposes of the City’s Disparity Study means services performed by a person or persons having special skill that is primarily physical or manual in nature. Examples of Other Services include janitorial services, IT, printing and reproduction, pest control, rubbish container emptying, mowing, and supply services. Other Services is one of the City’s 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 110 or more.

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

Prime Contractor or Prime Vendor– A business who has entered into direct contractual relationship with the City, 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’s Disparity Study means services which are performed competently only by a person or persons having a special skill, expertise, education, or knowledge which is primarily mental or intellectual in nature rather than physical or manual. The Industry Category of Professional Services does not include A&E firms. Professional Services includes, but is not limited to, accounting, landscape architecture, medicine, optometry, real estate appraising, professional nursing, attorney services, technical services, research planning services, consulting services, auditing services, financial advisory services. Professional Services is one of the City’s 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 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.

SMWDBE, for the purpose of this Study, means, (collectively unless the context indicates otherwise), the following groups, each group as further defined herein: Small Business Enterprise (SBE), Minority Business Enterprise (MBE), Women Owned Enterprise (WBE), and Disadvantaged Business Enterprise (DBE). A business in any of these groups will have a certification designation as a small, minority, woman, and/or disadvantaged business enterprise from an authorized certification agency.

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

Study Period – The period between which all City contract awards are subject to study analysis. For this study it has been defined as January 1, 2015 through December 31, 2019 (CY2015-2019)

Subcontractor – A business who has entered into a direct contractual relationship with a Prime Contractor to either provide a good or service or perform a full scope, or portion of a scope of services.

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 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.

Woman Business Enterprise (WBE) A business which has been certified as a WBE under any recognized WBE program.