

## PREFACE

The City of Baltimore and the Housing Authority of Baltimore City collaborated to conduct a disparity study for their respective agencies. MGT Consulting Group worked with the City and Housing Authority to define and scope of work and study requirements specific to their agencies. During the course of the study, there were elements of both studies where the scope overlapped.

## City of Baltimore

2022 Disparity Study
AUGUST 26, 2022

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## Executive Summary

## Introduction

The City of Baltimore (City) retained MGT of America Consulting, LLC (MGT) to conduct an availability and disparity study to determine if there are any disparities between the utilization of minority-owned businesses (MBE), women-owned businesses (WBE), veteran-owned businesses (VBE), disabled owned businesses (DOBE), and lesbian, gay, transgender, bisexual, queer-owned businesses (LGBTQ) compared to the availability of these firms in the City's marketplace who are ready, willing, and able to perform work. MGT analyzed data for July 1, 2015 (FY16) through June 30, 2019 (FY19) for Construction, Architecture and Engineering, Goods, and Other Services (Including professional services).

The Study analyzed whether a disparity exists between the number of available MBEs, WBEs, VBEs, DOBEs, and LGBTQs providing goods or services in the above business categories (availability) and the number who are contracting with the City as a prime contractor or subcontractor (utilization).

## LEGAL FRAMEWORK

When local governments create affirmative action programs in government procurement, they must do so in a manner that comports with the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution. If a governmental program employs race-based classifications, the program must be narrowly tailored and further a compelling interest. See Richmond v. J.A. Croson Co., 488 U.S. 469, 492, 509 (1989) ("Croson"). Local governments have a compelling interest "in assuring those public dollars, drawn from the tax contributions of all citizens, do not serve to finance the evil of private prejudice." Id. at 492. Additionally, cities that can show they have "essentially become a 'passive participant' in a system of racial exclusion practiced by elements of the local construction industry," are able to "take affirmative steps to dismantle such a system." Id. If a governmental program employs gender-based classifications, in those cases the program must demonstrate an "exceedingly persuasive justification." United States v. Virginia, 518 U.S. 533 (1996).

The foundational case for evaluating M/WBE programs is Croson. Croson indicated what types of data might be sufficient to show that a program was narrowly tailored to further a compelling government interest. "Where 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 . The appropriate remedy for such an inference is likely not a "rigid numerical quota," id. at 508, but could be a program that offers "some form of narrowly tailored racial preference," id. at 509.

## STUDY SCOPE AND DATA PARAMETERS

The scope of the disparity study included defining the City`s market area and analyzing payment and contract data. MGT staff compiled and reconciled electronic data provided by the City to merge prime and subcontractor contract data to create a Master Utilization Database to support the needs of the study. MGT utilized the City's financial data as the primary source of the prime financial data and supplemented
that data with input from the City departments. The prime contract data was combined with the subcontractor data which was collected via a survey of the primes. Based on a common contract ID across both data sets, MGT merged the subcontractor data with the prime data to make up the Master Utilization Database.

## MARKET AREA

In determining a relevant market area, MGT abides by a 75 percent majority rule of agency spending with deference to historic programmatic considerations to prescribe an appropriate geographic boundary. To establish the appropriate geographic boundaries for the study, the "relevant" market area was isolated according to the 75 percent standard. These market areas are defined by geographic units such as counties and states, based on the following considerations: 1) the courts have accepted the use of standard geographic units in conducting equal employment opportunity and disparity studies; 2) geographic units are externally determined, so there are no subjective determinations, and 3) U.S. Census and other federal agencies routinely collect data by geographic unit.

The recommended relevant market area includes Baltimore City, Baltimore County, Anne Arundel County, Carroll County, Howard County, Queen Anne's County, Montgomery County, and Prince George’s County, MD ("Market Area"). Chapter 4 details the exact localities utilized.

## Key Findings

## Finding A: M/WBE Utilization (Chapter 4, Appendix C)

In Table E-1, the utilization analysis shows that non-M/WBE firms are utilized at higher rates than their M/WBE counterparts. The City's utilization of non-M/WBE firms totaled 70.68 percent, while 29.32 percent went to M/WBE firms. Overall, the highest utilization rates among M/WBE classifications included African American firms accounting for 12.34 percent of dollars spent and nonminority females accounting for 7.52 percent of dollars spent. Nonminority female firms had the greatest utilization in Construction at 8.36 percent or $\$ 21.69$ million, followed by Asian American firms in Goods at 6.75 percent or $\$ 42.54$ million. ${ }^{1}$

[^0]TABLE E-1.
UTILIZATION ANALYSIS
BY BUSINESS OWNERSHIP CLASSIFICATION AND BY PROCUREMENT CATEGORIES

| BUSINESS <br> OWNERSHIP <br> CLASSIFICATION | ALL |  |  | CONSTRUCTION |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| A\&E |  |  |  |  |  |

Source: Chapter 4, Market Area and Utilization Analysis.
In Table E-2, the utilization analysis shows the utilization of DOBE, VOBE, and LGBTQ firms. The highest utilization for VOBE firms can be found in Goods and Other Services with 0.10 percent, for DOBE firms it can be found in Construction with 0.02 percent; and LGBTQ firms did not have any identified utilization.

TABLE E-2.
UTILIZATION ANALYSIS
BY BUSINESS OWNERSHIP CLASSIFICATION AND BY PROCUREMENT CATEGORIES
$\left.\left.\begin{array}{|c|c|c|c|c|c|}\hline \begin{array}{c}\text { BUSINESS } \\ \text { OWNERSHIP } \\ \text { CLASSIFICATION }\end{array} & \text { ALL } & \text { CONSTRUCTION } & \text { A\&E } & \text { GOODS \& OTHER } \\ \text { SERVICES }\end{array}\right] \begin{array}{c}\text { PROFESSIONAL } \\ \text { SERVICES }\end{array}\right]$

Source: Chapter 4, Market Area and Utilization Analysis.

## Finding B: Availability Estimates (Chapter 5, Appendix C)

A reliable estimation of the number of firms willing and able to provide each of the respective services is an essential element in the determination of disparity. Post-Croson case law has not prescribed a single approach to deriving firm availability, and agencies have used various means to estimate pools of available vendors that have withstood legal scrutiny.

MGT calculates availability based on a "custom census" approach. This approach is the most accurate for calculating availability at its most granular level. An in-depth explanation of this approach is provided in Chapter 4. Detailed availability results by business category and 4-digit NAICS code are provided in Appendix C. The availability estimates by procurement category are illustrated in Table E-3.

MGT estimated the availability of IWDBE, VOBE, and SDVOBE firms directly from the custom census survey to determine the percentage of available firms in the marketplace.

TABLE E-3.
ESTIMATION OF AVAILABLE FIRMS

|  | AFRICAN <br> AMERICAN | ASIAN <br> AMERICAN | HISPANIC <br> AMERICAN | NATIVE <br> AMERICAN | MBE | NON- <br> MINORITY <br> FEMALE | M/WBE |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| CONSTRUCTION | $9.70 \%$ | $2.25 \%$ | $5.64 \%$ | $0.36 \%$ | $17.94 \%$ | $21.50 \%$ | $39.44 \%$ |
| A\&E | $10.19 \%$ | $6.27 \%$ | $5.74 \%$ | $0.81 \%$ | $23.01 \%$ | $25.45 \%$ | $48.46 \%$ |
| PROFESSIONAL SERVICES | $14.62 \%$ | $12.14 \%$ | $3.38 \%$ | $0.91 \%$ | $31.05 \%$ | $16.36 \%$ | $47.41 \%$ |
| GOODS \& SERVICES | $12.17 \%$ | $3.95 \%$ | $2.48 \%$ | $1.51 \%$ | $20.11 \%$ | $23.02 \%$ | $43.13 \%$ |
| Total | $10.54 \%$ | $3.39 \%$ | $4.80 \%$ | $0.68 \%$ | $19.41 \%$ | $21.87 \%$ | $41.28 \%$ |

Source: Chapter 4, Market Area and Availability Analysis.

## Finding C: Disparity (Chapter 5)

This section includes the results of the disparity ratios calculated in Chapter 5. MGT's disparity index methodology yields an easily calculable value, understandable in its interpretation, and universally comparable. A disparity in utilization within the minority- and female-owned firms can be assessed concerning the utilization of nonminority- and male-owned firms.

These overall results show that among M/WBE firms there is disparity in all categories. Only in Goods do you find no disparity for Hispanic American firms. Additionally, as a total M/WBE classification, all procurement categories find substantial and statistically significant disparity. Detailed disparity results by business category and 4-digit NAICS code are provided in Appendix C. Additionally, there was substantially significant disparity for IWDBE, VOBE, and SDVOBE firms throughout all of the procurement categories except IWDBE firms in Services.

TABLE E-4.
DISPARITY RATIO SUMMARY ANALYSIS

| Procurement Category | All |  <br> Engineering | Construction | Professional <br> Services |  <br> Services |
| :--- | :---: | :---: | :---: | :---: | :---: |
| African Americans | No Disparity | Disparity | No Disparity | Disparity | Disparity |
| Asian Americans | Disparity | No Disparity | Disparity | Disparity | Disparity |
| Hispanic Americans | No Disparity | Disparity | No Disparity | Disparity | Disparity |
| Native Americans | No Disparity | Disparity | No Disparity | Disparity | Disparity |
| Total MBE Firms | No Disparity | No Disparity | No Disparity | Disparity | Disparity |
| Nonminority Females | Disparity | Disparity | Disparity | Disparity | Disparity |
| Total M/WBE Firms | Disparity | Disparity | Disparity | Disparity | Disparity |
| Non-MWBE Firms | No Disparity | No Disparity | No Disparity | No Disparity | No Disparity |

BOLD indicates substantial statistically significant disparity.

## Commendations

The City of Baltimore is commended for investing the resources and providing the guidance, direction, and support to ensure the delivery of a study that is legally supportable and actionable. The disparity study conducted by MGT resulted in identifying several initiatives currently in place to increase access and opportunities for the City's diverse community of minority- and women-owned businesses.

Taken overall, the 2022 Disparity Study and efforts being undertaken are significant and important indicators of the City`s commitment to increasing access and opportunities for diverse businesses.

## Recommendations

The following recommendations are based on multiple findings and do not necessarily tie to one finding.

## RACE- AND GENDER-NEUTRAL:

## A: STAFF TRAINING ON BUSINESS FORMATION

To understand common business barriers the City staff that interacts with businesses should understand the functions of business operations from how bidding is completed for each industry to the capital needed for different industries.

## B: IMPROVE PAYMENT TERMS ON CITY CONTRACTS

The City should be commended for mandating the prompt payment of 30 days with an approved invoice. However, firms that work on City contracts are frustrated with the processing time of submitted invoices. M/WBE subcontracts are experiencing the direct impact of slow payment cycles by the City because that slower cycle means that subcontractors must wait longer for their payment.

## C: IMPLEMENT A CONTRACT COMPLIANCE SOFTWARE SYSTEM

The City should be commended on acquiring a contract compliance system. We recommend that in its implementation all vendors are required to utilize the system to report all subcontract utilization and payments. This system should be utilized by all City departments to enter and monitor their contracts.

## D: REORGANIZING THE MINORITY AND WOMEN'S BUSINESS OPPORTUNITY OFFICE

The M/WBE ordinance should be amended to place the Minority and Women's Business Opportunity Office ("MWBOO") under the Office of the Mayor as a standalone agency. The office is currently a small division of the City Law Department, which is and has been a limiting factor with regards to funding.

The Mayor's Office of Minority and Women-Owned Business Development ("MWBD") should be placed in the MWBOO and report directly to the Chief. MWBD should continue its outreach and advocacy functions. The two offices with similar names but different functions have always been a source of confusion for businesses and individuals seeking to do business with the City of Baltimore, and particularly those with M/WBE questions. Combining the two offices will result in a more efficient use of scarce resources

## RACE- AND GENDER-BASED

## A: M/WBE PREQUALIFICATION REQUIREMENTS

1. The Office of Boards and Commissions ("OBC") should be made a unit within MWBOO. OBC is responsible for prequalifying all construction-related contractors and design consultants seeking to perform services of $\$ 50,000$ or greater on Baltimore City contracts. Questions about an M/WBE's technical capability and financial capacity to perform satisfactory work for the City as a prime, and as a subcontractor on certain contracts, can be readily determined if the databases of the two offices are combined. Certification and prequalification of contractors should be a centralized activity.

## B: NETWORKING AND PROCUREMENT EVENTS

2. Realizing that the COVID-19 pandemic suspended M/WBE outreach and engagement, the City should create and host events that will provide upcoming procurement opportunities in all industries, not just construction. The City should partner with technical or professional organizations in the area to offer instruction for M/WBEs seeking to scale their business

## C: ADOPT ANNUAL ASPIRATIONAL GOALS

Estimates of M/WBE availability in the City's market area provide the starting point for citywide annual aspirational goals for contracting across all industry categories. As the City continues to review its achievement toward the annual aspirational goals, it should assess whether race- and gender-based remedies are necessary for all industry categories. Proposed goals are recommended at 25 percent for MBE firms and $15 \%$ for WBE firms. The proposed goals are based on a weighted average of utilization and availability. Aspirational goals are based on an accumulation of all spending within the City and should not be applied rigidly to every individual procurement. Future adjustments to citywide aspirational goals should be based on relative availability and adjusted as needed.

## D: CONTINUE THE M/WBE PROGRAM SUNSET REVIEW PROCESS

The City of Baltimore should continue to require the review of the Program to determine if an evidentiary basis to continue every five years and that it should be continued only if there is strong evidence that discrimination continues to disadvantage M/WBEs in the relevant market area.

## Conclusion

The City of Baltimore 2022 Disparity Study provides legally supportable factual predicate evidence for a narrowly tailored Supplier Diversity Program. As documented throughout the entirety of the study, disparities throughout the utilization, private sector, and qualitative analyses were ascertained for minority-owned businesses (MBE), and women-owned businesses (WBE) in the City's business markets. There was not enough data to identify disparity of VOBE, DOBE, and LGBTQ businesses in the market. Any program efforts must be narrowly tailored to rectify the issues identified in this report.

## 1 Introduction

### 1.1 Introduction

The City of Baltimore (City) commissioned a Disparity Study to determine whether there are any disparities between the utilization of minority- and women-owned business enterprises (M/WBE), disabled-owned business enterprises (DOBE), veteranowned business enterprises (VBE), and LGTBQ-owned business enterprises (LGTBQBE) compared to the availability of these firms in the marketplace who are ready, willing, and able to perform work.


To conduct the study, the City retained MGT Consulting Group, LLC (MGT) to examine M/WBE, DOBE, VBE, and LGBTQ utilization in City contracting, the availability of these firms in the relevant geographic marketplace, and the qualitative evidence of whether discrimination is the cause of any identified disparity. The statistical data was collected and analyzed for the following business categories:

- Architecture \& Engineering
- Professional Services
- Construction
- Goods \& Other Services

The Study analyzed contracting opportunities in these procurement categories to identify with particularity whether a statistical disparity exists. A statistical disparity demonstrates whether the City is a passive participant in private-sector discrimination and/or lingering effects of past discrimination exist that give rise to a compelling governmental interest in the City's race- and gender-conscious M/WBE program.

This study would not have been possible without the support and cooperation of the City staff.

### 1.2 Study Team

MGT Consulting is nationally recognized and experienced in disparity research, public policy, and diverse business inclusion programs. The MGT team assembled to conduct the City's study has extensive social science research experience and experience in all aspects of disparity research. The experience of our team enables us to navigate the challenges, obstacles, and volatility associated with conducting a thorough disparity study, which can derail even the most well-planned and executed study.

### 1.2.1 MGT Project Team

The team of experts who dedicated their time, attention, and expertise to this study includes:

Dr. Fred Seamon, Executive Vice President/Qualitative Researcher<br>Ms. Vernetta Mitchell, Director/Project Manager, Qualitative Lead<br>Mr. Reggie Smith, Vice President/Technical Advisor<br>Mr. Andres Bernal, Director/Legal Advisor, Quantitative and Qualitative Methodology Lead<br>Ms. Lara Opheim, Manager/Data Collection Manager<br>Mr. Justin Peterson, Consultant/Data Analyst

## MGT Subconsultants

## Chrysalis Collaborations, LLC (WBE)

Chrysalis Collaborations, LLC works with organizations, community members, and government to understand how education, community, human services, housing, health, and employment work on the ground. Chrysalis develops innovative, evidence-based programs and policies that improve employment success and life chances for community members. Chrysalis provides translation of research into practice/policy, training and technical assistance, and technical writing. For this study, Chrysalis Collaborations conducted anecdotal data collection via in-depth business owner interviews and stakeholder interviews. Chrysalis provided great support and insight to the research for individuals with disabilities and LGBTQ concerns.

## Laurel Marketing \& Design d/b/a LMD Agency (WBE)

For more than 40 years, LMD has evolved from a local graphics shop to the full-service, integrated communications and consulting "change agency" that we are today with regional and national private and public sector clients. For this study, LMD Agency conducted in-depth business owner interviews.

## The Melior Group (WBE)

The Melior Group is a strategic consultancy with extensive industry experience and deep roots in marketing research. Founded in 1982 to bring the disciplines of marketing research to service industries, they provide insights that transform questions into answers, by delivering rich and robust results that directly inform strategic decision-making. For this study, the Melior Group assisted the custom census survey and the vendor survey.

## Walker Benefit Services (MBE)

Walker Benefit Services, LLC (WBS), established in 1996, is a consulting and communications firm. WBS has over 20 years of experience conducting anecdotal research, including focus groups, interviews, and surveys. They have a team of award-winning, experienced communications consultants with a background in helping organizations communicate with and engage internal stakeholders, including employees, retirees, management, and union leadership, as well as external stakeholders, such as contractors and business owners. For this study, WBS prepared the community outreach plan and conducted community outreach.

## SkyBase7

SkyBase 7 is a Florida HUB, DBE, and WBE certified data collection research firm. They work with MGT's clients to build consistent strategies with the brand, deliver results and exceed expectations. Understanding the desired outcome and vision enables us to create strategies and implement relevant and achievable plans. For this project, Skybase7 conducted additional custom census and vendor surveys.

### 1.3 Background

The City of Baltimore established its M/WBE Program in 1976 and has been in continuous operations since then. The program is authorized and governed by Article 5, Subtitle 28, of the Baltimore City Code. The Minority and Women's Business Opportunity Office (MWBOO) responsibilities per the City Code are detailed in Chapter 3 of this report. ${ }^{2}$ Prior to this study, the City adopted the 2014 disparity study completed by NERA Economic Consulting. The 2014 study reviewed the City's prime contract data and classified it into one of four major categories: (1) Construction (2) Architecture and Engineering (A\&E) (3) Other Services, and (4) Commodities. ${ }^{3}$ MGT used a combination of this data in conjunction with data sourced from D\&B Hoovers to estimate growth in available establishments for each of these industries. D\&B data indicated that all four industries grew over the last seven years. Construction, representing 11\% of the overall growth of the four industries, grew by 15,580 establishments. Architecture and Engineering (13\%) grew by 17,941 establishments. Services saw the largest growth (41\%) and grew by 58,740 establishments. Finally, commodities were responsible for a large portion of growth (35\%) growing by 50,449 establishments.

### 1.4 Overview of Study Approach

MGT's framework, approach, and methodology for study execution are premised on a set of research questions and assumptions grounded in legal, statistical, econometric, and analytical research that will provide a study that's reliable, valid, and legally defensible. They are:

1. How does case law inform the research methodology in a particular region for a particular client? (Chapter 2)
2. Is there statistical evidence of disparity between the availability and utilization of MBE/WBE/DOBE/VBE/LGBTQBE firms? If so, what are the most relevant causal factors that contribute directly or indirectly to the disparities? (Chapter 4)
3. Are there statistically significant disparities in the utilization of $M / W B E s$ by primes on projects where there are no M/WBE goals? (Chapter 6)
4. Is there qualitative/anecdotal evidence of disparate treatment of minority- and womenowned and DOBE/VBE/LGBTQBE firms? (Chapter 7)

The objectives and key results of the study are aligned with current case law and industry standards. The objectives of this study were:

[^1]- Determine whether the City, either in the past or currently, engages in discriminatory practices in the solicitation and award of contracts in Construction, Architecture and Engineering, Professional Services, \& Goods and Other Services to M/WBEs.
- Determine if a legally justified need exists for the continuation of the M/WBE Program in accordance with the guidelines set forth by the Supreme Court and relevant subsequent cases.


### 1.5 Report Organization

In addition to this introductory chapter, the City's 2022 Disparity Study report consists of:

| CHAPTER $\mathbf{2}$ | Legal Review |
| :--- | :--- |
| CHAPTER $\mathbf{3}$ | Review of Policies, Procedures, and Programs |
| CHAPTER 4 | Market Area and Availability Analyses |
| CHAPTER 5 | Product Market, Utilization, and Disparity Analyses |
| CHAPTER 6 | Private Sector Analysis |
| CHAPTER 7 | Anecdotal Analysis |
| CHAPTER 8 | Commendations and Recommendations |
| APPENDICES | The appendices contain additional analyses and supporting documentation and data. |

MGT recommends reading the 2022 Disparity Study in its entirety to understand the basis for the findings and conclusions presented in Chapter 8, Commendations and Recommendations.

### 1.6 Business Ownership Classification

Firms included in the utilization analysis have been assigned to business owner classifications according to the definitions provided below. ${ }^{4}$

- M/WBE Firms. In this study, businesses classified as a minority- and woman-owned firms (M/WBE) are firms that are at least 51 percent owned and controlled by members of one of five groups: African Americans, Asian Americans, Hispanic Americans, Native Americans, or nonminority women. These groups were defined according to the United States (U.S.) Census Bureau as follows:
- African Americans: U.S. citizens or lawfully admitted permanent residents having an origin in any of the black racial groups of Africa.
- Asian Americans: U.S. citizens or lawfully admitted permanent residents who originate from the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands.

[^2]- Hispanic Americans: U.S. citizens or lawfully admitted permanent residents of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish or Portuguese cultures or origins regardless of race.
- Native Americans: U.S. citizens or lawfully admitted permanent residents who originate from any of the original peoples of North America and who maintain cultural identification through tribal affiliation or community recognition.
- Nonminority Woman: U.S. citizens or lawfully admitted permanent residents who are nonHispanic white females. Minority females were included in their respective minority categories.
- Minority female- and male-owned firms were classified and assigned to their corresponding minority groups. For example, a Hispanic American female- or Hispanic American male-owned firm was assigned to the Hispanic American-owned firm minority group.
- Non-M/WBE Firms. Firms that were identified as nonminority male or majority-owned were classified as non-M/WBE firms. If there was no indication of business ownership, these firms were also classified as non-M/WBE firms.
- MBE Firms. All minority-owned firms, regardless of gender.
- WBE Firms. All nonminority women-owned firms.
- DOBE Firms. An acronym for individuals with disabilities-owned business enterprise that is at least $51 \%$ owned and operated by one or more individuals with disabilities.
- LGBTQ Firms. An acronym for LGBTQ-owned business enterprise that is at least 51\% owned and operated by one or more individuals who are in the LGBTQ community.
- VOBE Firms. An acronym for veteran-owned business enterprise that is at least 51\% owned and operated by one or more individuals who are veterans.


## 2 Legal Review

### 2.1 Introduction

This chapter provides legal background for the Disparity Study and a context for the statistical analysis and anecdotal data that are its components. The focus of the review is relevant decisions from the U.S. Supreme Court and the Fourth Circuit Court of Appeals which includes Maryland. This chapter is the customary MGT chapter for the Fourth Circuit on this subject-matter, reviewed for recent cases at the time of publishing this chapter. It is not intended to constitute legal advice to the City of Baltimore (City) on minority and women business enterprise (M/WBE) programs, affirmative action, or any other matter. Instead, it provides a context for the statistical and anecdotal analysis that appears in subsequent chapters of this report.

The Supreme Court decisions in Richmond v. Croson Company (Croson), ${ }^{5}$ Adarand v. Peña (Adarand), ${ }^{6}$ and later cases have established and applied the constitutional standards for an affirmative action program. This chapter identifies and discusses
 those decisions, summarizing how courts evaluate the constitutionality of race-specific and gender-specific programs. Decisions of the Fourth Circuit offer the most directly binding authority; in particular, the most recent decision involving the North Carolina Department of Transportation's (NCDOT) M/WBE program in H.B. Rowe v. Tippett. ${ }^{7}$ While the Fourth Circuit has not directly addressed an issue involving M/WBE programs since the Croson decision, this review considers decisions from other circuits.

By way of a preliminary outline, the courts have determined that an affirmative action program involving governmental procurement of goods or services must meet the following standards:

- A remedial race-conscious program is subject to strict judicial scrutiny under the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution.
- Strict scrutiny has two basic components: a compelling governmental interest in the program and a narrow tailoring of the program to serve or address the government's compelling interest.
- To survive the strict scrutiny standard, a remedial race-conscious program must be based on a compelling governmental interest.
- "Compelling government interest" means the government must prove past or present racial discrimination requiring remedial attention.

[^3]- There must be a specific "strong basis in the evidence" for the compelling governmental interest.
- Statistical evidence is preferred and possibly necessary as a practical matter; anecdotal evidence is permissible and can offer substantial support, but it probably cannot stand on its own.
- Program(s) designed to address the compelling governmental interest must be narrowly tailored to remedy the identified discrimination.
- "Narrow tailoring" means the remedy must fit the findings.
- The evidence showing compelling government interest must guide the tailoring very closely.
- Race-neutral alternatives must be considered first.
- A lesser standard, intermediate judicial scrutiny, applies to programs that establish gender preferences.
- To survive the intermediate scrutiny standard, the remedial gender-conscious program must serve important governmental objectives and be substantially related to the achievement of those objectives.
- The evidence does not need to be as strong and the tailoring does not need to be as specific under the lesser standard.


### 2.2 Standards of Review for Race-Specific and GenderSpecific Programs

### 2.2.1 Race-Specific Programs: The Croson Decision

Croson established the framework for testing the validity of programs based on racial discrimination. In 1983, the Richmond City Council (Council) adopted a Minority Business Utilization Plan (the Plan) following a public hearing in which seven citizens testified about historical societal discrimination. In adopting the Plan, the Council also relied on a study indicating that "while the general population of Richmond was 50 percent African American, only 0.67 percent of the city's prime construction contracts had been awarded to minority businesses in the five-year period from 1978 to $1983 .{ }^{\prime \prime}{ }^{8}$

The evidence before the Council also established that a variety of state and local contractor associations had little or no minority business membership. The Council relied on statements by a Council member whose opinion was that "the general conduct of the construction industry in this area, the state, and around the nation, is one in which race discrimination and exclusion on the basis of race is widespread." ${ }^{9}$ There was, however, no direct evidence of race discrimination on the part of the city in its contracting activities, and no evidence that the city's prime contractors had discriminated against minority-owned subcontractors. ${ }^{10}$

[^4]The Plan required the city's prime contractors to subcontract at least 30 percent of the dollar amount of each contract to one or more minority-owned business enterprises (MBEs). The Plan did not establish any geographic limits for eligibility. Therefore, an otherwise qualified MBE from anywhere in the United States could benefit from the 30 percent set-aside.
J.A. Croson Company, a non-MBE mechanical plumbing and heating contractor, filed a lawsuit against the city of Richmond alleging that the Plan was unconstitutional because it violated the Equal Protection Clause of the Fourteenth Amendment. After a considerable record of litigation and appeals, the Fourth Circuit struck down the Richmond Plan and the Supreme Court affirmed this decision. ${ }^{11}$ The Supreme Court determined that strict scrutiny was the appropriate standard of judicial review for MBE programs, which means that a race-conscious program must be based on a compelling governmental interest and be narrowly tailored to achieve its objectives. This standard requires a firm evidentiary basis for concluding that the underutilization of minorities is a product of past discrimination. ${ }^{12}$

### 2.2.2 Gender-Specific Programs

The Supreme Court has not addressed the specific issue of a gender-based classification in the context of a woman-owned business enterprise (WBE) program. Croson was limited to the review of an MBE program. In evaluating gender-based classifications, the Court has used what some call "intermediate scrutiny," a less stringent standard of review than the "strict scrutiny" applied to race-based classifications. Intermediate scrutiny requires that classifying persons on the basis of sex "must carry the burden of showing an exceedingly persuasive justification for the classification." ${ }^{13}$

The Fourth Circuit has ruled that the intermediate scrutiny standard is satisfied by "by showing at least that the classification serves important governmental objectives and that the discriminatory means employed are substantially related to the achievement of those objectives." ${ }^{14}$ The Fourth Circuit in H.B. Rowe agreed with other federal circuits that intermediate scrutiny "can rest safely on something less than the 'strong basis in evidence'." ${ }^{15}$ This 'something less' can mean that the statute must "present [ ] sufficient probative evidence in support of its stated rationale for enacting a gender preference, i.e., ... the evidence [must be] sufficient to show that the preference rests on evidence- informed analysis rather than on stereotypical generalizations." ${ }^{16}$

### 2.3 Strict Scrutiny Analysis

For government contracting programs, courts have yet to find a compelling governmental interest for affirmative action other than remedying discrimination in the relevant marketplace. In other arenas, diversity has served as a compelling governmental interest for affirmative action. For example, the Ninth Circuit upheld race-based admission standards at an experimental elementary school in order to provide

[^5]a more real world education experience. ${ }^{17}$ More recently, in Petit $v$. Chicago, the Seventh Circuit relied on Grutter v. Bollinger (Grutter) in stating that urban police departments had "an even more compelling need for diversity" than universities and upheld the Chicago program "under the Grutter standards." ${ }^{18}$ The recent holding that other compelling interests may support affirmative action does not yet appear to have any application to public contracting. ${ }^{19}$

Croson identified two necessary factors for establishing racial discrimination sufficiently to demonstrate a compelling governmental interest in establishing an M/WBE program. First, there needs to be identified discrimination in the relevant market. ${ }^{20}$ Second, "the governmental actor enacting the set-aside program must have somehow perpetuated the discrimination to be remedied by the program," ${ }^{21}$ either actively or at least passively with "the infusion of tax dollars into a discriminatory industry." ${ }^{22}$

Although the Supreme Court in Croson did not specifically define the methodology that should be used to establish the evidentiary basis required by strict scrutiny, the Court did outline governing principles. Lower courts have expanded the Supreme Court's Croson guidelines and have applied or distinguished these principles when asked to decide the constitutionality of state, county, and city programs that seek to enhance opportunities for minorities and women.

### 2.3.1 Post-Enactment Evidence

The Supreme Court in Croson found pre-enactment evidence of discrimination insufficient to justify the program. The defendant in Croson did not seek to defend its program based on post-enactment evidence. However, following Croson, a number of circuits did defend the use of post-enactment evidence to support the establishment of a local public affirmative action program. ${ }^{23}$ Some cases required both preenactment and post-enactment evidence. ${ }^{24}$

The Supreme Court case of Shaw v. Hunt ${ }^{25}$ (Shaw) raised anew the issue of post-enactment evidence in defending local public sector affirmative action programs. Shaw involved the use of racial factors in drawing voting districts in North Carolina. In Shaw, the Supreme Court rejected the use of reports providing evidence of discrimination in North Carolina because the reports were not developed before the voting districts were designed. Thus, the critical issue was whether the legislative body believed that discrimination had existed before the districts were drafted. ${ }^{26}$ Following the Shaw decision, two districts courts rejected the use of post-enactment evidence in the evaluation of the constitutionality of local

[^6]minority business programs. ${ }^{27}$ A federal circuit court decision, covering the federal small disadvantaged business enterprise program, stated that, "For evidence to be relevant in a strict scrutiny analysis of the constitutionality of a statute, it must be proven to have been before Congress prior to enactment of the racial classification." ${ }^{28}$ The issue of post-enactment evidence was not directly addressed in H.B. Rowe, although the NCDOT M/WBE program was upheld based on studies conducted after the program was enacted.

### 2.3.2 Racial Classifications Subject to Strict Scrutiny

In Scott v. Jackson, the city argued that its disadvantaged business program was not a racial classification subject to strict scrutiny because (1) it was based upon disadvantage, not race, and (2) it was a goals program and not a quota. The Fifth Circuit disagreed with the claim that the Jackson program was not a racial classification because the city used the federal Section $8(\mathrm{~d})$, which grants a rebuttable presumption of social and economic disadvantage to firms owned by minorities. ${ }^{29}$ Such a presumption is subject to strict scrutiny. The Fifth Circuit also noted that strict scrutiny applied not simply when race-conscious measures were required, but also when such measures were authorized or encouraged. ${ }^{30}$ While this issue was not directly addressed in H.B. Rowe, the Fourth Circuit did state in an earlier case that with regard to a claim that an employment affirmative action program was not a racial quota, "In the end, appellees cannot escape the reality that these preferences will deny some persons the opportunity to be a state trooper or to advance as a state trooper solely because they belong to a certain race."31

### 2.3.3 Staleness of Data and Time Period of Study

A few cases have addressed the issue of how much and how current data must be to satisfy strict scrutiny and how much data must be reviewed to satisfy strict scrutiny. There is no clear guidance from the district courts about how many years should be studied, although there is cautionary language in cases about relying on small samples of data. ${ }^{32}$ With regard to the age of data the federal appeals court decision of Rothe ruled that relying on disparity studies that presented data was not stale with regard to reenacting a federal program in 2006. Whereas agencies could rely on the most current available data, other circuit courts had "relied on studies containing data more than five years old when conducting compelling interest analyses." ${ }^{33}$

### 2.3.4 Outreach Programs and Strict Scrutiny

There has been some difference amongst the circuit courts as to whether strict scrutiny applies to outreach programs. In Safeco v. City of White House, the Sixth Circuit stated that "outreach efforts may

[^7]or may not require strict scrutiny." ${ }^{34}$ However, the Eleventh Circuit in Virdi v. DeKalb County School District in the course of discussing a school district M/WBE program stated that, "strict scrutiny applies to all racial classifications, not just those creating racial preferences." ${ }^{35}$ The Fifth Circuit also made clear in W. H. Scott Construction Company, Inc. v. City of Jackson, that both goals and quotas grant a preference based on race. ${ }^{36}$

Nevertheless, in a ruling on summary judgment in HCA v. Houston Metro the Fifth Circuit did appear to draw a distinction between an "outreach program... [for which] all that is required of the contractors is that they contact DBEs and give them an opportunity to bid as subcontractors on the project," and a "coercive quota." ${ }^{37}$ The plaintiff had argued that the Houston Metro DBE program was a "coercive quota" and not a goals program because there were serious repercussions for prime contractors if the DBE goals were not satisfied. The Fifth Circuit vacated the district court ruling on the interpretation of Houston Metro's program as a coercive quota disguised as a goals program (albeit supported by a disparity study criticized by the district court), rather than an outreach program. The implication being that there is difference in material fact between an outreach program supported by a disparity study and a coercive quota based on the same disparity study. Both an outreach program and a coercive quota are subject to strict scrutiny and require a factual predicate, but they do differ with regard to narrow tailoring.

### 2.4 Statistical Evidence

The Supreme Court in Croson stated that "where gross statistical disparities can be shown, they alone in a proper case may constitute prima facie proof of a pattern or practice of discrimination." ${ }^{38}$ But the statistics must go well beyond comparing the rate of minority presence in the general population to the rate of prime construction contracts awarded to MBEs. The Court in Croson objected to such a comparison, indicating that the proper statistical evaluation would compare the percentage of qualified MBEs in the relevant market with the percentage of total municipal construction dollars awarded to them. ${ }^{39}$

The Supreme Court in Croson recognized statistical measures of disparity that compared the number of qualified and available M/WBEs with the rate of state construction dollars actually awarded to M/WBEs in order to demonstrate discrimination in a local construction industry. ${ }^{40}$ To meet this more precise requirement, courts, including the Fourth Circuit, have accepted the use of a disparity index. ${ }^{41}$

### 2.4.1 Determining Availability

To perform proper disparity analysis, the government must determine "availability" - the number of qualified minority contractors willing and able to perform a particular service for the state and local

[^8]government. In Croson, the Court stated, "Where 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." ${ }^{42}$

An accurate determination of availability also permits the government to meet the requirement that it "determine the precise scope of the injury it seeks to remedy" by its program. ${ }^{43}$ Following Croson's statements on availability, lower courts have considered how legislative bodies may determine the precise scope of the injury sought to be remedied by an MBE program. Nevertheless, the federal courts have not provided clear guidance on the best data sources or techniques for measuring M/WBE availability.

Different forms of data used to measure availability give rise to particular controversies. In H.B. Rowe, subcontractor availability was estimated using NCDOT-approved subcontractors, subcontractor awardees and prime contractors. The plaintiff's expert argued in the case that subcontractor bidder data should be employed to estimate subcontractor availability rather than a vendor-based approach. The Fourth Circuit in H.B. Rowe noted that the available subcontractor bidder data did not change the results of the vendor data. ${ }^{44}$

Further, Courts have permitted the use of census data to measure availability. Census data has the benefit of being accessible, comprehensive, and objective in measuring availability. In Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia, the Third Circuit acknowledged some of the limitations of census data, but nonetheless stated that such data could appropriately be used in disparity studies. ${ }^{45}$ In that case, the city's consultant calculated a disparity using data showing the total amount of contract dollars awarded by the city, the amount that went to MBEs, and the number of African American construction firms. The consultant combined this data with data from the Census Bureau on the number of construction firms in the Philadelphia Standard Metropolitan Statistical Area. ${ }^{46}$ Although the Third Circuit declined to rule on the compelling interest prong, the court's discussion of the data sources indicated that it may be inclined to accept such data sources. ${ }^{47}$
Another potential data source that could be used to determine minority firm availability is the agency's bidder data. ${ }^{48}$ However, as pointed out in the National Cooperative Highway Research Program's Report 644, the bidder list approach has several drawbacks, including the fact that minority firms are likely to be underrepresented in such lists because of current and past discrimination. ${ }^{49}$ Further, Croson does not require the use of bidder data to determine availability. ${ }^{50}$ In Concrete Works IV, in the context of plaintiff's

[^9]complaint that the City of Denver had not used such information, the Tenth Circuit rejected the plaintiff's claim that the availability data was unreliable because it was not based on the city's bidder data. ${ }^{51}$ As the court noted, the usefulness of bid information is limited, since some firms that bid may not be qualified or able to undertake agency contracts, whereas other firms that do not bid may be qualified and able to do so. ${ }^{52}$

### 2.4.2 Relevant Market Area

Another issue in availability analysis is the definition of the relevant market area. Specifically, the question is whether the relevant market area should be defined as the area from which a specific percentage of purchases are made, the area in which a specific percentage of qualified, willing and able contractors may be located, or the area determined by a fixed geopolitical boundary.

The Supreme Court has not yet established how the relevant market area should be defined, and the relevant market was not directly addressed in H.B. Rowe. However, the study in Rowe defined the relevant market as the area in which 75 percent of the dollars was spent by the agency with vendors in a particular procurement category.

### 2.4.3 Firm Qualifications

Another availability consideration is whether M/WBE firms are qualified to perform the required services. In Croson, the Supreme Court noted that although gross statistical disparities may demonstrate prima facie proof of discrimination, "when special qualifications are required to fill particular jobs, comparisons to the general population (rather than to the smaller group of individuals who possess the necessary qualifications) may have little probative value. ${ }^{\prime 53}$ The Court, however, did not define the test for determining whether a firm is qualified. In H.B. Rowe, the plaintiff's expert argued that prime contractor assessment of subcontractor qualifications should be used to assess M/WBE subcontractor qualification. But the Fourth Circuit noted that there was no data on prime contractor assessment of subcontractor qualifications. ${ }^{54}$

## Willingness

Croson requires that an "available" firm must be not only qualified but also willing to provide the required services. In this context, it can be difficult to determine whether a business is willing. The decision in H.B. Rowe did not directly address measures of willingness, but implicitly accepted the vendor-based measures of availability presented in the NCDOT as a measure of willingness.

## Ability

Another availability consideration is whether the firms being considered are able to perform a particular service. Those who challenge affirmative action often question whether M/WBE firms have the "capacity" to perform particular services. In Rowe the court noted that capacity does not have the same force for

[^10]subcontracts which are relatively small. The NCDOT study provided evidence that more than 90 percent of subcontracts were valued at less than $\$ 500,000 .{ }^{55} \mathrm{In}$ addition, the study for NCDOT contained a regression analysis indicating that "African American ownership had a significant negative impact on firm revenue unrelated to firm capacity or experience." ${ }^{56}$

## Disparity Index

In the Rowe decision the plaintiff noted that there was not substantial disparity when the percentage of subcontractors were used was compared to their availability. However, the Fourth Circuit noted that "the State pointed to evidence that prime contractors used minority businesses for low value work in order to comply with the Department's goals." ${ }^{57}$ Along these lines the Fourth Circuit noted that the average subcontract awarded to nonminority male subcontractors was more than double the size of subcontracts won by MBE subcontractors. ${ }^{58}$

## Statistical Significance in Disparity Studies

While courts have indicated that anecdotal evidence may suffice without statistical evidence, no case without statistical evidence has been given serious consideration by any circuit court. In practical effect, courts require statistical evidence. Further, the statistical evidence needs to be held to appropriate professional standards. ${ }^{59}$ In H.B. Rowe the court noted that the NCDOT study focused on disparity ratios lower than 80 percent and conducted t -tests of statistical significance.

## Non-Goal Evidence

Another question that has arisen in the case law is whether evidence of a decline in M/WBE utilization following a change in or termination of an M/WBE program is relevant and persuasive evidence of discrimination. The Fourth Circuit in H.B. Rowe found that a 38 percent decline in M/WBE utilization following the suspension of the program "surely provides a basis for a fact finder to infer that discrimination played some role in prime contractors' reduced utilization of these groups during the suspension." ${ }^{60}$ Similarly, the Eighth Circuit in Sherbrooke Turf Inc. v. Minnesota Department of Transportation and the Tenth Circuit in Concrete Works IV found that such a decline in M/WBE utilization was evidence that prime contractors were not willing to use M/WBEs in the absence of legal requirements. ${ }^{61}$

### 2.5 Passive Participation to Discrimination

In Croson, the Supreme Court stated, "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 evil of private prejudice." ${ }^{62}$ Croson provided that the government "can use its spending powers to remedy private discrimination, if it identifies that discrimination with the particularity

[^11]required by the Fourteenth Amendment." ${ }^{63}$ The government agency's active or passive participation in discriminatory practices in the marketplace may show the compelling interest. Defining passive participation, Croson stated, "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." ${ }^{64}$

In the H.B. Rowe case, WBEs were over-utilized on NCDOT projects, but evidence was presented of very low M/WBE utilization in private sector commercial construction and econometric evidence of disparities in entry into and earnings from self-employment in construction in the Public Use Micro Sample data. The Fourth Circuit criticized the evidence offered by NCDOT for not having a t-test of statistical significance, for not showing that WBEs sought private sector work, and for less anecdotal evidence of private sector discrimination against WBEs than was shown for minorities. The Fourth Circuit contrasted affidavits produced in the Concrete Works case of firms testifying they sought private sector work and could not obtain it. The court also stated that NCDOT did not establish the overlap between private sector and public sector work in transportation although the court acknowledged that some of the subcontracting was the same in both sectors. There is negligible private sector highway construction. The econometric evidence of self-employment was not addressed. The Fourth Circuit did acknowledge that,

We do not suggest that the proponent of a gender-conscious program must always tie private discrimination to public action...Rather, we simply hold where, as here, there exists substantial probative evidence of overutilization in the relevant public sector, a state must present something more than generalized private-sector data unsupported by compelling anecdotal evidence to justify a gender-conscious program. ${ }^{65}$

The Tenth Circuit decision in Adarand concluded that evidence of private sector discrimination provided a compelling interest for a DBE program. ${ }^{66}$ Later cases have reaffirmed that the government has a compelling interest in avoiding the financing of private discrimination with public dollars. ${ }^{67}$

Relying on this language in Croson, a number of local agencies have increased their emphasis on evidence of discrimination in the private sector. This strategy has not always succeeded. Evidence of private discrimination presented in litigation was found inadequate in the Philadelphia and Dade County cases ${ }^{68}$ The Third Circuit stated, in discussing low MBE participation in a local contractors association in the city of Philadelphia, "racial discrimination can justify a race-based remedy only if the city has somehow participated in or supported that discrimination." ${ }^{\prime 9}$ Nevertheless, recently in Concrete Works IV, the Tenth Circuit upheld the relevance of data from the private marketplace to establish a factual predicate for M/WBE programs. ${ }^{70}$ That is, courts mainly seek to ensure that M/WBE programs are based on findings of

[^12]active or passive discrimination in the government contracting marketplace, and not simply attempts to remedy general societal discrimination.

Courts also seek to find a causal connection between a statistical disparity and actual underlying discrimination. In Engineering Contractors, one component of the factual predicate was a study comparing entry rates into the construction business for M/WBEs and non-M/WBEs. ${ }^{71}$ The analysis provided statistically significant evidence that minorities and women entered the construction business at rates lower than would be expected, given their numerical presence in the population and human and financial capital variables. The study argued that those disparities persisting after the application of appropriate statistical controls were most likely the result of current and past discrimination. Even so, the Eleventh Circuit criticized this study for reliance on general census data and for the lack of particularized evidence of active or passive discrimination by Dade County, holding that the district court was entitled to find that the evidence did not show compelling justification for an M/WBE program. ${ }^{72}$

The Seventh Circuit has perhaps set a higher bar for connecting private discrimination with government action. The trial court in the Cook County case extensively considered evidence that prime contractors simply did not solicit M/WBEs as subcontractors and considered carefully whether this evidence on solicitation served as sufficient evidence of discrimination, or whether instead it was necessary to provide further evidence that there was discrimination in hiring M/WBE subcontractors. ${ }^{73}$ The Seventh Circuit held that this evidence was largely irrelevant. ${ }^{74}$ Beyond being anecdotal and partial, evidence that contractors failed to solicit M/WBEs on Cook County contracts was not the same as evidence that M/WBEs were denied the opportunity to bid. ${ }^{75}$ Furthermore, such activities on the part of contractors did not necessarily implicate the County as being a passive participant in such discrimination as might exist because there was no evidence the county knew about it. ${ }^{76}$

Interestingly, some courts have been willing to see capital market discrimination as part of the required nexus between private and public contracting discrimination, even if capital market discrimination could arguably be seen as simply part of broader societal discrimination. In Adarand v. Slater, the Tenth Circuit favorably cited evidence of capital market discrimination as relevant in establishing the factual predicate for the federal DBE program. ${ }^{77}$ The same court, in Concrete Works IV, found that barriers to business formation were relevant insofar as this evidence demonstrated that M/WBEs were "precluded from the outset from competing for public construction contracts." ${ }^{18}$ Along related lines, the court also found a regression analysis of census data to be relevant evidence showing barriers to M/WBE formation. ${ }^{79}$

Courts have come to different conclusions about the effects of M/WBE programs on the private sector evidence itself. For instance, is M/WBE participation in public sector projects higher than on private sector

[^13]projects simply because the M/WBE program increases M/WBE participation in the public sector, or is such a pattern evidence of private sector discrimination? The Seventh Circuit raised the former concern in the Cook County litigation. ${ }^{80}$ Concrete Works IV, on the other hand, expressly cited as evidence of discrimination that M/WBE contractors used for business with the city of Denver were not used by the same prime contractors for private sector contracts. ${ }^{81}$

Finally, is evidence of a decline in M/WBE utilization following a change in or termination of an M/WBE program relevant and persuasive evidence of discrimination? The Eighth Circuit in Sherbrooke Turf Inc. v. Minnesota Department of Transportation and the Tenth Circuit in Concrete Works IV did find that such a decline in M/WBE utilization was evidence that prime contractors were not willing to use M/WBEs in the absence of legal requirements. ${ }^{82}$ Other lower courts have arrived at similar conclusions. ${ }^{83}$

### 2.6 Anecdotal Evidence

Most disparity studies present anecdotal evidence along with statistical data. The Supreme Court in Croson discussed the relevance of anecdotal evidence and explained: "[E]vidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government's determination that broader remedial relief is justified." ${ }^{84}$

In H.B. Rowe there was evidence from a telephone survey, interviews and focus groups. The Fourth Circuit favorably cited survey evidence of a good old boys' network excluding MBEs from work, double standards in qualifications, primes viewing MBEs as less qualified, dropping MBEs after contract award and the firms changing their behavior when not required to use MBEs. This material was affirmed in interviews and focus groups. The Fourth Circuit also seemed to give some weight to the differences in responses between ethnic/gender groups in regarding the aforementioned barriers. The Fourth Circuit concluded that, "The survey in the 2004 study exposed an informal, racially exclusive network that systematically disadvantaged minority subcontractors." ${ }^{85}$

The plaintiff argued that this data was not verified. To which the Fourth Circuit responded," a fact finder could very well conclude that anecdotal evidence need not- and indeed cannot—be verified because it "is nothing more than a witness' narrative of an incident told from the witness' perspective and including the witness' perceptions." ${ }^{86}$ The Fourth Circuit also commented favorably on the NCDOT study survey oversampling MBEs as long as the sample was random. The Fourth Circuit did state, citing precedent in Maryland Troopers, that it was problematic to infer "discrimination from reports of cronyism absent evidence of racial animus." ${ }^{87}$

[^14]In Engineering Contractors, the County presented testimony from M/WBE program staff, affidavits from $23 \mathrm{M} / \mathrm{WBEs}$ and a survey of Black-owned firms. The Eleventh Circuit acknowledged that the "picture painted by the anecdotal evidence [was] not a good one." ${ }^{88}$ However, the Eleventh Circuit had a limited discussion of the requirements for anecdotal evidence because the statistical evidence was weak and the Court noted that "only in the rare case will anecdotal evidence suffice standing alone." 89

Although Croson did not expressly consider the form or level of specificity required for anecdotal evidence, the Ninth Circuit has addressed both issues. In Coral Construction, the Ninth Circuit addressed the use of anecdotal evidence alone to prove discrimination. Although King County's anecdotal evidence was extensive, the court noted the absence in the record of any statistical data in support of the program. Additionally, the court stated, "While anecdotal evidence may suffice to prove individual claims of discrimination, rarely, if ever, can such evidence show a systemic pattern of discrimination necessary for the adoption of an affirmative action plan." ${ }^{90}$ The court concluded, by contrast,

There is no merit to [the plaintiff's] argument that witnesses' accounts must be verified to provide support for Denver's burden. Anecdotal evidence is nothing more than a witness' narrative of an incident told from the witness' perspective and including the witness' perceptions...Denver was not required to present corroborating evidence and [the plaintiff] was free to present its own witnesses to either refute the incidents described by Denver's witnesses or to relate their own perceptions on discrimination in the Denver construction industry

Concrete Works IV, 321 F.3d at 989. and statistical evidence is potent." ${ }^{91}$

Regarding the appropriate form of anecdotal evidence, the Ninth Circuit in Coral Construction noted that the record provided by King County was "considerably more extensive than that compiled by the Richmond City Council in Croson." 92 The King County record contained "affidavits of at least 57 minority or [female] contractors, each of whom complain[ed] in varying degree[s] of specificity about discrimination within the local construction industry". ${ }^{93}$ The Coral Construction court stated that the M/WBE affidavits "reflect[ed] a broad spectrum of the contracting community" and the affidavits "certainly suggest[ed] that ongoing discrimination may be occurring in much of the King County business community." 94

In Associated General Contractors of California v. Coalition for Economic Equity (AGCC II), the Ninth Circuit discussed the specificity of anecdotal evidence required by Croson. ${ }^{95}$ Seeking a preliminary injunction, the contractors contended that the evidence presented by the city of San Francisco lacked the specificity required by both an earlier appeal in that case and by Croson. ${ }^{96}$ The court held that the City's findings were based on substantially more evidence than the anecdotes in the two prior cases, and "were clearly

[^15]based upon dozens of specific instances of discrimination that are laid out with particularity in the record, as well as significant statistical disparities in the award of contracts." ${ }^{97}$

The court also ruled that the City was under no burden to identify specific practices or policies that were discriminatory. ${ }^{98}$ Reiterating the City's perspective, the court stated that the City "must simply demonstrate the existence of past discrimination with specificity; there is no requirement that the legislative findings specifically detail each and every instance that the legislative body ha[d] relied upon in support of its decision that affirmative action is necessary." ${ }^{99}$ Not only have courts found that a municipality does not have to specifically identify all the discriminatory practices impeding M/WBE utilization, but the Tenth Circuit in Concrete Works IV also held that anecdotal evidence collected by a municipality does not have to be verified.

### 2.7 Narrowly Tailoring

The discussion of compelling interest in the court cases has been extensive, but narrow tailoring may be the more critical issue. Many courts have held that even if a compelling interest for the M/WBE program can be found, the program can still be found to not be narrowly tailored. ${ }^{100}$ The Fourth Circuit has laid out the following factors in determining whether or not a program was narrowly tailored:
(1) the necessity of the policy and the efficacy of alternative race neutral policies; (2) the planned duration of the policy; (3) the relationship between the numerical goal and the percentage of minority group members in the relevant population; (4) the flexibility of the policy, including the provision of waivers if the goal cannot be met; and (5) the burden of the policy on innocent third parties. ${ }^{101}$

In H.B. Rowe, the Fourth Circuit added to this list "overinclusiveness," defined as the "tendency to benefit particular minority groups that have not been shown to have suffered invidious discrimination." ${ }^{102}$

### 2.7.1 Race-Neutral Alternatives

Concerning race-neutral alternatives, the Supreme Court in Croson concluded that a governmental entity must demonstrate that it has evaluated the use of race-neutral means to increase minority business participation in contracting or purchasing activities. In H.B. Rowe, the Fourth Circuit noted that NCDOT had a Small Business Enterprise program and had undertaken all the race neutral methods suggested by the DOT DBE program regulations. The Court went on to note that the plaintiff had identified "no viable race-neutral alternatives that North Carolina has failed to consider and adopt" ${ }^{103}$ (emphasis in the

[^16]original). The Court further noted that disparities persisted in spite of NCDOT employment of these race neutral initiatives.

### 2.7.2 Duration of the Remedy

With respect to program duration, in Adarand v. Peña, the Supreme Court wrote that a program should be "appropriately limited such that it will not last longer than the discriminatory effects it is designed to eliminate." ${ }^{104}$ In H.B. Rowe the Fourth Circuit stated that "the district court found two facts particularly compelling in establishing that it was narrowly tailored: the statute's provisions (1) setting a specific expiration date and requiring a new disparity study every 5 years."... We agree." ${ }^{105}$ Other appellate courts have noted possible mechanisms for limiting program duration: required termination if goals have been met ${ }^{106}$ and decertification of MBEs who achieve certain levels of success, or mandatory review of MBE certification at regular, relatively brief periods. ${ }^{107}$

### 2.7.3 Relationship of Goals to Availability

Narrow tailoring under the Croson standard requires that remedial goals be in line with measured availability. Merely setting percentages without a carefully selected basis in statistical studies, as the city of Richmond did in Croson itself, has played a strong part in decisions finding other programs unconstitutional. ${ }^{108}$

In H.B. Rowe, the Fourth Circuit found that NCDOT participation goals were related to percentage MBE availability. First, the NCDOT goals were set project by project. Second, there was a report detailing the type of work likely to be subcontracted. Third, the NCDOT goal setting committee checks its database for availability. Finally, Fourth Circuit noted that 10 percent of the NCDOT projects had a zero M/WBE goal.

### 2.7.4 Flexibility

In H.B. Rowe, the Fourth Circuit agreed with the ruling of the federal district court in the case that the NCDOT M/WBE program was flexible, stated that,

The Program contemplates a waiver of project-specific goals when prime contractors make good faith efforts to meet those goals...Good faith efforts essentially require only that the prime contractor solicit and consider bids from minorities. The State does not require or expect the prime contractor to accept any bid from an unqualified bidder, or any bid that is not the lowest bid. Moreover, prime contractors can bank any excess minority participation for use against future goals over the following two years. Given the lenient standard and flexibility of the "good faith" requirement, it comes as little surprise

[^17]that as of July 2003, only 13 of 878 good faith submissions-including Rowe's-had failed to demonstrate good faith efforts.

In contrast, the Third Circuit observed in Contractors Association that, "As we have explained, the 15 percent participation goal and the system of presumptions, which in practice require non-black contractors to meet the goal on virtually every contract, result in a $15 \%$ set-aside for black contractors in the subcontracting market." ${ }^{109}$

The Fourth Circuit also noted that,
The State does not require or expect the prime contractor to accept any bid from an unqualified bidder, or any bid that is not the lowest bid. Moreover, prime contractors can bank any excess minority participation for use against future goals over the following two years. ${ }^{110}$

It is worth observing that these features of the NCDOT program are more narrowly tailored than the federal DBE program for federally funded transportation projects. ${ }^{111}$

### 2.7.5 Burden on Third Parties

Narrow tailoring also requires minimizing the burden of the program on third party's waivers. Good faith compliance is a tool that serves this purpose of reducing the burden on third parties. ${ }^{112}$ The plaintiff in H.B. Rowe argued that the solicitation requirements were burdensome and that it was forced to subcontract out work that could be self-performed. The Fourth Circuit noted that the solicitation requirements could be met with existing staff and the M/WBE program did not require subcontracting out work that could be self-performed. ${ }^{113}$

### 2.7.6 Over-inclusion

Finally, narrow tailoring involves limiting the number and type of beneficiaries of the program. As noted above, there has to be evidence of discrimination to justify a group-based remedy, and over-inclusion of uninjured individuals or groups can endanger the entire program. However, the statute in question limited relief "those racial or ethnicity classifications . . . that have been subjected to discrimination in the relevant marketplace and that have been adversely affected in their ability to obtain contracts with the Department." ${ }^{114}$

[^18]
### 2.8 Small Business Procurement Preferences

Small business procurement preferences have existed since the 1940s. The first small business program had its origins in the Smaller War Plants Corporation (SWPC), established during World War II. ${ }^{115}$ The SWPC was created to channel war contracts to small business. In 1947, Congress passed the Armed Forces Procurement Act, declaring, "It is the policy of Congress that a fair proportion of the purchases and contracts under this chapter be placed with small business concerns." ${ }^{116}$ Continuing this policy, the 1958 Small Business Act requires that government agencies award a "fair proportion" of procurement contracts to small business concerns. ${ }^{117}$ The regulations are designed to implement this general policy. ${ }^{118}$

Section 8(b)(11) of the Small Business Act authorizes the Small Business Administration (SBA) to set aside contracts for placement with small business concerns. The SBA has the power:

> ...to make studies and recommendations to the appropriate Federal agencies to insure that a fair proportion of the total purchases and contracts for property and services for the Government be placed with small-business enterprises, to insure that a fair proportion of Government contracts for research and development be placed with small-business concerns, to insure that a fair proportion of the total sales of Government property be made to small-business concerns, and to insure a fair and equitable share materials, supplies, and equipment to small-business concerns. ${ }^{119}$

Every acquisition of goods and services anticipated to be between $\$ 2,500$ and $\$ 100,000$ is set aside exclusively for small business unless the contracting officer has a reasonable expectation of fewer than two bids by small businesses. ${ }^{120}$

There has been only one constitutional challenge to the long-standing federal SBE programs. In J.H. Rutter Rex Manufacturing v. United States, ${ }^{121}$ a federal vendor unsuccessfully challenged the Army's small business set-aside as in violation of the due process clause of the Fifth Amendment to the U.S. Constitution, as well as the Administrative Procedures Act and the Armed Forces Procurement Act. ${ }^{122}$ The court held that classifying businesses as small was not a "suspect classification" subject to strict scrutiny. Instead, the court ruled:

Since no fundamental rights are implicated, we need only determine whether the contested socioeconomic legislation rationally relates to a legitimate governmental purpose . . . Our previous discussion adequately demonstrates that the procurement statutes and the regulations promulgated there under are rationally related to the sound

[^19]
## legislative purpose of promoting small businesses in order to contribute to the security and economic health of this Nation. ${ }^{123}$

A large number of state and local governments have maintained small business preference programs for many years. ${ }^{124}$ No district court cases were found overturning a state and local small business preference program. One reason for the low level of litigation in this area is that there has been no significant organizational opposition to SBE programs. There are no reported cases of litigation against local SBE programs. The legal foundations that have typically sued M/WBE programs have actually promoted SBE procurement preference programs as a race-neutral substitute for M/WBE programs.

There has been one state court case in which an SBE program was struck down as unconstitutional. The Cincinnati SBE program called for maximum practical M/WBE participation and required bidders to use good faith effort requirements to contract with M/WBEs up to government-specified M/WBE availability. Failure to satisfy good faith effort requirements triggered an investigation of efforts to provide opportunities for M/WBE subcontractors. In Cleveland Construction v. Cincinnati, ${ }^{125}$ the state court ruled that the Cincinnati SBE program had race and gender preferences and had deprived the plaintiff of constitutionally protected property interest without due process of law. The city acknowledged that it had not offered evidence to satisfy strict scrutiny because it felt that it had been operating a race-neutral program.

### 2.9 DBE Programs

### 2.9.1 Over-inclusion Factual Predicate for DBE Programs

The Ninth Circuit in Western States Paving Co. v. Washington State Department of Transportation cited the following evidence that Congress considered in finding a factual predicate supporting the federal DBE program:

- Minority business ownership percentage does not reflect the percentage of the population.
- MBEs have gross receipts that are on average approximately one-third those of firms owned by non-minorities.
- MBEs own 9 percent of all businesses but receive only 4.1 percent of federal contracting dollars.
- WBEs constitute almost a third of all small businesses but receive less than 3 percent of federal contracting dollars.
- Majority-owned construction firms receive more than 50 times as many loan dollars per dollar of equity capital as Black firms with the same borrowing characteristics.

[^20]- After many state and local governments stopped their M/WBE programs there was a significant drop in M/WBE utilization in the construction industry.
- The U.S. Department of Justice study The Compelling Interest for Affirmative Action in Federal Procurement: A Preliminary Survey found that discrimination by trade unions, financial lenders, prime contractors, business networks, suppliers, and bonding companies and "old boys' network." 126

The Ninth Circuit also concurred with the ruling of the federal circuit in Rothe Development Corp. $v$. Department of Defense, as well as the Eighth Circuit in Sherbrooke Turf, that Congress did not need to possess evidence of discrimination in every state to enact the national DBE program. ${ }^{127}$

### 2.9.2 "As Applied" Challenge in Western States Paving

The Washington DOT DBE program was struck down in Western States Paving not because the federal DBE program had no factual predicate and not because the federal DBE program lacked narrow tailored program features. Instead, the Ninth Circuit ruled that the Washington DOT DBE program was not narrowly tailored "as applied." ${ }^{128}$ While a state does not have to independently provide a factual predicate for its DBE program, the Ninth Circuit found that "it cannot be said that TEA-21 is a narrowly tailored remedial measure unless its application is limited to those States in which the effects of discrimination are actually present." ${ }^{129}$ In effect, while the Washington DOT was not required to produce a separate factual predicate for a DBE program, it was still required to produce a factual predicate (of sorts) to justify race-conscious elements in the local implementation of its DBE program.

While the Washington DOT conceded that it had no studies of discrimination in highway contracting, it argued that there was evidence of discrimination in the fact that DBEs received 9 percent of subcontracting dollars on state-funded projects where there were no DBE goals and 18 percent of federal funded projects where there were DBE goals. But the Ninth Circuit stated that "even in States in which there has never been discrimination, the proportion of work that DBEs receive on contracts that lack affirmative action requirements will be lower than the share that they obtain on contracts that include such measures because minority preferences afford DBEs a competitive advantage." ${ }^{130}$
In contrast, the Eighth Circuit in Sherbrooke Turf and the Tenth Circuit in Adarand v. Slater found that a decline in DBE utilization following a change in or termination of a DBE program was relevant evidence of discrimination in subcontracting. ${ }^{131}$ The Tenth Circuit stated that while this evidence "standing alone is not dispositive, it strongly supports the government's claim that there are significant barriers to minority competition in the public subcontracting." ${ }^{132}$
The Ninth Circuit also dismissed the disparity between the proportion of DBE subcontractors and the proportion of DBE dollars on state-funded contracts, because "DBE firms may be smaller and less

[^21]experienced than non-DBE firms (especially if they are new businesses started by recent immigrants) or they may be concentrated in certain geographic areas of the State, rendering them unavailable for a disproportionate amount of work. ${ }^{133}$ The Ninth Circuit quoted the D.C. Circuit in O'Donnell to the effect that:
. . . minority firms may not have bid on . . . construction contracts because they were generally small companies incapable of taking on large projects; or they may have been fully occupied on other projects; or the District's contracts may not have been as lucrative as others available in the Washington metropolitan area; or they may not have had the expertise needed to perform the contracts; or they may have bid but were rejected because others came in with a lower price. ${ }^{134}$

The Ninth Circuit noted further that "if this small disparity has any probative value, it is insufficient, standing alone, to establish the existence of discrimination against DBEs." The Ninth Circuit contrasted this minor disparity with the Ninth Circuit's decision in Associated General Contractors of California, Inc. v. Coalition for Economic Equity, where "discrimination was likely to exist where minority availability for prime contracts was $49.5 \%$ but minority dollar participation was only $11.1 \%$." ${ }^{135}$

### 2.10 Recent Developments

Recent years have brought further challenges to race- and gender-conscious preference programs in the transportation-constructing industry. Within the Fifth Circuit, the Southern District of Texas recently considered a challenge to Houston's M/WBE program in Kossman Contracting v. City of Houston. ${ }^{136}$ The case addressed an equal-protection challenge to the City of Houston's 2013 Small/Minority Business Enterprise Program for Construction Contracts. The opinion provides an up-to-date discussion of current constitutional standards, relying primarily on Croson, more recent Supreme Court guidance, and Fifth Circuit analysis. In the Seventh Circuit, the federal DBE program and the programs of the Illinois Department of Transportation (IDOT) and the Illinois State Toll Highway Authority survived a Fourteenth Amendment equal protection challenge. ${ }^{137} \mathrm{~A} 2015$ challenge to the constitutionality of the IDOT DBE was also unsuccessful before the Seventh Circuit. ${ }^{138}$ In 2013, the Ninth Circuit dismissed an appeal, on standing grounds, of a ruling adverse to a constitutional challenge to the California Department of Transportation's DBE program, stating that the program would survive strict scrutiny. The Court indicated here that the Caltran's program would survive strict scrutiny by having a strong basis in evidence of discrimination within the California transportation contracting industry; and being narrowly tailored to benefit only those groups that have actually suffered discrimination. ${ }^{139}$

[^22]
### 2.11 Conclusions

As summarized earlier, when governments develop and implement a contracting program that is sensitive to race and gender, they must understand the case law that has developed in the federal courts. These cases establish specific requirements that must be addressed so that such programs can withstand judicial review for constitutionality and prove to be just and fair. Given current trends in the application of the law, local governments must engage in specific fact-finding processes to compile a thorough, accurate, and specific evidentiary foundation to determine whether there is, in fact, discrimination sufficient to justify an affirmative action plan. Further, state and local governments must continue to update this information and revise their programs accordingly.

While the Supreme Court has yet to return to this exact area of law to sort out some of the conflicts, the Fourth Circuit has recently provided some guidance on core standards. Ultimately, MBE and WBE programs can withstand challenges if state and local governments comply with the requirements outlined by the courts.

# 3 Review of Policies, Procedures, and Programs 

### 3.1 Introduction

Procurement and contracting are essential functions of the City of Baltimore (City). As such, procurement policies, procedures, and programs have a significant impact on City departments, City agencies, and businesses seeking opportunities to provide goods and services required by the City. An important part of a comprehensive disparity study is a review of policies, procedures, and programs. This review is important for several reasons-first, it is a key component of a comprehensive legally supportable disparity study and second the policy review is critical for
 pinpointing changes that have occurred since the 2014 disparity study. Finally, the review is important for evaluating initiatives to increase participation of minority- and women-owned businesses in the City's procurement and contracting.

MGT's review of policies and procedures is presented in five major sections. Section $\mathbf{3 . 2}$ describes the methodology used to conduct the review. The remaining sections summarize procurement policies, procedures, programs, and the structure and environment in which procurement and contracting take place. Our review of policies and procedures in this chapter is intended to provide the foundation for the analysis of utilization and availability in Chapters $\mathbf{4} \& 5$ and the findings and recommendations in Chapter 8.

### 3.2 Methodology

To conduct the review a multi-faceted approach was used, which included reviewing source documents and regulations related to procurement and contracting. The review also included meetings with staff in the Bureau of Procurement (BOP), Minority and Women's Business Opportunity Office (MWBOO), and end-user departments including the Department of General Services, Department of Public Works, Department of Transportation, Department of Housing and Community Development, and the Department of Recreation and Parks. MGT used the meetings to better understand service requirements, end-user experiences, and the operational impacts of procurement and contracting policies and procedures. MGT also researched the City's website to document information and resources available internally to City staff and to businesses seeking opportunities with the City. The policy review was conducted with the cooperation and support of City staff. At no time did MGT not obtain the cooperation and responsiveness that was critical in conducting the policy review. Without the support and cooperation received by MGT, completing the policy review and other components of this study would have been difficult. The policy review included the following:

- Finalizing the scope of the policy review.
- Collection and review of procurement/contracting policies and procedures.
- Collection and review of other information and data pertinent to the policy review and business inclusion programs.
- Interviews/meetings with City staff to document end-user's experience and understand operational impacts. Follow-up contacts were made as necessary to obtain additional information.
- Review of the 2014 disparity study conducted by NERA.
- Developing key findings and recommendations based on the policy review.

Finally, to fully understand the City's procurement and contracting process and operations, MGT reviewed the documents and information itemized in Table 3-1.

TABLE 3-1. DOCUMENTS REVIEWED DURING POLICY AND PROCEDURES REVIEW

| INDEX | DESCRIPTION |
| :---: | :---: |
| Procurement Related Documents |  |
| 1. | Baltimore City Board of Estimates-Regulations on Procurement, Protests, Minority and Women-owned Business Enterprise, and Debarment/Suspension |
| 2. | Article 5 Finance, Property, and Procurement |
| 3. | City Council Resolution 19-0169R |
| 4. | Ordinance 20-0605 Minority and Women's Business Utilization-Emergencies |
| 5. | The Green Book -Department of Public Works Specifications Materials, Highways, Bridges, Utilities, And Incidental Structures 2006 |
| 6. | Green Book User Guide 2006 |
| 7. | Resolution Relating to Non-Architectural or Engineering Professional Services February 20, 2019 |
| 8. | Resolution Relating to Non-Competitive Procurements February 20, 2019 |
| 9. | Vendor Registration in CitiBuy |
| 10. | Application for Certification |
| Other Related Documents |  |
| 11. | Maryland Annotated Code |
| 12. | The Minority and Women's Business Opportunity Office (MWBOO)Annual Report 2020 |
| 13. | Annual Goals Revised 6/1/2020 |
| 14. | M/WBE Program Annual Participation Goals 4/8/2020 |
| 15. | M/WBE Program Annual Size Standard BOE Submission 4/8/2020 |
| 16. | Office of the Inspector General Investigative Report Synopsis July 2,2020 |
| 17. | Request for Proposal Procurement Assessment and Transformation |
|  | Disparity Studies |
| 18. | NERA, Disadvantaged Business Enterprise Disparity Study, Prepared for the Maryland Department of Transportation (2013) |
| 19. | NERA The State of Minority-and Women-Owned Business Enterprise: Evidence From Baltimore March 2014 |

### 3.3 Procurement Structure and Environment

The structure and environment in which procurement and contracting occur was important for understanding the operational impact of procurement policies on city departments and businesses seeking to meet the City's service requirements. As such the City's organization structure was important for placing procurement and contracting into proper context and understanding the role of certain entities in the procurement cycle. The following exhibits (Exhibit 3-1 to 3-3) show the organization structure for the City, Bureau of Procurement (BOP), and Minority and Women's Business Opportunity Office (MWBOO). The diagram in Figure 3-1 shows the linkage between laws, policies, procedures, and resolutions that dictate procurement and contracting by the entities shown in Exhibit 3-1 to Exhibit 3-3.

The exhibits convey the size and complexity of Baltimore's municipal government and the procurement cycle. With a budget of $\$ 3.85$ billion, organized around five key priorities: Children and Families, Public Safety, Clean and Healthy Communities, Equitable Neighborhood Development, and Innovative Government, ${ }^{140}$ procurement and contracting are a vital activity. As such, organization entities such as the Board of Estimates, Bureau of Procurement, MWBOO, end-user departments, and other entities play a critical role in the procurement cycle.

FIGURE 3-1. PROCUREMENT REGULATIONS


Source: Contracting with the City Regulations, 2021.

[^23]Ideally, procurement systems should be operated in a transparent, cost-effective, and responsive manner to provide goods and supplies, professional services, architectural and engineering services, and construction services. Based on MGT's experience procurement systems are responsible for the following:

- Obtaining goods and services of good quality at fair and reasonable cost.
- Maximizing the purchasing value of public funds.
- Adhering to laws, regulations, processes, and procedures.
- Obtaining goods and services in a timely and equitable manner.

In acquiring goods and services to meet internal and external needs, a broad spectrum of activities should be carried out according to procurement regulations and policies. For this policy review, interviews and meetings with staff provided valuable insight into procurement and contracting. Discussions with staff focused mainly on procurement and contracting policies and their impact on M/WBE participation and whether there have been major changes since the 2014 disparity study. According to staff, since the 2014 disparity study, there have been few major changes in procurement policies or the procurement cycle.

Based on MGT's review, staff tended to be knowledgeable about the procurement cycle and related policies and regulations as well as requirements pertaining to M/WBE participation. The interviews and meetings with staff revealed awareness and sensitivity to the participation of small, minority and womenowned businesses. In fact, throughout most of MGT's meetings with staff, it was apparent that M/WBE participation is an important priority. Staff comments also revealed an emphasis on ensuring policies and procedures are applied fairly and consistently followed.

EXHIBIT 3-1. CITY OF BALTIMORE ORGANIZATION CHART

*The Baltimore Police Department was created by an act of State legislature. The Mayor has the statutory right to hire and replace the Police Commissioner.
Source: Summary of the Adopted Budget Fiscal 2021.

## EXHIBIT 3-2. BUREAU OF PROCUREMENT ORGANIZATION CHART



Source: Bureau of Procurement.

As shown in Exhibit 3-2, BOP consists of divisions that report to the Purchasing Agent. BOP is housed in the Department of Finance and is the City's central purchasing entity except for construction and public works contracts. These contracts are procured by the Department of Public Works, Department of Transportation, Department of General Services and the Department of Recreation and Parks. As the central purchasing entity, BOP is responsible for purchasing goods and services and obtaining maximum value for each dollar spent. BOP staff responsible for procurement and contracting perform an essential role in the acquisition of goods and services according to established policies and procedures for advertisement, solicitation, and approval.

EXHIBIT 3-3. MINORITY AND WOMEN'S BUSINESS OPPORTUNITY OFFICE ORGANIZATION CHART


Source: Minority and Women's Business Opportunity Office. ${ }^{141}$

The organization structure for MWBOO, which is housed in the Law Department, is shown in Exhibit 3-3. Organizationally MWBOO is critical in executing the City's commitment to equity and inclusion as outlined in Article 5, Subtitle 28, of the Baltimore City Code. A detailed discussion of MWBOO is provided in a subsequent section of this chapter.

It was noted that MGT's procurement policy review for the disparity study followed the Office of the Inspector General's Investigative Report Synopsis of BOP which cited several inefficiencies, waste, and opportunities for improvement. ${ }^{142}$ Also, as the policy review for the disparity study got underway, Mayor Brandon Scott announced plans for reform of the procurement system referring to the City's procurement process as "outdated, inefficient, and inequitable." Following the Mayor's announcement, the "Procurement Assessment and Transformation RFP" was issued "to identify opportunities to streamline the process, ensure proper controls and policies are in place, drive efficiencies, increase stakeholder satisfaction, drive additional savings, and establish a procurement environment suitable for P3 opportunities." ${ }^{143}$ The Procurement Assessment and Transformation is currently ongoing.

### 3.3.1 Procurement and Contracting Process

Based on MGT's experience, an efficient and effective procurement and contracting process is largely dependent on knowledgeable and skilled staff and well executed laws, regulations, and policies. The laws and regulations governing the City's procurement process components in Figure 3-1 are found in different sources and various agencies administer different pieces of the process.

The Board of Estimates is authorized to adopt procurement resolutions and regulations. Pursuant to the Baltimore City Charter, the Board of Estimates has the authority to issue procurement regulations as outlined in Baltimore City Board of Estimates "Regulations on Procurement, Protests, Minority and

[^24]Women-Owned Business Enterprise, and Debarment/Suspension." The Board of Estimates has the authority to waive regulations for certain procurements or class of procurements. The Board of Estimates regulations apply to all City agencies and to all procurements exceeding $\$ 25,000$ in contract value. Included in the Board of Estimates regulations are provisions related to procurement authority for the following:

- The Department of Finance may procure supplies, materials, equipment, and services other than professional services for using city agencies
- City agencies have authority to procure professional services
- The Department of Public Works, Department of General Services, Department of Recreation \& Parks, and the Department of Transportation have the authority to procure public works ${ }^{144}$

As mentioned, the Bureau of Procurement (BOP) is the central purchasing entity for the City, except for construction or public works contracts. Public works and design-build contracts procured by the Departments of Public Works, Transportation, General Services, or Recreations and Parks are subject to the most current provisions in the "Green Book" (Baltimore Standard Specifications) which is the "Bible" for construction.

Ordinances passed by the Baltimore City Council pertaining to procurement and contracting are codified in the Baltimore City Annotated Code. Included are provisions establishing the Minority and Women Owned Business Enterprise Program. Internal City processes and procedures are established by the Administrative Manual. Any changes, additions, or deletions to the Administrative Manual must be approved by the Board of Estimates.

Table 3-2 shows the types of solicitations utilized by the City outlined in the Board of Estimates Regulations. Table 3-2 is intended to provide a high-level overview and is not intended to reflect the "nuts and bolts" of each type of solicitation. Based on MGT's review, ample policy guidance and detail for solicitations are provided in regulations, resolutions, ordinances, and the City's website.

TABLE 3-2. TYPES OF SOLICITATIONS

| Solicitation Type | Description | Solicitation Methods |
| :--- | :--- | :--- |
| Formal | Required for procurement valued at <br> more than $\$ 50,000$ | IFBs Competitive Sealed Bids awarded <br> to the lowest responsive and <br> responsible bidder <br> RFPs, Competitive Sealed Bids awarded <br> to the highest scoring responsive and <br> responsible proposer |
| Informal | RFI used in the planning phase due to <br> lack of clarity regarding the <br> availability of contractors, <br> specifications, or types of products/ <br> services needed for a project | Nonbinding RFI that does not result in a <br> contract |
| Professional Services | Include the services of attorneys, <br> physicians, architects, engineers, | Non-Architectural or Engineering <br> Professional Services are subject to the |

[^25]|  | consultants, and other recognized <br> professional individuals, associations, <br> corporations, and groups whose <br> services are typically negotiated | guidance memorandum pertaining to <br> implementation of the Resolution of <br> the Board of Estimates Relating to Non- <br> Architectural or Engineering <br> Professional Services dated March 20, <br> 2019 |
| :--- | :--- | :--- |
| Non-Competitive Procurement | Include procurements that no <br> advantage will result in obtaining <br> competitive responses | Non-Competitive procurements are <br> subject to the Board of Estimates <br> Resolution Relating to Non-Competitive <br> effective July 1, 2019 |
| Emergency Procurement | Procurements that would otherwise <br> require Board approval, but public <br> welfare would be adversely impacted <br> by awaiting approval of the Board | Using agencies may obtain supplies, <br> materials, equipment, services, or <br> public works without formal <br> advertisement and prior approval of the <br> Board |

Source: Prepared by MGT.

Regarding the procurement and contracting cycle and the structure and environment in which it takes place, several key points and observations are particularly noteworthy:

- As indicated the City has ample regulations, resolutions, ordinances, and policies related to the procurement and contracting process. However as reflected by the following on the City's website "The procurement and contracting process for Baltimore City can be complicated and confusing. The laws and policies governing procurement and contracting are from different sources and various agencies administer different pieces of the process." The July 2,2020 Inspector General's Report shined a light on BOP for a "toxic environment" that adversely impacted BOP's efficiency and effectiveness. However, the recently issued "Procurement Assessment and Transformation RFP" also recognize there are systemic issues that must be addressed including "current procurement code, policies, systems, administrative processes, technology tools, as well as procurement activity and centralized coordination activities within all city agencies and the end-to-end procurement process across the entire enterprise. ${ }^{145}$
- Throughout the policy review, staff commented on the disruption created by staff shortages and staff vacancies and the impact on coordination and collaboration between entities involved in the procurement cycle.
- Based on input from end users there are opportunities to streamline the procurement and contracting process. One factor that was frequently mentioned was procurement cycle time which can be dramatically improved to reduce any adverse impact on operations. According to several staff procurement cycle time "conception to birth" can range from 6 to 9 months.
- From an end-user perspective there may be an opportunity to revisit how M/WBE goals are calculated for certain projects based on availability numbers which are not perceived as realistic for certain types of work.
- Overall, perceptions and opinions were consistent about improvements needed in systems, processes, and tools that facilitate procurement and contracting particularly related technology

[^26]and addressing staff attrition and retention which adversely impact operations. According to staff familiar with the 2014 disparity study some of the same issues pinpointed in the 2014 study are still prevalent and all recommendations from the 2014 study have not been fully implemented. For example, while there has been progress on recommendations related to improving contract and subcontract data collection improvements are still in progress. The 2014 study included recommendations related to prompt payment but there are still major concerns among MWBEs about prompt payment. Other recommendations that have not been fully implemented include reciprocal certification and providing more operational resources for MWBOO to certify and recertify applicants, set goals, review bids, monitor contractor performance, investigate allegations of fraud and abuse, and provide supportive services.

- COVID-19 has resulted in adjustments and pivots some of which may continue post-COVID-19.
- It was evident that ensuring inclusive and equitable purchasing is taken very seriously as well as is enabling minority- and women-owned businesses to participate in procurement and contracting.
- Overall staff were very open and forthcoming about progress since the last disparity study and opportunities to improve and enhance operations, systems, and processes related to procurement and contracting and the utilization of M/WBEs.


### 3.4 Business Inclusion Programs

The major impetus for this disparity study is participation and utilization of minority-owned businesses in procurement and contracting. In fact, the City's commitment to inclusion and economic empowerment through greater participation of minority- and women-owned firms was a key factor in conducting this study at this time. MGT's experience has shown that the successful inclusion of small and minority- and women-owned businesses is dependent upon policies and procedures that are consistently followed, strong enforcement and compliance mechanisms, effective outreach, information and assistance, and staff who are supportive and sensitive to the participation and utilization of minority- and women-owned businesses. As discussed throughout this chapter, there are ample regulations and policies in place for procurement and contracting and M/WBE participation. To conduct this component of the policy review in addition to interviews and meetings with MWBOO staff, MGT relied heavily on source documents in Exhibit 3-1 and the resources and information on the City's website.

### 3.4.1 M/WBE Program

The City's M/WBE Program was originally established in 1976 and has been in continuous operation since 1976. The M/WBE Program is authorized and governed by Article 5, Subtitle 28, of the Baltimore City Code. The regulations to carry out City policy are included in Board of Estimates Minority and WomenOwned Business Enterprise Regulation. Section III includes provisions for certification, recertification, decertification, good faith efforts, goal setting, utilization requirements, and reporting. ${ }^{146}$ Article 5, Subtitle 28, established MWBOO in the Department of Law responsible for the following:

[^27]- Certification of business enterprises
- Maintaining a directory of certified businesses
- Providing information and assistance to business enterprises
- Investigating violations and making recommendations for remedial action
- Developing and distributing forms, applications, and documents
- Maintaining statistics towards achieving annual goals recommending policies
- Monitoring contractors throughout the duration of their contracts
- Certifying compliance ${ }^{147}$

Within the context of the above MWBOO's major role is enforcement of Article 5, Subtitle 28, and Subtitle 29. MWBOO's specific compliance responsibilities include:

- Setting M/WBE goals and monitoring all City contracts above \$50,000
- Reviewing budgets and setting goals and monitoring all private contracts of \$50,000 or more
- Reviewing waiver requests from all agencies
- Reviewing BOE items for compliance
- Conducting compliance reviews-bids, renewals, increases, extensions, amendments, change orders over 10 percent ${ }^{148}$

MWBOO's specific investigation responsibilities include:

- Site visits for businesses seeking certification
- Interviews to confirm minority and/or woman ownership
- Site visits to verify subcontractor performance
- Mediation of payment disputes between prime contractors and subcontractors
- Contract reviews pertaining subcontractor addition, substitution, or decrease in goals
- Review of non-compliance allegations
- Release of retainage reviews ${ }^{149}$


### 3.4.2 M/WBE Program Policy

Policies related to the M/WBE Program are governed by Article 5, Subtitle 28, of the Baltimore City Code, Minority and Women's Business Enterprises (M/WBE ordinance). The ordinance is based upon previous disparity study findings documenting discrimination in the City's contracting process by prime contractors against $M / W B E s$ that resulted in significant underutilization of $M / W B E s$ in City contracts. The ordinance

[^28]was passed in an effort to overcome the effects of past discrimination and to prevent ongoing discrimination in the City's procurement and contracting process. The ordinance has sunset provisions but has been extended by City Council since its passage. Major policy directives in the ordinance include:

- Establishing annual M/WBE goals
- Utilizing race and gender remedies in conjunction with the M/WBE Program
- Setting goals on a per contract basis
- Limiting eligibility to the Baltimore City Market Area
- Regular review of minority group categories
- Criminal penalties for fraudulent misuse
- Post-bid submission of information about minority and women's business enterprises ${ }^{150}$

In Article 5, Subtitle 28, MBE and WBE subcontracting requirements are set forth in Chapter 2 including definitions for MBE, WBE, minority categories, certified business enterprise, and the authority of the Board of Estimates and Finance Department. Part II of Chapter 2 includes Annual Goals and Certification requirements are found in Part IV Counting MBE and WBE Participation. Utilization requirements for contracts between \$1,000 and \$4,999 are explicitly stated in Part V which include:

- Providing the contracting agency with a list of certified businesses
- Soliciting bids from certified businesses

Provisions for contracts between $\$ 5,000$ and $\$ 49,999$ and contracts of $\$ 50,000$ or more are also included in Part IV. ${ }^{151}$

### 3.4.3 M/WBE and Program Results

The following exhibits highlight results and key metrics for MWBOO. Exhibits 3-4 and 3-6 include results for FY 2015 to FY 2019 which encompass the study period for this disparity study.

[^29]
## EXHIBIT 3-4. MWBOO RESULTS



Source: The Minority and Women's Business Opportunity Office Annual Report 2020.

EXHIBIT 3-5. BUSINESS CERTIFICATION RESULTS


Contributing factors in increased certified businesses

## Factor 1 Shorter application created in 2018 for MDOT certified Businesses

Factor 2 Large projects with M/WBE goals such as Port Covington

Factor 3
Increased outreach/collaboration
Source: The Minority and Women's Business Opportunity Office Annual Report 2020.

EXHIBIT 3-6. PROTEST RESULTS


[^30]The results, which encompass the study period for this disparity study, are significant given comments about resources in the 2014 study. The 2014 disparity study concluded "a legally defensible and administratively successful M/WBE Program cannot be implemented without additional resources" - a conclusion with which MGT is in total agreement. MWBOO is solely responsible for certifying MBEs and WBEs and other key program elements such as annual participation goals, contract participation goals, contract reporting and monitoring, outreach, and supportive services all of which are critical to a legally defensible and administratively successful M/WBE Program. To ensure consistently efficient and effective operations MWBOO will need more resources.

### 3.4.4 Resources for Doing Business with the City

Navigating the City's procurement and contracting process is essential for businesses and city departments and agencies. As such, the guidance, direction, and support provided to vendors and city staff is critical. Typically, an organization's website is the starting point for seeking information about procurement procedures and opportunities. As part of this review, MGT navigated the City's website to determine what information is provided regarding procurement and contracting processes, resources, and assistance available to all vendors and City staff. MGT paid particular attention to the Office of Mayor's link "Contracting with the City" and the Bureau of Procurement's link "Doing Business with the City." The "Contracting with the City" section is organized into the following:

- Current Contracts—Available contracting opportunities
- Background-Contracting process and why there are certain steps and procedures
- City Contract Basics-What's required in order to bid or submit proposals on contracts
- Regulations-Procurement laws, policies, procedures, and resolutions
- FAQs-Frequently asked questions about City contracting
- Contact Us—Submitting questions/comments about contracts or the process

BOP's "Doing Business with the City" provides access to CitiBuy which is the online marketplace for doing business with the City. In fact, all vendors interested in doing business with the City must register in CitiBuy. Also included on the site is access to the Department of Public Works, Department of General Services, and the Department of Transportation construction contracts. In addition, there is a section highlighting BOP's coordination with MWBOO to ensure MBE/WBE participation. The BOP site also includes a section on training for vendors and City employees. Training offered to vendors include the following:

- How to do Business with the City of Baltimore
- How to Find Bidding Opportunities with the City
- CitiBuy Training-The Basics
- CitiBuy-Subcontractor Payment Tracking

Training offered to employees include the following:

- CitiBuy Training-for requisitioners and approvers
- Procurement 101-for all City employees
- Procurement 102-for Executives only

Overall, MGT found the information and resources throughout the site and various links to be very useful. The training topics seem particularly helpful and relevant. Vendor reactions and input about the training will be solicited during the anecdotal data collection.

### 3.5 Conclusions

The City's commitment to M/WBE participation in the City's procurement and contracting is embodied in the regulations and policies discussed throughout this chapter. The City's emphasis on increasing the participation of M/WBEs recognize that procurement and contracting can have a significant impact and can serve multiple purposes. In addition to ensuring city departments and agencies can meet service requirements, procurement and contracting can also be a powerful mechanism for promoting economic empowerment. MGT's review concluded there are regulations and policies that govern all aspects of procurement and contracting. However, there is no "one size fit all" regarding perceptions and opinions about the City's procurement system, which was described by the Mayor as "outdated and inequitable." According to the City's website the City's procurement system is admittedly "confusing and complex," factors which may have played a significant role in the recently issued "Procurement Assessment and Transformation" RFP. Key stakeholders in the procurement cycle such as BOP, MWBOO, and end-user departments recognize there are significant opportunities for improvement, several of which were identified in the 2014 disparity study and are still relevant for the current study. One of the recommendations that has not been fully implemented is providing more operational resources to MWBOO, which, if addressed, would benefit the City and M/WBEs seeking opportunities to do business with the City.

MGT also noted there is dissatisfaction among segments of the M/WBE community as evidenced by rallies and protests organized by major advocacy groups which occurred in March 2021. The protests revolved around limited opportunities for minority firms as both prime and subcontractors and concerns about prompt payment to prime contractors, which prevent timely payment to minority subcontractors. According to advocates and staff these and other related issues are longstanding and not only adversely impact vendors but also departments and agencies that rely on vendors to provide goods and services. The RFP to conduct the comprehensive assessment of the City's procurement system is designed to address many of the concerns and issues that have been longstanding among various segments of the minority business community.

## 4 Market Area and Utilization Analysis

### 4.1 Introduction

The market area analysis is essential to establishing the universe of available vendors and spending that will be considered in the identification of any disparate treatment of assorted classifications of firms. Availability is a measure of the numbers and proportions of vendors willing and able to work with an agency, while disparity is an observed statistically significant difference between the utilization of minority- and womenowned firms relative to their respective availability.


This chapter presents the results of the relevant geographic market area and availability estimates analyses of firms willing and able to do business in the market area. The specific procurement categories analyzed were Construction, Architecture and Engineering, Professional Services, and Goods and Services.

The relevant geographic market area includes the Baltimore-Columbia-Towson Metropolitan Statistical Area plus Prince George's and Montgomery counties. Prince George's and Montgomery counties were added to ensure that the City of Baltimore Relevant Market Area captured over 75 percent of the City's
 contractual spending.

### 4.2 Data Collection and Management

MGT staff compiled and reconciled electronic data provided by the City to develop a master set of prime and subcontractor contract data into a Master Utilization Database to support the needs of the study. MGT utilized the City's financial data as the source of prime data and a portion of the subcontractor data that was combined with the subcontractor data collected via a survey of the primes. Based on a common contract ID across both data sets, MGT merged the subcontractor data with the prime data to make up the Master Utilization Database.

### 4.2.1 Study Period

The preliminary market area analysis is based on contract transactions from July 1, 2014 (FY15) through June 30, 2019 (FY19).

### 4.2.2 Procurement Categories and Exclusions

MGT analyzed the procurement categories competitively bid by the City, encompassing four sectors: Construction, Architecture and Engineering, Professional Services, \& Goods and Other Services. These procurement categories are defined as:

- Construction: Services provided for the construction, renovation, rehabilitation, repair, alteration, improvement, demolition, and excavation of physical structures, excluding the performance of routine maintenance.
- Architecture and Engineering: A class of services specifically related to the preparation of plans and specifications for Construction projects.
- Professional Services: Services that require the provider to possess specialized skills, including the holding of advanced degrees and the exercise of independent judgment.
- Goods and Other Services: This category includes all purchases of physical items, including but not limited to equipment and materials, excluding land or a permanent interest in land; or services that do not typically require a provider to have experience in a specialized field or hold an advanced degree.
The following types of transactions were excluded from the analysis:
- Transactions outside of the study period.
- Transactions associated with non-procurement activities, for example:
- Administrative items such as utility payments, leases for real estate, or insurance.
- Salary and fringe benefits, training, parking, postage, or conference fees.
- Transactions associated with nonprofit organizations, universities, medical facilities, and governmental agencies.


### 4.3 Market Area Analysis

As prescribed by Croson and subsequent cases, a disparity study requires the definition of a market area to ensure that a relevant pool of vendors is considered in analyzing the availability and utilization of firms. If these boundaries are stretched too far, the universe of vendors becomes diluted with firms with no interest or history in working with the governmental entity, and thus their demographics and experiences have little relevance to actual contracting activity or policy. On the other hand, a boundary set too narrowly risks the opposite circumstance of excluding a high proportion of firms who have contracted with, or bid for work with, the governmental entity, and thus may also skew the prospective analyses of disparity.

### 4.3.1 Methodology

In determining a relevant market area, MGT abides by a 75 percent majority rule of agency spending with deference to historic programmatic considerations to prescribe an appropriate geographic boundary. The use of 75 percent as a measure of determining the relevant market area has been accepted by antitrust cases in the $2^{\text {nd }}$ Circuit and serves as a persuasive precedent. One example is James C. Jones v. New York County Human Resources Administration (James C. Jones), which affirms findings and policies on market area definitions encompassing approximately 75 percent of agency spending. In James C. Jones, the court accepted less than 100 percent of data when it was reasonable to assume that the missing data would not significantly change the analysis results. To establish the appropriate geographic boundaries for the study, the "relevant" market area was isolated according to the 75 percent standard. These market areas are defined by geographic units such as counties and states, based on the following considerations: 1) the
courts have accepted counties as a standard geographical unit of analysis in conducting equal employment and disparity analyses; 2) county boundaries are externally determined and, hence, are free from any researcher bias that might result from any arbitrary determinations of boundaries of geographical units of analysis; 3) U.S. Census data and other federal and county data are routinely collected and reported using country boundaries. The following presents the methodology used to determine the overall market area and relevant market area.

- Overall Market Area. To determine the full extent of the market area in which the City utilized firms, MGT staff determined the geographic locations of utilized vendors by their county jurisdictions. The overall market area presents the total dollars awarded for each procurement category included within the scope of the study. The overall market area results by procurement category are presented in Figure 4-1 of this chapter.
- Relevant Market Area. Once the overall market area was established, the relevant market area was determined by examining geographic areas from which the majority of its purchases are procured. Based on the results of the market area analysis conducted for each business category, the recommended relevant market area are the eight (8) counties and independent cities within the City of Baltimore Relevant Market Area.

The dollars paid were summarized by county according to the location of each firm and by the services they provided to the City: Construction, Architecture and Engineering, Professional Services, and Goods \& Other Services. Corresponding market area analyses showing the dollars awarded by county within each procurement category are presented in Appendix B.

### 4.3.2 Analysis and Identification and Relevant Market Area

As described in the preceding section, an overall market area was first established to account for all relevant City payments, after which more specific regions were analyzed to arrive at a relevant market area to support the goals of the study. Detailed information supporting this market area analysis is presented in Appendix B and Appendix $\mathbf{C}$ to this report.

Figure 4-1 shows that $\$ 3,376,926,631.54$ were paid to firms located within the overall market area.

FIGURE 4-1. SUMMARY OF DOLLARS, TOTAL SPEND BY PROCUREMENT CATEGORY, OVERALL MARKET AREA


Source: MGT developed a Master Utilization File based on the City's spending between July 1, 2014 (FY15) through June 30, 2019 (FY19).

In terms of the overall market area, Figure 4-2 shows the top ten counties with the most contract spending across all procurement categories. Four of the top ten counties (Harford County, MD; Middlesex County, MA; Frederick County, MD; and Cook County, IL) fall outside of the Baltimore Relevant Market Area. The largest category of spend coming from Harford County, MD is Construction (\$204.1 million) and is primarily driven by subcontractor spend data. The largest category of spend coming from Frederick County, MD is Construction ( $\$ \mathbf{3 8 . 2}$ million) and is primarily driven by subcontractor spend data. The largest category of spend coming from Middlesex County, MA is Construction ( $\$ 102.5$ million) and is entirely driven by subcontractor spend data. The largest category of work coming from Cook County, IL is Professional Services ( $\$ 38.7$ million) and is entirely driven by prime contractor spend data. Overall, these ten counties represent over 87 percent of the overall market area spending.

FIGURE 4-2. MARKET AREA ANALYSIS, CONTRACTS DISTRIBUTION OF DOLLARS BY COUNTY TOP TEN COUNTIES BY SPEND


Source: MGT developed a Master Utilization File based on the City's spending between July 1, 2014 (FY15) through June 30, 2019 (FY19).

Narrowing the geographic scope, Table 4-1 shows that firms located within the relevant market area accounted for 81.55 percent of spend across all procurement categories. When broken down by procurement categories, firms located within the relevant market area accounted for:

- 86.38 percent of the dollars awarded in Construction;
- 92.80 percent of the dollars awarded in Architecture and Engineering;
- 71.13 percent of the dollars awarded in Goods and Other Services; and
- $\mathbf{5 0 . 9 6}$ percent of the dollars awarded in Professional Services.

TABLE 4-1. MARKET AREA ANALYSIS, CONTRACTS DISTRIBUTION OF DOLLARS BY BUSINESS CATEGORY, BALTIMORE CITY RELEVANT MARKET AREA

| CONSTRUCTION | Amount | Percent |
| :--- | ---: | ---: |
| Inside City of Baltimore Marketplace MSA | $\$ 1,907,492,472.78$ | $86.38 \%$ |
| Outside City of Baltimore Marketplace MSA | $\$ 300,720,095.36$ | $13.62 \%$ |
| CONSTRUCTION TOTAL | $\mathbf{\$ 2 , 2 0 8 , 2 1 2 , 5 6 8 . 1 4}$ | $\mathbf{1 0 0 . 0 0 \%}$ |
| ARCHITECTURE \& ENGINEERING |  | Amount |


| Inside City of Baltimore Marketplace MSA | \$206,042,498.05 | 92.80\% |
| :---: | :---: | :---: |
| Outside City of Baltimore Marketplace MSA | \$15,984,735.92 | 7.20\% |
| ARCHITECTURE \& ENGINEERING TOTAL | \$222,027,233.97 | 100.00\% |
| GOODS \& OTHER SERVICES | Amount | Percent |
| Inside City of Baltimore Marketplace MSA | \$557,205,526.01 | 71.13\% |
| Outside City of Baltimore Marketplace MSA | \$226,188,575.26 | 28.87\% |
| GOODS \& OTHER SERVICES TOTAL | \$783,394,101.27 | 100.00\% |
| PROFESSIONAL SERVICES | Amount | Percent |
| Inside City of Baltimore Marketplace MSA | \$83,217,284.01 | 50.96\% |
| Outside City of Baltimore Marketplace MSA | \$80,075,444.15 | 49.04\% |
| PROFESSIONAL SERVICES TOTAL | \$163,292,728.16 | 100.00\% |
| ALL BUSINESS CATEGORIES | Amount | Percent |
| Inside City of Baltimore Marketplace MSA | \$2,753,957,780.85 | 81.55\% |
| Outside City of Baltimore Marketplace MSA | \$622,968,850.69 | 18.45\% |
| ALL BUSINESS CATEGORIES TOTAL | \$3,376,926,631.54 | 100.00\% |

Source: MGT developed a Master Utilization File based on the City's spending between July 1, 2014 (FY15) through June 30, 2019 (FY19).

Corresponding market area analyses showing the dollars awarded by county for each procurement category are presented in Appendix B.

### 4.4 Availability Estimations

Included in the sections that follow are descriptions of the approach and methodology used by MGT to estimate availability followed by the results of the data collection and estimation process.

### 4.4.1 Availability Methodology

As noted in Chapter 2, the Supreme Court stated in Croson that,
"Where 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 engaged by the locality or the locality's prime contractors, an inference of discriminatory exclusion could arise."

Availability is defined by courts as to whether a firm is willing and able to work with the agency in question, as a method of constructing the universe of firms that might be considered in that agency's procurement activities. Due to the statistical limitations of deriving a vendor's ability, MGT will concentrate on the willingness of the vendors and not adjust availability due to capacity.

- Willing is reasonably presumed via the vendors' active pursuit of registration to work with any public (government) agency, which drives the scope of identification for the sources of available firms considered.
- Able, or capability to perform work, is more loosely defined due to two obscuring factors: (1) the scalable nature of firms, which may reasonably add capacity to handle jobs beyond previous performance, and (2) the inherent concern that discrimination may have influenced the historic or existing scale of operation of the firms within the market. Therefore, the only confining measure of "ability" used to cull the universe of available vendors is that they have some presence within the defined market area.

Thus, a reliable estimation of the number of firms willing and able to provide each of the respective services under the scope of examination is an element in the determination of disparity. Post-Croson case law has not prescribed a single, particular approach to deriving vendor availability, and agencies have used a variety of means to estimate pools of available vendors that have withstood legal scrutiny; however, among the array of methods utilized, what is known as a "custom census" has received favorable endorsement. A custom census is characterized as a survey of a representative sample of firms offering the procured goods and services within an organization's relevant market area to determine an estimate of the prospective universe of vendors.

MGT's data assessment and evaluation of alternative methods for measuring the numbers of firms of the types and classifications available to work with the City confirmed that a version of a custom census of firms in the relevant market area would provide the most accurate representation of available firms. The custom census approach used by MGT in this instance required the development of representative samples of firms within each of the four procurement categories identified for the study, each of which had to cover the defined eight-county geographic boundaries of the relevant market area.

First, an intensive examination of the City's procurements was required to define the appropriate characteristics of the universe of prospective vendors, in terms of the types of goods and services offered. City procurements were assigned North American Industry Classification System (NAICS) codes that Dun \& Bradstreet uses to classify firms' primary lines of business. These industry selections were then used to establish weighting criteria to be used in random selections of vendors to be surveyed. Target response thresholds were established for each industry subsector to ensure a 95 percent confidence interval and +/-5 percent margin of error for findings. Second, a survey was designed and administered to sampled firms by telephone to (1) determine and/or validate the race, ethnicity, and gender of ownership as well as (2) to elicit these representative firms' interest in working with the City.

Results of the survey were then extrapolated to the full scale of the applicable universe to arrive at an estimation of available firms by ethnicity/gender classification and procurement category.

### 4.4.2 Availability Analysis

Following the methodology prescribed in the previous section, estimates were derived for proportions of available firms for the business ownership classifications, overall, and the four defined procurement categories. A detailed review of availability estimates for each procurement category is provided in Tables 4-2 through 4-6.

Table 4-2 presents availability estimates spanning all procurement categories, in aggregate. We observe that:

- MBE firms represented 19.41 percent of available vendors
- African American firms represented $\mathbf{1 0 . 5 4}$ percent of available vendors;
- Asian American firms represented $\mathbf{3 . 3 9}$ percent of available vendors;
- Hispanic American firms represented 4.80 percent of available vendors;
- Native American firms represented 0.68 percent of available vendors;
- Nonminority female firms represented 21.87 percent of available vendors; and
- Non-M/WBE firms represented 58.72 percent of available vendors.

TABLE 4-2.
estimation of available firms, all procurement categories

| BUSINESS OWNERSHIP CLASSIFICATION | \% OF AVAILABLE <br> FIRMS |
| :--- | ---: |
| African Americans | $10.54 \%$ |
| Asian Americans | $3.39 \%$ |
| Hispanic Americans | $4.80 \%$ |
| Native Americans | $0.68 \%$ |
| Total MBE Firms | $\mathbf{1 9 . 4 1 \%}$ |
| Nonminority Females | $21.87 \%$ |
| Total M/WBE Firms | $\mathbf{4 1 . 2 8 \%}$ |
| Non-M/WBE Firms | $58.72 \%$ |
| TOTAL | $\mathbf{1 0 0 . 0 0 \%}$ |

Source: Custom Census Analysis.
Study Period: July 1, 2014 (FY15) through June 30, 2019 (FY19).
Within the Architecture \& Engineering category (Table 4-3), availability estimates are as follows:

- MBE firms represented 23.01 percent of available vendors;
- African American firms represented $\mathbf{1 0 . 1 9}$ percent of available vendors;
- Asian American firms represented 6.27 percent of available vendors;
- Hispanic American firms represented 5.74 percent of available vendors;
- Native American firms represented 0.81 percent of available vendors;
- Nonminority female firms represented 25.45 percent of available vendors; and
- Non-M/WBE firms represented 51.54 percent of available vendors.

TABLE 4-3.
ESTIMATION OF AVAILABLE FIRMS, ARCHITECTURE \& ENGINEERING

| BUSINESS OWNERSHIP CLASSIFICATION | \% OF AVAILABLE <br> FIRMS |
| :--- | ---: |
| African Americans | $10.19 \%$ |
| Asian Americans | $6.27 \%$ |
| Hispanic Americans | $5.74 \%$ |
| Native Americans | $0.81 \%$ |
| Total MBE Firms | $\mathbf{2 3 . 0 1 \%}$ |
| Nonminority Females | $\mathbf{2 5 . 4 5 \%}$ |
| Total M/WBE Firms | $\mathbf{4 8 . 4 6 \%}$ |
| Non-M/WBE Firms | $51.54 \%$ |
| TOTAL | $100.00 \%$ |

Source: Custom Census Analysis.
Study Period: July 1, 2014 (FY15) through June 30, 2019 (FY19).
In the Construction category, we observe the following availability proportions (Table 4-4):

- MBE firms represented 17.94 percent of available vendors;
- African American firms represented $\mathbf{9 . 7 0}$ percent of available vendors;
- Asian American firms represented $\mathbf{2 . 2 5}$ percent of available vendors;
- Hispanic American firms represented $\mathbf{5 . 6 4}$ percent of available vendors;
- Native American firms represented 0.36 percent of available vendors;
- Nonminority female firms represented 21.50 percent of available vendors; and
- Non-M/WBE firms represented 60.56 percent of available vendors.

TABLE 4-4.
ESTIMATION OF AVAILABLE FIRMS, CONSTRUCTION

| BUSINESS OWNERSHIP CLASSIFICATION | \% OF AVAILABLE <br> FIRMS |
| :--- | ---: |
| African Americans | $9.70 \%$ |
| Asian Americans | $2.25 \%$ |
| Hispanic Americans | $5.64 \%$ |
| Native Americans | $0.36 \%$ |
| Total MBE Firms | $\mathbf{1 7 . 9 4 \%}$ |
| Nonminority Females | $21.50 \%$ |
| Total M/WBE Firms | $\mathbf{3 9 . 4 4 \%}$ |
| Non-M/WBE Firms | $60.56 \%$ |
| TOTAL | $100.00 \%$ |

Source: Custom Census Analysis.
Study Period: July 1, 2014 (FY15) through June 30, 2019 (FY19).

In Professional Services (Table 4-5), availability estimates were as follows:

- MBE firms represented 31.05 percent of available vendors;
- African American firms represented $\mathbf{1 4 . 6 2}$ percent of available vendors;
- Asian American firms represented $\mathbf{1 2 . 1 4}$ percent of available vendors;
- Hispanic American firms represented $\mathbf{3 . 3 8}$ percent of available vendors;
- Native American firms represented 0.91 percent of available vendors;
- Nonminority female firms represented 16.36 percent of available vendors; and
- Non-M/WBE firms represented 52.59 percent of available vendors.

TABLE 4-5.
ESTIMATION OF AVAILABLE FIRMS, PROFESSIONAL SERVICES

| BUSINESS OWNERSHIP CLASSIFICATION | \% OF AVAILABLE <br> FIRMS |
| :--- | ---: |
| African Americans | $14.62 \%$ |
| Asian Americans | $12.14 \%$ |
| Hispanic Americans | $3.38 \%$ |
| Native Americans | $0.91 \%$ |
| Total MBE Firms | $\mathbf{3 1 . 0 5 \%}$ |
| Nonminority Females | $16.36 \%$ |
| Total M/WBE Firms | $\mathbf{4 7 . 4 1 \%}$ |
| Non-M/WBE Firms | $52.59 \%$ |
| TOTAL | $100.00 \%$ |

Source: Custom Census Analysis. Study Period: July 1, 2014 (FY15) through June 30, 2019 (FY19).

Finally, in the Goods \& Services (Table 4-6), availability estimates consisted of:

- MBE firms represented 20.11 percent of available vendors;
- African American firms represented $\mathbf{1 2 . 1 7}$ percent of available vendors;
- Asian American firms represented 3.95 percent of available vendors;
- Hispanic American firms represented 2.48 percent of available vendors;
- Native American firms represented 1.51 percent of available vendors;
- Nonminority female firms represented 43.14 percent of available vendors; and
- Non-M/WBE firms represented 56.86 percent of available vendors.

TABLE 4-6.
ESTIMATION OF AVAILABLE FIRMS, GOODS \& SERVICES

| BUSINESS OWNERSHIP CLASSIFICATION | \% OF AVAILABLE <br> FIRMS |
| :--- | ---: |
| African Americans | $15.71 \%$ |
| Asian Americans | $6.09 \%$ |
| Hispanic Americans | $5.35 \%$ |
| Native Americans | $0.85 \%$ |
| Total MBE Firms | $28.00 \%$ |
| Nonminority Females | $19.75 \%$ |
| Total M/WBE Firms | $47.75 \%$ |
| Non-M/WBE Firms | $52.25 \%$ |
| TOTAL | $100.00 \%$ |

Source: Custom Census Analysis. Due to rounding, it may not add up to $100 \%$
Study Period: July 1, 2014, through June 30, 2019 (FY2015 - FY2019).

### 4.4.3 Market Area Conclusions

Based on the market area analysis of the City's procurement activity it was determined that the eight (8) counties in the City of Baltimore Relevant Market Area should be used as the market area. This 8-County and Independent City Market Area represents most of the City's procurement activity, with 81.55 percent of the payments to vendors within this market area. Individually, all the categories represent a majority of the City's procurement activity within the corresponding categories. Architecture and Engineering have the highest spending in the market area with 92.80 percent of payments, and Professional Services has the smallest at 50.96 percent. The definition of the relevant market area allows for detailed examinations of contracting activity with local vendors. The following section describes the results of this utilization analysis for the City.

## 5 Product Market, Utilization, and Disparity Analyses

### 5.1 Introduction

This chapter presents the results of MGT's analyses regarding the product market, utilization and disparity. Utilization data are central to defining this market area and thus are first presented as a means of identifying the market area for consideration, and then are examined within that market area to assess assorted levels of contracting activity as the first step in the quantitative determination of disparity. Consistent with prior chapters, this analysis focuses on procurements in the categories of
 Construction, Architecture and Engineering, Professional Services, and Goods and Services.

### 5.1.1 Analysis and Identification of Product Market

Based on the major categories and description of work on each contract, MGT assigned NAICS codes to each of the payments for both primes and subcontractors. MGT assigned both NAICS code industry groups (4-digit level) and NAICS code industries (6-digit level). Table 5-1 through Table 5-5 show the payments and their associated weights for Construction, Architecture and Engineering, Goods and Other Services, and Professional Services. Appendix B shows the NAICS code industries (6-digit level) for the four procurement categories.

Overall, City procurements occur in 125 NAICS industry groups. In Construction, City procurements occur in 60 NAICS industry groups. In Architecture and Engineering, City procurements occur in 20 NAICS industry groups. In Goods and Other Services, City procurements occur in 76 NAICS industry groups. In Professional Services, City procurements occur in 42 NAICS industry groups.

Table 5-1 shows that for Construction, over 87 percent of the payments are distributed among only seven industry groups (2371, 2381, 2382, 2389, 2373, 2362, and 2379).

TABLE 5-1. PRODUCT MARKET
DISTRIBUTION OF DOLLARS BY NAICS CODE
CONSTRUCTION

| NAICS <br> INDUSTRY <br> GROUP | NAICS DESCRIPTION | AMOUNT | NAICS |
| :---: | ---: | ---: | ---: |
| 2371 | Utility system construction | $\$ 851,715,140.42$ | $38.57 \%$ |
| 2381 | Wuilding foundation and exterior contractors | $\$ 335,044,694.51$ | $15.17 \%$ |
| 2382 | Building equipment contractors | $\$ 275,061,859.02$ | $12.46 \%$ |
| 2389 | Other specialty trade contractors | $\$ 174,785,437.57$ | $7.92 \%$ |
| 2373 | Highway, street, and bridge construction | $\$ 116,788,033.30$ | $5.29 \%$ |
| 2362 | Nonresidential building construction | $\$ 100,829,359.58$ | $4.57 \%$ |


| NAICS INDUSTRY GROUP | NAICS DESCRIPTION | AMOUNT | NAICS WEIGHT |
| :---: | :---: | :---: | :---: |
| 2379 | Other heavy construction | \$73,386,969.69 | 3.32\% |
| 4841 | General freight trucking | \$47,345,193.28 | 2.14\% |
| 5413 | Architectural and engineering services | \$38,472,339.76 | 1.74\% |
| 2383 | Building finishing contractors | \$32,623,393.66 | 1.48\% |
| 4239 | Misc. durable goods merchant wholesalers | \$26,838,717.85 | 1.22\% |
| 3273 | Cement and concrete product manufacturing | \$22,323,786.66 | 1.01\% |
| 5629 | Remediation and other waste services | \$12,690,344.25 | 0.57\% |
| 5613 | Employment services | \$11,778,806.08 | 0.53\% |
| 5416 | Management and technical consulting services | \$11,037,831.55 | 0.50\% |
| 5617 | Services to buildings and dwellings | \$9,472,535.40 | 0.43\% |
| 8111 | Automotive repair and maintenance | \$8,325,012.17 | 0.38\% |
| 4236 | Appliance and electric goods merchant wholesalers. | \$8,072,194.22 | 0.37\% |
| 3323 | Architectural and structural metals mfg. | \$7,457,846.15 | 0.34\% |
| 4842 | Specialized freight trucking | \$6,924,805.07 | 0.31\% |
| 4233 | Lumber and const. supply merchant wholesalers | \$4,000,280.37 | 0.18\% |
| 4247 | Petroleum merchant wholesalers | \$3,481,214.31 | 0.16\% |
| 5419 | Other professional and technical services | \$2,886,099.68 | 0.13\% |
| 5321 | Automotive equipment rental and leasing | \$2,480,647.11 | 0.11\% |
| 3339 | Other general purpose machinery manufacturing | \$2,340,465.18 | 0.11\% |
| 5621 | Waste collection | \$2,313,604.66 | 0.10\% |
| 1153 | Support activities for forestry | \$2,269,422.50 | 0.10\% |
| 3241 | Petroleum and coal products manufacturing | \$2,173,031.74 | 0.10\% |
| 4237 | Hardware and plumbing merchant wholesalers | \$1,919,641.35 | 0.09\% |
| 4238 | Machinery and supply merchant wholesalers | \$1,866,617.17 | 0.08\% |
| 9261 | Administration of economic programs | \$1,741,950.13 | 0.08\% |
| 3329 | Other fabricated metal product manufacturing | \$1,683,256.21 | 0.08\% |
| 5619 | Other support services | \$1,625,782.60 | 0.07\% |
| 8113 | Commercial machinery repair and maintenance | \$1,356,366.33 | 0.06\% |
| 2213 | Water, sewage, and other systems | \$1,134,750.00 | 0.05\% |
| 3328 | Coating, engraving, and heat-treating metals | \$740,848.00 | 0.03\% |
| 5324 | Machinery and equipment rental and leasing | \$678,168.28 | 0.03\% |
| 4543 | Direct selling establishments | \$475,081.06 | 0.02\% |
| 4234 | Commercial equip. merchant wholesalers | \$342,634.73 | 0.02\% |
| 3279 | Other nonmetallic mineral products | \$293,695.00 | 0.01\% |
| 5622 | Waste treatment and disposal | \$263,003.95 | 0.01\% |
| 4442 | Lawn and garden equipment and supplies stores | \$170,556.12 | 0.01\% |
| 5182 | Data processing, hosting and related services | \$157,942.45 | 0.01\% |
| 3399 | Other miscellaneous manufacturing | \$146,961.96 | 0.01\% |
| 3332 | Industrial machinery manufacturing | \$125,721.00 | 0.01\% |
| 5415 | Computer systems design and related services | \$116,073.22 | 0.01\% |
| 5616 | Investigation and security services | \$109,201.14 | 0.00\% |
| 5313 | Activities related to real estate | \$65,687.37 | 0.00\% |
| 5411 | Legal services | \$58,979.00 | 0.00\% |
| 3259 | Other chemical products and preparation mfg. | \$39,747.83 | 0.00\% |
| 9221 | Justice, public order, and safety activities | \$35,950.70 | 0.00\% |
| 3331 | Ag., construction, and mining machinery mfg. | \$35,393.06 | 0.00\% |
| 3372 | Office furniture and fixtures manufacturing | \$32,595.00 | 0.00\% |
| 4246 | Chemical merchant wholesalers | \$29,628.00 | 0.00\% |


| NAICS <br> INDUSTRY <br> GROUP | NAICS DESCRIPTION | AMOUNT | NAICS <br> WEIGHT |
| :---: | ---: | ---: | ---: |
| 4235 | Metal and mineral merchant wholesalers | $\$ 24,405.24$ | $0.00 \%$ |
| 3231 | Printing and related support activities | $\$ 8,563.00$ | $0.00 \%$ |
| 8112 | Electronic equipment repair and maintenance | $\$ 7,755.00$ | $0.00 \%$ |
| 5414 | Specialized design services | $\$ 4,185.00$ | $0.00 \%$ |
| 2372 | Land subdivision | $\$ 2,362.50$ | $0.00 \%$ |
| 3219 | Other wood product manufacturing | $\$ 0.00$ | $0.00 \%$ |
|  | TOTAL | $\mathbf{\$ 2 , 2 0 8 , 2 1 2 , 5 6 8 . 1 4}$ |  |

Source: MGT developed a Master Utilization File based on the City's spend between July 1, 2014 (FY15) through June 30, 2019 (FY19).

For Architecture and Engineering, Table 5-2 shows that nearly all of the payments occurred in one industry group (5413).

TABLE 5-2. PRODUCT MARKET
DISTRIBUTION OF DOLLARS BY NAICS CODE
ARCHITECTURE \& ENGINEERING

| NAICS INDUSTRY GROUP | NAICS DESCRIPTION | AMOUNT | NAICS WEIGHT |
| :---: | :---: | :---: | :---: |
| 5413 | Architectural and engineering services | \$200,829,883.27 | 90.45\% |
| 2362 | Nonresidential building construction | \$11,606,000.69 | 5.23\% |
| 2371 | Utility system construction | \$5,249,404.35 | 2.36\% |
| 5629 | Remediation and other waste services | \$1,484,356.53 | 0.67\% |
| 5416 | Management and technical consulting services | \$1,082,521.10 | 0.49\% |
| 5617 | Services to buildings and dwellings | \$445,123.17 | 0.20\% |
| 2382 | Building equipment contractors | \$274,048.61 | 0.12\% |
| 5419 | Other professional and technical services | \$250,570.56 | 0.11\% |
| 5619 | Other support services | \$216,168.00 | 0.10\% |
| 2389 | Other specialty trade contractors | \$197,767.11 | 0.09\% |
| 5622 | Waste treatment and disposal | \$128,932.52 | 0.06\% |
| 5313 | Activities related to real estate | \$114,690.82 | 0.05\% |
| 5414 | Specialized design services | \$62,777.05 | 0.03\% |
| 2379 | Other heavy construction | \$50,756.88 | 0.02\% |
| 5415 | Computer systems design and related services | \$25,521.53 | 0.01\% |
| 5182 | Data processing, hosting, and related services | \$4,692.50 | 0.00\% |
| 5324 | Machinery and equipment rental and leasing | \$3,174.28 | 0.00\% |
| 2381 | Building foundation and exterior contractors | \$845.00 | 0.00\% |
| 3231 | Printing and related support activities | \$0.00 | 0.00\% |
| 2383 | Building finishing contractors | \$0.00 | 0.00\% |
|  | TOTAL | \$222,027,233.97 |  |

Source: MGT developed a Master Utilization File based on the City's spending between July 1, 2014 (FY15) through June 30, 2019 (FY19).

Table 5-3 shows that for Goods and Other Services, over 85 percent of the payments are distributed among only thirteen industry groups ( $5613,5617,4238,4234,4543,5616,8112,4246,3251,4236,4233$, 8129, and 5629).

TABLE 5-3. PRODUCT MARKET DISTRIBUTION OF DOLLARS BY NAICS CODE GOODS \& OTHER SERVICES

| NAICS INDUSTRY GROUP | NAICS DESCRIPTION | AMOUNT | NAICS WEIGHT |
| :---: | :---: | :---: | :---: |
| 5613 | Employment services | \$182,955,265.53 | 23.35\% |
| 5617 | Services to buildings and dwellings | \$147,485,800.74 | 18.83\% |
| 4238 | Machinery and supply merchant wholesalers | \$76,328,446.22 | 9.74\% |
| 4234 | Commercial equip. merchant wholesalers | \$66,722,081.83 | 8.52\% |
| 4543 | Direct selling establishments | \$34,395,758.46 | 4.39\% |
| 5616 | Investigation and security services | \$33,206,674.33 | 4.24\% |
| 8112 | Electronic equipment repair and maintenance | \$30,253,999.30 | 3.86\% |
| 4246 | Chemical merchant wholesalers | \$21,513,092.24 | 2.75\% |
| 3251 | Basic chemical manufacturing | \$16,819,637.23 | 2.15\% |
| 4236 | Appliance and electric goods merchant wholesalers | \$15,322,161.90 | 1.96\% |
| 4233 | Lumber and const. supply merchant wholesalers | \$15,145,876.21 | 1.93\% |
| 8129 | Other personal services | \$14,265,949.19 | 1.82\% |
| 5629 | Remediation and other waste services | \$13,810,275.60 | 1.76\% |
| 4411 | Automobile dealers | \$12,867,756.97 | 1.64\% |
| 8111 | Automotive repair and maintenance | \$12,234,570.06 | 1.56\% |
| 8113 | Commercial machinery repair and maintenance | \$9,592,495.89 | 1.22\% |
| 7223 | Special food services | \$7,652,003.82 | 0.98\% |
| 4231 | Motor vehicle and parts merchant wholesalers | \$6,596,620.32 | 0.84\% |
| 4232 | Furniture and furnishing merchant wholesalers | \$5,761,579.50 | 0.74\% |
| 4461 | Health and personal care stores | \$5,290,070.22 | 0.68\% |
| 4855 | Charter bus industry | \$4,859,510.52 | 0.62\% |
| 2213 | Water, sewage, and other systems | \$4,806,201.82 | 0.61\% |
| 4881 | Support activities for air transportation | \$4,192,063.17 | 0.54\% |
| 8123 | Dry-cleaning and laundry services | \$3,570,800.02 | 0.46\% |
| 3329 | Other fabricated metal product manufacturing | \$3,253,818.57 | 0.42\% |
| 3231 | Printing and related support activities | \$3,074,195.30 | 0.39\% |
| 4853 | Taxi and limousine service | \$3,041,095.80 | 0.39\% |
| 4413 | Auto parts, accessories, and tire stores | \$2,510,759.95 | 0.32\% |
| 5622 | Waste treatment and disposal | \$2,304,024.46 | 0.29\% |
| 4237 | Hardware and plumbing merchant wholesalers | \$2,106,259.68 | 0.27\% |
| 5182 | Data processing, hosting, and related services | \$2,082,002.66 | 0.27\% |
| 4482 | Shoe stores | \$1,713,640.99 | 0.22\% |
| 4884 | Support activities for road transportation | \$1,574,987.44 | 0.20\% |
| 3345 | Electronic instrument manufacturing | \$1,432,187.00 | 0.18\% |
| 5614 | Business support services | \$1,247,426.17 | 0.16\% |
| 4412 | Other motor vehicle dealers | \$1,151,909.76 | 0.15\% |
| 4441 | Building material and supplies dealers | \$1,112,428.34 | 0.14\% |
| 4842 | Specialized freight trucking | \$1,107,319.78 | 0.14\% |
| 4442 | Lawn and garden equipment and supplies stores | \$931,903.40 | 0.12\% |
| 3312 | Steel product mfg. from purchased steel | \$917,928.97 | 0.12\% |
| 1114 | Greenhouse and nursery production | \$802,312.25 | 0.10\% |
| 3252 | Resin, rubber, and artificial fibers mfg. | \$776,956.07 | 0.10\% |
| 8114 | Household goods repair and maintenance | \$770,261.95 | 0.10\% |
| 5621 | Waste collection | \$720,451.46 | 0.09\% |
| 4241 | Paper and paper product merchant wholesalers | \$715,854.04 | 0.09\% |


| NAICS INDUSTRY GROUP | NAICS DESCRIPTION | AMOUNT | NAICS WEIGHT |
| :---: | :---: | :---: | :---: |
| 4859 | Other ground passenger transportation | \$526,506.44 | 0.07\% |
| 4249 | Misc. nondurable goods merchant wholesalers | \$387,166.01 | 0.05\% |
| 4481 | Clothing stores | \$314,982.00 | 0.04\% |
| 4511 | Sporting goods and musical instrument stores | \$298,165.53 | 0.04\% |
| 5416 | Management and technical consulting services | \$278,115.00 | 0.04\% |
| 4242 | Druggists' goods merchant wholesalers | \$278,092.26 | 0.04\% |
| 3399 | Other miscellaneous manufacturing | \$241,129.10 | 0.03\% |
| 4239 | Misc. durable goods merchant wholesalers | \$215,659.23 | 0.03\% |
| 3261 | Plastics product manufacturing | \$205,368.84 | 0.03\% |
| 4922 | Local messengers and local delivery | \$190,920.59 | 0.02\% |
| 4422 | Home furnishings stores | \$190,764.30 | 0.02\% |
| 3311 | Iron and steel mills and ferroalloy mfg. | \$182,935.99 | 0.02\% |
| 5619 | Other support services | \$179,048.68 | 0.02\% |
| 4244 | Grocery and related product wholesalers | \$175,709.17 | 0.02\% |
| 4539 | Other miscellaneous store retailers | \$111,157.17 | 0.01\% |
| 4421 | Furniture stores | \$97,647.76 | 0.01\% |
| 1152 | Support activities for animal production | \$70,060.00 | 0.01\% |
| 3149 | Other textile product mills | \$61,042.27 | 0.01\% |
| 4243 | Apparel and piece goods merchant wholesalers | \$60,836.40 | 0.01\% |
| 4841 | General freight trucking | \$56,550.00 | 0.01\% |
| 5612 | Facilities support services | \$50,600.00 | 0.01\% |
| 3211 | Sawmills and wood preservation | \$36,314.50 | 0.00\% |
| 4523 | General Merchandise Stores, including Warehouse Clubs and Supercenters | \$34,887.30 | 0.00\% |
| 4235 | Metal and mineral merchant wholesalers | \$33,319.06 | 0.00\% |
| 7115 | Independent artists, writers, and performers | \$22,987.50 | 0.00\% |
| 5121 | Motion picture and video industries | \$19,950.00 | 0.00\% |
| 7225 | Restaurants and other eating places | \$18,967.00 | 0.00\% |
| 5112 | Software publishers | \$16,544.00 | 0.00\% |
| 3391 | Medical equipment and supplies manufacturing | \$14,581.86 | 0.00\% |
| 3253 | Agricultural chemical manufacturing | \$13,920.00 | 0.00\% |
| 4247 | Petroleum merchant wholesalers | \$13,758.18 | 0.00\% |
|  | TOTAL | \$783,394,101.27 |  |

Source: MGT developed a Master Utilization File based on the City's spending between July 1, 2014 (FY15) through June 30, 2019 (FY19).

For Professional Services, Table 5-4 over 85 percent of the payments are distributed among only five industry groups ( $5415,6213,5321,5413$, and 5416 ). Most of the payments came from one industry group (5415).

TABLE 5-4. PRODUCT MARKET
DISTRIBUTION OF DOLLARS BY NAICS CODE
PROFESSIONAL SERVICES

| NAICS INDUSTRY GROUP | NAICS DESCRIPTION | AMOUNT | NAICS <br> WEIGHT |
| :---: | ---: | ---: | ---: |
| 5415 | Computer systems design and related services | $\$ 98,119,771.79$ | $60.09 \%$ |
| 6213 | Offices of other health practitioners | $\$ 16,270,370.41$ | $9.96 \%$ |
| 5321 | Automotive equipment rental and leasing | $\$ 9,534,932.87$ | $5.84 \%$ |


| NAICS INDUSTRY GROUP | NAICS DESCRIPTION | AMOUNT | NAICS WEIGHT |
| :---: | :---: | :---: | :---: |
| 5413 | Architectural and engineering services | \$8,714,281.95 | 5.34\% |
| 5416 | Management and technical consulting services | \$6,633,968.88 | 4.06\% |
| 6219 | Other ambulatory health care services | \$5,434,130.73 | 3.33\% |
| 5322 | Consumer goods rental | \$3,806,071.45 | 2.33\% |
| 2382 | Building equipment contractors | \$3,277,491.80 | 2.01\% |
| 5242 | Insurance agencies and brokerages | \$2,465,370.00 | 1.51\% |
| 4234 | Commercial equip. merchant wholesalers | \$1,466,473.00 | 0.90\% |
| 5412 | Accounting and bookkeeping services | \$1,071,914.05 | 0.66\% |
| 5613 | Employment services | \$948,599.00 | 0.58\% |
| 2383 | Building finishing contractors | \$693,443.55 | 0.42\% |
| 4859 | Other ground passenger transportation | \$640,598.00 | 0.39\% |
| 9221 | Justice, public order, and safety activities | \$614,393.00 | 0.38\% |
| 6241 | Individual and family services | \$572,211.00 | 0.35\% |
| 5418 | Advertising, PR, and related services | \$495,885.62 | 0.30\% |
| 5419 | Other professional and technical services | \$447,446.16 | 0.27\% |
| 5324 | Machinery and equipment rental and leasing | \$443,134.99 | 0.27\% |
| 5239 | Other financial investment activities | \$361,939.00 | 0.22\% |
| 2381 | Building foundation and exterior contractors | \$278,827.81 | 0.17\% |
| 2389 | Other specialty trade contractors | \$223,460.85 | 0.14\% |
| 6216 | Home health care services | \$162,335.00 | 0.10\% |
| 4237 | Hardware and plumbing merchant wholesalers | \$121,055.81 | 0.07\% |
| 5411 | Legal services | \$109,917.30 | 0.07\% |
| 4841 | General freight trucking | \$74,882.00 | 0.05\% |
| 4233 | Lumber and const. supply merchant wholesalers | \$71,215.24 | 0.04\% |
| 6114 | Business, computer, and management training | \$51,584.16 | 0.03\% |
| 3231 | Printing and related support activities | \$42,392.82 | 0.03\% |
| 5417 | Scientific research and development services | \$39,902.00 | 0.02\% |
| 3261 | Plastics product manufacturing | \$29,183.52 | 0.02\% |
| 5323 | General rental centers | \$18,916.90 | 0.01\% |
| 6211 | Offices of physicians | \$10,550.00 | 0.01\% |
| 4241 | Paper and paper product merchant wholesalers | \$10,449.00 | 0.01\% |
| 6117 | Educational support services | \$10,020.50 | 0.01\% |
| 6215 | Medical and diagnostic laboratories | \$9,843.00 | 0.01\% |
| 6115 | Technical and trade schools | \$7,500.00 | 0.00\% |
| 5414 | Specialized design services | \$4,666.00 | 0.00\% |
| 6116 | Other schools and instruction | \$2,875.00 | 0.00\% |
| 4249 | Misc. nondurable goods merchant wholesalers | \$384.00 | 0.00\% |
| 8111 | Automotive repair and maintenance | \$340.00 | 0.00\% |
| 5241 | Insurance carriers | \$0.00 | 0.00\% |
|  | TOTAL | \$163,292,728.16 |  |

Source: MGT developed a Master Utilization File based on the City's spend between July 1, 2014 (FY15) through June 30, 2019 (FY19).

### 5.2 Utilization Analysis

The utilization analysis presents a summary of payments within the scope of the study and an initial assessment of the effectiveness of initiatives in promoting the inclusion of M/WBEs in the City's contracting and procurement activities. The City's overall spend during the study period was $\$ 3.376$
billion, 58 percent higher than reported utilization in the City's 2014 study ${ }^{152}$ the City's overall spend was $\$ 1.959$ billion.

The utilization analysis is based on the defined relevant market area, as described in the preceding sections of this chapter. The payments data included within this analysis encompass both (1) total dollars paid to primes located within the market area (excluding all subcontracting payments) and (2) dollars allocated to subcontractors located within the market area, independent of their respective prime contractor location. Analysis of these data is broken down by the procurement categories of Construction, Architecture and Engineering, Professional Services, Goods and Other Services. and encompasses payments between July 1, 2014 (FY15) through June 30, 2019 (FY19).

### 5.2.1 Overall Utilization

Table 5-5 shows the M/WBE utilization amounted to 29.32 percent of total prime and subcontract spending. Corresponding detailed analyses showing the utilization of firms by business ownership classification are presented in Appendix C.

TABLE 5-5.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION, ALL PROCUREMENT CATEGORIES

| BUSINESS OWNERSHIP CLASSIFICATION | ALL PROCUREMENT CATEGORIES |  |
| :---: | :---: | :---: |
|  | Dollars (\$) | Percent (\%) |
| African American | \$416,701,494.70 | 12.34\% |
| Asian American | \$79,551,295.77 | 2.36\% |
| Hispanic American | \$207,578,560.55 | 6.15\% |
| Native American | \$32,182,827.60 | 0.95\% |
| Total MBE Firms | \$736,014,178.62 | 21.80\% |
| Non-Minority Female | \$254,079,897.55 | 7.52\% |
| Total M/WBE Firms | \$990,094,076.17 | 29.32\% |
| Non-MWBE | \$2,386,832,555.37 | 70.68\% |
| TOTAL | \$3,376,926,631.54 | 100.00\% |

Source: MGT developed a Master Utilization File based on the City's spending between July 1, 2014 (FY15) through June 30, 2019 (FY19).

## Utilization by Procurement Category

The next series of tables presents the summary results of the prime and subcontract utilization for each procurement category analyzed. In the examination of M/WBE utilization, there are a few M/WBE firms that were awarded large or multiple contracts that resulted in the higher spending for MBE. For construction, two African American firms accounted for 51 percent of the total utilization for African Americans. Three Hispanic American firms were paid 53 percent of the total utilization for Hispanic Americans. One Native American firm accounted for 95 percent of the total utilization for Native

[^31]Americans. In Architecture and Engineering, three Asian American firms accounted for 45 percent of the total utilization of Asian Americans.

Beginning with an examination of Construction, Table $\mathbf{5 - 6}$ shows the utilization of M/WBE firms was $\mathbf{3 3 . 4 0}$ percent. Otherwise, utilization for specific business ownership classifications was:

- 26.47 percent for MBE firms;
- $\mathbf{1 5 . 1 3}$ percent for African American firms;
- $\mathbf{0 . 8 0}$ percent for Asian American firms;
- 9.10 percent for Hispanic American firms;
- $\quad 1.44$ percent for Native American firms;
- 6.93 percent for Nonminority female firms.

TABLE 5-6.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION, CONSTRUCTION

| BUSINESS OWNERSHIP CLASSIFICATION | CONSTRUCTION |  |
| :---: | :---: | :---: |
|  | Dollars (\$) | Percent (\%) |
| African American | \$334,094,603.56 | 15.13\% |
| Asian American | \$17,660,759.31 | 0.80\% |
| Hispanic American | \$200,939,896.03 | 9.10\% |
| Native American | \$31,758,301.17 | 1.44\% |
| Total MBE Firms | \$584,453,560.07 | 26.47\% |
| Non-Minority Female | \$152,992,599.02 | 6.93\% |
| Total M/WBE Firms | \$737,446,159.09 | 33.40\% |
| Non-MWBE | \$1,470,766,409.05 | 66.60\% |
| TOTAL | \$2,208,212,568.14 | 100.00\% |

Source: MGT developed a Master Utilization File based on the City's spending between July 1, 2014 (FY15) through June 30, 2019 (FY19).

Table 5-7 shows the utilization of M/WBE firms was 40.04 percent in Architecture and Engineering. Utilization for specific classifications was:

- 30.14 percent for MBE firms;
- $\mathbf{7 . 2 5}$ percent for African American firms;
- 22.39 percent for Asian American firms;
- 0.46 percent for Hispanic American firms;
- $\mathbf{0 . 0 3}$ percent for Native American firms;
- 9.91 percent for Nonminority female firms.

TABLE 5-7.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION, ARCHITECTURE \& ENGINEERING

| BUSINESS OWNERSHIP <br> CLASSIFICATION | Architecture \& Engineering |  |
| :--- | ---: | :---: |
|  | Dollars (\$) | Percent <br> $(\%)$ |
| African American | $\$ 16,100,181.77$ | $7.25 \%$ |
| Asian American | $\$ 49,721,104.87$ | $22.39 \%$ |
| Hispanic American | $\$ 1,024,797.00$ | $0.46 \%$ |
| Native American | $\$ 63,207.79$ | $0.03 \%$ |
| Total MBE Firms | $\mathbf{\$ 6 6 , 9 0 9 , 2 9 1 . 4 3}$ | $\mathbf{3 0 . 1 4 \%}$ |
| Non-Minority Female | $\$ 22,000,510.63$ | $9.91 \%$ |
| Total M/WBE Firms | $\mathbf{\$ 8 8 , 9 0 9 , 8 0 2 . 0 6}$ | $\mathbf{4 0 . 0 4 \%}$ |
| Non-MWBE | $\$ 133,117,431.91$ | $59.96 \%$ |
| TOTAL | $\mathbf{\$ 2 2 2 , 0 2 7 , 2 3 3 . 9 7}$ | $\mathbf{1 0 0 . 0 0 \%}$ |

Source: MGT developed a Master Utilization File based on the City's spend between July 1, 2014 (FY15) through June 30, 2019 (FY19).

Table 5-8 shows the utilization of M/WBE firms was 17.89 percent in Goods and Other Services. Individually, the M/WBE utilization was:

- 9.25 percent for MBE firms;
- 7.63 percent for African American firms;
- 0.91 percent for Asian American firms;
- $\mathbf{0 . 6 7}$ percent for Hispanic American firms;
- $\mathbf{0 . 0 5}$ percent for Native American firms;
- 8.64 percent for Nonminority female firms.

TABLE 5-8.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION, GOODS \& OTHER SERVICES

| BUSINESS OWNERSHIP <br> CLASSIFICATION | GOODS \& OTHER SERVICES |  |
| :--- | ---: | ---: |
|  | Dollars (\$) | Percent <br> $(\%)$ |
| African American | $\$ 59,789,747.02$ | $7.63 \%$ |
| Asian American | $\$ 7,099,480.35$ | $0.91 \%$ |
| Hispanic American | $\$ 5,235,978.52$ | $0.67 \%$ |
| Native American | $\$ 361,318.64$ | $0.05 \%$ |
| Total MBE Firms | $\$ 72,486,524.53$ | $\mathbf{9 . 2 5 \%}$ |
| Non-Minority Female | $\$ 67,696,423.81$ | $8.64 \%$ |
| Total M/WBE Firms | $\mathbf{\$ 1 4 0 , 1 8 2 , 9 4 8 . 3 4}$ | $\mathbf{1 7 . 8 9 \%}$ |
| Non-MWBE | $\$ 643,211,152.93$ | $82.11 \%$ |
| TOTAL | $\mathbf{\$ 7 8 3 , 3 9 4 , 1 0 1 . 2 7}$ | $\mathbf{1 0 0 . 0 0 \%}$ |

Source: MGT developed a Master Utilization File based on the City's spend between July 1, 2014 (FY15) through June 30, 2019 (FY19).

Table 5-9 shows the utilization of M/WBE firms was $\mathbf{1 4 . 4 3}$ percent in Professional Services. Individually, the M/WBE utilization was:

- 7.45 percent for MBE firms;
- 4.11 percent for African American firms;
- 3.10 percent for Asian American firms;
- $\mathbf{0 . 2 3}$ percent for Hispanic American firms;
- $\mathbf{0 . 0 0}$ percent for Native American firms;
- 6.98 percent for Nonminority female firms.

TABLE 5-9.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION, PROFESSIONAL SERVICES

| BUSINESS OWNERSHIP <br> CLASSIFICATION | PROFESSIONAL SERVICES |  |
| :--- | ---: | :---: |
|  | Dollars (\$) | Percent <br> $(\%)$ |
| African American | $\$ 6,716,962.35$ | $4.11 \%$ |
| Asian American | $\$ 5,069,951.24$ | $3.10 \%$ |
| Hispanic American | $\$ 377,889.00$ | $0.23 \%$ |
| Native American | $\$ 0.00$ | $0.00 \%$ |
| Total MBE Firms | $\$ \mathbf{1 2 , 1 6 4 , 8 0 2 . 5 9}$ | $\mathbf{7 . 4 5 \%}$ |
| Non-Minority Female | $\$ 11,390,364.09$ | $6.98 \%$ |
| Total M/WBE Firms | $\mathbf{\$ 2 3 , 5 5 5 , 1 6 6 . 6 8}$ | $\mathbf{1 4 . 4 3 \%}$ |
| Non-MWBE | $\mathbf{\$ 1 3 9 , 7 3 7 , 5 6 1 . 4 8}$ | $85.57 \%$ |
| TOTAL | $\mathbf{\$ 1 6 3 , 2 9 2 , 7 2 8 . 1 6}$ | $\mathbf{1 0 0 . 0 0 \%}$ |

Source: MGT developed a Master Utilization File based on the City's spending between July 1, 2014 (FY15) through June 30, 2019 (FY19).

Table 5-10 shows the utilization of M/WBE firms for prime contracts only was $\mathbf{1 6 . 7 5}$ percent. Individually, the M/WBE utilization was:

- 11.48 percent for MBE firms;
- 7.24 percent for African American firms;
- 1.42 percent for Asian American firms;
- 2.80 percent for Hispanic American firms;
- 0.02 percent for Native American firms;
- 5.28 percent for Nonminority female firms.

TABLE 5-10.
UTILIZATION ANALYSIS OF PRIME CONTRACTS

| BUSINESS OWNERSHIP CLASSIFICATION | ALL | CONSTRUCTION | A\&E | GOODS \& OTHER SERVICES | PROFESSIONAL SERVICES |
| :---: | :---: | :---: | :---: | :---: | :---: |
| African American | \$144,463,917.51 | \$82,478,422.69 | \$517,717.13 | \$59,789,747.02 | \$1,678,030.67 |
| Asian American | \$28,343,329.11 | \$2,401,024.53 | \$14,007,462.99 | \$6,929,290.35 | \$5,005,551.24 |
| Hispanic American | \$55,967,489.46 | \$50,564,900.94 | \$0.00 | \$5,235,978.52 | \$166,610.00 |
| Native American | \$361,318.64 | \$0.00 | \$0.00 | \$361,318.64 | \$0.00 |
| Total MBE Firms | \$229,136,054.72 | \$135,444,348.16 | \$14,525,180.12 | \$72,316,334.53 | \$6,850,191.91 |
| Non-Minority Female | \$105,295,500.58 | \$19,224,380.30 | \$8,830,120.75 | \$67,696,423.81 | \$9,544,575.72 |
| Total M/WBE Firms | \$334,431,555.30 | \$154,668,728.46 | \$23,355,300.87 | \$140,012,758.34 | \$16,394,767.63 |
| Non-MWBE | \$1,661,657,411.15 | \$761,415,750.47 | \$125,444,582.16 | \$643,103,227.93 | \$131,693,850.59 |
| TOTAL | \$1,996,088,966.46 | \$916,084,478.94 | \$148,799,883.03 | \$783,115,986.27 | \$148,088,618.22 |
| BUSINESS OWNERSHIP | ALL | CONSTRUCTION | A\&E | GOODS \& OTHER SERVICES | PROFESSIONAL SERVICES |
|  | (\%) | (\%) | (\%) | (\%) | (\%) |
| African American | 7.24\% | 9.00\% | 0.35\% | 7.63\% | 1.13\% |
| Asian American | 1.42\% | 0.26\% | 9.41\% | 0.88\% | 3.38\% |
| Hispanic American | 2.80\% | 5.52\% | 0.00\% | 0.67\% | 0.11\% |
| Native American | 0.02\% | 0.00\% | 0.00\% | 0.05\% | 0.00\% |
| Total MBE Firms | 11.48\% | 14.79\% | 9.76\% | 9.23\% | 4.63\% |
| Non-Minority Female | 5.28\% | 2.10\% | 5.93\% | 8.64\% | 6.45\% |
| Total M/WBE Firms | 16.75\% | 16.88\% | 15.70\% | 17.88\% | 11.07\% |
| Non-MWBE | 83.25\% | 83.12\% | 84.30\% | 82.12\% | 88.93\% |
| TOTAL | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Source: MGT developed a Master Utilization File based on the City's spend between July 1, 2014 (FY15) through June 30, 2019 (FY19).

The data collection and preparations included identifying firms that were identified disabled-, veteran, and LGBTQ-owned firms. Data sources that identify these business ownership classifications were limited because it is not maintained as broadly as minority and women data sources are. The sources used to identify DOBE, VOBE, and LGBTQBE business ownership classifications were Anne Arundel County's certified vendor list, Howard County's Disabled-owned Business list, Small Business Administration's Dynamic Small Business Search list, the Maryland LGBT Chamber of Commerce, Maryland Works, Maryland Department of Transportation, and the National LGBT Chamber of Commerce. Table 5-11 shows the utilization of DOBE, VOBE, and LGBTQ firms. Being that there is an overlap of the race, ethnicity, and gender classifications, utilization is shown at the total DOBE, VOBE, and LGBTQ classification and not by race, ethnicity, or gender.

- Overall, 0.02 percent for DOBE firms;
- Overall, 0.04 percent for VOBE firms;
- Overall, 0.00 percent for LGBTQ firms;
- Highest percentage of DOBE firms can be found in Architecture and Engineering with 0.13 percent;
- Highest percentage of VOBE firms can be found in Professional Services with 0.15 percent.

TABLE 5-11.
UTILIZATION ANALYSIS OF DOBE, VOBE, AND LGBTQ FIRMS

| BUSINESS OWNERSHIP CLASSIFICATION | ALL | CONSTRUCTION | A\&E | GOODS \& OTHER SERVICES | PROFESSIONAL SERVICES |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DOBE | \$633,564.93 | \$341,249.01 | \$292,315.92 | \$0.00 | \$0.00 |
| VOBE | \$1,317,829.68 | \$269,284.27 | \$0.00 | \$797,734.52 | \$250,810.89 |
| LGBTQ | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL | \$1,951,394.61 | \$610,533.28 | \$292,315.92 | \$797,734.52 | \$250,810.89 |
| BUSINESS OWNERSHIP | ALL | CONSTRUCTION | A\&E | GOODS \& OTHER SERVICES | PROFESSIONAL SERVICES |
| CLASSIFICATION | (\%) | (\%) | (\%) | (\%) | (\%) |
| DOBE | 0.02\% | 0.02\% | 0.13\% | 0.00\% | 0.00\% |
| VOBE | 0.04\% | 0.01\% | 0.00\% | 0.10\% | 0.15\% |
| LGBTQ | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |

Source: MGT developed a Master Utilization File based on the City's spending between July 1, 2014 (FY15) through June 30, 2019 (FY19). The utilization percentage is calculated using the total spend in Table 5-5.

## Utilization Conclusions

The utilization analysis shows that M/WBE firms are utilized at lower rates than their non-M/WBE counterparts. Overall, $\mathbf{2 9 . 3 2}$ percent of the City's payments went to M/WBE firms, while $\mathbf{7 0 . 6 8}$ percent went to non-M/WBE firms. While M/WBE utilization is low throughout the views on utilization that have been presented in this chapter, the proportion of firms willing and able to provide services to the City is a critical qualifying context in any determinations of disparity.

### 5.3 Disparity Analyses and Significance Testing

Building on our understanding of the City's vendor utilization (Section 5.2) and the availability estimates presented in the previous chapter (Chapter 4), we can use this information to identify potential disparities in City's procurement. A summary of the approach is provided in Section 5 .3.1 followed by the results of these disparity calculations and associated statistical significance testing in Section 5.3.2.

### 5.3.1 Disparity Analysis Methodology

Disparity, in this context, is the analysis of the differences between the utilization of minority- and womenowned firms and the respective availability of those firms. Thus, MGT calculated disparity indices to examine whether minority- and women-owned firms received a proportional share of dollars based on the respective availability of minority- and women-owned firms located in the study's defined relevant market area (as presented in Chapter 4).

MGT's disparity index methodology yields a value that is easily calculable, understandable in its interpretation, and universally comparable such that a disparity in utilization within minority- and womenowned firms can be assessed regarding the utilization of nonminority- and male-owned firms. The disparity index gives the evidence necessary to infer that discrimination in the marketplace has occurred.

Where 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 engaged by the locality or the locality's prime contractors, an inference of discriminatory exclusion could arise ${ }^{153}$. The inference of discrimination need not be proven correct by the government. As noted by the Tenth Circuit in upholding Denver's M/WBE Program, strong evidence supporting Denver's determination that necessary remedial action need not have been based upon "irrefutable or definitive" proof of discrimination. It was sufficient that the statistical evidence created an inference of discriminatory motivation, and evidence of marketplace discrimination was properly used to meet strict scrutiny. It is not the government's burden but rather the plaintiff who must prove by a preponderance of the evidence that such proof does not support those inferences ${ }^{154}$.


The disparity index is a simple proportional calculation that divides utilization rates (percent of dollars awarded to firms by class) by their associated availability (percent of firms available to work, within that same class) and multiplies this value by 100. Thus, a disparity index value of zero (0.00) indicates absolutely no utilization and, therefore, absolute disparity. A disparity index of 100 indicates that utilization is perfectly proportionate to availability, therefore indicating the absence of disparity (that is, all things being equal). Alternately, firms are considered underutilized if the disparity indices are less than 100 and overutilized if the indices are above 100.

Since there is no standardized measurement to evaluate the levels of underutilization or overutilization within a procurement context, MGT's methodology to measure disparity, if disparity is found, is based on the Equal Employment Opportunity Commission's (EEOC) " 80 percent rule." ${ }^{155}$ In the employment discrimination framework, an employment disparity index below 80 indicates a "substantial disparity." The Supreme Court has accepted the use of the "80 percent rule" in Connecticut v. Teal (Teal), 457 U.S. 440 (1982). ${ }^{156}$ Therefore, following a similar pattern, firms are considered substantially underutilized (substantial disparity) if the disparity indices are 80 or less.

Standard deviation tests or testing for statistical significance, in this context, is the analysis to determine the significance of the difference between the utilization of minority- and women-owned firms and the availability of those firms. This analysis can determine whether the disparities are substantial or statistically significant, which lends further statistical support to a finding of discrimination. The following explains MGT's methodology.

Standard deviation measures the probability that a result is a random deviation from a predicted result, where the greater the number of standard deviations, the lower the probability the result is a random one. The accepted standard used by Courts in disparity testing has been two standard deviations. That is,

[^32]if there is a result that falls within two standard deviations, then one can assume that the results are nonsignificant, or that no disparity has been confidently established.

Regarding the use of statistical significance in the disparity study context the National Cooperative Highway Research Program Report $644^{157}$ notes that:

- ". . . for statistical disparities to be taken as legally dispositive in the discrimination context, they should be (a) statistically significant and (b) "substantively" significant. Substantive significance is taken to mean, for example, a DBE utilization measure that is less than or equal to $80 \%$ of the corresponding DBE availability measure."
- "In discrimination cases, the courts have usually required $p$-values of $5 \%$ or less to
 establish statistical significance in a two-sided case."

Note that $p$-values are used to determine whether the differences between two populations feature legitimate differences (that would be sustained if we continued to collect more observations), or if the variation between them is simply a product of normal random variation between observations that would be washed out if we collected more data. A p-value of less than 0.05 suggests it is highly unlikely that the differences between two groups are just driven by chance. The use of the t-test to calculate p -values for disparity indices was approved by the Fourth Circuit in H.B. Rowe v. Tippett, 615 F.3d 233, 244-45 ( $4^{\text {th }}$ Cir 2010).

Thus, MGT applies two major tests to determine statistical significance: (1) whether the disparity index is less than or equal to 80 percent of respective M/WBE availability, which is labeled "substantial disparity" and (2) whether the disparity index passes the t-test determination of statistical significance. In cases where one, or especially both, measures hold true, a remedy is typically deemed to be justifiable by courts, making these results critical outcomes of the subsequent analyses.

### 5.3.2 Disparity Analyses and Statistical Significance Testing

Included in this section are inputs and calculations of disparity indices and significance testing for each of the procurement categories and race, ethnic, and gender classifications. Corresponding detailed analyses showing the disparity analysis of firms by race, ethnicity, and gender in each procurement category are presented in Tables 5-13 through 5-17. Additional detailed analysis can be found in Appendix C. Analysis of disparities across all procurement categories in Table 5-12 reveals:

- Asian American firms were underutilized, with a disparity index of 69.59;

[^33]- Nonminority female firms were underutilized, with a substantial and statistically significant disparity index of 34.41 ; and
- M/WBE firms were underutilized, with a substantial and statistically significant disparity index of 71.03 .

TABLE 5-12.
DISPARITY INDICES AND SIGNIFICANCE TESTING, ALL PROCUREMENT CATEGORIES

| Ethnic/Gender Classification | Utilization | Availability | Disparity Index | Disparity Impact | Statistical Significance | Disparity Conclusion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| African Americans | 12.34\% | 10.54\% | 117.05 | Overutilization | No | No Disparity |
| Asian Americans | 2.36\% | 3.39\% | 69.59 | Underutilization | No | Disparity |
| Hispanic Americans | 6.15\% | 4.80\% | 127.97 | Overutilization | No | No Disparity |
| Native Americans | 0.95\% | 0.68\% | 140.13 | Overutilization | No | No Disparity |
| Total MBE Firms | 21.80\% | 19.41\% | 112.28 | Overutilization | No | No Disparity |
| Nonminority Females | 7.52\% | 21.87\% | 34.41 | Underutilization | Yes | Disparity |
| Total M/WBE Firms | 29.32\% | 41.28\% | 71.03 | Underutilization | Yes | Disparity |
| Non-M/WBE Firms | 70.68\% | 58.72\% | 120.36 | Overutilization | No | No Disparity |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability.
BOLD indicates a substantial level of disparity, which is a statically significant disparity index below 80.00.

The calculation of disparity indices and significance testing for the Architecture \& Engineering procurement category are depicted in Table 5-13. Relevant findings include:

- African American firms were underutilized, with a disparity index of 71.15;
- Hispanic American firms were underutilized, with a substantial and statistically significant disparity index of 8.04;
- Native American firms were underutilized, with a disparity index of 0.00 ;
- Nonminority female firms were underutilized, with a substantial and statistically significant disparity index of 38.94; and
- M/WBE firms were underutilized, with a statistically significant disparity index of 82.63.

TABLE 5-13.
DISPARITY INDICES AND SIGNIFICANCE TESTING, ARCHITECTURE \& ENGINEERING

| Ethnic/Gender Classification | Utilization | Availability | Disparity Index | Disparity Impact | Statistical Significance | Disparity Conclusion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| African Americans | 7.25\% | 10.19\% | 71.15 | Underutilization | No | Disparity |
| Asian Americans | 22.39\% | 6.27\% | 357.07 | Overutilization | No | No Disparity |
| Hispanic Americans | 0.46\% | 5.74\% | 8.04 | Underutilization | Yes | Disparity |
| Native Americans | 0.03\% | 0.81\% | 0.00 | Underutilization | No | Disparity |
| Total MBE Firms | 30.14\% | 23.01\% | 130.95 | Overutilization | No | No Disparity |
| Nonminority Females | 9.91\% | 25.45\% | 38.94 | Underutilization | Yes | Disparity |
| Total M/WBE Firms | 40.04\% | 48.46\% | 82.63 | Underutilization | Yes | Disparity |
| Non-M/WBE Firms | 59.96\% | 51.54\% | 116.33 | Overutilization | No | No Disparity |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability.
BOLD indicates a substantial level of disparity, which is a statically significant disparity index below 80.00.

Disparity indices and significance testing for Construction appear in Table 5-14. Noteworthy observations include:

- Asian American firms were underutilized, with a disparity index of 35.57;
- Nonminority female firms were underutilized, with a substantial and statistically significant disparity index of 32.22; and
- M/WBE firms were underutilized, with a disparity index of 84.67.

TABLE 5-14.
DISPARITY INDICES AND SIGNIFICANCE TESTING,
CONSTRUCTION

| Ethnic/Gender Classification | Utilization | Availability | Disparity Index | Disparity Impact | Statistical Significance | Disparity Conclusion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| African Americans | 15.13\% | 9.70\% | 156.02 | Overutilization | Yes | No Disparity |
| Asian Americans | 0.80\% | 2.25\% | 35.57 | Underutilization | No | Disparity |
| Hispanic Americans | 9.10\% | 5.64\% | 161.35 | Overutilization | No | No Disparity |
| Native Americans | 1.44\% | 0.36\% | 404.48 | Overutilization | No | No Disparity |
| Total MBE Firms | 26.47\% | 17.94\% | 147.52 | Overutilization | No | No Disparity |
| Nonminority Females | 6.93\% | 21.50\% | 32.22 | Underutilization | Yes | Disparity |
| Total M/WBE Firms | 33.40\% | 39.44\% | 84.67 | Underutilization | No | Disparity |
| Non-M/WBE Firms | 66.60\% | 60.56\% | 109.98 | Overutilization | No | No Disparity |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability.
BOLD indicates a substantial level of disparity, which is a statically significant disparity index below 80.00 .

Disparity indices and significance testing for the Professional Services sector are presented in Disparity indices and significance testing for Construction appear in Table 5-14. Noteworthy observations include:

- Asian American firms were underutilized, with a disparity index of 35.57;
- Nonminority female firms were underutilized, with a substantial and statistically significant disparity index of 32.22; and
- M/WBE firms were underutilized, with a disparity index of 84.67.

TABLE 5-14.
DISPARITY INDICES AND SIGNIFICANCE TESTING,
CONSTRUCTION

| Ethnic/Gender Classification | Utilization | Availability | Disparity Index | Disparity Impact | Statistical Significance | Disparity Conclusion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| African Americans | 15.13\% | 9.70\% | 156.02 | Overutilization | Yes | No Disparity |
| Asian Americans | 0.80\% | 2.25\% | 35.57 | Underutilization | No | Disparity |
| Hispanic Americans | 9.10\% | 5.64\% | 161.35 | Overutilization | No | No Disparity |
| Native Americans | 1.44\% | 0.36\% | 404.48 | Overutilization | No | No Disparity |
| Total MBE Firms | 26.47\% | 17.94\% | 147.52 | Overutilization | No | No Disparity |


| Nonminority Females | $\mathbf{6 . 9 3 \%}$ | $\mathbf{2 1 . 5 0 \%}$ | $\mathbf{3 2 . 2 2}$ | Underutilization | Yes | Disparity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total M/WBE Firms | $33.40 \%$ | $39.44 \%$ | 84.67 | Underutilization | No | Disparity |
| Non-M/WBE Firms | $66.60 \%$ | $60.56 \%$ | 109.98 | Overutilization | No | No Disparity |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability.
BOLD indicates a substantial level of disparity, which is a statically significant disparity index below 80.00.
15. Some findings include that:

- African American firms were underutilized, with a disparity index of 28.14;
- Asian American firms were underutilized, with a disparity index of 25.58;
- Hispanic American firms were underutilized, with a disparity index of 6.85;
- Native American firms were underutilized, with a disparity index of 0.00;
- MBE firms were underutilized, with a substantial and statistically significant disparity index of 24.00;
- Nonminority female firms were underutilized, with a disparity index of 42.62; and
- M/WBE firms were underutilized, with a substantial and statistically significant disparity index of 30.43 .

TABLE 5-15.
DISPARITY INDICES AND SIGNIFICANCE TESTING, PROFESSIONAL SERVICES

| Ethnic/Gender Classification | Utilization | Availability | Disparity Index | Disparity Impact | Statistical Significance | Disparity Conclusion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| African Americans | 4.11\% | 14.62\% | 28.14 | Underutilization | No | Disparity |
| Asian Americans | 3.10\% | 12.14\% | 25.58 | Underutilization | No | Disparity |
| Hispanic Americans | 0.23\% | 3.38\% | 6.85 | Underutilization | No | Disparity |
| Native Americans | 0.00\% | 0.91\% | 0.00 | Underutilization | No | Disparity |
| Total MBE Firms | 7.45\% | 31.05\% | 24.00 | Underutilization | Yes | Disparity |
| Nonminority Females | 6.98\% | 16.36\% | 42.62 | Underutilization | No | Disparity |
| Total M/WBE Firms | 14.43\% | 47.41\% | 30.43 | Underutilization | Yes | Disparity |
| Non-M/WBE Firms | 85.57\% | 52.59\% | 162.72 | Overutilization | No | No Disparity |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability.
BOLD indicates a substantial level of disparity, which is a statistically significant disparity index below 80.00 .

Table 5-16 presents disparity indices and significance testing for the Goods \& Services sector.

- African American firms were underutilized, with a disparity index of 62.69;
- Asian American firms were underutilized, with a disparity index of 22.96;
- Hispanic American firms were underutilized, with a disparity index of 26.99;
- Native American firms were underutilized, with a disparity index of 3.05;
- MBE firms were underutilized, with a disparity index of 46.01;
- Nonminority female firms were underutilized, with a substantial and statistically significant disparity index of 37.53 ; and
- M/WBE firms were underutilized, with a substantial and statistically significant disparity index of 41.48.

TABLE 5-16.
DISPARITY INDICES AND SIGNIFICANCE TESTING, GOODS \& SERVICES

| Ethnic/Gender Classification | Utilization | Availability | Disparity Index | Disparity Impact | Statistical Significance | Disparity Conclusion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| African Americans | 7.63\% | 12.17\% | 62.69 | Underutilization | No | Disparity |
| Asian Americans | 0.91\% | 3.95\% | 22.96 | Underutilization | No | Disparity |
| Hispanic Americans | 0.67\% | 2.48\% | 26.99 | Underutilization | No | Disparity |
| Native Americans | 0.05\% | 1.51\% | 3.05 | Underutilization | No | Disparity |
| Total MBE Firms | 9.25\% | 20.11\% | 46.01 | Underutilization | No | Disparity |
| Nonminority Females | 8.64\% | 23.03\% | 37.53 | Underutilization | Yes | Disparity |
| Total M/WBE Firms | 17.89\% | 43.14\% | 41.48 | Underutilization | Yes | Disparity |
| Non-M/WBE Firms | 82.11\% | 56.86\% | 144.39 | Overutilization | No | No Disparity |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability.
BOLD indicates a substantial level of disparity, which is a statically significant disparity index below 80.00.

### 5.4 Conclusions

The calculations of availability and disparity within this chapter and the preceding depiction of utilization serve as the foundation for the future of the City M/WBE program. These analyses provide the quantitative legal justification for any current or future remedies to assist M/WBE enterprises within the market. As summarized in the table below (Table 5-17), disparities between utilization and availability have been observed for most procurement and M/WBE categories included within the scope of the study, both in terms of the order of magnitude (Disparity Indices less than or equal to 80) and statistical significance. The City's 2014 Disparity Study reported overall disparity results for M/WBE firms. ${ }^{158}$

TABLE 5-17. DISPARITY ANALYSIS SUMMARY

| Procurement Category | All |  <br> Engineering | Construction | Professional <br> Services |  <br> Services |
| :--- | :---: | :---: | :---: | :---: | :---: |
| African Americans | No Disparity | Disparity | No Disparity | Disparity | Disparity |
| Asian Americans | Disparity | No Disparity | Disparity | Disparity | Disparity |
| Hispanic Americans | No Disparity | Disparity | No Disparity | Disparity | Disparity |
| Native Americans | No Disparity | Disparity | No Disparity | Disparity | Disparity |
| Total MBE Firms | No Disparity | No Disparity | No Disparity | Disparity | Disparity |
| Nonminority Females | Disparity | Disparity | Disparity | Disparity | Disparity |
| Total M/WBE Firms | Disparity | Disparity | Disparity | Disparity | Disparity |
| Non-MWBE Firms | No Disparity | No Disparity | No Disparity | No Disparity | No Disparity |

BOLD indicates a substantial level of disparity, which is a statically significant disparity index below 80.00.

[^34]
## 6 Private Sector Analysis

### 6.1 Introduction

The Legal Framework presented in Chapter 2 documents how a government entity must have a record of active or passive discrimination to justify remedies promoted through the institution of a minority- and female-owned business enterprise (M/WBE) program. Courts further require a compelling interest analysis showing a connection between the government or agency and the public or private discrimination that may exist within their jurisdiction. This chapter focuses on the overarching question:

- Does discrimination exist in the private sector


## Chapter Sections

6.1 Introduction
6.2 Private Sector Disparities in SBO Census Data
6.3 Private Sector Disparities in ABS Census Data
6.4 Analysis of Race, Ethnicity, and Gender Effects on SelfEmployment and Earnings
6.5 Conclusions marketplace, giving rise to a compelling governmental interest, thus supporting the City of Baltimore's (City) and Housing Authority of Baltimore City (HABC) continuance of its M/WBE program to avoid becoming a passive participant in discrimination?

Passive discrimination describes a circumstance where a public entity resides in a market with measurably disparate circumstances in the public and private sector but fails to take proactive actions to implement remedies within the domain of its control. Substantiating the relevance of an analysis of the private sector courts have favorably looked upon private sector analyses as support to determine compelling interest in M/WBE programs:

- Defining passive participation, Justice O'Connor in Croson stated, "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." ${ }^{159}$
- In Adarand, the Tenth Circuit favorably cited evidence of capital market discrimination as relevant in establishing the factual predicate for the federal DBE program. ${ }^{160}$
- Concrete Works IV found that barriers to business formation were relevant insofar as the evidence demonstrated that M/WBEs were "precluded from the outset from competing for public construction contracts." ${ }^{161}$
- In Adarand, the courts concluded a compelling interest for a government Disadvantaged Business Enterprise (DBE) program in part on evidence of private-sector discrimination. ${ }^{162}$

[^35]- Along related lines, a court found regression analysis of census data to be relevant evidence showing barriers to M/WBE formation. ${ }^{163}$

Thus, discriminatory practices in the private marketplace may, in many circumstances, show or serve to support the compelling interest required by courts to support an agency's program to intervene to prevent the agency from becoming a passive participant in discrimination.

These decisions support an investigation into this private sector domain to develop a comprehensive framework and set of perspectives traditionally used to justify M/WBE programs. This chapter provides an accumulation of evidence for the overarching question of whether or not the City has a continued compelling interest to maintain its M/WBE program based on circumstances observed in the private sector. This is investigated using three specific sources of data leveraged to address particular questions substantiating the overarching research question regarding disparities in the private sector:

- 2012 Census Survey of Business Owners (SBO) and 2017 Census Annual Business Survey (ABS) data, which are used to determine:

1. Do marketplace disparities exist in the private sector regarding revenue within similar City procurement categories for firms owned by minorities or females?

- 2016-2020 Census American Community Survey (ACS) Public Used Microdata Sample (PUMS) data, which are used to determine:

1. Are racial, ethnic, and gender minority groups less likely than nonminority males (nonM/WBEs) to be self-employed? If so, does race, ethnicity, or gender have a role in the disparity?
2. Does racial, ethnic, and gender status impact self-employed individuals' wages?
3. Suppose minority and female-owned business enterprises (M/WBEs) and nonminority maleowned firms shared similar traits and marketplace "conditions" (i.e., similar "rewards" in terms of capital and asset accrual), what would be the effect on rates of self-employment by race, ethnicity, and gender?

In answering these questions, the private sector analysis mirrors many of the same anecdotal comments offered in Chapter 7, Anecdotal Analysis, regarding difficulties M/WBE firms have in securing work on private sector projects.

### 6.2 Private Sector Disparities in SBO Census Data

To answer the overarching research question regarding the existence of disparities in the private sector, as well as the specific question (1) of whether these disparities exist in procurement categories relevant to the City's and HABC's contracting domain, MGT obtained and analyzed the U.S. Census Bureau's 2012 Survey of Business Owners (SBO) data to measure private sector disparities. ${ }^{164}$ SBO provides data on economic and demographic characteristics for businesses and business owners by geography (such as states and metropolitan areas), categorized by industries defined by North American Industry

[^36]Classification System (NAICS) codes, and supporting information including firm receipts (sales), ${ }^{165}$ firm employment size, and business ownership classification. The survey has been administered every five years since 1972 as part of the economic census.

The SBO gathers and reports data on (1) firms with paid employees, including workers on the payroll (employer firms), and (2) firms without paid employees, including sole proprietors and partners of unincorporated businesses that do not have any other employees on the payroll (nonemployer firms), as well as (3) in aggregate across all firms. MGT calculated private sector disparity indices to examine whether M/WBE firms in any of these categories received a proportionate share of firm sales based on the availability of M/WBE firms. Disparity indices were reviewed for all firms and employer firms. It should be noted that all of the disparity indices in the SBO tables are statistically significant within a 95 percent confidence interval.

The following NAICS codes ${ }^{166}$ were analyzed because they align with the categories of utilization analyzed for the City

- NAICS Code 23, Construction
- NAICS Code 42, Wholesale Trade
- NAICS Code 54, Professional, Scientific, and Technical Services
- NAICS Code 56, Administrative and Support and Waste Management and Remediation Services
- NAICS Code 81, Other Services (Except Public Administration)


### 6.2.1 Results of Analysis

This private-sector analysis presents disparity results based on the City's and HABC's geographic marketplace. The City marketplace contains the following counties in the Washington metropolitan statistical area: Anne Arundel County, MD, Baltimore City, MD, Baltimore County, MD, Carroll County, MD, Howard County, MD, Montgomery County, MD, Prince George's County, MD, and Queen Anne's County, MD.

### 6.2.2 City of Baltimore and HABC Marketplace

Tables 6-1 through 6-5 show the measures of private sector disparities based on U.S. Census, 2012 SBO data for the population of available firms in the City of Baltimore and HABC marketplace by race, ethnicity, and gender for construction; wholesale trade; professional, scientific, and technical services; administrative and support and waste management and remediation services; and other services (except public administration).

[^37]Based on the analysis of the U.S. Census, 2012 SBO data, overall, there remains a significant gap between the market share of M/WBE firms and their share of the City of Baltimore and HABC marketplace business population, where data was available.

NAICS Code 23: Construction, City of Baltimore and HABC Marketplace
Table 6-1 shows the availability, sales, and disparity results for construction. The results were derived from those firms which provide construction or construction-related services based on the NAICS Code 23.

There were a total of 22,476 construction firms (all firms ${ }^{167}$ ) in the City of Baltimore in 2012, of which 20.60 percent were owned by minorities and 10.22 percent by nonminority women.

- African American firms (disparity index of 14.54) were substantially underutilized, accounting for 10.94 percent of all firms and 1.42 percent of sales.
- American Indian and Alaska Native firms (disparity index of 11.99 ) were substantially underutilized, accounting for 0.47 percent of all firms and 0.05 percent of sales.
- Asian American firms (disparity index of 9.12) were substantially underutilized, accounting for 2.97 percent of all firms and 0.27 percent of sales.
- Hispanic American firms (disparity index of 16.50 ) were substantially underutilized, accounting for 6.07 percent of all firms and 1.00 percent of sales.
- Nonminority women firms (disparity index of 78.58) were substantially underutilized, accounting for 10.22 percent of all firms and 8.03 percent of sales.
- Data available for Native Hawaiian/Pacific Islanders is insufficient for analysis.

There were a total of 6,932 construction employer firms ${ }^{168}$ in the City of Baltimore in 2012, of which 7.00 percent were owned by minorities and 11.21 percent by nonminority women firms.

- African American firms (disparity index of 62.68) were substantially underutilized, accounting for 2.26 percent of employer firms and 1.42 percent of sales.
- American Indian and Alaska Native firms (disparity index of 40.16) were substantially underutilized, accounting for 0.12 percent of employer firms and 0.05 percent of sales.
- American Indian and Alaska Native firms (disparity index of 13.21) were substantially underutilized, accounting for 1.05 percent of employer firms and 0.14 percent of sales.
- Hispanic American firms (disparity index of 24.76) were substantially underutilized, accounting for 3.56 percent of employer firms and 0.88 percent of sales.
- Nonminority women firms (disparity index of 71.29) were substantially underutilized, accounting for 11.21 percent of employer firms and 7.99 percent of sales.

[^38]- Data for Native Hawaiian/Pacific Islanders was withheld; therefore, disparities were not calculated.
- firms, Hispanic firms, Native Hawaiian/Pacific Islander firms was insufficient for analysis.

TABLE 6-1. PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 23, CONSTRUCTION

## U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS CITY OF BALTIMORE AND HABC MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | ALL FIRMS (\#) | ALL FIRMS, SALES ( $\$ 1,000$ ) | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS SALES $(\$ 1,000)$ |
| :---: | :---: | :---: | :---: | :---: |
| All Firms | 22,476 | 18,291,502 | 6,932 | 17,441,409 |
| Nonminority Male | 20,146 | 12,048,143 | 6,124 | 11,515,812 |
| Minority | 4,630 | 534,097 | 485 | 433,843 |
| African American | 2,459 | 290,959 | 157 | 247,608 |
| American Indian or Alaska Native | 105 | 10,244 | 8 | 8,084 |
| Asian | 668 | 49,580 | 73 | 24,258 |
| Hispanic | 1,365 | 183,314 | 247 | 153,893 |
| Native Hawaiian or Pacific Islander | 33 | S | S | S |
| Nonminority Female ${ }^{1}$ | 2,298 | 1,469,508 | 777 | 1,393,758 |
| PERCENTAGE OF MARKETPLACE |  |  |  |  |
| All Firms | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| Nonminority Male | 89.63\% | 65.87\% | 88.34\% | 66.03\% |
| Minority | 20.60\% | 2.92\% | 7.00\% | 2.49\% |
| African American | 10.94\% | 1.59\% | 2.26\% | 1.42\% |
| American Indian and Alaska Native | 0.47\% | 0.06\% | 0.12\% | 0.05\% |
| Asian | 2.97\% | 0.27\% | 1.05\% | 0.14\% |
| Hispanic | 6.07\% | 1.00\% | 3.56\% | 0.88\% |
| Native Hawaiian and Pacific Islander | 0.15\% | N/A | N/A | N/A |
| Nonminority Female | 10.22\% | 8.03\% | 11.21\% | 7.99\% |
| DISPARITY RATIOS |  |  |  |  |
| All Firms |  | 100.00 |  | 100.00 |
| Nonminority Male |  | 73.49 |  | 74.74 |
| Minority |  | 14.17 |  | 35.55 |
| African American |  | 14.54 |  | 62.68 |
| American Indian and Alaska Native |  | 11.99 |  | 40.16 |
| Asian |  | 9.12 |  | 13.21 |
| Hispanic |  | 16.50 |  | 24.76 |
| Native Hawaiian and Pacific Islander |  | - |  | - |
| Nonminority Female |  | 78.58 |  | 71.29 |

Source: MGT Consulting Group, LLC conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.
${ }^{1}$ Nonminority Female consists of White Women-owned and White Equally Women-/Male-owned firms.
$S$ denotes findings were withheld as the estimates did not meet U.S. Census publication standards.
N/A denotes data on business ownership classification group was not available
"-" denotes the denominator was zero and thus the values were undefined
Sales includes total shipments, receipts, revenue, or business done by the firm.

Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00. A disparity index below 80.00 indicates a substantial level of disparity.

## NAICS Code 42: Wholesale Trade, City of Baltimore and HABC Marketplace

Table 6-2 shows the availability, sales, and disparity results for wholesale trade firms. The results were derived from those firms which sell capital or durable goods to other businesses based on NAICS Code 42.

There were a total of 5,765 wholesale trade firms (all firms) in the City of Baltimore in 2012, of which 14.14 percent were owned by minorities and 23.73 percent by nonminority women.

- African American firms (disparity index of 4.39) were substantially underutilized, accounting for 8.24 percent of employer firms and 0.36 percent of sales.
- Data available for was insufficient for analysis.
- Asian American firms (disparity index of 32.57 ) were substantially underutilized, accounting for 4.82 percent of all firms and 1.57 percent of sales.
- Hispanic American firms (disparity index of 21.04) were substantially underutilized, accounting for 1.08 percent of all firms and 0.23 percent of sales.
- Nonminority women firms (disparity index of 22.96) were substantially underutilized, accounting for 23.73 percent of all firms and 5.45 percent of sales.
- Data available for "Native Hawaiian and Pacific Islander" and "American Indian or Alaskan Native" was insufficient for analysis.

There were a total of 3,098 wholesale trade employer firms in the City of Baltimore in 2012, of which 7.04 percent were owned by minorities and 12.46 percent by nonminority women.

- African American firms (disparity index of 17.75) were substantially underutilized, accounting for 2.00 percent of employer firms and 0.36 percent of sales.
- Asian American firms (disparity index of 29.80) were substantially underutilized, accounting for 4.65 percent of employer firms and 1.39 percent of sales.
- Hispanic American firms (disparity index 57.59) were substantially underutilized, accounting for 0.39 percent of employer firms and 0.22 percent of sales.
- Nonminority women firms (disparity index of 43.40) were substantially underutilized, accounting for 12.46 percent of employer firms and 5.41 percent of sales.
- Data available for "Native Hawaiian and Pacific Islander" and "American Indian or Alaskan Native" was insufficient for analysis.


## TABLE 6-2. PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 42, WHOLESALE TRADE

U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, CITY OF BALTIMORE AND HABC MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | ALL FIRMS <br> (\#) | ALL FIRMS, SALES $(\$ 1,000)$ | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS SALES $\mathbf{( \$ 1 , 0 0 0 )}$ |
| :---: | :---: | :---: | :---: | :---: |
| All Firms | 5,765 | 53,737,584 | 3,098 | 53,570,637 |
| Nonminority Male | 4,341 | 49,381,547 | 2,662 | 49,221,020 |
| Minority | 815 | 1,159,779 | 218 | 1,051,768 |
| African American | 475 | 194,196 | 62 | 190,293 |
| American Indian or Alaska Native ${ }^{1}$ | S | S | S | S |
| Asian ${ }^{2}$ | 278 | 843,964 | 144 | 741,976 |
| Hispanic | 62 | 121,619 | 12 | 119,499 |
| Native Hawaiian or Pacific Islander ${ }^{3}$ | S | S | S | S |
| Nonminority Female ${ }^{4}$ | 1,368 | 2,927,754 | 386 | 2,896,787 |
| PERCENTAGE OF MARKETPLACE |  |  |  |  |
| All Firms | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| Nonminority Male | 75.30\% | 91.89\% | 85.93\% | 91.88\% |
| Minority | 14.14\% | 2.16\% | 7.04\% | 1.96\% |
| African American | 8.24\% | 0.36\% | 2.00\% | 0.36\% |
| American Indian or Alaska Native ${ }^{1}$ | N/A | N/A | N/A | N/A |
| Asian ${ }^{2}$ | 4.82\% | 1.57\% | 4.65\% | 1.39\% |
| Hispanic | 1.08\% | 0.23\% | 0.39\% | 0.22\% |
| Native Hawaiian or Pacific Islander ${ }^{3}$ | N/A | N/A | N/A | N/A |
| Nonminority Female ${ }^{4}$ | 23.73\% | 5.45\% | 12.46\% | 5.41\% |
| DISPARITY RATIOS ${ }^{5}$ |  |  |  |  |
| All Firms |  | 100.00 |  | 100.00 |
| Nonminority Male |  | 122.04 |  | 106.93 |
| Minority |  | 15.27 |  | 27.90 |
| African American |  | 4.39 |  | 17.75 |
| American Indian or Alaska Native ${ }^{1}$ |  | - |  | - |
| Asian ${ }^{2}$ |  | 32.57 |  | 29.80 |
| Hispanic |  | 21.04 |  | 57.59 |
| Native Hawaiian or Pacific Islander ${ }^{3}$ |  | - |  | - |
| Nonminority Female ${ }^{4}$ |  | 22.96 |  | 43.40 |

Source: MGT Consulting Group, LLC conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.
${ }^{1}$ Nonminority Female consists of White Women-owned and White Equally Women-/Male-owned firms.
S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.
N/A denotes data on business ownership classification group was not available
"-" denotes the denominator was zero and thus the values were undefined
Sales includes total shipments, receipts, revenue, or business done by the firm.
Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00. A disparity index below 80.00 indicates a substantial level of disparity.

NAICS Code 54: Professional, Scientific and Technical Services, City of Baltimore and HABC Marketplace
Table 6-3 shows the availability, sales, and disparity results for professional, scientific, and technical services. Professional, scientific, and technical services, which require a high degree of expertise and training, were derived from those firms specializing in performing professional, scientific, and technical
activities (such as legal advice, accounting, architecture, engineering, computer services, consulting services, advertising services) for others in NAICS Code 54.

There were a total of 39,598 professional, scientific, and technical services firms (all firms) in the City of Baltimore in 2012, of which 20.98 percent were owned by minorities and 36.00 percent by nonminority women.

- African American firms (disparity index of 16.04) were substantially underutilized, accounting for 12.14 percent of all firms and 1.95 percent of sales.
- American Indian and Alaskan Native firms (disparity index of 0.89 ) were substantially underutilized accounting for 0.39 percent of all firms and close to 0.00 percent of all sales.
- Asian American firms (disparity index of 65.93 ) were substantially underutilized, accounting for 5.89 percent of all firms and 3.88 percent of sales.
- Hispanic American firms (disparity index of 46.62 ) were substantially underutilized, accounting for 2.47 percent of all firms and 1.15 percent of sales.
- Nonminority women firms (disparity index of 22.78) were substantially underutilized, accounting for 36.00 percent of all firms and 8.20 percent of sales.
- Data available for Native Hawaiian/Pacific Islander was insufficient for analysis.

There were a total of 8,867 professional, scientific, and technical services employer firms in the City of Baltimore in 2012, of which 12.28 percent were owned by minorities and 7.40 percent by nonminority women.

- African American firms (disparity index of 39.69) were substantially underutilized, accounting for 4.23 percent of employer firms and 1.68 percent of sales.
- Data available for American Indian or Alaskan Native was insufficient for analysis.
- Asian American firms (disparity index of 61.72) were substantially underutilized, accounting for 6.19 percent of employer firms and 3.82 percent of sales,
- Hispanic American firms (disparity index 59.23) were substantially underutilized, accounting for 1.66 percent of employer firms and 0.98 percent of sales.
- Nonminority women firms (disparity index of 35.28 ) were grossly underutilized, accounting for 20.97 percent of employer firms and 7.40 percent of sales.
- Data available for "Native Hawaiian and Pacific Islander" and "American Indian or Alaskan Native" was insufficient for analysis.

TABLE 6-3. PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 54, PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES
U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, CITY OF BALTIMORE AND HABC MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | ALL FIRMS <br> (\#) | ALL FIRMS, SALES ( $\$ 1,000$ ) | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS SALES $(\$ 1,000)$ |
| :---: | :---: | :---: | :---: | :---: |
| All Firms | 39,598 | 28,172,563 | 8,867 | 26,312,388 |
| Nonminority Male | 25,338 | 25,599,744 | 7,005 | 24,188,156 |
| Minority | 8,307 | 1,968,491 | 1,089 | 1,705,504 |
| African American | 4,808 | 548,581 | 375 | 441,661 |
| American Indian or Alaska Native ${ }^{1}$ | 156 | 993 | 18 | S |
| Asian ${ }^{2}$ | 2,332 | 1,093,839 | 549 | 1,005,470 |
| Hispanic | 980 | 325,078 | 147 | 258,373 |
| Native Hawaiian or Pacific Islander ${ }^{3}$ | 31 | S | S | S |
| Nonminority Female ${ }^{4}$ | 14,257 | 2,311,078 | 1,859 | 1,946,421 |
| PERCENTAGE OF MARKETPLACE |  |  |  |  |
| All Firms | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| Nonminority Male | 63.99\% | 90.87\% | 79.00\% | 91.93\% |
| Minority | 20.98\% | 6.99\% | 12.28\% | 6.48\% |
| African American | 12.14\% | 1.95\% | 4.23\% | 1.68\% |
| American Indian or Alaska Native ${ }^{1}$ | 0.39\% | 0.00\% | 0.20\% | N/A |
| Asian ${ }^{2}$ | 5.89\% | 3.88\% | 6.19\% | 3.82\% |
| Hispanic | 2.47\% | 1.15\% | 1.66\% | 0.98\% |
| Native Hawaiian or Pacific Islander ${ }^{3}$ | 0.08\% | N/A | N/A | N/A |
| Nonminority Female ${ }^{4}$ | 36.00\% | 8.20\% | 20.97\% | 7.40\% |
| DISPARITY RATIOS ${ }^{5}$ |  |  |  |  |
| All Firms |  | 100.00 |  | 100.00 |
| Nonminority Male |  | 142.01 |  | 116.36 |
| Minority |  | 33.31 |  | 52.78 |
| African American |  | 16.04 |  | 39.69 |
| American Indian or Alaska Native ${ }^{1}$ |  | 0.89 |  | - |
| Asian ${ }^{2}$ |  | 65.93 |  | 61.72 |
| Hispanic |  | 46.62 |  | 59.23 |
| Native Hawaiian or Pacific Islander ${ }^{3}$ |  | - |  | - |
| Nonminority Female ${ }^{4}$ |  | 22.78 |  | 35.28 |

Source: MGT Consulting Group, LLC conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.
${ }^{1}$ Nonminority Female consists of White Women-owned and White Equally Women-/Male-owned firms.
S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.
N/A denotes data on business ownership classification group was not available
"-" denotes the denominator was zero and thus the values were undefined
Sales includes total shipments, receipts, revenue, or business done by the firm.
Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00. A disparity index below 80.00 indicates a substantial level of disparity.

## NAICS Code 56: Administrative and Support and Waste Management and Remediation Services, City of Baltimore and HABC Marketplace

Table 6-4 shows the availability, sales, and disparity results for administrative and support and waste management and remediation services (such as office administration, hiring and placing of personnel, document preparation and similar clerical services, solicitation, collection, security and surveillance services, cleaning, and waste disposal services) in NAICS Code 56.

There were a total of 18,615 administrative and support and waste management and remediation services firms (all firms) in the City of Baltimore in 2012 , of which 81.93 percent were owned by minorities and 6.70 percent by nonminority women.

- American Indian or Alaskan Native Firms (disparity 158.28) were not underutilized, accounting for 53.01 percent of all firms and 83.90 percent of sales.
- Asian American firms (disparity index of 12.01) were substantially underutilized, accounting for 26.06 percent of all firms and 3.13 percent of sales.
- Native Hawaiian or Pacific Islander firms (disparity index 91.70) were underutilized accounting for 2.87 percent of all firms and 2.63 percent of sales.
- Nonminority women firms (disparity index of 9.48) were substantially underutilized, accounting for 6.70 percent of all firms and 0.64 percent of sales.
- Data Available for African American firms and Hispanic American firms was insufficient for analysis.

There were a total of 3,500 administrative and support and waste management and remediation services employer firms in the State of Maryland in 2012, of which 88.94 percent were owned by minorities and 3.17 percent by nonminority women.

- American Indian or Alaskan Native Firms (disparity 108.82) were not underutilized, accounting for 78.26 percent of all firms and 85.16 percent of sales.
- Asian American firms (disparity index of 12.01) were substantially underutilized, accounting for 7.57 percent of employer firms and 2.53 percent of sales.
- Native Hawaiian or Pacific Islander firms (disparity index 86.24) were underutilized accounting for 3.11 percent of all firms and 2.69 percent of sales.
- Nonminority women firms (disparity index of 6.71) were substantially underutilized, accounting for 3.17 percent of employer firms and 0.21 percent of sales.
- Data Available for African American firms and Hispanic American firms was insufficient for analysis.

TABLE 6-4. PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 56, ADMINISTRATIVE AND SUPPORT/WASTE MANAGEMENT AND REMEDIATION SERVICES U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, CITY OF BALTIMORE AND HABC MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | ALL FIRMS <br> (\#) | ALL FIRMS, SALES ( $\$ 1,000$ ) | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS SALES $(\$ 1,000)$ |
| :---: | :---: | :---: | :---: | :---: |
| All Firms | 18,615 | 6,965,371 | 3,500 | 6,614,949 |
| Nonminority Male | S | S | S | S |
| Minority | 15,252 | 6,245,063 | 3,113 | 5,978,025 |
| African American | S | S | S | S |
| American Indian or Alaska Native ${ }^{1}$ | 9,867 | 5,843,772 | 2,739 | 5,633,116 |
| Asian ${ }^{2}$ | 4,851 | 218,059 | 265 | 167,242 |
| Hispanic | S | S | S | S |
| Native Hawaiian or Pacific Islander ${ }^{3}$ | 534 | 183,232 | 109 | 177,667 |
| Nonminority Female ${ }^{4}$ | 1,247 | 44,255 | 111 | 14,074 |
| PERCENTAGE OF MARKETPLACE |  |  |  |  |
| All Firms | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| Nonminority Male | N/A | N/A | N/A | N/A |
| Minority | 81.93\% | 89.66\% | 88.94\% | 90.37\% |
| African American | N/A | N/A | N/A | N/A |
| American Indian or Alaska Native ${ }^{1}$ | 53.01\% | 83.90\% | 78.26\% | 85.16\% |
| Asian ${ }^{2}$ | 26.06\% | 3.13\% | 7.57\% | 2.53\% |
| Hispanic | N/A | N/A | N/A | N/A |
| Native Hawaiian or Pacific Islander ${ }^{3}$ | 2.87\% | 2.63\% | 3.11\% | 2.69\% |
| Nonminority Female ${ }^{4}$ | 6.70\% | 0.64\% | 3.17\% | 0.21\% |
| DISPARITY RATIOS ${ }^{5}$ |  |  |  |  |
| All Firms |  | 100.00 |  | 100.00 |
| Nonminority Male |  | - |  | - |
| Minority |  | 109.43 |  | 101.61 |
| African American |  | - |  | - |
| American Indian or Alaska Native ${ }^{1}$ |  | 158.28 |  | 108.82 |
| Asian ${ }^{2}$ |  | 12.01 |  | 33.39 |
| Hispanic |  | - |  | - |
| Native Hawaiian or Pacific Islander ${ }^{3}$ |  | 91.70 |  | 86.24 |
| Nonminority Female ${ }^{4}$ |  | 9.48 |  | 6.71 |

Source: MGT Consulting Group, LLC conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.
${ }^{1}$ Nonminority Female consists of White Women-owned and White Equally Women-/Male-owned firms.
$S$ denotes findings were withheld as the estimates did not meet U.S. Census publication standards.
N/A denotes data on business ownership classification group was not available
"-" denotes the denominator was zero and thus the values were undefined
Sales includes total shipments, receipts, revenue, or business done by the firm.
Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00 . A disparity index below 80.00 indicates a substantial level of disparity.

## NAICS Code 81: Other Services (Except Public Administration), City of Baltimore and HABC Marketplace

Table 6-5 shows the availability, sales, and disparity results for other services (except Public Administration) firms in NAICS Code 81. Firms in this sector primarily engage in equipment and machinery repairing, automotive repair services, electronic and precision equipment repair and maintenance services, providing laundry services, personal care services, and photofinishing services.

There were a total of 29,116 other services (except Public Administration) firms (all firms) in the City of Baltimore in 2012, of which 96.79 percent were owned by minorities and 3.20 percent by nonminority women.

- African American firms (disparity index of 168.38) were not underutilized, accounting for 44.99 percent of all firms and 75.75 percent of sales.
- Asian American (disparity index of 17.59) firms were substantially underutilized, accounting for 37.14 percent of all firms and 6.53 percent of sales.
- Native Hawaiian and pacific Islander (disparity index of 72.31) firms were substantially underutilized, accounting for 11.45 percent of all firms and 8.28 percent of sales.
- Nonminority women firms (disparity index of 47.14) were substantially underutilized, accounting for 3.20 percent of all firms and 1.51 percent of sales.
- Data available for "American Indian and Alaskan Native" firms and Hispanic American firms was insufficient for analysis.

There were a total of 3,645 administrative and support and waste management and remediation services employer firms in the City of Baltimore in 2012, of which 96.16 percent were owned by minorities and 1.10 percent by nonminority women.

- African American firms (disparity index of 110.18) were not underutilized, accounting for percent 73.58 percent of all firms and 81.07 percent of sales.
- Data available for American Indian or Alaskan Native firms was insufficient for analysis.
- Asian American (disparity index of 45.64) firms were substantially underutilized, accounting for 4.17 percent of all firms and 1.90 percent of sales.
- Data available for Hispanic American firms was insufficient for analysis.
- Native Hawaiian and pacific Islander (disparity index of 41.00) firms were substantially underutilized, accounting for 17.31 percent of all firms and 7.10 percent of sales.
- Nonminority women firms (disparity index of 25.56 ) were underutilized, accounting for 1.10 percent of all firms and 1.02 percent of sales.

TABLE 6-5. PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 81, OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION)
U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, CITY OF BALTIMORE AND HABC MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | ALL FIRMS <br> (\#) | ALL FIRMS, SALES ( $\$ 1,000$ ) | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS SALES $(\$ 1,000)$ |
| :---: | :---: | :---: | :---: | :---: |
| All Firms | 29,116 | 3,421,114 | 3,645 | 2,804,218 |
| Nonminority Male | S | S | S | S |
| Minority | 28,180 | 3,149,875 | 3,505 | 2,554,271 |
| African American | 13,098 | 2,591,400 | 2,682 | 2,273,378 |
| American Indian or Alaska Native ${ }^{1}$ | S | S | S | S |
| Asian ${ }^{2}$ | 10,815 | 223,498 | 152 | 53,365 |
| Hispanic | S | S | S | S |
| Native Hawaiian or Pacific Islander ${ }^{3}$ | 3,335 | 283,351 | 631 | 199,044 |
| Nonminority Female ${ }^{4}$ | 932 | 51,626 | 40 | 28,484 |
| PERCENTAGE OF MARKETPLACE |  |  |  |  |
| All Firms | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| Nonminority Male | N/A | N/A | N/A | N/A |
| Minority | 96.79\% | 92.07\% | 96.16\% | 91.09\% |
| African American | 44.99\% | 75.75\% | 73.58\% | 81.07\% |
| American Indian or Alaska Native ${ }^{1}$ | N/A | N/A | N/A | N/A |
| Asian ${ }^{2}$ | 37.14\% | 6.53\% | 4.17\% | 1.90\% |
| Hispanic | N/A | N/A | N/A | N/A |
| Native Hawaiian or Pacific Islander ${ }^{3}$ | 11.45\% | 8.28\% | 17.31\% | 7.10\% |
| Nonminority Female ${ }^{4}$ | 3.20\% | 1.51\% | 1.10\% | 1.02\% |
| DISPARITY RATIOS ${ }^{5}$ |  |  |  |  |
| All Firms |  | 100.00 |  | 100.00 |
| Nonminority Male |  | - |  | - |
| Minority |  | 95.13 |  | 94.73 |
| African American |  | 168.38 |  | 110.18 |
| American Indian or Alaska Native ${ }^{1}$ |  | - |  | - |
| Asian ${ }^{2}$ |  | 17.59 |  | 45.64 |
| Hispanic |  | - |  | - |
| Native Hawaiian or Pacific Islander ${ }^{3}$ |  | 72.31 |  | 41.00 |
| Nonminority Female ${ }^{4}$ |  | 47.14 |  | 92.56 |

Source: MGT Consulting Group, LLC conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.
${ }^{1}$ Nonminority Female consists of White Women-owned and White Equally Women-/Male-owned firms.
$S$ denotes findings were withheld as the estimates did not meet U.S. Census publication standards.
N/A denotes data on business ownership classification group was not available
"-" denotes the denominator was zero and thus the values were undefined
Sales includes total shipments, receipts, revenue, or business done by the firm.
Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00. A disparity index below 80.00 indicates a substantial level of disparity.

### 6.2.3 SBO Conclusion

The SBO analysis shows consistent underutilization of M/WBE firms relative to their availability in the marketplace. The results give credence to the overarching research question that disparities exist for the broader private sector and is compelling for the City to maintain associated remedies to avoid passive participation in discrimination, irrespective of circumstances in the public sector.

Further, each of the five procurement categories analyzed showed substantial disparity among defined M/WBE classes where sufficient data were available.

### 6.3 Private Sector Disparities in ABS Census Data

As described above, SBO data is a vital resource in helping to answer the overarching research question regarding the existence of disparities in the private sector and the specific question (1) of whether these disparities exist in procurement categories relevant to the City's and HABC's contracting domain. A limitation with the SBO data is, of course, the age of it. In 2017, the Census Bureau replaced the SBO data with the American Business Survey (ABS). Essentially this dataset is the same as the SBO with one caveat. ABS data no longer provides information for all firms, only employer firms. This data is still valuable for determining more recent private sector disparities, but it excludes a sector usually dominated by smaller businesses that are the beneficiary of any M/WBE program.

As with the SBO data, ABS gathers and reports data on (1) firms with paid employees, including workers on the payroll (employer firms). MGT calculated private sector disparity indices to examine whether M/WBE firms in any of these categories received a proportionate share of firm sales based on the availability of M/WBE firms. Disparity indices were reviewed for employer firms. It should be noted that all of the disparity indices in the ABS tables are statistically significant within a 95 percent confidence interval. The same NAICS codes as the SBO analysis were analyzed for the ABS data and the same marketplace.

### 6.3.1 Results of Analysis

Tables 6-6 through 6-10 show the measures of private sector disparities based on U.S. Census, 2017 ABS data for the population of available firms in the City of Baltimore and HABC marketplace by race, ethnicity, and gender for construction; wholesale trade; professional, scientific, and technical services; administrative and support and waste management and remediation services; and other services (except public administration).

Based on the analysis of the U.S. Census, 2017 ABS data, overall, there remains a significant gap between the market share of M/WBE firms and their share of the City of Baltimore and HABC marketplace business population, where data was available.

## NAICS Code 23: Construction, City of Baltimore and HABC Marketplace

Table 6-6 shows the construction availability, sales, and disparity results (NAICS Code 23).

There were 17,401 construction employer firms ${ }^{169}$ in the City of Baltimore and HABC marketplace in 2017.

- African American firms (disparity index of 60.39 ) were substantially underutilized, accounting for 2.56 percent of all firms and 1.54 percent of sales.
- American Indian and Alaska Native firms (disparity index of 45.49) were substantially underutilized, accounting for 0.29 percent of all firms and 0.13 percent of sales.
- Asian American firms (disparity index of 45.47 ) were substantially underutilized, accounting for 3.23 percent of all firms and 1.47 percent of sales.
- Hispanic American firms (disparity index of 30.68) were substantially underutilized, accounting for 11.78 percent of all firms and 3.61 percent of sales.
- Native Hawaiian and Pacific Islander firm data was extremely minimal and did not allow for a proper analysis.
- Data for nonminority female firms (disparity index of 51.41) were substantially underutilized, accounting for 13.28 percent of all firms and 6.83 percent of sales.

[^39]TABLE 6-6.
PRIVATE SECTOR CENSUS DISPARITIES

## NAICS CODE 23, CONSTRUCTION

U.S. CENSUS 2017 ANNUAL BUSINESS SURVEY, CITY OF BALTIMORE AND HABC MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS SALES $(\$ 1,000)$ |
| :---: | :---: | :---: |
| All Firms | 17,401 | 59,983,000 |
| Nonminority Male | 11,983 | 51,834,091 |
| African American | 444 | 925,568 |
| American Indian and Alaska Native | 50 | 78,945 |
| Asian | 562 | 881,560 |
| Hispanic ${ }^{4}$ | 2,050 | 2,168,360 |
| Native Hawaiian and Other Pacific Islander | S | S |
| Nonminority Female | 2,310 | 4,094,473 |
| PERCENTAGE OF MARKETPLACE |  |  |
| All Firms | 100.00\% | 100.00\% |
| Nonminority Male | 68.86\% | 86.41\% |
| African American | 2.56\% | 1.54\% |
| American Indian and Alaska Native | 0.29\% | 0.13\% |
| Asian | 3.23\% | 1.47\% |
| Hispanic ${ }^{4}$ | 11.78\% | 3.61\% |
| Native Hawaiian and Other Pacific Islander |  |  |
| Nonminority Female | 13.28\% | 6.83\% |
| DISPARITY RATIOS3 |  |  |
| All Firms |  | 100.00 |
| Nonminority Male |  | 125.48 |
| African American |  | 60.39 |
| American Indian and Alaska Native |  | 45.49 |
| Asian |  | 45.47 |
| Hispanic ${ }^{4}$ |  | 30.68 |
| Native Hawaiian and Other Pacific Islander |  | - |
| Nonminority Female |  | 51.41 |

Source: MGT Consulting Group, LLC conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2017 Annual Business Survey (ABS) data.
${ }^{1}$ Employer firms include firms with payroll at any time during 2017.
${ }^{2}$ Sales includes total shipments, receipts, revenue, or business done by the firm.
${ }^{3}$ Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00 . A disparity index below 80.00 indicates a substantial level of disparity.
${ }^{4}$ Hispanic firms are considered an ethnicity in this Census data and therefore may be double counted in race categories, which leads to percentages equaling greater than $100 \%$. S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.

## NAICS Code 42: Wholesale Trade, City of Baltimore and HABC Marketplace

Table 6-7 shows wholesale trade availability, sales, and disparity results (NAICS Code 42).
There was a total of 4,831 wholesale trade employer firms in the City of Baltimore and HABC marketplace in 2017.

- African American firms (disparity index of 64.94 ) were substantially underutilized, accounting for 1.43 percent of all firms and 0.93 percent of sales.
- American Indian and Alaska Native firm data was extraordinarily minimal and therefore did not allow for a proper analysis.
- Asian American firms (disparity index of 19.96) were substantially underutilized, accounting for 9.42 percent of all firms and 1.88 percent of sales.
- Hispanic American firms data were minimal and therefore did not allow for a proper analysis.
- Native Hawaiian and Pacific Islander firm data were minimal and therefore did not allow for a proper analysis.
- Data for nonminority female firms (disparity index of 26.99) were substantially underutilized, accounting for 19.79 percent of all firms and 5.34 percent of sales.

TABLE 6-7.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 42, WHOLESALE TRADE
U.S. CENSUS 2017 ANNUAL BUSINESS SURVEY, CITY OF BALTIMORE AND HABC MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS SALES $(\$ 1,000)$ |
| :---: | :---: | :---: |
| All Firms | 4,589 | 85,037,302 |
| Nonminority Male | 3,183 | 78,108,133 |
| African American | 65 | 788,756 |
| American Indian and Alaska Native | 0 | 0 |
| Asian | 432 | 1,598,907 |
| Hispanic ${ }^{4}$ | S | S |
| Native Hawaiian and Other Pacific Islander | S | S |
| Nonminority Female | 908 | 4,541,505 |
| PERCENTAGE OF MARKETPLACE |  |  |
| All Firms | 100.00\% | 100.00\% |
| Nonminority Male | 69.36\% | 91.85\% |
| African American | 1.43\% | 0.93\% |
| American Indian and Alaska Native | 0.00\% | 0.00\% |
| Asian | 9.42\% | 1.88\% |
| Hispanic ${ }^{4}$ |  |  |
| Native Hawaiian and Other Pacific Islander |  |  |
| Nonminority Female | 19.79\% | 5.34\% |
| DISPARITY RATIOS3 |  |  |
| All Firms |  | 100.00 |
| Nonminority Male |  | 132.42 |
| African American |  | 64.94 |
| American Indian and Alaska Native |  | - |
| Asian |  | 19.96 |
| Hispanic ${ }^{4}$ |  | - |
| Native Hawaiian and Other Pacific Islander |  | - |
| Nonminority Female |  | 26.99 |

Source: MGT Consulting Group, LLC conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2017 Annual Business Survey (ABS) data.
${ }^{1}$ Employer firms include firms with payroll at any time during 2017.
${ }^{2}$ Sales includes total shipments, receipts, revenue, or business done by the firm.
${ }^{3}$ Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00 . A disparity index below 80.00 indicates a substantial level of disparity.
${ }^{4}$ Hispanic firms are considered an ethnicity in this Census data and therefore may be double counted in race categories, which leads to percentages equaling greater than $100 \%$. S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.

NAICS Code 54: Professional, Scientific, and Technical Services, City of Baltimore and HABC Marketplace
Table 6-8 shows the availability, sales, and disparity results for professional, scientific, and technical services (NAICS Code 54).

There was a total of 43,071 professional, scientific, and technical services employer firms in the City of Baltimore and HABC marketplace in 2017.

- African American firms (disparity index of 54.71) were substantially underutilized, accounting for 4.05 percent of all firms and 2.21 percent of sales.
- American Indian and Alaska Native firms (disparity index of 50.33 ) were substantially underutilized, accounting for 0.42 percent of all firms and 0.21 percent of sales.
- Asian American firms (disparity index of 57.61) were substantially underutilized, accounting for 11.45 percent of all firms and 6.60 percent of sales.
- Hispanic American firms (disparity index of 66.52) were substantially underutilized, accounting for 2.32 percent of all firms and 1.55 percent of sales.
- Native Hawaiian and Pacific Islander firm data were minimal and therefore did not allow for a proper analysis.
- Data for nonminority female firms (disparity index of 42.37) were substantially underutilized, accounting for 20.02 percent of all firms and 8.48 percent of sales.

TABLE 6-8.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 54, PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES
U.S. CENSUS 2017 ANNUAL BUSINESS SURVEY, CITY OF BALTIMORE AND HABC MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS SALES $(\$ 1,000)$ |
| :---: | :---: | :---: |
| All Firms | 43,071 | 166,178,141 |
| Nonminority Male | 26,592 | 134,522,471 |
| African American | 1,742 | 3,677,489 |
| American Indian and Alaska Native | 181 | 352,362 |
| Asian | 4,931 | 10,961,954 |
| Hispanic ${ }^{4}$ | 1,000 | 2,567,578 |
| Native Hawaiian and Other Pacific Islander | S | S |
| Nonminority Female | 8,623 | 14,096,284 |
| PERCENTAGE OF MARKETPLACE |  |  |
| All Firms | 100.00\% | 100.00\% |
| Nonminority Male | 61.74\% | 80.95\% |
| African American | 4.05\% | 2.21\% |
| American Indian and Alaska Native | 0.42\% | 0.21\% |
| Asian | 11.45\% | 6.60\% |
| Hispanic ${ }^{4}$ | 2.32\% | 1.55\% |
| Native Hawaiian and Other Pacific Islander |  |  |
| Nonminority Female | 20.02\% | 8.48\% |
| DISPARITY RATIOS ${ }^{3}$ |  |  |
| All Firms |  | 100.00 |
| Nonminority Male |  | 131.11 |
| African American |  | 54.71 |
| American Indian and Alaska Native |  | 50.33 |
| Asian |  | 57.61 |
| Hispanic ${ }^{4}$ |  | 66.52 |
| Native Hawaiian and Other Pacific Islander |  | - |
| Nonminority Female |  | 42.37 |

Source: MGT Consulting Group, LLC conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2017 Annual Business Survey (ABS) data.
${ }^{1}$ Employer firms include firms with payroll at any time during 2017.
${ }^{2}$ Sales includes total shipments, receipts, revenue, or business done by the firm.
${ }^{3}$ Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00 . A disparity index below 80.00 indicates a substantial level of disparity.
${ }^{4}$ Hispanic firms are considered an ethnicity in this Census data and therefore may be double counted in race categories, which leads to percentages equaling greater than $100 \%$. S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.

## NAICS Code 56: Administrative and Support and Waste Management and Remediation Services, City of Baltimore and HABC Marketplace

Table 6-9 shows the availability, sales, and disparity results for administrative and support and waste management and remediation services (NAICS Code 56).

There were 11,542 administrative and support and waste management and remediation services employer firms in the City of Baltimore and HABC marketplace in 2017.

- African American firms (disparity index of 75.11) were substantially underutilized, accounting for 5.65 percent of all firms and 4.24 percent of sales.
- American Indian and Alaska Native firms (disparity index of 17.60) were substantially underutilized, accounting for 0.63 percent of all firms and 0.11 percent of sales.
- Asian American firms (disparity index of 78.30) were substantially underutilized, accounting for 3.27 percent of all firms and 2.56 percent of sales.
- Hispanic American firms (disparity index of 51.00) were substantially underutilized, accounting for 8.95 percent of all firms and 4.56 percent of sales.
- Native Hawaiian and Pacific Islander marketplace firm data was extremely minimal and therefore did not allow for a proper analysis.
- Data for nonminority female firms (disparity index of 66.23) were substantially underutilized, accounting for 19.84 percent of all firms and 13.14 percent of sales.

TABLE 6-9.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 56, ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT AND REMEDIATION SERVICES, U.S. CENSUS 2017 ANNUAL BUSINESS SURVEY, CITY OF BALTIMORE AND HABC MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS SALES $(\$ 1,000)$ |
| :---: | :---: | :---: |
| All Firms | 11,542 | 31,439,680 |
| Nonminority Male | 7,118 | 23,701,310 |
| African American | 651 | 1,333,207 |
| American Indian and Alaska Native | 72 | 34,605 |
| Asian | 377 | 804,319 |
| Hispanic ${ }^{4}$ | 1,032 | 1,434,500 |
| Native Hawaiian and Other Pacific Islander | S | S |
| Nonminority Female | 2,290 | 4,131,737 |
| PERCENTAGE OF MARKETPLACE |  |  |
| All Firms | 100.00\% | 100.00\% |
| Nonminority Male | 61.67\% | 75.39\% |
| African American | 5.65\% | 4.24\% |
| American Indian and Alaska Native | 0.63\% | 0.11\% |
| Asian | 3.27\% | 2.56\% |
| Hispanic ${ }^{4}$ | 8.95\% | 4.56\% |
| Native Hawaiian and Other Pacific Islander |  |  |
| Nonminority Female | 19.84\% | 13.14\% |
| DISPARITY RATIOS ${ }^{3}$ |  |  |
| All Firms |  | 100.00 |
| Nonminority Male |  | 122.24 |
| African American |  | 75.11 |
| American Indian and Alaska Native |  | 17.60 |
| Asian |  | 78.30 |
| Hispanic ${ }^{4}$ |  | 51.00 |
| Native Hawaiian and Other Pacific Islander |  | - |
| Nonminority Female |  | 66.23 |

Source: MGT Consulting Group, LLC conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2017 Annual Business Survey (ABS) data.
${ }^{1}$ Employer firms include firms with payroll at any time during 2017.
${ }^{2}$ Sales includes total shipments, receipts, revenue, or business done by the firm.
${ }^{3}$ Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00. A disparity index below 80.00 indicates a substantial level of disparity.
${ }^{4}$ Hispanic firms are considered an ethnicity in this Census data and therefore may be double counted in race categories, which leads to percentages equaling greater than $100 \%$. S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.

## NAICS Code 81: Other Services (Except Public Administration), City of Baltimore and HABC Marketplace

Table 6-10 shows the availability, sales, and disparity results for NAICS Code other services (except public administration).

There was a total of 13,056 other services (except public administration) employer firms in the City of Baltimore and HABC marketplace in 2017.

- African American firms (disparity index of 55.43 ) were substantially underutilized, accounting for 3.30 percent of all firms and 1.83 percent of sales.
- American Indian and Alaska Native marketplace firm data was minimal and therefore did not allow for a proper analysis.
- Asian American firms (disparity index of 74.35) were substantially underutilized, accounting for 16.28 percent of all firms and 12.10 percent of sales.
- Hispanic American firms (disparity index of 55.87) were substantially underutilized, accounting for 3.56 percent of all firms and 1.99 percent of sales.
- Native Hawaiian or Pacific Islander marketplace firm data was extremely minimal and therefore did not allow for a proper analysis.
- Data for nonminority female firms (disparity index of 75.37 ) were substantially underutilized, accounting for 23.27 percent of all firms and 17.54 percent of sales.

TABLE 6-10.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 81, OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION)
U.S. CENSUS 2017 ANNUAL BUSINESS SURVEY, CITY OF BALTIMORE AND HABC MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS SALES $(\$ 1,000)$ |
| :---: | :---: | :---: |
| All Firms | 13,056 | 8,778,145 |
| Nonminority Male | 6,997 | 5,841,216 |
| African American | 431 | 160,719 |
| American Indian and Alaska Native | S | S |
| Asian | 2,125 | 1,062,264 |
| Hispanic ${ }^{4}$ | 464 | 174,502 |
| Native Hawaiian and Other Pacific Islander | S | S |
| Nonminority Female | 3,038 | 1,539,442 |
| PERCENTAGE OF MARKETPLACE |  |  |
| All Firms | 100.00\% | 100.00\% |
| Nonminority Male | 53.59\% | 66.54\% |
| African American | 3.30\% | 1.83\% |
| American Indian and Alaska Native |  |  |
| Asian | 16.28\% | 12.10\% |
| Hispanic ${ }^{4}$ | 3.56\% | 1.99\% |
| Native Hawaiian and Other Pacific Islander |  |  |
| Nonminority Female | 23.27\% | 17.54\% |
| DISPARITY RATIOS ${ }^{3}$ |  |  |
| All Firms |  | 100.00 |
| Nonminority Male |  | 124.16 |
| African American |  | 55.43 |
| American Indian and Alaska Native |  | - |
| Asian |  | 74.35 |
| Hispanic ${ }^{4}$ |  | 55.87 |
| Native Hawaiian and Other Pacific Islander |  | - |
| Nonminority Female |  | 75.37 |

Source: MGT Consulting Group, LLC conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2017 Annual Business Survey (ABS) data.
${ }^{1}$ Employer firms include firms with payroll at any time during 2017.
${ }^{2}$ Sales includes total shipments, receipts, revenue, or business done by the firm.
${ }^{3}$ Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00. A disparity index below 80.00 indicates a substantial level of disparity. ${ }^{4}$ Hispanic firms are considered an ethnicity in this Census data and therefore may be double counted in race categories, which leads to percentages equaling greater than $100 \%$. S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.

### 6.3.2 ABS Conclusion

Like the SBO analysis, the ABS analysis shows consistent underutilization of M/WBE firms relative to their availability in the marketplace. These results further help answer the overarching research question that disparities exist for the broader private sector, thus compelling the City to maintain associated remedies to avoid passive participation in discrimination, irrespective of circumstances in the public sector.

As with the SBO results, the ABS results for each of the five procurement categories analyzed showed substantial disparity among defined M/WBE classes where sufficient data were available.

### 6.4 Analysis of Race, Ethnicity, and Gender Effects on SelfEmployment and Earnings

This section examines further evidence regarding the overarching research question of whether disparities exist in the private sector and addresses the three more specific questions:

1. Are racial, ethnic, and gender minority groups less likely than nonminority males (nonM/WBEs) to be self-employed? If so, does race, ethnicity, or gender have a role in the disparity?
2. Does racial, ethnic, and gender status impact self-employed individuals' wages?
3. Suppose minority and female-owned business enterprises (M/WBEs) and nonminority maleowned firms shared similar traits and marketplace "conditions" (i.e., similar "rewards" in terms of capital and asset accrual), what would be the effect on rates of self-employment by race, ethnicity, and gender?
This is achieved by examining the effects of race, ethnicity, and gender, alongside controls for individual economic and demographic characteristics, on individuals' participation in the private sector as selfemployed business operators and the effects of these variables on their wages. The analysis is targeted to four categories of private sector business activity (Construction, Professional Services, Goods \& Services) that generally align with City procurement categories defined for the study, noting that Construction also encompasses Architecture and Engineering, due to observations in this category being too limited in this subset to support separate analysis.

Adopting the methodology and variables employed by a City of Denver disparity study (see Concrete Works v. City and County of Denver ${ }^{170}$ ), MGT used Public Use Microdata Samples (PUMS) data derived from the 2016-2020 American Community Survey (ACS), to which MGT applied appropriate regression statistics to draw conclusions.

### 6.4.1 Links to Business Formation and Maintenance

Economics research consistently finds group differences by race, ethnicity, and gender in business formation rates. ${ }^{171}$ MGT knows, for instance, that most minorities and females have a lower median age than nonminority males (ACS PUMS, 2016-2020). In general, the likelihood of being self-employed increases with age (ACS PUMS, 2016-2020). An examination of these variables within the context of a disparity study, therefore, seeks to control for these other important demographic and economic variables in conjunction with race, ethnicity, and gender - since they also influence group rates of business formation - to determine if MGT can assert that inequities specific to minorities and females are demonstrably present to warrant consideration of public sector remedies. Questions about marketplace

[^40]dynamics affecting self-employment-or, more specifically, the odds of forming one's own business and then excelling (i.e., generate wages growth)-are at the heart of disparity analysis research.

### 6.4.2 Statistical Models and Methods

MGT employed two multivariate regression techniques to answer the research questions identified for this section: (1) logistic regression and (2) linear regression. Logistic regression is an econometric method that allows for analyzing dichotomous dependent variables. The results can then be translated into loglikelihoods that examine how likely one variable is to be true compared to another variable. Linear regression is an econometric method that helps explain the linear relationship between the dependent variable and the independent variables - how substantially and in what direction each independent variable influences the dependent variable. This will help analyze the direct impact of being part of a specific minority or gender group on wages.

To understand the appropriate application of these regression techniques, it is helpful to explore the variables inherent in these questions in greater detail. There are two general categories of variables employed in the regression techniques: (1) dependent variables and (2) independent variables.

- Dependent variables are the phenomena to be explained by influences such as age, race, gender, and disability status (i.e., the independent or "explanatory" variables).
- The first dependent variable is the probability of self-employment status, which is a binary, categorical variable based on two possible values: 0 (not self-employed) versus 1 (self-employed).
- Logistic regression is appropriately used to perform an analysis in which the dependent variable is binary and categorical and therefore was employed to analyze self-employment. ${ }^{172}$
- The second dependent variable is self-employment wages, a continuous variable with many possible values.
- Continuous variables are best explained using simple linear regression.


### 6.4.3 The Influences of Race, Ethnicity, and Gender on Self-Employment

To derive a set of variables known to predict employment status (self-employed/not self-employed), MGT used the 2016-2020 U.S. Census ACS 5 percent PUMS data. Logistic regression was used to calculate the probability of being self-employed, the dependent variable, concerning socioeconomic and demographic characteristics selected for their potential to influence the likelihood of self-employment. The sample for the analysis was limited to labor force participants who met the following criteria:

- Resident of the City of Baltimore and HABC marketplace.

[^41]- Self-employed in construction, professional services, architecture, and engineering,173 or goods and services.
- Employed full-time (more than 35 hours a week).
- Eighteen years of age or older.
- Employed in the private sector.

Next, MGT derived the following variables ${ }^{174}$ hypothesized as predictors of employment status:

- Race and Gender: African American, Asian American, Hispanic American, Native American, nonminority woman, nonminority male.
- Availability of Capital: Homeownership, home value, mortgage rate, unearned income, residual income.
- Marital Status.
- Ability to Speak English Well.
- Disability Status: From individuals' reports of health-related disabilities.
- Age and Age Squared: Squaring the age variable acknowledges the positive, curvilinear relationship between each year of age and wages.
- Owner's Level of Education.
- Number of Individuals Over the Age of 65 Living in Household.
- Number of Children Under the Age of 18 Living in Household.

This analysis examined the statistical effects of these variables on the likelihood of being self-employed in the City of Baltimore and HABC marketplace. MGT can interpret a likelihood value of its impact on selfemployment from the inverse of this value. The results are interpretable based on the inverse of the "odds ratios." For example, the "odds ratio" for an African American is 0.638 , as seen in the top portion of Table 6-11, while the inverse of this is 1.566 , as seen in the lower portion of this table. This inverse value means that a nonminority male is 1.566 times more likely to be self-employed than an African American. Comparisons are made to nonminority males as a control group, where the influence of any of the race, ethnicity, or gender variables is considered absent. In this sense, the circumstance of the nonminority male is deemed to be a baseline for what might be expected for self-employment rates for this market with race, ethnicity, or gender variables being tested for their positive or negative influence. The results in the following tables present rates for the groups after variables such as age and education have been factored out of the equation.

[^42]TABLE 6-11.

## SELF-EMPLOYMENT ODDS RATIOS AND THEIR INVERSES FOR MINORITY GROUPS RELATIVE TO NONMINORITY MALES AFTER CONTROLLING FOR DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

| BUSINESS OWNERSHIP CLASSIFICATION | ALL INDUSTRIES | CONSTRUCTION | PROFESSIONAL SERVICES | $\begin{aligned} & \text { GOODS } \\ & \& \\ & \text { SERVICES } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| African American Firms | 0.638 | 0.622 | 0.489 | 0.836 |
| Hispanic American Firms | 0.789 | 0.767 | 0.609 | 0.824 |
| Asian American Firms | 0.868 | 0.778 | 0.567 | 1.197 |
| Native American Firms | 0.723 | 0.926 | 0.311 | 0.970 |
| Nonminority Female Firms | 0.660 | 0.425 | 0.456 | 1.016 |
| INVERSE OF ODDS-RATIOS |  |  |  |  |
| African American Firms | 1.566 | 1.607 | 2.044 | 1.196 |
| Hispanic American Firms | 1.267 | 1.304 | 1.642 | 1.214 |
| Asian American Firms | 1.152 | 1.285 | 1.763 | 0.835 |
| Native American Firms | 1.383 | 1.080 | 3.219 | 1.031 |
| Nonminority Female Firms | 1.515 | 2.355 | 2.193 | 0.985 |

Source: PUMS data from 2016-2020 American Community Survey (City of Baltimore and HABC marketplace) and MGT of America Consulting, LLC, calculations using SPSS Statistics software.
Note: Shading and bold indicate that the group's estimated "odds ratio" was statistically significant at a $95 \%$ confidence interval. ${ }^{175}$ The architecture and engineering business industry was excluded from this analysis because of insufficient data.

Are racial, ethnic, and gender minority groups less likely than nonminority males to be self-employed? The findings show that racial, ethnic, and gender minority groups are nearly universally less likely than nonminority males to be self-employed after adjusting for the effects of age, education, etc. For example, nonminority males were 2.044 times more likely than African Americans to be self-employed in Professional Services; and nonminority males were 2.355 times more likely than nonminority females to be self-employed in the Construction industry.

These findings again communicate that discrimination exist in the market concerning the overarching research question. Within this circumstance and in response to the specific research question, it is also evident that racial, ethnic, and gender variables have a statistically significant negative impact on selfemployment rates after other factors are controlled for.

### 6.4.4 The Influences of Race, Ethnicity, and Gender on Individual Earnings

To explore whether there are any measurable impacts on wages, MGT compared self-employed, minority, and female entrepreneurs' wages to those of nonminority males in the City of Baltimore and HABC marketplace, when the effect of other demographic and economic characteristics was controlled or neutralized. MGT used wages as the dependent variable as it includes all income earned for an individual

[^43]and not just their wages. MGT was able to examine the wages of self-employed individuals of similar education levels, ages, etc., to permit wages comparisons more purely by race, ethnicity, and gender.

First, MGT derived a set of independent variables known to predict wages, including:

- Race and Gender: African American, Asian American, Hispanic American, Native American, nonminority woman, nonminority males.
- Availability of Capital: Homeownership, home value, mortgage rate, unearned income, residual income.
- Marital Status.
- Ability to Speak English Well.
- Disability Status: From individuals' reports of health-related disabilities.
- Age and Age Squared: Squaring the age variable acknowledges the positive, curvilinear relationship between each year of age and wages.
- Owner's Level of Education.

MGT used 2016-2020 wages from employment for self-employed individuals for the dependent variable, as reported in the 5 percent PUMS data.

This analysis examined the statistical effects of these variables on income from self-employment for business owners in the City of Baltimore and HABC marketplace. As the linear regression analysis yielded, each number in Table 6-12 represents a percent change in wages associated with introducing the variable (business ownership classification) in the left-hand column. For example, across all industries, the adjustment factor for an African American is -0.527 , meaning that an African American would be predicted to earn 52.70 percent less than a nonminority male, all other variables considered or controlled for.

TABLE 6-12.

## EARNINGS ELASTICITIES OF MINORITY GROUPS RELATIVE TO NONMINORITY MALES AFTER CONTROLLING FOR DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

| BUSINESS OWNERSHIP <br> CLASSIFICATION | ALL <br> INDUSTRIES | CONSTRUCTION | PROFESSIONAL <br> SERVICES | GOODS <br>  <br> SERVICES |
| :--- | :---: | :---: | :---: | :---: |
| African American Firms | $\mathbf{- 0 . 5 2 7}$ | $\mathbf{- 0 . 2 2 4}$ | $\mathbf{- 0 . 6 9 7}$ | $\mathbf{- 0 . 4 7 8}$ |
| Hispanic American Firms | $\mathbf{- 0 . 5 8 7}$ | $\mathbf{- 0 . 4 2 5}$ | $\mathbf{- 0 . 5 8 9}$ | $\mathbf{- 0 . 6 2 0}$ |
| Asian American Firms | $\mathbf{- 0 . 4 4 4}$ | $\mathbf{- 0 . 3 9 8}$ | $\mathbf{- 0 . 2 7 0}$ | $\mathbf{- 0 . 4 1 3}$ |
| Native American Firms | -0.118 | 0.504 | -0.070 | -0.229 |
| Nonminority Female Firms | $\mathbf{- 0 . 4 4 6}$ | $\mathbf{- 0 . 1 9 3}$ | $\mathbf{- 0 . 5 4 9}$ | $\mathbf{- 0 . 4 6 9}$ |

Source: PUMS data from 2016-2020 American Community Survey (City of Baltimore and HABC marketplace) and MGT of America Consulting, LLC, calculations using SPSS Statistics software.
Note: Shading and bold indicate that the group's estimated "elasticities" were statistically significant at a $95 \%$ confidence interval. The architecture and engineering business industry was excluded from this analysis because of insufficient data. The regression "elasticity" means the percent change resulting from being a member of one of the M/WBE groups.

The findings provide further positive evidence that disparities exist in the private sector of the City's and HABC's marketplace, compelling the continuation of remedies in the domain of the government's
influence. The findings also provide affirmative evidence to the more specific questions regarding impacts on wages, demonstrating that self-employed racial, ethnic, and gender minority groups earn less than their nonminority male counterparts, all variables considered.

### 6.4.5 Disparities in Rates of Self-Employment: How Much Can Be Attributed to Discrimination?

The analyses of self-employment rates and 2016-2020 ACS self-employment wages revealed general disparities between minority and nonminority self-employed individuals whose businesses were located in the City of Baltimore and HABC marketplace.

Table 6-13 presents the results of these analyses. Column A reports observed employment rates for each racial, ethnic, and gender group, calculated directly from the PUMS 2016-2020 data. To obtain values in columns B, MGT calculated two predicted self-employment rates using the following equation:

$$
\operatorname{Pr} o b(y=1)=\sum_{k=1}^{K}\left(e^{\beta_{k} x_{k}} / 1+e^{\beta_{k} x_{k}}\right)
$$

Where:

$$
\begin{aligned}
\operatorname{Pr} o b(y=1) & =\text { represents the probability of being self-employed } \\
\beta_{k}= & \text { coefficient corresponding to the independent variables used in the logistic } \\
& \text { regression analysis of self-employment probabilities } \\
x_{k}= & \text { the mean values of these same variables }
\end{aligned}
$$

The predicted self-employment rate calculation (in column B) presents minority self-employment rates as they would be if minorities were rewarded similarly as nonminority males in the nonminority male market structure, by multiplying the minority means (i.e., characteristics) by the estimated nonminority coefficients for both race and the other independent variables.

TABLE 6-13.

| CITY OF BALTIMORE AND HABC MARKETPLACE |  |  |  |
| :---: | :---: | :---: | :---: |
| BUSINESS OWNERSHIP CLASSIFICATION | OBSERVED SELFEMPLOYMENT RATES <br> (A) | PREDICTED SELFEMPLOYMENT RATES <br> (B) | DISPARITY RATIO (COLUMN A DIVIDED BY COLUMN C) (C) |
| Overall |  |  |  |
| African American Firms | 7.57\% | 12.32\% | 61.43 |
| Hispanic American Firms | 9.90\% | 14.66\% | 67.52 |
| Asian American Firms | 13.16\% | 17.88\% | 73.59 |
| Native American Firms | 9.14\% | 13.45\% | 67.93 |
| Nonminority Female Firms | 8.40\% | 14.01\% | 59.96 |
|  |  |  |  |
| Construction |  |  |  |
| African American Firms | 15.49\% | 25.94\% | 59.71 |
| Hispanic American Firms | 13.11\% | 23.18\% | 56.57 |
| Asian American Firms | 16.99\% | 29.10\% | 58.39 |
| Native American Firms | 15.82\% | 31.69\% | 49.93 |
| Nonminority Female Firms | 7.72\% | 26.26\% | 29.39 |
|  |  |  |  |
| Professional Services |  |  |  |
| African American Firms | 6.36\% | 13.56\% | 46.92 |
| Hispanic American Firms | 7.67\% | 15.63\% | 49.04 |
| Asian American Firms | 8.81\% | 17.20\% | 51.21 |
| Native American Firms | 5.08\% | 14.12\% | 35.98 |
| Nonminority Female Firms | 7.10\% | 16.68\% | 42.55 |
|  |  |  |  |
| Goods \& Services |  |  |  |
| African American Firms | 7.77\% | 9.70\% | 80.08 |
| Hispanic American Firms | 9.08\% | 12.21\% | 74.39 |
| Asian American Firms | 15.09\% | 14.65\% |  |
| Native American Firms | 9.19\% | 9.55\% | 96.23 |
| Nonminority Female Firms | 9.64\% | 10.49\% | 91.86 |

Source: PUMS data from 2016-2020 American Community Survey (City of Baltimore and HABC marketplace) and MGT of America Consulting, LLC, calculations using SPSS Statistics software.

Using these calculations, MGT was able to determine a percentage of the disparities in self-employment between minorities and nonminority males attributable to discrimination by dividing the observed selfemployment rate for a particular minority group (column A) by the predicted self-employment rate as it would be if minority groups faced the same market structure as nonminority males (column B).

The findings provide evidence that for $\mathrm{M} / \mathrm{WBEs}$, many discriminatory barriers exist to achieving the same level of self-employment rates as their Non-M/WBE counterparts. The results further show that discriminatory factors are the primary cause of these differences in several instances.

### 6.5 Conclusions

Analysis of the U.S. Census 2012 SBO data, 2017 ABS data, and the PUMS 2016-2020 data demonstrate, in response to the overarching research question driving this analysis, that disparities do exist for M/WBE firms operating in the private sector within the City's and HABC's marketplace. Thus, based on the guidance offered by the courts into this domain, and the results of these analysis, the City and HABC has a compelling interest to continue its current M/WBE program.

To the more specific research questions:

- Findings from the U.S Census 2012 SBO and 2017 ABS data indicate that there are substantial disparities for most M/WBE firms across industry sectors resembling the procurement categories identified for this study.
- Findings from the 2016-2020 PUMS data indicate that:
- M/WBE firms were significantly less likely than nonminority males to be self-employed.
- Overall, nonminority male firms were over 1.5 times as likely as African Americans to be self-employed.
- The most egregious business category was Professional Services, where nonminority male firms were over three times as likely as Native Americans to be self-employed.
- If they were self-employed, M/WBE firms earned significantly less in 2016-2020 than did selfemployed nonminority males.
- Overall, Hispanic firms earned far less than their nonminority male counterparts; 58.70 percent less.
- The most egregious businesses category is Professional Services, where African American firms earned 69.70 percent less than nonminority male firms.
- Analysis of observed vs. predicted self-employment rates show that there are instances that discrimination had an impact on these rates. Further, this analysis shows that holding all factors consistent, race, ethnicity, and gender plays a role in lower level of self-employment for M/WBEs.

In light of these findings, credence may be given to the proposition established by Justice O'Connor in Croson, which suggested a government could be a passive participant in private-sector discrimination if it did not act to counter these dynamics, at least within the domain of its influence. This evidence stands alongside the disparities observed in public sector contracting to illustrate the substantial discriminatory inequities that continue to exist in the City's and HABC's marketplace, underscoring its compelling interest in continuing to pursue remedies to address these extant gaps.

## 7 Qualitative Analysis

### 7.1 Introduction

This chapter presents the qualitative accounts of the conditions and obstacles faced by M/WBE firms in the relevant market area and their experiences working with the City or Housing Authority, their prime vendors, and the private sector. The collection and analysis of the qualitative data focused on firms registered or interested in doing business with the City or Housing Authority helps to explain and provide context for the disparities found in statistical analysis detailed in previous chapters of this report. In conjunction with the quantitative data, MGT also drew inferences from the qualitative data as to the prevalence of obstacles perceived as limiting the participation of M/WBEs and other firms in the City's or Housing Authority's procurement transactions.

The qualitative data collection allowed participants to respond to their experiences with the City, Housing Authority, or both.
 Qualitative comments in this chapter detail the perceptions and opinions of individuals. The importance of these opinions depends on how much they are corroborated by others' statements and the quantitative data compiled to substantiate these perceptions. Unlike conclusions derived from other analyses in this report, the qualitative analysis does not rely solely on quantitative data. Instead, the analysis in this chapter utilizes qualitative data to describe the context of the examined social, political, and economic environment in which all businesses and other relevant entities applicable to the study operate. This analysis assesses the broad patterns among large groups of businesses based on their business ownership classification and industry.

The collective qualitative activities gathered input from over 414 business owners or company representatives in the relevant market area regarding their opinions and perceptions of their experiences working with City or Housing Authority as prime contractors or City or Housing Authority projects as subcontractors.

### 7.2 Qualitative Background

Generally, disparity studies set out to determine how and to what extent public sector entitiesmunicipalities and states-utilize private enterprises to procure goods and services needed by state and local governments to discharge governmental responsibilities on behalf of taxpayers. A big part of these studies is collecting and analyzing quantitative data from the entity's procurement and contracting records to determine if race, ethnicity, or gender of business ownership bears any relationship to the extent to which businesses are "chosen" in government contracting and procurement to provide needed goods and services that government cannot deliver on its own. Government purchasing records identifying race, ethnicity, or gender of utilized businesses provide the quantitative record for determining if there are any disparities. To provide context, history, and an account of business owner experiences in
dealing with the government procurement processes and with one another in a given jurisdiction, qualitative and anecdotal information is also gathered in the form of telephone and online surveys and individual interview sessions. The data collected are intended to explain the quantitative results from purchasing and procurement data to provide insight into purchasing trends that might explain the modus operandi of disparities, how they work, and how and why they have evolved.

MGT's experience conducting disparity studies and analyzing respondents' replies to telephone and qualitative surveys have revealed that according to respondents, race, ethnicity, and gender are an underlying factor in four response trends over time that have prevailed universally from disparity study to disparity study. These trends have been organized around four general disparity barrier themes:

1. Majority-/minority organizational capacity;
2. Majority/minority access to credit, commercial loans, and other financing to grow business capacity;
3. Majority and minority firm longevity (i.e., age);
4. Level of education, training, and experience of majority versus minority business owners.

These four trends have persisted regardless of jurisdiction size, geography, population (urban or rural), or political tendencies and in dozens of jurisdictions. Of course, there is some overlap across trends but whether or not these are mutually exclusive categories or related, in efforts to reduce disparities, their contribution to our understanding of the root causes of majority/minority disparities may be better informed if we perceive them as parts of a much larger discrimination phenomenon, as described throughout this disparity study.

### 7.3 Methodology

MGT used a combination of surveys, community meetings, focus groups, and in-depth, one-on-one interviews with businesses to collect qualitative data that are analyzed to identify issues and concerns common to businesses in the market area. In addition to the qualitative data collection from area businesses, MGT, the City, and Housing Authority identified area trade associations and business organizations, referred to as stakeholders for this report, whose insights would be valuable to understanding the dynamics and perceptions of the vendor community. MGT conducted in-depth interviews with area trade associations and business organizations to gather anecdotes on their perceptions of the City or Housing Authority's procurement process and the impact of the M/WBE programs on M/WBE and non-M/WBE firms in the market area. While the courts do not require the collection of these anecdotes, input from advocacy and professional development organizations gives a third-party perspective of M/WBE issues. It broadens the collection of M/WBE firms' experiences doing business or attempting to do business with City or Housing Authority.

### 7.3.1 Community Outreach

MGT worked with City and Housing Authority to create and execute a community outreach plan that included various outreach methods to inform and encourage the business community's involvement and engagement in the qualitative data collection activities. To ensure maximum reach to the relevant market area, MGT developed a master vendor database of firms that incorporated data sets from the City and Housing Authority's vendor database; membership lists provided by area trade associations and business
organizations; and vendor and certification lists collected from other public agencies to establish a base for the outreach efforts. This database was created to ensure that a broad range of firms in the marketplace were notified about the qualitative data collection activities. Outreach to stakeholders (trade associations and business organizations) was beneficial to the outreach efforts because their assistance extended communication efforts to inform and engage the business community in qualitative activities by disseminating community meeting notices and study update notices. Stakeholders were asked to provide their feedback on the M/WBE programs and procurement processes from the perspective of the objectives of City or Housing Authority.

Stakeholders were also asked to provide MGT with a copy of membership or vendor lists used to help build the master vendor outreach database. The organizations and associations included in these efforts are identified in Appendix I, List of Trade Associations and Business Organizations.

Outreach methods included:

- Email blasts to notify stakeholders of qualitative data collection activities and encourage their members to participate.
- Email blasts to the business community to increase awareness and engagement.


### 7.3.2 Qualitative Research and Anecdotal Data Collection

MGT's sampling methodology for in-depth interviews and business surveys randomly selected firms from the study's master vendor database ${ }^{176}$. The samples were stratified by the number of firms, business ownership classification, and business industry. The database was cross-referenced with previous extractions to avoid contacting businesses multiple times to ensure that firms did not participate in more than one qualitative data collection activity. Receiving single anecdotal accounts from only one business allows for a broader collection of unique experiences. The qualitative analysis is not steered to the particular interests of a small group of participants. Receiving single anecdotal accounts from business only once allows for a broader perspective of unique experiences that allow for the examination of patterns and trends. The interviews provided more latitude for additional information on issues unique to the respondents' experiences than the community meetings or surveys. The interviewer did not attempt to prompt or guide responses from the participants, although follow-up questions were asked to obtain further clarification or information as necessary and appropriate. Before the interviews began, each participant attested that their responses were given freely and were true and accurate reflections of their experience with City or Housing Authority or its prime contractors.

### 7.3.3 Business Survey

The business survey asked respondents to provide information on business ownership, demographics, and structure; work bid or performed as prime contractors with City or Housing Authority; work bid or performed as subcontractors to City or Housing Authority prime contractors; whether the respondent firm bid or performed work in the private sector; and any perceived barriers to include discrimination to doing business with City or Housing Authority or its primes that the respondents believed they had

[^44]experienced during the study period. The survey was administered via telephone and online to a randomly selected list of firms.

MGT attempted to collect data in proportion to the distribution of M/WBEs and non-M/WBEs in the relevant market area. The survey of vendors questionnaire is included in this report as Appendix $\mathbf{E}$, Business Survey Instrument. The data from the survey responses were analyzed to determine the types of firms represented in the findings included in this chapter. These survey demographics are included in Appendix F, Vendor Survey Results.

### 7.3.4 Community Meetings

Area businesses and stakeholders were invited to attend virtual community meetings to learn about the study and provide qualitative input on doing business with City or Housing Authority and in the marketplace. Due to the COVID-19 pandemic, MGT conducted two virtual community meetings. The community meetings were open to all businesses in the market area. Firms that participate in the community meetings may not be able to fully expound on their experience due to time limitations. Therefore, they are potentially contacted during other qualitative data collection activities for MGT to gain additional insight into their experiences.

### 7.3.5 In-Depth Interviews

The in-depth interviews were individual interviews with M/WBE, non-M/WBE, veteran business owners, disabled business owners, and persons that identify as LGBTQ. The in-depth interviews were focused on gathering information about the firms' experiences attempting to conduct business with City or Housing Authority (both directly as a prime or as a subcontractor). During the interviews, MGT gathered demographic information such as the firm's primary line of business, ethnicity, gender, education/training background of the owner, business history, size, and gross revenues during a selected calendar or fiscal year. The in-depth interviews were structured settings where an interviewer or facilitator used an interview guide (Appendix G) to obtain input from participants. Their anecdotes are incorporated in Section 7.5 of this chapter.

### 7.3.6 Focus Groups

Focus groups permitted conversation with a diverse smaller group of business owners and representatives. MGT conducted five focus groups with area businesses to discuss topics concerning their experience doing business with the City, Housing Authority, primes, and/or in the private marketplace. The focus groups were structured settings where an interviewer or facilitator used an interview guide (Appendix H) to obtain input from participants Their anecdotes are incorporated in Section 7.5 of this chapter.

### 7.4 Qualitative Results

### 7.4.1 Community Meetings, Interviews, and Focus Groups

During the course of the study, 57 business owners and representatives representing varying industries, including construction, goods, engineering, and consulting participated in either a community meeting, in-depth interview, or focus group. These activities were inclusive of minority, women, LGBTQ, veterans, disabled and non-M/WBE firms.

### 7.4.2 Business Surveys

The survey collected 357 responses from firm owners and representatives in City or Housing Authority's relevant market areas. Figure 7-1 provides respondents' race, ethnicity, and gender. M/WBE firms accounted for 73 percent of the total respondents. LGBTQ-, Disabled-, and Veteran-owned businesses were captured in their specific ownership classification in Figure 7-1. Survey respondents that were DOBE accounted for 2.31 percent, LGBTQBE accounted for 0.58 percent, and VOBE accounted for 6.63 percent. The industries or business categories represented are listed in Figure 7-2. Construction was the most prominent industry represented at 35 percent, Architecture and Engineering at 19 percent, Professional Services at 18 percent, Other Services at 16 percent and Goods at 11 percent.

FIGURE 7-1. SURVEY OF VENDORS DEMOGRAPHICS:
PROPORTION OF RESPONDENTS BY M/WBE CLASS


[^45]FIGURE 7-2. SURVEY OF VENDORS
DEMOGRAPHICS:
PROPORTION OF RESPONDENTS BY INDUSTRY


Source: Business Surveys, SkyBase7 \& Online Surveys.

### 7.5 Barriers to Doing Business

Barriers that prevent firms can be assessed in two ways. First is whether the barrier is caused by discrimination or second, if the barriers is a normal hurdle of being in business. In this study, we focus on those barriers that are inferred to be discriminatory. Our research included a line of questions as to what prevents minority and women businesses in gaining contracts as compared to non-minority- owned firms. One such barrier is survey respondents that were subcontractors indicated that primes seldomly solicited their firm to bid on projects without M/WBE goals compared to those with M/WBE goals. The survey sought to determine if prime contractor behavior was the same when projects applied M/WBE goals versus projects without goals. Twenty-three percent of the minority firms responded that they are never or seldomly asked to bid on contracts without M/WBE goals. This occurs with Nonminority Women only three percent of time.

Minority and women businesses that participated in the focus groups and in-depth interviews expressed that barriers they experience are prequalification requirements, bonding, and the informal network of prime vendors and subcontractors that exclude their firm from doing business. Table 7-1 highlights M/WBE survey respondents expressed the impact of barriers for them compared to non-M/WBE firms. The percentages in the table below represents the percentage of the firms within their business ownership classification. The numerical numbers represent the number of firms that responded that they experience barriers to doing business or attempting to business with the City. Table 7-2 reflects firms' response to barriers to doing business with the Housing Authority.

TABLE 7-1.

## BARRIERS IDENTIFIED BY SURVEY RESPONDENTS

CITY OF BALTIMORE


Source: Business Surveys, SkyBase7 \& Online Surveys.

TABLE 7-2.
BARRIERS IDENTIFIED BY SURVEY RESPONDENTS HOUSING AUTHORITY OF BALTIMORE CITY

| Housing Authority of Baltimore City | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native <br> American/ <br> American Indian | Nonminority Female | NonM/WBE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prequalification requirements | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 9.68 \% \\ 3 \end{gathered}$ | $\begin{gathered} 20.00 \% \\ 2 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 4.17 \% \\ 1 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Bond requirements | $\begin{gathered} 4.35 \% \\ 2 \end{gathered}$ | $\begin{gathered} 13.79 \% \\ 4 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 4.17 \% \\ 1 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Proposal/bid specification | $\begin{gathered} 11.90 \% \\ 5 \end{gathered}$ | $\begin{gathered} 24.14 \% \\ 7 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 16.67 \% \\ 4 \end{gathered}$ | $\begin{gathered} 3.57 \% \\ 1 \end{gathered}$ |
| Short or limited time given to prepare bid package or quote | $\begin{gathered} 4.88 \% \\ 2 \end{gathered}$ | $\begin{gathered} 23.08 \% \\ 6 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 4.35 \% \\ 1 \end{gathered}$ | $\begin{gathered} \hline 3.57 \% \\ 1 \end{gathered}$ |
| Unnecessarily restrictive contract specifications | $\begin{gathered} 4.88 \% \\ 2 \end{gathered}$ | $\begin{gathered} 11.54 \% \\ 3 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 4.17 \% \\ 1 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Meeting M/WBE program requirements | $\begin{gathered} 0.00 \% \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} 3.23 \% \\ 1 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \\ \hline \end{gathered}$ |
| Identifying M/WBE firms | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 9.38 \% \\ 3 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Selection process/evaluation criteria | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 24.14 \% \\ 7 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} \hline 3.57 \% \\ 1 \end{gathered}$ |
| Insurance requirements (general liability, professional liability, etc.) | $\begin{gathered} 2.33 \% \\ 1 \end{gathered}$ | $\begin{gathered} 3.13 \% \\ 1 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Cost of bidding/proposing | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 16.13 \% \\ 5 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Price of supplies/materials | $\begin{gathered} 7.14 \% \\ 3 \end{gathered}$ | $\begin{gathered} 12.50 \% \\ 4 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Competing with large companies | $\begin{gathered} 13.51 \% \\ 5 \end{gathered}$ | $\begin{gathered} 44.44 \% \\ 12 \\ \hline \end{gathered}$ | $\begin{gathered} 22.22 \% \\ 2 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 31.82 \% \\ 7 \end{gathered}$ | $\begin{gathered} 7.14 \% \\ 2 \end{gathered}$ |
| Financing | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 6.90 \% \\ 2 \end{gathered}$ | $\begin{gathered} 11.11 \% \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Lack of experience | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 3.03 \% \\ 1 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Contract too large | $\begin{gathered} 4.76 \% \\ 2 \end{gathered}$ | $\begin{gathered} 9.09 \% \\ 3 \end{gathered}$ | $\begin{gathered} 20.00 \% \\ 2 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Informal network of prime contractors and subcontractors that has excluded my company from doing business | 2.56\% | 37.93\% | 30.00\% | 0.00\% | 16.67\% | 0.00\% |
| Changes in the scope of work (after work began) | $\begin{gathered} 4.65 \% \\ 2 \end{gathered}$ | $\begin{gathered} 9.68 \% \\ 3 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 8.33 \% \\ 2 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Slow payment or non-payment for project work | $\begin{gathered} 15.79 \% \\ 6 \end{gathered}$ | $\begin{gathered} 30.77 \% \\ 8 \end{gathered}$ | $\begin{gathered} 20.00 \% \\ 2 \\ \hline \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 13.64 \% \\ 3 \end{gathered}$ | $\begin{gathered} 3.70 \% \\ 1 \end{gathered}$ |

Source: Business Surveys, SkyBase7 \& Online Surveys.

### 7.6 Discrimination and Disparate Treatment

The qualitative research looked to understand and identify whether M/WBE firms encountered disparate treatment or discrimination working with City or Housing Authority or their primes. While most of the firms that participated in interviews, surveys, or community meetings cannot specifically identify or prove the discrimination, they concur that the act of discrimination is prevalent because it happens too frequently.

In Tables 7-3 and 7-4, M/WBE survey respondents further elaborated on how they experienced various forms of disparate treatment when working on City or Housing Authority contracts, either as a prime or subcontractor.

The categories included in the table below were provided as options for describing disparate or discriminatory treatment by primes. Unequal or unfair treatment and double standards in performance were the most frequently cited experiences of M/WBE subcontractor respondents.

TABLE 7-3.
DISCRIMINATORY BEHAVIOR
CITY OF BALTIMORE

| City of Baltimore | African American | Asian American/ Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Harassment on the jobsite | 3.08\% | 3.23\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | 2 | 2 | 0 | 0 | 0 | 0 |
| Unequal or unfair treatment | 10.61\% | 9.68\% | 15.38\% | 0.00\% | 1.27\% | 0.00\% |
|  | 7 | 6 | 2 | 0 | 1 | 0 |
| Double standards in performance | 10.61\% | 10.00\% | 0.00\% | 0.00\% | 1.27\% | 0.00\% |
|  | 7 | 6 | 0 | 0 | 1 | 0 |
| Denial of opportunity to bid | 3.08\% | 3.39\% | 8.33\% | 0.00\% | 0.00\% | 0.00\% |
|  | 2 | 2 | 1 | 0 | 0 | 0 |
| Unfair denial of contract award | 3.08\% | 11.48\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | 2 | 7 | 0 | 0 | 0 | 0 |
| Unfair contract termination | 6.15\% | 3.23\% | 0.00\% | 0.00\% | 1.27\% | 0.00\% |
|  | 4 | 2 | 0 | 0 | 1 | 0 |
| Unequal price quotes from suppliers | 1.54\% | 8.33\% | 7.69\% | 0.00\% | 0.00\% | 0.00\% |
|  | 1 | 5 | 1 | 0 | 0 | 0 |

[^46]TABLE 7-4.
DISCRIMINATORY BEHAVIOR
HOUSING AUTHORITY OF BALTIMORE CITY

| Housing Authority of Baltimore City | African American | Asian American/ Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Harassment on the jobsite | $\begin{gathered} 2.33 \% \\ 1 \end{gathered}$ | $\begin{gathered} 2.86 \% \\ 1 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Unequal or unfair treatment | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} \hline 3.23 \% \\ 1 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Double standards in performance | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 12.50 \% \\ 4 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Denial of opportunity to bid | $\begin{gathered} 2.27 \% \\ 1 \end{gathered}$ | $\begin{gathered} \hline 3.13 \% \\ 1 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Unfair denial of contract award | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 9.38 \% \\ 3 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Unfair contract termination | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $0.00 \%$ 0 | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| Unequal price quotes from suppliers | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 6.45 \% \\ 2 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |

Source: 2021 Business Surveys SkyBase7 and an online survey.

### 7.7 M/WBE Challenges in the Procurement Process

Small minority, and female-owned firms that participated generally do not bid on public work due to the challenges of identifying opportunities or the documentation required to respond to bids and proposals. Many firms stated that they are successful and prefer competing in the private sector because the process is more straightforward, the requirements are streamlined, and decisions are more direct.

In the successive sections, findings are generally organized around themes of concerns expressed by vendors, with evidence divided between (1) items identified through qualitative input from qualitative research participants (interviews and open-ended comments) and (2) quantitative summaries of perceptions collected through the business surveys. In some cases, content is limited to one category of findings based on the scope of the information collected through either medium.

Companies can specifically target small, minority, and women businesses in the private sector so they don't compete against larger firms. Of the survey respondents that bid as prime or direct vendors to City or Housing Authority, competing with large companies is a huge barrier to doing business with City or Housing Authority. Larger firms have depth of resources and more work where they can be more flexible in their pricing.

A Hispanic-owned professional services firm owner stated that the City's minority and women business program isn't helpful because it does not address the low-bidding requirement. His major suggestions to the city are:

- To create a system with larger targeted percentages for minority, women, LGBTBE, disabled and veterans and include a price preference for these firms so that they would not be underbid by larger companies that can afford to do so.
- Better educating procurement staff so that bid criteria (total contract amount and anticipated salary for various positions) are realistic.

A Nonminority Women owner of a service firm stated that the City's procurement lacks transparency and consistency in the RFP development. The buyer does not understand what they are asking for and do not take suggestions well. This makes it difficult for businesses to provide appropriate pricing.

An African American owner stated that bid requirements of three years of similar projects and similar size has a direct impact on minority businesses who are not able to win contracts with the City. The City then can continue to work with the same non-minority firms over again.

An Asian American of an engineering firm recommend that the city and Housing Authority distribute a forecast of procurement opportunities so MWBE firms can prepare for and identify potential partners for upcoming bids.

### 7.8 Prime Contracting Behavior

Participants overwhelmingly agreed that primes that solicit bids for public sector work were not soliciting M/WBE firms for private projects. This was the case for M/WBE firms that were not provided opportunities to bid on public projects without M/WBE goals. Good ole boy or informal networks often exclude M/WBE firms from bidding opportunities. In addition, there are multiple experiences where M/WBE firms stated that when primes receive payment, they do not quickly pay their subcontractors, if at all. Table 7-5 below details survey respondents' experiences with primes when projects do not include M/WBE goals.

### 7.8.1 Survey Responses

TABLE 7-5.
PRIMES INCLUSION OF M/WBE FIRMS WITHOUT GOALS

|  | African American | Asian American/P acific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Very Often | 4 | 4 | 1 | 0 | 3 | 7 |
|  | 9.09\% | 9.30\% | 11.11\% | 0.00\% | 10.71\% | 17.95\% |
| Sometimes | 12 | 7 | 2 | 0 | 4 | 3 |
|  | 27.27\% | 16.28\% | 22.22\% | 0.00\% | 14.29\% | 7.69\% |
| Seldom | 13 | 10 | 2 | 1 | 7 | 1 |
|  | 29.55\% | 23.26\% | 22.22\% | 100.00\% | 25.00\% | 2.56\% |
| Never | 10 | 18 | 3 | 0 | 4 | 14 |
|  | 22.73\% | 41.86\% | 33.33\% | 0.00\% | 14.29\% | 35.90\% |
| Don't Know | 5 | 4 | 1 | 0 | 10 | 14 |
|  | 11.36\% | 9.30\% | 11.11\% | 0.00\% | 35.71\% | 35.90\% |

Source: 2021 Business Surveys SkyBase7 and online survey.

Prime behavior is further revealed when they drop M/WBE firms from contracts after award. Table 7-6 indicates that African American owned businesses are more likely to be dropped from utilization once the contract they are included in is awarded to the prime on both City or Housing Authority and non-City or Housing Authority projects.

TABLE 7-6.
M/WBE FIRMS DROPPED AFTER AWARD

|  | African <br> American | Asian <br> American/Pacific <br> Islander | Hispanic <br> American or <br> Latino | Native <br> American/ <br> American <br> Indian | Nonminority <br> Female | Non- <br> M/WBE |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Yes | 16 | 15 | 4 | 1 | 3 | 0 |
| No | $22.86 \%$ | $21.43 \%$ | $23.53 \%$ | $50.00 \%$ | $3.41 \%$ | $0.00 \%$ |
| Not | 51 | 54 | 12 | 1 | 82 | 82 |
| applicable | $1.43 \%$ | 1 | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $1.14 \%$ |

Source: 2021 Business Surveys SkyBase7 and an online survey.

### 7.8.2 Experiences from M/WBEs on Prime Behavior

A few of the anecdotes on prime behavior include:

An African American construction owner stated that they experienced racism and unfair treatment from general contractors. The firm's experience includes bid shopping and putting growing MWBE firms out of business by delaying payment and creating other unwanted reasons for not paying subcontractors. This firm recommends:

- The City closely monitor subcontractor participation to ensure they are being treated fairly and paid on time
- Create sole source competitive contracts for minorities on smaller contracts
- Do not include LGBTQ, disabled or veteran goals to the program. This would dilute the opportunities for Black businesses.

An African American construction owner stated that contract work with the Housing Authority under the Section 3 program is better for their company because they can fairly negotiate change orders and their payments are consistent and on time.

A Nonminority woman that owns a services company states that she is encouraged to bid on HABC and City contracts as a subcontractor. The firm owner continued by stating that she is treated fairly by primes which are mostly Caucasian owned.

An African American owner of a goods and services firm stated that a prime wanted them to sign a blank form the day prior to an RFP response was to be submitted. A few months later I got a call from somebody that worked with the City that wanted to see how the project went and if we got paid for what we were supposed to do. The price that the City had was larger than what we were paid. I offered to send my subcontract and they said, "No thanks. That's okay. We appreciate it. Have a good day," and they hung up the phone.

### 7.9 Financial Barriers

There was a common theme of many frustrations around timing of payments from the City in particular. Participants stated that late payments by the City are excessive which impacts the primes paying their subcontracts. Limited access to capital and inconsistent cash flow impacts M/WBE and small firms' ability to complete projects, apply for and receive bonds, hire employees, and operate their businesses. Similarly, cash flow becomes a barrier for M/WBE firms, notably smaller M/WBE firms, because it limits the amount of work they can bid on. Acquiring bonding for projects continues to be a financial barrier for M/WBE firms that not only want to be become primes but also limits their ability to scale up to larger subcontracts.

An African American owner of a goods and services firm stated they were denied a line of credit by the bank they had been working with for 15 years. They felt the denial was discriminatory and they changed to a small community bank where they secured a line of credit.

An African American owner of a construction firm stated that bonding is a barrier to growing their business. The firm only seeks to bid on projects that meets their limited bonding capacity.

Tables 7-7 and 7-8 illustrate survey responses of firms that stated they have bonding capacity and the aggregate bonding levels of M/WBE firms.

### 7.9.1 Survey Reponses

TABLE 7-7.
FIRMS WITH BONDING

|  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yes | 45.21\% | 47.89\% | 58.82\% | 50.00\% | 47.19\% | 47.78\% |
|  | 33 | 34 | 10 | 1 | 42 | 43 |
| No | 35.62\% | 38.03\% | 35.29\% | 50.00\% | 42.70\% | 40.00\% |
|  | 26 | 27 | 6 | 1 | 38 | 36 |
| Have Not Applied for Bonding | 8.22\% | 12.68\% | 5.88\% | 0.00\% | 3.37\% | 1.11\% |
|  | 6 | 9 | 1 | 0 | 3 | 1 |

Source: 2021 Business Surveys SkyBase7 and an online survey.

M/WBE survey respondents generally have lower aggregate bonding capacity than non-M/WBE firms, as shown in Table 7-8 below. The aggregate bonding for M/WBEs decreases as the limits increase.

TABLE 7-8.
BONDING CAPACITY

|  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native <br> American/ American Indian | Nonminority Female | Non-M/WBE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <\$100k | $\begin{gathered} 3.03 \% \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} 5.88 \% \\ 2 \\ \hline \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 2.38 \% \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| \$100k-\$250k | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 2.94 \% \\ 1 \end{gathered}$ | $\begin{gathered} 10.00 \% \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ |
| \$250k-\$500k | $\begin{gathered} 9.09 \% \\ 3 \\ \hline \end{gathered}$ | $\begin{gathered} 8.82 \% \\ 3 \\ \hline \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} 2.38 \% \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \\ \hline \end{gathered}$ |
| \$500k-\$1M | $\begin{gathered} 27.27 \% \\ 9 \\ \hline \end{gathered}$ | $\begin{gathered} 17.65 \% \\ 6 \\ \hline \end{gathered}$ | $\begin{gathered} 20.00 \% \\ 2 \\ \hline \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 33.33 \% \\ 14 \\ \hline \end{gathered}$ | $\begin{gathered} 16.28 \% \\ 7 \\ \hline \end{gathered}$ |
| \$1M-\$1.5M | $\begin{gathered} 12.12 \% \\ 4 \end{gathered}$ | $\begin{gathered} 29.41 \% \\ 10 \end{gathered}$ | $\begin{gathered} 30.00 \% \\ 3 \end{gathered}$ | $\begin{gathered} 100.00 \% \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} 30.95 \% \\ 13 \end{gathered}$ | $\begin{gathered} 30.23 \% \\ 13 \end{gathered}$ |
| \$1.5M-\$3M | $\begin{gathered} 18.18 \% \\ 6 \end{gathered}$ | $\begin{gathered} 8.82 \% \\ 3 \\ \hline \end{gathered}$ | $\begin{gathered} 10.00 \% \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} 4.76 \% \\ 2 \\ \hline \end{gathered}$ | $\begin{gathered} 11.63 \% \\ 5 \end{gathered}$ |
| \$3M-\$5M | $\begin{gathered} 6.06 \% \\ 2 \\ \hline \end{gathered}$ | $\begin{gathered} 8.82 \% \\ 3 \end{gathered}$ | $\begin{gathered} 20.00 \% \\ 2 \\ \hline \end{gathered}$ | $\begin{gathered} 0.00 \% \\ 0 \end{gathered}$ | $\begin{gathered} 11.90 \% \\ 5 \end{gathered}$ | $\begin{gathered} 4.65 \% \\ 2 \end{gathered}$ |
| >\$5M | $\begin{gathered} \hline 9.09 \% \\ 3 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 8.82 \% \\ 3 \\ \hline \end{gathered}$ | $\begin{gathered} 10.00 \% \\ 1 \\ \hline \end{gathered}$ | $0.00 \%$ 0 | $\begin{gathered} \hline 9.52 \% \\ 4 \\ \hline \end{gathered}$ | $\begin{gathered} 18.60 \% \\ 8 \\ \hline \end{gathered}$ |

Source: 2021 Business Surveys SkyBase7 and an online survey.

### 7.9.2 Discrimination and Disparate Treatment

Comments gathered from interview and community engagement participants highlight their financial barriers to doing business.

A LGBTQBE services firm owner stated that when it became known that they were LGBTQ they lost some business. However, they gained new clients in the LGBTQ community.

An African American construction specialty company stated that they had on a Housing Authority project where the general contractor's superintendent did not like African Americans or women. The superintendent was verbally abusive and suggested that the firm hire a Hispanic crew because the superintendent felt they would do a better job than the African American crew onsite.

### 7.10 Stakeholder Engagement

### 7.10.1Stakeholder Outreach

Outreach to stakeholders (trade associations and business organizations) was beneficial to the outreach efforts because their assistance extended communication efforts to inform and engage the business community in qualitative activities by disseminating community meeting notices and study update
notices. Stakeholders were asked to provide their feedback on the M/WBE programs and procurement processes from the perspective of the objectives of City or Housing Authority.

Generally, the associations and organizations share common assessments on M/WBE business development and barriers.

- Barriers are technical knowledge of running a business, access to capital - especially for very small or sole proprietor businesses.
- The City and Housing Authority should host activities and events to encourage relationship building.
- Establish relationships with area associations and organizations to assist the City and Housing Authority meet their objective of growing businesses.

Involving area trade associations and business organizations (stakeholders) that provide advocacy for and professional development to businesses in similar services in the City or Housing Authority market area is essential to the success of City or Housing Authority's program objectives. For this study, trade organizations and business associations assisted with outreach and provided insight into minority and women business growth, development, and barriers they face in the marketplace.

### 7.11 Summary

The evidence from the qualitative and anecdotal activities was consistent with the other evidence reported throughout this study. The qualitative evidence suggests that M/WBEs face discriminatory barriers to full and equitable participation in public and private sector contracts in the City or Housing Authority market area. These activities have yielded the types of evidence that the courts have found to be highly probative in deciding whether an entity such as City or Housing Authority has been or continues to be a passive participant in a discriminatory market area. This is particularly true when considered in conjunction with the other statistical and quantitative evidence provided in this report.

Firms were also split on whether the M/WBE Program aid with M/WBE growth. Those who agreed stated they would not have been invited if not for the program; others say they do not get invited or City or Housing Authority does not provide oversight. Subcontractors do not receive notification of opportunities that would be helpful to reach out to primes.

Qualitative data were collected using multiple methods and included a broad reach of diverse businesses and business industries. Feedback from many businesses had common themes regarding their experiences working or attempting to work with City or Housing Authority, such as competing with large firms, incumbent firms holding legacy contracts, and enforcement of the policies established to eliminate unfair treatment that prevents M/WBE firms from building their businesses. The anecdotes from this broad population of businesses can provide a footprint of policies and procedures that could meet the need of businesses in the market area.

## 8 Commendations and Recommendations

### 8.1 Introduction

The City of Baltimore engaged MGT Consulting Group (MGT) to conduct its Disparity Study to determine if there is a disparity between the number of viable minority- and woman-owned businesses that are ready, willing, and able to perform Construction, Architecture and Engineering, Professional Services, Goods and Other Services contracts, and the numbers of these same business types who are actually participating in these same types of contracts with the City of Baltimore (City).


Within the context of studying the City's procurement practices, the study was conducted in a manner consistent with disparity study best practices, controlling local legal precedents, and constitutional law in order to properly advise the City about the legal basis for potential remedies, if necessary. MGT's methodology included a review of disparity studies legal framework, a policy and procedures review, analyses of utilization, availability, and statistical disparity, anecdotal research, private sector analyses, and findings, commendations, and recommendations.

Strict scrutiny requires the City' study to have evidence of M/WBE utilization and the success of M/WBE in gaining business in the marketplace. The results of this study and conclusions drawn are presented in detail in Chapters 3 through 7 of this report. This chapter summarizes the evidence on the central research question: Is there factual predicate evidence for the continuation of a race-and gender-conscious M/WBE program for the City? MGT`s findings and evidence are based on fact finding to analyze the City's procurement trends and practices between July 1, 2014 (FY15) through June 30, 2019 (FY19); evaluation of the impact of race-and gender-neutral remedial efforts; and evaluation of options for future program development. MGT found sufficient evidence of disparity to recommend the continuation of a narrowly tailored race- and gender-based procurement program to address identified disparities.

### 8.2 Commendations and Recommendations

The City of Baltimore is commended for investing the resources and providing the guidance, direction, and support to ensure the delivery of a study that is legally supportable and actionable. The disparity study conducted by MGT resulted in identifying several initiatives currently in place to increase access and opportunities for the City's diverse community of minority- and women-owned businesses. Most of the following recommendations are based on multiple findings and do not necessarily tie to one finding. The recommendations are presented according to race- and gender-neutral measures and race- and genderbased measures.

### 8.2.1 Race - and Gender-Neutral Recommendations

## A: Staff Training on Business Formation

To understand common business barriers the City staff that interacts with businesses should understand the functions of business operations from how bidding is completed for each industry to the capital needed for different industries.

## B: Improve Payment Terms on City Contracts

The City should be commended for mandating the prompt payment of 30 days with an approved invoice. However, firms that work on City contracts are frustrated with the processing time of submitted invoices. M/WBE subcontracts are experiencing the direct impact of slow payments cycles by the City because that slower cycle means that subcontractors must wait longer for their payment.

## C: Implement a Contract Compliance Software System

The City should be commended on acquiring a contract compliance system. We recommend that in its implementation all vendors are required to utilize the system to report all subcontract utilization and payments. This system should be utilized by all City departments to enter and monitor their contracts.

## D: Reorganizing the Minority and Women's Business Opportunity Office

The M/WBE ordinance should be amended to place the Minority and Women's Business Opportunity Office ("MWBOO") under the Office of the Mayor as a standalone agency. The office is currently a small division of the City Law Department, which is and has been a limiting factor with regards to funding. As a direct report to the Mayor, the MWBOO will be better positioned to receive the funding needed to carry out its statutorily mandated responsibilities.

The Mayor's Office of Minority and Women-Owned Business Development ("MWBD") should be placed in the MWBOO and report directly to the Chief. MWBD should continue its outreach and advocacy functions. The two offices with similar names but different functions have always been a source of confusion for businesses and individuals seeking to do business with the City of Baltimore, and particularly those with M/WBE questions. Combining the two offices will result in a more efficient use of scarce resources.

### 8.2.2 Race - and Gender- Based Recommendations

## A: M/WBE Prequalification Requirements

The Office of Boards and Commissions ("OBC") should be made a unit within MWBOO. OBC is responsible for prequalifying all construction-related contractors and design consultants seeking to perform services of $\$ 50,000$ or greater on Baltimore City contracts. Questions about an M/WBE's technical capability and financial capacity to perform satisfactory work for the City as a prime, and as a subcontractor on certain contracts, can be readily determined if the databases of the two offices are combined. Certification and prequalification of contractors should be a centralized activity.

## B: Networking and Procurement Events

Realizing that the COVID-19 pandemic suspended M/WBE outreach and engagement, the City should create and host events that will provide upcoming procurement opportunities in all industries, not just construction. The City should partner with technical or professional organizations in the area to offer instruction for M/WBEs seeking to scale their business.

## C: Adopt Annual Aspirational M/WBE Goals

Estimates of M/WBE availability in the City's market area provide the starting point for citywide annual aspirational goals for contracting across all industry categories. As the City continues to review its achievement toward the annual aspirational goals, it should assess whether race- and gender-based remedies are necessary for all industry categories. Proposed goals are recommended at 25 percent for MBE firms and $15 \%$ for WBE firms. The proposed goals are based on a weighted average of utilization and availability. Aspirational goals are based on an accumulation of all spending within the City and should not be applied rigidly to every individual procurement. Future adjustments to citywide aspirational goals should be based on relative availability and adjusted as needed.

## D: Continue the M/WBE Program Sunset Review Process

The City of Baltimore should continue to require the review of the Program to determine if an evidentiary basis to continue every five years and that it should be continued only if there is strong evidence that discrimination continues to disadvantage M/WBEs in the relevant market area.

### 8.3 Conclusion

The City of Baltimore 2022 Disparity Study provides legally supportable factual predicate evidence for a narrowly tailored minority and woman-owned program. As documented throughout the entirety of the study, disparities throughout the utilization, private sector, and qualitative analyses were ascertained for minority-owned businesses (MBE), and women-owned businesses (WBE) in the City's business markets. There was not enough data to identify disparity of VOBE, DOBE, and LGBTQ businesses in the market. Any program efforts must be narrowly tailored to rectify the issues identified in this report.


# City of Baltimore 

## 2022 Disparity Study

AUGUST 26, 2022
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## Appendix A

## Glossary of Terms

This glossary contains definitions of common terms and acronyms used throughout the City's 2022 Disparity Study. Additional and more detailed definitions can be found in various chapters of the report.

Anecdotal
Aspirational Goal

Anecdotal Database

Awards
Combined
Statistical Area

Contract All types of the City agreements, to include direct payments and purchase orders,

Custom Census Custom census involves using Dun \& Bradstreet as a source of business availability. A short survey is conducted on a random sample of firms supplied by Dun \& Bradstreet, requesting specific information, i.e., ethnic and gender status, willingness to work on City projects.

An acronym for a Disadvantaged Business Enterprise. A DBE is a for-profit business which is at least $51 \%$ owned and controlled by one or more socially or economically disadvantaged individuals, whose personal net worth does not exceed the US Department of Transportation's current threshold.

Direct Payment Payment made to prime contractors or vendors without the development of a contract.

Disparity Index/ The ratio of the percentage of utilization and the percentage of availability for a Disparity Ratio

A personal account of experiences of businesses doing business with or attempting to do business with the City collected through surveys, interviews, and public hearings.

A benchmark percentage of spending by an agency with a particular group over a period of time. The aspirational goal is typically an annual goal.

A compiled list of utilized firms, registered vendors, and certification lists developed from several different sources, including Dun \& Bradstreet. This list was used to develop the pool of available firms to participate in the anecdotal activities.

Awards reflect anticipated dollar amounts a prime contractor or vendor are scheduled to receive upon completion of a contract.

Combined Statistical Area (CSA) are geographic entities defined by the U.S. Office of Management and Budget (OMB) for use by Federal statistical agencies in collecting, tabulating, and publishing Federal statistics. for the procurement of goods and services.

DBE particular demographic group times 100. Disparities were calculated for primes and subcontractors for each of the business categories.

| Disparity Study | A study that reviews and analyzes the utilization and availability of disadvantaged, minority- and women-owned businesses in a particular market area to determine if disparity exists in the awarding of contracts to minority and women business enterprises by a public entity. |
| :---: | :---: |
| Expenditures | Expenditures are payments made by the City to primes and payments made by primes to subcontractors. |
| Good Faith Efforts | Documented evidence of the primes' efforts to meet established project goals to contract with M/WBE firms. |
| Intermediate Scrutiny | The second level of federal judicial review to determine whether certain governmental policies are constitutional. Less demanding than "strict scrutiny." |
| Lowest <br> Responsible, Responsive Bidder | An entity that provides the lowest price, has responded to the needs of the requestor, and has not violated statutory requirements for vendor eligibility. |
| M/WBE | An acronym for a minority, or woman-owned business enterprise. An MWBE is a business that is at least $51 \%$ owned and operated by one or more individuals who are African American, Asian American, Hispanic American, Native American or Nonminority Women. |
| Master Utilization Database | A database that maintains firms who have conducted business with the City and were paid by the City for goods and services. |
| MBE | An acronym for a minority-owned business enterprise. An MBE is a business that is at least $51 \%$ owned and operated by one or more individuals who are African American, Asian American, Hispanic American, or Native American. |
| Non-M/WBE | An acronym for firms not identified as minority- or women-owned. |
| Passive Discrimination | The act of perpetuating discrimination by awarding contracts to firms that discriminate against minority and women-owned firms. |
| Prima Facie | Evidence which is legally sufficient to establish a fact or a case unless disproved or rebutted. |
| Prime | The contractor or vendor to whom a purchase order or contract is issued by the City. |
| Private Sector | The for-profit part of the national economy that is not under direct government control. |
| Procurement Category | The type of service or good provided under a contract awarded. The categories analyzed are Construction, Architecture and Engineering, Professional Services, Goods and Other Services. |


| Project Goals | Goals placed on an individual project or contract, as opposed to aspirational goals <br> placed on overall agency spending. |
| :--- | :--- |
| Public Sector | The non-profit part of the economy that is controlled by the government. |
| PUMS | An acronym for Public Use Microdata Sample. PUMS contains records for a sample <br> of housing units with information on the characteristics of each unit and each <br> person in it. PUMS files are available from the American Community Survey (ACS) <br> and the Decennial Census. |
| Purchase Order | A commercial document and first official offer issued by a buyer to a seller, <br> indicating types, quantities, and agreed prices for products or services. |
| Regression AnalysisA technique for modeling and analyzing several variables when the focus is on the <br> relationship between a dependent variable and one or more independent |  |
| variables. More specifically, regression analysis helps one understand how the <br> typical value of the dependent variable changes when any one of the independent <br> variables is varied, while the other independent variables are held constant. For <br> the purpose of this study, a multivariate regression analysis was used to examine <br> the influence of an owner's race and gender on gross revenues reported by firms |  |
| participating in a survey of vendors administered during the study. |  |

WBE
An acronym for a women-owned business enterprise. A WBE is a business that is at least $51 \%$ owned and operated by one or more nonminority women.

## Appendix B

Detailed Market Area Analyses
Geographic Product Market

TABLE B-1.
CITY OF BALTIMORE GEOGRAPHIC MARKET AREA
ALL FIRMS

| COUNTY_STATE | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: |
| BALTIMORE CITY, MD | \$1,145,558,354.05 | 33.92\% | 33.92\% |
| BALTIMORE COUNTY, MD | \$502,981,692.55 | 14.89\% | 48.82\% |
| ANNE ARUNDEL COUNTY, MD | \$400,184,226.04 | 11.85\% | 60.67\% |
| HARFORD COUNTY, MD | \$215,549,922.91 | 6.38\% | 67.05\% |
| MONTGOMERY COUNTY, MD | \$183,494,356.78 | 5.43\% | 72.49\% |
| PRINCE GEORGES COUNTY, MD | \$165,032,950.11 | 4.89\% | 77.37\% |
| HOWARD COUNTY, MD | \$128,015,547.98 | 3.79\% | 81.16\% |
| CARROLL COUNTY, MD | \$8,634,350.62 | 0.26\% | 81.42\% |
| QUEEN ANNES COUNTY, MD | \$4,506,379.80 | 0.13\% | 81.55\% |
| MIDDLESEX COUNTY, MA | \$106,191,060.64 | 3.14\% | 84.70\% |
| FREDERICK COUNTY, MD | \$47,411,888.88 | 1.40\% | 86.10\% |
| COOK COUNTY, IL | \$46,453,524.15 | 1.38\% | 87.48\% |
| DELAWARE COUNTY, PA | \$38,040,743.05 | 1.13\% | 88.60\% |
| HARRIS COUNTY, TX | \$34,903,029.70 | 1.03\% | 89.64\% |
| YORK COUNTY, PA | \$24,376,340.91 | 0.72\% | 90.36\% |
| PRINCE WILLIAM COUNTY, VA | \$14,293,064.58 | 0.42\% | 90.78\% |
| CLARKE COUNTY, VA | \$13,917,678.81 | 0.41\% | 91.19\% |
| MIDDLESEX COUNTY, NJ | \$13,853,463.58 | 0.41\% | 91.60\% |
| BUCKS COUNTY, PA | \$13,329,836.80 | 0.39\% | 92.00\% |
| MARICOPA COUNTY, AZ | \$12,666,074.71 | 0.38\% | 92.37\% |
| ALLEGHENY COUNTY, PA | \$12,421,951.79 | 0.37\% | 92.74\% |
| DISTRICT OF COLUMBIA COUNTY, DC | \$10,993,866.16 | 0.33\% | 93.07\% |
| CHARLES COUNTY, MD | \$10,593,688.47 | 0.31\% | 93.38\% |
| LANCASTER COUNTY, PA | \$9,230,129.69 | 0.27\% | 93.65\% |
| LOS ANGELES COUNTY, CA | \$9,146,406.76 | 0.27\% | 93.93\% |
| FAIRFIELD COUNTY, CT | \$8,971,934.18 | 0.27\% | 94.19\% |
| FAIRFAX COUNTY, VA | \$8,718,751.35 | 0.26\% | 94.45\% |
| JEFFERSON COUNTY, LA | \$8,671,619.51 | 0.26\% | 94.71\% |
| BERKS COUNTY, PA | \$7,941,689.53 | 0.24\% | 94.94\% |
| MECKLENBURG COUNTY, NC | \$7,757,486.76 | 0.23\% | 95.17\% |
| WAYNE COUNTY, MI | \$7,550,757.29 | 0.22\% | 95.39\% |
| HUDSON COUNTY, NJ | \$7,392,834.75 | 0.22\% | 95.61\% |
| SAN DIEGO COUNTY, CA | \$7,380,331.75 | 0.22\% | 95.83\% |
| MONTGOMERY COUNTY, PA | \$6,752,826.44 | 0.20\% | 96.03\% |
| LOUDOUN COUNTY, VA | \$5,612,037.90 | 0.17\% | 96.20\% |


|  |  |  | CUMULATIVE |
| :--- | ---: | ---: | ---: |
| COUNTY_STATE | PAYMENTS | PERCENT | PERCENTAGE |$|$| ONONDAGA COUNTY, NY |
| :--- |


| COUNTY_STATE | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: |
| SOMERSET COUNTY, NJ | \$808,686.35 | 0.02\% | 99.17\% |
| FRANKLIN COUNTY, OH | \$780,131.40 | 0.02\% | 99.19\% |
| VOLUSIA COUNTY, FL | \$770,736.80 | 0.02\% | 99.22\% |
| SUFFOLK COUNTY, NY | \$770,578.22 | 0.02\% | 99.24\% |
| VIRGINIA BEACH CITY COUNTY, VA | \$726,138.51 | 0.02\% | 99.26\% |
| GUILFORD COUNTY, NC | \$708,614.75 | 0.02\% | 99.28\% |
| PHILADELPHIA COUNTY, PA | \$698,883.54 | 0.02\% | 99.30\% |
| CRAWFORD COUNTY, PA | \$629,185.53 | 0.02\% | 99.32\% |
| NORTHAMPTON COUNTY, PA | \$616,837.00 | 0.02\% | 99.34\% |
| ORANGE COUNTY, NY | \$614,332.00 | 0.02\% | 99.36\% |
| LIBERTY COUNTY, GA | \$603,582.13 | 0.02\% | 99.38\% |
| UNION COUNTY, NC | \$598,900.46 | 0.02\% | 99.39\% |
| FORSYTH COUNTY, NC | \$561,613.75 | 0.02\% | 99.41\% |
| GWINNETT COUNTY, GA | \$543,361.89 | 0.02\% | 99.43\% |
| DANE COUNTY, WI | \$514,880.10 | 0.02\% | 99.44\% |
| ATHENS COUNTY, OH | \$508,373.11 | 0.02\% | 99.46\% |
| BARNWELL COUNTY, SC | \$505,688.00 | 0.01\% | 99.47\% |
| FAYETTE COUNTY, KY | \$505,500.00 | 0.01\% | 99.49\% |
| CUMBERLAND COUNTY, PA | \$462,869.00 | 0.01\% | 99.50\% |
| FULTON COUNTY, GA | \$457,398.39 | 0.01\% | 99.51\% |
| MONTGOMERY COUNTY, OH | \$444,281.66 | 0.01\% | 99.53\% |
| CHESAPEAKE CITY COUNTY, VA | \$441,622.99 | 0.01\% | 99.54\% |
| PIMA COUNTY, AZ | \$369,600.00 | 0.01\% | 99.55\% |
| CHAUTAUQUA COUNTY, NY | \$342,883.22 | 0.01\% | 99.56\% |
| CUYAHOGA COUNTY, OH | \$333,425.48 | 0.01\% | 99.57\% |
| WINNEBAGO COUNTY, WI | \$332,687.78 | 0.01\% | 99.58\% |
| ORANGE COUNTY, FL | \$328,891.46 | 0.01\% | 99.59\% |
| BEXAR COUNTY, TX | \$328,592.16 | 0.01\% | 99.60\% |
| MONROE COUNTY, NY | \$308,786.00 | 0.01\% | 99.61\% |
| CARBON COUNTY, PA | \$298,303.57 | 0.01\% | 99.62\% |
| COBB COUNTY, GA | \$279,677.74 | 0.01\% | 99.63\% |
| ARAPAHOE COUNTY, CO | \$277,305.04 | 0.01\% | 99.63\% |
| ERIE COUNTY, PA | \$272,678.06 | 0.01\% | 99.64\% |
| HAMILTON COUNTY, IN | \$271,727.35 | 0.01\% | 99.65\% |
| SUFFOLK COUNTY, MA | \$266,759.84 | 0.01\% | 99.66\% |
| SONOMA COUNTY, CA | \$265,024.27 | 0.01\% | 99.67\% |
| ULSTER COUNTY, NY | \$259,000.00 | 0.01\% | 99.67\% |
| CUMBERLAND COUNTY, ME | \$257,959.21 | 0.01\% | 99.68\% |
| WAYNE COUNTY, PA | \$257,822.23 | 0.01\% | 99.69\% |
| DAVIESS COUNTY, KY | \$257,728.20 | 0.01\% | 99.70\% |
| WILLIAMSBURG CITY COUNTY, VA | \$250,570.56 | 0.01\% | 99.70\% |
| CHEMUNG COUNTY, NY | \$244,631.68 | 0.01\% | 99.71\% |
| LOUISA COUNTY, VA | \$243,590.00 | 0.01\% | 99.72\% |
| NEW HAVEN COUNTY, CT | \$240,288.92 | 0.01\% | 99.73\% |
| CENTRE COUNTY, PA | \$239,862.73 | 0.01\% | 99.73\% |
| SACRAMENTO COUNTY, CA | \$225,903.83 | 0.01\% | 99.74\% |


| COUNTY_STATE | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: |
| TULARE COUNTY, CA | \$218,000.00 | 0.01\% | 99.75\% |
| GREENVILLE COUNTY, SC | \$211,567.50 | 0.01\% | 99.75\% |
| DAVIDSON COUNTY, NC | \$211,382.86 | 0.01\% | 99.76\% |
| TALBOT COUNTY, MD | \$202,624.43 | 0.01\% | 99.76\% |
| WATAUGA COUNTY, NC | \$199,375.00 | 0.01\% | 99.77\% |
| CHESTER COUNTY, PA | \$198,512.50 | 0.01\% | 99.78\% |
| FRANKLIN COUNTY, PA | \$196,597.72 | 0.01\% | 99.78\% |
| STARK COUNTY, OH | \$195,504.10 | 0.01\% | 99.79\% |
| TULSA COUNTY, OK | \$193,993.01 | 0.01\% | 99.79\% |
| FAYETTE COUNTY, PA | \$191,062.36 | 0.01\% | 99.80\% |
| CHATTOOGA COUNTY, GA | \$188,891.50 | 0.01\% | 99.80\% |
| RAMSEY COUNTY, MN | \$186,347.30 | 0.01\% | 99.81\% |
| CAMDEN COUNTY, NJ | \$185,506.22 | 0.01\% | 99.82\% |
| RANDOLPH COUNTY, NC | \$178,860.00 | 0.01\% | 99.82\% |
| LAKE COUNTY, OH | \$166,450.51 | 0.00\% | 99.83\% |
| ADAMS COUNTY, PA | \$162,303.00 | 0.00\% | 99.83\% |
| PORTER COUNTY, IN | \$157,529.45 | 0.00\% | 99.84\% |
| CLINTON COUNTY, OH | \$157,321.31 | 0.00\% | 99.84\% |
| DENVER COUNTY, CO | \$155,587.30 | 0.00\% | 99.84\% |
| DAKOTA COUNTY, MN | \$138,218.83 | 0.00\% | 99.85\% |
| PINELLAS COUNTY, FL | \$135,727.55 | 0.00\% | 99.85\% |
| MADISON COUNTY, AL | \$135,556.68 | 0.00\% | 99.86\% |
| KENTON COUNTY, KY | \$134,293.63 | 0.00\% | 99.86\% |
| FAUQUIER COUNTY, VA | \$130,625.00 | 0.00\% | 99.86\% |
| OTTAWA COUNTY, MI | \$126,060.70 | 0.00\% | 99.87\% |
| MOBILE COUNTY, AL | \$122,550.00 | 0.00\% | 99.87\% |
| MARION COUNTY, IN | \$121,400.97 | 0.00\% | 99.88\% |
| CLARK COUNTY, IN | \$118,940.00 | 0.00\% | 99.88\% |
| ATLANTIC COUNTY, NJ | \$110,868.63 | 0.00\% | 99.88\% |
| KANAWHA COUNTY, WV | \$110,714.10 | 0.00\% | 99.89\% |
| SANTA CLARA COUNTY, CA | \$110,280.00 | 0.00\% | 99.89\% |
| PROVIDENCE COUNTY, RI | \$107,493.20 | 0.00\% | 99.89\% |
| NORFOLK COUNTY, MA | \$105,321.63 | 0.00\% | 99.90\% |
| MUSCATINE COUNTY, IA | \$103,558.35 | 0.00\% | 99.90\% |
| MORGAN COUNTY, UT | \$102,810.00 | 0.00\% | 99.90\% |
| BUTLER COUNTY, PA | \$101,585.00 | 0.00\% | 99.90\% |
| MULTNOMAH COUNTY, OR | \$100,500.00 | 0.00\% | 99.91\% |
| WARREN COUNTY, VA | \$98,120.00 | 0.00\% | 99.91\% |
| CUMBERLAND COUNTY, NJ | \$96,413.64 | 0.00\% | 99.91\% |
| GLOUCESTER COUNTY, NJ | \$94,610.90 | 0.00\% | 99.92\% |
| ORANGE COUNTY, CA | \$93,718.40 | 0.00\% | 99.92\% |
| LEHIGH COUNTY, PA | \$92,696.99 | 0.00\% | 99.92\% |
| DUVAL COUNTY, FL | \$90,262.18 | 0.00\% | 99.92\% |
| SAINT TAMMANY COUNTY, LA | \$87,578.34 | 0.00\% | 99.93\% |
| MANASSAS CITY COUNTY, VA | \$83,098.53 | 0.00\% | 99.93\% |
| MAURY COUNTY, TN | \$81,245.85 | 0.00\% | 99.93\% |


| COUNTY_STATE | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: |
| NEW LONDON COUNTY, CT | \$80,164.99 | 0.00\% | 99.93\% |
| PIERCE COUNTY, WI | \$77,908.95 | 0.00\% | 99.94\% |
| EAST BATON ROUGE COUNTY, LA | \$75,392.24 | 0.00\% | 99.94\% |
| MILWAUKEE COUNTY, WI | \$73,211.69 | 0.00\% | 99.94\% |
| CAMERON COUNTY, TX | \$71,215.24 | 0.00\% | 99.94\% |
| RILEY COUNTY, KS | \$70,375.00 | 0.00\% | 99.94\% |
| ESSEX COUNTY, NJ | \$70,320.00 | 0.00\% | 99.95\% |
| MERCER COUNTY, PA | \$70,060.00 | 0.00\% | 99.95\% |
| MACOMB COUNTY, MI | \$64,729.00 | 0.00\% | 99.95\% |
| DEKALB COUNTY, GA | \$64,400.00 | 0.00\% | 99.95\% |
| ALLEN COUNTY, IN | \$62,731.72 | 0.00\% | 99.95\% |
| BERKELEY COUNTY, SC | \$62,006.25 | 0.00\% | 99.96\% |
| UNION COUNTY, PA | \$60,000.00 | 0.00\% | 99.96\% |
| LIVINGSTON COUNTY, NY | \$54,820.61 | 0.00\% | 99.96\% |
| BURLINGTON COUNTY, NJ | \$54,384.93 | 0.00\% | 99.96\% |
| RACINE COUNTY, WI | \$52,896.52 | 0.00\% | 99.96\% |
| POWHATAN COUNTY, VA | \$50,250.00 | 0.00\% | 99.96\% |
| PIERCE COUNTY, WA | \$50,192.40 | 0.00\% | 99.97\% |
| HENDRICKS COUNTY, IN | \$47,039.50 | 0.00\% | 99.97\% |
| SCOTT COUNTY, IA | \$45,400.00 | 0.00\% | 99.97\% |
| JASPER COUNTY, MO | \$44,557.68 | 0.00\% | 99.97\% |
| FRANKLIN COUNTY, NC | \$41,656.65 | 0.00\% | 99.97\% |
| WICOMICO COUNTY, MD | \$40,340.00 | 0.00\% | 99.97\% |
| WASATCH COUNTY, UT | \$38,880.20 | 0.00\% | 99.97\% |
| WILLIAMSON COUNTY, TX | \$35,227.50 | 0.00\% | 99.97\% |
| PALM BEACH COUNTY, FL | \$33,122.72 | 0.00\% | 99.98\% |
| SUMMIT COUNTY, OH | \$31,963.96 | 0.00\% | 99.98\% |
| RICHMOND CITY COUNTY, VA | \$30,353.25 | 0.00\% | 99.98\% |
| LAFAYETTE COUNTY, LA | \$29,183.52 | 0.00\% | 99.98\% |
| ROSS COUNTY, OH | \$29,160.00 | 0.00\% | 99.98\% |
| KINGS COUNTY, NY | \$27,870.66 | 0.00\% | 99.98\% |
| SEMINOLE COUNTY, FL | \$27,058.00 | 0.00\% | 99.98\% |
| OAKLAND COUNTY, MI | \$27,010.00 | 0.00\% | 99.98\% |
| RIVERSIDE COUNTY, CA | \$26,725.00 | 0.00\% | 99.98\% |
| SALEM COUNTY, NJ | \$25,452.87 | 0.00\% | 99.98\% |
| BROWN COUNTY, WI | \$25,395.14 | 0.00\% | 99.98\% |
| WAUKESHA COUNTY, WI | \$25,200.00 | 0.00\% | 99.98\% |
| BUNCOMBE COUNTY, NC | \$25,116.00 | 0.00\% | 99.99\% |
| WINONA COUNTY, MN | \$23,835.77 | 0.00\% | 99.99\% |
| ALAMANCE COUNTY, NC | \$22,352.50 | 0.00\% | 99.99\% |
| ALACHUA COUNTY, FL | \$22,005.00 | 0.00\% | 99.99\% |
| WASHTENAW COUNTY, MI | \$21,815.00 | 0.00\% | 99.99\% |
| OCEAN COUNTY, NJ | \$21,690.00 | 0.00\% | 99.99\% |
| BERGEN COUNTY, NJ | \$20,416.42 | 0.00\% | 99.99\% |
| CLEVELAND COUNTY, OK | \$19,950.00 | 0.00\% | 99.99\% |
| DOUGLAS COUNTY, NE | \$19,116.00 | 0.00\% | 99.99\% |


| COUNTY_STATE | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: |
| CULPEPER COUNTY, VA | \$18,365.00 | 0.00\% | 99.99\% |
| ALBEMARLE COUNTY, VA | \$18,226.23 | 0.00\% | 99.99\% |
| BOULDER COUNTY, CO | \$18,054.00 | 0.00\% | 99.99\% |
| MIAMI DADE COUNTY, FL | \$17,670.86 | 0.00\% | 99.99\% |
| NASSAU COUNTY, NY | \$16,739.74 | 0.00\% | 99.99\% |
| JOHNSON COUNTY, KS | \$16,404.60 | 0.00\% | 99.99\% |
| MADISON COUNTY, NY | \$15,823.40 | 0.00\% | 99.99\% |
| HARTFORD COUNTY, CT | \$15,490.20 | 0.00\% | 99.99\% |
| RICHMOND COUNTY, GA | \$14,890.18 | 0.00\% | 100.00\% |
| PASSAIC COUNTY, NJ | \$14,652.89 | 0.00\% | 100.00\% |
| WAUPACA COUNTY, WI | \$14,588.74 | 0.00\% | 100.00\% |
| HOWELL COUNTY, MO | \$13,837.00 | 0.00\% | 100.00\% |
| LAKE COUNTY, IL | \$12,791.23 | 0.00\% | 100.00\% |
| DAVIS COUNTY, UT | \$11,500.00 | 0.00\% | 100.00\% |
| DELAWARE COUNTY, OH | \$11,107.25 | 0.00\% | 100.00\% |
| SNOHOMISH COUNTY, WA | \$10,020.50 | 0.00\% | 100.00\% |
| HANOVER COUNTY, VA | \$8,078.05 | 0.00\% | 100.00\% |
| LUCAS COUNTY, OH | \$7,741.72 | 0.00\% | 100.00\% |
| HUMBOLDT COUNTY, CA | \$7,557.12 | 0.00\% | 100.00\% |
| SANGAMON COUNTY, IL | \$7,463.00 | 0.00\% | 100.00\% |
| DANVILLE CITY COUNTY, VA | \$7,343.00 | 0.00\% | 100.00\% |
| FRANKLIN COUNTY, VA | \$7,303.20 | 0.00\% | 100.00\% |
| LA SALLE COUNTY, IL | \$7,028.74 | 0.00\% | 100.00\% |
| OZAUKEE COUNTY, WI | \$6,699.00 | 0.00\% | 100.00\% |
| KERN COUNTY, CA | \$4,869.02 | 0.00\% | 100.00\% |
| CHARLOTTE COUNTY, FL | \$4,550.79 | 0.00\% | 100.00\% |
| NORTHUMBERLAND COUNTY, VA | \$4,275.00 | 0.00\% | 100.00\% |
| PLYMOUTH COUNTY, MA | \$4,161.97 | 0.00\% | 100.00\% |
| BOONE COUNTY, MO | \$1,121.00 | 0.00\% | 100.00\% |
| CHARLESTON COUNTY, SC | \$453.60 | 0.00\% | 100.00\% |
| MANATEE COUNTY, FL | \$429.98 | 0.00\% | 100.00\% |
| POWESHIEK COUNTY, IA | \$89.10 | 0.00\% | 100.00\% |
| TARRANT COUNTY, TX | \$0.00 | 0.00\% | 100.00\% |
| KENT COUNTY, DE | \$0.00 | 0.00\% | 100.00\% |
| WILLIAMSON COUNTY, TN | \$0.00 | 0.00\% | 100.00\% |
| PIKE COUNTY, MO | \$0.00 | 0.00\% | 100.00\% |
| MONTGOMERY COUNTY, AL | \$0.00 | 0.00\% | 100.00\% |
| BRISTOL COUNTY, MA | \$0.00 | 0.00\% | 100.00\% |
| STEARNS COUNTY, MN | \$0.00 | 0.00\% | 100.00\% |
| CATAWBA COUNTY, NC | \$0.00 | 0.00\% | 100.00\% |
| ELMORE COUNTY, AL | \$0.00 | 0.00\% | 100.00\% |
| CLINTON COUNTY, NY | \$0.00 | 0.00\% | 100.00\% |
| BARNSTABLE COUNTY, MA | \$0.00 | 0.00\% | 100.00\% |
| SAINT LOUIS COUNTY, MO | \$0.00 | 0.00\% | 100.00\% |
| ALBANY COUNTY, NY | \$0.00 | 0.00\% | 100.00\% |
| SCOTT COUNTY, MN | \$0.00 | 0.00\% | 100.00\% |


| COUNTY_STATE | PAYMENTS |  | CUMULATIVE <br> PERCENT |
| :--- | ---: | ---: | ---: |
| PAINT MARYS COUNTY, MD | $\$ 0.00$ | $0.00 \%$ | $100.00 \%$ |
| MEDINA COUNTY, OH | $\$ 0.00$ | $0.00 \%$ | $100.00 \%$ |
| MONTEREY COUNTY, CA | $\$ 0.00$ | $0.00 \%$ | $100.00 \%$ |
| Grand Total | $\$ 3,376,926,631.54$ | $\mathbf{1 0 0 . 0 0 \%}$ |  |

TABLE B-2.
CITY OF BALTIMORE GEOGRAPHIC MARKET AREA
CONSTRUCTION FIRMS

| COUNTY_STATE | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: |
| BALTIMORE CITY, MD | \$947,510,451.14 | 42.91\% | 42.91\% |
| BALTIMORE COUNTY, MD | \$294,600,653.01 | 13.34\% | 56.25\% |
| HARFORD COUNTY, MD | \$204,061,852.86 | 9.24\% | 65.49\% |
| MONTGOMERY COUNTY, MD | \$156,387,362.19 | 7.08\% | 72.57\% |
| PRINCE GEORGES COUNTY, MD | \$106,327,713.32 | 4.82\% | 77.39\% |
| ANNE ARUNDEL COUNTY, MD | \$104,843,634.32 | 4.75\% | 82.14\% |
| HOWARD COUNTY, MD | \$87,257,624.21 | 3.95\% | 86.09\% |
| QUEEN ANNES COUNTY, MD | \$3,463,546.55 | 0.16\% | 86.24\% |
| CARROLL COUNTY, MD | \$3,039,635.17 | 0.14\% | 86.38\% |
| MIDDLESEX COUNTY, MA | \$102,506,474.40 | 4.64\% | 91.02\% |
| FREDERICK COUNTY, MD | \$38,168,987.07 | 1.73\% | 92.75\% |
| HARRIS COUNTY, TX | \$34,419,064.06 | 1.56\% | 94.31\% |
| YORK COUNTY, PA | \$22,720,900.53 | 1.03\% | 95.34\% |
| CLARKE COUNTY, VA | \$13,917,678.81 | 0.63\% | 95.97\% |
| CHARLES COUNTY, MD | \$10,593,230.22 | 0.48\% | 96.45\% |
| LANCASTER COUNTY, PA | \$8,695,638.92 | 0.39\% | 96.84\% |
| JEFFERSON COUNTY, LA | \$8,671,619.51 | 0.39\% | 97.24\% |
| LOS ANGELES COUNTY, CA | \$7,399,201.20 | 0.34\% | 97.57\% |
| CALVERT COUNTY, MD | \$4,238,176.41 | 0.19\% | 97.76\% |
| DISTRICT OF COLUMBIA COUNTY, DC | \$4,229,930.00 | 0.19\% | 97.95\% |
| HOWARD COUNTY, IN | \$3,204,488.35 | 0.15\% | 98.10\% |
| OHIO COUNTY, WV | \$2,848,688.04 | 0.13\% | 98.23\% |
| ALLEGHENY COUNTY, PA | \$2,693,595.84 | 0.12\% | 98.35\% |
| BERKS COUNTY, PA | \$2,252,543.00 | 0.10\% | 98.45\% |
| JEFFERSON COUNTY, WV | \$2,137,600.18 | 0.10\% | 98.55\% |
| WORCESTER COUNTY, MA | \$1,794,383.26 | 0.08\% | 98.63\% |
| WESTMORELAND COUNTY, PA | \$1,768,103.00 | 0.08\% | 98.71\% |
| ALAMEDA COUNTY, CA | \$1,714,545.38 | 0.08\% | 98.79\% |
| BOONE COUNTY, WV | \$1,679,857.25 | 0.08\% | 98.86\% |
| CECIL COUNTY, MD | \$1,533,897.45 | 0.07\% | 98.93\% |
| MERCER COUNTY, NJ | \$1,523,575.49 | 0.07\% | 99.00\% |
| WAYNE COUNTY, MI | \$1,497,543.38 | 0.07\% | 99.07\% |
| WASHINGTON COUNTY, PA | \$1,491,297.52 | 0.07\% | 99.14\% |
| HENNEPIN COUNTY, MN | \$1,400,368.88 | 0.06\% | 99.20\% |
| KANE COUNTY, IL | \$1,377,580.00 | 0.06\% | 99.26\% |


| COUNTY_STATE | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: |
| FAIRFAX COUNTY, VA | \$1,370,940.74 | 0.06\% | 99.33\% |
| SAN FRANCISCO COUNTY, CA | \$1,264,668.78 | 0.06\% | 99.38\% |
| DELAWARE COUNTY, PA | \$1,247,712.25 | 0.06\% | 99.44\% |
| BUCKS COUNTY, PA | \$1,126,335.21 | 0.05\% | 99.49\% |
| MONMOUTH COUNTY, NJ | \$1,030,388.00 | 0.05\% | 99.54\% |
| HAMILTON COUNTY, OH | \$889,164.34 | 0.04\% | 99.58\% |
| DAUPHIN COUNTY, PA | \$797,015.91 | 0.04\% | 99.61\% |
| DUPAGE COUNTY, IL | \$733,815.59 | 0.03\% | 99.65\% |
| COOK COUNTY, IL | \$729,120.32 | 0.03\% | 99.68\% |
| CRAWFORD COUNTY, PA | \$629,185.53 | 0.03\% | 99.71\% |
| UNION COUNTY, NC | \$598,900.46 | 0.03\% | 99.74\% |
| LOUDOUN COUNTY, VA | \$594,200.00 | 0.03\% | 99.76\% |
| CUMBERLAND COUNTY, PA | \$462,869.00 | 0.02\% | 99.78\% |
| FULTON COUNTY, GA | \$445,533.61 | 0.02\% | 99.80\% |
| CHESAPEAKE CITY COUNTY, VA | \$441,622.99 | 0.02\% | 99.82\% |
| VOLUSIA COUNTY, FL | \$412,736.80 | 0.02\% | 99.84\% |
| BARNWELL COUNTY, SC | \$293,695.00 | 0.01\% | 99.86\% |
| TULARE COUNTY, CA | \$218,000.00 | 0.01\% | 99.87\% |
| TRAVIS COUNTY, TX | \$206,810.99 | 0.01\% | 99.88\% |
| WATAUGA COUNTY, NC | \$199,375.00 | 0.01\% | 99.88\% |
| FRANKLIN COUNTY, PA | \$174,842.00 | 0.01\% | 99.89\% |
| ADAMS COUNTY, PA | \$162,303.00 | 0.01\% | 99.90\% |
| STARK COUNTY, OH | \$154,962.10 | 0.01\% | 99.91\% |
| LAKE COUNTY, OH | \$154,825.51 | 0.01\% | 99.91\% |
| HAMILTON COUNTY, IN | \$151,727.35 | 0.01\% | 99.92\% |
| NEW CASTLE COUNTY, DE | \$145,649.43 | 0.01\% | 99.93\% |
| LUZERNE COUNTY, PA | \$144,970.00 | 0.01\% | 99.93\% |
| GUILFORD COUNTY, NC | \$139,977.75 | 0.01\% | 99.94\% |
| FAUQUIER COUNTY, VA | \$130,625.00 | 0.01\% | 99.95\% |
| CHESTER COUNTY, PA | \$117,895.00 | 0.01\% | 99.95\% |
| HENRICO COUNTY, VA | \$113,979.83 | 0.01\% | 99.96\% |
| KANAWHA COUNTY, WV | \$94,998.10 | 0.00\% | 99.96\% |
| CUMBERLAND COUNTY, NJ | \$85,628.64 | 0.00\% | 99.96\% |
| MANASSAS CITY COUNTY, VA | \$83,098.53 | 0.00\% | 99.97\% |
| MAURY COUNTY, TN | \$81,245.85 | 0.00\% | 99.97\% |
| MARION COUNTY, IN | \$79,326.00 | 0.00\% | 99.98\% |
| EAST BATON ROUGE COUNTY, LA | \$75,392.24 | 0.00\% | 99.98\% |
| GLOUCESTER COUNTY, NJ | \$73,548.00 | 0.00\% | 99.98\% |
| BURLINGTON COUNTY, NJ | \$52,551.25 | 0.00\% | 99.98\% |
| MONTGOMERY COUNTY, PA | \$46,211.00 | 0.00\% | 99.99\% |
| HENDRICKS COUNTY, IN | \$44,069.26 | 0.00\% | 99.99\% |
| WICOMICO COUNTY, MD | \$40,000.00 | 0.00\% | 99.99\% |
| MECKLENBURG COUNTY, NC | \$32,613.85 | 0.00\% | 99.99\% |
| SALEM COUNTY, NJ | \$25,452.87 | 0.00\% | 99.99\% |
| DAVIDSON COUNTY, NC | \$24,000.00 | 0.00\% | 99.99\% |
| CULPEPER COUNTY, VA | \$18,365.00 | 0.00\% | 100.00\% |


| COUNTY_STATE |  |  |  |
| :--- | ---: | ---: | ---: |
| PAYMENTS | PERCENT | CUMULATIVE <br> PERCENTAGE |  |
| MADISON COUNTY, NY | $\$ 15,823.40$ | $0.00 \%$ | $100.00 \%$ |
| LEHIGH COUNTY, PA | $\$ 14,169.00$ | $0.00 \%$ | $100.00 \%$ |
| NEW YORK COUNTY, NY | $\$ 13,804.82$ | $0.00 \%$ | $100.00 \%$ |
| PHILADELPHIA COUNTY, PA | $\$ 12,572.35$ | $0.00 \%$ | $100.00 \%$ |
| GREENVILLE COUNTY, SC | $\$ 11,587.50$ | $0.00 \%$ | $100.00 \%$ |
| LUCAS COUNTY, OH | $\$ 7,741.72$ | $0.00 \%$ | $100.00 \%$ |
| DANVILLE CITY COUNTY, VA | $\$ 7,343.00$ | $0.00 \%$ | $100.00 \%$ |
| LA SALLE COUNTY, IL | $\$ 7,028.74$ | $0.00 \%$ | $100.00 \%$ |
| NORTHUMBERLAND COUNTY, VA | $\$ 4,275.00$ | $0.00 \%$ | $100.00 \%$ |
| PRINCE WILLIAM COUNTY, VA | $\$ 3,800.00$ | $0.00 \%$ | $100.00 \%$ |
| LAKE COUNTY, IL | $\$ 2,180.00$ | $0.00 \%$ | $100.00 \%$ |
| CHARLESTON COUNTY, SC | $\$ 453.60$ | $0.00 \%$ | $100.00 \%$ |
| TARRANT COUNTY, TX | $\$ 0.00$ | $0.00 \%$ | $100.00 \%$ |
| BEXAR COUNTY, TX | $\$ 0.00$ | $0.00 \%$ | $100.00 \%$ |
| Grand Total | $\$ 2,208,212,568.14$ | $\mathbf{1 0 0 . 0 0 \%}$ |  |

TABLE B-3.
CITY OF BALTIMORE GEOGRAPHIC MARKET AREA ARCHITECTURE \& ENGINEERING FIRMS

|  |  |  | CUMULATIVE |
| :--- | ---: | ---: | ---: |
| COUNTY_STATE | PAYMENTS | PERCENT | PERCENTAGE |
| BALTIMORE CITY, MD | $\$ 84,667,697.12$ | $38.13 \%$ | $38.13 \%$ |
| BALTIMORE COUNTY, MD | $\$ 67,261,358.61$ | $30.29 \%$ | $68.43 \%$ |
| HOWARD COUNTY, MD | $\$ 22,815,611.91$ | $10.28 \%$ | $78.70 \%$ |
| MONTGOMERY COUNTY, MD | $\$ 13,728,456.80$ | $6.18 \%$ | $84.89 \%$ |
| ANNE ARUNDEL COUNTY, MD | $\$ 8,375,787.87$ | $3.77 \%$ | $88.66 \%$ |
| PRINCE GEORGES COUNTY, MD | $\$ 6,741,874.42$ | $3.04 \%$ | $91.70 \%$ |
| HARFORD COUNTY, MD | $\$ 1,415,121.64$ | $0.64 \%$ | $92.33 \%$ |
| CARROLL COUNTY, MD | $\$ 692,344.43$ | $0.31 \%$ | $92.65 \%$ |
| QUEEN ANNES COUNTY, MD | $\$ 344,245.25$ | $0.16 \%$ | $92.80 \%$ |
| BUCKS COUNTY, PA | $\$ 5,003,608.09$ | $2.25 \%$ | $95.05 \%$ |
| LOUDOUN COUNTY, VA | $\$ 4,529,275.29$ | $2.04 \%$ | $97.09 \%$ |
| DISTRICT OF COLUMBIA COUNTY, DC | $\$ 1,526,504.31$ | $0.69 \%$ | $97.78 \%$ |
| PORTAGE COUNTY, OH | $\$ 1,253,251.94$ | $0.56 \%$ | $98.35 \%$ |
| NEW YORK COUNTY, NY | $\$ 972,864.07$ | $0.44 \%$ | $98.78 \%$ |
| DAUPHIN COUNTY, PA | $\$ 450,532.12$ | $0.20 \%$ | $98.99 \%$ |
| HENRICO COUNTY, VA | $\$ 432,814.29$ | $0.19 \%$ | $99.18 \%$ |
| ARLINGTON COUNTY, VA | $\$ 301,117.83$ | $0.14 \%$ | $99.32 \%$ |
| WILLIAMSBURG CITY COUNTY, VA | $\$ 250,570.56$ | $0.11 \%$ | $99.43 \%$ |
| FAIRFAX COUNTY, VA | $\$ 222,953.31$ | $0.10 \%$ | $99.53 \%$ |
| ALLEGHENY COUNTY, PA | $\$ 188,625.75$ | $0.08 \%$ | $99.62 \%$ |
| PORTER COUNTY, IN | $\$ 157,529.45$ | $0.07 \%$ | $99.69 \%$ |
| ONONDAGA COUNTY, NY | $\$ 127,551.68$ | $0.06 \%$ | $99.74 \%$ |
| VIRGINIA BEACH CITY COUNTY, VA | $\$ 118,588.63$ | $0.05 \%$ | $99.80 \%$ |
| BUTLER COUNTY, PA | $\$ 101,585.00$ | $0.05 \%$ | $99.84 \%$ |


| COUNTY_STATE | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: |
| WAYNE COUNTY, MI | \$98,560.00 | 0.04\% | 99.89\% |
| UNION COUNTY, PA | \$60,000.00 | 0.03\% | 99.91\% |
| BERKS COUNTY, PA | \$47,065.00 | 0.02\% | 99.94\% |
| YORK COUNTY, PA | \$40,577.22 | 0.02\% | 99.95\% |
| HENNEPIN COUNTY, MN | \$37,136.08 | 0.02\% | 99.97\% |
| LANCASTER COUNTY, PA | \$21,656.52 | 0.01\% | 99.98\% |
| BERGEN COUNTY, NJ | \$20,416.42 | 0.01\% | 99.99\% |
| FULTON COUNTY, GA | \$11,864.78 | 0.01\% | 100.00\% |
| JOHNSON COUNTY, KS | \$4,692.50 | 0.00\% | 100.00\% |
| INTERNATIONAL | \$2,190.40 | 0.00\% | 100.00\% |
| BURLINGTON COUNTY, NJ | \$1,833.68 | 0.00\% | 100.00\% |
| NEW CASTLE COUNTY, DE | \$1,371.00 | 0.00\% | 100.00\% |
| SAINT LOUIS COUNTY, MO | \$0.00 | 0.00\% | 100.00\% |
| Grand Total | \$222,027,233.97 | 100.00\% |  |

TABLE B-4.
CITY OF BALTIMORE GEOGRAPHIC MARKET AREA GOODS \& OTHER SERVICES FIRMS

|  |  |  | CUMULATIVE |
| :--- | ---: | ---: | ---: |
| COUNTY_STATE | PAYMENTS | PERCENT | PERCENTAGE |
| ANNE ARUNDEL COUNTY, MD | $\$ 283,870,229.32$ | $36.24 \%$ | $36.24 \%$ |
| BALTIMORE COUNTY, MD | $\$ 104,302,996.07$ | $13.31 \%$ | $49.55 \%$ |
| BALTIMORE CITY, MD | $\$ 89,809,406.10$ | $11.46 \%$ | $61.01 \%$ |
| PRINCE GEORGES COUNTY, MD | $\$ 41,890,978.85$ | $5.35 \%$ | $66.36 \%$ |
| HOWARD COUNTY, MD | $\$ 17,620,265.39$ | $2.25 \%$ | $68.61 \%$ |
| HARFORD COUNTY, MD | $\$ 8,223,753.95$ | $1.05 \%$ | $69.66 \%$ |
| MONTGOMERY COUNTY, MD | $\$ 7,032,108.86$ | $0.90 \%$ | $70.56 \%$ |
| CARROLL COUNTY, MD | $\$ 4,426,557.47$ | $0.57 \%$ | $71.12 \%$ |
| QUEEN ANNES COUNTY, MD | $\$ 29,230.00$ | $0.00 \%$ | $71.13 \%$ |
| DELAWARE COUNTY, PA | $\$ 36,793,030.80$ | $4.70 \%$ | $75.82 \%$ |
| PRINCE WILLIAM COUNTY, VA | $\$ 14,289,264.58$ | $1.82 \%$ | $77.65 \%$ |
| MIDDLESEX COUNTY, NJ | $\$ 13,853,463.58$ | $1.77 \%$ | $79.42 \%$ |
| MARICOPA COUNTY, AZ | $\$ 11,406,722.71$ | $1.46 \%$ | $80.87 \%$ |
| ALLEGHENY COUNTY, PA | $\$ 9,539,730.20$ | $1.22 \%$ | $82.09 \%$ |
| FAIRFIELD COUNTY, CT | $\$ 8,971,934.18$ | $1.15 \%$ | $83.24 \%$ |
| FREDERICK COUNTY, MD | $\$ 8,768,952.49$ | $1.12 \%$ | $84.35 \%$ |
| MECKLENBURG COUNTY, NC | $\$ 7,716,857.33$ | $0.99 \%$ | $85.34 \%$ |
| HUDSON COUNTY, NJ | $\$ 7,392,834.75$ | $0.94 \%$ | $86.28 \%$ |
| BUCKS COUNTY, PA | $\$ 7,199,893.50$ | $0.92 \%$ | $87.20 \%$ |
| FAIRFAX COUNTY, VA | $\$ 7,072,536.28$ | $0.90 \%$ | $88.11 \%$ |
| COOK COUNTY, IL | $\$ 7,051,408.81$ | $0.90 \%$ | $89.01 \%$ |
| MONTGOMERY COUNTY, PA | $\$ 6,677,975.44$ | $0.85 \%$ | $89.86 \%$ |
| WAYNE COUNTY, MI | $\$ 5,954,653.91$ | $0.76 \%$ | $90.62 \%$ |
| BERKS COUNTY, PA | $\$ 5,642,081.53$ | $0.72 \%$ | $91.34 \%$ |
| ONONDAGA COUNTY, NY | $\$ 5,358,649.83$ | $0.68 \%$ | $92.02 \%$ |


|  |  |  | CUMULATIVE |
| :--- | ---: | ---: | ---: |
| COUNTY_STATE | PAYMENTS | PERCENT | PERCENTAGE |$|$| SAN DIEGO COUNTY, CA |
| :--- |
| NEW CASTLE COUNTY, DE |
| SUSSEX COUNTY, DE |


| COUNTY_STATE | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: |
| ERIE COUNTY, PA | \$272,678.06 | 0.03\% | 98.87\% |
| SUFFOLK COUNTY, MA | \$266,759.84 | 0.03\% | 98.91\% |
| SONOMA COUNTY, CA | \$265,024.27 | 0.03\% | 98.94\% |
| ULSTER COUNTY, NY | \$259,000.00 | 0.03\% | 98.98\% |
| WAYNE COUNTY, PA | \$257,822.23 | 0.03\% | 99.01\% |
| DAVIESS COUNTY, KY | \$257,728.20 | 0.03\% | 99.04\% |
| WINNEBAGO COUNTY, WI | \$250,244.10 | 0.03\% | 99.07\% |
| CHEMUNG COUNTY, NY | \$244,631.68 | 0.03\% | 99.10\% |
| LOUISA COUNTY, VA | \$243,590.00 | 0.03\% | 99.14\% |
| SACRAMENTO COUNTY, CA | \$216,903.83 | 0.03\% | 99.16\% |
| MONROE COUNTY, NY | \$204,718.00 | 0.03\% | 99.19\% |
| TALBOT COUNTY, MD | \$202,624.43 | 0.03\% | 99.21\% |
| GREENVILLE COUNTY, SC | \$199,980.00 | 0.03\% | 99.24\% |
| TULSA COUNTY, OK | \$193,993.01 | 0.02\% | 99.27\% |
| FAYETTE COUNTY, PA | \$191,062.36 | 0.02\% | 99.29\% |
| CHATTOOGA COUNTY, GA | \$188,891.50 | 0.02\% | 99.31\% |
| DAVIDSON COUNTY, NC | \$187,382.86 | 0.02\% | 99.34\% |
| RAMSEY COUNTY, MN | \$186,347.30 | 0.02\% | 99.36\% |
| CAMDEN COUNTY, NJ | \$185,506.22 | 0.02\% | 99.39\% |
| RANDOLPH COUNTY, NC | \$178,860.00 | 0.02\% | 99.41\% |
| COBB COUNTY, GA | \$176,141.74 | 0.02\% | 99.43\% |
| CLINTON COUNTY, OH | \$157,321.31 | 0.02\% | 99.45\% |
| DENVER COUNTY, CO | \$145,987.30 | 0.02\% | 99.47\% |
| PINELLAS COUNTY, FL | \$135,727.55 | 0.02\% | 99.49\% |
| KENTON COUNTY, KY | \$134,293.63 | 0.02\% | 99.50\% |
| CENTRE COUNTY, PA | \$131,043.00 | 0.02\% | 99.52\% |
| OTTAWA COUNTY, MI | \$126,060.70 | 0.02\% | 99.54\% |
| MOBILE COUNTY, AL | \$122,550.00 | 0.02\% | 99.55\% |
| DAKOTA COUNTY, MN | \$121,618.83 | 0.02\% | 99.57\% |
| DANE COUNTY, WI | \$120,617.00 | 0.02\% | 99.58\% |
| CLARK COUNTY, IN | \$118,940.00 | 0.02\% | 99.60\% |
| ATLANTIC COUNTY, NJ | \$110,868.63 | 0.01\% | 99.61\% |
| SANTA CLARA COUNTY, CA | \$110,280.00 | 0.01\% | 99.63\% |
| PROVIDENCE COUNTY, RI | \$107,493.20 | 0.01\% | 99.64\% |
| NORFOLK COUNTY, MA | \$105,321.63 | 0.01\% | 99.65\% |
| MUSCATINE COUNTY, IA | \$103,558.35 | 0.01\% | 99.67\% |
| MULTNOMAH COUNTY, OR | \$100,500.00 | 0.01\% | 99.68\% |
| WARREN COUNTY, VA | \$98,120.00 | 0.01\% | 99.69\% |
| INTERNATIONAL | \$93,630.54 | 0.01\% | 99.70\% |
| DUVAL COUNTY, FL | \$90,262.18 | 0.01\% | 99.72\% |
| SAINT TAMMANY COUNTY, LA | \$87,578.34 | 0.01\% | 99.73\% |
| BEXAR COUNTY, TX | \$84,322.63 | 0.01\% | 99.74\% |
| NEW LONDON COUNTY, CT | \$80,164.99 | 0.01\% | 99.75\% |
| LEHIGH COUNTY, PA | \$78,527.99 | 0.01\% | 99.76\% |
| CHESTER COUNTY, PA | \$74,965.40 | 0.01\% | 99.77\% |
| ESSEX COUNTY, NJ | \$70,320.00 | 0.01\% | 99.78\% |


| COUNTY_STATE | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: |
| MERCER COUNTY, PA | \$70,060.00 | 0.01\% | 99.79\% |
| ALLEN COUNTY, IN | \$62,731.72 | 0.01\% | 99.79\% |
| BERKELEY COUNTY, SC | \$62,006.25 | 0.01\% | 99.80\% |
| LIVINGSTON COUNTY, NY | \$54,820.61 | 0.01\% | 99.81\% |
| RACINE COUNTY, WI | \$52,896.52 | 0.01\% | 99.81\% |
| POWHATAN COUNTY, VA | \$50,250.00 | 0.01\% | 99.82\% |
| PIERCE COUNTY, WA | \$50,192.40 | 0.01\% | 99.83\% |
| SALT LAKE COUNTY, UT | \$49,910.00 | 0.01\% | 99.83\% |
| VIRGINIA BEACH CITY COUNTY, VA | \$49,821.68 | 0.01\% | 99.84\% |
| SCOTT COUNTY, IA | \$45,400.00 | 0.01\% | 99.85\% |
| JASPER COUNTY, MO | \$44,557.68 | 0.01\% | 99.85\% |
| DUPAGE COUNTY, IL | \$44,002.73 | 0.01\% | 99.86\% |
| ORANGE COUNTY, CA | \$43,768.40 | 0.01\% | 99.86\% |
| KANE COUNTY, IL | \$43,125.00 | 0.01\% | 99.87\% |
| MERCER COUNTY, NJ | \$43,062.10 | 0.01\% | 99.87\% |
| MARION COUNTY, IN | \$42,074.97 | 0.01\% | 99.88\% |
| FRANKLIN COUNTY, NC | \$41,656.65 | 0.01\% | 99.88\% |
| STARK COUNTY, OH | \$40,542.00 | 0.01\% | 99.89\% |
| WASATCH COUNTY, UT | \$38,880.20 | 0.00\% | 99.89\% |
| WILLIAMSON COUNTY, TX | \$35,227.50 | 0.00\% | 99.90\% |
| PALM BEACH COUNTY, FL | \$33,122.72 | 0.00\% | 99.90\% |
| SUMMIT COUNTY, OH | \$31,963.96 | 0.00\% | 99.91\% |
| SOMERSET COUNTY, NJ | \$31,821.18 | 0.00\% | 99.91\% |
| ARAPAHOE COUNTY, CO | \$30,735.00 | 0.00\% | 99.92\% |
| ROSS COUNTY, OH | \$29,160.00 | 0.00\% | 99.92\% |
| KINGS COUNTY, NY | \$27,870.66 | 0.00\% | 99.92\% |
| SEMINOLE COUNTY, FL | \$27,058.00 | 0.00\% | 99.93\% |
| BROWN COUNTY, WI | \$25,395.14 | 0.00\% | 99.93\% |
| BUNCOMBE COUNTY, NC | \$25,116.00 | 0.00\% | 99.93\% |
| ERIE COUNTY, NY | \$23,959.54 | 0.00\% | 99.94\% |
| WINONA COUNTY, MN | \$23,835.77 | 0.00\% | 99.94\% |
| MACOMB COUNTY, MI | \$23,100.00 | 0.00\% | 99.94\% |
| RIVERSIDE COUNTY, CA | \$22,987.50 | 0.00\% | 99.94\% |
| ALACHUA COUNTY, FL | \$22,005.00 | 0.00\% | 99.95\% |
| ALAMEDA COUNTY, CA | \$21,906.00 | 0.00\% | 99.95\% |
| OCEAN COUNTY, NJ | \$21,690.00 | 0.00\% | 99.95\% |
| GLOUCESTER COUNTY, NJ | \$21,062.90 | 0.00\% | 99.96\% |
| CLEVELAND COUNTY, OK | \$19,950.00 | 0.00\% | 99.96\% |
| DOUGLAS COUNTY, NE | \$19,116.00 | 0.00\% | 99.96\% |
| ALBEMARLE COUNTY, VA | \$18,226.23 | 0.00\% | 99.96\% |
| BOULDER COUNTY, CO | \$18,054.00 | 0.00\% | 99.97\% |
| MIAMI DADE COUNTY, FL | \$17,670.86 | 0.00\% | 99.97\% |
| WAUKESHA COUNTY, WI | \$16,800.00 | 0.00\% | 99.97\% |
| NASSAU COUNTY, NY | \$16,739.74 | 0.00\% | 99.97\% |
| MONTGOMERY COUNTY, OH | \$16,544.00 | 0.00\% | 99.97\% |
| MILWAUKEE COUNTY, WI | \$16,200.00 | 0.00\% | 99.98\% |


| COUNTY_STATE | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: |
| HARTFORD COUNTY, CT | \$15,490.20 | 0.00\% | 99.98\% |
| RICHMOND COUNTY, GA | \$14,890.18 | 0.00\% | 99.98\% |
| PASSAIC COUNTY, NJ | \$14,652.89 | 0.00\% | 99.98\% |
| WAUPACA COUNTY, WI | \$14,588.74 | 0.00\% | 99.98\% |
| JOHNSON COUNTY, KS | \$11,712.10 | 0.00\% | 99.99\% |
| LAKE COUNTY, OH | \$11,625.00 | 0.00\% | 99.99\% |
| DAVIS COUNTY, UT | \$11,500.00 | 0.00\% | 99.99\% |
| DELAWARE COUNTY, OH | \$11,107.25 | 0.00\% | 99.99\% |
| CUMBERLAND COUNTY, NJ | \$10,785.00 | 0.00\% | 99.99\% |
| LAKE COUNTY, IL | \$10,611.23 | 0.00\% | 99.99\% |
| WASHTENAW COUNTY, MI | \$8,142.00 | 0.00\% | 99.99\% |
| HANOVER COUNTY, VA | \$8,078.05 | 0.00\% | 99.99\% |
| HUMBOLDT COUNTY, CA | \$7,557.12 | 0.00\% | 100.00\% |
| FRANKLIN COUNTY, VA | \$7,303.20 | 0.00\% | 100.00\% |
| OZAUKEE COUNTY, WI | \$6,699.00 | 0.00\% | 100.00\% |
| KERN COUNTY, CA | \$4,869.02 | 0.00\% | 100.00\% |
| CHARLOTTE COUNTY, FL | \$4,550.79 | 0.00\% | 100.00\% |
| PLYMOUTH COUNTY, MA | \$4,161.97 | 0.00\% | 100.00\% |
| HENDRICKS COUNTY, IN | \$2,970.24 | 0.00\% | 100.00\% |
| ALAMANCE COUNTY, NC | \$1,420.00 | 0.00\% | 100.00\% |
| BOONE COUNTY, MO | \$1,121.00 | 0.00\% | 100.00\% |
| NEW YORK COUNTY, NY | \$699.90 | 0.00\% | 100.00\% |
| CHARLES COUNTY, MD | \$458.25 | 0.00\% | 100.00\% |
| MANATEE COUNTY, FL | \$429.98 | 0.00\% | 100.00\% |
| POWESHIEK COUNTY, IA | \$89.10 | 0.00\% | 100.00\% |
| KENT COUNTY, DE | \$0.00 | 0.00\% | 100.00\% |
| MEDINA COUNTY, OH | \$0.00 | 0.00\% | 100.00\% |
| BARNSTABLE COUNTY, MA | \$0.00 | 0.00\% | 100.00\% |
| PIKE COUNTY, MO | \$0.00 | 0.00\% | 100.00\% |
| SAINT LOUIS COUNTY, MO | \$0.00 | 0.00\% | 100.00\% |
| WILLIAMSON COUNTY, TN | \$0.00 | 0.00\% | 100.00\% |
| SAINT MARYS COUNTY, MD | \$0.00 | 0.00\% | 100.00\% |
| BRISTOL COUNTY, MA | \$0.00 | 0.00\% | 100.00\% |
| SCOTT COUNTY, MN | \$0.00 | 0.00\% | 100.00\% |
| CONTRA COSTA COUNTY, CA | \$0.00 | 0.00\% | 100.00\% |
| ELMORE COUNTY, AL | \$0.00 | 0.00\% | 100.00\% |
| ALBANY COUNTY, NY | \$0.00 | 0.00\% | 100.00\% |
| CATAWBA COUNTY, NC | \$0.00 | 0.00\% | 100.00\% |
| MONTGOMERY COUNTY, AL | \$0.00 | 0.00\% | 100.00\% |
| CLINTON COUNTY, NY | \$0.00 | 0.00\% | 100.00\% |
| Grand Total | \$783,394,101.27 | 100.00\% |  |

TABLE B-5.
CITY OF BALTIMORE GEOGRAPHIC MARKET AREA
PROFESSIONAL SERVICES

| COUNTY_STATE | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: |
| BALTIMORE COUNTY, MD | \$36,816,684.86 | 22.55\% | 22.55\% |
| BALTIMORE CITY, MD | \$23,570,799.69 | 14.43\% | 36.98\% |
| PRINCE GEORGES COUNTY, MD | \$10,072,383.52 | 6.17\% | 43.15\% |
| MONTGOMERY COUNTY, MD | \$6,346,428.93 | 3.89\% | 47.04\% |
| ANNE ARUNDEL COUNTY, MD | \$3,094,574.53 | 1.90\% | 48.93\% |
| HARFORD COUNTY, MD | \$1,849,194.46 | 1.13\% | 50.06\% |
| QUEEN ANNES COUNTY, MD | \$669,358.00 | 0.41\% | 50.47\% |
| CARROLL COUNTY, MD | \$475,813.55 | 0.29\% | 50.76\% |
| HOWARD COUNTY, MD | \$322,046.47 | 0.20\% | 50.96\% |
| COOK COUNTY, IL | \$38,672,995.02 | 23.68\% | 74.65\% |
| DISTRICT OF COLUMBIA COUNTY, DC | \$4,925,278.52 | 3.02\% | 77.66\% |
| INTERNATIONAL | \$4,013,751.85 | 2.46\% | 80.12\% |
| SALT LAKE COUNTY, UT | \$3,920,000.00 | 2.40\% | 82.52\% |
| DALLAS COUNTY, TX | \$3,581,531.77 | 2.19\% | 84.71\% |
| SAN DIEGO COUNTY, CA | \$3,229,485.04 | 1.98\% | 86.69\% |
| SPOKANE COUNTY, WA | \$3,156,840.00 | 1.93\% | 88.62\% |
| SAN BERNARDINO COUNTY, CA | \$1,882,872.20 | 1.15\% | 89.78\% |
| ERIE COUNTY, NY | \$1,694,112.75 | 1.04\% | 90.81\% |
| MIDDLESEX COUNTY, MA | \$1,272,903.60 | 0.78\% | 91.59\% |
| MARICOPA COUNTY, AZ | \$1,259,352.00 | 0.77\% | 92.37\% |
| ARLINGTON COUNTY, VA | \$1,174,450.00 | 0.72\% | 93.08\% |
| TRAVIS COUNTY, TX | \$1,091,661.95 | 0.67\% | 93.75\% |
| CONTRA COSTA COUNTY, CA | \$988,740.00 | 0.61\% | 94.36\% |
| SOMERSET COUNTY, NJ | \$776,865.17 | 0.48\% | 94.83\% |
| NORTHAMPTON COUNTY, PA | \$616,837.00 | 0.38\% | 95.21\% |
| WAKE COUNTY, NC | \$607,821.16 | 0.37\% | 95.58\% |
| FORSYTH COUNTY, NC | \$561,613.75 | 0.34\% | 95.93\% |
| VIRGINIA BEACH CITY COUNTY, VA | \$557,728.20 | 0.34\% | 96.27\% |
| FREDERICK COUNTY, MD | \$473,949.32 | 0.29\% | 96.56\% |
| MONTGOMERY COUNTY, OH | \$427,737.66 | 0.26\% | 96.82\% |
| BROWARD COUNTY, FL | \$414,521.85 | 0.25\% | 97.08\% |
| DANE COUNTY, WI | \$394,263.10 | 0.24\% | 97.32\% |
| VOLUSIA COUNTY, FL | \$358,000.00 | 0.22\% | 97.54\% |
| CUMBERLAND COUNTY, ME | \$257,959.21 | 0.16\% | 97.69\% |
| ARAPAHOE COUNTY, CO | \$246,570.04 | 0.15\% | 97.85\% |
| BEXAR COUNTY, TX | \$244,269.53 | 0.15\% | 98.00\% |
| NEW HAVEN COUNTY, CT | \$240,288.92 | 0.15\% | 98.14\% |
| HENNEPIN COUNTY, MN | \$232,458.73 | 0.14\% | 98.28\% |
| WASHINGTON COUNTY, MD | \$229,479.07 | 0.14\% | 98.43\% |
| YORK COUNTY, PA | \$212,006.75 | 0.13\% | 98.56\% |
| BARNWELL COUNTY, SC | \$211,993.00 | 0.13\% | 98.69\% |
| GWINNETT COUNTY, GA | \$159,730.00 | 0.10\% | 98.78\% |
| HARRIS COUNTY, TX | \$140,430.64 | 0.09\% | 98.87\% |


| COUNTY_STATE | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: |
| MADISON COUNTY, AL | \$135,556.68 | 0.08\% | 98.95\% |
| HAMILTON COUNTY, IN | \$120,000.00 | 0.07\% | 99.03\% |
| LOS ANGELES COUNTY, CA | \$119,399.71 | 0.07\% | 99.10\% |
| CENTRE COUNTY, PA | \$108,819.73 | 0.07\% | 99.17\% |
| MONROE COUNTY, NY | \$104,068.00 | 0.06\% | 99.23\% |
| COBB COUNTY, GA | \$103,536.00 | 0.06\% | 99.29\% |
| MORGAN COUNTY, UT | \$102,810.00 | 0.06\% | 99.36\% |
| WINNEBAGO COUNTY, WI | \$82,443.68 | 0.05\% | 99.41\% |
| DUPAGE COUNTY, IL | \$82,297.50 | 0.05\% | 99.46\% |
| PIERCE COUNTY, WI | \$77,908.95 | 0.05\% | 99.50\% |
| CAMERON COUNTY, TX | \$71,215.24 | 0.04\% | 99.55\% |
| RILEY COUNTY, KS | \$70,375.00 | 0.04\% | 99.59\% |
| DEKALB COUNTY, GA | \$64,400.00 | 0.04\% | 99.63\% |
| MILWAUKEE COUNTY, WI | \$57,011.69 | 0.03\% | 99.66\% |
| NEW CASTLE COUNTY, DE | \$53,869.86 | 0.03\% | 99.70\% |
| FAIRFAX COUNTY, VA | \$52,321.02 | 0.03\% | 99.73\% |
| ORANGE COUNTY, CA | \$49,950.00 | 0.03\% | 99.76\% |
| PHILADELPHIA COUNTY, PA | \$46,023.32 | 0.03\% | 99.79\% |
| MACOMB COUNTY, MI | \$41,629.00 | 0.03\% | 99.81\% |
| RICHMOND CITY COUNTY, VA | \$30,353.25 | 0.02\% | 99.83\% |
| LAFAYETTE COUNTY, LA | \$29,183.52 | 0.02\% | 99.85\% |
| MONTGOMERY COUNTY, PA | \$28,640.00 | 0.02\% | 99.87\% |
| OAKLAND COUNTY, MI | \$27,010.00 | 0.02\% | 99.88\% |
| FRANKLIN COUNTY, PA | \$21,755.72 | 0.01\% | 99.90\% |
| ALAMANCE COUNTY, NC | \$20,932.50 | 0.01\% | 99.91\% |
| CUYAHOGA COUNTY, OH | \$18,877.00 | 0.01\% | 99.92\% |
| DAKOTA COUNTY, MN | \$16,600.00 | 0.01\% | 99.93\% |
| KANAWHA COUNTY, WV | \$15,716.00 | 0.01\% | 99.94\% |
| HOWELL COUNTY, MO | \$13,837.00 | 0.01\% | 99.95\% |
| WASHTENAW COUNTY, MI | \$13,673.00 | 0.01\% | 99.96\% |
| SNOHOMISH COUNTY, WA | \$10,020.50 | 0.01\% | 99.97\% |
| DENVER COUNTY, CO | \$9,600.00 | 0.01\% | 99.97\% |
| SACRAMENTO COUNTY, CA | \$9,000.00 | 0.01\% | 99.98\% |
| WAUKESHA COUNTY, WI | \$8,400.00 | 0.01\% | 99.98\% |
| MECKLENBURG COUNTY, NC | \$8,015.58 | 0.00\% | 99.99\% |
| SANGAMON COUNTY, IL | \$7,463.00 | 0.00\% | 99.99\% |
| CHESTER COUNTY, PA | \$5,652.10 | 0.00\% | 99.99\% |
| KING COUNTY, WA | \$4,504.30 | 0.00\% | 100.00\% |
| RIVERSIDE COUNTY, CA | \$3,737.50 | 0.00\% | 100.00\% |
| WICOMICO COUNTY, MD | \$340.00 | 0.00\% | 100.00\% |
| FULTON COUNTY, GA | \$0.00 | 0.00\% | 100.00\% |
| STEARNS COUNTY, MN | \$0.00 | 0.00\% | 100.00\% |
| HARTFORD COUNTY, CT | \$0.00 | 0.00\% | 100.00\% |
| MONTEREY COUNTY, CA | \$0.00 | 0.00\% | 100.00\% |
| Grand Total | \$163,292,728.16 | 100.00\% |  |

## Product Market Area

TABLE B-6. CITY OF BALTIMORE PRODUCT MARKET AREA ALL NAICS CODES

| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: | :---: |
| 237110 | Water and Sewer Line and Related Structures Construction | \$842,065,898.93 | 24.94\% | 24.94\% |
| 238110 | Poured Concrete Foundation and Structure Contractors | \$234,217,687.93 | 6.94\% | 31.87\% |
| 541330 | Engineering Services | \$215,724,368.70 | 6.39\% | 38.26\% |
| 561320 | Temporary Help Services | \$195,567,259.61 | 5.79\% | 44.05\% |
| 238210 | Electrical Contractors and Other Wiring Installation Contractors | \$154,933,063.09 | 4.59\% | 48.64\% |
| 238910 | Site Preparation Contractors | \$133,759,379.93 | 3.96\% | 52.60\% |
| 237310 | Highway, Street, and Bridge Construction | \$116,788,033.30 | 3.46\% | 56.06\% |
| 238220 | Plumbing, Heating, and Air-Conditioning Contractor | \$115,157,478.63 | 3.41\% | 59.47\% |
| 236220 | Commercial and Institutional Building Construction | \$110,481,910.71 | 3.27\% | 62.74\% |
| 561720 | Janitorial Services | \$84,247,888.91 | 2.49\% | 65.24\% |
| 541511 | Custom Computer Programming Services | \$76,489,017.45 | 2.27\% | 67.50\% |
| 237990 | Other Heavy and Civil Engineering Construction | \$73,437,726.57 | 2.17\% | 69.67\% |
| 561730 | Landscaping Services | \$65,591,269.21 | 1.94\% | 71.62\% |
| 238190 | Other Foundation, Structure, and Building Exterior Contractors | \$62,479,462.80 | 1.85\% | 73.47\% |
| 484110 | General Freight Trucking, Local | \$47,476,625.28 | 1.41\% | 74.87\% |
| 238990 | All Other Specialty Trade Contractors | \$41,447,285.60 | 1.23\% | 76.10\% |
| 423430 | Computer and Computer Peripheral Equipment and Software Merchant Wholesalers | \$40,344,469.16 | 1.19\% | 77.30\% |
| 454310 | Fuel Dealers | \$34,870,839.52 | 1.03\% | 78.33\% |
| 423810 | Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers | \$34,194,536.32 | 1.01\% | 79.34\% |
| 811219 | Other Electronic and Precision Equipment Repair and Maintenance | \$28,037,090.68 | 0.83\% | 80.17\% |
| 423910 | Sporting and Recreational Goods and Supplies Merchant Wholesalers | \$26,845,321.16 | 0.79\% | 80.97\% |
| 423610 | Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers | \$23,370,442.48 | 0.69\% | 81.66\% |
| 327320 | Ready-Mix Concrete Manufacturing | \$22,241,085.75 | 0.66\% | 82.32\% |
| 423850 | Service Establishment Equipment and Supplies Merchant Wholesalers | \$21,619,108.77 | 0.64\% | 82.96\% |
| 424690 | Other Chemical and Allied Products Merchant Wholesalers | \$21,313,018.64 | 0.63\% | 83.59\% |
| 561612 | Security Guards and Patrol Services | \$20,155,019.73 | 0.60\% | 84.18\% |
| 423830 | Industrial Machinery and Equipment Merchant Wholesalers | \$18,728,876.55 | 0.55\% | 84.74\% |
| 541350 | Building Inspection Services | \$16,874,272.97 | 0.50\% | 85.24\% |
| 621340 | Offices of Physical, Occupational and Speech Therapists, and Audiologists | \$16,268,687.87 | 0.48\% | 85.72\% |
| 238320 | Painting and Wall Covering Contractors | \$16,137,350.31 | 0.48\% | 86.20\% |
| 237130 | Power and Communication Line and Related Structures Construction | \$14,889,395.84 | 0.44\% | 86.64\% |
| 541512 | Computer Systems Design Services | \$14,384,939.32 | 0.43\% | 87.07\% |
| 812930 | Parking Lots and Garages | \$14,228,359.19 | 0.42\% | 87.49\% |

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| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: | :---: |
| 423320 | Brick, Stone, and Related Construction Material Merchant Wholesalers | \$13,966,412.99 | 0.41\% | 87.90\% |
| 562998 | All Other Miscellaneous Waste Management Services | \$13,254,717.20 | 0.39\% | 88.29\% |
| 423490 | Other Professional Equipment and Supplies Merchant Wholesalers | \$12,883,915.58 | 0.38\% | 88.67\% |
| 441110 | New Car Dealers | \$12,867,756.97 | 0.38\% | 89.06\% |
| 238120 | Structural Steel and Precast Concrete Contractors | \$12,541,666.27 | 0.37\% | 89.43\% |
| 238140 | Masonry Contractors | \$11,526,812.58 | 0.34\% | 89.77\% |
| 238160 | Roofing Contractors | \$11,265,759.00 | 0.33\% | 90.10\% |
| 325120 | Industrial Gas Manufacturing | \$11,245,129.98 | 0.33\% | 90.43\% |
| 811310 | Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance | \$10,948,862.22 | 0.32\% | 90.76\% |
| 561621 | Security Systems Services (except Locksmiths) | \$10,936,626.97 | 0.32\% | 91.08\% |
| 423450 | Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers | \$10,882,533.52 | 0.32\% | 91.41\% |
| 562910 | Remediation Services | \$9,737,040.94 | 0.29\% | 91.69\% |
| 811111 | General Automotive Repair | \$9,357,479.00 | 0.28\% | 91.97\% |
| 532112 | Passenger Car Leasing | \$9,279,439.25 | 0.27\% | 92.25\% |
| 238290 | Other Building Equipment Contractors | \$8,522,857.71 | 0.25\% | 92.50\% |
| 541380 | Testing Laboratories | \$8,470,085.30 | 0.25\% | 92.75\% |
| 811118 | Other Automotive Mechanical and Electrical Repair and Maintenance | \$8,376,056.89 | 0.25\% | 93.00\% |
| 484220 | Specialized Freight (except Used Goods) Trucking, Local | \$7,864,772.14 | 0.23\% | 93.23\% |
| 722320 | Caterers | \$7,652,003.82 | 0.23\% | 93.46\% |
| 332312 | Fabricated Structural Metal Manufacturing | \$7,457,846.15 | 0.22\% | 93.68\% |
| 541519 | Other Computer Related Services | \$7,381,826.24 | 0.22\% | 93.90\% |
| 541614 | Process, Physical Distribution, and Logistics Consulting Services | \$7,132,570.87 | 0.21\% | 94.11\% |
| 561710 | Exterminating and Pest Control Services | \$6,560,974.35 | 0.19\% | 94.30\% |
| 423120 | Motor Vehicle Supplies and New Parts Merchant Wholesalers | \$6,522,270.32 | 0.19\% | 94.49\% |
| 238310 | Drywall and Insulation Contractors | \$6,189,278.86 | 0.18\% | 94.68\% |
| 423210 | Furniture Merchant Wholesalers | \$5,761,579.50 | 0.17\% | 94.85\% |
| 325180 | Other Basic Inorganic Chemical Manufacturing | \$5,574,507.25 | 0.17\% | 95.01\% |
| 621910 | Ambulance Services | \$5,434,130.73 | 0.16\% | 95.17\% |
| 446110 | Pharmacies and Drug Stores | \$5,290,070.22 | 0.16\% | 95.33\% |
| 541611 | Administrative Management and General Management Consulting Services | \$5,246,377.20 | 0.16\% | 95.49\% |
| 485510 | Charter Bus Industry | \$4,859,510.52 | 0.14\% | 95.63\% |
| 221320 | Sewage Treatment Facilities | \$4,806,201.82 | 0.14\% | 95.77\% |
| 238390 | Other Building Finishing Contractors | \$4,750,790.36 | 0.14\% | 95.91\% |
| 423440 | Other Commercial Equipment Merchant Wholesalers | \$4,336,649.50 | 0.13\% | 96.04\% |
| 488190 | Other Support Activities for Air Transportation | \$4,192,063.17 | 0.12\% | 96.17\% |
| 562920 | Materials Recovery Facilities | \$3,875,373.19 | 0.11\% | 96.28\% |
| 532284 | Recreational Goods Rental | \$3,806,071.45 | 0.11\% | 96.39\% |
| 423720 | Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers | \$3,612,645.49 | 0.11\% | 96.50\% |
| 423840 | Industrial Supplies Merchant Wholesalers | \$3,598,375.70 | 0.11\% | 96.61\% |
| 812331 | Linen Supply | \$3,570,800.02 | 0.11\% | 96.71\% |

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| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: | :---: |
| 424720 | Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals) | \$3,494,972.49 | 0.10\% | 96.82\% |
| 238350 | Finish Carpentry Contractors | \$3,252,066.65 | 0.10\% | 96.91\% |
| 332911 | Industrial Valve Manufacturing | \$3,150,038.28 | 0.09\% | 97.01\% |
| 541370 | Surveying and Mapping (except Geophysical) Services | \$3,128,882.16 | 0.09\% | 97.10\% |
| 485310 | Taxi Service | \$3,041,095.80 | 0.09\% | 97.19\% |
| 323111 | Commercial Printing (except Screen and Books) | \$2,996,208.74 | 0.09\% | 97.28\% |
| 541990 | All Other Professional, Scientific, and Technical Services | \$2,987,546.89 | 0.09\% | 97.37\% |
| 238330 | Flooring Contractors | \$2,883,651.03 | 0.09\% | 97.45\% |
| 562211 | Hazardous Waste Treatment and Disposal | \$2,695,960.93 | 0.08\% | 97.53\% |
| 238150 | Glass and Glazing Contractors | \$2,635,716.50 | 0.08\% | 97.61\% |
| 562111 | Solid Waste Collection | \$2,575,543.67 | 0.08\% | 97.68\% |
| 811121 | Automotive Body, Paint, and Interior Repair and Maintenance | \$2,509,241.33 | 0.07\% | 97.76\% |
| 532120 | Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing | \$2,480,647.11 | 0.07\% | 97.83\% |
| 441310 | Automotive Parts and Accessories Stores | \$2,469,996.73 | 0.07\% | 97.91\% |
| 524298 | All Other Insurance Related Activities | \$2,465,370.00 | 0.07\% | 97.98\% |
| 541310 | Architectural Services | \$2,376,694.71 | 0.07\% | 98.05\% |
| 541618 | Other Management Consulting Services | \$2,306,094.50 | 0.07\% | 98.12\% |
| 115310 | Support Activities for Forestry | \$2,269,422.50 | 0.07\% | 98.18\% |
| 518210 | Data Processing, Hosting, and Related Services | \$2,244,637.61 | 0.07\% | 98.25\% |
| 333913 | Measuring, Dispensing, and Other Pumping Equipment Manufacturing | \$2,200,006.00 | 0.07\% | 98.32\% |
| 423390 | Other Construction Material Merchant Wholesalers | \$2,189,350.14 | 0.06\% | 98.38\% |
| 324121 | Asphalt Paving Mixture and Block Manufacturing | \$2,173,031.74 | 0.06\% | 98.45\% |
| 561990 | All Other Support Services | \$2,020,999.28 | 0.06\% | 98.51\% |
| 236210 | Industrial Building Construction | \$1,953,449.56 | 0.06\% | 98.56\% |
| 423310 | Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers | \$1,916,720.91 | 0.06\% | 98.62\% |
| 926130 | Regulation and Administration of Communications, Electric, Gas, and Other Utilities | \$1,741,950.13 | 0.05\% | 98.67\% |
| 448210 | Shoe Stores | \$1,713,640.99 | 0.05\% | 98.72\% |
| 541690 | Other Scientific and Technical Consulting Services | \$1,623,018.02 | 0.05\% | 98.77\% |
| 811211 | Consumer Electronics Repair and Maintenance | \$1,614,377.64 | 0.05\% | 98.82\% |
| 332996 | Fabricated Pipe and Pipe Fitting Manufacturing | \$1,591,591.32 | 0.05\% | 98.87\% |
| 561622 | Locksmiths | \$1,575,873.92 | 0.05\% | 98.91\% |
| 488410 | Motor Vehicle Towing | \$1,574,987.44 | 0.05\% | 98.96\% |
| 541620 | Environmental Consulting Services | \$1,546,308.74 | 0.05\% | 99.00\% |
| 334514 | Totalizing Fluid Meter and Counting Device Manufacturing | \$1,432,187.00 | 0.04\% | 99.05\% |
| 441228 | Motorcycle, ATV, and All Other Motor Vehicle Dealers | \$1,151,909.76 | 0.03\% | 99.08\% |
| 423330 | Roofing, Siding, and Insulation Material Merchant Wholesalers | \$1,144,887.78 | 0.03\% | 99.11\% |
| 221310 | Water Supply and Irrigation Systems | \$1,134,750.00 | 0.03\% | 99.15\% |
| 562991 | Septic Tank and Related Services | \$1,117,845.05 | 0.03\% | 99.18\% |
| 561440 | Collection Agencies | \$1,102,079.71 | 0.03\% | 99.21\% |
| 444120 | Paint and Wallpaper Stores | \$1,100,595.74 | 0.03\% | 99.25\% |
| 541211 | Offices of Certified Public Accountants | \$1,071,914.05 | 0.03\% | 99.28\% |


| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: | :---: |
| 485991 | Special Needs Transportation | \$1,071,803.44 | 0.03\% | 99.31\% |
| 331210 | Iron and Steel Pipe and Tube Manufacturing from Purchased Steel | \$917,928.97 | 0.03\% | 99.34\% |
| 532412 | Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing | \$912,850.01 | 0.03\% | 99.36\% |
| 541612 | Human Resources Consulting Services | \$877,951.56 | 0.03\% | 99.39\% |
| 444210 | Outdoor Power Equipment Stores | \$846,799.76 | 0.03\% | 99.42\% |
| 541360 | Geophysical Surveying and Mapping Services | \$825,250.40 | 0.02\% | 99.44\% |
| 111421 | Nursery and Tree Production | \$802,312.25 | 0.02\% | 99.46\% |
| 325211 | Plastics Material and Resin Manufacturing | \$776,956.07 | 0.02\% | 99.49\% |
| 811411 | Home and Garden Equipment Repair and Maintenance | \$747,285.14 | 0.02\% | 99.51\% |
| 332812 | Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers | \$740,848.00 | 0.02\% | 99.53\% |
| 424110 | Printing and Writing Paper Merchant Wholesalers | \$658,833.05 | 0.02\% | 99.55\% |
| 561790 | Other Services to Buildings and Dwellings | \$655,289.81 | 0.02\% | 99.57\% |
| 922160 | Fire Protection | \$650,343.70 | 0.02\% | 99.59\% |
| 541320 | Landscape Architectural Services | \$609,450.74 | 0.02\% | 99.61\% |
| 238170 | Siding Contractors | \$594,667.85 | 0.02\% | 99.62\% |
| 624190 | Other Individual and Family Services | \$572,211.00 | 0.02\% | 99.64\% |
| 811213 | Communication Equipment Repair and Maintenance | \$564,966.50 | 0.02\% | 99.66\% |
| 423710 | Hardware Merchant Wholesalers | \$534,311.35 | 0.02\% | 99.67\% |
| 561611 | Investigation Services | \$402,840.43 | 0.01\% | 99.69\% |
| 339950 | Sign Manufacturing | \$388,091.06 | 0.01\% | 99.70\% |
| 541940 | Veterinary Services | \$364,434.16 | 0.01\% | 99.71\% |
| 523930 | Investment Advice | \$361,939.00 | 0.01\% | 99.72\% |
| 424990 | Other Miscellaneous Nondurable Goods Merchant Wholesalers | \$361,641.70 | 0.01\% | 99.73\% |
| 561740 | Carpet and Upholstery Cleaning Services | \$348,037.03 | 0.01\% | 99.74\% |
| 562112 | Hazardous Waste Collection | \$328,963.21 | 0.01\% | 99.75\% |
| 448190 | Other Clothing Stores | \$314,982.00 | 0.01\% | 99.76\% |
| 541613 | Marketing Consulting Services | \$300,115.64 | 0.01\% | 99.77\% |
| 327999 | All Other Miscellaneous Nonmetallic Mineral Product Manufacturing | \$293,695.00 | 0.01\% | 99.78\% |
| 424210 | Drugs and Druggists' Sundries Merchant Wholesalers | \$278,092.26 | 0.01\% | 99.78\% |
| 541890 | Other Services Related to Advertising | \$274,957.62 | 0.01\% | 99.79\% |
| 444220 | Nursery, Garden Center, and Farm Supply Stores | \$255,659.76 | 0.01\% | 99.80\% |
| 532111 | Passenger Car Rental | \$255,493.62 | 0.01\% | 99.81\% |
| 561613 | Armored Car Services | \$245,514.42 | 0.01\% | 99.82\% |
| 451110 | Sporting Goods Stores | \$236,061.26 | 0.01\% | 99.82\% |
| 424610 | Plastics Materials and Basic Forms and Shapes Merchant Wholesalers | \$229,701.60 | 0.01\% | 99.83\% |
| 541820 | Public Relations Agencies | \$220,928.00 | 0.01\% | 99.84\% |
| 532420 | Office Machinery and Equipment Rental and Leasing | \$208,453.26 | 0.01\% | 99.84\% |
| 326122 | Plastics Pipe and Pipe Fitting Manufacturing | \$205,368.84 | 0.01\% | 99.85\% |
| 492210 | Local Messengers and Local Delivery | \$190,920.59 | 0.01\% | 99.85\% |
| 442210 | Floor Covering Stores | \$190,764.30 | 0.01\% | 99.86\% |
| 331110 | Iron and Steel Mills and Ferroalloy Manufacturing | \$182,935.99 | 0.01\% | 99.86\% |


| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: | :---: |
| 531311 | Residential Property Managers | \$180,378.19 | 0.01\% | 99.87\% |
| 484210 | Used Household and Office Goods Moving | \$167,352.71 | 0.00\% | 99.88\% |
| 423990 | Other Miscellaneous Durable Goods Merchant Wholesalers | \$165,879.20 | 0.00\% | 99.88\% |
| 621610 | Home Health Care Services | \$162,335.00 | 0.00\% | 99.88\% |
| 541922 | Commercial Photography | \$162,325.35 | 0.00\% | 99.89\% |
| 541110 | Offices of Lawyers | \$161,061.00 | 0.00\% | 99.89\% |
| 561492 | Court Reporting and Stenotype Services | \$145,346.46 | 0.00\% | 99.90\% |
| 333921 | Elevator and Moving Stairway Manufacturing | \$140,459.18 | 0.00\% | 99.90\% |
| 811113 | Automotive Transmission Repair | \$139,101.21 | 0.00\% | 99.91\% |
| 562119 | Other Waste Collection | \$129,549.24 | 0.00\% | 99.91\% |
| 323117 | Books Printing | \$128,942.38 | 0.00\% | 99.91\% |
| 333249 | Other Industrial Machinery Manufacturing | \$113,964.00 | 0.00\% | 99.92\% |
| 424490 | Other Grocery and Related Products Merchant Wholesalers | \$109,698.61 | 0.00\% | 99.92\% |
| 332991 | Ball and Roller Bearing Manufacturing | \$106,161.67 | 0.00\% | 99.92\% |
| 238340 | Tile and Terrazzo Contractors | \$103,700.00 | 0.00\% | 99.93\% |
| 442110 | Furniture Stores | \$97,647.76 | 0.00\% | 99.93\% |
| 485999 | All Other Transit and Ground Passenger Transportation | \$95,301.00 | 0.00\% | 99.93\% |
| 332999 | All Other Miscellaneous Fabricated Metal Product Manufacturing | \$89,283.51 | 0.00\% | 99.94\% |
| 327331 | Concrete Block and Brick Manufacturing | \$82,700.91 | 0.00\% | 99.94\% |
| 811198 | All Other Automotive Repair and Maintenance | \$81,713.92 | 0.00\% | 99.94\% |
| 423410 | Photographic Equipment and Supplies Merchant Wholesalers | \$77,365.63 | 0.00\% | 99.94\% |
| 423110 | Automobile and Other Motor Vehicle Merchant Wholesalers | \$74,350.00 | 0.00\% | 99.95\% |
| 115210 | Support Activities for Animal Production | \$70,060.00 | 0.00\% | 99.95\% |
| 541921 | Photography Studios, Portrait | \$69,450.00 | 0.00\% | 99.95\% |
| 424410 | General Line Grocery Merchant Wholesalers | \$66,010.56 | 0.00\% | 99.95\% |
| 424120 | Stationery and Office Supplies Merchant Wholesalers | \$65,636.99 | 0.00\% | 99.95\% |
| 561311 | Employment Placement Agencies | \$64,400.00 | 0.00\% | 99.96\% |
| 238130 | Framing Contractors | \$62,594.39 | 0.00\% | 99.96\% |
| 314999 | All Other Miscellaneous Textile Product Mills | \$61,042.27 | 0.00\% | 99.96\% |
| 424340 | Footwear Merchant Wholesalers | \$60,836.40 | 0.00\% | 99.96\% |
| 811122 | Automotive Glass Replacement Shops | \$59,390.00 | 0.00\% | 99.96\% |
| 423510 | Metal Service Centers and Other Metal Merchant Wholesalers | \$57,724.30 | 0.00\% | 99.96\% |
| 453910 | Pet and Pet Supplies Stores | \$55,600.59 | 0.00\% | 99.97\% |
| 453998 | All Other Miscellaneous Store Retailers (except Tobacco Stores) | \$55,556.58 | 0.00\% | 99.97\% |
| 561330 | Professional Employer Organizations | \$51,011.00 | 0.00\% | 99.97\% |
| 561210 | Facilities Support Services | \$50,600.00 | 0.00\% | 99.97\% |
| 423820 | Farm and Garden Machinery and Equipment Merchant Wholesalers | \$48,994.80 | 0.00\% | 99.97\% |
| 611430 | Professional and Management Development Training | \$48,740.00 | 0.00\% | 99.97\% |
| 811212 | Computer and Office Machine Repair and Maintenance | \$45,319.48 | 0.00\% | 99.97\% |
| 423920 | Toy and Hobby Goods and Supplies Merchant Wholesalers | \$43,176.72 | 0.00\% | 99.98\% |
| 441320 | Tire Dealers | \$40,763.22 | 0.00\% | 99.98\% |
| 541720 | Research and Development in the Social Sciences and Humanities | \$39,902.00 | 0.00\% | 99.98\% |

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| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: | :---: |
| 325998 | All Other Miscellaneous Chemical Product and Preparation Manufacturing | \$39,747.83 | 0.00\% | 99.98\% |
| 812910 | Pet Care (except Veterinary) Services | \$37,590.00 | 0.00\% | 99.98\% |
| 451120 | Hobby, Toy, and Game Stores | \$36,988.27 | 0.00\% | 99.98\% |
| 321113 | Sawmills | \$36,314.50 | 0.00\% | 99.98\% |
| 541410 | Interior Design Services | \$36,309.05 | 0.00\% | 99.98\% |
| 333120 | Construction Machinery Manufacturing | \$35,393.06 | 0.00\% | 99.98\% |
| 541430 | Graphic Design Services | \$35,319.00 | 0.00\% | 99.99\% |
| 452319 | All Other General Merchandise Stores | \$34,887.30 | 0.00\% | 99.99\% |
| 337215 | Showcase, Partition, Shelving, and Locker Manufacturing | \$32,595.00 | 0.00\% | 99.99\% |
| 326199 | All Other Plastics Product Manufacturing | \$29,183.52 | 0.00\% | 99.99\% |
| 424910 | Farm Supplies Merchant Wholesalers | \$25,524.31 | 0.00\% | 99.99\% |
| 451130 | Sewing, Needlework, and Piece Goods Stores | \$25,116.00 | 0.00\% | 99.99\% |
| 811112 | Automotive Exhaust System Repair | \$24,377.93 | 0.00\% | 99.99\% |
| 711510 | Independent Artists, Writers, and Performers | \$22,987.50 | 0.00\% | 99.99\% |
| 512110 | Motion Picture and Video Production | \$19,950.00 | 0.00\% | 99.99\% |
| 722513 | Limited-Service Restaurants | \$18,967.00 | 0.00\% | 99.99\% |
| 532310 | General Rental Centers | \$18,916.90 | 0.00\% | 99.99\% |
| 511210 | Software Publishers | \$16,544.00 | 0.00\% | 99.99\% |
| 423620 | Household Appliances, Electric Housewares, and Consumer Electronics Merchant Wholesalers | \$14,890.18 | 0.00\% | 99.99\% |
| 339116 | Dental Laboratories | \$14,581.86 | 0.00\% | 99.99\% |
| 811490 | Other Personal and Household Goods Repair and Maintenance | \$13,923.66 | 0.00\% | 100.00\% |
| 325312 | Phosphatic Fertilizer Manufacturing | \$13,920.00 | 0.00\% | 100.00\% |
| 811192 | Car Washes | \$12,561.95 | 0.00\% | 100.00\% |
| 444130 | Hardware Stores | \$11,832.60 | 0.00\% | 100.00\% |
| 333241 | Food Product Machinery Manufacturing | \$11,757.00 | 0.00\% | 100.00\% |
| 621112 | Offices of Physicians, Mental Health Specialists | \$10,550.00 | 0.00\% | 100.00\% |
| 611710 | Educational Support Services | \$10,020.50 | 0.00\% | 100.00\% |
| 621511 | Medical Laboratories | \$9,843.00 | 0.00\% | 100.00\% |
| 237120 | Oil and Gas Pipeline and Related Structures Construction | \$9,250.00 | 0.00\% | 100.00\% |
| 811420 | Reupholstery and Furniture Repair | \$9,053.15 | 0.00\% | 100.00\% |
| 423690 | Other Electronic Parts and Equipment Merchant Wholesalers | \$9,023.46 | 0.00\% | 100.00\% |
| 541199 | All Other Legal Services | \$7,835.30 | 0.00\% | 100.00\% |
| 541340 | Drafting Services | \$7,500.00 | 0.00\% | 100.00\% |
| 611513 | Apprenticeship Training | \$7,500.00 | 0.00\% | 100.00\% |
| 423420 | Office Equipment Merchant Wholesalers | \$6,256.17 | 0.00\% | 100.00\% |
| 541513 | Computer Facilities Management Services | \$5,583.53 | 0.00\% | 100.00\% |
| 423860 | Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers | \$5,171.25 | 0.00\% | 100.00\% |
| 532490 | Other Commercial and Industrial Machinery and Equipment Rental and Leasing | \$3,174.28 | 0.00\% | 100.00\% |
| 611610 | Fine Arts Schools | \$2,875.00 | 0.00\% | 100.00\% |
| 611420 | Computer Training | \$2,844.16 | 0.00\% | 100.00\% |
| 237210 | Land Subdivision | \$2,362.50 | 0.00\% | 100.00\% |
| 424130 | Industrial and Personal Service Paper Merchant Wholesalers | \$1,833.00 | 0.00\% | 100.00\% |


| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE <br> PERCENTAGE |
| :--- | :--- | ---: | ---: | ---: |
| 621399 | Offices of All Other Miscellaneous Health Practitioners | $\$ 1,682.54$ | $0.00 \%$ | $100.00 \%$ |
| 424930 | Flower, Nursery Stock, and Florists' Supplies Merchant <br> Wholesalers | $\$ 384.00$ | $0.00 \%$ | $100.00 \%$ |
| 541930 | Translation and Interpretation Services | $\$ 360.00$ | $0.00 \%$ | $100.00 \%$ |
| 441222 | Boat Dealers | $\$ 0.00$ | $0.00 \%$ | $100.00 \%$ |
| 611620 | Sports and Recreation Instruction | $\$ 0.00$ | $0.00 \%$ | $100.00 \%$ |
| 488490 | Other Support Activities for Road Transportation | $\$ 0.00$ | $0.00 \%$ | $100.00 \%$ |
| 812332 | Industrial Launderers | $\$ 0.00$ | $0.00 \%$ | $100.00 \%$ |
| 561421 | Telephone Answering Services | $\$ 0.00$ | $0.00 \%$ | $100.00 \%$ |
| 524113 | Direct Life Insurance Carriers | $\$ 0.00$ | $0.00 \%$ | $100.00 \%$ |
| 321911 | Wood Window and Door Manufacturing | $\$ 0.00$ | $0.00 \%$ | $100.00 \%$ |
| Grand <br> Total |  | $\$ 3,376,926,631.54$ | $\mathbf{1 0 0 . 0 0 \%}$ |  |

TABLE B-7.
CITY OF BALTIMORE PRODUCT MARKET AREA
CONSTRUCTION NAICS CODES

| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE <br> PERCENTAGE |
| :---: | :--- | ---: | ---: | ---: |
|  | Water and Sewer Line and Related Structures Construction | $\$ 836,816,494.58$ | $37.90 \%$ | $37.90 \%$ |
| 238110 | Poured Concrete Foundation and Structure Contractors | $\$ 234,006,408.93$ | $10.60 \%$ | $48.49 \%$ |
| 238210 | Electrical Contractors and Other Wiring Installation <br> Contractors | $\$ 153,440,795.18$ | $6.95 \%$ | $55.44 \%$ |
| 238910 | Site Preparation Contractors | $\$ 133,473,748.55$ | $6.04 \%$ | $61.49 \%$ |
| 237310 | Highway, Street, and Bridge Construction | $\$ 116,788,033.30$ | $5.29 \%$ | $66.77 \%$ |
| 238220 | Plumbing, Heating, and Air-Conditioning Contractors | $\$ 113,220,752.95$ | $5.13 \%$ | $71.90 \%$ |
| 236220 | Commercial and Institutional Building Construction | $\$ 98,875,910.02$ | $4.48 \%$ | $76.38 \%$ |
| 237990 | Other Heavy and Civil Engineering Construction | $\$ 73,386,969.69$ | $3.32 \%$ | $79.70 \%$ |
| 238190 | Other Foundation, Structure, and Building Exterior <br> Contractors | $\$ 62,479,462.80$ | $2.83 \%$ | $82.53 \%$ |
| 484110 | General Freight Trucking, Local | $\$ 47,345,193.28$ | $2.14 \%$ | $84.68 \%$ |
| 238990 | All Other Specialty Trade Contractors | $\$ 41,311,689.02$ | $1.87 \%$ | $86.55 \%$ |
| 541330 | Engineering Services | $\$ 35,767,369.88$ | $1.62 \%$ | $88.17 \%$ |
| 423910 | Sporting and Recreational Goods and Supplies Merchant <br> Wholesalers | $\$ 26,838,717.85$ | $1.22 \%$ | $89.38 \%$ |
| 327320 | Ready-Mix Concrete Manufacturing | $\$ 22,241,085.75$ | $1.01 \%$ | $90.39 \%$ |
| 238320 | Painting and Wall Covering Contractors | $\$ 15,520,513.31$ | $0.70 \%$ | $91.09 \%$ |
| 237130 | Power and Communication Line and Related Structures <br> Construction | $\$ 14,889,395.84$ | $0.67 \%$ | $91.77 \%$ |
| 238120 | Structural Steel and Precast Concrete Contractors | $\$ 12,541,666.27$ | $0.57 \%$ | $92.33 \%$ |
| 561320 | Temporary Help Services | $\$ 11,778,806.08$ | $0.53 \%$ | $92.87 \%$ |
| 238140 | Masonry Contractors | $\$ 11,499,908.77$ | $0.52 \%$ | $93.39 \%$ |
| 238160 | Roofing Contractors | $\$ 11,224,269.00$ | $0.51 \%$ | $93.90 \%$ |
| 562998 | All Other Miscellaneous Waste Management Services | $\$ 10,582,457.68$ | $0.48 \%$ | $94.38 \%$ |
| 238290 | Other Building Equipment Contractors | $\$ 8,400,310.89$ | $0.38 \%$ | $94.76 \%$ |

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| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: | :---: |
| 811118 | Other Automotive Mechanical and Electrical Repair and Maintenance | \$8,299,288.89 | 0.38\% | 95.13\% |
| 423610 | Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers | \$8,072,194.22 | 0.37\% | 95.50\% |
| 332312 | Fabricated Structural Metal Manufacturing | \$7,457,846.15 | 0.34\% | 95.84\% |
| 484220 | Specialized Freight (except Used Goods) Trucking, Local | \$6,924,805.07 | 0.31\% | 96.15\% |
| 541614 | Process, Physical Distribution, and Logistics Consulting Services | \$6,552,111.40 | 0.30\% | 96.45\% |
| 561730 | Landscaping Services | \$6,131,920.27 | 0.28\% | 96.72\% |
| 238310 | Drywall and Insulation Contractors | \$6,120,853.31 | 0.28\% | 97.00\% |
| 238390 | Other Building Finishing Contractors | \$4,750,790.36 | 0.22\% | 97.22\% |
| 424720 | Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals) | \$3,481,214.31 | 0.16\% | 97.37\% |
| 238350 | Finish Carpentry Contractors | \$3,252,066.65 | 0.15\% | 97.52\% |
| 561720 | Janitorial Services | \$3,154,841.70 | 0.14\% | 97.66\% |
| 238330 | Flooring Contractors | \$2,875,470.03 | 0.13\% | 97.79\% |
| 541611 | Administrative Management and General Management Consulting Services | \$2,743,143.50 | 0.12\% | 97.92\% |
| 541990 | All Other Professional, Scientific, and Technical Services | \$2,654,324.33 | 0.12\% | 98.04\% |
| 238150 | Glass and Glazing Contractors | \$2,635,716.50 | 0.12\% | 98.16\% |
| 532120 | Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing | \$2,480,647.11 | 0.11\% | 98.27\% |
| 562111 | Solid Waste Collection | \$2,313,604.66 | 0.10\% | 98.38\% |
| 115310 | Support Activities for Forestry | \$2,269,422.50 | 0.10\% | 98.48\% |
| 423320 | Brick, Stone, and Related Construction Material Merchant Wholesalers | \$2,266,001.60 | 0.10\% | 98.58\% |
| 333913 | Measuring, Dispensing, and Other Pumping Equipment Manufacturing | \$2,200,006.00 | 0.10\% | 98.68\% |
| 324121 | Asphalt Paving Mixture and Block Manufacturing | \$2,173,031.74 | 0.10\% | 98.78\% |
| 541380 | Testing Laboratories | \$1,980,368.97 | 0.09\% | 98.87\% |
| 236210 | Industrial Building Construction | \$1,953,449.56 | 0.09\% | 98.96\% |
| 562910 | Remediation Services | \$1,835,440.25 | 0.08\% | 99.04\% |
| 926130 | Regulation and Administration of Communications, Electric, Gas, and Other Utilities | \$1,741,950.13 | 0.08\% | 99.12\% |
| 561990 | All Other Support Services | \$1,625,782.60 | 0.07\% | 99.19\% |
| 423720 | Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers | \$1,385,330.00 | 0.06\% | 99.26\% |
| 332996 | Fabricated Pipe and Pipe Fitting Manufacturing | \$1,379,575.00 | 0.06\% | 99.32\% |
| 811310 | Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance | \$1,356,366.33 | 0.06\% | 99.38\% |
| 221310 | Water Supply and Irrigation Systems | \$1,134,750.00 | 0.05\% | 99.43\% |
| 423330 | Roofing, Siding, and Insulation Material Merchant Wholesalers | \$1,079,812.78 | 0.05\% | 99.48\% |
| 423830 | Industrial Machinery and Equipment Merchant Wholesalers | \$1,059,154.39 | 0.05\% | 99.53\% |
| 541620 | Environmental Consulting Services | \$934,440.18 | 0.04\% | 99.57\% |
| 423810 | Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers | \$807,462.78 | 0.04\% | 99.61\% |

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| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: | :---: |
| 332812 | Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers | \$740,848.00 | 0.03\% | 99.64\% |
| 532412 | Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing | \$678,168.28 | 0.03\% | 99.67\% |
| 541690 | Other Scientific and Technical Consulting Services | \$662,800.69 | 0.03\% | 99.70\% |
| 423310 | Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers | \$626,541.47 | 0.03\% | 99.73\% |
| 238170 | Siding Contractors | \$594,667.85 | 0.03\% | 99.76\% |
| 423710 | Hardware Merchant Wholesalers | \$534,311.35 | 0.02\% | 99.78\% |
| 454310 | Fuel Dealers | \$475,081.06 | 0.02\% | 99.80\% |
| 541310 | Architectural Services | \$445,074.66 | 0.02\% | 99.82\% |
| 327999 | All Other Miscellaneous Nonmetallic Mineral Product Manufacturing | \$293,695.00 | 0.01\% | 99.83\% |
| 562991 | Septic Tank and Related Services | \$272,446.32 | 0.01\% | 99.85\% |
| 562211 | Hazardous Waste Treatment and Disposal | \$263,003.95 | 0.01\% | 99.86\% |
| 332911 | Industrial Valve Manufacturing | \$218,000.00 | 0.01\% | 99.87\% |
| 423440 | Other Commercial Equipment Merchant Wholesalers | \$187,672.63 | 0.01\% | 99.88\% |
| 444220 | Nursery, Garden Center, and Farm Supply Stores | \$170,556.12 | 0.01\% | 99.89\% |
| 541922 | Commercial Photography | \$162,325.35 | 0.01\% | 99.89\% |
| 518210 | Data Processing, Hosting, and Related Services | \$157,942.45 | 0.01\% | 99.90\% |
| 541320 | Landscape Architectural Services | \$157,350.00 | 0.01\% | 99.91\% |
| 423490 | Other Professional Equipment and Supplies Merchant Wholesalers | \$154,962.10 | 0.01\% | 99.91\% |
| 339950 | Sign Manufacturing | \$146,961.96 | 0.01\% | 99.92\% |
| 333921 | Elevator and Moving Stairway Manufacturing | \$140,459.18 | 0.01\% | 99.93\% |
| 541512 | Computer Systems Design Services | \$115,073.22 | 0.01\% | 99.93\% |
| 541370 | Surveying and Mapping (except Geophysical) Services | \$114,676.25 | 0.01\% | 99.94\% |
| 333249 | Other Industrial Machinery Manufacturing | \$113,964.00 | 0.01\% | 99.94\% |
| 561621 | Security Systems Services (except Locksmiths) | \$109,201.14 | 0.00\% | 99.95\% |
| 238340 | Tile and Terrazzo Contractors | \$103,700.00 | 0.00\% | 99.95\% |
| 561710 | Exterminating and Pest Control Services | \$93,833.62 | 0.00\% | 99.96\% |
| 561790 | Other Services to Buildings and Dwellings | \$91,939.81 | 0.00\% | 99.96\% |
| 332999 | All Other Miscellaneous Fabricated Metal Product Manufacturing | \$85,681.21 | 0.00\% | 99.96\% |
| 327331 | Concrete Block and Brick Manufacturing | \$82,700.91 | 0.00\% | 99.97\% |
| 541618 | Other Management Consulting Services | \$77,453.53 | 0.00\% | 99.97\% |
| 541921 | Photography Studios, Portrait | \$69,450.00 | 0.00\% | 99.97\% |
| 541613 | Marketing Consulting Services | \$67,882.25 | 0.00\% | 99.98\% |
| 531311 | Residential Property Managers | \$65,687.37 | 0.00\% | 99.98\% |
| 238130 | Framing Contractors | \$62,594.39 | 0.00\% | 99.98\% |
| 541110 | Offices of Lawyers | \$58,979.00 | 0.00\% | 99.99\% |
| 325998 | All Other Miscellaneous Chemical Product and Preparation Manufacturing | \$39,747.83 | 0.00\% | 99.99\% |
| 922160 | Fire Protection | \$35,950.70 | 0.00\% | 99.99\% |
| 333120 | Construction Machinery Manufacturing | \$35,393.06 | 0.00\% | 99.99\% |
| 337215 | Showcase, Partition, Shelving, and Locker Manufacturing | \$32,595.00 | 0.00\% | 99.99\% |
| 424690 | Other Chemical and Allied Products Merchant Wholesalers | \$29,628.00 | 0.00\% | 99.99\% |

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| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE <br> PERCENTAGE |
| :---: | :--- | ---: | ---: | ---: |
| 423390 | Other Construction Material Merchant Wholesalers | $\$ 27,924.52$ | $0.00 \%$ | $100.00 \%$ |
| 811111 | General Automotive Repair | $\$ 25,723.28$ | $0.00 \%$ | $100.00 \%$ |
| 423510 | Metal Service Centers and Other Metal Merchant <br> Wholesalers | $\$ 24,405.24$ | $0.00 \%$ | $100.00 \%$ |
| 333241 | Food Product Machinery Manufacturing | $\$ 11,757.00$ | $0.00 \%$ | $100.00 \%$ |
| 237120 | Oil and Gas Pipeline and Related Structures Construction | $\$ 9,250.00$ | $0.00 \%$ | $100.00 \%$ |
| 323111 | Commercial Printing (except Screen and Books) | $\$ 8,563.00$ | $0.00 \%$ | $100.00 \%$ |
| 541340 | Drafting Services | $\$ 7,500.00$ | $0.00 \%$ | $100.00 \%$ |
| 811212 | Computer and Office Machine Repair and Maintenance | $\$ 5,580.00$ | $0.00 \%$ | $100.00 \%$ |
| 541430 | Graphic Design Services | $\$ 4,185.00$ | $0.00 \%$ | $100.00 \%$ |
| 237210 | Land Subdivision | $\$ 2,362.50$ | $0.00 \%$ | $100.00 \%$ |
| 811219 | Other Electronic and Precision Equipment Repair and <br> Maintenance | $\$ 2,175.00$ | $0.00 \%$ | $100.00 \%$ |
| 541519 | Other Computer Related Services | $\$ 1,000.00$ | $0.00 \%$ | $100.00 \%$ |
| 321911 | Wood Window and Door Manufacturing | $\$ 0.00$ | $0.00 \%$ | $100.00 \%$ |
| Grand |  | $\mathbf{\$ 2 , 2 0 8 , 2 1 2 , 5 6 8 . 1 4}$ | $\mathbf{1 0 0 . 0 0 \%}$ |  |

TABLE B-8.
CITY OF BALTIMORE PRODUCT MARKET AREA ARCHITECHTURE \& ENGINEERING NAICS CODES

| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE <br> PERCENTAGE |
| :---: | :--- | ---: | ---: | ---: |
|  | Engineering Services | $\$ 177,575,005.82$ | $79.98 \%$ | $79.98 \%$ |
| 541350 | Building Inspection Services | $\$ 16,874,272.97$ | $7.60 \%$ | $87.58 \%$ |
| 236220 | Commercial and Institutional Building Construction | $\$ 11,606,000.69$ | $5.23 \%$ | $92.81 \%$ |
| 237110 | Water and Sewer Line and Related Structures Construction | $\$ 5,249,404.35$ | $2.36 \%$ | $95.17 \%$ |
| 541370 | Surveying and Mapping (except Geophysical) Services | $\$ 3,014,205.91$ | $1.36 \%$ | $96.53 \%$ |
| 541310 | Architectural Services | $\$ 1,931,620.05$ | $0.87 \%$ | $97.40 \%$ |
| 562998 | All Other Miscellaneous Waste Management Services | $\$ 1,479,716.80$ | $0.67 \%$ | $98.06 \%$ |
| 541360 | Geophysical Surveying and Mapping Services | $\$ 825,250.40$ | $0.37 \%$ | $98.44 \%$ |
| 541320 | Landscape Architectural Services | $\$ 452,100.74$ | $0.20 \%$ | $98.64 \%$ |
| 561730 | Landscaping Services | $\$ 445,123.17$ | $0.20 \%$ | $98.84 \%$ |
| 541614 | Process, Physical Distribution, and Logistics Consulting Services | $\$ 307,608.88$ | $0.14 \%$ | $98.98 \%$ |
| 541611 | Administrative Management and General Management | $\$ 307,440.91$ | $0.14 \%$ | $99.12 \%$ |
| 541990 | All Other Professional, Scientific, and Technical Services | $\$ 250,570.56$ | $0.11 \%$ | $99.23 \%$ |
| 561990 | All Other Support Services | $\$ 216,168.00$ | $0.10 \%$ | $99.33 \%$ |
| 541690 | Other Scientific and Technical Consulting Services | $\$ 210,124.65$ | $0.09 \%$ | $99.42 \%$ |
| 541618 | Other Management Consulting Services | $\$ 184,670.71$ | $0.08 \%$ | $99.51 \%$ |
| 541380 | Testing Laboratories | $\$ 157,427.38$ | $0.07 \%$ | $99.58 \%$ |
| 238210 | Electrical Contractors and Other Wiring Installation Contractors | $\$ 151,501.79$ | $0.07 \%$ | $99.64 \%$ |
| 238990 | All Other Specialty Trade Contractors | $\$ 135,596.58$ | $0.06 \%$ | $99.71 \%$ |
| 562211 | Hazardous Waste Treatment and Disposal | $\$ 128,932.52$ | $0.06 \%$ | $99.76 \%$ |
| 238290 | Other Building Equipment Contractors | $\$ 122,546.82$ | $0.06 \%$ | $99.82 \%$ |

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| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE <br> PERCENTAGE |
| :---: | :--- | ---: | ---: | ---: |
| 531311 | Residential Property Managers | $\$ 114,690.82$ | $0.05 \%$ | $99.87 \%$ |
| 238910 | Site Preparation Contractors | $\$ 62,170.53$ | $0.03 \%$ | $99.90 \%$ |
| 237990 | Other Heavy and Civil Engineering Construction | $\$ 50,756.88$ | $0.02 \%$ | $99.92 \%$ |
| 541620 | Environmental Consulting Services | $\$ 40,442.56$ | $0.02 \%$ | $99.94 \%$ |
| 541410 | Interior Design Services | $\$ 36,309.05$ | $0.02 \%$ | $99.96 \%$ |
| 541613 | Marketing Consulting Services | $\$ 32,233.39$ | $0.01 \%$ | $99.97 \%$ |
| 541430 | Graphic Design Services | $\$ 26,468.00$ | $0.01 \%$ | $99.98 \%$ |
| 541511 | Custom Computer Programming Services | $\$ 25,521.53$ | $0.01 \%$ | $99.99 \%$ |
| 518210 | Data Processing, Hosting, and Related Services | $\$ 4,692.50$ | $0.00 \%$ | $100.00 \%$ |
| 562910 | Remediation Services | $\$ 4,639.73$ | $0.00 \%$ | $100.00 \%$ |
| 532490 | Other Commercial and Industrial Machinery and Equipment <br> Rental and Leasing | $\$ 3,174.28$ | $0.00 \%$ | $100.00 \%$ |
| 238160 | Roofing Contractors | $\$ 845.00$ | $0.00 \%$ | $100.00 \%$ |
| 323111 | Commercial Printing (except Screen and Books) | $\$ 0.00$ | $0.00 \%$ | $100.00 \%$ |
| Grand |  | $\mathbf{\$ 2 2 2 , 0 2 7 , 2 3 3 . 9 7}$ | $\mathbf{1 0 0 . 0 0 \%}$ |  |

TABLE B-9.
CITY OF BALTIMORE PRODUCT MARKET AREA GOODS \& OTHER SERVICES NAICS CODES

| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE <br> PERCENTAGE |
| :--- | :--- | :--- | ---: | ---: |
| 561320 | Temporary Help Services | $\$ 182,955,265.53$ | $23.35 \%$ | $23.35 \%$ |
| 561720 | Janitorial Services | $\$ 81,093,047.21$ | $10.35 \%$ | $33.71 \%$ |
| 561730 | Landscaping Services | $\$ 59,014,225.77$ | $7.53 \%$ | $41.24 \%$ |
| 423430 | Computer and Computer Peripheral Equipment and Software <br> Merchant Wholesalers | $\$ 40,344,469.16$ | $5.15 \%$ | $46.39 \%$ |
| 454310 | Fuel Dealers | $\$ 34,395,758.46$ | $4.39 \%$ | $50.78 \%$ |
| 423810 | Construction and Mining (except Oil Well) Machinery and Equipment <br> Merchant Wholesalers | $\$ 33,387,073.54$ | $4.26 \%$ | $55.04 \%$ |
| 811219 | Other Electronic and Precision Equipment Repair and Maintenance | $\$ 28,034,915.68$ | $3.58 \%$ | $58.62 \%$ |
| 423850 | Service Establishment Equipment and Supplies Merchant <br> Wholesalers | $\$ 21,619,108.77$ | $2.76 \%$ | $61.38 \%$ |
| 424690 | Other Chemical and Allied Products Merchant Wholesalers | $\$ 21,283,390.64$ | $2.72 \%$ | $64.10 \%$ |
| 561612 | Security Guards and Patrol Services | $\$ 20,155,019.73$ | $2.57 \%$ | $66.67 \%$ |
| 423830 | Industrial Machinery and Equipment Merchant Wholesalers | $\$ 17,669,722.16$ | $2.26 \%$ | $68.92 \%$ |
| 423610 | Electrical Apparatus and Equipment, Wiring Supplies, and Related <br> Equipment Merchant Wholesalers | $\$ 15,298,248.26$ | $1.95 \%$ | $70.88 \%$ |
| 812930 | Parking Lots and Garages | $\$ 14,228,359.19$ | $1.82 \%$ | $72.69 \%$ |
| 441110 | New Car Dealers | $\$ 12,867,756.97$ | $1.64 \%$ | $74.34 \%$ |
| 423490 | Other Professional Equipment and Supplies Merchant Wholesalers | $\$ 12,728,953.48$ | $1.62 \%$ | $75.96 \%$ |
| 423320 | Brick, Stone, and Related Construction Material Merchant <br> Wholesalers | $\$ 11,700,411.39$ | $1.49 \%$ | $77.45 \%$ |
| 325120 | Industrial Gas Manufacturing | $\$ 11,245,129.98$ | $1.44 \%$ | $78.89 \%$ |
| 561621 | Security Systems Services (except Locksmiths) | $\$ 10,827,425.83$ | $1.38 \%$ | $80.27 \%$ |


| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: | :---: |
| 811310 | Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance | \$9,592,495.89 | 1.22\% | 81.50\% |
| 423450 | Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers | \$9,416,060.52 | 1.20\% | 82.70\% |
| 811111 | General Automotive Repair | \$9,331,755.72 | 1.19\% | 83.89\% |
| 562910 | Remediation Services | \$7,896,960.96 | 1.01\% | 84.90\% |
| 722320 | Caterers | \$7,652,003.82 | 0.98\% | 85.87\% |
| 423120 | Motor Vehicle Supplies and New Parts Merchant Wholesalers | \$6,522,270.32 | 0.83\% | 86.71\% |
| 561710 | Exterminating and Pest Control Services | \$6,467,140.73 | 0.83\% | 87.53\% |
| 423210 | Furniture Merchant Wholesalers | \$5,761,579.50 | 0.74\% | 88.27\% |
| 325180 | Other Basic Inorganic Chemical Manufacturing | \$5,574,507.25 | 0.71\% | 88.98\% |
| 446110 | Pharmacies and Drug Stores | \$5,290,070.22 | 0.68\% | 89.66\% |
| 485510 | Charter Bus Industry | \$4,859,510.52 | 0.62\% | 90.28\% |
| 221320 | Sewage Treatment Facilities | \$4,806,201.82 | 0.61\% | 90.89\% |
| 488190 | Other Support Activities for Air Transportation | \$4,192,063.17 | 0.54\% | 91.42\% |
| 423440 | Other Commercial Equipment Merchant Wholesalers | \$4,148,976.87 | 0.53\% | 91.95\% |
| 562920 | Materials Recovery Facilities | \$3,875,373.19 | 0.49\% | 92.45\% |
| 423840 | Industrial Supplies Merchant Wholesalers | \$3,598,375.70 | 0.46\% | 92.91\% |
| 812331 | Linen Supply | \$3,570,800.02 | 0.46\% | 93.36\% |
| 485310 | Taxi Service | \$3,041,095.80 | 0.39\% | 93.75\% |
| 323111 | Commercial Printing (except Screen and Books) | \$2,945,252.92 | 0.38\% | 94.13\% |
| 332911 | Industrial Valve Manufacturing | \$2,932,038.28 | 0.37\% | 94.50\% |
| 811121 | Automotive Body, Paint, and Interior Repair and Maintenance | \$2,508,901.33 | 0.32\% | 94.82\% |
| 441310 | Automotive Parts and Accessories Stores | \$2,469,996.73 | 0.32\% | 95.14\% |
| 562211 | Hazardous Waste Treatment and Disposal | \$2,304,024.46 | 0.29\% | 95.43\% |
| 423390 | Other Construction Material Merchant Wholesalers | \$2,161,425.62 | 0.28\% | 95.71\% |
| 423720 | Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers | \$2,106,259.68 | 0.27\% | 95.98\% |
| 518210 | Data Processing, Hosting, and Related Services | \$2,082,002.66 | 0.27\% | 96.24\% |
| 448210 | Shoe Stores | \$1,713,640.99 | 0.22\% | 96.46\% |
| 811211 | Consumer Electronics Repair and Maintenance | \$1,614,377.64 | 0.21\% | 96.67\% |
| 561622 | Locksmiths | \$1,575,873.92 | 0.20\% | 96.87\% |
| 488410 | Motor Vehicle Towing | \$1,574,987.44 | 0.20\% | 97.07\% |
| 334514 | Totalizing Fluid Meter and Counting Device Manufacturing | \$1,432,187.00 | 0.18\% | 97.25\% |
| 423310 | Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers | \$1,218,964.20 | 0.16\% | 97.41\% |
| 562998 | All Other Miscellaneous Waste Management Services | \$1,192,542.72 | 0.15\% | 97.56\% |
| 441228 | Motorcycle, ATV, and All Other Motor Vehicle Dealers | \$1,151,909.76 | 0.15\% | 97.71\% |
| 561440 | Collection Agencies | \$1,102,079.71 | 0.14\% | 97.85\% |
| 444120 | Paint and Wallpaper Stores | \$1,100,595.74 | 0.14\% | 97.99\% |
| 484220 | Specialized Freight (except Used Goods) Trucking, Local | \$939,967.07 | 0.12\% | 98.11\% |
| 331210 | Iron and Steel Pipe and Tube Manufacturing from Purchased Steel | \$917,928.97 | 0.12\% | 98.23\% |
| 444210 | Outdoor Power Equipment Stores | \$846,799.76 | 0.11\% | 98.33\% |
| 562991 | Septic Tank and Related Services | \$845,398.73 | 0.11\% | 98.44\% |
| 111421 | Nursery and Tree Production | \$802,312.25 | 0.10\% | 98.54\% |
| 325211 | Plastics Material and Resin Manufacturing | \$776,956.07 | 0.10\% | 98.64\% |
| 811411 | Home and Garden Equipment Repair and Maintenance | \$747,285.14 | 0.10\% | 98.74\% |

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| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: | :---: |
| 424110 | Printing and Writing Paper Merchant Wholesalers | \$658,833.05 | 0.08\% | 98.82\% |
| 811213 | Communication Equipment Repair and Maintenance | \$564,966.50 | 0.07\% | 98.89\% |
| 561790 | Other Services to Buildings and Dwellings | \$563,350.00 | 0.07\% | 98.97\% |
| 485991 | Special Needs Transportation | \$526,506.44 | 0.07\% | 99.03\% |
| 561611 | Investigation Services | \$402,840.43 | 0.05\% | 99.08\% |
| 424990 | Other Miscellaneous Nondurable Goods Merchant Wholesalers | \$361,641.70 | 0.05\% | 99.13\% |
| 561740 | Carpet and Upholstery Cleaning Services | \$348,037.03 | 0.04\% | 99.18\% |
| 562112 | Hazardous Waste Collection | \$328,963.21 | 0.04\% | 99.22\% |
| 448190 | Other Clothing Stores | \$314,982.00 | 0.04\% | 99.26\% |
| 541611 | Administrative Management and General Management Consulting Services | \$278,115.00 | 0.04\% | 99.29\% |
| 424210 | Drugs and Druggists' Sundries Merchant Wholesalers | \$278,092.26 | 0.04\% | 99.33\% |
| 562111 | Solid Waste Collection | \$261,939.01 | 0.03\% | 99.36\% |
| 561613 | Armored Car Services | \$245,514.42 | 0.03\% | 99.39\% |
| 339950 | Sign Manufacturing | \$241,129.10 | 0.03\% | 99.42\% |
| 451110 | Sporting Goods Stores | \$236,061.26 | 0.03\% | 99.45\% |
| 424610 | Plastics Materials and Basic Forms and Shapes Merchant Wholesalers | \$229,701.60 | 0.03\% | 99.48\% |
| 332996 | Fabricated Pipe and Pipe Fitting Manufacturing | \$212,016.32 | 0.03\% | 99.51\% |
| 326122 | Plastics Pipe and Pipe Fitting Manufacturing | \$205,368.84 | 0.03\% | 99.54\% |
| 492210 | Local Messengers and Local Delivery | \$190,920.59 | 0.02\% | 99.56\% |
| 442210 | Floor Covering Stores | \$190,764.30 | 0.02\% | 99.59\% |
| 331110 | Iron and Steel Mills and Ferroalloy Manufacturing | \$182,935.99 | 0.02\% | 99.61\% |
| 561990 | All Other Support Services | \$179,048.68 | 0.02\% | 99.63\% |
| 484210 | Used Household and Office Goods Moving | \$167,352.71 | 0.02\% | 99.65\% |
| 423990 | Other Miscellaneous Durable Goods Merchant Wholesalers | \$165,879.20 | 0.02\% | 99.67\% |
| 561492 | Court Reporting and Stenotype Services | \$145,346.46 | 0.02\% | 99.69\% |
| 811113 | Automotive Transmission Repair | \$139,101.21 | 0.02\% | 99.71\% |
| 562119 | Other Waste Collection | \$129,549.24 | 0.02\% | 99.73\% |
| 323117 | Books Printing | \$128,942.38 | 0.02\% | 99.74\% |
| 424490 | Other Grocery and Related Products Merchant Wholesalers | \$109,698.61 | 0.01\% | 99.76\% |
| 332991 | Ball and Roller Bearing Manufacturing | \$106,161.67 | 0.01\% | 99.77\% |
| 442110 | Furniture Stores | \$97,647.76 | 0.01\% | 99.78\% |
| 444220 | Nursery, Garden Center, and Farm Supply Stores | \$85,103.64 | 0.01\% | 99.79\% |
| 811198 | All Other Automotive Repair and Maintenance | \$81,713.92 | 0.01\% | 99.81\% |
| 423410 | Photographic Equipment and Supplies Merchant Wholesalers | \$77,365.63 | 0.01\% | 99.82\% |
| 811118 | Other Automotive Mechanical and Electrical Repair and Maintenance | \$76,768.00 | 0.01\% | 99.82\% |
| 423110 | Automobile and Other Motor Vehicle Merchant Wholesalers | \$74,350.00 | 0.01\% | 99.83\% |
| 115210 | Support Activities for Animal Production | \$70,060.00 | 0.01\% | 99.84\% |
| 424410 | General Line Grocery Merchant Wholesalers | \$66,010.56 | 0.01\% | 99.85\% |
| 423330 | Roofing, Siding, and Insulation Material Merchant Wholesalers | \$65,075.00 | 0.01\% | 99.86\% |
| 314999 | All Other Miscellaneous Textile Product Mills | \$61,042.27 | 0.01\% | 99.87\% |
| 424340 | Footwear Merchant Wholesalers | \$60,836.40 | 0.01\% | 99.88\% |
| 811122 | Automotive Glass Replacement Shops | \$59,390.00 | 0.01\% | 99.88\% |
| 484110 | General Freight Trucking, Local | \$56,550.00 | 0.01\% | 99.89\% |


| NAICS | NAICS DESCRIPTION |  |  |  |
| :--- | :--- | ---: | ---: | ---: |

TABLE B-10.
CITY OF BALTIMORE PRODUCT MARKET AREA
PROFESSIONAL SERVICES NAICS CODES

| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: | :---: |
| 541511 | Custom Computer Programming Services | \$76,463,495.92 | 46.83\% | 46.83\% |
| 621340 | Offices of Physical, Occupational and Speech Therapists, and Audiologists | \$16,268,687.87 | 9.96\% | 56.79\% |
| 541512 | Computer Systems Design Services | \$14,269,866.10 | 8.74\% | 65.53\% |
| 532112 | Passenger Car Leasing | \$9,279,439.25 | 5.68\% | 71.21\% |
| 541519 | Other Computer Related Services | \$7,380,826.24 | 4.52\% | 75.73\% |
| 541380 | Testing Laboratories | \$6,332,288.95 | 3.88\% | 79.61\% |
| 621910 | Ambulance Services | \$5,434,130.73 | 3.33\% | 82.94\% |
| 532284 | Recreational Goods Rental | \$3,806,071.45 | 2.33\% | 85.27\% |
| 524298 | All Other Insurance Related Activities | \$2,465,370.00 | 1.51\% | 86.78\% |
| 541330 | Engineering Services | \$2,381,993.00 | 1.46\% | 88.24\% |
| 541618 | Other Management Consulting Services | \$2,043,970.26 | 1.25\% | 89.49\% |
| 238220 | Plumbing, Heating, and Air-Conditioning Contractors | \$1,936,725.68 | 1.19\% | 90.67\% |
| 541611 | Administrative Management and General Management Consulting Services | \$1,917,677.79 | 1.17\% | 91.85\% |
| 423450 | Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers | \$1,466,473.00 | 0.90\% | 92.75\% |
| 238210 | Electrical Contractors and Other Wiring Installation Contractors | \$1,340,766.12 | 0.82\% | 93.57\% |
| 541211 | Offices of Certified Public Accountants | \$1,071,914.05 | 0.66\% | 94.22\% |
| 541612 | Human Resources Consulting Services | \$877,951.56 | 0.54\% | 94.76\% |
| 561320 | Temporary Help Services | \$833,188.00 | 0.51\% | 95.27\% |
| 541690 | Other Scientific and Technical Consulting Services | \$750,092.68 | 0.46\% | 95.73\% |
| 238320 | Painting and Wall Covering Contractors | \$616,837.00 | 0.38\% | 96.11\% |
| 922160 | Fire Protection | \$614,393.00 | 0.38\% | 96.48\% |
| 624190 | Other Individual and Family Services | \$572,211.00 | 0.35\% | 96.83\% |
| 541620 | Environmental Consulting Services | \$571,426.00 | 0.35\% | 97.18\% |
| 485991 | Special Needs Transportation | \$545,297.00 | 0.33\% | 97.52\% |
| 541940 | Veterinary Services | \$364,434.16 | 0.22\% | 97.74\% |
| 523930 | Investment Advice | \$361,939.00 | 0.22\% | 97.96\% |
| 541890 | Other Services Related to Advertising | \$274,957.62 | 0.17\% | 98.13\% |
| 541614 | Process, Physical Distribution, and Logistics Consulting Services | \$272,850.59 | 0.17\% | 98.30\% |
| 532111 | Passenger Car Rental | \$255,493.62 | 0.16\% | 98.46\% |
| 532412 | Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing | \$234,681.73 | 0.14\% | 98.60\% |
| 238910 | Site Preparation Contractors | \$223,460.85 | 0.14\% | 98.74\% |
| 541820 | Public Relations Agencies | \$220,928.00 | 0.14\% | 98.87\% |
| 238110 | Poured Concrete Foundation and Structure Contractors | \$211,279.00 | 0.13\% | 99.00\% |
| 532420 | Office Machinery and Equipment Rental and Leasing | \$208,453.26 | 0.13\% | 99.13\% |
| 541613 | Marketing Consulting Services | \$200,000.00 | 0.12\% | 99.25\% |
| 621610 | Home Health Care Services | \$162,335.00 | 0.10\% | 99.35\% |
| 423720 | Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers | \$121,055.81 | 0.07\% | 99.42\% |
| 541110 | Offices of Lawyers | \$102,082.00 | 0.06\% | 99.49\% |


| NAICS | NAICS DESCRIPTION | PAYMENTS | PERCENT | CUMULATIVE PERCENTAGE |
| :---: | :---: | :---: | :---: | :---: |
| 485999 | All Other Transit and Ground Passenger Transportation | \$95,301.00 | 0.06\% | 99.55\% |
| 541990 | All Other Professional, Scientific, and Technical Services | \$82,652.00 | 0.05\% | 99.60\% |
| 484110 | General Freight Trucking, Local | \$74,882.00 | 0.05\% | 99.64\% |
| 423310 | Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers | \$71,215.24 | 0.04\% | 99.69\% |
| 238310 | Drywall and Insulation Contractors | \$68,425.55 | 0.04\% | 99.73\% |
| 561311 | Employment Placement Agencies | \$64,400.00 | 0.04\% | 99.77\% |
| 561330 | Professional Employer Organizations | \$51,011.00 | 0.03\% | 99.80\% |
| 611430 | Professional and Management Development Training | \$48,740.00 | 0.03\% | 99.83\% |
| 323111 | Commercial Printing (except Screen and Books) | \$42,392.82 | 0.03\% | 99.85\% |
| 238160 | Roofing Contractors | \$40,645.00 | 0.02\% | 99.88\% |
| 541720 | Research and Development in the Social Sciences and Humanities | \$39,902.00 | 0.02\% | 99.90\% |
| 326199 | All Other Plastics Product Manufacturing | \$29,183.52 | 0.02\% | 99.92\% |
| 238140 | Masonry Contractors | \$26,903.81 | 0.02\% | 99.94\% |
| 532310 | General Rental Centers | \$18,916.90 | 0.01\% | 99.95\% |
| 621112 | Offices of Physicians, Mental Health Specialists | \$10,550.00 | 0.01\% | 99.96\% |
| 424120 | Stationery and Office Supplies Merchant Wholesalers | \$10,449.00 | 0.01\% | 99.96\% |
| 611710 | Educational Support Services | \$10,020.50 | 0.01\% | 99.97\% |
| 621511 | Medical Laboratories | \$9,843.00 | 0.01\% | 99.97\% |
| 238330 | Flooring Contractors | \$8,181.00 | 0.01\% | 99.98\% |
| 541199 | All Other Legal Services | \$7,835.30 | 0.00\% | 99.98\% |
| 611513 | Apprenticeship Training | \$7,500.00 | 0.00\% | 99.99\% |
| 541513 | Computer Facilities Management Services | \$5,583.53 | 0.00\% | 99.99\% |
| 541430 | Graphic Design Services | \$4,666.00 | 0.00\% | 99.99\% |
| 611610 | Fine Arts Schools | \$2,875.00 | 0.00\% | 100.00\% |
| 611420 | Computer Training | \$2,844.16 | 0.00\% | 100.00\% |
| 621399 | Offices of All Other Miscellaneous Health Practitioners | \$1,682.54 | 0.00\% | 100.00\% |
| 424930 | Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers | \$384.00 | 0.00\% | 100.00\% |
| 541930 | Translation and Interpretation Services | \$360.00 | 0.00\% | 100.00\% |
| 811121 | Automotive Body, Paint, and Interior Repair and Maintenance | \$340.00 | 0.00\% | 100.00\% |
| 611620 | Sports and Recreation Instruction | \$0.00 | 0.00\% | 100.00\% |
| 524113 | Direct Life Insurance Carriers | \$0.00 | 0.00\% | 100.00\% |
| Grand Total |  | \$163,292,728.16 | 100.00\% |  |

## Appendix C

Detailed Utilization, Availability, and Disparity Analyses

TABLE C-1.<br>DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES CITY OF BALTIMORE MARKETPLACE<br>CONSTRUCTION<br>AFRICAN AMERICAN FIRMS

| NAICS-4 | NAICS-4 DESC | AFRICAN AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 1153 | Support activities for forestry | 0.00\% | 0.00\% | 0.00\% |  |
| 2213 | Water, sewage and other systems | 0.00\% | 0.00\% | 0.00\% |  |
| 2362 | Nonresidential building construction | 5.66\% | 10.03\% | 56.42\% | ¥ |
| 2371 | Utility system construction | 6.06\% | 11.10\% | 54.61\% | $¥$ |
| 2372 | Land subdivision | 0.00\% | 0.00\% | 0.00\% |  |
| 2373 | Highway, street, and bridge construction | 1.67\% | 5.36\% | 31.21\% | ¥ |
| 2379 | Other heavy construction | 0.07\% | 0.00\% | 0.00\% |  |
| 2381 | Building foundation and exterior contractors | 20.57\% | 3.83\% | 0.00\% |  |
| 2382 | Building equipment contractors | 18.63\% | 9.74\% | 0.00\% |  |
| 2383 | Building finishing contractors | 6.69\% | 6.02\% | 0.00\% |  |
| 2389 | Other specialty trade contractors | 57.36\% | 9.67\% | 0.00\% |  |
| 3219 | Other wood product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3231 | Printing and related support activities | 0.00\% | 0.46\% | 0.00\% |  |
| 3241 | Petroleum and coal products manufacturing | 0.55\% | 4.55\% | 12.10\% | $¥ ¥$ |
| 3259 | Other chemical product and preparation mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3273 | Cement and concrete product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3279 | Other nonmetallic mineral products | 0.00\% | 0.00\% | 0.00\% |  |
| 3323 | Architectural and structural metals mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3328 | Coating, engraving, and heat treating metals | 0.00\% | 0.00\% | 0.00\% |  |
| 3329 | Other fabricated metal product manufacturing | 4.76\% | 0.00\% | 0.00\% |  |
| 3331 | Ag., construction, and mining machinery mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3332 | Industrial machinery manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3339 | Other general purpose machinery manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3372 | Office furniture and fixtures manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3399 | Other miscellaneous manufacturing | 0.00\% | 5.45\% | 0.00\% | $¥ ¥ ¥$ |
| 4233 | Lumber and const. supply merchant wholesalers | 53.25\% | 1.29\% | 0.00\% |  |
| 4234 | Commercial equip. merchant wholesalers | 0.00\% | 4.65\% | 0.00\% | $¥ ¥ ¥$ |
| 4235 | Metal and mineral merchant wholesalers | 0.00\% | 10.78\% | 0.00\% | $¥ ¥ ¥$ |
| 4236 | Appliance and electric goods merchant whls. | 0.00\% | 0.49\% | 0.00\% |  |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 8.24\% | 0.00\% | $¥ ¥ ¥$ |
| 4238 | Machinery and supply merchant wholesalers | 1.70\% | 3.33\% | 50.98\% |  |
| 4239 | Misc. durable goods merchant wholesalers | 0.00\% | 25.28\% | 0.00\% | $¥ ¥ ¥$ |
| 4246 | Chemical merchant wholesalers | 0.00\% | 0.62\% | 0.00\% |  |
| 4247 | Petroleum merchant wholesalers | 100.00\% | 100.00\% | 0.00\% |  |
| 4442 | Lawn and garden equipment and supplies stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4543 | Direct selling establishments | 100.00\% | 100.00\% | 0.00\% |  |
| 4841 | General freight trucking | 30.52\% | 30.52\% | 0.00\% |  |
| 4842 | Specialized freight trucking | 14.35\% | 27.75\% | 51.71\% | $¥ ¥ ¥$ |
| 5182 | Data processing, hosting and related services | 0.00\% | 12.51\% | 0.00\% | $¥ ¥ ¥$ |
| 5313 | Activities related to real estate | 100.00\% | 100.00\% | 0.00\% |  |


| NAICS-4 | NAICS-4 DESC | AFRICAN AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 5321 | Automotive equipment rental and leasing | 90.91\% | 90.91\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 1.29\% | 1.29\% | 0.00\% |  |
| 5411 | Legal services | 36.03\% | 3.60\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 6.32\% | 10.05\% | 62.88\% |  |
| 5414 | Specialized design services | 0.00\% | 11.29\% | 0.00\% | $¥ ¥ ¥$ |
| 5415 | Computer systems design and related services | 87.81\% | 17.33\% | 0.00\% |  |
| 5416 | Management and technical consulting services | 36.03\% | 19.76\% | 0.00\% |  |
| 5419 | Other professional and technical services | 26.20\% | 28.80\% | 90.98\% |  |
| 5613 | Employment services | 94.12\% | 17.89\% | 0.00\% |  |
| 5616 | Investigation and security services | 0.00\% | 14.20\% | 0.00\% | $¥ ¥ ¥$ |
| 5617 | Services to buildings and dwellings | 4.60\% | 18.80\% | 24.48\% | $¥ ¥ ¥$ |
| 5619 | Other support services | 5.06\% | 35.17\% | 14.39\% | $¥ ¥ ¥$ |
| 5621 | Waste collection | 0.00\% | 2.63\% | 0.00\% | $¥ ¥$ |
| 5622 | Waste treatment and disposal | 0.00\% | 28.17\% | 0.00\% | $¥ ¥ ¥$ |
| 5629 | Remediation and other waste services | 0.35\% | 10.96\% | 3.19\% | $¥ ¥ ¥$ |
| 8111 | Automotive repair and maintenance | 99.69\% | 12.09\% | 0.00\% |  |
| 8112 | Electronic equipment repair and maintenance | 71.95\% | 26.84\% | 0.00\% |  |
| 8113 | Commercial machinery repair and maintenance | 69.61\% | 69.61\% | 0.00\% |  |
| 9221 | Justice, public order, and safety activities | 0.00\% | 0.00\% | 0.00\% |  |
| 9261 | Administration of economic programs | 0.00\% | 0.00\% | 0.00\% |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv "$ indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ \neq \neq "$ indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-2.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES CITY OF BALTIMORE MARKETPLACE CONSTRUCTION
ASIAN AMERICAN FIRMS

| NAICS-4 | NAICS-4 DESC | ASIAN AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 1153 | Support activities for forestry | 0.00\% | 0.00\% | 0.00\% |  |
| 2213 | Water, sewage and other systems | 0.00\% | 0.00\% | 0.00\% |  |
| 2362 | Nonresidential building construction | 2.29\% | 5.41\% | 42.29\% |  |
| 2371 | Utility system construction | 0.02\% | 1.20\% | 1.35\% |  |
| 2372 | Land subdivision | 0.00\% | 0.00\% | 0.00\% |  |
| 2373 | Highway, street, and bridge construction | 0.09\% | 2.59\% | 3.58\% | ¥ |
| 2379 | Other heavy construction | 0.00\% | 4.55\% | 0.00\% | $¥ ¥ ¥$ |
| 2381 | Building foundation and exterior contractors | 0.18\% | 2.73\% | 6.52\% | ¥ |
| 2382 | Building equipment contractors | 0.14\% | 1.67\% | 8.29\% |  |
| 2383 | Building finishing contractors | 0.00\% | 2.22\% | 0.00\% | ¥ |
| 2389 | Other specialty trade contractors | 0.11\% | 0.62\% | 18.55\% |  |
| 3219 | Other wood product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3231 | Printing and related support activities | 0.00\% | 0.15\% | 0.00\% |  |
| 3241 | Petroleum and coal products manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3259 | Other chemical product and preparation mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3273 | Cement and concrete product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3279 | Other nonmetallic mineral products | 0.00\% | 0.00\% | 0.00\% |  |
| 3323 | Architectural and structural metals mfg. | 0.00\% | 0.00\% | 0.00\% |  |


| NAICS-4 | NAICS-4 DESC | ASIAN AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 3328 | Coating, engraving, and heat treating metals | 0.00\% | 0.00\% | 0.00\% |  |
| 3329 | Other fabricated metal product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3331 | Ag., construction, and mining machinery mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3332 | Industrial machinery manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3339 | Other general purpose machinery manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3372 | Office furniture and fixtures manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3399 | Other miscellaneous manufacturing | 0.00\% | 9.52\% | 0.00\% | $¥ ¥ ¥$ |
| 4233 | Lumber and const. supply merchant wholesalers | 4.98\% | 2.20\% | 0.00\% |  |
| 4234 | Commercial equip. merchant wholesalers | 0.00\% | 5.36\% | 0.00\% | $¥ ¥ ¥$ |
| 4235 | Metal and mineral merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4236 | Appliance and electric goods merchant whls. | 0.00\% | 6.78\% | 0.00\% | $¥ ¥ ¥$ |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4238 | Machinery and supply merchant wholesalers | 0.00\% | 6.30\% | 0.00\% | $¥ ¥ ¥$ |
| 4239 | Misc. durable goods merchant wholesalers | 0.00\% | 25.25\% | 0.00\% | $¥ ¥ ¥$ |
| 4246 | Chemical merchant wholesalers | 0.00\% | 11.94\% | 0.00\% | $¥ ¥ ¥$ |
| 4247 | Petroleum merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4442 | Lawn and garden equipment and supplies stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4543 | Direct selling establishments | 0.00\% | 0.00\% | 0.00\% |  |
| 4841 | General freight trucking | 0.00\% | 0.00\% | 0.00\% |  |
| 4842 | Specialized freight trucking | 0.00\% | 0.44\% | 0.00\% |  |
| 5182 | Data processing, hosting and related services | 0.00\% | 12.31\% | 0.00\% | $¥ ¥ ¥$ |
| 5313 | Activities related to real estate | 0.00\% | 0.00\% | 0.00\% |  |
| 5321 | Automotive equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5411 | Legal services | 0.00\% | 1.74\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 35.20\% | 6.54\% | 0.00\% |  |
| 5414 | Specialized design services | 0.00\% | 0.37\% | 0.00\% |  |
| 5415 | Computer systems design and related services | 0.45\% | 17.12\% | 2.62\% | $¥ ¥ ¥$ |
| 5416 | Management and technical consulting services | 0.33\% | 3.85\% | 8.71\% | $¥ ¥$ |
| 5419 | Other professional and technical services | 0.00\% | 5.87\% | 0.00\% | $¥ ¥ ¥$ |
| 5613 | Employment services | 0.00\% | 7.37\% | 0.00\% | $¥ ¥ ¥$ |
| 5616 | Investigation and security services | 0.00\% | 1.84\% | 0.00\% |  |
| 5617 | Services to buildings and dwellings | 0.00\% | 0.10\% | 0.00\% |  |
| 5619 | Other support services | 0.00\% | 2.00\% | 0.00\% |  |
| 5621 | Waste collection | 0.00\% | 1.32\% | 0.00\% |  |
| 5622 | Waste treatment and disposal | 0.00\% | 7.17\% | 0.00\% | $¥ ¥ ¥$ |
| 5629 | Remediation and other waste services | 1.21\% | 1.09\% | 0.00\% |  |
| 8111 | Automotive repair and maintenance | 0.00\% | 2.83\% | 0.00\% | $¥ ¥$ |
| 8112 | Electronic equipment repair and maintenance | 0.00\% | 10.42\% | 0.00\% | $¥ ¥ ¥$ |
| 8113 | Commercial machinery repair and maintenance | 0.00\% | 0.00\% | 0.00\% |  |
| 9221 | Justice, public order, and safety activities | 0.00\% | 0.00\% | 0.00\% |  |
| 9261 | Administration of economic programs | 0.00\% | 0.00\% | 0.00\% |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \neq$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ \not \equiv \neq$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-3.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES

CITY OF BALTIMORE MARKETPLACE CONSTRUCTION
HISPANIC AMERICAN FIRMS

| NAICS-4 | NAICS-4 DESC | HISPANIC AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 1153 | Support activities for forestry | 0.00\% | 0.00\% | 0.00\% |  |
| 2213 | Water, sewage and other systems | 0.00\% | 0.00\% | 0.00\% |  |
| 2362 | Nonresidential building construction | 0.57\% | 5.24\% | 10.83\% | $¥ ¥ ¥$ |
| 2371 | Utility system construction | 3.48\% | 6.22\% | 55.93\% |  |
| 2372 | Land subdivision | 0.00\% | 0.00\% | 0.00\% |  |
| 2373 | Highway, street, and bridge construction | 27.88\% | 3.91\% | 0.00\% |  |
| 2379 | Other heavy construction | 0.77\% | 0.00\% | 0.00\% |  |
| 2381 | Building foundation and exterior contractors | 28.22\% | 8.65\% | 0.00\% |  |
| 2382 | Building equipment contractors | 2.17\% | 3.26\% | 66.33\% |  |
| 2383 | Building finishing contractors | 11.90\% | 11.24\% | 0.00\% |  |
| 2389 | Other specialty trade contractors | 2.27\% | 8.42\% | 26.95\% | $¥ ¥ ¥$ |
| 3219 | Other wood product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3231 | Printing and related support activities | 0.00\% | 5.41\% | 0.00\% | $¥ ¥ ¥$ |
| 3241 | Petroleum and coal products manufacturing | 83.50\% | 0.00\% | 0.00\% |  |
| 3259 | Other chemical product and preparation mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3273 | Cement and concrete product manufacturing | 99.63\% | 0.00\% | 0.00\% |  |
| 3279 | Other nonmetallic mineral products | 0.00\% | 0.00\% | 0.00\% |  |
| 3323 | Architectural and structural metals mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3328 | Coating, engraving, and heat treating metals | 0.00\% | 0.00\% | 0.00\% |  |
| 3329 | Other fabricated metal product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3331 | Ag., construction, and mining machinery mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3332 | Industrial machinery manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3339 | Other general purpose machinery manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3372 | Office furniture and fixtures manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3399 | Other miscellaneous manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 4233 | Lumber and const. supply merchant wholesalers | 0.00\% | 2.46\% | 0.00\% | ¥ |
| 4234 | Commercial equip. merchant wholesalers | 54.77\% | 0.10\% | 0.00\% |  |
| 4235 | Metal and mineral merchant wholesalers | 0.00\% | 0.43\% | 0.00\% |  |
| 4236 | Appliance and electric goods merchant whls. | 0.00\% | 0.21\% | 0.00\% |  |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 0.58\% | 0.00\% |  |
| 4238 | Machinery and supply merchant wholesalers | 0.00\% | 0.56\% | 0.00\% |  |
| 4239 | Misc. durable goods merchant wholesalers | 0.00\% | 0.34\% | 0.00\% |  |
| 4246 | Chemical merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4247 | Petroleum merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4442 | Lawn and garden equipment and supplies stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4543 | Direct selling establishments | 0.00\% | 0.00\% | 0.00\% |  |
| 4841 | General freight trucking | 0.71\% | 0.71\% | 0.00\% |  |
| 4842 | Specialized freight trucking | 17.83\% | 6.31\% | 0.00\% |  |
| 5182 | Data processing, hosting and related services | 0.00\% | 0.34\% | 0.00\% |  |
| 5313 | Activities related to real estate | 0.00\% | 0.00\% | 0.00\% |  |
| 5321 | Automotive equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5411 | Legal services | 0.00\% | 1.71\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 0.33\% | 5.81\% | 5.76\% | $¥ ¥ ¥$ |
| 5414 | Specialized design services | 0.00\% | 0.25\% | 0.00\% |  |
| 5415 | Computer systems design and related services | 0.00\% | 2.67\% | 0.00\% | $¥ ¥$ |


| NAICS-4 | NAICS-4 DESC | HISPANIC AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 5416 | Management and technical consulting services | 0.00\% | 4.18\% | 0.00\% | $¥ ¥ ¥$ |
| 5419 | Other professional and technical services | 0.00\% | 2.96\% | 0.00\% | $¥ ¥$ |
| 5613 | Employment services | 0.00\% | 0.42\% | 0.00\% |  |
| 5616 | Investigation and security services | 0.00\% | 5.24\% | 0.00\% | $¥ ¥ ¥$ |
| 5617 | Services to buildings and dwellings | 32.73\% | 9.99\% | 0.00\% |  |
| 5619 | Other support services | 0.62\% | 5.63\% | 11.01\% | $¥ ¥ ¥$ |
| 5621 | Waste collection | 5.15\% | 0.00\% | 0.00\% |  |
| 5622 | Waste treatment and disposal | 0.00\% | 0.00\% | 0.00\% |  |
| 5629 | Remediation and other waste services | 0.00\% | 0.36\% | 0.00\% |  |
| 8111 | Automotive repair and maintenance | 0.31\% | 4.71\% | 6.56\% | $¥ ¥ ¥$ |
| 8112 | Electronic equipment repair and maintenance | 0.00\% | 0.22\% | 0.00\% |  |
| 8113 | Commercial machinery repair and maintenance | 2.48\% | 2.48\% | 0.00\% |  |
| 9221 | Justice, public order, and safety activities | 0.00\% | 0.00\% | 0.00\% |  |
| 9261 | Administration of economic programs | 0.00\% | 0.00\% | 0.00\% |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better (85\% confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ \not \equiv \not \equiv$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-4.

## DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES

CITY OF BALTIMORE MARKETPLACE

## CONSTRUCTION

NATIVE AMERICAN FIRMS

| NAICS-4 | NAICS-4 DESC | NATIVE AMERICAN |  |  |  |
| ---: | :--- | ---: | ---: | ---: | ---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 1153 | Support activities for forestry | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 2213 | Water, sewage and other systems | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 2362 | Nonresidential building construction | $0.52 \%$ | $1.70 \%$ | $30.58 \%$ |  |
| 2371 | Utility system construction | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 2372 | Land subdivision | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 2373 | Highway, street, and bridge construction | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 2379 | Other heavy construction | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 2381 | Building foundation and exterior contractors | $0.26 \%$ | $0.11 \%$ | $241.91 \%$ |  |
| 2382 | Building equipment contractors | $10.95 \%$ | $0.32 \%$ | $0.00 \%$ |  |
| 2383 | Building finishing contractors | $0.00 \%$ | $0.98 \%$ | $0.00 \%$ |  |
| 2389 | Other specialty trade contractors | $0.03 \%$ | $1.90 \%$ | $1.74 \%$ |  |
| 3219 | Other wood product manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3231 | Printing and related support activities | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3241 | Petroleum and coal products manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3259 | Other chemical product and preparation mfg. | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3273 | Cement and concrete product manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3279 | Other nonmetallic mineral products | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3323 | Architectural and structural metals mfg. | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3328 | Coating, engraving, and heat treating metals | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3329 | Other fabricated metal product manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3331 | Ag., construction, and mining machinery mfg. | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3332 | Industrial machinery manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |


| NAICS-4 | NAICS-4 DESC | NATIVE AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 3339 | Other general purpose machinery manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3372 | Office furniture and fixtures manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3399 | Other miscellaneous manufacturing | 0.00\% | 4.76\% | 0.00\% | $¥ ¥ ¥$ |
| 4233 | Lumber and const. supply merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4234 | Commercial equip. merchant wholesalers | 0.00\% | 1.69\% | 0.00\% |  |
| 4235 | Metal and mineral merchant wholesalers | 0.00\% | 10.00\% | 0.00\% | $¥ ¥ ¥$ |
| 4236 | Appliance and electric goods merchant whls. | 0.00\% | 0.00\% | 0.00\% |  |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4238 | Machinery and supply merchant wholesalers | 0.00\% | 1.26\% | 0.00\% |  |
| 4239 | Misc. durable goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4246 | Chemical merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4247 | Petroleum merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4442 | Lawn and garden equipment and supplies stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4543 | Direct selling establishments | 0.00\% | 0.00\% | 0.00\% |  |
| 4841 | General freight trucking | 0.00\% | 0.00\% | 0.00\% |  |
| 4842 | Specialized freight trucking | 0.00\% | 0.00\% | 0.00\% |  |
| 5182 | Data processing, hosting and related services | 0.00\% | 0.00\% | 0.00\% |  |
| 5313 | Activities related to real estate | 0.00\% | 0.00\% | 0.00\% |  |
| 5321 | Automotive equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5411 | Legal services | 0.00\% | 0.00\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 0.00\% | 0.77\% | 0.00\% |  |
| 5414 | Specialized design services | 0.00\% | 0.00\% | 0.00\% |  |
| 5415 | Computer systems design and related services | 0.00\% | 1.14\% | 0.00\% |  |
| 5416 | Management and technical consulting services | 0.00\% | 0.04\% | 0.00\% |  |
| 5419 | Other professional and technical services | 0.00\% | 0.00\% | 0.00\% |  |
| 5613 | Employment services | 0.00\% | 3.48\% | 0.00\% | $¥ ¥$ |
| 5616 | Investigation and security services | 0.00\% | 3.31\% | 0.00\% | $¥ ¥$ |
| 5617 | Services to buildings and dwellings | 0.00\% | 1.02\% | 0.00\% |  |
| 5619 | Other support services | 0.00\% | 0.01\% | 0.00\% |  |
| 5621 | Waste collection | 0.00\% | 0.00\% | 0.00\% |  |
| 5622 | Waste treatment and disposal | 0.00\% | 0.00\% | 0.00\% |  |
| 5629 | Remediation and other waste services | 1.46\% | 2.04\% | 71.36\% |  |
| 8111 | Automotive repair and maintenance | 0.00\% | 1.83\% | 0.00\% |  |
| 8112 | Electronic equipment repair and maintenance | 0.00\% | 0.00\% | 0.00\% |  |
| 8113 | Commercial machinery repair and maintenance | 0.00\% | 0.00\% | 0.00\% |  |
| 9221 | Justice, public order, and safety activities | 0.00\% | 0.00\% | 0.00\% |  |
| 9261 | Administration of economic programs | 0.00\% | 0.00\% | 0.00\% |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv "$ indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ \not \equiv \neq$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-5.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES
CITY OF BALTIMORE MARKETPLACE
CONSTRUCTION
MBE FIRMS

| NAICS-4 | NAICS-4 DESC | MBE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 1153 | Support activities for forestry | 0.00\% | 0.00\% | 0.00\% |  |
| 2213 | Water, sewage and other systems | 0.00\% | 0.00\% | 0.00\% |  |
| 2362 | Nonresidential building construction | 9.03\% | 22.38\% | 40.37\% | $¥ ¥ ¥$ |
| 2371 | Utility system construction | 9.56\% | 18.52\% | 51.60\% | $¥ ¥ ¥$ |
| 2372 | Land subdivision | 0.00\% | 0.00\% | 0.00\% |  |
| 2373 | Highway, street, and bridge construction | 29.65\% | 11.85\% | 0.00\% |  |
| 2379 | Other heavy construction | 0.84\% | 4.55\% | 18.50\% | $¥ ¥$ |
| 2381 | Building foundation and exterior contractors | 49.23\% | 15.32\% | 0.00\% |  |
| 2382 | Building equipment contractors | 31.89\% | 14.99\% | 0.00\% |  |
| 2383 | Building finishing contractors | 18.59\% | 20.46\% | 90.87\% |  |
| 2389 | Other specialty trade contractors | 59.77\% | 20.61\% | 0.00\% |  |
| 3219 | Other wood product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3231 | Printing and related support activities | 0.00\% | 6.02\% | 0.00\% | $¥ ¥ ¥$ |
| 3241 | Petroleum and coal products manufacturing | 84.05\% | 4.55\% | 0.00\% |  |
| 3259 | Other chemical product and preparation mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3273 | Cement and concrete product manufacturing | 99.63\% | 0.00\% | 0.00\% |  |
| 3279 | Other nonmetallic mineral products | 0.00\% | 0.00\% | 0.00\% |  |
| 3323 | Architectural and structural metals mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3328 | Coating, engraving, and heat treating metals | 0.00\% | 0.00\% | 0.00\% |  |
| 3329 | Other fabricated metal product manufacturing | 4.76\% | 0.00\% | 0.00\% |  |
| 3331 | Ag., construction, and mining machinery mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3332 | Industrial machinery manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3339 | Other general purpose machinery manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3372 | Office furniture and fixtures manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3399 | Other miscellaneous manufacturing | 0.00\% | 19.74\% | 0.00\% | $¥ ¥ ¥$ |
| 4233 | Lumber and const. supply merchant wholesalers | 58.23\% | 5.95\% | 0.00\% |  |
| 4234 | Commercial equip. merchant wholesalers | 54.77\% | 11.81\% | 0.00\% |  |
| 4235 | Metal and mineral merchant wholesalers | 0.00\% | 21.22\% | 0.00\% | $¥ ¥ ¥$ |
| 4236 | Appliance and electric goods merchant whls. | 0.00\% | 7.48\% | 0.00\% | $¥ ¥ ¥$ |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 8.82\% | 0.00\% | $¥ ¥ ¥$ |
| 4238 | Machinery and supply merchant wholesalers | 1.70\% | 11.45\% | 14.83\% | $¥ ¥ ¥$ |
| 4239 | Misc. durable goods merchant wholesalers | 0.00\% | 50.87\% | 0.00\% | $¥ ¥ ¥$ |
| 4246 | Chemical merchant wholesalers | 0.00\% | 12.56\% | 0.00\% | $¥ ¥ ¥$ |
| 4247 | Petroleum merchant wholesalers | 100.00\% | 100.00\% | 0.00\% |  |
| 4442 | Lawn and garden equipment and supplies stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4543 | Direct selling establishments | 100.00\% | 100.00\% | 0.00\% |  |
| 4841 | General freight trucking | 31.23\% | 31.23\% | 0.00\% |  |
| 4842 | Specialized freight trucking | 32.18\% | 34.50\% | 93.28\% |  |
| 5182 | Data processing, hosting and related services | 0.00\% | 25.15\% | 0.00\% | $¥ ¥ ¥$ |
| 5313 | Activities related to real estate | 100.00\% | 100.00\% | 0.00\% |  |
| 5321 | Automotive equipment rental and leasing | 90.91\% | 90.91\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 1.29\% | 1.29\% | 0.00\% |  |
| 5411 | Legal services | 36.03\% | 7.05\% | 0.00\% |  |


| NAICS-4 | NAICS-4 DESC | MBE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 5413 | Architectural and engineering services | 41.85\% | 23.17\% | 0.00\% |  |
| 5414 | Specialized design services | 0.00\% | 11.91\% | 0.00\% | $¥ ¥ ¥$ |
| 5415 | Computer systems design and related services | 88.25\% | 38.27\% | 0.00\% |  |
| 5416 | Management and technical consulting services | 36.37\% | 27.83\% | 0.00\% |  |
| 5419 | Other professional and technical services | 26.20\% | 37.64\% | 69.61\% | $¥ ¥ ¥$ |
| 5613 | Employment services | 94.12\% | 29.16\% | 0.00\% |  |
| 5616 | Investigation and security services | 0.00\% | 24.57\% | 0.00\% | $¥ ¥ ¥$ |
| 5617 | Services to buildings and dwellings | 37.33\% | 29.92\% | 0.00\% |  |
| 5619 | Other support services | 5.68\% | 42.81\% | 13.27\% | $¥ ¥ ¥$ |
| 5621 | Waste collection | 5.15\% | 3.95\% | 0.00\% |  |
| 5622 | Waste treatment and disposal | 0.00\% | 35.34\% | 0.00\% | $¥ ¥ ¥$ |
| 5629 | Remediation and other waste services | 3.02\% | 14.46\% | 20.88\% | $¥ ¥ ¥$ |
| 8111 | Automotive repair and maintenance | 100.00\% | 21.46\% | 0.00\% |  |
| 8112 | Electronic equipment repair and maintenance | 71.95\% | 37.47\% | 0.00\% |  |
| 8113 | Commercial machinery repair and maintenance | 72.08\% | 72.08\% | 0.00\% |  |
| 9221 | Justice, public order, and safety activities | 0.00\% | 0.00\% | 0.00\% |  |
| 9261 | Administration of economic programs | 0.00\% | 0.00\% | 0.00\% |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ \not \equiv \neq$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-6.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES CITY OF BALTIMORE MARKETPLACE CONSTRUCTION NONMINORITY FEMALE FIRMS

| NAICS-4 | NAICS-4 DESC | NONMINORITY FEMALE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 1153 | Support activities for forestry | 100.00\% | 100.00\% | 0.00\% |  |
| 2213 | Water, sewage and other systems | 0.00\% | 0.00\% | 0.00\% |  |
| 2362 | Nonresidential building construction | 34.69\% | 26.50\% | 0.00\% |  |
| 2371 | Utility system construction | 1.60\% | 17.75\% | 9.01\% | $¥ ¥ ¥$ |
| 2372 | Land subdivision | 100.00\% | 100.00\% | 0.00\% |  |
| 2373 | Highway, street, and bridge construction | 4.30\% | 25.69\% | 16.74\% | $¥ ¥ ¥$ |
| 2379 | Other heavy construction | 4.26\% | 26.16\% | 16.29\% | $¥ ¥ ¥$ |
| 2381 | Building foundation and exterior contractors | 2.34\% | 22.36\% | 10.47\% | $¥ ¥ ¥$ |
| 2382 | Building equipment contractors | 1.01\% | 20.76\% | 4.84\% | $¥ ¥ ¥$ |
| 2383 | Building finishing contractors | 36.82\% | 28.32\% | 0.00\% |  |
| 2389 | Other specialty trade contractors | 10.39\% | 22.00\% | 47.22\% | $¥ ¥ ¥$ |
| 3219 | Other wood product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3231 | Printing and related support activities | 100.00\% | 43.37\% | 0.00\% |  |
| 3241 | Petroleum and coal products manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3259 | Other chemical product and preparation mfg. | 100.00\% | 100.00\% | 0.00\% |  |
| 3273 | Cement and concrete product manufacturing | 0.00\% | 1.52\% | 0.00\% |  |
| 3279 | Other nonmetallic mineral products | 0.00\% | 0.00\% | 0.00\% |  |
| 3323 | Architectural and structural metals mfg. | 3.19\% | 3.19\% | 0.00\% |  |
| 3328 | Coating, engraving, and heat treating metals | 0.00\% | 0.00\% | 0.00\% |  |


| NAICS-4 | NAICS-4 DESC | NONMINORITY FEMALE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 3329 | Other fabricated metal product manufacturing | 0.33\% | 29.76\% | 1.10\% | $¥ ¥ ¥$ |
| 3331 | Ag., construction, and mining machinery mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3332 | Industrial machinery manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3339 | Other general purpose machinery manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3372 | Office furniture and fixtures manufacturing | 18.02\% | 18.02\% | 0.00\% |  |
| 3399 | Other miscellaneous manufacturing | 100.00\% | 37.10\% | 0.00\% |  |
| 4233 | Lumber and const. supply merchant wholesalers | 5.24\% | 39.30\% | 13.33\% | $¥ ¥ ¥$ |
| 4234 | Commercial equip. merchant wholesalers | 0.00\% | 28.32\% | 0.00\% | $¥ ¥ ¥$ |
| 4235 | Metal and mineral merchant wholesalers | 0.00\% | 41.04\% | 0.00\% | $¥ ¥ ¥$ |
| 4236 | Appliance and electric goods merchant whls. | 5.01\% | 33.60\% | 14.92\% | $¥ ¥ ¥$ |
| 4237 | Hardware and plumbing merchant wholesalers | 65.20\% | 24.45\% | 0.00\% |  |
| 4238 | Machinery and supply merchant wholesalers | 9.37\% | 17.70\% | 52.93\% | $¥ ¥ ¥$ |
| 4239 | Misc. durable goods merchant wholesalers | 0.00\% | 1.12\% | 0.00\% |  |
| 4246 | Chemical merchant wholesalers | 100.00\% | 35.51\% | 0.00\% |  |
| 4247 | Petroleum merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4442 | Lawn and garden equipment and supplies stores | 100.00\% | 100.00\% | 0.00\% |  |
| 4543 | Direct selling establishments | 0.00\% | 0.00\% | 0.00\% |  |
| 4841 | General freight trucking | 67.60\% | 67.60\% | 0.00\% |  |
| 4842 | Specialized freight trucking | 19.38\% | 13.61\% | 0.00\% |  |
| 5182 | Data processing, hosting and related services | 0.00\% | 36.62\% | 0.00\% | $¥ ¥ ¥$ |
| 5313 | Activities related to real estate | 0.00\% | 0.00\% | 0.00\% |  |
| 5321 | Automotive equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5411 | Legal services | 0.00\% | 30.26\% | 0.00\% | $¥ ¥ ¥$ |
| 5413 | Architectural and engineering services | 12.01\% | 25.46\% | 47.17\% | $¥ ¥ ¥$ |
| 5414 | Specialized design services | 0.00\% | 38.10\% | 0.00\% | $¥ ¥ ¥$ |
| 5415 | Computer systems design and related services | 0.00\% | 15.37\% | 0.00\% | $¥ ¥ ¥$ |
| 5416 | Management and technical consulting services | 1.93\% | 22.47\% | 8.58\% | $¥ ¥ ¥$ |
| 5419 | Other professional and technical services | 51.28\% | 38.00\% | 0.00\% |  |
| 5613 | Employment services | 5.88\% | 18.50\% | 31.78\% | $¥ ¥ ¥$ |
| 5616 | Investigation and security services | 0.00\% | 37.30\% | 0.00\% | $¥ ¥ ¥$ |
| 5617 | Services to buildings and dwellings | 53.90\% | 28.92\% | 0.00\% |  |
| 5619 | Other support services | 84.68\% | 31.35\% | 0.00\% |  |
| 5621 | Waste collection | 78.32\% | 30.92\% | 0.00\% |  |
| 5622 | Waste treatment and disposal | 100.00\% | 20.00\% | 0.00\% |  |
| 5629 | Remediation and other waste services | 12.51\% | 36.48\% | 34.29\% | $¥ ¥ ¥$ |
| 8111 | Automotive repair and maintenance | 0.00\% | 18.98\% | 0.00\% | $¥ ¥ ¥$ |
| 8112 | Electronic equipment repair and maintenance | 0.00\% | 21.23\% | 0.00\% | $¥ ¥ ¥$ |
| 8113 | Commercial machinery repair and maintenance | 0.00\% | 0.00\% | 0.00\% |  |
| 9221 | Justice, public order, and safety activities | 0.00\% | 0.00\% | 0.00\% |  |
| 9261 | Administration of economic programs | 0.00\% | 0.00\% | 0.00\% |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \neq$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ \not \equiv \neq$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-7.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES
CITY OF BALTIMORE MARKETPLACE
CONSTRUCTION
M/WBE FIRMS

| NAICS-4 | NAICS-4 DESC | M/WBE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 1153 | Support activities for forestry | 100.00\% | 100.00\% | 0.00\% |  |
| 2213 | Water, sewage and other systems | 0.00\% | 0.00\% | 0.00\% |  |
| 2362 | Nonresidential building construction | 43.72\% | 48.87\% | 89.46\% |  |
| 2371 | Utility system construction | 11.16\% | 36.27\% | 30.76\% | $\ddagger ¥ ¥$ |
| 2372 | Land subdivision | 100.00\% | 100.00\% | 0.00\% |  |
| 2373 | Highway, street, and bridge construction | 33.95\% | 37.55\% | 90.41\% |  |
| 2379 | Other heavy construction | 5.10\% | 30.71\% | 16.62\% | ¥¥¥ |
| 2381 | Building foundation and exterior contractors | 51.57\% | 37.67\% | 0.00\% |  |
| 2382 | Building equipment contractors | 32.89\% | 35.76\% | 92.00\% |  |
| 2383 | Building finishing contractors | 55.41\% | 48.77\% | 0.00\% |  |
| 2389 | Other specialty trade contractors | 70.16\% | 42.61\% | 0.00\% |  |
| 3219 | Other wood product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3231 | Printing and related support activities | 100.00\% | 49.39\% | 0.00\% |  |
| 3241 | Petroleum and coal products manufacturing | 84.05\% | 4.55\% | 0.00\% |  |
| 3259 | Other chemical product and preparation mfg. | 100.00\% | 100.00\% | 0.00\% |  |
| 3273 | Cement and concrete product manufacturing | 99.63\% | 1.52\% | 0.00\% |  |
| 3279 | Other nonmetallic mineral products | 0.00\% | 0.00\% | 0.00\% |  |
| 3323 | Architectural and structural metals mfg. | 3.19\% | 3.19\% | 0.00\% |  |
| 3328 | Coating, engraving, and heat treating metals | 0.00\% | 0.00\% | 0.00\% |  |
| 3329 | Other fabricated metal product manufacturing | 5.09\% | 29.76\% | 17.10\% | $¥ ¥ ¥$ |
| 3331 | Ag., construction, and mining machinery mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3332 | Industrial machinery manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3339 | Other general purpose machinery manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3372 | Office furniture and fixtures manufacturing | 18.02\% | 18.02\% | 0.00\% |  |
| 3399 | Other miscellaneous manufacturing | 100.00\% | 56.84\% | 0.00\% |  |
| 4233 | Lumber and const. supply merchant wholesalers | 63.47\% | 45.25\% | 0.00\% |  |
| 4234 | Commercial equip. merchant wholesalers | 54.77\% | 40.13\% | 0.00\% |  |
| 4235 | Metal and mineral merchant wholesalers | 0.00\% | 62.26\% | 0.00\% | $¥ ¥ ¥$ |
| 4236 | Appliance and electric goods merchant whls. | 5.01\% | 41.08\% | 12.20\% | $\ddagger ¥ ¥$ |
| 4237 | Hardware and plumbing merchant wholesalers | 65.20\% | 33.27\% | 0.00\% |  |
| 4238 | Machinery and supply merchant wholesalers | 11.07\% | 29.16\% | 37.97\% | $¥ ¥ ¥$ |
| 4239 | Misc. durable goods merchant wholesalers | 0.00\% | 52.00\% | 0.00\% | $¥ ¥ ¥$ |
| 4246 | Chemical merchant wholesalers | 100.00\% | 48.08\% | 0.00\% |  |
| 4247 | Petroleum merchant wholesalers | 100.00\% | 100.00\% | 0.00\% |  |
| 4442 | Lawn and garden equipment and supplies stores | 100.00\% | 100.00\% | 0.00\% |  |
| 4543 | Direct selling establishments | 100.00\% | 100.00\% | 0.00\% |  |
| 4841 | General freight trucking | 98.83\% | 98.83\% | 0.00\% |  |
| 4842 | Specialized freight trucking | 51.56\% | 48.11\% | 0.00\% |  |
| 5182 | Data processing, hosting and related services | 0.00\% | 61.77\% | 0.00\% | $\ddagger ¥ ¥$ |
| 5313 | Activities related to real estate | 100.00\% | 100.00\% | 0.00\% |  |
| 5321 | Automotive equipment rental and leasing | 90.91\% | 90.91\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 1.29\% | 1.29\% | 0.00\% |  |
| 5411 | Legal services | 36.03\% | 37.31\% | 96.58\% |  |


| NAICS-4 | NAICS-4 DESC | M/WBE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 5413 | Architectural and engineering services | 53.86\% | 48.64\% | 0.00\% |  |
| 5414 | Specialized design services | 0.00\% | 50.01\% | 0.00\% | $¥ ¥ ¥$ |
| 5415 | Computer systems design and related services | 88.25\% | 53.64\% | 0.00\% |  |
| 5416 | Management and technical consulting services | 38.30\% | 50.30\% | 76.13\% | $¥ ¥ ¥$ |
| 5419 | Other professional and technical services | 77.49\% | 75.64\% | 0.00\% |  |
| 5613 | Employment services | 100.00\% | 47.67\% | 0.00\% |  |
| 5616 | Investigation and security services | 0.00\% | 61.88\% | 0.00\% | $¥ ¥ ¥$ |
| 5617 | Services to buildings and dwellings | 91.23\% | 58.84\% | 0.00\% |  |
| 5619 | Other support services | 90.36\% | 74.17\% | 0.00\% |  |
| 5621 | Waste collection | 83.47\% | 34.87\% | 0.00\% |  |
| 5622 | Waste treatment and disposal | 100.00\% | 55.34\% | 0.00\% |  |
| 5629 | Remediation and other waste services | 15.53\% | 50.94\% | 30.48\% | $¥ ¥ ¥$ |
| 8111 | Automotive repair and maintenance | 100.00\% | 40.45\% | 0.00\% |  |
| 8112 | Electronic equipment repair and maintenance | 71.95\% | 58.70\% | 0.00\% |  |
| 8113 | Commercial machinery repair and maintenance | 72.08\% | 72.08\% | 0.00\% |  |
| 9221 | Justice, public order, and safety activities | 0.00\% | 0.00\% | 0.00\% |  |
| 9261 | Administration of economic programs | 0.00\% | 0.00\% | 0.00\% |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ \not \equiv \neq$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-8.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES
CITY OF BALTIMORE MARKETPLACE
ARCHITECTURE \& ENGINEERING
AFRICAN AMERICAN FIRMS

| NAICS-4 | NAICS-4 DESC | AFRICAN AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 2362 | Nonresidential building construction | 69.01\% | 10.03\% | 0.00\% |  |
| 2371 | Utility system construction | 0.00\% | 11.10\% | 0.00\% | $¥ ¥ ¥$ |
| 2379 | Other heavy construction | 88.44\% | 0.00\% | 0.00\% |  |
| 2381 | Building foundation and exterior contractors | 0.00\% | 3.83\% | 0.00\% | $¥ ¥ ¥$ |
| 2382 | Building equipment contractors | 15.04\% | 9.74\% | 0.00\% |  |
| 2389 | Other specialty trade contractors | 0.00\% | 9.67\% | 0.00\% | $¥ ¥ ¥$ |
| 3231 | Printing and related support activities | 0.00\% | 0.46\% | 0.00\% |  |
| 5182 | Data processing, hosting and related services | 0.00\% | 12.51\% | 0.00\% | $¥ ¥ ¥$ |
| 5313 | Activities related to real estate | 0.00\% | 0.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 3.32\% | 10.05\% | 32.99\% | $¥ ¥ ¥$ |
| 5414 | Specialized design services | 42.16\% | 11.29\% | 0.00\% |  |
| 5415 | Computer systems design and related services | 0.00\% | 17.33\% | 0.00\% | $¥ ¥ ¥$ |
| 5416 | Management and technical consulting services | 19.87\% | 19.76\% | 0.00\% |  |
| 5419 | Other professional and technical services | 0.00\% | 28.80\% | 0.00\% | $¥ ¥ ¥$ |
| 5617 | Services to buildings and dwellings | 0.00\% | 18.80\% | 0.00\% | $¥ ¥ ¥$ |
| 5619 | Other support services | 96.74\% | 35.17\% | 0.00\% |  |
| 5622 | Waste treatment and disposal | 0.00\% | 28.17\% | 0.00\% | $¥ ¥ ¥$ |
| 5629 | Remediation and other waste services | 60.36\% | 10.96\% | 0.00\% |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ ¥ \not \equiv$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-9.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES
CITY OF BALTIMORE MARKETPLACE
ARCHITECTURE \& ENGINEERING
ASIAN AMERICAN FIRMS

| NAICS-4 | NAICS-4 DESC | ASIAN AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 2362 | Nonresidential building construction | 13.80\% | 5.41\% | 0.00\% |  |
| 2371 | Utility system construction | 24.44\% | 1.20\% | 0.00\% |  |
| 2379 | Other heavy construction | 0.00\% | 4.55\% | 0.00\% | ¥¥¥ |
| 2381 | Building foundation and exterior contractors | 0.00\% | 2.73\% | 0.00\% | $¥ ¥ ¥$ |
| 2382 | Building equipment contractors | 0.00\% | 1.67\% | 0.00\% | $¥$ |
| 2389 | Other specialty trade contractors | 68.56\% | 0.62\% | 0.00\% |  |
| 3231 | Printing and related support activities | 0.00\% | 0.15\% | 0.00\% |  |
| 5182 | Data processing, hosting and related services | 0.00\% | 12.31\% | 0.00\% | $¥ ¥ ¥$ |
| 5313 | Activities related to real estate | 0.00\% | 0.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 22.71\% | 6.54\% | 0.00\% |  |
| 5414 | Specialized design services | 0.00\% | 0.37\% | 0.00\% |  |


| NAICS-4 | NAICS-4 DESC | ASIAN AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 5415 | Computer systems design and related services | 0.00\% | 17.12\% | 0.00\% | $¥ ¥ ¥$ |
| 5416 | Management and technical consulting services | 60.38\% | 3.85\% | 0.00\% |  |
| 5419 | Other professional and technical services | 0.00\% | 5.87\% | 0.00\% | $¥ ¥ ¥$ |
| 5617 | Services to buildings and dwellings | 0.00\% | 0.10\% | 0.00\% |  |
| 5619 | Other support services | 0.00\% | 2.00\% | 0.00\% | ¥¥ |
| 5622 | Waste treatment and disposal | 0.00\% | 7.17\% | 0.00\% | $¥ ¥ ¥$ |
| 5629 | Remediation and other waste services | 29.71\% | 1.09\% | 0.00\% |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ \nexists \neq$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-10.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES CITY OF BALTIMORE MARKETPLACE ARCHITECTURE \& ENGINEERING

HISPANIC AMERICAN FIRMS

| NAICS-4 | NAICS-4 DESC | HISPANIC AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 2362 | Nonresidential building construction | 2.41\% | 5.24\% | 45.89\% | $\ddagger$ |
| 2371 | Utility system construction | 0.00\% | 6.22\% | 0.00\% | $¥ ¥ ¥$ |
| 2379 | Other heavy construction | 0.00\% | 0.00\% | 0.00\% |  |
| 2381 | Building foundation and exterior contractors | 0.00\% | 8.65\% | 0.00\% | $¥ ¥ ¥$ |
| 2382 | Building equipment contractors | 0.00\% | 3.26\% | 0.00\% | $¥ ¥ ¥$ |
| 2389 | Other specialty trade contractors | 0.00\% | 8.42\% | 0.00\% | $\ddagger ¥ ¥$ |
| 3231 | Printing and related support activities | 0.00\% | 5.41\% | 0.00\% | $¥ ¥ ¥$ |
| 5182 | Data processing, hosting and related services | 0.00\% | 0.34\% | 0.00\% |  |
| 5313 | Activities related to real estate | 0.00\% | 0.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 0.37\% | 5.81\% | 6.36\% | $¥ ¥ ¥$ |
| 5414 | Specialized design services | 0.00\% | 0.25\% | 0.00\% |  |
| 5415 | Computer systems design and related services | 0.00\% | 2.67\% | 0.00\% | $¥ ¥ ¥$ |
| 5416 | Management and technical consulting services | 0.00\% | 4.18\% | 0.00\% | $\ddagger ¥ ¥$ |
| 5419 | Other professional and technical services | 0.00\% | 2.96\% | 0.00\% | $¥ ¥ ¥$ |
| 5617 | Services to buildings and dwellings | 0.00\% | 9.99\% | 0.00\% | $¥ ¥ ¥$ |
| 5619 | Other support services | 1.62\% | 5.63\% | 28.76\% | $¥ ¥ ¥$ |
| 5622 | Waste treatment and disposal | 0.00\% | 0.00\% | 0.00\% |  |
| 5629 | Remediation and other waste services | 0.00\% | 0.36\% | 0.00\% |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ ¥ \not \equiv$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-11. DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES

NATIVE AMERICAN FIRMS

| NAICS-4 | NAICS-4 DESC | NATIVE AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 2362 | Nonresidential building construction | 0.00\% | 1.70\% | 0.00\% | $¥$ |
| 2371 | Utility system construction | 0.00\% | 0.00\% | 0.00\% |  |
| 2379 | Other heavy construction | 0.00\% | 0.00\% | 0.00\% |  |
| 2381 | Building foundation and exterior contractors | 0.00\% | 0.11\% | 0.00\% |  |
| 2382 | Building equipment contractors | 23.06\% | 0.32\% | 0.00\% |  |
| 2389 | Other specialty trade contractors | 0.00\% | 1.90\% | 0.00\% | $¥ ¥$ |
| 3231 | Printing and related support activities | 0.00\% | 0.00\% | 0.00\% |  |
| 5182 | Data processing, hosting and related services | 0.00\% | 0.00\% | 0.00\% |  |
| 5313 | Activities related to real estate | 0.00\% | 0.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 0.00\% | 0.77\% | 0.00\% |  |
| 5414 | Specialized design services | 0.00\% | 0.00\% | 0.00\% |  |
| 5415 | Computer systems design and related services | 0.00\% | 1.14\% | 0.00\% |  |
| 5416 | Management and technical consulting services | 0.00\% | 0.04\% | 0.00\% |  |
| 5419 | Other professional and technical services | 0.00\% | 0.00\% | 0.00\% |  |
| 5617 | Services to buildings and dwellings | 0.00\% | 1.02\% | 0.00\% |  |
| 5619 | Other support services | 0.00\% | 0.01\% | 0.00\% |  |
| 5622 | Waste treatment and disposal | 0.00\% | 0.00\% | 0.00\% |  |
| 5629 | Remediation and other waste services | 0.00\% | 2.04\% | 0.00\% | ¥ |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv "$ indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ ¥ \not \equiv "$ indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-12.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES CITY OF BALTIMORE MARKETPLACE ARCHITECTURE \& ENGINEERING

MBE FIRMS

| NAICS-4 | NAICS-4 DESC | MBE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 2362 | Nonresidential building construction | 85.22\% | 22.38\% | 0.00\% |  |
| 2371 | Utility system construction | 24.44\% | 18.52\% | 0.00\% |  |
| 2379 | Other heavy construction | 88.44\% | 4.55\% | 0.00\% |  |
| 2381 | Building foundation and exterior contractors | 0.00\% | 15.32\% | 0.00\% | $¥ ¥ ¥$ |
| 2382 | Building equipment contractors | 38.11\% | 14.99\% | 0.00\% |  |
| 2389 | Other specialty trade contractors | 68.56\% | 20.61\% | 0.00\% |  |
| 3231 | Printing and related support activities | 0.00\% | 6.02\% | 0.00\% | $¥ ¥ ¥$ |
| 5182 | Data processing, hosting and related services | 0.00\% | 25.15\% | 0.00\% | $¥ ¥ ¥$ |
| 5313 | Activities related to real estate | 0.00\% | 0.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 26.39\% | 23.17\% | 0.00\% |  |
| 5414 | Specialized design services | 42.16\% | 11.91\% | 0.00\% |  |
| 5415 | Computer systems design and related services | 0.00\% | 38.27\% | 0.00\% | $¥ ¥ ¥$ |


| NAICS-4 | NAICS-4 DESC | MBE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 5416 | Management and technical consulting services | 80.25\% | 27.83\% | 0.00\% |  |
| 5419 | Other professional and technical services | 0.00\% | 37.64\% | 0.00\% | $¥ ¥ ¥$ |
| 5617 | Services to buildings and dwellings | 0.00\% | 29.92\% | 0.00\% | $¥ ¥ ¥$ |
| 5619 | Other support services | 98.36\% | 42.81\% | 0.00\% |  |
| 5622 | Waste treatment and disposal | 0.00\% | 35.34\% | 0.00\% | $¥ ¥ ¥$ |
| 5629 | Remediation and other waste services | 90.07\% | 14.46\% | 0.00\% |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ ¥ \not \equiv "$ indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-13.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES CITY OF BALTIMORE MARKETPLACE
ARCHITECTURE \& ENGINEERING
NONMINORITY FEMALE FIRMS

| NAICS-4 | NAICS-4 DESC | NONMINORITY FEMALE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 2362 | Nonresidential building construction | 11.05\% | 26.50\% | 41.71\% | $¥ ¥ ¥$ |
| 2371 | Utility system construction | 29.43\% | 17.75\% | 0.00\% |  |
| 2379 | Other heavy construction | 0.00\% | 26.16\% | 0.00\% | $¥ ¥ ¥$ |
| 2381 | Building foundation and exterior contractors | 0.00\% | 22.36\% | 0.00\% | $¥ ¥ ¥$ |
| 2382 | Building equipment contractors | 20.19\% | 20.76\% | 97.25\% |  |
| 2389 | Other specialty trade contractors | 31.44\% | 22.00\% | 0.00\% |  |
| 3231 | Printing and related support activities | 0.00\% | 43.37\% | 0.00\% | $¥ ¥ ¥$ |
| 5182 | Data processing, hosting and related services | 0.00\% | 36.62\% | 0.00\% | $¥ ¥ ¥$ |
| 5313 | Activities related to real estate | 100.00\% | 100.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 9.16\% | 25.46\% | 35.98\% | $¥ ¥ ¥$ |
| 5414 | Specialized design services | 57.84\% | 38.10\% | 0.00\% |  |
| 5415 | Computer systems design and related services | 100.00\% | 15.37\% | 0.00\% |  |
| 5416 | Management and technical consulting services | 13.83\% | 22.47\% | 61.53\% | $¥ ¥ ¥$ |
| 5419 | Other professional and technical services | 0.00\% | 38.00\% | 0.00\% | $¥ ¥ ¥$ |
| 5617 | Services to buildings and dwellings | 65.54\% | 28.92\% | 0.00\% |  |
| 5619 | Other support services | 1.64\% | 31.35\% | 5.22\% | $¥ ¥ ¥$ |
| 5622 | Waste treatment and disposal | 0.00\% | 20.00\% | 0.00\% | $¥ ¥ ¥$ |
| 5629 | Remediation and other waste services | 2.27\% | 36.48\% | 6.21\% | $¥ ¥ ¥$ |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ \nexists \neq$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-14.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES
CITY OF BALTIMORE MARKETPLACE
ARCHITECTURE \& ENGINEERING
M/WBE FIRMS

| NAICS-4 | NAICS-4 DESC | M/WBE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 2362 | Nonresidential building construction | 96.27\% | 48.87\% | 0.00\% |  |
| 2371 | Utility system construction | 53.87\% | 36.27\% | 0.00\% |  |
| 2379 | Other heavy construction | 88.44\% | 30.71\% | 0.00\% |  |
| 2381 | Building foundation and exterior contractors | 0.00\% | 37.67\% | 0.00\% | $¥ ¥ ¥$ |
| 2382 | Building equipment contractors | 58.30\% | 35.76\% | 0.00\% |  |
| 2389 | Other specialty trade contractors | 100.00\% | 42.61\% | 0.00\% |  |
| 3231 | Printing and related support activities | 0.00\% | 49.39\% | 0.00\% | $¥ ¥ ¥$ |
| 5182 | Data processing, hosting and related services | 0.00\% | 61.77\% | 0.00\% | $¥ ¥ ¥$ |
| 5313 | Activities related to real estate | 100.00\% | 100.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 35.56\% | 48.64\% | 73.10\% | $¥ ¥ ¥$ |
| 5414 | Specialized design services | 100.00\% | 50.01\% | 0.00\% |  |
| 5415 | Computer systems design and related services | 100.00\% | 53.64\% | 0.00\% |  |
| 5416 | Management and technical consulting services | 94.08\% | 50.30\% | 0.00\% |  |
| 5419 | Other professional and technical services | 0.00\% | 75.64\% | 0.00\% | $¥ ¥ ¥$ |
| 5617 | Services to buildings and dwellings | 65.54\% | 58.84\% | 0.00\% |  |
| 5619 | Other support services | 100.00\% | 74.17\% | 0.00\% |  |
| 5622 | Waste treatment and disposal | 0.00\% | 55.34\% | 0.00\% | $¥ ¥ ¥$ |
| 5629 | Remediation and other waste services | 92.33\% | 50.94\% | 0.00\% |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv "$ indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ ¥ \not \equiv$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-15.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES CITY OF BALTIMORE MARKETPLACE

GOODS \& OTHER SERVICES
AFRICAN AMERICAN FIRMS

| NAICS-4 | NAICS-4 DESC | AFRICAN AMERICAN |  |  |  |
| :---: | :--- | ---: | ---: | ---: | ---: |
|  | Greenhouse and nursery production | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 1152 | Support activities for animal production | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 2213 | Water, sewage and other systems | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3149 | Other textile product mills | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3211 | Sawmills and wood preservation | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3231 | Printing and related support activities | $1.05 \%$ | $0.46 \%$ | $0.00 \%$ |  |
| 3251 | Basic chemical manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3252 | Resin, rubber, and artificial fibers mfg. | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3253 | Agricultural chemical manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3261 | Plastics product manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3311 | Iron and steel mills and ferroalloy mfg. | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3312 | Steel product mfg. from purchased steel | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3329 | Other fabricated metal product manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |


| NAICS-4 | NAICS-4 DESC | AFRICAN AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 3345 | Electronic instrument manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3391 | Medical equipment and supplies manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3399 | Other miscellaneous manufacturing | 0.00\% | 5.45\% | 0.00\% |  |
| 4231 | Motor vehicle and parts merchant wholesalers | 5.75\% | 5.75\% | 0.00\% |  |
| 4232 | Furniture and furnishing merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4233 | Lumber and const. supply merchant wholesalers | 0.04\% | 1.29\% | 2.86\% |  |
| 4234 | Commercial equip. merchant wholesalers | 0.58\% | 4.65\% | 12.40\% |  |
| 4235 | Metal and mineral merchant wholesalers | 0.00\% | 10.78\% | 0.00\% | $¥$ |
| 4236 | Appliance and electric goods merchant whls. | 42.81\% | 0.49\% | 0.00\% |  |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 8.24\% | 0.00\% |  |
| 4238 | Machinery and supply merchant wholesalers | 0.59\% | 3.33\% | 17.65\% |  |
| 4239 | Misc. durable goods merchant wholesalers | 0.00\% | 25.28\% | 0.00\% | $¥ ¥ ¥$ |
| 4241 | Paper and paper product merchant wholesalers | 0.00\% | 2.90\% | 0.00\% |  |
| 4242 | Druggists' goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4243 | Apparel and piece goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4244 | Grocery and related product wholesalers | 35.65\% | 35.65\% | 0.00\% |  |
| 4246 | Chemical merchant wholesalers | 0.00\% | 0.62\% | 0.00\% |  |
| 4247 | Petroleum merchant wholesalers | 100.00\% | 100.00\% | 0.00\% |  |
| 4249 | Misc. nondurable goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4411 | Automobile dealers | 0.00\% | 16.78\% | 0.00\% | $¥ ¥ ¥$ |
| 4412 | Other motor vehicle dealers | 0.00\% | 0.00\% | 0.00\% |  |
| 4413 | Auto parts, accessories, and tire stores | 0.00\% | 10.18\% | 0.00\% | $¥$ |
| 4421 | Furniture stores | 0.00\% | 12.50\% | 0.00\% | $¥ ¥$ |
| 4422 | Home furnishings stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4441 | Building material and supplies dealers | 0.00\% | 0.00\% | 0.00\% |  |
| 4442 | Lawn and garden equipment and supplies stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4461 | Health and personal care stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4481 | Clothing stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4482 | Shoe stores | 11.89\% | 11.89\% | 0.00\% |  |
| 4511 | Sporting goods and musical instrument stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4523 | General Merchandise Stores, including Warehouse Clubs and Supercenters | 0.00\% | 0.00\% | 0.00\% |  |
| 4539 | Other miscellaneous store retailers | 0.00\% | 0.00\% | 0.00\% |  |
| 4543 | Direct selling establishments | 0.00\% | 0.00\% | 0.00\% |  |
| 4841 | General freight trucking | 0.00\% | 0.00\% | 0.00\% |  |
| 4842 | Specialized freight trucking | 34.50\% | 27.75\% | 0.00\% |  |
| 4853 | Taxi and limousine service | 0.00\% | 0.00\% | 0.00\% |  |
| 4855 | Charter bus industry | 2.32\% | 0.00\% | 0.00\% |  |
| 4859 | Other ground passenger transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 4881 | Support activities for air transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 4884 | Support activities for road transportation | 4.52\% | 25.21\% | 17.94\% | $¥ ¥ ¥$ |
| 4922 | Local messengers and local delivery | 0.00\% | 0.00\% | 0.00\% |  |
| 5112 | Software publishers | 0.00\% | 25.35\% | 0.00\% | $¥ ¥ ¥$ |
| 5121 | Motion picture and video industries | 0.00\% | 14.56\% | 0.00\% | ¥¥ |
| 5182 | Data processing, hosting and related services | 0.00\% | 12.51\% | 0.00\% | $¥ ¥$ |
| 5416 | Management and technical consulting services | 0.00\% | 19.76\% | 0.00\% | $¥ ¥ ¥$ |
| 5612 | Facilities support services | 0.00\% | 0.00\% | 0.00\% |  |
| 5613 | Employment services | 3.52\% | 17.89\% | 19.65\% | $¥ ¥$ |
| 5614 | Business support services | 0.00\% | 19.65\% | 0.00\% | $¥ ¥ ¥$ |


| NAICS-4 | NAICS-4 DESC | AFRICAN AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 5616 | Investigation and security services | 13.32\% | 14.20\% | 93.81\% |  |
| 5617 | Services to buildings and dwellings | 21.80\% | 18.80\% | 0.00\% |  |
| 5619 | Other support services | 0.00\% | 35.17\% | 0.00\% | $¥ ¥ ¥$ |
| 5621 | Waste collection | 0.00\% | 2.63\% | 0.00\% |  |
| 5622 | Waste treatment and disposal | 3.57\% | 28.17\% | 12.69\% | $¥ ¥ ¥$ |
| 5629 | Remediation and other waste services | 10.85\% | 10.96\% | 99.00\% |  |
| 7115 | Independent artists, writers, and performers | 0.00\% | 31.40\% | 0.00\% | $¥ ¥ ¥$ |
| 7223 | Special food services | 0.50\% | 12.89\% | 3.85\% | ¥ |
| 7225 | Restaurants and other eating places | 0.00\% | 0.00\% | 0.00\% |  |
| 8111 | Automotive repair and maintenance | 0.28\% | 12.09\% | 2.30\% | ¥ |
| 8112 | Electronic equipment repair and maintenance | 0.25\% | 26.84\% | 0.93\% | $¥ ¥ ¥$ |
| 8113 | Commercial machinery repair and maintenance | 0.67\% | 0.67\% | 0.00\% |  |
| 8114 | Household goods repair and maintenance | 0.00\% | 33.36\% | 0.00\% | $¥ ¥ ¥$ |
| 8123 | Drycleaning and laundry services | 0.01\% | 0.43\% | 2.47\% |  |
| 8129 | Other personal services | 44.34\% | 44.34\% | 0.00\% | 0 |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ \not \equiv \neq$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-16.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES
CITY OF BALTIMORE MARKETPLACE
GOODS \& OTHER SERVICES
ASIAN AMERICAN FIRMS

| NAICS-4 | NAICS-4 DESC |  | ASIAN AMERICAN |  |  |
| :---: | :--- | ---: | ---: | ---: | ---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 1114 | Greenhouse and nursery production | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 1152 | Support activities for animal production | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 2213 | Water, sewage and other systems | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3149 | Other textile product mills | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3211 | Sawmills and wood preservation | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3231 | Printing and related support activities | $0.00 \%$ | $0.15 \%$ | $0.00 \%$ |  |
| 3251 | Basic chemical manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3252 | Resin, rubber, and artificial fibers mfg. | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3253 | Agricultural chemical manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3261 | Plastics product manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3311 | Iron and steel mills and ferroalloy mfg. | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3312 | Steel product mfg. from purchased steel | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3329 | Other fabricated metal product manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3345 | Electronic instrument manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3391 | Medical equipment and supplies manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3399 | Other miscellaneous manufacturing | $0.00 \%$ | $9.52 \%$ | $0.00 \%$ |  |
| 4231 | Motor vehicle and parts merchant wholesalers | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 4232 | Furniture and furnishing merchant wholesalers | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 4233 | Lumber and const. supply merchant wholesalers | $0.00 \%$ | $2.20 \%$ | $0.00 \%$ |  |
| 4234 | Commercial equip. merchant wholesalers | $6.66 \%$ | $5.36 \%$ | $0.00 \%$ |  |
| 4235 | Metal and mineral merchant wholesalers | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 4236 | Appliance and electric goods merchant whls. | $0.00 \%$ | $6.78 \%$ | $0.00 \%$ |  |
| 4237 | Hardware and plumbing merchant wholesalers | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
|  |  |  |  |  |  |


| NAICS-4 | NAICS-4 DESC | ASIAN AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 4238 | Machinery and supply merchant wholesalers | 0.00\% | 6.30\% | 0.00\% |  |
| 4239 | Misc. durable goods merchant wholesalers | 0.00\% | 25.25\% | 0.00\% | $¥ ¥ ¥$ |
| 4241 | Paper and paper product merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4242 | Druggists' goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4243 | Apparel and piece goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4244 | Grocery and related product wholesalers | 47.01\% | 47.01\% | 0.00\% |  |
| 4246 | Chemical merchant wholesalers | 0.00\% | 11.94\% | 0.00\% | ¥ |
| 4247 | Petroleum merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4249 | Misc. nondurable goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4411 | Automobile dealers | 0.00\% | 0.00\% | 0.00\% |  |
| 4412 | Other motor vehicle dealers | 0.00\% | 0.00\% | 0.00\% |  |
| 4413 | Auto parts, accessories, and tire stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4421 | Furniture stores | 0.00\% | 0.18\% | 0.00\% |  |
| 4422 | Home furnishings stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4441 | Building material and supplies dealers | 0.00\% | 0.00\% | 0.00\% |  |
| 4442 | Lawn and garden equipment and supplies stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4461 | Health and personal care stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4481 | Clothing stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4482 | Shoe stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4511 | Sporting goods and musical instrument stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4523 | General Merchandise Stores, including Warehouse Clubs and Supercenters | 0.00\% | 0.00\% | 0.00\% |  |
| 4539 | Other miscellaneous store retailers | 0.00\% | 0.00\% | 0.00\% |  |
| 4543 | Direct selling establishments | 0.00\% | 0.00\% | 0.00\% |  |
| 4841 | General freight trucking | 0.00\% | 0.00\% | 0.00\% |  |
| 4842 | Specialized freight trucking | 0.00\% | 0.44\% | 0.00\% |  |
| 4853 | Taxi and limousine service | 0.00\% | 0.00\% | 0.00\% |  |
| 4855 | Charter bus industry | 0.00\% | 0.56\% | 0.00\% |  |
| 4859 | Other ground passenger transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 4881 | Support activities for air transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 4884 | Support activities for road transportation | 0.00\% | 0.09\% | 0.00\% |  |
| 4922 | Local messengers and local delivery | 4.29\% | 4.29\% | 0.00\% |  |
| 5112 | Software publishers | 0.00\% | 2.09\% | 0.00\% |  |
| 5121 | Motion picture and video industries | 0.00\% | 6.80\% | 0.00\% |  |
| 5182 | Data processing, hosting and related services | 0.00\% | 12.31\% | 0.00\% | $¥ ¥$ |
| 5416 | Management and technical consulting services | 61.19\% | 3.85\% | 0.00\% |  |
| 5612 | Facilities support services | 0.00\% | 0.00\% | 0.00\% |  |
| 5613 | Employment services | 0.00\% | 7.37\% | 0.00\% |  |
| 5614 | Business support services | 0.00\% | 3.37\% | 0.00\% |  |
| 5616 | Investigation and security services | 0.00\% | 1.84\% | 0.00\% |  |
| 5617 | Services to buildings and dwellings | 1.28\% | 0.10\% | 0.00\% |  |
| 5619 | Other support services | 0.00\% | 2.00\% | 0.00\% |  |
| 5621 | Waste collection | 0.00\% | 1.32\% | 0.00\% |  |
| 5622 | Waste treatment and disposal | 0.00\% | 7.17\% | 0.00\% |  |
| 5629 | Remediation and other waste services | 3.09\% | 1.09\% | 0.00\% |  |
| 7115 | Independent artists, writers, and performers | 0.00\% | 6.25\% | 0.00\% |  |
| 7223 | Special food services | 0.00\% | 0.00\% | 0.00\% |  |
| 7225 | Restaurants and other eating places | 0.00\% | 0.00\% | 0.00\% |  |
| 8111 | Automotive repair and maintenance | 0.00\% | 2.83\% | 0.00\% |  |
| 8112 | Electronic equipment repair and maintenance | 0.22\% | 10.42\% | 2.10\% | $¥$ |
| 8113 | Commercial machinery repair and maintenance | 0.00\% | 0.00\% | 0.00\% |  |


| NAICS-4 | NAICS-4 DESC |  | ASIAN AMERICAN |  |  |
| ---: | :--- | ---: | ---: | ---: | :---: |
|  | Utilization | Availability | Disparity | Significance |  |
| 8114 | Household goods repair and maintenance | $1.18 \%$ | $0.08 \%$ | $0.00 \%$ |  |
| 8123 | Drycleaning and laundry services | $0.20 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 8129 | Other personal services | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | 0 |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ ¥ \not \equiv$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-17.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES
CITY OF BALTIMORE MARKETPLACE
GOODS \& OTHER SERVICES
HISPANIC AMERICAN FIRMS

| NAICS-4 | NAICS-4 DESC | HISPANIC AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 1114 | Greenhouse and nursery production | 0.00\% | 0.00\% | 0.00\% |  |
| 1152 | Support activities for animal production | 0.00\% | 0.00\% | 0.00\% |  |
| 2213 | Water, sewage and other systems | 0.00\% | 0.00\% | 0.00\% |  |
| 3149 | Other textile product mills | 0.00\% | 0.00\% | 0.00\% |  |
| 3211 | Sawmills and wood preservation | 0.00\% | 0.00\% | 0.00\% |  |
| 3231 | Printing and related support activities | 0.00\% | 5.41\% | 0.00\% |  |
| 3251 | Basic chemical manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3252 | Resin, rubber, and artificial fibers mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3253 | Agricultural chemical manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3261 | Plastics product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3311 | Iron and steel mills and ferroalloy mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3312 | Steel product mfg. from purchased steel | 0.00\% | 0.00\% | 0.00\% |  |
| 3329 | Other fabricated metal product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3345 | Electronic instrument manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3391 | Medical equipment and supplies manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3399 | Other miscellaneous manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 4231 | Motor vehicle and parts merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4232 | Furniture and furnishing merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4233 | Lumber and const. supply merchant wholesalers | 0.00\% | 2.46\% | 0.00\% |  |
| 4234 | Commercial equip. merchant wholesalers | 0.07\% | 0.10\% | 70.83\% |  |
| 4235 | Metal and mineral merchant wholesalers | 0.00\% | 0.43\% | 0.00\% |  |
| 4236 | Appliance and electric goods merchant whls. | 0.00\% | 0.21\% | 0.00\% |  |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 0.58\% | 0.00\% |  |
| 4238 | Machinery and supply merchant wholesalers | 0.00\% | 0.56\% | 0.00\% |  |
| 4239 | Misc. durable goods merchant wholesalers | 0.00\% | 0.34\% | 0.00\% |  |
| 4241 | Paper and paper product merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4242 | Druggists' goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4243 | Apparel and piece goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4244 | Grocery and related product wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4246 | Chemical merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4247 | Petroleum merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4249 | Misc. nondurable goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4411 | Automobile dealers | 0.00\% | 0.17\% | 0.00\% |  |
| 4412 | Other motor vehicle dealers | 0.00\% | 0.00\% | 0.00\% |  |
| 4413 | Auto parts, accessories, and tire stores | 0.00\% | 10.00\% | 0.00\% | $¥$ |


| NAICS-4 | NAICS-4 DESC | HISPANIC AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 4421 | Furniture stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4422 | Home furnishings stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4441 | Building material and supplies dealers | 0.00\% | 0.00\% | 0.00\% |  |
| 4442 | Lawn and garden equipment and supplies stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4461 | Health and personal care stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4481 | Clothing stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4482 | Shoe stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4511 | Sporting goods and musical instrument stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4523 | General Merchandise Stores, including Warehouse Clubs and Supercenters | 0.00\% | 0.00\% | 0.00\% |  |
| 4539 | Other miscellaneous store retailers | 0.00\% | 0.00\% | 0.00\% |  |
| 4543 | Direct selling establishments | 0.00\% | 0.00\% | 0.00\% |  |
| 4841 | General freight trucking | 0.00\% | 0.00\% | 0.00\% |  |
| 4842 | Specialized freight trucking | 0.00\% | 6.31\% | 0.00\% |  |
| 4853 | Taxi and limousine service | 0.00\% | 0.00\% | 0.00\% |  |
| 4855 | Charter bus industry | 0.00\% | 0.00\% | 0.00\% |  |
| 4859 | Other ground passenger transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 4881 | Support activities for air transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 4884 | Support activities for road transportation | 0.00\% | 0.18\% | 0.00\% |  |
| 4922 | Local messengers and local delivery | 0.00\% | 0.00\% | 0.00\% |  |
| 5112 | Software publishers | 0.00\% | 12.91\% | 0.00\% | $¥ ¥$ |
| 5121 | Motion picture and video industries | 0.00\% | 7.20\% | 0.00\% |  |
| 5182 | Data processing, hosting and related services | 0.00\% | 0.34\% | 0.00\% |  |
| 5416 | Management and technical consulting services | 0.00\% | 4.18\% | 0.00\% |  |
| 5612 | Facilities support services | 0.00\% | 0.00\% | 0.00\% |  |
| 5613 | Employment services | 0.00\% | 0.42\% | 0.00\% |  |
| 5614 | Business support services | 0.00\% | 0.08\% | 0.00\% |  |
| 5616 | Investigation and security services | 9.09\% | 5.24\% | 0.00\% |  |
| 5617 | Services to buildings and dwellings | 1.47\% | 9.99\% | 14.68\% |  |
| 5619 | Other support services | 0.00\% | 5.63\% | 0.00\% |  |
| 5621 | Waste collection | 0.00\% | 0.00\% | 0.00\% |  |
| 5622 | Waste treatment and disposal | 0.00\% | 0.00\% | 0.00\% |  |
| 5629 | Remediation and other waste services | 0.00\% | 0.36\% | 0.00\% |  |
| 7115 | Independent artists, writers, and performers | 0.00\% | 12.50\% | 0.00\% | $¥ ¥$ |
| 7223 | Special food services | 0.00\% | 0.17\% | 0.00\% |  |
| 7225 | Restaurants and other eating places | 0.00\% | 0.00\% | 0.00\% |  |
| 8111 | Automotive repair and maintenance | 0.00\% | 4.71\% | 0.00\% |  |
| 8112 | Electronic equipment repair and maintenance | 0.02\% | 0.22\% | 8.46\% |  |
| 8113 | Commercial machinery repair and maintenance | 0.00\% | 0.00\% | 0.00\% |  |
| 8114 | Household goods repair and maintenance | 0.00\% | 0.17\% | 0.00\% |  |
| 8123 | Drycleaning and laundry services | 0.00\% | 0.00\% | 0.00\% |  |
| 8129 | Other personal services | 0.00\% | 0.00\% | 0.00\% | 0 |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ ¥ \not \equiv$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-18. DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES

## CITY OF BALTIMORE MARKETPLACE

GOODS \& OTHER SERVICES
NATIVE AMERICAN FIRMS

| NAICS-4 | NAICS-4 DESC | NATIVE AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 1114 | Greenhouse and nursery production | 0.00\% | 0.00\% | 0.00\% |  |
| 1152 | Support activities for animal production | 0.00\% | 0.00\% | 0.00\% |  |
| 2213 | Water, sewage and other systems | 0.00\% | 0.00\% | 0.00\% |  |
| 3149 | Other textile product mills | 0.00\% | 0.00\% | 0.00\% |  |
| 3211 | Sawmills and wood preservation | 0.00\% | 0.00\% | 0.00\% |  |
| 3231 | Printing and related support activities | 0.00\% | 0.00\% | 0.00\% |  |
| 3251 | Basic chemical manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3252 | Resin, rubber, and artificial fibers mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3253 | Agricultural chemical manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3261 | Plastics product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3311 | Iron and steel mills and ferroalloy mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3312 | Steel product mfg. from purchased steel | 0.00\% | 0.00\% | 0.00\% |  |
| 3329 | Other fabricated metal product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3345 | Electronic instrument manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3391 | Medical equipment and supplies manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3399 | Other miscellaneous manufacturing | 0.00\% | 4.76\% | 0.00\% |  |
| 4231 | Motor vehicle and parts merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4232 | Furniture and furnishing merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4233 | Lumber and const. supply merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4234 | Commercial equip. merchant wholesalers | 0.00\% | 1.69\% | 0.00\% |  |
| 4235 | Metal and mineral merchant wholesalers | 0.00\% | 10.00\% | 0.00\% | $¥$ |
| 4236 | Appliance and electric goods merchant whls. | 0.00\% | 0.00\% | 0.00\% |  |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4238 | Machinery and supply merchant wholesalers | 0.00\% | 1.26\% | 0.00\% |  |
| 4239 | Misc. durable goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4241 | Paper and paper product merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4242 | Druggists' goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4243 | Apparel and piece goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4244 | Grocery and related product wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4246 | Chemical merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4247 | Petroleum merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4249 | Misc. nondurable goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4411 | Automobile dealers | 0.00\% | 0.00\% | 0.00\% |  |
| 4412 | Other motor vehicle dealers | 0.00\% | 0.00\% | 0.00\% |  |
| 4413 | Auto parts, accessories, and tire stores | 0.00\% | 10.00\% | 0.00\% | $¥$ |
| 4421 | Furniture stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4422 | Home furnishings stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4441 | Building material and supplies dealers | 0.00\% | 0.00\% | 0.00\% |  |
| 4442 | Lawn and garden equipment and supplies stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4461 | Health and personal care stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4481 | Clothing stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4482 | Shoe stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4511 | Sporting goods and musical instrument stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4523 | General Merchandise Stores, including Warehouse Clubs and Supercenters | 0.00\% | 0.00\% | 0.00\% |  |


| NAICS-4 | NAICS-4 DESC | NATIVE AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 4539 | Other miscellaneous store retailers | 0.00\% | 0.00\% | 0.00\% |  |
| 4543 | Direct selling establishments | 0.00\% | 0.00\% | 0.00\% |  |
| 4841 | General freight trucking | 0.00\% | 0.00\% | 0.00\% |  |
| 4842 | Specialized freight trucking | 0.00\% | 0.00\% | 0.00\% |  |
| 4853 | Taxi and limousine service | 0.00\% | 0.00\% | 0.00\% |  |
| 4855 | Charter bus industry | 0.00\% | 0.00\% | 0.00\% |  |
| 4859 | Other ground passenger transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 4881 | Support activities for air transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 4884 | Support activities for road transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 4922 | Local messengers and local delivery | 0.00\% | 0.00\% | 0.00\% |  |
| 5112 | Software publishers | 0.00\% | 0.35\% | 0.00\% |  |
| 5121 | Motion picture and video industries | 0.00\% | 0.00\% | 0.00\% |  |
| 5182 | Data processing, hosting and related services | 0.00\% | 0.00\% | 0.00\% |  |
| 5416 | Management and technical consulting services | 0.00\% | 0.04\% | 0.00\% |  |
| 5612 | Facilities support services | 0.00\% | 0.00\% | 0.00\% |  |
| 5613 | Employment services | 0.20\% | 3.48\% | 5.67\% |  |
| 5614 | Business support services | 0.00\% | 0.00\% | 0.00\% |  |
| 5616 | Investigation and security services | 0.00\% | 3.31\% | 0.00\% |  |
| 5617 | Services to buildings and dwellings | 0.00\% | 1.02\% | 0.00\% |  |
| 5619 | Other support services | 0.00\% | 0.01\% | 0.00\% |  |
| 5621 | Waste collection | 0.00\% | 0.00\% | 0.00\% |  |
| 5622 | Waste treatment and disposal | 0.00\% | 0.00\% | 0.00\% |  |
| 5629 | Remediation and other waste services | 0.00\% | 2.04\% | 0.00\% |  |
| 7115 | Independent artists, writers, and performers | 0.00\% | 0.05\% | 0.00\% |  |
| 7223 | Special food services | 0.00\% | 0.00\% | 0.00\% |  |
| 7225 | Restaurants and other eating places | 0.00\% | 0.00\% | 0.00\% |  |
| 8111 | Automotive repair and maintenance | 0.00\% | 1.83\% | 0.00\% |  |
| 8112 | Electronic equipment repair and maintenance | 0.00\% | 0.00\% | 0.00\% |  |
| 8113 | Commercial machinery repair and maintenance | 0.00\% | 0.00\% | 0.00\% |  |
| 8114 | Household goods repair and maintenance | 0.00\% | 0.00\% | 0.00\% |  |
| 8123 | Drycleaning and laundry services | 0.00\% | 0.00\% | 0.00\% |  |
| 8129 | Other personal services | 0.00\% | 0.00\% | 0.00\% | 0 |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ ¥ \not \equiv$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-19.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES
CITY OF BALTIMORE MARKETPLACE
GOODS \& OTHER SERVICES
MBE FIRMS

| NAICS-4 | NAICS-4 DESC | MBE |  |  |  |
| :---: | :--- | ---: | ---: | ---: | ---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 1114 | Greenhouse and nursery production | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 1152 | Support activities for animal production | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 2213 | Water, sewage and other systems | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3149 | Other textile product mills | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3211 | Sawmills and wood preservation | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3231 | Printing and related support activities | $1.05 \%$ | $6.02 \%$ | $17.45 \%$ |  |


| NAICS-4 | NAICS-4 DESC | MBE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 3251 | Basic chemical manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3252 | Resin, rubber, and artificial fibers mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3253 | Agricultural chemical manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3261 | Plastics product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3311 | Iron and steel mills and ferroalloy mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3312 | Steel product mfg. from purchased steel | 0.00\% | 0.00\% | 0.00\% |  |
| 3329 | Other fabricated metal product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3345 | Electronic instrument manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3391 | Medical equipment and supplies manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3399 | Other miscellaneous manufacturing | 0.00\% | 19.74\% | 0.00\% | $¥ ¥ ¥$ |
| 4231 | Motor vehicle and parts merchant wholesalers | 5.75\% | 5.75\% | 0.00\% |  |
| 4232 | Furniture and furnishing merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4233 | Lumber and const. supply merchant wholesalers | 0.04\% | 5.95\% | 0.62\% |  |
| 4234 | Commercial equip. merchant wholesalers | 7.31\% | 11.81\% | 61.88\% |  |
| 4235 | Metal and mineral merchant wholesalers | 0.00\% | 21.22\% | 0.00\% | $¥ ¥ ¥$ |
| 4236 | Appliance and electric goods merchant whls. | 42.81\% | 7.48\% | 0.00\% |  |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 8.82\% | 0.00\% |  |
| 4238 | Machinery and supply merchant wholesalers | 0.59\% | 11.45\% | 5.13\% | ¥ |
| 4239 | Misc. durable goods merchant wholesalers | 0.00\% | 50.87\% | 0.00\% | $¥ ¥ ¥$ |
| 4241 | Paper and paper product merchant wholesalers | 0.00\% | 2.90\% | 0.00\% |  |
| 4242 | Druggists' goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4243 | Apparel and piece goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4244 | Grocery and related product wholesalers | 82.66\% | 82.66\% | 0.00\% |  |
| 4246 | Chemical merchant wholesalers | 0.00\% | 12.56\% | 0.00\% | $¥ ¥$ |
| 4247 | Petroleum merchant wholesalers | 100.00\% | 100.00\% | 0.00\% |  |
| 4249 | Misc. nondurable goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4411 | Automobile dealers | 0.00\% | 16.95\% | 0.00\% | $¥ ¥ ¥$ |
| 4412 | Other motor vehicle dealers | 0.00\% | 0.00\% | 0.00\% |  |
| 4413 | Auto parts, accessories, and tire stores | 0.00\% | 30.18\% | 0.00\% | $¥ ¥ ¥$ |
| 4421 | Furniture stores | 0.00\% | 12.68\% | 0.00\% | $¥ ¥$ |
| 4422 | Home furnishings stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4441 | Building material and supplies dealers | 0.00\% | 0.00\% | 0.00\% |  |
| 4442 | Lawn and garden equipment and supplies stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4461 | Health and personal care stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4481 | Clothing stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4482 | Shoe stores | 11.89\% | 11.89\% | 0.00\% |  |
| 4511 | Sporting goods and musical instrument stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4523 | General Merchandise Stores, including Warehouse Clubs and Supercenters | 0.00\% | 0.00\% | 0.00\% |  |
| 4539 | Other miscellaneous store retailers | 0.00\% | 0.00\% | 0.00\% |  |
| 4543 | Direct selling establishments | 0.00\% | 0.00\% | 0.00\% |  |
| 4841 | General freight trucking | 0.00\% | 0.00\% | 0.00\% |  |
| 4842 | Specialized freight trucking | 34.50\% | 34.50\% | 99.99\% |  |
| 4853 | Taxi and limousine service | 0.00\% | 0.00\% | 0.00\% |  |
| 4855 | Charter bus industry | 2.32\% | 0.56\% | 0.00\% |  |
| 4859 | Other ground passenger transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 4881 | Support activities for air transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 4884 | Support activities for road transportation | 4.52\% | 25.48\% | 17.75\% | $¥ ¥ ¥$ |
| 4922 | Local messengers and local delivery | 4.29\% | 4.29\% | 0.00\% |  |
| 5112 | Software publishers | 0.00\% | 40.70\% | 0.00\% | $¥ ¥ ¥$ |
| 5121 | Motion picture and video industries | 0.00\% | 28.56\% | 0.00\% | $¥ ¥ ¥$ |


| NAICS-4 | NAICS-4 DESC | MBE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 5182 | Data processing, hosting and related services | 0.00\% | 25.15\% | 0.00\% | $¥ ¥ ¥$ |
| 5416 | Management and technical consulting services | 61.19\% | 27.83\% | 0.00\% |  |
| 5612 | Facilities support services | 0.00\% | 0.00\% | 0.00\% |  |
| 5613 | Employment services | 3.71\% | 29.16\% | 12.74\% | $¥ ¥ ¥$ |
| 5614 | Business support services | 0.00\% | 23.10\% | 0.00\% | $¥ \nexists \ddagger$ |
| 5616 | Investigation and security services | 22.41\% | 24.57\% | 91.20\% |  |
| 5617 | Services to buildings and dwellings | 24.55\% | 29.92\% | 82.07\% |  |
| 5619 | Other support services | 0.00\% | 42.81\% | 0.00\% | $¥ ¥ ¥$ |
| 5621 | Waste collection | 0.00\% | 3.95\% | 0.00\% |  |
| 5622 | Waste treatment and disposal | 3.57\% | 35.34\% | 10.11\% | $¥ ¥ ¥$ |
| 5629 | Remediation and other waste services | 13.94\% | 14.46\% | 96.39\% |  |
| 7115 | Independent artists, writers, and performers | 0.00\% | 50.20\% | 0.00\% | $¥ ¥ ¥$ |
| 7223 | Special food services | 0.50\% | 13.06\% | 3.80\% | $¥ ¥$ |
| 7225 | Restaurants and other eating places | 0.00\% | 0.00\% | 0.00\% |  |
| 8111 | Automotive repair and maintenance | 0.28\% | 21.46\% | 1.29\% | $¥ ¥ ¥$ |
| 8112 | Electronic equipment repair and maintenance | 0.49\% | 37.47\% | 1.30\% | $¥ ¥ ¥$ |
| 8113 | Commercial machinery repair and maintenance | 0.67\% | 0.67\% | 0.00\% |  |
| 8114 | Household goods repair and maintenance | 1.18\% | 33.61\% | 3.50\% | $¥ ¥ ¥$ |
| 8123 | Drycleaning and laundry services | 0.21\% | 0.43\% | 48.43\% |  |
| 8129 | Other personal services | 44.34\% | 44.34\% | 0.00\% | 0 |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ \not \equiv \neq$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-20.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES CITY OF BALTIMORE MARKETPLACE

GOODS \& OTHER SERVICES
NONMINORITY FEMALE FIRMS

| NAICS-4 | NAICS-4 DESC | NONMINORITY FEMALE |  |  |  |
| :---: | :--- | ---: | ---: | ---: | ---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 1114 | Greenhouse and nursery production | $39.70 \%$ | $39.70 \%$ | $0.00 \%$ |  |
| 1152 | Support activities for animal production | $100.00 \%$ | $100.00 \%$ | $0.00 \%$ |  |
| 2213 | Water, sewage and other systems | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3149 | Other textile product mills | $39.05 \%$ | $39.05 \%$ | $0.00 \%$ |  |
| 3211 | Sawmills and wood preservation | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3231 | Printing and related support activities | $0.00 \%$ | $43.37 \%$ | $0.00 \%$ | $\not \approx \nexists \neq$ |
| 3251 | Basic chemical manufacturing | $0.40 \%$ | $0.40 \%$ | $0.00 \%$ |  |
| 3252 | Resin, rubber, and artificial fibers mfg. | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3253 | Agricultural chemical manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3261 | Plastics product manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3311 | Iron and steel mills and ferroalloy mfg. | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3312 | Steel product mfg. from purchased steel | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3329 | Other fabricated metal product manufacturing | $0.00 \%$ | $29.76 \%$ | $0.00 \%$ | $\nexists \nexists ¥$ |
| 3345 | Electronic instrument manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3391 | Medical equipment and supplies manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 3399 | Other miscellaneous manufacturing | $85.39 \%$ | $37.10 \%$ | $0.00 \%$ |  |
| 4231 | Motor vehicle and parts merchant wholesalers | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |


| NAICS-4 | NAICS-4 DESC | NONMINORITY FEMALE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 4232 | Furniture and furnishing merchant wholesalers | 30.50\% | 30.50\% | 0.00\% |  |
| 4233 | Lumber and const. supply merchant wholesalers | 0.43\% | 39.30\% | 1.09\% | $¥ ¥ ¥$ |
| 4234 | Commercial equip. merchant wholesalers | 5.70\% | 28.32\% | 20.11\% | $¥ ¥ ¥$ |
| 4235 | Metal and mineral merchant wholesalers | 0.00\% | 41.04\% | 0.00\% | $¥ ¥ ¥$ |
| 4236 | Appliance and electric goods merchant whls. | 0.00\% | 33.60\% | 0.00\% | $\ddagger ¥ ¥$ |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 24.45\% | 0.00\% | $¥ ¥ ¥$ |
| 4238 | Machinery and supply merchant wholesalers | 0.20\% | 17.70\% | 1.11\% | $¥ ¥ ¥$ |
| 4239 | Misc. durable goods merchant wholesalers | 0.00\% | 1.12\% | 0.00\% |  |
| 4241 | Paper and paper product merchant wholesalers | 1.13\% | 5.57\% | 20.24\% |  |
| 4242 | Druggists' goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4243 | Apparel and piece goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4244 | Grocery and related product wholesalers | 2.77\% | 2.77\% | 0.00\% |  |
| 4246 | Chemical merchant wholesalers | 0.29\% | 35.51\% | 0.82\% | $¥ ¥ ¥$ |
| 4247 | Petroleum merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4249 | Misc. nondurable goods merchant wholesalers | 0.00\% | 33.33\% | 0.00\% | $¥ ¥ ¥$ |
| 4411 | Automobile dealers | 0.00\% | 0.27\% | 0.00\% |  |
| 4412 | Other motor vehicle dealers | 0.00\% | 49.11\% | 0.00\% | $¥ ¥ ¥$ |
| 4413 | Auto parts, accessories, and tire stores | 0.00\% | 1.63\% | 0.00\% |  |
| 4421 | Furniture stores | 0.00\% | 12.23\% | 0.00\% | $¥ ¥$ |
| 4422 | Home furnishings stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4441 | Building material and supplies dealers | 0.00\% | 0.00\% | 0.00\% |  |
| 4442 | Lawn and garden equipment and supplies stores | 0.69\% | 0.69\% | 0.00\% |  |
| 4461 | Health and personal care stores | 0.12\% | 0.12\% | 0.00\% |  |
| 4481 | Clothing stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4482 | Shoe stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4511 | Sporting goods and musical instrument stores | 1.67\% | 1.67\% | 0.00\% |  |
| 4523 | General Merchandise Stores, including Warehouse Clubs and Supercenters | 0.00\% | 0.00\% | 0.00\% |  |
| 4539 | Other miscellaneous store retailers | 72.33\% | 72.33\% | 0.00\% |  |
| 4543 | Direct selling establishments | 0.00\% | 0.00\% | 0.00\% |  |
| 4841 | General freight trucking | 0.00\% | 0.00\% | 0.00\% |  |
| 4842 | Specialized freight trucking | 0.00\% | 13.61\% | 0.00\% | $¥ ¥$ |
| 4853 | Taxi and limousine service | 100.00\% | 100.00\% | 0.00\% |  |
| 4855 | Charter bus industry | 0.39\% | 99.44\% | 0.39\% | $¥ ¥ ¥$ |
| 4859 | Other ground passenger transportation | 100.00\% | 100.00\% | 0.00\% |  |
| 4881 | Support activities for air transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 4884 | Support activities for road transportation | 19.24\% | 24.70\% | 77.90\% |  |
| 4922 | Local messengers and local delivery | 95.71\% | 95.71\% | 0.00\% |  |
| 5112 | Software publishers | 0.00\% | 1.92\% | 0.00\% |  |
| 5121 | Motion picture and video industries | 0.00\% | 14.56\% | 0.00\% | $¥ ¥$ |
| 5182 | Data processing, hosting and related services | 0.09\% | 36.62\% | 0.25\% | $¥ ¥ ¥$ |
| 5416 | Management and technical consulting services | 0.00\% | 22.47\% | 0.00\% | $¥ ¥ ¥$ |
| 5612 | Facilities support services | 0.00\% | 0.00\% | 0.00\% |  |
| 5613 | Employment services | 0.45\% | 18.50\% | 2.42\% | $¥ ¥ ¥$ |
| 5614 | Business support services | 11.65\% | 38.88\% | 29.97\% | $¥ ¥ ¥$ |
| 5616 | Investigation and security services | 2.77\% | 37.30\% | 7.42\% | $¥ ¥ ¥$ |
| 5617 | Services to buildings and dwellings | 33.96\% | 28.92\% | 0.00\% |  |
| 5619 | Other support services | 29.74\% | 31.35\% | 94.84\% |  |
| 5621 | Waste collection | 19.10\% | 30.92\% | 61.76\% |  |


| NAICS-4 | NAICS-4 DESC | NONMINORITY FEMALE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 5622 | Waste treatment and disposal | 0.09\% | 20.00\% | 0.43\% | $¥ ¥ ¥$ |
| 5629 | Remediation and other waste services | 6.40\% | 36.48\% | 17.54\% | $¥ ¥ ¥$ |
| 7115 | Independent artists, writers, and performers | 0.00\% | 17.87\% | 0.00\% | $¥ ¥ ¥$ |
| 7223 | Special food services | 0.00\% | 80.07\% | 0.00\% | $¥ ¥ ¥$ |
| 7225 | Restaurants and other eating places | 0.00\% | 0.00\% | 0.00\% |  |
| 8111 | Automotive repair and maintenance | 4.42\% | 18.98\% | 23.26\% | ¥ |
| 8112 | Electronic equipment repair and maintenance | 3.24\% | 21.23\% | 15.27\% | $¥ ¥$ |
| 8113 | Commercial machinery repair and maintenance | 1.10\% | 1.10\% | 0.00\% |  |
| 8114 | Household goods repair and maintenance | 0.00\% | 16.67\% | 0.00\% | $¥ ¥ ¥$ |
| 8123 | Drycleaning and laundry services | 0.13\% | 16.85\% | 0.75\% | $¥ ¥ ¥$ |
| 8129 | Other personal services | 16.25\% | 16.25\% | 0.00\% | 0 |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ ¥ \not \equiv$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-21. DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES CITY OF BALTIMORE MARKETPLACE

GOODS \& OTHER SERVICES
M/WBE FIRMS

| NAICS-4 | NAICS-4 DESC | M/WBE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 1114 | Greenhouse and nursery production | 39.70\% | 39.70\% | 0.00\% |  |
| 1152 | Support activities for animal production | 100.00\% | 100.00\% | 0.00\% |  |
| 2213 | Water, sewage and other systems | 0.00\% | 0.00\% | 0.00\% |  |
| 3149 | Other textile product mills | 39.05\% | 39.05\% | 0.00\% |  |
| 3211 | Sawmills and wood preservation | 0.00\% | 0.00\% | 0.00\% |  |
| 3231 | Printing and related support activities | 1.05\% | 49.39\% | 2.13\% | $¥ ¥ ¥$ |
| 3251 | Basic chemical manufacturing | 0.40\% | 0.40\% | 0.00\% |  |
| 3252 | Resin, rubber, and artificial fibers mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3253 | Agricultural chemical manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3261 | Plastics product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3311 | Iron and steel mills and ferroalloy mfg. | 0.00\% | 0.00\% | 0.00\% |  |
| 3312 | Steel product mfg. from purchased steel | 0.00\% | 0.00\% | 0.00\% |  |
| 3329 | Other fabricated metal product manufacturing | 0.00\% | 29.76\% | 0.00\% | $¥ ¥ ¥$ |
| 3345 | Electronic instrument manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3391 | Medical equipment and supplies manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 3399 | Other miscellaneous manufacturing | 85.39\% | 56.84\% | 0.00\% |  |
| 4231 | Motor vehicle and parts merchant wholesalers | 5.75\% | 5.75\% | 0.00\% |  |
| 4232 | Furniture and furnishing merchant wholesalers | 30.50\% | 30.50\% | 0.00\% |  |
| 4233 | Lumber and const. supply merchant wholesalers | 0.47\% | 45.25\% | 1.03\% | $¥ ¥ ¥$ |
| 4234 | Commercial equip. merchant wholesalers | 13.00\% | 40.13\% | 32.40\% | $¥ ¥ ¥$ |
| 4235 | Metal and mineral merchant wholesalers | 0.00\% | 62.26\% | 0.00\% | $¥ ¥ ¥$ |
| 4236 | Appliance and electric goods merchant whls. | 42.81\% | 41.08\% | 0.00\% |  |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 33.27\% | 0.00\% | $¥ ¥ ¥$ |
| 4238 | Machinery and supply merchant wholesalers | 0.78\% | 29.16\% | 2.69\% | $\ddagger ¥ ¥$ |
| 4239 | Misc. durable goods merchant wholesalers | 0.00\% | 52.00\% | 0.00\% | $¥ ¥ ¥$ |


| NAICS-4 | NAICS-4 DESC | M/WBE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 4241 | Paper and paper product merchant wholesalers | 1.13\% | 8.48\% | 13.31\% |  |
| 4242 | Druggists' goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4243 | Apparel and piece goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4244 | Grocery and related product wholesalers | 85.43\% | 85.43\% | 0.00\% |  |
| 4246 | Chemical merchant wholesalers | 0.29\% | 48.08\% | 0.61\% | $¥ ¥ ¥$ |
| 4247 | Petroleum merchant wholesalers | 100.00\% | 100.00\% | 0.00\% |  |
| 4249 | Misc. nondurable goods merchant wholesalers | 0.00\% | 33.33\% | 0.00\% | $¥ ¥ ¥$ |
| 4411 | Automobile dealers | 0.00\% | 17.22\% | 0.00\% | $¥ ¥ ¥$ |
| 4412 | Other motor vehicle dealers | 0.00\% | 49.11\% | 0.00\% | $¥ ¥ ¥$ |
| 4413 | Auto parts, accessories, and tire stores | 0.00\% | 31.81\% | 0.00\% | $¥ ¥ ¥$ |
| 4421 | Furniture stores | 0.00\% | 24.91\% | 0.00\% | $¥ ¥ ¥$ |
| 4422 | Home furnishings stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4441 | Building material and supplies dealers | 0.00\% | 0.00\% | 0.00\% |  |
| 4442 | Lawn and garden equipment and supplies stores | 0.69\% | 0.69\% | 0.00\% |  |
| 4461 | Health and personal care stores | 0.12\% | 0.12\% | 0.00\% |  |
| 4481 | Clothing stores | 0.00\% | 0.00\% | 0.00\% |  |
| 4482 | Shoe stores | 11.89\% | 11.89\% | 0.00\% |  |
| 4511 | Sporting goods and musical instrument stores | 1.67\% | 1.67\% | 0.00\% |  |
| 4523 | General Merchandise Stores, including Warehouse Clubs and Supercenters | 0.00\% | 0.00\% | 0.00\% |  |
| 4539 | Other miscellaneous store retailers | 72.33\% | 72.33\% | 0.00\% |  |
| 4543 | Direct selling establishments | 0.00\% | 0.00\% | 0.00\% |  |
| 4841 | General freight trucking | 0.00\% | 0.00\% | 0.00\% |  |
| 4842 | Specialized freight trucking | 34.50\% | 48.11\% | 71.71\% |  |
| 4853 | Taxi and limousine service | 100.00\% | 100.00\% | 0.00\% |  |
| 4855 | Charter bus industry | 2.70\% | 100.00\% | 2.70\% | $¥ ¥ ¥$ |
| 4859 | Other ground passenger transportation | 100.00\% | 100.00\% | 0.00\% |  |
| 4881 | Support activities for air transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 4884 | Support activities for road transportation | 23.76\% | 50.18\% | 47.35\% | $¥ ¥ ¥$ |
| 4922 | Local messengers and local delivery | 100.00\% | 100.00\% | 0.00\% |  |
| 5112 | Software publishers | 0.00\% | 42.62\% | 0.00\% | $¥ ¥ ¥$ |
| 5121 | Motion picture and video industries | 0.00\% | 43.12\% | 0.00\% | $¥ ¥ ¥$ |
| 5182 | Data processing, hosting and related services | 0.09\% | 61.77\% | 0.15\% | $¥ ¥ ¥$ |
| 5416 | Management and technical consulting services | 61.19\% | 50.30\% | 0.00\% |  |
| 5612 | Facilities support services | 0.00\% | 0.00\% | 0.00\% |  |
| 5613 | Employment services | 4.16\% | 47.67\% | 8.73\% | $¥ ¥ ¥$ |
| 5614 | Business support services | 11.65\% | 61.98\% | 18.80\% | $¥ ¥ ¥$ |
| 5616 | Investigation and security services | 25.18\% | 61.88\% | 40.69\% | $¥ ¥ ¥$ |
| 5617 | Services to buildings and dwellings | 58.51\% | 58.84\% | 99.44\% |  |
| 5619 | Other support services | 29.74\% | 74.17\% | 40.09\% | $¥ ¥ ¥$ |
| 5621 | Waste collection | 19.10\% | 34.87\% | 54.77\% | $¥$ |
| 5622 | Waste treatment and disposal | 3.66\% | 55.34\% | 6.62\% | $¥ ¥ ¥$ |
| 5629 | Remediation and other waste services | 20.34\% | 50.94\% | 39.92\% | $¥ ¥ ¥$ |
| 7115 | Independent artists, writers, and performers | 0.00\% | 68.07\% | 0.00\% | $¥ ¥ ¥$ |
| 7223 | Special food services | 0.50\% | 93.13\% | 0.53\% | $¥ ¥ ¥$ |
| 7225 | Restaurants and other eating places | 0.00\% | 0.00\% | 0.00\% |  |
| 8111 | Automotive repair and maintenance | 4.69\% | 40.45\% | 11.60\% | $¥ ¥ ¥$ |
| 8112 | Electronic equipment repair and maintenance | 3.73\% | 58.70\% | 6.35\% | $¥ ¥ ¥$ |
| 8113 | Commercial machinery repair and maintenance | 1.77\% | 1.77\% | 0.00\% |  |


| NAICS-4 | NAICS-4 DESC | M/WBE |  |  |  |
| :---: | :--- | ---: | ---: | ---: | :---: |
|  | Household goods repair and maintenance | Utilization | Availability | Disparity | Significance |
| 8123 | Drycleaning and laundry services | $1.18 \%$ | $50.28 \%$ | $2.34 \%$ | $\not \equiv \not \equiv$ |
| 8129 | Other personal services | $0.34 \%$ | $17.28 \%$ | $1.94 \%$ | $\nexists \nexists ¥$ |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ \not \equiv \neq$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-22.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES CITY OF BALTIMORE MARKETPLACE

PROFESSIONAL SERVICES
AFRICAN AMERICAN FIRMS

| NAICS-4 | NAICS-4 DESC | AFRICAN AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 2381 | Building foundation and exterior contractors | 14.58\% | 3.83\% | 0.00\% |  |
| 2382 | Building equipment contractors | 59.09\% | 9.74\% | 0.00\% |  |
| 2383 | Building finishing contractors | 0.00\% | 6.02\% | 0.00\% |  |
| 2389 | Other specialty trade contractors | 0.00\% | 9.67\% | 0.00\% |  |
| 3231 | Printing and related support activities | 3.12\% | 0.46\% | 0.00\% |  |
| 3261 | Plastics product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 4233 | Lumber and const. supply merchant wholesalers | 0.00\% | 1.29\% | 0.00\% |  |
| 4234 | Commercial equip. merchant wholesalers | 100.00\% | 4.65\% | 0.00\% |  |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 8.24\% | 0.00\% |  |
| 4241 | Paper and paper product merchant wholesalers | 100.00\% | 2.90\% | 0.00\% |  |
| 4249 | Misc. nondurable goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4841 | General freight trucking | 100.00\% | 100.00\% | 0.00\% |  |
| 4859 | Other ground passenger transportation | 100.00\% | 100.00\% | 0.00\% |  |
| 5239 | Other financial investment activities | 37.06\% | 0.29\% | 0.00\% |  |
| 5241 | Insurance carriers | 0.00\% | 0.00\% | 0.00\% |  |
| 5242 | Insurance agencies and brokerages | 0.00\% | 13.47\% | 0.00\% |  |
| 5321 | Automotive equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5322 | Consumer goods rental | 0.00\% | 0.00\% | 0.00\% |  |
| 5323 | General rental centers | 0.00\% | 0.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5411 | Legal services | 0.00\% | 3.60\% | 0.00\% |  |
| 5412 | Accounting and bookkeeping services | 100.00\% | 21.28\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 0.00\% | 10.05\% | 0.00\% |  |
| 5414 | Specialized design services | 0.00\% | 11.29\% | 0.00\% |  |
| 5415 | Computer systems design and related services | 0.47\% | 17.33\% | 2.72\% | ¥ |
| 5416 | Management and technical consulting services | 1.84\% | 19.76\% | 9.32\% | $¥$ |
| 5417 | Scientific research and development services | 0.00\% | 0.00\% | 0.00\% |  |
| 5418 | Advertising, PR, and related services | 4.94\% | 13.50\% | 36.59\% |  |
| 5419 | Other professional and technical services | 0.00\% | 28.80\% | 0.00\% | $¥ ¥ ¥$ |
| 5613 | Employment services | 0.00\% | 17.89\% | 0.00\% | ¥ |
| 6114 | Business, computer and management training | 0.00\% | 1.22\% | 0.00\% |  |
| 6115 | Technical and trade schools | 0.00\% | 27.72\% | 0.00\% | $¥ ¥ ¥$ |
| 6116 | Other schools and instruction | 0.00\% | 16.82\% | 0.00\% | $¥$ |
| 6117 | Educational support services | 0.00\% | 27.63\% | 0.00\% | $¥ ¥ ¥$ |
| 6211 | Offices of physicians | 100.00\% | 0.10\% | 0.00\% |  |


| NAICS-4 | NAICS-4 DESC | AFRICAN AMERICAN |  |  |  |
| ---: | :--- | ---: | ---: | ---: | ---: |
|  | Utilization | Availability | Disparity | Significance |  |
| 6213 | Offices of other health practitioners | $0.00 \%$ | $11.26 \%$ | $0.00 \%$ |  |
| 6215 | Medical and diagnostic laboratories | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 6216 | Home health care services | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 6219 | Other ambulatory health care services | $13.26 \%$ | $13.26 \%$ | $0.00 \%$ |  |
| 6241 | Individual and family services | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| 8111 | Automotive repair and maintenance | $0.00 \%$ | $12.09 \%$ | $0.00 \%$ |  |
| 9221 | Justice, public order, and safety activities | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ ¥ \not \equiv$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-23.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES CITY OF BALTIMORE MARKETPLACE

PROFESSIONAL SERVICES
ASIAN AMERICAN FIRMS

| NAICS-4 | NAICS-4 DESC | ASIAN AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 2381 | Building foundation and exterior contractors | 0.00\% | 2.73\% | 0.00\% |  |
| 2382 | Building equipment contractors | 0.00\% | 1.67\% | 0.00\% |  |
| 2383 | Building finishing contractors | 0.00\% | 2.22\% | 0.00\% |  |
| 2389 | Other specialty trade contractors | 0.00\% | 0.62\% | 0.00\% |  |
| 3231 | Printing and related support activities | 0.00\% | 0.15\% | 0.00\% |  |
| 3261 | Plastics product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 4233 | Lumber and const. supply merchant wholesalers | 0.00\% | 2.20\% | 0.00\% |  |
| 4234 | Commercial equip. merchant wholesalers | 0.00\% | 5.36\% | 0.00\% |  |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4241 | Paper and paper product merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4249 | Misc. nondurable goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4841 | General freight trucking | 0.00\% | 0.00\% | 0.00\% |  |
| 4859 | Other ground passenger transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 5239 | Other financial investment activities | 0.00\% | 25.00\% | 0.00\% | $¥ ¥ ¥$ |
| 5241 | Insurance carriers | 0.00\% | 0.00\% | 0.00\% |  |
| 5242 | Insurance agencies and brokerages | 0.00\% | 0.00\% | 0.00\% |  |
| 5321 | Automotive equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5322 | Consumer goods rental | 0.00\% | 0.00\% | 0.00\% |  |
| 5323 | General rental centers | 0.00\% | 0.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5411 | Legal services | 0.00\% | 1.74\% | 0.00\% |  |
| 5412 | Accounting and bookkeeping services | 0.00\% | 3.81\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 0.35\% | 6.54\% | 5.33\% |  |
| 5414 | Specialized design services | 0.00\% | 0.37\% | 0.00\% |  |
| 5415 | Computer systems design and related services | 5.03\% | 17.12\% | 29.37\% |  |
| 5416 | Management and technical consulting services | 0.61\% | 3.85\% | 15.91\% |  |
| 5417 | Scientific research and development services | 0.00\% | 0.00\% | 0.00\% |  |
| 5418 | Advertising, PR, and related services | 0.00\% | 0.12\% | 0.00\% |  |
| 5419 | Other professional and technical services | 0.00\% | 5.87\% | 0.00\% |  |
| 5613 | Employment services | 6.79\% | 7.37\% | 92.09\% |  |
| 6114 | Business, computer and management training | 0.00\% | 0.46\% | 0.00\% |  |


| NAICS-4 | NAICS-4 DESC |  |  |  | ASIAN AMERICAN |  |  |
| :---: | :--- | ---: | ---: | ---: | ---: | :---: | :---: |
|  | Utilization | Availability | Disparity | Significance |  |  |  |
| 6115 | Technical and trade schools | $0.00 \%$ | $0.20 \%$ | $0.00 \%$ |  |  |  |
| 6116 | Other schools and instruction | $0.00 \%$ | $8.33 \%$ | $0.00 \%$ |  |  |  |
| 6117 | Educational support services | $0.00 \%$ | $0.32 \%$ | $0.00 \%$ |  |  |  |
| 6211 | Offices of physicians | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |  |
| 6213 | Offices of other health practitioners | $0.00 \%$ | $11.11 \%$ | $0.00 \%$ |  |  |  |
| 6215 | Medical and diagnostic laboratories | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |  |
| 6216 | Home health care services | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |  |
| 6219 | Other ambulatory health care services | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |  |
| 6241 | Individual and family services | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |  |
| 8111 | Automotive repair and maintenance | $0.00 \%$ | $2.83 \%$ | $0.00 \%$ |  |  |  |
| 9221 | Justice, public order, and safety activities | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv "$ indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ ¥ \not \equiv "$ indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-24.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES
CITY OF BALTIMORE MARKETPLACE
PROFESSIONAL SERVICES
HISPANIC AMERICAN FIRMS

| NAICS-4 | NAICS-4 DESC | HISPANIC AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 2381 | Building foundation and exterior contractors | 75.77\% | 8.65\% | 0.00\% |  |
| 2382 | Building equipment contractors | 0.00\% | 3.26\% | 0.00\% |  |
| 2383 | Building finishing contractors | 0.00\% | 11.24\% | 0.00\% |  |
| 2389 | Other specialty trade contractors | 0.00\% | 8.42\% | 0.00\% |  |
| 3231 | Printing and related support activities | 0.00\% | 5.41\% | 0.00\% |  |
| 3261 | Plastics product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 4233 | Lumber and const. supply merchant wholesalers | 0.00\% | 2.46\% | 0.00\% |  |
| 4234 | Commercial equip. merchant wholesalers | 0.00\% | 0.10\% | 0.00\% |  |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 0.58\% | 0.00\% |  |
| 4241 | Paper and paper product merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4249 | Misc. nondurable goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4841 | General freight trucking | 0.00\% | 0.00\% | 0.00\% |  |
| 4859 | Other ground passenger transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 5239 | Other financial investment activities | 0.00\% | 0.00\% | 0.00\% |  |
| 5241 | Insurance carriers | 0.00\% | 0.00\% | 0.00\% |  |
| 5242 | Insurance agencies and brokerages | 0.00\% | 0.07\% | 0.00\% |  |
| 5321 | Automotive equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5322 | Consumer goods rental | 0.00\% | 0.00\% | 0.00\% |  |
| 5323 | General rental centers | 0.00\% | 0.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5411 | Legal services | 0.00\% | 1.71\% | 0.00\% |  |
| 5412 | Accounting and bookkeeping services | 0.00\% | 3.69\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 0.00\% | 5.81\% | 0.00\% |  |
| 5414 | Specialized design services | 0.00\% | 0.25\% | 0.00\% |  |
| 5415 | Computer systems design and related services | 0.17\% | 2.67\% | 6.36\% |  |
| 5416 | Management and technical consulting services | 0.00\% | 4.18\% | 0.00\% |  |
| 5417 | Scientific research and development services | 0.00\% | 0.00\% | 0.00\% |  |


| NAICS-4 | NAICS-4 DESC |  |  | HISPANIC AMERICAN |  |  |
| :---: | :--- | ---: | ---: | ---: | ---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |  |
| 5418 | Advertising, PR, and related services | $0.00 \%$ | $0.60 \%$ | $0.00 \%$ |  |  |
| 5419 | Other professional and technical services | $0.00 \%$ | $2.96 \%$ | $0.00 \%$ |  |  |
| 5613 | Employment services | $0.00 \%$ | $0.42 \%$ | $0.00 \%$ |  |  |
| 6114 | Business, computer and management training | $0.00 \%$ | $20.00 \%$ | $0.00 \%$ | $\not \approx \neq$ |  |
| 6115 | Technical and trade schools | $0.00 \%$ | $0.40 \%$ | $0.00 \%$ |  |  |
| 6116 | Other schools and instruction | $0.00 \%$ | $0.06 \%$ | $0.00 \%$ |  |  |
| 6117 | Educational support services | $0.00 \%$ | $0.19 \%$ | $0.00 \%$ |  |  |
| 6211 | Offices of physicians | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |
| 6213 | Offices of other health practitioners | $0.00 \%$ | $11.11 \%$ | $0.00 \%$ |  |  |
| 6215 | Medical and diagnostic laboratories | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |
| 6216 | Home health care services | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |
| 6219 | Other ambulatory health care services | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |
| 6241 | Individual and family services | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |
| 8111 | Automotive repair and maintenance | $0.00 \%$ | $4.71 \%$ | $0.00 \%$ |  |  |
| 9221 | Justice, public order, and safety activities | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. "¥" indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ \not \equiv \neq$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-25.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES
CITY OF BALTIMORE MARKETPLACE
PROFESSIONAL SERVICES
NATIVE AMERICAN FIRMS

| NAICS-4 | NAICS-4 DESC | NATIVE AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 2381 | Building foundation and exterior contractors | 0.00\% | 0.11\% | 0.00\% |  |
| 2382 | Building equipment contractors | 0.00\% | 0.32\% | 0.00\% |  |
| 2383 | Building finishing contractors | 0.00\% | 0.98\% | 0.00\% |  |
| 2389 | Other specialty trade contractors | 0.00\% | 1.90\% | 0.00\% |  |
| 3231 | Printing and related support activities | 0.00\% | 0.00\% | 0.00\% |  |
| 3261 | Plastics product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 4233 | Lumber and const. supply merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4234 | Commercial equip. merchant wholesalers | 0.00\% | 1.69\% | 0.00\% |  |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4241 | Paper and paper product merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4249 | Misc. nondurable goods merchant wholesalers | 0.00\% | 0.00\% | 0.00\% |  |
| 4841 | General freight trucking | 0.00\% | 0.00\% | 0.00\% |  |
| 4859 | Other ground passenger transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 5239 | Other financial investment activities | 0.00\% | 0.00\% | 0.00\% |  |
| 5241 | Insurance carriers | 0.00\% | 0.00\% | 0.00\% |  |
| 5242 | Insurance agencies and brokerages | 0.00\% | 6.67\% | 0.00\% |  |
| 5321 | Automotive equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5322 | Consumer goods rental | 0.00\% | 0.00\% | 0.00\% |  |
| 5323 | General rental centers | 0.00\% | 0.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5411 | Legal services | 0.00\% | 0.00\% | 0.00\% |  |
| 5412 | Accounting and bookkeeping services | 0.00\% | 0.00\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 0.00\% | 0.77\% | 0.00\% |  |


| NAICS-4 | NAICS-4 DESC | NATIVE AMERICAN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 5414 | Specialized design services | 0.00\% | 0.00\% | 0.00\% |  |
| 5415 | Computer systems design and related services | 0.00\% | 1.14\% | 0.00\% |  |
| 5416 | Management and technical consulting services | 0.00\% | 0.04\% | 0.00\% |  |
| 5417 | Scientific research and development services | 0.00\% | 0.00\% | 0.00\% |  |
| 5418 | Advertising, PR, and related services | 0.00\% | 0.11\% | 0.00\% |  |
| 5419 | Other professional and technical services | 0.00\% | 0.00\% | 0.00\% |  |
| 5613 | Employment services | 0.00\% | 3.48\% | 0.00\% |  |
| 6114 | Business, computer and management training | 0.00\% | 0.00\% | 0.00\% |  |
| 6115 | Technical and trade schools | 0.00\% | 0.00\% | 0.00\% |  |
| 6116 | Other schools and instruction | 0.00\% | 0.00\% | 0.00\% |  |
| 6117 | Educational support services | 0.00\% | 0.00\% | 0.00\% |  |
| 6211 | Offices of physicians | 0.00\% | 0.00\% | 0.00\% |  |
| 6213 | Offices of other health practitioners | 0.00\% | 0.28\% | 0.00\% |  |
| 6215 | Medical and diagnostic laboratories | 0.00\% | 0.00\% | 0.00\% |  |
| 6216 | Home health care services | 0.00\% | 0.00\% | 0.00\% |  |
| 6219 | Other ambulatory health care services | 0.00\% | 0.00\% | 0.00\% |  |
| 6241 | Individual and family services | 0.00\% | 0.00\% | 0.00\% |  |
| 8111 | Automotive repair and maintenance | 0.00\% | 1.83\% | 0.00\% |  |
| 9221 | Justice, public order, and safety activities | 0.00\% | 0.00\% | 0.00\% |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv "$ indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ ¥ \not \equiv "$ indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-26.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES CITY OF BALTIMORE MARKETPLACE

PROFESSIONAL SERVICES
MBE FIRMS

| NAICS-4 | NAICS-4 DESC |  |  |  |  |  | MBE |  |  |  |
| :---: | :--- | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |  |  |  |  |  |
| 2381 | Building foundation and exterior contractors | $90.35 \%$ | $15.32 \%$ | $0.00 \%$ |  |  |  |  |  |  |
| 2382 | Building equipment contractors | $59.09 \%$ | $14.99 \%$ | $0.00 \%$ |  |  |  |  |  |  |
| 2383 | Building finishing contractors | $0.00 \%$ | $20.46 \%$ | $0.00 \%$ | $¥ \neq$ |  |  |  |  |  |
| 2389 | Other specialty trade contractors | $0.00 \%$ | $20.61 \%$ | $0.00 \%$ | $\nexists$ |  |  |  |  |  |
| 3231 | Printing and related support activities | $3.12 \%$ | $6.02 \%$ | $51.75 \%$ |  |  |  |  |  |  |
| 3261 | Plastics product manufacturing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |  |  |  |  |
| 4233 | Lumber and const. supply merchant wholesalers | $0.00 \%$ | $5.95 \%$ | $0.00 \%$ |  |  |  |  |  |  |
| 4234 | Commercial equip. merchant wholesalers | $100.00 \%$ | $11.81 \%$ | $0.00 \%$ |  |  |  |  |  |  |
| 4237 | Hardware and plumbing merchant wholesalers | $0.00 \%$ | $8.82 \%$ | $0.00 \%$ |  |  |  |  |  |  |
| 4241 | Paper and paper product merchant wholesalers | $100.00 \%$ | $2.90 \%$ | $0.00 \%$ |  |  |  |  |  |  |
| 4249 | Misc. nondurable goods merchant wholesalers | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |  |  |  |  |
| 4841 | General freight trucking | $100.00 \%$ | $100.00 \%$ | $0.00 \%$ |  |  |  |  |  |  |
| 4859 | Other ground passenger transportation | $100.00 \%$ | $100.00 \%$ | $0.00 \%$ |  |  |  |  |  |  |
| 5239 | Other financial investment activities | $37.06 \%$ | $25.29 \%$ | $0.00 \%$ |  |  |  |  |  |  |
| 5241 | Insurance carriers | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |  |  |  |  |
| 5242 | Insurance agencies and brokerages | $0.00 \%$ | $20.21 \%$ | $0.00 \%$ | $\nexists \neq$ |  |  |  |  |  |
| 5321 | Automotive equipment rental and leasing | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |  |  |  |  |
| 5322 | Consumer goods rental | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |  |  |  |  |
| 5323 | General rental centers | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |


| NAICS-4 | NAICS-4 DESC | MBE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5411 | Legal services | 0.00\% | 7.05\% | 0.00\% |  |
| 5412 | Accounting and bookkeeping services | 100.00\% | 28.79\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 0.35\% | 23.17\% | 1.50\% | $¥ ¥$ |
| 5414 | Specialized design services | 0.00\% | 11.91\% | 0.00\% |  |
| 5415 | Computer systems design and related services | 5.67\% | 38.27\% | 14.82\% | ¥¥¥ |
| 5416 | Management and technical consulting services | 2.45\% | 27.83\% | 8.82\% | $¥ ¥$ |
| 5417 | Scientific research and development services | 0.00\% | 0.00\% | 0.00\% |  |
| 5418 | Advertising, PR, and related services | 4.94\% | 14.33\% | 34.47\% |  |
| 5419 | Other professional and technical services | 0.00\% | 37.64\% | 0.00\% | $¥ ¥ ¥$ |
| 5613 | Employment services | 6.79\% | 29.16\% | 23.28\% | $¥ ¥$ |
| 6114 | Business, computer and management training | 0.00\% | 21.67\% | 0.00\% | ¥¥ |
| 6115 | Technical and trade schools | 0.00\% | 28.33\% | 0.00\% | $¥ ¥ ¥$ |
| 6116 | Other schools and instruction | 0.00\% | 25.22\% | 0.00\% | $¥ ¥ ¥$ |
| 6117 | Educational support services | 0.00\% | 28.14\% | 0.00\% | $¥ ¥ ¥$ |
| 6211 | Offices of physicians | 100.00\% | 0.10\% | 0.00\% |  |
| 6213 | Offices of other health practitioners | 0.00\% | 33.76\% | 0.00\% | $¥ ¥ ¥$ |
| 6215 | Medical and diagnostic laboratories | 0.00\% | 0.00\% | 0.00\% |  |
| 6216 | Home health care services | 0.00\% | 0.00\% | 0.00\% |  |
| 6219 | Other ambulatory health care services | 13.26\% | 13.26\% | 0.00\% |  |
| 6241 | Individual and family services | 0.00\% | 0.00\% | 0.00\% |  |
| 8111 | Automotive repair and maintenance | 0.00\% | 21.46\% | 0.00\% | $¥ ¥$ |
| 9221 | Justice, public order, and safety activities | 0.00\% | 0.00\% | 0.00\% |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv$ " indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ ¥ \not \equiv$ " indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-27.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES

## CITY OF BALTIMORE MARKETPLACE PROFESSIONAL SERVICES <br> NONMINORITY FEMALE FIRMS

| NAICS-4 | NAICS-4 DESC | NONMINORITY FEMALE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 2381 | Building foundation and exterior contractors | 0.00\% | 22.36\% | 0.00\% | $¥ ¥$ |
| 2382 | Building equipment contractors | 0.00\% | 20.76\% | 0.00\% | $¥ ¥$ |
| 2383 | Building finishing contractors | 9.87\% | 28.32\% | 34.85\% |  |
| 2389 | Other specialty trade contractors | 47.23\% | 22.00\% | 0.00\% |  |
| 3231 | Printing and related support activities | 96.88\% | 43.37\% | 0.00\% |  |
| 3261 | Plastics product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 4233 | Lumber and const. supply merchant wholesalers | 0.00\% | 39.30\% | 0.00\% | $¥ ¥ ¥$ |
| 4234 | Commercial equip. merchant wholesalers | 0.00\% | 28.32\% | 0.00\% | $¥ ¥ ¥$ |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 24.45\% | 0.00\% | $¥ ¥$ |
| 4241 | Paper and paper product merchant wholesalers | 0.00\% | 5.57\% | 0.00\% |  |
| 4249 | Misc. nondurable goods merchant wholesalers | 100.00\% | 33.33\% | 0.00\% |  |
| 4841 | General freight trucking | 0.00\% | 0.00\% | 0.00\% |  |
| 4859 | Other ground passenger transportation | 0.00\% | 0.00\% | 0.00\% |  |
| 5239 | Other financial investment activities | 0.00\% | 25.03\% | 0.00\% | $¥ ¥ ¥$ |
| 5241 | Insurance carriers | 0.00\% | 50.12\% | 0.00\% | $¥ ¥ ¥$ |


| NAICS-4 | NAICS-4 DESC | NONMINORITY FEMALE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 5242 | Insurance agencies and brokerages | 0.00\% | 20.03\% | 0.00\% | $¥ ¥$ |
| 5321 | Automotive equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5322 | Consumer goods rental | 0.00\% | 0.00\% | 0.00\% |  |
| 5323 | General rental centers | 0.00\% | 0.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5411 | Legal services | 38.37\% | 30.26\% | 0.00\% |  |
| 5412 | Accounting and bookkeeping services | 0.00\% | 19.28\% | 0.00\% | $¥ ¥$ |
| 5413 | Architectural and engineering services | 0.41\% | 25.46\% | 1.60\% | $¥ ¥ ¥$ |
| 5414 | Specialized design services | 100.00\% | 38.10\% | 0.00\% |  |
| 5415 | Computer systems design and related services | 9.00\% | 15.37\% | 58.58\% |  |
| 5416 | Management and technical consulting services | 1.80\% | 22.47\% | 8.03\% | $¥ ¥$ |
| 5417 | Scientific research and development services | 0.00\% | 0.00\% | 0.00\% |  |
| 5418 | Advertising, PR, and related services | 67.51\% | 38.21\% | 0.00\% |  |
| 5419 | Other professional and technical services | 8.89\% | 38.00\% | 23.41\% | $¥ ¥ ¥$ |
| 5613 | Employment services | 93.21\% | 18.50\% | 0.00\% |  |
| 6114 | Business, computer and management training | 0.00\% | 43.29\% | 0.00\% | ¥¥¥ |
| 6115 | Technical and trade schools | 0.00\% | 25.00\% | 0.00\% | $¥ ¥ ¥$ |
| 6116 | Other schools and instruction | 0.00\% | 33.54\% | 0.00\% | $¥ ¥ ¥$ |
| 6117 | Educational support services | 0.00\% | 5.61\% | 0.00\% |  |
| 6211 | Offices of physicians | 0.00\% | 35.13\% | 0.00\% | $¥ ¥ ¥$ |
| 6213 | Offices of other health practitioners | 0.01\% | 25.71\% | 0.04\% | $¥ ¥ ¥$ |
| 6215 | Medical and diagnostic laboratories | 0.00\% | 0.00\% | 0.00\% |  |
| 6216 | Home health care services | 100.00\% | 100.00\% | 0.00\% |  |
| 6219 | Other ambulatory health care services | 1.85\% | 1.85\% | 0.00\% |  |
| 6241 | Individual and family services | 0.00\% | 0.00\% | 0.00\% |  |
| 8111 | Automotive repair and maintenance | 0.00\% | 18.98\% | 0.00\% | $¥ ¥$ |
| 9221 | Justice, public order, and safety activities | 100.00\% | 100.00\% | 0.00\% |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv "$ indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ ¥ \not \equiv "$ indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

TABLE C-28.
DETAILED UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES CITY OF BALTIMORE MARKETPLACE PROFESSIONAL SERVICES

M/WBE FIRMS

| NAICS-4 | NAICS-4 DESC | M/WBE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 2381 | Building foundation and exterior contractors | 90.35\% | 37.67\% | 0.00\% |  |
| 2382 | Building equipment contractors | 59.09\% | 35.76\% | 0.00\% |  |
| 2383 | Building finishing contractors | 9.87\% | 48.77\% | 20.23\% | $¥ ¥ ¥$ |
| 2389 | Other specialty trade contractors | 47.23\% | 42.61\% | 0.00\% |  |
| 3231 | Printing and related support activities | 100.00\% | 49.39\% | 0.00\% |  |
| 3261 | Plastics product manufacturing | 0.00\% | 0.00\% | 0.00\% |  |
| 4233 | Lumber and const. supply merchant wholesalers | 0.00\% | 45.25\% | 0.00\% | $¥ ¥ ¥$ |
| 4234 | Commercial equip. merchant wholesalers | 100.00\% | 40.13\% | 0.00\% |  |
| 4237 | Hardware and plumbing merchant wholesalers | 0.00\% | 33.27\% | 0.00\% | $¥ ¥ ¥$ |
| 4241 | Paper and paper product merchant wholesalers | 100.00\% | 8.48\% | 0.00\% |  |
| 4249 | Misc. nondurable goods merchant wholesalers | 100.00\% | 33.33\% | 0.00\% |  |


| NAICS-4 | NAICS-4 DESC | M/WBE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Utilization | Availability | Disparity | Significance |
| 4841 | General freight trucking | 100.00\% | 100.00\% | 0.00\% |  |
| 4859 | Other ground passenger transportation | 100.00\% | 100.00\% | 0.00\% |  |
| 5239 | Other financial investment activities | 37.06\% | 50.32\% | 73.66\% |  |
| 5241 | Insurance carriers | 0.00\% | 50.12\% | 0.00\% | $¥ ¥ ¥$ |
| 5242 | Insurance agencies and brokerages | 0.00\% | 40.24\% | 0.00\% | $¥ ¥ ¥$ |
| 5321 | Automotive equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5322 | Consumer goods rental | 0.00\% | 0.00\% | 0.00\% |  |
| 5323 | General rental centers | 0.00\% | 0.00\% | 0.00\% |  |
| 5324 | Machinery and equipment rental and leasing | 0.00\% | 0.00\% | 0.00\% |  |
| 5411 | Legal services | 38.37\% | 37.31\% | 0.00\% |  |
| 5412 | Accounting and bookkeeping services | 100.00\% | 48.07\% | 0.00\% |  |
| 5413 | Architectural and engineering services | 0.76\% | 48.64\% | 1.56\% | $¥ ¥ ¥$ |
| 5414 | Specialized design services | 100.00\% | 50.01\% | 0.00\% |  |
| 5415 | Computer systems design and related services | 14.67\% | 53.64\% | 27.36\% | $¥ ¥ ¥$ |
| 5416 | Management and technical consulting services | 4.26\% | 50.30\% | 8.46\% | $¥ ¥ ¥$ |
| 5417 | Scientific research and development services | 0.00\% | 0.00\% | 0.00\% |  |
| 5418 | Advertising, PR, and related services | 72.45\% | 52.54\% | 0.00\% |  |
| 5419 | Other professional and technical services | 8.89\% | 75.64\% | 11.76\% | $¥ ¥ ¥$ |
| 5613 | Employment services | 100.00\% | 47.67\% | 0.00\% |  |
| 6114 | Business, computer and management training | 0.00\% | 64.96\% | 0.00\% | $¥ ¥ ¥$ |
| 6115 | Technical and trade schools | 0.00\% | 53.33\% | 0.00\% | $¥ ¥ ¥$ |
| 6116 | Other schools and instruction | 0.00\% | 58.76\% | 0.00\% | $¥ ¥ ¥$ |
| 6117 | Educational support services | 0.00\% | 33.74\% | 0.00\% | $¥ ¥ ¥$ |
| 6211 | Offices of physicians | 100.00\% | 35.23\% | 0.00\% |  |
| 6213 | Offices of other health practitioners | 0.01\% | 59.46\% | 0.02\% | $¥ ¥ ¥$ |
| 6215 | Medical and diagnostic laboratories | 0.00\% | 0.00\% | 0.00\% |  |
| 6216 | Home health care services | 100.00\% | 100.00\% | 0.00\% |  |
| 6219 | Other ambulatory health care services | 15.10\% | 15.10\% | 0.00\% |  |
| 6241 | Individual and family services | 0.00\% | 0.00\% | 0.00\% |  |
| 8111 | Automotive repair and maintenance | 0.00\% | 40.45\% | 0.00\% | $¥ ¥ ¥$ |
| 9221 | Justice, public order, and safety activities | 100.00\% | 100.00\% | 0.00\% |  |

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability. " $¥$ " indicates an adverse disparity that is statistically significant at the $15 \%$ level or better ( $85 \%$ confidence). " $¥ \not \equiv "$ indicates the disparity is significant at a $10 \%$ level or better ( $90 \%$ confidence). " $¥ ¥ \not \equiv "$ indicates significance at a $5 \%$ level or better ( $95 \%$ confidence).

## Appendix D

Private Sector Analysis In Depth Results - (PUMS)
Regression Analysis

## Results of Logistic Regression, Explanation of Results and Variables, Logistic Regression Output

Below, variable names and operational definitions are provided. When interpreting Tables D-1 to D-4, the third column - $\operatorname{Exp}(B)$ - is the most informative index with regard to the influence of the independent variables on the likelihood of being self-employed. From the inverse of this value, we can interpret a likelihood value of its effect on self-employment. For example, the $\operatorname{Exp}(B)$ for an African American is 0.638 from Table $\mathbf{D}-1$, the inverse of this is 1.566 . This means that a nonminority male is 1.566 times more likely to be self-employed than an African American. Columns $A$ and $B$ are reported as a matter of convention to give the reader another indicator of both the magnitude of the variable's effect and the direction of the effect ("-" suggests the greater the negative B value the more it depresses the likelihood of being selfemployed, and vice versa for a positive B value. It is noteworthy that theoretically "race-neutral" variables (e.g., marital status) tend to impact the likelihood of self-employment positively and that the race/ethnicity/gender variables, in general, tend to have a negative effect on self-employment.

## Variables

Race, ethnicity, and gender indicator variables:
African American.
Asian American.
Hispanic American.
Native American.
Sex: Nonminority woman or not.
Other indicator variables:
Marital Status: Married or not.
Age.
Age ${ }^{2}$ : age squared. Used to acknowledge the positive, curvilinear relationship between each year of age and self-employment.
Disability: Individuals self-reported health-related disabilities.
Tenure: Owns their own home.
Value: Household property value.
Mortgage: Monthly total mortgage payments.
Unearn: Unearned income, such as interests and dividends.
Resdinc: Household income less individuals' personal income.

P65: Number of individuals over the age of 65 living in the household.
P18: Number of children under the age of 18 living in the household.
Some College: Some college education.
College Graduate: College degree.
More than College: Professional or graduate degree.
TABLE D-1.
RESULTS OF LOGISTIC REGRESSION BALTIMORE/HABC MARKETPLACE

OVERALL

|  | B | Sig. | Exp (B) |
| :--- | :---: | :---: | :---: |
| African American | $-\mathbf{0 . 3 9 8}$ | 0.000 | 0.638 |
| Hispanic American | $-\mathbf{0 . 1 8 6}$ | 0.000 | 0.789 |
| Asian American | $-\mathbf{0 . 0 9 0}$ | 0.015 | 0.868 |
| Native American | -0.273 | 0.097 | 0.723 |
| Sex (1=Female) | $-\mathbf{0 . 3 6 4}$ | 0.000 | 0.660 |
| Marital Status (1=Married) | $\mathbf{0 . 1 6 9}$ | 0.000 | 0.638 |
| Age | $\mathbf{0 . 0 9 3}$ | 0.000 | 1.097 |
| Age ${ }^{2}$ | $-\mathbf{0 . 0 0 1}$ | 0.000 | 0.999 |
| Speaks English Well (1=Yes) | $\mathbf{0 . 3 1 6}$ | 0.000 | 1.371 |
| Disability (1=Yes) | -0.028 | 0.549 | 0.972 |
| Tenure (1=Yes) | $\mathbf{0 . 2 7 8}$ | 0.000 | 1.321 |
| Value | $\mathbf{0 . 0 0 0}$ | 0.000 | 1.000 |
| Mortgage | $\mathbf{0 . 0 0 0}$ | 0.000 | 1.000 |
| Unearn | $\mathbf{0 . 0 0 0}$ | 0.000 | 1.000 |
| Resdinc | $\mathbf{0 . 0 0 0}$ | 0.034 | 1.000 |
| P65 | 0.039 | 0.072 | 1.040 |
| P18 | $\mathbf{0 . 1 2 2}$ | 0.000 | 1.129 |
| Some College (1=Yes) | $\mathbf{0 . 4 2 2}$ | 0.000 | 1.525 |
| College Graduate (1=Yes) | $\mathbf{0 . 3 2 5}$ | 0.003 | 1.384 |
| More than College (1=Yes) | $\mathbf{0 . 1 7 4}$ | 0.000 | 1.191 |
| Number of Observations |  |  |  |
| Chi-squared statistic (df=20) | 115064 |  |  |
| Log Likelihood | $\mathbf{5 1 7 3 . 4 3 2}$ |  |  |

Source: The Public Use Microdata Samples (PUMS) data from 2015-2019 American Community Survey and Calculations using SPSS.
Note: BOLD statistically significant at $p<.05$.
Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.

TABLE D-2.

## RESULTS OF LOGISTIC REGRESSION

 BALTIMORE/HABC MARKETPLACECONSTRUCTION

|  | B | Sig. | Exp (B) |
| :--- | :---: | :---: | :---: |
| African American | -0.398 | 0.000 | 0.622 |
| Hispanic American | $-\mathbf{0 . 1 8 6}$ | 0.000 | 0.767 |
| Asian American | $-\mathbf{0 . 0 9 0}$ | 0.075 | 0.778 |
| Native American | -0.273 | 0.097 | 0.926 |
| Sex (1=Female) | $-\mathbf{0 . 3 6 4}$ | 0.000 | 0.425 |
| Marital Status (1=Married) | $\mathbf{0 . 1 6 9}$ | 0.000 | 0.622 |
| Age | $\mathbf{0 . 0 9 3}$ | 0.000 | 1.097 |
| Age | $\mathbf{- 0 . 0 0 1}$ | 0.000 | 0.999 |
| Speaks English Well (1=Yes) | $\mathbf{0 . 3 1 6}$ | 0.000 | 1.371 |
| Disability (1=Yes) | -0.028 | 0.549 | 0.972 |
| Tenure (1=Yes) | $\mathbf{0 . 2 7 8}$ | 0.000 | 1.321 |
| Value | $\mathbf{0 . 0 0 0}$ | 0.000 | 1.000 |
| Mortgage | $\mathbf{0 . 0 0 0}$ | 0.000 | 1.000 |
| Unearn | $\mathbf{0 . 0 0 0}$ | 0.000 | 1.000 |
| Resdinc | $\mathbf{0 . 0 0 0}$ | 0.034 | 1.000 |
| P65 | 0.039 | 0.072 | 1.040 |
| P18 | $\mathbf{0 . 1 2 2}$ | 0.000 | 1.129 |
| Some College (1=Yes) | $\mathbf{0 . 4 2 2}$ | 0.000 | 1.525 |
| College Graduate (1=Yes) | $\mathbf{0 . 3 2 5}$ | 0.003 | 1.384 |
| More than College (1=Yes) | $\mathbf{0 . 1 7 4}$ | 0.000 | 1.191 |
| Number of Observations |  |  |  |
| Chi-squared statistic (df=20) | 115064 |  |  |
| Log Likelihood | 5173.432 |  |  |

Source: The Public Use Microdata Samples (PUMS) data from 2015-2019 American Community Survey and Calculations using SPSS.
Note: BOLD statistically significant at p < 05 .
Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.

TABLE D-3.
RESULTS OF LOGISTIC REGRESSION BALTIMORE/HABC MARKETPLACE GOODS

|  | B | Sig. | Exp (B) |
| :--- | :---: | :---: | :---: |
| African American | -0.663 | 0.000 | 0.489 |
| Hispanic American | -0.445 | 0.000 | 0.609 |
| Asian American | -0.515 | 0.000 | 0.567 |
| Native American | $\mathbf{- 1 . 1 1 9}$ | 0.009 | 0.311 |
| Sex (1=Female) | -0.733 | 0.000 | 0.456 |
| Marital Status (1=Married) | 0.029 | 0.550 | 0.489 |
| Age | $\mathbf{0 . 1 2 9}$ | 0.000 | 1.137 |
| Age | -0.001 | 0.000 | 0.999 |
| Speaks English Well (1=Yes) | 0.052 | 0.388 | 1.054 |
| Disability (1=Yes) | 0.151 | 0.101 | 1.163 |
| Tenure (1=Yes) | $\mathbf{0 . 4 3 5}$ | 0.000 | 1.545 |
| Value | $\mathbf{0 . 0 0 0}$ | 0.000 | 1.000 |
| Mortgage | $\mathbf{0 . 0 0 0}$ | 0.000 | 1.000 |
| Unearn | $\mathbf{0 . 0 0 0}$ | 0.004 | 1.000 |
| Resdinc | 0.000 | 0.648 | 1.000 |
| P65 | 0.011 | 0.788 | 1.011 |
| P18 | 0.032 | 0.490 | 1.032 |
| Some College (1=Yes) | -0.909 | 0.129 | 0.403 |
| College Graduate (1=Yes) | -0.098 | 0.841 | 0.907 |
| More than College (1=Yes) | $\mathbf{- 1 . 0 0 1}$ | 0.000 | 0.368 |
| Number of Observations |  |  |  |
| Chi-squared statistic (df=20) | 3878.845 |  |  |
| Log Likelihood | -19210.2 |  |  |

Source: The Public Use Microdata Samples (PUMS) data from 2015-2019 American Community Survey and Calculations using SPSS.
Note: BOLD statistically significant at $\mathrm{p}<.05$.
Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.

TABLE D-4.

## RESULTS OF LOGISTIC REGRESSION

 BALTIMORE/HABC MARKETPLACE SERVICES|  | B | Sig. | Exp (B) |
| :--- | :---: | :---: | :---: |
| African American | $\mathbf{- 0 . 1 2 8}$ | 0.002 | 0.836 |
| Hispanic American | $\mathbf{- 0 . 1 4 3}$ | 0.011 | 0.824 |
| Asian American | $\mathbf{0 . 2 3 1}$ | 0.000 | 1.197 |
| Native American | 0.021 | 0.923 | 0.970 |
| Sex (1=Female) | 0.067 | 0.081 | 1.016 |
| Marital Status (1=Married) | $\mathbf{0 . 1 9 1}$ | 0.000 | 0.836 |
| Age | $\mathbf{0 . 0 7 2}$ | 0.000 | 1.075 |
| Age | $\mathbf{0 . 0 0 0}$ | 0.000 | 1.000 |
| Speaks English Well (1=Yes) | $\mathbf{0 . 4 4 0}$ | 0.000 | 1.553 |
| Disability (1=Yes) | -0.053 | 0.405 | 0.948 |
| Tenure (1=Yes) | $\mathbf{0 . 2 4 0}$ | 0.000 | 1.271 |
| Value | $\mathbf{0 . 0 0 0}$ | 0.000 | 1.000 |
| Mortgage | $\mathbf{0 . 0 0 0}$ | 0.000 | 1.000 |
| Unearn | 0.000 | 0.497 | 1.000 |
| Resdinc | 0.000 | 0.211 | 1.000 |
| P65 | 0.055 | 0.056 | 1.056 |
| P18 | $\mathbf{0 . 1 3 8}$ | 0.000 | 1.148 |
| Some College (1=Yes) | $\mathbf{0 . 4 8 1}$ | 0.000 | 1.618 |
| College Graduate (1=Yes) | $\mathbf{0 . 3 8 0}$ | 0.004 | 1.462 |
| More than College (1=Yes) | $\mathbf{0 . 2 1 1}$ | 0.000 | 1.235 |
|  |  |  |  |
| Number of Observations | $\mathbf{2 8 6 1 4 . 4 6 5}$ |  |  |
| Chi-squared statistic (df=20) |  |  |  |
| Log Likelihood | $\mathbf{2 1 0 6 . 3 4 2}$ |  |  |
|  |  |  |  |

Source: The Public Use Microdata Samples (PUMS) data from 2015-2019 American Community Survey and Calculations using SPSS.
Note: BOLD statistically significant at p < 05 .
Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.

## Results of Linear Regression, Explanation of Results and Variables

Below, variable names and operational definitions are provided. When interpreting the linear regression Tables C-5 to C-8, the first column - Unstandardized B - is the most informative index with regard to the influence of the independent variables on the earnings of a self-employed individual. Each number in this column represents a percent change in earnings. For example, the corresponding number for an African American is -0.539 , from Table C-5, meaning that an African American will earn 53.9 percent less than a nonminority male. The other four columns are reported in order to give the reader another indicator of both the magnitude of the variable's effect and the direction of the effect. Std. Error reports the standard deviation in the sampling distribution. Standardized B reports the standard deviation change in the dependent variable from on standard deviation increase in the independent variable. The $t$ and Sig. columns simply report the level and strength of a variable's significance.

## Variables

Race, ethnicity and gender indicator variables:
African American.
Asian American.
Hispanic American.
Native American.
Nonminority Woman.
Other indicator variables:
Marital Status: Married or not.
Disability: Individuals self-reported health-related disabilities.
Age.
Age ${ }^{2}$ : age squared. Used to acknowledge the positive, curvilinear relationship between each year of age and self-employment.

Speaks English Well: Person's ability to speak English if not a native speaker.
Some College: Some college education.
College Graduate: College degree.
More than College: Professional or graduate degree.

TABLE D-5.
RESULTS OF LINEAR REGRESSION BALTIMORE/HABC MARKETPLACE OVERALL

| Unstandardized | Standardized |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | B | Std. Error | B | t | Sig. |
| African American | $\mathbf{- 0 . 5 2 7}$ | 0.029 | -0.160 | -17.419 | 0.000 |
| Hispanic American | $\mathbf{- 0 . 5 8 7}$ | 0.036 | -0.156 | -15.555 | 0.000 |
| Asian American | $\mathbf{- 0 . 4 4 4}$ | 0.031 | -0.136 | -13.529 | 0.000 |
| Native American | -0.118 | 0.149 | -0.006 | -0.756 | 0.450 |
| Nonminority Women (1=Female) | $\mathbf{- 0 . 4 4 6}$ | 0.006 | -0.156 | -17.099 | 0.000 |
| Marital Status (1=Married) | $\mathbf{0 . 2 7 7}$ | 0.021 | 0.117 | 13.196 | 0.000 |
| Disability (1=Yes) | $\mathbf{- 0 . 2 2 8}$ | 0.042 | -0.047 | -5.462 | 0.000 |
| Age | $\mathbf{0 . 0 7 3}$ | 0.005 | 0.836 | 14.526 | 0.000 |
| Age ${ }^{2}$ | $\mathbf{- 0 . 0 0 1}$ | 0.000 | -0.785 | -13.650 | 0.000 |
| Speaks English Well (1=Yes) | $\mathbf{- 0 . 1 3 1}$ | 0.025 | -0.053 | -5.229 | 0.000 |
| Some College (1=Yes) | $\mathbf{- 0 . 4 7 1}$ | 0.070 | -0.058 | -6.778 | 0.000 |
| College Graduate (1=Yes) | $\mathbf{- 0 . 4 5 0}$ | 0.096 | -0.040 | -4.671 | 0.000 |
| More than College (1=Yes) | $\mathbf{- 0 . 5 3 2}$ | 0.023 | -0.197 | -23.064 | 0.000 |
|  |  |  |  |  |  |
| Constant | 9.384 | 0.122 |  | 76.686 | 0.000 |

Source: The Public Use Microdata Samples (PUMS) data from 2015-2019 American Community Survey and Calculations using SPSS.
Note: BOLD statistically significant at $p<.05$.

TABLE D-6.
RESULTS OF LINEAR REGRESSION BALTIMORE/HABC MARKETPLACE

## CONSTRUCTION

|  | Unstandardized |  | Standardized |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | B | Std. Error | B | $\mathbf{t}$ | Sig. |
| African American | $\mathbf{- 0 . 2 2 4}$ | 0.070 | -0.064 | -3.029 | 0.002 |
| Hispanic American | $\mathbf{- 0 . 4 2 5}$ | 0.063 | -0.174 | -6.460 | 0.000 |
| Asian American | $\mathbf{- 0 . 3 9 8}$ | 0.084 | -0.099 | -4.491 | 0.000 |
| Native American | 0.504 | 0.261 | 0.038 | 1.844 | 0.065 |
| Nonminority Women (1=Female) | $\mathbf{- 0 . 1 8 4}$ | 0.003 | -0.050 | -2.383 | 0.017 |
| Marital Status (1=Married) | $\mathbf{0 . 3 0 0}$ | 0.044 | 0.144 | 6.827 | 0.000 |
| Disability (1=Yes) | $\mathbf{- 0 . 2 2 5}$ | 0.088 | -0.054 | -2.562 | 0.010 |
| Age | $\mathbf{0 . 0 3 5}$ | 0.011 | 0.441 | 3.069 | 0.002 |
| Age ${ }^{2}$ | $\mathbf{0 . 0 0 0}$ | 0.000 | -0.439 | -3.057 | 0.002 |
| Speaks English Well (1=Yes) | 0.056 | 0.055 | 0.026 | 1.011 | 0.312 |
| Some College (1=Yes) | $\mathbf{- 0 . 2 3 3}$ | 0.102 | -0.048 | -2.285 | 0.022 |
| College Graduate (1=Yes) | -0.268 | 0.159 | -0.035 | -1.689 | 0.091 |
| More than College (1=Yes) | $\mathbf{- 0 . 2 0 6}$ | 0.040 | -0.107 | -5.131 | 0.000 |
|  |  |  |  |  |  |
| Constant | 10.028 | 0.277 |  | 36.263 | 0.000 |

Source: The Public Use Microdata Samples (PUMS) data from 2015-2019 American Community Survey and Calculations using SPSS.
Note: BOLD statistically significant at $p<.05$.

TABLE D-7.
RESULTS OF LINEAR REGRESSION BALTIMORE/HABC MARKETPLACE GOODS

|  | Unstandardized |  | Standardized |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | B | Std. Error | B | t | Sig. |
| African American | $\mathbf{- 0 . 6 9 7}$ | 0.057 | -0.198 | -11.686 | 0.000 |
| Hispanic American | $\mathbf{- 0 . 5 8 9}$ | 0.088 | -0.110 | -6.376 | 0.000 |
| Asian American | $\mathbf{- 0 . 2 7 0}$ | 0.066 | -0.072 | -3.879 | 0.000 |
| Native American | -0.070 | 0.399 | -0.003 | -0.167 | 0.867 |
| Nonminority Women (1=Female) | $\mathbf{- 0 . 5 2 3}$ | 0.043 | -0.209 | -12.304 | 0.000 |
| Marital Status (1=Married) | $\mathbf{0 . 3 1 0}$ | 0.041 | 0.125 | 7.619 | 0.000 |
| Disability (1=Yes) | $\mathbf{- 0 . 3 4 7}$ | 0.077 | -0.072 | -4.474 | 0.000 |
| Age | $\mathbf{0 . 0 9 5}$ | 0.011 | 1.045 | 8.945 | 0.000 |
| Age ${ }^{2}$ | $\mathbf{- 0 . 0 0 1}$ | 0.000 | -1.006 | -8.614 | 0.000 |
| Speaks English Well (1=Yes) | $\mathbf{- 0 . 1 7 1}$ | 0.052 | -0.062 | -3.310 | 0.001 |
| Some College (1=Yes) | $\mathbf{- 1 . 5 3 7}$ | 0.563 | -0.043 | -2.730 | 0.006 |
| College Graduate (1=Yes) | $\mathbf{- 0 . 9 5 6}$ | 0.438 | -0.035 | -2.182 | 0.029 |
| More than College (1=Yes) | $\mathbf{- 0 . 6 0 2}$ | 0.103 | -0.093 | -5.854 | 0.000 |
|  |  |  |  |  |  |
| Constant | 9.297 | 0.266 |  | 34.895 | 0.000 |

Source: The Public Use Microdata Samples (PUMS) data from 2015-2019 American Community Survey and Calculations using SPSS.
Note: BOLD statistically significant at $p<.05$.

TABLE D-8.
RESULTS OF LINEAR REGRESSION BALTIMORE/HABC MARKETPLACE SERVICES

|  | Unstandardized |  | Standardized |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | B | Std. Error | B | t | Sig. |
| African American | $\mathbf{- 0 . 4 7 8}$ | 0.035 | -0.172 | -12.869 | 0.000 |
| Hispanic American | $\mathbf{- 0 . 6 2 0}$ | 0.046 | -0.177 | -12.757 | 0.000 |
| Asian American | $\mathbf{- 0 . 4 1 3}$ | 0.037 | -0.156 | -10.615 | 0.000 |
| Native American | -0.229 | 0.178 | -0.015 | -1.225 | 0.221 |
| Nonminority Women (1=Female) | $\mathbf{- 0 . 4 4 7}$ | $\mathbf{0 . 0 3 2}$ | -0.185 | -13.967 | 0.000 |
| Marital Status (1=Married) | $\mathbf{0 . 2 1 0}$ | 0.026 | 0.099 | 7.909 | 0.000 |
| Disability (1=Yes) | $\mathbf{- 0 . 1 4 4}$ | 0.054 | -0.032 | -2.676 | 0.007 |
| Age | $\mathbf{0 . 0 7 4}$ | 0.006 | 0.943 | 12.130 | 0.000 |
| Age ${ }^{2}$ | $\mathbf{- 0 . 0 0 1}$ | 0.000 | -0.914 | -11.782 | 0.000 |
| Speaks English Well (1=Yes) | $\mathbf{- 0 . 1 0 8}$ | 0.030 | -0.051 | -3.604 | 0.000 |
| Some College (1=Yes) | $\mathbf{- 0 . 2 7 0}$ | 0.083 | -0.039 | -3.237 | 0.001 |
| College Graduate (1=Yes) | $\mathbf{- 0 . 1 6 2}$ | 0.110 | -0.017 | -1.466 | 0.143 |
| More than College (1=Yes) | $\mathbf{- 0 . 3 3 2}$ | 0.028 | -0.145 | -12.040 | 0.000 |
|  |  |  |  |  |  |
| Constant | 9.237 | 0.145 |  | 63.855 | 0.000 |

Source: The Public Use Microdata Samples (PUMS) data from 2015-2019 American Community Survey and Calculations using SPSS.
Note: BOLD statistically significant at $p<.05$.

## Appendix E

## Combined Census and Vendor Questionnaire

\author{

* MGT 山 Housing <br> consulting group Niy If elitimorecity
}


# City of Baltimore/Housing Authority of Baltimore City (HABC) <br> Business Survey 

## Final Questionnaire

Hello, my name is $\qquad$ and I am calling on behalf of the City of Baltimore/Housing Authority of Baltimore City and we are conducting a Disparity Study to learn more about the firms in the market area so that the City and HABC can adequately act to encourage participation in its contracting activities by area firms.

May I speak with \&V.4\&? IF NOT AVAILABLE OR NO LONGER WITH COMPANY ASK:
Is there someone else I can talk to who could answer some questions about the business and procurement activities?

IF OWNER or OTHER DECISION MAKER IS PUT ON THE LINE: CONTINUE

Are you the owner or an authorized decision maker in your company?
IF NO OR TRANSFERRED TO ANOTHER PARTY (CFO, MANAGER, ETC): Are you able to answer questions concerning ownership and business practices for this company? IF YES, CONTINUE

IF NO: Is there someone else I can talk to who could answer some questions about the business and procurement activities? IF NO, SCHEDULE CALL-BACK?

IF NO OR TRANSFERRED TO ANOTHER PARTY (CFO, MANAGER, ETC): Are you able to answer questions concerning ownership and business practices for this company? IF YES, CONTINUE

IF NO: Is there someone else I can talk to who could answer some questions about the business and procurement activities? IF NO, SCHEDULE CALL-BACK?

## IF NEEDED:

The City of Baltimore (City) and Housing Authority of Baltimore City (HABC) has retained MGT Consulting Group to evaluate how the City and HABC buys goods and services; the subcontracting practices of prime contractors/vendors who do business with the City and HABC; and your business experiences in the marketplace. This survey will assist MGT in learning more about business' ease of doing business in the Baltimore marketplace. Your responses to this research survey will be combined with all other businesses who respond for the overall analysis and used only for this research study. Individual information and your identity are kept private.

This is a great opportunity for you to provide feedback regarding your experience doing business with or attempting to do business with the City and/or HABC. The survey results could impact program and policy changes for years to come. For participating in this important research study, your firm will be entered in a drawing for a chance to win a $\$ 500$ Amazon gift card. Winners will be announced at the end of the study.

If you have any questions or would like more information about this research study, please contact Vernetta Mitchell at (813) 3211400 ext. 2131 or visit the study website at www.cityofbaltimore-habcdisparitystudy.com.

Thank you for your participation!

## MGT_Baltimore Questionnaire <br> Final

Q. 1 DO NOT ASK; JUST NOTE Gender:
[REQUIRE ANSWER]
(5)

Male ........ 1
Female .... 2
Q. 2 May I please have your NAME just in case we have any further questions?
[REQUIRE ANSWER]
Q. 3 What is your OFFICIAL TITLE?
[REQUIRE ANSWER]

Owner .................................... 1
CEO/President ....................... 2
Manager/Financial Officer ...... 3
Other ..................................... 4
[S - IF THE ANSWER IS NOT 4, THEN SKIP TO QUESTION 5]
Q. 4 Specify Other: OFFICIAL TITLE
[REQUIRE ANSWER]
Q. 5 Based on the information we have, I want to confirm this is a FOR-PROFIT company, as opposed to a nonprofit, foundation, or government office?
(If the respondent says they are a NON-Profit Business, PLEASE VERIFY THEIR RESPONSE.)
Only local, state, and federal government offices and other foundations such as your local Girls \& Boys Clubs, United Way and Churches are considered non-profit.
[REQUIRE ANSWER]
(107)

Yes ............................... 1
No .................................. 2
Don't Know/Refused ...... 3
[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 68]


#### Abstract

Q. 6 Let me confirm that, based on the information we have from Dun and Bradstreet, the company's PRIMARY LINE OF BUSINESS is [ANSWER TO Q. 85]:


(READ CORRESPONDING DESCRIPTIVE TEXT IN BOLD)
[REQUIRE ANSWER]
(108)

Yes ............................... 1
No ................................. 2
Don't Know/Refused ...... 3
[S - IF THE ANSWER IS 1, THEN SKIP TO QUESTION 8]
Q. 7 Please SPECIFY your company's PRIMARY TYPE OF WORK. (Very Brief Description) (109-408)
Q. 8 Is your company at least 51 percent owned, managed, and controlled by a WOMAN or WOMEN?
[REQUIRE ANSWER]
(409)
Yes ................................ 1
No ................................. 2
Don't Know/Refused ..... 3
Q. 9 Is your company at least 51 percent owned, managed, and controlled by one of the following RACIAL or ETHNIC GROUP(S)?
[REQUIRE ANSWER]
African American/Black
Asian American or Pacific Islander .................................................................. 2
Caucasian/White ............................................................................................. 3
Hispanic American or Latino ............................................................................ 4
Native American/American Indian ................................................................... 5
Don't Know/Refused ........................................................................................ 6
Other (Please specify the race or ethnicity of the owner(s)/manager(s)) .......... 7
[S - IF THE ANSWER IS NOT 7, THEN SKIP TO QUESTION 11]
Q. 10 Specify Other: RACE OR ETHNICITY
[REQUIRE ANSWER]
(411-460)
Q. 11 Is your company at least 51 percent owned, managed, and controlled by a person or people of the following groups? (CHECK ALL THAT APPLY)
[REQUIRE ANSWER]

|  | Yes | No | Don't <br> Know |
| :--- | :---: | :---: | :---: |
| Veteran | 1 | 2 | 3 <br> $(461)$ |
| Disabled | 1 | 2 | 3 <br> $(462)$ |
| LGBT+ (Lesbian, Gay, <br> Bisexual, Transgender, and <br> related groups) 1 | 2 | 3 |  |
| $(463)$ |  |  |  |

Q. 12 Has your firm EVER worked with or attempted to do work on a CITY OF BALTIMORE or HOUSING AUTHORITY OF BALTIMORE CITY (HBAC) contract?
[REQUIRE ANSWER]
ONLY with the City of Baltimore ...................................................................... 1
ONLY with the Housing Authority OF Baltimore City (HABC) .......................... 2
BOTH the City of Baltimore and the Housing Authority of Baltimore City (HABC) 3
NEITHER the City of Baltimore NOR the Housing Authority of
Baltimore City (HABC)
4
Don't Know/Refused ........................................................................................ 5
[S - IF THE ANSWER IS 4-5, THEN SKIP TO QUESTION 67]
Q. 13 What is the HIGHEST LEVEL OF EDUCATION completed by the primary owner of your company?

> [REQUIRE ANSWER]
(465)

Some high school ................................................................... 1
High school graduate ............................................................ 2
Trade or technical education ................................................. 3
Some college ........................................................................ 4
Associate Degree (AA, AS, etc.) ........................................... 5
Bachelor's Degree (BA, BS, etc.) .......................................... 6
Graduate or Professional Degree (MA, PhD, JD, etc.) .......... 7
Don't know/Refused ............................................................... 8
Q. 14 What is the AGE of the company? PROBE! Best guess...

If they don't know age of the company, then ask if they know the year the company was established. If so, note on paper and move on.
Best guess ....
[REQUIRE ANSWER](466)
0-2 years ..... 1
3-5 years ..... 2
6-10 years ..... 3
11-15 years ..... 4
16-20 years ..... 5
21+ years ..... 6
Don't Know/Refused ..... 7
Q. 15 What is the average NUMBER OF EMPLOYEES on your company's payroll, including fulltime and part-time staff? PROMPT! Best guess ....Would you say the \# of employees fall between.. read list below.
[REQUIRE ANSWER]
(467)

None (Owners only) ...... 1
1-4 employees ............ 2
5-9 employees ............ 3
10 - 19 employees ........ 4
20-49 employees ........ 5
50-499 employees ....... 6
500+ .............................. 7
Don't Know/Refused ...... 8
Q. 16 Which of the following ranges best approximates your company's AVERAGE ANNUAL GROSS REVENUE over the last three (3) years? PROMPT THEM TO ANSWER!

Best Guess.. Would you say it falls between....read list below.
[REQUIRE ANSWER]
(468)

Up to $\$ 50,000$
01
\$50,001 to \$100,000 .............. 02
\$100,001 to \$300,000 ............ 03
\$300,001 to \$500,000 ............ 04
\$500,001 to $\$ 1$ Million ............ 05
\$1,000,001 to \$3 Million ......... 06
\$3,000,001 to \$5 Million ......... 07
\$5,000,001 to $\$ 10$ Million ....... 08
Over \$10 Million ..................... 09
Don't Know/Refused .............. 10
[A - IF THE ANSWER TO QUESTION 12 IS 2, THEN SKIP TO QUESTION 18]
Q. 17 What PERCENTAGE of the company's gross revenue in the last three (3) years was earned from contracts or subcontracts on CITY OF BALTIMORE projects?

## [REQUIRE ANSWER]

(469)

| None ......................... |  |
| :---: | :---: |
|  |  |
|  | 11-20\% .................... 3 |
|  | 21-50\% |
| 51-75\% ................ 5 |  |
| 76-100\% |  |
| Don't Know/Refused |  |

## [A - IF THE ANSWER TO QUESTION 12 IS 1, THEN SKIP TO QUESTION 19]

Q. 18 What PERCENTAGE of the company's gross revenue in the last three (3) years was earned from the HOUSING AUTHORITY OF BALTIMORE CITY (HABC)?
[REQUIRE ANSWER] (470)

None 1
1-10\% .......................... 2
11-20\% ....................... 3
21-50\% ....................... 4
51-75\% ....................... 5
76-100\% ...................... 6
Don't Know/Refused ...... 7
Q. 19 Thinking about the last three (3) years, which of the following ranges bests approximates the size of your company's LARGEST AWARDED CONTRACT or SUBCONTRACT?
PROBE! Would you say it falls between... read list below.

## [REQUIRE ANSWER]

(471-472)
None ................................. 001
Up to \$50,000? ................. 002
\$50,001 to \$100,000? ....... 003
\$100,001 to \$200,000? ..... 004
\$200,001 to \$300,000? ..... 005
\$300,001 to \$400,000? ..... 006
\$400,001 to \$500,000? ..... 007
\$500,001 to $\$ 1$ million? ..... 008
Over \$1 million? ................ 009
Don't Know/Refused ......... 010
Q. 20 Does your company hold any of the following CERTIFICATIONS:

READ AND CHECK ALL THAT APPLY.
[REQUIRE ANSWER]

|  | Yes | No | Don't <br> Know |
| :--- | :---: | :---: | :---: |
| Minority Business Enterprise <br> (MBE) | 1 | 2 | 3 <br> $(473)$ |
| Woman Business Enterprise <br> (WBE) | 1 | 2 | 3 <br> $(474)$ |
| Veteran Business Enterprise <br> (VBE) | 1 | 2 | 3 <br> $(475)$ |
| Disabled-owned Business <br> Enterprise (DOBE) | 1 | 2 | 3 <br> $(476)$ |
| LGBT Business Enterprise <br> (LGBTBE) | 1 | 2 | 3 <br> $(477)$ |
| Section 3 HUD (Housing and <br> Urban Development) | 1 | 2 | 3 <br> $(478)$ |
| Other (Please specify) | 1 | 2 | 3 <br> $(479)$ |

[A - IF THE ANSWER TO SUB-QUESTION 7 OF QUESTION 20 IS NOT 1, THEN SKIP TO QUESTION 22]
Q. 21 Specify Other: CERTIFICATIONS
[REQUIRE ANSWER]
$\qquad$ (480-779)
[A - IF THE ANSWER TO SUB-QUESTION 3 OF QUESTION 20 IS NOT 1, THEN SKIP TO QUESTION 25]
Q. 22 What impact does being a VETERAN-OWNED company have on your business?
[REQUIRE ANSWER]
(780)

Positive ....... 1
Negative ...... 2 No impact .... 3
Q. 23 Do you think being a VETERAN REGISTERED BUSINESS gives your company a competitive advantage?
[REQUIRE ANSWER]
(781)

Yes
1
No ................................. 2
Don't Know/Refused ...... 3
Q. 24 Have you been treated disparately (differently) after disclosing that you are a VETERANOWNED company?
[REQUIRE ANSWER]
(782)

Yes ............................... 1
No .................................. 2
Don't Know/Refused ...... 3
[A - IF THE ANSWER TO SUB-QUESTION 4 OF QUESTION 20 IS NOT 1, THEN SKIP TO QUESTION 27]
Q. 25 Do you feel comfortable or safe disclosing your DISABILITY when bidding on or proposing contracts or subcontracts?
[REQUIRE ANSWER]

Yes
1
No ................................. 2
Don't Know/Refused ...... 3
Q. 26 Have you been treated disparately (differently) after disclosing that you are a DISABLEDOWNED company?
[REQUIRE ANSWER]
(784)

Yes ............................... 1
No ................................. 2
Don't Know/Refused ...... 3
[A - IF THE ANSWER TO SUB-QUESTION 5 OF QUESTION 20 IS NOT 1, THEN SKIP TO QUESTION 29]
Q. 27 Do you feel comfortable or safe disclosing your company is a LGBT Business Enterprise
when bidding on or proposing contracts or subcontracts?
[REQUIRE ANSWER]
(785)

Yes ............................... 1
No ................................. 2
Don't Know/Refused ...... 3


#### Abstract

Q. 28 Would LGBT BUSINESS REGISTRATION with the CITY OF BALTIMORE or HOUSING AUTHORITY OF BALTIMORE CITY (HABC) encourage you to do business or attempt to do business with the City or HABC?


[REQUIRE ANSWER]
(786)

Yes ................................ 1
No .................................. 2
Don't Know/Refused ...... 3
[A - IF THE ANSWER TO SUB-QUESTION 6 OF QUESTION 20 IS NOT 1, THEN SKIP TO QUESTION 30]
Q. 29 Has being certified as a SECTION 3 HUD FIRM helped your firm gain access to contract opportunities with the HOUSING AUTHORITY OF BALTIMORE CITY (HABC)?
[REQUIRE ANSWER]
(787)

Yes 1
No ................. 2
Don't Know .... 3
Q. 30 Does your business work as a PRIME CONTRACTOR/VENDOR/CONSULTANT,
SUBCONTRACTOR/SUPPLIER
or
[REQUIRE ANSWER]
(788)

Prime contractor/vendor/consultant ....... 1
Subcontractor/supplier ........................... 2
Both prime and subcontractor ................ 3
Don't Know/Refused .............................. 4
[S - IF THE ANSWER IS 2, THEN SKIP TO QUESTION 32]
[S - IF THE ANSWER IS 4, THEN SKIP TO QUESTION 33]
Q. 31 As a PRIME CONTRACTOR, do you solicit MINORITY-, WOMEN-, VETERAN-, DISABLED-, or LGBT+ BUSINESS ENTERPRISES on private (non-government) contracts?
[REQUIRE ANSWER]
(789)

Yes ............................... 1
No ................................. 2
Don't Know/Refused ...... 3
[A - IF THE ANSWER TO QUESTION 30 IS 1 OR 4, THEN SKIP TO QUESTION 33]
Q. 32 How often do PRIME CONTRACTORS who use your company as a SUBCONTRACTOR on public sector or government projects with M/WBE GOALS solicit your company on projects (private or public) WITHOUT M/WBE GOALS?
[REQUIRE ANSWER]
(790)

Very often ..................... 1
Sometimes .................... 2
Seldom ........................... 3
Never ............................. 4
Don't Know/Refused ...... 5
Q. 33 Have you experienced or observed a situation in which a PRIME ONTRACTOR/VENDOR includes minority or woman subcontractors on a bid or proposal to satisfy the "good faith effort" requirements and then DROPS and/or REPLACES the company as a subcontractor for no legitimate reason after winning the award?
[REQUIRE ANSWER]

Yes .............................. 1
No ................................ 2
Not applicable .............. 3
Don't know/Refused ..... 4
[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 35]
Q. 34 Please briefly describe the situation.
[REQUIRE ANSWER]
Q. 35 Does your business have BONDING?
[REQUIRE ANSWER]
(1292)

Yes 1 No ............................................... 2 Have not applied for bonding ....... 3 Don't Know/Refused .................... 4
[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 37]
Q. 36 What is your current AGGREGATE (Total) BONDING CAPACITY?
[REQUIRE ANSWER]
(1293)

Below \$100,000? 1
\$100,001 to \$250,000? ......... 2
$\$ 250,001$ to $\$ 500,000$ ? ......... 3
\$500,001 to \$1 Million? ......... 4
\$1 Million to \$1.5 Million? ...... 5
\$1.5 Million to \$3 Million? ...... 6
\$3 Million to \$5 Million? ......... 7
Over $\$ 5$ Million? .................... 8
Don't know/Refused .............. 9
[A - IF THE ANSWER TO QUESTION 12 IS 2, THEN SKIP TO QUESTION 45]

## Q. 37 CITY OF BALTIMORE PROJECTS:

Have any of the following been a BARRIER to attempting to do work or working on CITY OF BALTIMORE projects?
[REQUIRE ANSWER]

|  | Yes | No | Don't Know/ <br> Refused |
| :--- | :---: | :---: | :---: |
| Prequalification requirements | 01 | 02 | $03(1294-$ <br> $1295)$ |
| Bond requirements | 01 | 02 | $03(1296-$ <br> $1297)$ |
| Proposal/bid specifications | 01 | 02 | $03(1298-$ <br> $1299)$ |
| Short or limited time given to prepare bid package or <br> quote | 01 | 02 | $03(1300-$ <br> $1301)$ |
| Unnecessarily restrictive contract specifications | 01 | 02 | $03(1302-$ <br> $1303)$ |
| Meeting M/WBE program requirements | 01 | 02 | $03(1304-$ <br> $1305)$ |
| Identifying M/WBE firms | 01 | 02 | $03(1306-$ <br> $1307)$ |
| Selection process/evaluation criteria | 01 | $03(1308-$ <br> $1309)$ |  |
| Insurance requirements (general liability, professional <br> liability, etc.) | 01 | 02 | $03(1310-$ <br> $1311)$ |
| Cost of bidding/proposing | 01 | 02 | $03(1312-$ <br> $1313)$ |
| Price of supplies/materials | $01314-$ |  |  |
| Competing with large companies | 01 | 02 | $03(1316-$ <br> $1317)$ |
| Financing | $03(1318-$ |  |  |
| $1319)$ |  |  |  |

Q. 38 Have you or your company experienced any of the following DISCRIMINATORY BEHAVIOR when attempting to do work or working on CITY OF BALTIMORE projects?
[REQUIRE ANSWER]

|  | CITY OF BALTIMORE |  |  |
| :---: | :---: | :---: | :---: |
|  | Yes | No | Don't Know |
| Harassment on the jobsite | 1 | 2 | $\begin{gathered} 3 \\ (1330) \end{gathered}$ |
| Unequal or unfair treatment | 1 | 2 | $\begin{gathered} 3 \\ (1331) \end{gathered}$ |
| Double standards in performance | 1 | 2 | $\begin{gathered} 3 \\ (1332) \end{gathered}$ |
| Denial of opportunity to bid | 1 | 2 | $\begin{gathered} 3 \\ (1333) \end{gathered}$ |
| Unfair denial of contract award | 1 | 2 | $\begin{gathered} 3 \\ (1334) \end{gathered}$ |
| Unfair contract termination | 1 | 2 | $\begin{gathered} 3 \\ (1335) \end{gathered}$ |
| Unequal price quotes from suppliers | 1 | 2 | $\begin{gathered} 3 \\ (1336) \end{gathered}$ |
| Other: Please explain | 1 | 2 | $\begin{gathered} 3 \\ (1337) \end{gathered}$ |

[A - IF THE ANSWER TO SUB-QUESTION 8 OF QUESTION 38 IS NOT 1, THEN SKIP TO QUESTION 40]
Q. 39 Specify Other: DISCRIMINATORY BEHAVIOR EXPERIENCED ON CITY OF BALTIMORE PROJECTS
[REQUIRE ANSWER]
$\qquad$ (1338-1837)
[A - IF THE ANSWER TO SUB-QUESTION 1 OF QUESTION 38 IS NOT 1, AND...]
[A - IF THE ANSWER TO SUB-QUESTION 2 OF QUESTION 38 IS NOT 1, AND...]
[A - IF THE ANSWER TO SUB-QUESTION 3 OF QUESTION 38 IS NOT 1, AND...]
[A - IF THE ANSWER TO SUB-QUESTION 4 OF QUESTION 38 IS NOT 1, AND...]
[A - IF THE ANSWER TO SUB-QUESTION 5 OF QUESTION 38 IS NOT 1, AND...]
[A - IF THE ANSWER TO SUB-QUESTION 6 OF QUESTION 38 IS NOT 1, AND...]
[A - IF THE ANSWER TO SUB-QUESTION 7 OF QUESTION 38 IS NOT 1, AND...]
[A - IF THE ANSWER TO SUB-QUESTION 8 OF QUESTION 38 IS NOT 1, THEN SKIP TO QUESTION 45]
Q. 40 Which of the following do you consider the REASON(S) for your company being discriminated against on any CITY OF BALTIMORE contracts? CHECK ALL THAT APPLY
[REQUIRE ANSWER]
(1838-1843)
Owner's Race or Ethnicity ......................................... 1
Owner's Gender ......................................................... 2
Owner's Veteran Status ............................................. 3
Owner's Disability ..................................................... 4
Owner's Sexual Orientation or Gender Identity ......... 5
Other (Please explain) .............................................. 6
[S - IF THE ANSWER IS NOT 6, THEN SKIP TO QUESTION 42]
Q. 41 Specify Other: REASON FOR BEING DISCRIMINATED AGAINST ON CITY OF BALTIMORE PROJECTS
[REQUIRE ANSWER]
Q. 42 Please BRIEFLY describe the DISCRIMINATION you experienced on a CITY OF BALTIMORE project.
[REQUIRE ANSWER]
(2344-2843)
Q. 43 Did you FILE a COMPLAINT? (City of Baltimore project)
[REQUIRE ANSWER] (2844)

Yes 1 No ................................. 2 Don't Know/Refused ...... 3
[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 45]
Q. 44 What was the RESULT of filing the COMPLAINT? (City of Baltimore project)
[REQUIRE ANSWER]
(2845-3344)
[A - IF THE ANSWER TO QUESTION 12 IS 1, THEN SKIP TO QUESTION 53]

## Q. 45 HOUSING AUTHORITY OF BALTIMORE (HABC) PROJECTS:

Have any of the following been a BARRIER to attempting to do work or working on HOUSING AUTHORITY OF BALTIMORE CITY (HABC) projects?
[REQUIRE ANSWER]

|  | Yes | No | Don't Know |
| :--- | :---: | :---: | :---: |
| Prequalification requirements | 01 | 02 | $03(3345-$ <br> $3346)$ |
| Bond requirements | 01 | 02 | $03(3347-$ <br> $3348)$ |
| Proposal/bid specifications | 01 | $03(3349-$ <br> $3350)$ |  |
| Short or limited time given to prepare bid package or <br> quote | 01 | 02 | $03(3351-$ <br> $3352)$ |
| Unnecessarily restrictive contract specifications | 01 | 02 | $03(3353-$ <br> $3354)$ |
| Meeting M/WBE program requirements | 01 | 02 | $03(3355-$ <br> $3356)$ |
| Identifying M/WBE firms | 01 | 02 | $03(3357-$ <br> $3358)$ |
| Selection process/evaluation criteria | 01 | $03(3359-$ <br> $3360)$ |  |
| Insurance requirements (general liability, professional <br> liability, etc.) | 01 | 02 | $03(3361-$ <br> $3362)$ |
| Cost of bidding/proposing | 01 | 02 | $03(3363-$ <br> $3364)$ |
| Price of supplies/materials | $0365-$ |  |  |
| Competing with large companies | 01 | 02 | $03(3367-$ <br> $3368)$ |
| Financing | 01 | $02(3369-$ |  |
| $3370)$ |  |  |  |

Q. 46 Have you or your company experienced any of the following DISCRIMINATORY BEHAVIOR when attempting to do work or working on HOUSING AUTHORITY OF BALTIMORE CITY (HABC) projects?
[REQUIRE ANSWER]

|  |  |  | Don't <br> Know/ <br> Refus |
| :--- | :---: | :---: | :---: |
| ed |  |  |  |$|$

[A - IF THE ANSWER TO SUB-QUESTION 8 OF QUESTION 46 IS NOT 1, THEN SKIP TO QUESTION 48]
Q. 47 Specify Other: DISCRIMINATORY BEHAVIOR EXPERIENCED ON HOUSING

AUTHORITY OF BALTIMORE CITY (HABC) PROJECTS
[REQUIRE ANSWER]
(3389-3888)
[A - IF THE ANSWER TO SUB-QUESTION 1 OF QUESTION 46 IS NOT 1, AND...]
[A - IF THE ANSWER TO SUB-QUESTION 2 OF QUESTION 46 IS NOT 1, AND...]
[A - IF THE ANSWER TO SUB-QUESTION 3 OF QUESTION 46 IS NOT 1, AND...]
[A - IF THE ANSWER TO SUB-QUESTION 4 OF QUESTION 46 IS NOT 1, AND...]
[A - IF THE ANSWER TO SUB-QUESTION 5 OF QUESTION 46 IS NOT 1, AND...]
[A - IF THE ANSWER TO SUB-QUESTION 6 OF QUESTION 46 IS NOT 1, AND...]
[A - IF THE ANSWER TO SUB-QUESTION 7 OF QUESTION 46 IS NOT 1, AND...]
[A - IF THE ANSWER TO SUB-QUESTION 8 OF QUESTION 46 IS NOT 1, THEN SKIP TO QUESTION 53]

# Q. 48 Which of the following do you consider the REASON(S) for your company being discriminated against on any HOUSING AUTHORITY OF BALTIMORE CITY (HABC) contracts? 

CHECK ALL THAT APPLY
[REQUIRE ANSWER]
(3889-3894)
Owner's Race or Ethnicity ......................................... 1
Owner's Gender ......................................................... 2
Owner's Veteran Status ............................................. 3
Owner's Disability ..................................................... 4
Owner's Sexual Orientation or Gender Identity ......... 5
Other (Please explain) ............................................. 6
[S - IF THE ANSWER IS NOT 6, THEN SKIP TO QUESTION 50]
Q. 49 Specify Other: REASON FOR BEING DISCRIMINATED AGAINST ON HOUSING AUTHORITY OF BALTIMORE CITY (HABC) PROJECTS
[REQUIRE ANSWER]
(3895-4394)
Q. 50 Please BRIEFLY describe the DISCRIMINATION you experienced on a HOUSING AUTHORITY OF BALTIMORE CITY (HABC) project.
[REQUIRE ANSWER]
(4395-4894)
Q. 51 Did you FILE a COMPLAINT? (Housing Authority of Baltimore City (HABC) project)
[REQUIRE ANSWER]
$(4895)$
Yes .............. 1
No ............ 2
Don't Know .... 3
Q. 52 What was the RESULT of filing the COMPLAINT? (Housing Authority of Baltimore City (HABC) project)

[REQUIRE ANSWER]

## Q. 53 PRIVATE SECTOR MARKET:

Have you or your company experienced any DISCRIMINATORY BEHAVIOR when attempting to do work or working in the PRIVATE SECTOR?
[REQUIRE ANSWER]

Yes .................................................... 1
No ...................................................... 2
Do not work in the Private Sector ....... 3
Don't Know/Refused .......................... 4
[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 58]
Q. 54 Which of the following DISCRIMINATORY BEHAVIOR have you experienced when attempting to do work or working in the PRIVATE SECTOR (non-government)?
[REQUIRE ANSWER]

|  | Yes | No | Don't <br> Know |
| :--- | :---: | :---: | :---: |
| Harassment on the jobsite | 1 | 2 | 3 <br> $(5397)$ |
| Unequal or unfair treatment | 1 | 2 | 3 <br> $(5398)$ |
| Double standards in <br> performance | 1 | 2 | 3 <br> $5399)$ |
| Denial of opportunity to bid | 1 | 2 | 3 <br> $(5400)$ |
| Unfair denial of contract <br> award | 1 | 2 | 3 <br> $(5401)$ |
| Unfair contract termination | 1 | 2 | 3 <br> $(5402)$ |
| Unequal price quotes from <br> suppliers | 1 | 2 | 3 <br> $(5403)$ |
| Other: Please explain | 1 | 2 | 3 <br> $(5404)$ |

[A - IF THE ANSWER TO SUB-QUESTION 8 OF QUESTION 54 IS NOT 1, THEN SKIP TO QUESTION 56]

# Q. 55 Specify Other: DISCRIMINATORY BEHAVIOR EXPERIENCED ON PRIVATE SECTOR (NON-GOVERNMENT) CONTRACTS OR PROJECTS 

[REQUIRE ANSWER]
5405-5904)
[A - IF THE ANSWER TO SUB-QUESTION 1 OF QUESTION 54 IS NOT 1, AND...] [A - IF THE ANSWER TO SUB-QUESTION 2 OF QUESTION 54 IS NOT 1, AND...] [A - IF THE ANSWER TO SUB-QUESTION 3 OF QUESTION 54 IS NOT 1, AND...] [A - IF THE ANSWER TO SUB-QUESTION 4 OF QUESTION 54 IS NOT 1, AND...] [A - IF THE ANSWER TO SUB-QUESTION 5 OF QUESTION 54 IS NOT 1, AND...] [A - IF THE ANSWER TO SUB-QUESTION 6 OF QUESTION 54 IS NOT 1, AND...] [A - IF THE ANSWER TO SUB-QUESTION 7 OF QUESTION 54 IS NOT 1, AND...]
[A - IF THE ANSWER TO SUB-QUESTION 8 OF QUESTION 54 IS NOT 1, THEN SKIP TO QUESTION 58]
Q. 56 Which of the following do you consider the REASON(S) for your company being discriminated against on PRIVATE SECTOR (non-government) contracts or projects?

CHECK ALL THAT APPLY
[REQUIRE ANSWER]
(5905-5910)
Owner's Race or Ethnicity ......................................... 1
Owner's Gender ......................................................... 2
Owner's Veteran Status ............................................ 3
Owner's Disability ..................................................... 4
Owner's Sexual Orientation or Gender Identity ......... 5
Other (Please specify) .............................................. 6
[S - IF THE ANSWER IS NOT 6, THEN SKIP TO QUESTION 58]
Q. 57 Specify Other: REASON FOR BEING DISCRIMINATED AGAINST ON PRIVATE SECTOR (NON-GOVERNMENTAL) PROJECTS
[REQUIRE ANSWER]
(5911-6410)
Q. 58 CREDIT ACCESS:

Has your company APPLIED FOR A LOAN OR BUSINESS CREDIT in the last 12 months?
[REQUIRE ANSWER]
(6411)

Yes
1
No ................................. 2
Don't Know/Refused ...... 3
[S - IF THE ANSWER IS 2, THEN SKIP TO QUESTION 61]
[S - IF THE ANSWER IS 3, THEN SKIP TO QUESTION 66]
Q. 59 What was the REASON(S) for applying for a LOAN or CREDIT?

CHECK ALL THAT APPLY
[REQUIRE ANSWER]
(6412-6417)
Operating expense 1
Business expansion ............................. 2
Loss of revenue due to COVID-19 ....... 3
Equipment purchase ............................ 4
Building purchase ................................ 5
Other (Please specify) ......................... 6
[S - IF THE ANSWER IS NOT 6, THEN SKIP TO QUESTION 63]
Q. 60 Specify Other: REASON YOU APPLIED FOR A LOAN OR CREDIT
[REQUIRE ANSWER]
[D - IF THE ANSWER TO QUESTION 58 IS 1, THEN SKIP TO QUESTION 63]
Q. 61 What was your PRIMARY REASON for NOT APPLYING FOR CREDIT?
[REQUIRE ANSWER]
(6918)

Have sufficient financing ................ 1
Debt averse ................................... 2
Credit interest rate too high ............ 3
No established business credit ...... 4
Other (Please specify) ................... 5
[S - IF THE ANSWER IS NOT 5, THEN SKIP TO QUESTION 66]
Q. 62 Specify Other: REASON YOU DID NOT APPLY FOR CREDIT
[REQUIRE ANSWER]
(6919-7418)
[D - IF THE ANSWER TO QUESTION 58 IS 2, THEN SKIP TO QUESTION 66]
[A - IF THE ANSWER TO QUESTION 58 IS NOT 1, THEN SKIP TO QUESTION 66]
Q. 63 Was your LOAN OR CREDIT APPLICATION APPROVED?
[REQUIRE ANSWER]
(7419)

Yes ................................ 1
No .................................. 2
Don't Know/Refused ...... 3
[S - IF THE ANSWER IS NOT 2, THEN SKIP TO QUESTION 66]
Q. 64 Why do you think your LOAN OR CREDIT APPLICATION was DENIED?

SELECT ALL THAT APPLY.
[REQUIRE ANSWER]
(7420-7425)
Insufficient Documentation .......... 1
Insufficient Business History ........ 2
Confusion about the Process ....... 3
Race or Ethnicity of Owner .......... 4
Gender of Owner ......................... 5
Don't Know/Refused .................... 6
Other (please specify) ................. 7
[S - IF THE ANSWER IS NOT 7, THEN SKIP TO QUESTION 66]
Q. 65 Specify Other: REASON WHY YOU THINK YOUR LOAN OR CREDIT APPLICATION WAS DENIED
[REQUIRE ANSWER]
$\qquad$ (7426-7925)
Q. 66 Do you have any other FEEDBACK or RECOMMENDATIONS that you would like to share regarding the CITY of BALTIMORE or HOUSING AUTHORITY of BALTIMORE CITY (HBAC) contracting practices, working with prime firms, working with subcontractors, or the administration
of the M/WBE program? BE BRIEF. (PROBE)If respondent has no feedback to offer, enter NONE.
[REQUIRE ANSWER]
Q. 67 This concludes the survey. On behalf of the CITY OF BALTIMORE and the HOUSING AUTHORITY OF BALTIMORE CITY (HABC), thank you for your participation in this important survey.

## ONLY PROVIDE THE INFORMATION BELOW IF ASKED FOR IT!

If you have any questions or would like more information about the disparity study, please contact Vernetta Mitchell at (813) 321-1400 ext. 2131or vmitchell@mtgconsulting.com, or visit the study website at https://cityofbaltimore-habcdisparitystudy.com.

## [D - IF THE ANSWER TO QUESTION 5 IS 1, THEN SKIP TO QUESTION 69] <br> [A - IF THE ANSWER TO QUESTION 5 IS 1, THEN SKIP TO QUESTION 69]

Q. 68 Disqualification Statement

Thank you for your input; however, based on your answers, it appears that you DO NOT qualify for this survey because we are only seeking input from for-profit companies.

CODE AS INELIGIBLE (i.e. 13).
Q. 69 Interviewer Comments

If no additional comments, put \#99 in box.
(8426-8925)
Q. 70 Procurement Category: [ANSWER TO Q. 85]Type of Business

RECODE BASED UPON ABOVE ONLY! DO NOT CHANGE THE LINE OF BUSINESS!
[REQUIRE ANSWER]
(8926)

Construction ................................................ 1
Architectural and Engineering Services ....... 2
Other Services .............................................. 3
Professional Services ................................... 4
Goods and Services .................................... 5
Other Business Category ............................. 6
Q. 71 RECODE MINORITY STATUS AS SHOWN: [ANSWER TO Q. 85] DO NOT CHANGE STATUS!
[REQUIRE ANSWER]
(8928-8929)
236116 ...... 01
236118 ...... 02
236210 ...... 03
236220 ...... 04
237110 ...... 05
237130 ...... 06
237310 ...... 07
237990 ...... 08
238110 ...... 09
238140 ...... 10
238150 ...... 11
238160 ...... 12
238190 ...... 13
238210 ...... 14
238220 ...... 15
238290 ...... 16
238310 ...... 17
238320 ...... 18
238330 ...... 19
238360 ...... 20
238390 ...... 21
238910 ...... 22
238990 ...... 23
423330 ...... 24
Q. 73 RECODE ETHNICITY/RACE/GENDER AS SHOWN: \&\&

DO NOT CHANGE!
[REQUIRE ANSWER]
(8930)

African American $\qquad$
Asian American ..... 2
Hispanic American ..... 3
Native American ..... 4
Non-minority Woman ..... 5
NON/M/WBE ..... 6
Q. 74 Telephone Number

$\qquad$
(8931-8946)
Q. 75 Ref Name $\qquad$ (8972-8976)

## Q. 76 Ref \#

$\qquad$
Q. 77 Business Name $\qquad$ (8977-9076)
Q. 78 First \& Last Name $\qquad$ (9077-9106)
Q. 79 Contact Title $\qquad$ (9107-9131)
Q. 80 MGT-County \& State $\qquad$ (9132-9181)
Q. 81 NAICS Code $\qquad$ (9182-9191)
Q. 82 NAICS Descriptions
Q. 83 Business Category
$\qquad$ (9192-9291)
Q. 84 Minority Status
$\qquad$ (9292-9341)
Q. 85 Ethnicity, Race, Gender $\qquad$ (9342-9371)
Q. 86 DUNS \# $\qquad$ (9422-9436)
Q. 87 Interviewer $\qquad$ (9437-9440)
Q. 88 Date $\qquad$
Q. 89 Time (9450-9455)
Q. 90 Duration (9456-9461)
Q. 91 Call Result $\qquad$ (9462-9463)

## Appendix F

Vendor Survey Results

|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian American/ Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't Know |  |
| Q3-What is your OFFICIAL TITLE? * Business Ownership Crosstabulation | Owner | Count | 39 | 30 | 8 | 1 | 33 | 28 | 0 | 139 |
|  |  | \% within Q3 | 15.07\% | 31.51\% | 1.37\% | 0.00\% | 31.51\% | 20.55\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 14.67\% | 32.39\% | 5.88\% | 0.00\% | 25.56\% | 16.48\% | 0.00\% | 21.04\% |
|  | CEO/President | Count | 11 | 23 | 1 | 0 | 23 | 15 | 0 | 73 |
|  |  | \% within Q3 | 15.07\% | 31.51\% | 1.37\% | 0.00\% | 31.51\% | 20.55\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 14.67\% | 32.39\% | 5.88\% | 0.00\% | 25.56\% | 16.48\% | 0.00\% | 21.04\% |
|  | Manager/Financial Officer | Count | 13 | 10 | 6 | 1 | 26 | 37 | 1 | 94 |
|  |  | \% within Q3 | 13.83\% | 10.64\% | 6.38\% | 1.06\% | 27.66\% | 39.36\% | 1.06\% | 100.00\% |
|  |  | \% within Business Ownership | 17.33\% | 14.08\% | 35.29\% | 50.00\% | 28.89\% | 40.66\% | 100.00\% | 27.09\% |
|  | Other | Count | 12 | 8 | 2 | 0 | 8 | 11 | 0 | 41 |
|  |  | \% within Q3 | 29.27\% | 19.51\% | 4.88\% | 0.00\% | 19.51\% | 26.83\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 16.00\% | 11.27\% | 11.76\% | 0.00\% | 8.89\% | 12.09\% | 0.00\% | 11.82\% |
| Total |  | Count | 75 | 71 | 17 | 2 | 90 | 91 | 1 | 347 |
|  |  | \% within Q3 | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian American/Pacific Islander | Hispanic American or Latino | Native <br> American/ <br> American Indian | Nonminority Female | NonMBE | Don't Know |  |
| Q8- Is at least 51 percent of your company owned, managed, and controlled by a woman or women? * Business Ownership Crosstabulation | Yes | Count | 48 | 41 | 10 | 2 | 90 | 3 | 0 | 194 |
|  |  | \% within Q8 | 24.74\% | 21.13\% | 5.15\% | 1.03\% | 46.39\% | 1.55\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 64.00\% | 57.75\% | 58.82\% | 100.00\% | 100.00\% | 3.30\% | 0.00\% | 55.91\% |
|  | No | Count | 27 | 30 | 7 | 0 | 0 | 88 | 1 | 153 |
|  |  | \% within Q8 | 17.65\% | 19.61\% | 4.58\% | 0.00\% | 0.00\% | 57.52\% | 0.65\% | 100.00\% |
|  |  | \% within Business Ownership | 36.00\% | 42.25\% | 41.18\% | 0.00\% | 0.00\% | 96.70\% | 100.00\% | 44.09\% |
| Total |  | Count | 75 | 71 | 17 | 2 | 90 | 91 | 1 | 347 |
|  |  | \% within Q8 | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

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|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q9- Is at least 51 percent of your company owned, managed, and controlled by a person or people of one of the following racial or ethnic group(s)? <br> * Business Ownership Crosstabulation | African American | Count | 75 | 0 | 0 | 0 | 0 | 0 | 0 | 75 |
|  |  | \% within Q9 | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 21.61\% |
|  | Asian <br> American/ <br> Pacific <br> Islander | Count | 0 | 71 | 0 | 0 | 0 | 0 | 0 | 71 |
|  |  | \% within Q9 | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 20.46\% |
|  | Caucasian /White | Count | 0 | 0 | 0 | 0 | 90 | 91 | 0 | 181 |
|  |  | \% within Q9 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 49.72\% | 50.28\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 100.00\% | 0.00\% | 52.16\% |
|  | Hispanic American or Latino | Count | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 17 |
|  |  | \% within Q9 | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 4.90\% |
|  | Native American/ American Indian | Count | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
|  |  | \% within Q9 | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.58\% |
|  | Don't Know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
|  |  | \% within Q9 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.29\% |
|  | Other | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q9 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 75 | 71 | 17 | 2 | 90 | 91 | 1 | 347 |
|  |  | \% within Q9 | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

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|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian American/Pacific Islander | Hispanic American or Latino | Native <br> American/ American Indian | Nonminority Female | NonM/WBE | Don't Know |  |
| Q11- Is at least 51 percent of your company owned, managed, and controlled by a person or people of the following groups? Veteran * Business Ownership Crosstabulation | Yes | Count | 10 | 11 | 1 | 0 | 1 | 0 | 0 | 23 |
|  |  | \% within Q11 | 43.48\% | 47.83\% | 4.35\% | 0.00\% | 4.35\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 13.33\% | 15.49\% | 5.88\% | 0.00\% | 1.11\% | 0.00\% | 0.00\% | 6.63\% |
|  | No | Count | 65 | 60 | 16 | 2 | 89 | 90 | 1 | 323 |
|  |  | \% within Q11 | 20.12\% | 18.58\% | 4.95\% | 0.62\% | 27.55\% | 27.86\% | 0.31\% | 100.00\% |
|  |  | \% within Business Ownership | 86.67\% | 84.51\% | 94.12\% | 100.00\% | 98.89\% | 98.90\% | 100.00\% | 93.08\% |
|  | Don't <br> know | Count | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
|  |  | \% within Q11 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.10\% | 0.00\% | 0.29\% |
| Total |  | Count | 75 | 71 | 17 | 2 | 90 | 91 | 1 | 347 |
|  |  | \% within Q11 | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

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|  |  |  |  |  | Busin | s Ownership |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | Non- <br> M/WBE | Don't Know | Total |
| Q11- Is at least 51 | Yes | Count | 4 | 3 | 1 | 0 | 0 | 0 | 0 | 8 |
| percent of your |  | \% within Q11 | 50.00\% | 37.50\% | 12.50\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
| managed, and |  | \% within Business Ownership | 5.33\% | 4.23\% | 5.88\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 2.31\% |
| controlled by a person | No | Count | 71 | 68 | 16 | 2 | 89 | 91 | 1 | 338 |
| or people of the |  | \% within Q11 | 21.01\% | 20.12\% | 4.73\% | 0.59\% | 26.33\% | 26.92\% | 0.30\% | 100.00\% |
| following groups? |  | \% within Business Ownership | 94.67\% | 95.77\% | 94.12\% | 100.00\% | 98.89\% | 100.00\% | 100.00\% | 97.41\% |
| Disabled * Business Ownership | Don't | Count | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Crosstabulation | know | \% within Q11 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.11\% | 0.00\% | 0.00\% | 0.29\% |
| Total |  | Count | 75 | 75 | 71 | 17 | 2 | 90 | 91 | 1 |
|  |  | \% within Q11 | 21.61\% | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

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|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q11- Is at least 51 percent of your company owned, managed, and controlled by a person or people of the following groups? LGBT+ * Business Ownership Crosstabulation | Yes | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | \% within Q11 | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 1.33\% | 1.41\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.58\% |
|  | No | Count | 74 | 70 | 17 | 2 | 90 | 90 | 1 | 344 |
|  |  | \% within Q11 | 21.51\% | 20.35\% | 4.94\% | 0.58\% | 26.16\% | 26.16\% | 0.29\% | 100.00\% |
|  |  | \% within Business Ownership | 98.67\% | 98.59\% | 100.00\% | 100.00\% | 100.00\% | 98.90\% | 100.00\% | 99.14\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
|  |  | \% within Q11 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.10\% | 0.00\% | 0.29\% |
| Total |  | Count | 75 | 71 | 17 | 2 | 90 | 91 | 1 | 347 |
|  |  | \% within Q11 | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | Non- <br> MBE | Don't <br> Know |  |
| Q12- Has your firm tried to do business with the City or HABC? * Business Ownership Crosstabulation | Only with the City | Count | 49 | 62 | 8 | 1 | 68 | 66 | 1 | 255 |
|  |  | \% within Q12 | 19.22\% | 24.31\% | 3.14\% | 0.39\% | 26.67\% | 25.88\% | 0.39\% | 100.00\% |
|  |  | \% within Business Ownership | 65.33\% | 87.32\% | 47.06\% | 50.00\% | 75.56\% | 72.53\% | 100.00\% | 73.49\% |
|  | Only with the HABC | Count | 9 | 0 | 4 | 1 | 11 | 10 | 0 | 35 |
|  |  | \% within Q12 | 25.71\% | 0.00\% | 11.43\% | 2.86\% | 31.43\% | 28.57\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 12.00\% | 0.00\% | 23.53\% | 50.00\% | 12.22\% | 10.99\% | 0.00\% | 10.09\% |
|  | Both <br> the City <br> and HABC | Count | 13 | 4 | 4 | 0 | 10 | 14 | 0 | 45 |
|  |  | \% within Q12 | 28.89\% | 8.89\% | 8.89\% | 0.00\% | 22.22\% | 31.11\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 17.33\% | 5.63\% | 23.53\% | 0.00\% | 11.11\% | 15.38\% | 0.00\% | 12.97\% |
|  | Neither | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | \% within Q12 | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |

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|  |  | \% within Business Ownership | 1.33\% | 1.41\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.58\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Don't know | Count | 3 | 4 | 1 | 0 | 1 | 1 | 0 | 10 |
|  |  | \% within Q12 | 30.00\% | 40.00\% | 10.00\% | 0.00\% | 10.00\% | 10.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 4.00\% | 5.63\% | 5.88\% | 0.00\% | 1.11\% | 1.10\% | 0.00\% | 2.88\% |
| Total |  | Count | 75 | 71 | 17 | 2 | 90 | 91 | 1 | 347 |
|  |  | \% within Q12 | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  |  |  | Busin | s Ownership |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't Know | Total |
| Q14- What is the | 0-2 | Count | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 |
| age of the | years | \% within Q14 | 0.00\% | 50.00\% | 0.00\% | 0.00\% | 50.00\% | 0.00\% | 0.00\% | 100.00\% |
| company? * |  | \% within Business Ownership | 0.00\% | 1.41\% | 0.00\% | 0.00\% | 1.12\% | 0.00\% | 0.00\% | 0.58\% |
| Business | 3-5 | Count | 5 | 5 | 1 | 0 | 2 | 2 | 0 | 15 |
| wnership | years | \% within Q14 | 33.33\% | 33.33\% | 6.67\% | 0.00\% | 13.33\% | 13.33\% | 0.00\% | 100.00\% |
| Crosstabulation |  | \% within Business Ownership | 6.67\% | 7.04\% | 5.88\% | 0.00\% | 2.25\% | 2.22\% | 0.00\% | 4.35\% |
|  | 6-10 | Count | 15 | 13 | 2 | 0 | 5 | 10 | 0 | 45 |
|  | years | \% within Q14 | 33.33\% | 28.89\% | 4.44\% | 0.00\% | 11.11\% | 22.22\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 20.00\% | 18.31\% | 11.76\% | 0.00\% | 5.62\% | 11.11\% | 0.00\% | 13.04\% |
|  | 11-15 | Count | 13 | 13 | 3 | 1 | 24 | 14 | 0 | 68 |
|  | years | \% within Q14 | 19.12\% | 19.12\% | 4.41\% | 1.47\% | 35.29\% | 20.59\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 17.33\% | 18.31\% | 17.65\% | 50.00\% | 26.97\% | 15.56\% | 0.00\% | 19.71\% |
|  |  | Count | 13 | 15 | 8 | 1 | 13 | 17 | 0 | 67 |
|  | year | \% within Q14 | 19.40\% | 22.39\% | 11.94\% | 1.49\% | 19.40\% | 25.37\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 17.33\% | 21.13\% | 47.06\% | 50.00\% | 14.61\% | 18.89\% | 0.00\% | 19.42\% |
|  | 21+ | Count | 29 | 24 | 3 | 0 | 44 | 47 | 1 | 148 |
|  | years | \% within Q14 | 19.59\% | 16.22\% | 2.03\% | 0.00\% | 29.73\% | 31.76\% | 0.68\% | 100.00\% |
|  |  | \% within Business Ownership | 38.67\% | 33.80\% | 17.65\% | 0.00\% | 49.44\% | 52.22\% | 100.00\% | 42.90\% |
| Total |  | Count | 75 | 71 | 17 | 2 | 89 | 90 | 1 | 345 |
|  |  | \% within Q14 | 21.74\% | 20.58\% | 4.93\% | 0.58\% | 25.80\% | 26.09\% | 0.29\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

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|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q15- What is the average number of employees on your company's payroll, including full-time and part-time staff? <br> * Business Ownership Crosstabulation | None (owners only) | Count | 6 | 9 | 0 | 0 | 0 | 3 | 0 | 18 |
|  |  | \% within Q15 | 33.33\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 16.67\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 8.00\% | 12.68\% | 0.00\% | 0.00\% | 0.00\% | 3.30\% | 0.00\% | 5.19\% |
|  | 1 to 4 | Count | 12 | 10 | 3 | 1 | 11 | 8 | 0 | 45 |
|  |  | \% within Q15 | 26.67\% | 22.22\% | 6.67\% | 2.22\% | 24.44\% | 17.78\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 16.00\% | 14.08\% | 17.65\% | 50.00\% | 12.22\% | 8.79\% | 0.00\% | 12.97\% |
|  | 5 to 9 | Count | 16 | 13 | 2 | 0 | 14 | 13 | 0 | 58 |
|  |  | \% within Q15 | 27.59\% | 22.41\% | 3.45\% | 0.00\% | 24.14\% | 22.41\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 21.33\% | 18.31\% | 11.76\% | 0.00\% | 15.56\% | 14.29\% | 0.00\% | 16.71\% |
|  | $\begin{aligned} & 10 \text { to } \\ & 19 \end{aligned}$ | Count | 14 | 10 | 4 | 0 | 26 | 24 | 0 | 78 |
|  |  | \% within Q15 | 17.95\% | 12.82\% | 5.13\% | 0.00\% | 33.33\% | 30.77\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 18.67\% | 14.08\% | 23.53\% | 0.00\% | 28.89\% | 26.37\% | 0.00\% | 22.48\% |
|  | $\begin{aligned} & 20 \text { to } \\ & 49 \end{aligned}$ | Count | 11 | 12 | 5 | 1 | 16 | 17 | 1 | 63 |
|  |  | \% within Q15 | 17.46\% | 19.05\% | 7.94\% | 1.59\% | 25.40\% | 26.98\% | 1.59\% | 100.00\% |
|  |  | \% within Business Ownership | 14.67\% | 16.90\% | 29.41\% | 50.00\% | 17.78\% | 18.68\% | 100.00\% | 18.16\% |
|  | $\begin{aligned} & 50 \text { to } \\ & 499 \end{aligned}$ | Count | 5 | 6 | 2 | 0 | 16 | 16 | 0 | 45 |
|  |  | \% within Q15 | 11.11\% | 13.33\% | 4.44\% | 0.00\% | 35.56\% | 35.56\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 6.67\% | 8.45\% | 11.76\% | 0.00\% | 17.78\% | 17.58\% | 0.00\% | 12.97\% |
|  | 500+ | Count | 4 | 0 | 0 | 0 | 3 | 5 | 0 | 12 |
|  |  | \% within Q15 | 33.33\% | 0.00\% | 0.00\% | 0.00\% | 25.00\% | 41.67\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 5.33\% | 0.00\% | 0.00\% | 0.00\% | 3.33\% | 5.49\% | 0.00\% | 3.46\% |
|  | Don't know | Count | 7 | 11 | 1 | 0 | 4 | 5 | 0 | 28 |
|  |  | \% within Q15 | 25.00\% | 39.29\% | 3.57\% | 0.00\% | 14.29\% | 17.86\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 9.33\% | 15.49\% | 5.88\% | 0.00\% | 4.44\% | 5.49\% | 0.00\% | 8.07\% |
| Total |  | Count | 75 | 71 | 17 | 2 | 90 | 91 | 1 | 347 |
|  |  | \% within Q15 | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

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|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q16- What is the average annual revenue of the company over the last three (3) years? * Business Ownership Crosstabulation | $\begin{aligned} & \text { Up to } \\ & \$ 50,000 \end{aligned}$ | Count | 3 | 10 | 0 | 0 | 0 | 0 | 0 | 13 |
|  |  | \% within Q16 | 23.08\% | 76.92\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 4.00\% | 14.08\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 3.75\% |
|  | $\begin{aligned} & \$ 50,001 \text { to } \\ & \$ 100,000 \end{aligned}$ | Count | 4 | 0 | 0 | 0 | 3 | 0 | 0 | 7 |
|  |  | \% within Q16 | 57.14\% | 0.00\% | 0.00\% | 0.00\% | 42.86\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 5.33\% | 0.00\% | 0.00\% | 0.00\% | 3.33\% | 0.00\% | 0.00\% | 2.02\% |
|  | $\begin{aligned} & \$ 100,001 \\ & \text { to } \\ & \$ 300,000 \end{aligned}$ | Count | 6 | 11 | 2 | 0 | 3 | 4 | 0 | 26 |
|  |  | \% within Q16 | 23.08\% | 42.31\% | 7.69\% | 0.00\% | 11.54\% | 15.38\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 8.00\% | 15.49\% | 11.76\% | 0.00\% | 3.33\% | 4.40\% | 0.00\% | 7.49\% |
|  | $\begin{aligned} & \$ 300,001 \\ & \text { to } \\ & \$ 500,000 \end{aligned}$ | Count | 5 | 8 | 1 | 0 | 3 | 2 | 0 | 19 |
|  |  | \% within Q16 | 26.32\% | 42.11\% | 5.26\% | 0.00\% | 15.79\% | 10.53\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 6.67\% | 11.27\% | 5.88\% | 0.00\% | 3.33\% | 2.20\% | 0.00\% | 5.48\% |
|  | $\begin{aligned} & \text { \$500,001 } \\ & \text { to \$1 } \\ & \text { million } \end{aligned}$ | Count | 13 | 16 | 5 | 1 | 35 | 18 | 0 | 88 |
|  |  | \% within Q16 | 14.77\% | 18.18\% | 5.68\% | 1.14\% | 39.77\% | 20.45\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 17.33\% | 22.54\% | 29.41\% | 50.00\% | 38.89\% | 19.78\% | 0.00\% | 25.36\% |
|  | $\begin{aligned} & \$ 1,000,001 \\ & \text { to } \$ 3 \\ & \text { million } \end{aligned}$ | Count | 17 | 8 | 4 | 1 | 17 | 24 | 0 | 71 |
|  |  | \% within Q16 | 23.94\% | 11.27\% | 5.63\% | 1.41\% | 23.94\% | 33.80\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 22.67\% | 11.27\% | 23.53\% | 50.00\% | 18.89\% | 26.37\% | 0.00\% | 20.46\% |
|  | $\begin{aligned} & \text { \$3,000,001 } \\ & \text { to } \$ 5 \\ & \text { million } \end{aligned}$ | Count | 4 | 5 | 1 | 0 | 12 | 8 | 0 | 30 |
|  |  | \% within Q16 | 13.33\% | 16.67\% | 3.33\% | 0.00\% | 40.00\% | 26.67\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 5.33\% | 7.04\% | 5.88\% | 0.00\% | 13.33\% | 8.79\% | 0.00\% | 8.65\% |
|  | $\begin{aligned} & \$ 5,000,001 \\ & \text { to } \$ 10 \\ & \text { million } \end{aligned}$ | Count | 4 | 4 | 3 | 0 | 5 | 5 | 1 | 22 |
|  |  | \% within Q16 | 18.18\% | 18.18\% | 13.64\% | 0.00\% | 22.73\% | 22.73\% | 4.55\% | 100.00\% |
|  |  | \% within Business Ownership | 5.33\% | 5.63\% | 17.65\% | 0.00\% | 5.56\% | 5.49\% | 100.00\% | 6.34\% |
|  | Over \$10 million | Count | 6 | 1 | 0 | 0 | 4 | 10 | 0 | 21 |
|  |  | \% within Q16 | 28.57\% | 4.76\% | 0.00\% | 0.00\% | 19.05\% | 47.62\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 8.00\% | 1.41\% | 0.00\% | 0.00\% | 4.44\% | 10.99\% | 0.00\% | 6.05\% |

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|  | Don't <br> Know | Count | 13 | 8 | 1 | 0 | 8 | 20 | 0 | 50 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within Q16 | 26.00\% | 16.00\% | 2.00\% | 0.00\% | 16.00\% | 40.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 17.33\% | 11.27\% | 5.88\% | 0.00\% | 8.89\% | 21.98\% | 0.00\% | 14.41\% |
| Total |  | Count | 75 | 71 | 17 | 2 | 90 | 91 | 1 | 347 |
|  |  | \% within Q16 | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% | 100.00\% |
|  |  | \% within Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian American/ Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't Know |  |
| Q17- What percentage of the company's gross revenue between 20152019 was earned from contracts or subcontracts on City of Baltimore projects? * Business Ownership Crosstabulation | None | Count | 15 | 21 | 6 | 0 | 19 | 21 | 1 | 83 |
|  |  | \% within Q17 | 18.07\% | 25.30\% | 7.23\% | 0.00\% | 22.89\% | 25.30\% | 1.20\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 26.76\% | 25.93\% | 0.00\% | 29.23\% |
|  | 1-10\% | Count | 25 | 33 | 5 | 0 | 46 | 46 | 0 | 155 |
|  |  | \% within Q17 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 64.79\% | 56.79\% | 0.00\% | 54.58\% |
|  | 11-20\% | Count | 7 | 4 | 1 | 0 | 2 | 4 | 0 | 18 |
|  |  | \% within Q17 | 38.89\% | 22.22\% | 5.56\% | 0.00\% | 11.11\% | 22.22\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 2.82\% | 4.94\% | 0.00\% | 6.34\% |
|  | 21-50\% | Count | 4 | 3 | 0 | 1 | 3 | 5 | 0 | 16 |
|  |  | \% within Q17 | 25.00\% | 18.75\% | 0.00\% | 6.25\% | 18.75\% | 31.25\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 4.23\% | 6.17\% | 0.00\% | 5.63\% |
|  | 51-75\% | Count | 2 | 1 | 0 | 0.00\% | 1 | 3 | 0 | 7 |
|  |  | \% within Q17 | 28.57\% | 14.29\% | 0.00\% | 0.00\% | 14.29\% | 42.86\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.41\% | 3.70\% | 0.00\% | 2.46\% |
|  | 76-100\% | Count | 2 | 1 | 0 | 0 | 0 | 2 | 0 | 5 |
|  |  | \% within Q17 | 40.00\% | 20.00\% | 0.00\% | 0.00\% | 0.00\% | 40.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 2.47\% | 0.00\% | 1.76\% |
|  |  | Count | 7 | 4 | 0 | 0 | 6 | 8 | 0 | 25 |

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|  |  | \% within Q17 | 28.00\% | 16.00\% | 0.00\% | 0.00\% | 24.00\% | 32.00\% | 0.00\% | 100.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | know | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 8.45\% | 9.88\% | 0.00\% | 8.80\% |
| Total |  | Count | 55 | 63 | 12 | 1 | 71 | 81 | 1 | 284 |
|  |  | \% within Q17 | 19.37\% | 22.18\% | 4.23\% | 0.35\% | 25.00\% | 28.52\% | 0.35\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q18- What percentage of the company's gross revenue between 20152019 was earned from the Housing Authority of Baltimore City? <br> * Business <br> Ownership Crosstabulation | None | Count | 21 | 31 | 5 | 1 | 8 | 12 | 1 | 79 |
|  |  | \% within Q18 | 26.58\% | 39.24\% | 6.33\% | 1.27\% | 10.13\% | 15.19\% | 1.27\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 8.89\% | 13.19\% | 0.00\% | 22.77\% |
|  | 1-10\% | Count | 16 | 5 | 5 | 1 | 16 | 12 | 0 | 55 |
|  |  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 17.78\% | 13.19\% | 0.00\% | 15.85\% |
|  | $\begin{aligned} & 11- \\ & 20 \% \end{aligned}$ | Count | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | \% within Q18 | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.58\% |
|  | $\begin{aligned} & 21- \\ & 50 \% \end{aligned}$ | Count | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
|  |  | \% within Q18 | 66.67\% | 33.33\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.86\% |
|  | $\begin{aligned} & 51- \\ & 75 \% \end{aligned}$ | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | \% within Q18 | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.58\% |
|  | $\begin{aligned} & 76- \\ & 100 \% \end{aligned}$ | Count | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
|  |  | \% within Q18 | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.29\% |
|  | Don't know | Count | 33 | 32 | 7 | 0 | 66 | 67 | 0 | 205 |
|  |  | \% within Q18 | 16.10\% | 15.61\% | 3.41\% | 0.00\% | 32.20\% | 32.68\% | 0.00\% | 100.00\% |

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|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 73.33\% | 73.63\% | 0.00\% | 59.08\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | Count | 75 | 71 | 17 | 2 | 90 | 91 | 1 | 347 |
|  | \% within Q18 | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian American/Pacific Islander | Hispanic American or Latino | Native <br> American/ American Indian | Nonminority Female | NonM/WBE | Don't Know |  |
| Q. 19 Thinking about the last three (3) years, which of the following ranges bests approximates the size of your company's LARGEST AWARDED CONTRACT or SUBCONTRACT? | None | Count | 1 | 6 | 1 | 0 | 1 | 2 | 0 | 11 |
|  |  | \% within Q19 | 9.09\% | 54.55\% | 9.09\% | 0.00\% | 9.09\% | 18.18\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 1.33\% | 8.45\% | 5.88\% | 0.00\% | 1.11\% | 2.20\% | 0.00\% | 3.17\% |
|  | $\begin{aligned} & \text { Up to } \\ & \$ 50,000 \end{aligned}$ | Count | 8 | 8 | 0 | 0 | 7 | 2 | 0 | 25 |
|  |  | \% within Q19 | 32.00\% | 32.00\% | 0.00\% | 0.00\% | 28.00\% | 8.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 10.67\% | 11.27\% | 0.00\% | 0.00\% | 7.78\% | 2.20\% | 0.00\% | 7.20\% |
|  |  | Count | 3 | 5 | 0 | 0 | 4 | 2 | 1 | 15 |
|  |  | \% within Q19 | 20.00\% | 33.33\% | 0.00\% | 0.00\% | 26.67\% | 13.33\% | 6.67\% | 100.00\% |
|  |  | \% within Business Ownership | 4.00\% | 7.04\% | 0.00\% | 0.00\% | 4.44\% | 2.20\% | 100.00\% | 4.32\% |
|  | $\begin{aligned} & \hline \$ 100,001 \\ & \text { to } \\ & \$ 200,000 \end{aligned}$ | Count | 5 | 5 | 2 | 0 | 4 | 3 | 0 | 19 |
|  |  | \% within Q19 | 26.32\% | 26.32\% | 10.53\% | 0.00\% | 21.05\% | 15.79\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 6.67\% | 7.04\% | 11.76\% | 0.00\% | 4.44\% | 3.30\% | 0.00\% | 5.48\% |
|  | $\begin{aligned} & \$ 200,001 \\ & \text { to } \\ & \$ 300,000 \end{aligned}$ | Count | 2 | 6 | 1 | 0 | 4 | 4 | 0 | 17 |
|  |  | \% within Q19 | 11.76\% | 35.29\% | 5.88\% | 0.00\% | 23.53\% | 23.53\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 2.67\% | 8.45\% | 5.88\% | 0.00\% | 4.44\% | 4.40\% | 0.00\% | 4.90\% |
|  | $\begin{aligned} & \$ 300,001 \\ & \text { to } \\ & \$ 400,000 \end{aligned}$ | Count | 7 | 1 | 1 | 0 | 2 | 6 | 0 | 17 |
|  |  | \% within Q19 | 41.18\% | 5.88\% | 5.88\% | 0.00\% | 11.76\% | 35.29\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 9.33\% | 1.41\% | 5.88\% | 0.00\% | 2.22\% | 6.59\% | 0.00\% | 4.90\% |
|  | $\begin{aligned} & \$ 400,001 \\ & \text { to } \\ & \$ 500,000 \end{aligned}$ | Count | 6 | 6 | 1 | 0 | 11 | 11 | 0 | 35 |
|  |  | \% within Q19 | 17.14\% | 17.14\% | 2.86\% | 0.00\% | 31.43\% | 31.43\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 8.00\% | 8.45\% | 5.88\% | 0.00\% | 12.22\% | 12.09\% | 0.00\% | 10.09\% |

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|  | $\begin{aligned} & \$ 500,001 \\ & \text { to \$1 } \\ & \text { million } \end{aligned}$ | Count | 18 | 10 | 4 | 0 | 28 | 20 | 0 | 80 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within Q19 | 22.50\% | 12.50\% | 5.00\% | 0.00\% | 35.00\% | 25.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 24.00\% | 14.08\% | 23.53\% | 0.00\% | 31.11\% | 21.98\% | 0.00\% | 23.05\% |
|  | Over \$1 million | Count | 12 | 17 | 6 | 2 | 20 | 21 | 0 | 78 |
|  |  | \% within Q19 | 15.38\% | 21.79\% | 7.69\% | 2.56\% | 25.64\% | 26.92\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 16.00\% | 23.94\% | 35.29\% | 100.00\% | 22.22\% | 23.08\% | 0.00\% | 22.48\% |
|  | Don't know | Count | 13 | 7 | 1 | 0 | 9 | 20 | 0 | 50 |
|  |  | \% within Q19 | 26.00\% | 14.00\% | 2.00\% | 0.00\% | 18.00\% | 40.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 17.33\% | 9.86\% | 5.88\% | 0.00\% | 10.00\% | 21.98\% | 0.00\% | 14.41\% |
| Total |  | Count | 75 | 71 | 17 | 2 | 90 | 91 | 1 | 347 |
|  |  | \% within Q19 | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't Know |  |
| Q20a-Does your company hold any of the following certifications | Yes | Count | 54 | 59 | 13 | 1 | 23 | 8 |  | 158 |
|  |  | \% within Q20a | 34.18\% | 37.34\% | 8.23\% | 0.63\% | 14.56\% | 5.06\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 72.00\% | 83.10\% | 76.47\% | 50.00\% | 25.56\% | 8.79\% | 0.00\% | 45.53\% |
|  | No | Count | 18 | 12 | 4 | 1 | 66 | 82 |  | 183 |
| oma |  | \% within Q20a | 9.84\% | 6.56\% | 2.19\% | 0.55\% | 36.07\% | 44.81\% | 0.00\% | 100.00\% |
| recognized certification |  | \% within Business Ownership | 24.00\% | 16.90\% | 23.53\% | 50.00\% | 73.33\% | 90.11\% | 0.00\% | 52.74\% |
| agency? | Don't <br> know | Count | 3 | 0 | 0 | 0 | 1 | 1 | 1 | 6 |
| Minority |  | \% within Q20a | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 16.67\% | 16.67\% | 16.67\% | 100.00\% |
| Business <br> Enterprise (MBE) * <br> Business <br> Ownership Crosstabulation |  | \% within Business Ownership | 4.00\% | 0.00\% | 0.00\% | 0.00\% | 1.11\% | 1.10\% | 0.00\% | 1.73\% |

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| Total | Count | 75 | 71 | 17 | 2 | 90 | 91 | 1 | 347 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% within Q20a | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q20b-Does your company hold any of the following certifications from a recognized certification agency? Woman Business Enterprise (WBE) * Business Ownership Crosstabulation | Yes | Count | 42 | 27 | 8 | 1 | 37 | 1 | 0 | 116 |
|  |  | \% within Q20b | 36.21\% | 23.28\% | 6.90\% | 0.86\% | 31.90\% | 0.86\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 56.00\% | 38.03\% | 47.06\% | 50.00\% | 41.57\% | 1.10\% | 0.00\% | 33.62\% |
|  | No | Count | 31 | 31 | 9 | 1 | 51 | 87 | 0 | 210 |
|  |  | \% within Q20b | 14.76\% | 14.76\% | 4.29\% | 0.48\% | 24.29\% | 41.43\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 41.33\% | 43.66\% | 52.94\% | 50.00\% | 57.30\% | 95.60\% | 0.00\% | 60.87\% |
|  | No | Count | 2 | 13 | 0 | 0 | 1 | 3 | 0.00\% | 19 |
|  |  | \% within Q20b | 10.53\% | 68.42\% | 0.00\% | 0.00\% | 5.26\% | 15.79\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 2.67\% | 18.31\% | 0.00\% | 0.00\% | 1.12\% | 3.30\% | 0.00\% | 5.51\% |
| Total |  | Count | 75 | 71 | 17 | 2 | 89 | 91 | 0 | 345 |
|  |  | \% within Q20b | 21.74\% | 20.58\% | 4.93\% | 0.58\% | 25.80\% | 26.38\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



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| any of the following |  | \% within Business Ownership | 4.00\% | 7.04\% | 5.88\% | 0.00\% | 1.11\% | 1.10\% | 0.00\% | 3.17\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| certifications | No | Count | 60 | 47 | 16 | 1 | 86 | 86 | 0 | 296 |
| from a |  | \% within Q20c | 20.27\% | 15.88\% | 5.41\% | 0.34\% | 29.05\% | 29.05\% | 0.00\% | 100.00\% |
| recognized certification |  | \% within Business Ownership | 80.00\% | 66.20\% | 94.12\% | 50.00\% | 95.56\% | 94.51\% | 0.00\% | 85.30\% |
| agency? | Don't | Count | 12 | 19 | 0 | 1 | 3 | 4 | 1 | 40 |
| Veteran | know | \% within Q20c | 30.00\% | 47.50\% | 0.00\% | 2.50\% | 7.50\% | 10.00\% | 2.50\% | 100.00\% |
| Enterprise (VBE) <br> * Business <br> Ownership <br> Crosstabulation |  | \% within Business Ownership | 16.00\% | 26.76\% | 0.00\% | 50.00\% | 3.33\% | 4.40\% | 0.00\% | 11.53\% |
| Total |  | Count | 75 | 71 | 17 | 2 | 90 | 91 | 1 | 347 |
|  |  | \% within Q20c | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q20d-Does your company hold any of the following | Yes | Count | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 6 |
|  |  | \% within Q20d | 33.33\% | 66.67\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 2.67\% | 5.63\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.73\% |
| certifications | No | Count | 59 | 47 | 16 | 1 | 87 | 87 | 0 | 297 |
| from a |  | \% within Q20d | 19.87\% | 15.82\% | 5.39\% | 0.34\% | 29.29\% | 29.29\% | 0.00\% | 100.00\% |
| recognized certification |  | \% within Business Ownership | 78.67\% | 66.20\% | 94.12\% | 50.00\% | 96.67\% | 95.60\% | 0.00\% | 85.59\% |
| Disabled-owned <br> Business <br> Enterprise <br> (DOBE) * <br> Business <br> Ownership <br> Crosstabulation | Don't know | Count | 14 | 20 | 1 | 1 | 3 | 4 | 1 | 44 |
|  |  | \% within Q20d | 31.82\% | 45.45\% | 2.27\% | 2.27\% | 6.82\% | 9.09\% | 2.27\% | 100.00\% |
|  |  | \% within Business Ownership | 18.67\% | 28.17\% | 5.88\% | 50.00\% | 3.33\% | 4.40\% | 0.00\% | 12.68\% |
| Total |  | Count | 75 | 71 | 17 | 2 | 90 | 91 | 1 | 347 |

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|  | \% within Q20d | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% | 100.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |




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| any of the following |  | \% within Business Ownership | 4.00\% | 2.82\% | 0.00\% | 0.00\% | 2.22\% | 1.10\% | 0.00\% | 2.31\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| certifications | No | Count | 58 | 47 | 16 | 1 | 84 | 86 | 0 | 292 |
| from a |  | \% within Q20f | 19.86\% | 16.10\% | 5.48\% | 0.34\% | 28.77\% | 29.45\% | 0.00\% | 100.00\% |
| recognized certification |  | \% within Business Ownership | 77.33\% | 66.20\% | 94.12\% | 50.00\% | 93.33\% | 94.51\% | 0.00\% | 84.15\% |
| agency? Section | Don't | Count | 14 | 22 | 1 | 1 | 4 | 4 | 1 | 47 |
| 3 HUD (Housing | know | \% within Q20f | 29.79\% | 46.81\% | 2.13\% | 2.13\% | 8.51\% | 8.51\% | 2.13\% | 100.00\% |
| Development) * <br> Business <br> Ownership Crosstabulation |  | \% within Business Ownership | 18.67\% | 30.99\% | 5.88\% | 50.00\% | 4.44\% | 4.40\% | 0.00\% | 13.54\% |
| Total |  | Count | 75 | 71 | 17 | 2 | 90 | 91 | 1 | 347 |
|  |  | \% within Q20f | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q20g-Does your company hold any of the following certifications from a recognized certification agency? Other * Business Ownership Crosstabulation | Yes | Count | 9 | 12 | 3 | 0 | 4 | 3 | 0 | 31 |
|  |  | \% within Q20g | 29.03\% | 38.71\% | 9.68\% | 0.00\% | 12.90\% | 9.68\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 12.00\% | 16.90\% | 17.65\% | 0.00\% | 4.44\% | 3.30\% | 0.00\% | 8.93\% |
|  | No | Count | 52 | 38 | 13 | 1 | 83 | 83 | 0 | 270 |
|  |  | \% within Q20g | 19.26\% | 14.07\% | 4.81\% | 0.37\% | 30.74\% | 30.74\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 69.33\% | 53.52\% | 76.47\% | 50.00\% | 92.22\% | 91.21\% | 0.00\% | 77.81\% |
|  | Don't know | Count | 14 | 21 | 1 | 1 | 3 | 5 | 1 | 46 |
|  |  | \% within Q20g | 30.43\% | 45.65\% | 2.17\% | 2.17\% | 6.52\% | 10.87\% | 2.17\% | 100.00\% |
|  |  | \% within Business Ownership | 18.67\% | 29.58\% | 5.88\% | 50.00\% | 3.33\% | 5.49\% | 0.00\% | 13.26\% |
| Total |  | Count | 75 | 71 | 17 | 2 | 90 | 91 | 1 | 347 |
|  |  | \% within Q20g | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |

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|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | Non-MBE | Don't <br> Know |  |
| Q24- Have you been treated disparately (differently) after disclosing that you are a VETERAN-OWNED company? * Business Ownership Crosstabulation | Yes | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q24 } \end{aligned}$ | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | No | Count | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
|  |  | \% within Q24 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 50.00\% | 50.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q24 } \end{aligned}$ | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
|  |  | \% within Q24 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 50.00\% | 50.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |

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|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian American/Pacific Islander | Hispanic American or Latino | Native <br> American/ <br> American Indian | Nonminority Female | Non-MBE | Don't Know |  |
| Q25- Do you feel comfortable or safe disclosing your disability when bidding or proposing for contracts or subcontracts? * Business Ownership Crosstabulation | Yes | Count | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 7 |
|  |  | \% within Q25 | 42.86\% | 42.86\% | 14.29\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  | No | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | $\begin{aligned} & \hline \text { \% within } \\ & \text { Q25 } \\ & \hline \end{aligned}$ | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q25 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 7 |
|  |  | \% within Q25 | 42.86\% | 42.86\% | 14.29\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q26- Have you been treated disparately (differently) after disclosing that you are a DISABLEDOWNED company? * Business Ownership Crosstabulation | Yes | Count | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
|  |  | \% within Q26 | 75.00\% | 25.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  | No | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q26 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0.00\% | 0.00\% | 0 |
|  |  | \% within Q26 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q26 } \end{aligned}$ | 75.00\% | 25.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African <br> American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonMBE | Don't <br> Know |  |
| $\begin{aligned} & \text { Q27- Do you } \\ & \text { feel } \\ & \text { comfortable or } \\ & \text { safe disclosing } \\ & \text { your company } \\ & \text { is LGBT } \\ & \text { business } \\ & \text { enterprise } \\ & \text { when bidding } \\ & \text { or proposing } \\ & \text { for contracts or } \\ & \text { subcontracts? } \\ & \text { * Business } \\ & \text { Ownership } \\ & \text { Crosstabulation } \end{aligned}$ | Yes | Count | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 3 |
|  |  | \% within Q27 | 33.33\% | 33.33\% | 0.00\% | 0.00\% | 0.00\% | 33.33\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 100.00\% |
|  | No | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q27 } \end{aligned}$ | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 3 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q27 } \end{aligned}$ | 33.33\% | 33.33\% | 0.00\% | 0.00\% | 0.00\% | 33.33\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 100.00\% |




|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic <br> American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q30- Does your business work as a prime, subcontractor, or supplier? * <br> Business <br> Ownership Crosstabulation | Prime contractor/vendor/consultant | Count | 31 | 28 | 8 | 1 | 61 | 50 | 1 | 180 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q30 } \end{aligned}$ | 17.22\% | 15.56\% | 4.44\% | 0.56\% | 33.89\% | 27.78\% | 0.56\% | 100.00\% |
|  |  | \% within Business Ownership | 41.33\% | 39.44\% | 47.06\% | 50.00\% | 67.78\% | 54.95\% | 100.00\% | 51.87\% |
|  | Subcontractor/Supplier | Count | 20 | 15 | 6 | 0 | 13 | 20 | 0 | 74 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q30 } \end{aligned}$ | 27.03\% | 20.27\% | 8.11\% | 0.00\% | 17.57\% | 27.03\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 26.67\% | 21.13\% | 35.29\% | 0.00\% | 14.44\% | 21.98\% | 0.00\% | 21.33\% |
|  | Both prime and subcontractor | Count | 23 | 28 | 3 | 1 | 15 | 19 | 0 | 89 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q30 } \end{aligned}$ | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 30.67\% | 39.44\% | 17.65\% | 50.00\% | 16.67\% | 20.88\% | 0.00\% | 25.65\% |
|  | Don't know | Count | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 4 |
|  |  | \% within Q30 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 1.33\% | 0.00\% | 0.00\% | 0.00\% | 1.11\% | 2.20\% | 0.00\% | 1.15\% |
| Total |  | Count | 75 | 71 | 17 | 2 | 90 | 91 | 1 | 347 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q30 } \end{aligned}$ | 21.61\% | 20.46\% | 4.90\% | 0.58\% | 25.94\% | 26.22\% | 0.29\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q31- As a prime, do you solicit minority-, women-, veteran, LGBT+-, or disabled-business enterprises on private (nongovernment) contracts? * Business Ownership Crosstabulation | Yes | Count | 42 | 50 | 11 | 2 | 56 | 50 | 0 | 211 |
|  |  | \% within Q31 | 19.91\% | 23.70\% | 5.21\% | 0.95\% | 26.54\% | 23.70\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 77.78\% | 90.91\% | 100.00\% | 100.00\% | 73.68\% | 71.43\% | 0.00\% | 78.44\% |
|  | No | Count | 8 | 3 | 0 | 0 | 16 | 13 | 0 | 40 |
|  |  | \% within Q31 | 20.00\% | 7.50\% | 0.00\% | 0.00\% | 40.00\% | 32.50\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 14.81\% | 5.45\% | 0.00\% | 0.00\% | 21.05\% | 18.57\% | 0.00\% | 14.87\% |
|  | Don't know | Count | 4 | 2 | 0 | 0 | 4 | 7 | 1 | 18 |
|  |  | \% within Q31 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 7.41\% | 3.64\% | 0.00\% | 0.00\% | 5.26\% | 10.00\% | 100.00\% | 6.69\% |
| Total |  | Count | 54 | 55 | 11 | 2 | 76 | 70 | 1 | 269 |
|  |  | \% within Q31 | 20.07\% | 20.45\% | 4.09\% | 0.74\% | 28.25\% | 26.02\% | 0.37\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |



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|  | \% within <br> Q32 | $26.83 \%$ | $26.22 \%$ | $5.49 \%$ | $0.61 \%$ | $17.07 \%$ | $23.78 \%$ | $0.00 \%$ |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | \% within <br> Business <br> Ownership | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $0.00 \%$ |



|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q35- Does your business have bonding? * Business Ownership Crosstabulation | Yes | Count | 33 | 34 | 10 | 1 | 42 | 43 | 1 | 164 |
|  |  | \% within Q35 | 20.12\% | 20.73\% | 6.10\% | 0.61\% | 25.61\% | 26.22\% | 0.61\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 45.21\% | 47.89\% | 58.82\% | 50.00\% | 47.19\% | 47.78\% | 100.00\% | 47.81\% |
|  | No | Count | 26 | 27 | 6 | 1 | 38 | 36 | 0 | 134 |
|  |  | \% within Q35 | 19.40\% | 20.15\% | 4.48\% | 0.75\% | 28.36\% | 26.87\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 35.62\% | 38.03\% | 35.29\% | 50.00\% | 42.70\% | 40.00\% | 0.00\% | 39.07\% |
|  | Have not applied for bonding | Count | 6 | 9 | 1 | 0 | 3 | 1 | 0 | 20 |
|  |  | \% within Q35 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 8.22\% | 12.68\% | 5.88\% | 0.00\% | 3.37\% | 1.11\% | 0.00\% | 5.83\% |
|  | Don't know | Count | 8 | 1 | 0 | 0 | 6 | 10 | 0 | 25 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q35 } \\ & \hline \end{aligned}$ | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 10.96\% | 1.41\% | 0.00\% | 0.00\% | 6.74\% | 11.11\% | 0.00\% | 7.29\% |
| Total |  | Count | 73 | 71 | 17 | 2 | 89 | 90 | 1 | 343 |
|  |  | \% within Q35 | 21.28\% | 20.70\% | 4.96\% | 0.58\% | 25.95\% | 26.24\% | 0.29\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |



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|  | $\begin{aligned} & \$ 3 m- \\ & \$ 5 m \end{aligned}$ | Count | 2 | 3 | 2 | 0 | 5 | 2 | 1 | 15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within Q36 | 13.33\% | 20.00\% | 13.33\% | 0.00\% | 33.33\% | 13.33\% | 6.67\% | 100.00\% |
|  |  | \% within Business Ownership | 6.06\% | 8.82\% | 20.00\% | 0.00\% | 11.90\% | 4.65\% | 100.00\% | 9.15\% |
|  | >\$5m | Count | 3 | 3 | 1 | 0 | 4 | 8 | 0 | 19 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q36 } \end{aligned}$ | 15.79\% | 15.79\% | 5.26\% | 0.00\% | 21.05\% | 42.11\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 9.09\% | 8.82\% | 10.00\% | 0.00\% | 9.52\% | 18.60\% | 0.00\% | 11.59\% |
|  | Don't Know | Count | 5 | 3 | 0 | 0 | 2 | 8 | 0 | 18 |
|  |  | $\begin{aligned} & \hline \text { \% within } \\ & \text { Q36 } \end{aligned}$ | 27.78\% | 16.67\% | 0.00\% | 0.00\% | 11.11\% | 44.44\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 15.15\% | 8.82\% | 0.00\% | 0.00\% | 4.76\% | 18.60\% | 0.00\% | 10.98\% |
| Total |  | Count | 33 | 34 | 10 | 1 | 42 | 43 | 1 | 164 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q36 } \\ & \hline \end{aligned}$ | 20.12\% | 20.73\% | 6.10\% | 0.61\% | 25.61\% | 26.22\% | 0.61\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | Non- <br> M/WBE | Don't <br> Know |  |
| Q37- Thinking about City contracts, have any of the following been a barrier to attempting to do work or working on the City's projects? | Yes | Count | 9 | 13 | 0 | 0 | 3 | 2 | 0 | 27 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37a } \end{aligned}$ | 33.33\% | 48.15\% | 0.00\% | 0.00\% | 11.11\% | 7.41\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 13.64\% | 19.70\% | 0.00\% | 0.00\% | 3.80\% | 2.53\% | 0.00\% | 8.91\% |
|  | No | Count | 56 | 52 | 12 | 1 | 76 | 77 | 0 | 274 |


| Prequalification requirements * <br> Business <br> Ownership <br> Crosstabulation |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37a } \end{aligned}$ | 20.44\% | 18.98\% | 4.38\% | 0.36\% | 27.74\% | 28.10\% | 0.00\% | 100.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within <br> Business <br> Ownership | 84.85\% | 78.79\% | 100.00\% | 100.00\% | 96.20\% | 97.47\% | 0.00\% | 90.43\% |
|  | Don't know | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37a } \end{aligned}$ | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 1.52\% | 1.52\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.66\% |
| Total |  | Count | 66 | 66 | 12 | 1 | 79 | 79 | 0 | 303 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37a } \end{aligned}$ | 21.78\% | 21.78\% | 3.96\% | 0.33\% | 26.07\% | 26.07\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q37b- Thinking about City contracts, have any of the following been a barrier to attempting to do work or working on the City's projects? <br> Bond requirements* Business Ownership Crosstabulation | Yes | Count | 7 | 10 | 1 | 0 | 2 | 2 | 0 | 22 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37b } \end{aligned}$ | 31.82\% | 45.45\% | 4.55\% | 0.00\% | 9.09\% | 9.09\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 10.45\% | 16.67\% | 8.33\% | 0.00\% | 2.53\% | 2.53\% | 0.00\% | 7.38\% |
|  | No | Count | 59 | 49 | 11 | 1 | 77 | 77 | 0 | 274 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37b } \end{aligned}$ | 21.53\% | 17.88\% | 4.01\% | 0.36\% | 28.10\% | 28.10\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 88.06\% | 81.67\% | 91.67\% | 100.00\% | 97.47\% | 97.47\% | 0.00\% | 91.95\% |
|  |  | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |

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|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37b } \end{aligned}$ | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | know | \% within <br> Business <br> Ownership | 1.49\% | 1.67\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.67\% |
| Total |  | Count | 67 | 60 | 12 | 1 | 79 | 79 | 0 | 298 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37b } \end{aligned}$ | 22.48\% | 20.13\% | 4.03\% | 0.34\% | 26.51\% | 26.51\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q37c- Thinking about City contracts, have any of the following been a barrier to attempting to do work or working on the City's projects? <br> Proposal/bid specifications * Business Ownership Crosstabulation | Yes | Count | 9 | 15 | 1 | 1 | 7 | 3 | 0 | 36 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37c } \end{aligned}$ | 25.00\% | 41.67\% | 2.78\% | 2.78\% | 19.44\% | 8.33\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 13.43\% | 24.19\% | 8.33\% | 100.00\% | 8.86\% | 3.80\% | 0.00\% | 12.00\% |
|  | No | Count | 57 | 46 | 11 | 0 | 72 | 76 | 0 | 262 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37c } \end{aligned}$ | 21.76\% | 17.56\% | 4.20\% | 0.00\% | 27.48\% | 29.01\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 85.07\% | 74.19\% | 91.67\% | 0.00\% | 91.14\% | 96.20\% | 0.00\% | 87.33\% |
|  | Don't know | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37c } \end{aligned}$ | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 1.49\% | 1.61\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.67\% |

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| Total | Count | 67 | 62 | 12 | 1 | 79 | 79 | 0 | 300 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { \% within } \\ & \text { Q37c } \end{aligned}$ | 22.33\% | 20.67\% | 4.00\% | 0.33\% | 26.33\% | 26.33\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q37d- Thinking about City contracts, have any of the following been a barrier to attempting to do work or working on the City's projects? <br> Short or limited time given to prepare bid package or quote * Business Ownership Crosstabulation | Yes | Count | 6 | 16 | 3 | 1 | 3 | 3 | 0 | 32 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37d } \end{aligned}$ | 18.75\% | 50.00\% | 9.38\% | 3.13\% | 9.38\% | 9.38\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 8.96\% | 26.23\% | 23.08\% | 100.00\% | 3.80\% | 3.80\% | 0.00\% | 10.67\% |
|  | No | Count | 60 | 44 | 10 | 0 | 76 | 76 | 0 | 266 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37d } \end{aligned}$ | 22.56\% | 16.54\% | 3.76\% | 0.00\% | 28.57\% | 28.57\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 89.55\% | 72.13\% | 76.92\% | 0.00\% | 96.20\% | 96.20\% | 0.00\% | 88.67\% |
|  | Don't know | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37d } \end{aligned}$ | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 1.49\% | 1.64\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.67\% |
| Total |  | Count | 67 | 61 | 13 | 1 | 79 | 79 | 0 | 300 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37d } \end{aligned}$ | 22.33\% | 20.33\% | 4.33\% | 0.33\% | 26.33\% | 26.33\% | 0.00\% | 100.00\% |



|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian American/Pacific Islander | Hispanic American or Latino | Native <br> American/ <br> American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q37e- Thinking about City contracts, have any of the following been a barrier to attempting to do work or working on the City's projects? <br> Unnecessarily restrictive contract specifications * Business Ownership Crosstabulation | Yes | Count | 9 | 15 | 1 | 1 | 1 | 1 | 0 | 28 |
|  |  | \% within <br> Q37e | 32.14\% | 53.57\% | 3.57\% | 3.57\% | 3.57\% | 3.57\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 13.43\% | 23.81\% | 8.33\% | 100.00\% | 1.27\% | 1.27\% | 0.00\% | 9.30\% |
|  | No | Count | 57 | 47 | 11 | 0 | 78 | 78 | 0 | 271 |
|  |  | \% within Q37e | 21.03\% | 17.34\% | 4.06\% | 0.00\% | 28.78\% | 28.78\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 85.07\% | 74.60\% | 91.67\% | 0.00\% | 98.73\% | 98.73\% | 0.00\% | 90.03\% |
|  | Don't know | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | \% within Q37e | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business Ownership | 1.49\% | 1.59\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.66\% |
| Total |  | Count | 67 | 63 | 12 | 1 | 79 | 79 | 0 | 301 |
|  |  | \% within Q37e | 22.26\% | 20.93\% | 3.99\% | 0.33\% | 26.25\% | 26.25\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q37f- Thinking about City contracts, have any of the following been a barrier to attempting to do work or working on the City's projects? Meeting M/WBE program requirements * Business Ownership Crosstabulation | Yes | Count | 3 | 5 | 1 | 1 | 1 | 2 | 0 | 13 |
|  |  | \% within Q37f | 23.08\% | 38.46\% | 7.69\% | 7.69\% | 7.69\% | 15.38\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 4.48\% | 8.20\% | 8.33\% | 100.00\% | 1.27\% | 2.53\% | 0.00\% | 4.35\% |
|  | No | Count | 63 | 55 | 11 | 0 | 78 | 77 | 0 | 284 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37f } \end{aligned}$ | 22.18\% | 19.37\% | 3.87\% | 0.00\% | 27.46\% | 27.11\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 94.03\% | 90.16\% | 91.67\% | 0.00\% | 98.73\% | 97.47\% | 0.00\% | 94.98\% |
|  | Don't know | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37f } \end{aligned}$ | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 1.49\% | 1.64\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.67\% |
| Total |  | Count | 67 | 61 | 12 | 1 | 79 | 79 | 0 | 299 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37f } \end{aligned}$ | 22.41\% | 20.40\% | 4.01\% | 0.33\% | 26.42\% | 26.42\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian American/Pacific Islander | Hispanic American or Latino | Native <br> American/ <br> American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q37g- Thinking about City contracts, have any of the following been a barrier to attempting to do work or working on the City's projects? Identifying M/WBE firms * Business Ownership Crosstabulation | Yes | Count | 2 | 5 | 0 | 1 | 0 | 1 | 1 | 10 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37g } \end{aligned}$ | 20.00\% | 50.00\% | 0.00\% | 10.00\% | 0.00\% | 10.00\% | 10.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 3.08\% | 8.33\% | 0.00\% | 100.00\% | 0.00\% | 1.27\% | 100.00\% | 3.37\% |
|  | No | Count | 62 | 54 | 12 | 0 | 79 | 78 | 0 | 285 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37g } \end{aligned}$ | 21.75\% | 18.95\% | 4.21\% | 0.00\% | 27.72\% | 27.37\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 95.38\% | 90.00\% | 100.00\% | 0.00\% | 100.00\% | 98.73\% | 0.00\% | 95.96\% |
|  | Don't know | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37g } \end{aligned}$ | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 1.54\% | 1.67\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.67\% |
| Total |  | Count | 65 | 60 | 12 | 1 | 79 | 79 | 1 | 297 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37g } \end{aligned}$ | 21.89\% | 20.20\% | 4.04\% | 0.34\% | 26.60\% | 26.60\% | 0.34\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |



|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q37i- Thinking about City <br> contracts, have any of the following been a barrier to attempting to do work or working on the City's projects? <br> Insurance requirements (general liability, professional liability, etc.) * Business Ownership <br> Crosstabulation | Yes | Count | 3 | 6 | 1 | 1 | 0 | 1 | 0 | 12 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37i } \end{aligned}$ | 25.00\% | 50.00\% | 8.33\% | 8.33\% | 0.00\% | 8.33\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 4.55\% | 9.68\% | 7.69\% | 100.00\% | 0.00\% | 1.27\% | 0.00\% | 3.99\% |
|  | No | Count | 62 | 55 | 12 | 0 | 79 | 78 | 1 | 287 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37i } \end{aligned}$ | 21.60\% | 19.16\% | 4.18\% | 0.00\% | 27.53\% | 27.18\% | 0.35\% | 100.00\% |
|  |  | \% within Business Ownership | 93.94\% | 88.71\% | 92.31\% | 0.00\% | 100.00\% | 98.73\% | 100.00\% | 95.35\% |
|  | Don't know | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | \% within Q37i | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 1.52\% | 1.61\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.66\% |
| Total |  | Count | 66 | 62 | 13 | 1 | 79 | 79 | 1 | 301 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37i } \end{aligned}$ | 21.93\% | 20.60\% | 4.32\% | 0.33\% | 26.25\% | 26.25\% | 0.33\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |



|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q37k- Thinking about City contracts, have any of the following been a barrier to attempting to do work or working on the City's projects? Price of supplies/materials <br> * Business Ownership Crosstabulation | Yes | Count | 5 | 6 | 0 | 1 | 1 | 0 | 0 | 13 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37k } \end{aligned}$ | 38.46\% | 46.15\% | 0.00\% | 7.69\% | 7.69\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 7.69\% | 10.00\% | 0.00\% | 100.00\% | 1.27\% | 0.00\% | 0.00\% | 4.38\% |
|  | No | Count | 59 | 53 | 12 | 0 | 78 | 79 | 1 | 282 |
|  |  | \% within Q37k | 20.92\% | 18.79\% | 4.26\% | 0.00\% | 27.66\% | 28.01\% | 0.35\% | 100.00\% |
|  |  | \% within Business Ownership | 90.77\% | 88.33\% | 100.00\% | 0.00\% | 98.73\% | 100.00\% | 100.00\% | 94.95\% |
|  | Don't know | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37k } \end{aligned}$ | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 1.54\% | 1.67\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.67\% |
| Total |  | Count | 65 | 60 | 12 | 1 | 79 | 79 | 1 | 297 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37k } \end{aligned}$ | 21.89\% | 20.20\% | 4.04\% | 0.34\% | 26.60\% | 26.60\% | 0.34\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q37I- Thinking about City contracts, have any of the following been a barrier to attempting to do work or working on the City's projects? <br> Competing with large companies* Business Ownership Crosstabulation | Yes | Count | 21 | 27 | 4 | 1 | 14 | 7 | 0 | 74 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q371 } \end{aligned}$ | 28.38\% | 36.49\% | 5.41\% | 1.35\% | 18.92\% | 9.46\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 31.34\% | 41.54\% | 33.33\% | 100.00\% | 17.72\% | 8.86\% | 0.00\% | 24.34\% |
|  | No | Count | 45 | 37 | 8 | 0 | 65 | 72 | 1 | 228 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37I } \end{aligned}$ | 19.74\% | 16.23\% | 3.51\% | 0.00\% | 28.51\% | 31.58\% | 0.44\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 67.16\% | 56.92\% | 66.67\% | 0.00\% | 82.28\% | 91.14\% | 100.00\% | 75.00\% |
|  | Don't know | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q371 } \end{aligned}$ | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 1.49\% | 1.54\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.66\% |
| Total |  | Count | 67 | 65 | 12 | 1 | 79 | 79 | 1 | 304 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q371 } \end{aligned}$ | 22.04\% | 21.38\% | 3.95\% | 0.33\% | 25.99\% | 25.99\% | 0.33\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q37m- Thinking about City contracts, have any of the following been a barrier to attempting to do work or working on the City's projects? Financing * Business Ownership Crosstabulation | Yes | Count | 4 | 9 | 1 | 1 | 0 | 0 | 1 | 16 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37m } \end{aligned}$ | 25.00\% | 56.25\% | 6.25\% | 6.25\% | 0.00\% | 0.00\% | 6.25\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 6.15\% | 14.52\% | 8.33\% | 100.00\% | 0.00\% | 0.00\% | 100.00\% | 5.37\% |
|  | No | Count | 60 | 52 | 11 | 0 | 78 | 79 | 0 | 280 |
|  |  | \% within Q37m | 21.43\% | 18.57\% | 3.93\% | 0.00\% | 27.86\% | 28.21\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 92.31\% | 83.87\% | 91.67\% | 0.00\% | 100.00\% | 100.00\% | 0.00\% | 93.96\% |
|  | Don't know | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | \% within Q37m | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 1.54\% | 1.61\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.67\% |
| Total |  | Count | 65 | 62 | 12 | 1 | 78 | 79 | 1 | 298 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37m } \end{aligned}$ | 21.81\% | 20.81\% | 4.03\% | 0.34\% | 26.17\% | 26.51\% | 0.34\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian American/Pacific Islander | Hispanic American or Latino | Native <br> American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q37n- Thinking about City contracts, have any of the following been a barrier to attempting to do work or working on the City's projects? Lack of experience <br> * Business Ownership Crosstabulation | Yes | Count | 3 | 3 | 0 | 0 | 1 | 0 | 0 | 7 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37n } \end{aligned}$ | 42.86\% | 42.86\% | 0.00\% | 0.00\% | 14.29\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 4.62\% | 4.92\% | 0.00\% | 0.00\% | 1.27\% | 0.00\% | 0.00\% | 2.35\% |
|  | No | Count | 61 | 57 | 12 | 1 | 78 | 79 | 1 | 289 |
|  |  | \% within Q37n | 21.11\% | 19.72\% | 4.15\% | 0.35\% | 26.99\% | 27.34\% | 0.35\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 93.85\% | 93.44\% | 100.00\% | 100.00\% | 98.73\% | 100.00\% | 100.00\% | 96.98\% |
|  | Don't know | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | \% within Q37n | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 1.54\% | 1.64\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.67\% |
| Total |  | Count | 65 | 61 | 12 | 1 | 79 | 79 | 1 | 298 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37n } \end{aligned}$ | 21.81\% | 20.47\% | 4.03\% | 0.34\% | 26.51\% | 26.51\% | 0.34\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q37o- Thinking about City contracts, have any of the following been a barrier to attempting to do work or working on the City's projects? Contract too large <br> * Business Ownership Crosstabulation | Yes | Count | 11 | 6 | 0 | 0 | 3 | 2 | 0 | 22 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37o } \end{aligned}$ | 50.00\% | 27.27\% | 0.00\% | 0.00\% | 13.64\% | 9.09\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 16.42\% | 9.68\% | 0.00\% | 0.00\% | 3.80\% | 2.53\% | 0.00\% | 7.33\% |
|  | No | Count | 55 | 55 | 12 | 1 | 76 | 77 | 0 | 276 |
|  |  | \% within Q37o | 19.93\% | 19.93\% | 4.35\% | 0.36\% | 27.54\% | 27.90\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 82.09\% | 88.71\% | 100.00\% | 100.00\% | 96.20\% | 97.47\% | 0.00\% | 92.00\% |
|  | Don't know | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | \% within Q37o | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 1.49\% | 1.61\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.67\% |
| Total |  | Count | 67 | 62 | 12 | 1 | 79 | 79 | 0 | 300 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37o } \end{aligned}$ | 22.33\% | 20.67\% | 4.00\% | 0.33\% | 26.33\% | 26.33\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q37p- Thinking about City contracts, have any of the following been a barrier to attempting to do work or working on the City's projects? Informal network of prime contractors and subcontractors that has excluded my company from doing business ("good ole boy" network) * Business Ownership Crosstabulation | Yes | Count | 15 | 18 | 2 | 0 | 8 | 5 | 1 | 49 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37p } \end{aligned}$ | 30.61\% | 36.73\% | 4.08\% | 0.00\% | 16.33\% | 10.20\% | 2.04\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 22.73\% | 30.00\% | 15.38\% | 0.00\% | 10.13\% | 6.33\% | 100.00\% | 16.39\% |
|  | No | Count | 50 | 41 | 11 | 1 | 71 | 74 | 0 | 248 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37p } \end{aligned}$ | 20.16\% | 16.53\% | 4.44\% | 0.40\% | 28.63\% | 29.84\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 75.76\% | 68.33\% | 84.62\% | 100.00\% | 89.87\% | 93.67\% | 0.00\% | 82.94\% |
|  | Don't know | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37p } \end{aligned}$ | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 1.52\% | 1.67\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.67\% |
| Total |  | Count | 66 | 60 | 13 | 1 | 79 | 79 | 1 | 299 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37p } \end{aligned}$ | 22.07\% | 20.07\% | 4.35\% | 0.33\% | 26.42\% | 26.42\% | 0.33\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q37q- Thinking about City contracts, have any of the following been a barrier to attempting to do work or working on the City's projects? Changes in the scope of work (after work began)* Business Ownership Crosstabulation | Yes | Count | 8 | 5 | 2 | 0 | 5 | 1 | 0 | 21 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37q } \end{aligned}$ | 38.10\% | 23.81\% | 9.52\% | 0.00\% | 23.81\% | 4.76\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 12.12\% | 8.62\% | 15.38\% | 0.00\% | 6.33\% | 1.27\% | 0.00\% | 7.09\% |
|  | No | Count | 57 | 52 | 11 | 1 | 74 | 78 | 0 | 273 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37q } \end{aligned}$ | 20.88\% | 19.05\% | 4.03\% | 0.37\% | 27.11\% | 28.57\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 86.36\% | 89.66\% | 84.62\% | 100.00\% | 93.67\% | 98.73\% | 0.00\% | 92.23\% |
|  | Don't know | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37q } \end{aligned}$ | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 1.52\% | 1.72\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.68\% |
| Total |  | Count | 66 | 58 | 13 | 1 | 79 | 79 | 0 | 296 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37q } \end{aligned}$ | 22.30\% | 19.59\% | 4.39\% | 0.34\% | 26.69\% | 26.69\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q37r- Thinking about City contracts, have any of the following been a barrier to attempting to do work or working on the City's projects? Slow payment or non-payment for project work * Business Ownership Crosstabulation | Yes | Count | 19 | 23 | 3 | 1 | 12 | 10 | 0 | 68 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37r } \end{aligned}$ | 27.94\% | 33.82\% | 4.41\% | 1.47\% | 17.65\% | 14.71\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 28.79\% | 37.10\% | 23.08\% | 100.00\% | 15.19\% | 12.50\% | 0.00\% | 22.59\% |
|  | No | Count | 46 | 38 | 10 | 0 | 67 | 70 | 0 | 231 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37r } \end{aligned}$ | 19.91\% | 16.45\% | 4.33\% | 0.00\% | 29.00\% | 30.30\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 69.70\% | 61.29\% | 76.92\% | 0.00\% | 84.81\% | 87.50\% | 0.00\% | 76.74\% |
|  | Don't know | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37r } \end{aligned}$ | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 1.52\% | 1.61\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.66\% |
| Total |  | Count | 66 | 62 | 13 | 1 | 79 | 80 | 0 | 301 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q37r } \end{aligned}$ | 21.93\% | 20.60\% | 4.32\% | 0.33\% | 26.25\% | 26.58\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q38-Have you or your company experienced any of the following DISCRIMINATORY BEHAVIOR when attempting to do work or working on CITY OF BALTIMORE projects? <br> Harassment on the jobsite * Business Ownership Crosstabulation | Yes | Count | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 4 |
|  |  | \% within Q38a | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 3.08\% | 3.23\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.34\% |
|  | No | Count | 62 | 60 | 13 | 1 | 79 | 79 | 0 | 294 |
|  |  | \% within Q38a | 21.09\% | 20.41\% | 4.42\% | 0.34\% | 26.87\% | 26.87\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 95.38\% | 96.77\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 98.33\% |
|  | Don't know | Count | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|  |  | \% within Q38a | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 1.54\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.33\% |
| Total |  | Count | 65 | 62 | 13 | 1 | 79 | 79 | 0 | 299 |
|  |  | \% within Q38a | 21.74\% | 20.74\% | 4.35\% | 0.33\% | 26.42\% | 26.42\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



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| Q38-Have you or your company experienced any of the following DISCRIMINATORY BEHAVIOR when attempting to do work or working on CITY OF BALTIMORE projects? <br> Unequal or unfair treatment * Business Ownership Crosstabulation |  | \% within Q38b | 43.75\% | 37.50\% | 12.50\% | 0.00\% | 6.25\% | 0.00\% | 0.00\% | 100.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within Business Ownership | 10.61\% | 9.68\% | 15.38\% | 0.00\% | 1.27\% | 0.00\% | 0.00\% | 5.33\% |
|  | No | Count | 58 | 56 | 11 | 1 | 78 | 79 | 0 | 283 |
|  |  | \% within Q38b | 20.49\% | 19.79\% | 3.89\% | 0.35\% | 27.56\% | 27.92\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 87.88\% | 90.32\% | 84.62\% | 100.00\% | 98.73\% | 100.00\% | 0.00\% | 94.33\% |
|  | Don't know | Count | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|  |  | \% within Q38b | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 1.52\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.33\% |
| Total |  | Count | 66 | 62 | 13 | 1 | 79 | 79 | 0 | 300 |
|  |  | \% within Q38b | 22.00\% | 20.67\% | 4.33\% | 0.33\% | 26.33\% | 26.33\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q38-Have you or your company experienced any of the following DISCRIMINATORY BEHAVIOR when attempting to do work or working on CITY OF BALTIMORE | Yes | Count | 7 | 6 | 0 | 0 | 1 | 0 | 1 | 15 |
|  |  | \% within Q38c | 46.67\% | 40.00\% | 0.00\% | 0.00\% | 6.67\% | 0.00\% | 6.67\% | 100.00\% |
|  |  | \% within Business Ownership | 10.61\% | 10.00\% | 0.00\% | 0.00\% | 1.27\% | 0.00\% | 100.00\% | 5.03\% |
|  | No | Count | 58 | 54 | 12 | 1 | 78 | 79 | 0 | 282 |
|  |  | \% within Q38c | 20.57\% | 19.15\% | 4.26\% | 0.35\% | 27.66\% | 28.01\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 87.88\% | 90.00\% | 100.00\% | 100.00\% | 98.73\% | 100.00\% | 0.00\% | 94.63\% |
|  | Don't know | Count | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|  |  | \% within Q38c | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |


| projects? Double standards in performance* Business Ownership Crosstabulation |  | \% within Business Ownership | 1.52\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.34\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | Count | 66 | 60 | 12 | 1 | 79 | 79 | 1 | 298 |
|  |  | \% within Q38c | 22.15\% | 20.13\% | 4.03\% | 0.34\% | 26.51\% | 26.51\% | 0.34\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
|  |  |  | Business Ownership |  |  |  |  |  |  |  |
|  |  |  | African <br> American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know | Total |
| Q38-Have you or your company experienced any of the following DISCRIMINATORY BEHAVIOR when attempting to do work or working on CITY OF BALTIMORE projects? Denial of opportunity to bid * Business Ownership Crosstabulation | Yes | Count | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 5 |
|  |  | \% within Q38d | 40.00\% | 40.00\% | 20.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 3.08\% | 3.39\% | 8.33\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.69\% |
|  | No | Count | 62 | 57 | 11 | 1 | 79 | 79 | 1 | 290 |
|  |  | \% within Q38d | 21.38\% | 19.66\% | 3.79\% | 0.34\% | 27.24\% | 27.24\% | 0.34\% | 100.00\% |
|  |  | \% within Business Ownership | 95.38\% | 96.61\% | 91.67\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 97.97\% |
|  | Don't know | Count | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|  |  | \% within Q38d | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 1.54\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.34\% |
| Total |  | Count | 65 | 59 | 12 | 1 | 79 | 79 | 1 | 296 |
|  |  | \% within Q38d | 21.96\% | 19.93\% | 4.05\% | 0.34\% | 26.69\% | 26.69\% | 0.34\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | African <br> American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native <br> American/ <br> American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |


| Q38-Have you or your company experienced any of the following DISCRIMINATORY BEHAVIOR when attempting to do work or working on CITY OF BALTIMORE projects? Unfair denial of contract award * Business Ownership Crosstabulation | Yes | Count | 2 | 7 | 0 | 0 | 0 | 0 | 0 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within Q38e | 22.22\% | 77.78\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 3.08\% | 11.48\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 3.03\% |
|  | No | Count | 62 | 54 | 12 | 1 | 79 | 79 |  | 287 |
|  |  | \% within Q38e | 21.60\% | 18.82\% | 4.18\% | 0.35\% | 27.53\% | 27.53\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 95.38\% | 88.52\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 96.63\% |
|  | Don't know | Count | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|  |  | \% within Q38e | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 1.54\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.34\% |
| Total |  | Count | 65 | 61 | 12 | 1 | 79 | 79 | 0 | 297 |
|  |  | \% within Q38e | 21.89\% | 20.54\% | 4.04\% | 0.34\% | 26.60\% | 26.60\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q38-Have you or your company experienced any of the following DISCRIMINATORY BEHAVIOR when attempting to do work or working on CITY OF BALTIMORE | Yes | Count | 4 | 2 | 0 | 0 | 1 | 0 | 1 | 8 |
|  |  | \% within Q38f | 50.00\% | 25.00\% | 0.00\% | 0.00\% | 12.50\% | 0.00\% | 12.50\% | 100.00\% |
|  |  | \% within Business Ownership | 6.15\% | 3.23\% | 0.00\% | 0.00\% | 1.27\% | 0.00\% | 100.00\% | 2.68\% |
|  | No | Count | 60 | 60 | 12 | 1 | 78 | 79 |  | 290 |
|  |  | \% within Q38f | 20.69\% | 20.69\% | 4.14\% | 0.34\% | 26.90\% | 27.24\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 92.31\% | 96.77\% | 100.00\% | 100.00\% | 98.73\% | 100.00\% | 0.00\% | 96.99\% |
|  | Don't know | Count | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|  |  | \% within Q38f | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |


| projects? Unfair contract termination * Business Ownership Crosstabulation |  | \% within Business Ownership | 1.54\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.33\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | Count | 65 | 62 | 12 | 1 | 79 | 79 | 1 | 299 |
|  |  | \% within Q38f | 21.74\% | 20.74\% | 4.01\% | 0.33\% | 26.42\% | 26.42\% | 0.33\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
|  |  |  | Business Ownership |  |  |  |  |  |  |  |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know | Total |
| Q38-Have you or your company experienced any of the following DISCRIMINATORY BEHAVIOR when attempting to do work or working on CITY OF BALTIMORE projects? <br> Unequal price quotes from suppliers * Business Ownership Crosstabulation | Yes | Count | 1 | 5 | 1 | 0 | 0 | 0 | 0 | 7 |
|  |  | \% within Q38g | 14.29\% | 71.43\% | 14.29\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 1.54\% | 8.33\% | 7.69\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 2.36\% |
|  | No | Count | 62 | 55 | 12 | 1 | 79 | 79 | 0 | 288 |
|  |  | \% within Q38g | 21.53\% | 19.10\% | 4.17\% | 0.35\% | 27.43\% | 27.43\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 95.38\% | 91.67\% | 92.31\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 96.97\% |
|  | Don't know | Count | 2 | 0 | 0 | 0 | 0 | 0 | 0.00\% | 2 |
|  |  | \% within Q38g | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 3.08\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.67\% |
| Total |  | Count | 65 | 60 | 13 | 1 | 79 | 79 | 0 | 297 |
|  |  | \% within Q38g | 21.89\% | 20.20\% | 4.38\% | 0.34\% | 26.60\% | 26.60\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q38-Have you or your company experienced any of the following DISCRIMINATORY BEHAVIOR when attempting to do work or working on CITY OF BALTIMORE projects? Other * Business Ownership Crosstabulation | Yes | Count | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
|  |  | \% within Q38h | 50.00\% | 0.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 2.33\% | 0.00\% | 10.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.86\% |
|  | No | Count | 41 | 29 | 9 | 0 | 75 | 74 | 0 | 228 |
|  |  | \% within Q38h | 17.98\% | 12.72\% | 3.95\% | 0.00\% | 32.89\% | 32.46\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 95.35\% | 96.67\% | 90.00\% | 0.00\% | 100.00\% | 100.00\% | 0.00\% | 98.28\% |
|  | Don't know | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | \% within Q38h | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business <br> Ownership | 2.33\% | 3.33\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.86\% |
| Total |  | Count | 43 | 30 | 10 | 0 | 75 | 74 | 0 | 232 |
|  |  | \% within Q38h | 18.53\% | 12.93\% | 4.31\% | 0.00\% | 32.33\% | 31.90\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |




| discrimination on City contracts due to the owner's: Gender <br> * Business Ownership Crosstabulation |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q40b | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q40b | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q40b | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |



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|  | Don't | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | know | \% within Q40c | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q40c | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q40-Have you or your company experienced discrimination on City contracts due to the owner's: <br> Disability* Business Ownership Crosstabulation | Yes | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q40d } \end{aligned}$ | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | No | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q40d | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q40d | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q40d } \end{aligned}$ | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |

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|  |  | \% within <br> Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Business Ownership |  |  |  |  |  |  |  |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know | Total |
| Q40-Have you or your company experienced discrimination on City contracts due to the owner's: Sexual or gender identity * Business Ownership Crosstabulation | Yes | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q40e } \end{aligned}$ | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | No | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q40e | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q40e | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q40e | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |



|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q45- Thinking about HABC contracts, have any of the following been a barrier to attempting to do | Yes | Count | 0 | 3 | 2 | 0 | 1 | 0 | 1 | 7 |
|  |  | \% within Q45a | 0.00\% | 42.86\% | 28.57\% | 0.00\% | 14.29\% | 0.00\% | 14.29\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 9.68\% | 20.00\% | 0.00\% | 4.17\% | 0.00\% | 0.00\% | 5.15\% |

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| work or working on the HABC's projects? <br> Prequalification requirements * Business Ownership Crosstabulation | No | Count | 40 | 28 | 8 | 2 | 23 | 28 | 0 | 129 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within Q45a | 31.01\% | 21.71\% | 6.20\% | 1.55\% | 17.83\% | 21.71\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 90.32\% | 80.00\% | 100.00\% | 95.83\% | 100.00\% | 0.00\% | 94.85\% |
|  | Don't <br> know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q45a | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 40 | 31 | 10 | 2 | 24 | 28 | 1 | 136 |
|  |  | \% within Q45a | 29.41\% | 22.79\% | 7.35\% | 1.47\% | 17.65\% | 20.59\% | 0.74\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African <br> American | Asian American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q45b- Thinking about HABC contracts, have any of the following been a barrier to attempting to do work or working on the HABC's projects? Bond requirements* Business Ownership Crosstabulation | Yes | Count | 2 | 4 | 0 | 0 | 1 | 0 | 1 | 8 |
|  |  | \% within Q45b | 25.00\% | 50.00\% | 0.00\% | 0.00\% | 12.50\% | 0.00\% | 12.50\% | 100.00\% |
|  |  | \% within Business Ownership | 4.35\% | 13.79\% | 0.00\% | 0.00\% | 4.17\% | 0.00\% | 0.00\% | 5.76\% |
|  | No | Count | 44 | 25 | 9 | 2 | 23 | 28 |  | 131 |
|  |  | \% within Q45b | 33.59\% | 19.08\% | 6.87\% | 1.53\% | 17.56\% | 21.37\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 95.65\% | 86.21\% | 100.00\% | 100.00\% | 95.83\% | 100.00\% | 0.00\% | 94.24\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q45b | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |


|  | \% within <br> Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | Count | 46 | 29 | 9 | 2 | 24 | 28 | 1 | 139 |
|  | \% within Q45b | 33.09\% | 20.86\% | 6.47\% | 1.44\% | 17.27\% | 20.14\% | 0.72\% | 100.00\% |
|  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q45c- Thinking about HABC contracts, have any of the following been a barrier to attempting to do work or working on the HABC's projects? Proposal/bid specifications * Business Ownership Crosstabulation | Yes | Count | 5 | 7 | 0 | 0 | 4 | 1 | 0 | 17 |
|  |  | \% within Q45c | 29.41\% | 41.18\% | 0.00\% | 0.00\% | 23.53\% | 5.88\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 11.90\% | 24.14\% | 0.00\% | 0.00\% | 16.67\% | 3.57\% | 0.00\% | 12.69\% |
|  | No | Count | 37 | 22 | 10 | 1 | 20 | 27 | 0 | 117 |
|  |  | \% within Q45c | 31.62\% | 18.80\% | 8.55\% | 0.85\% | 17.09\% | 23.08\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 88.10\% | 75.86\% | 100.00\% | 100.00\% | 83.33\% | 96.43\% | 0.00\% | 87.31\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q45c | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 42 | 29 | 10 | 1 | 24 | 28 | 0 | 134 |
|  |  | \% within Q45c | 31.34\% | 21.64\% | 7.46\% | 0.75\% | 17.91\% | 20.90\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q45d- Thinking about HABC contracts, have any of the following been a barrier to attempting to do work or working on the HABC's projects? Short or limited time given to prepare bid package or quote * Business Ownership Crosstabulation | Yes | Count | 2 | 6 | 0 | 0 | 1 | 1 | 0 | 10 |
|  |  | \% within Q45d | 20.00\% | 60.00\% | 0.00\% | 0.00\% | 10.00\% | 10.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 4.88\% | 23.08\% | 0.00\% | 0.00\% | 4.35\% | 3.57\% | 0.00\% | 7.81\% |
|  | No | Count | 39 | 20 | 9 | 1 | 22 | 27 | 0 | 118 |
|  |  | \% within Q45d | 33.05\% | 16.95\% | 7.63\% | 0.85\% | 18.64\% | 22.88\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 95.12\% | 76.92\% | 100.00\% | 100.00\% | 95.65\% | 96.43\% | 0.00\% | 92.19\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q45d | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 41 | 26 | 9 | 1 | 23 | 28 | 0 | 128 |
|  |  | \% within Q45d | 32.03\% | 20.31\% | 7.03\% | 0.78\% | 17.97\% | 21.88\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



| of the following been a barrier to attempting to do work or working on the HABC's projects? Unnecessarily restrictive contract specifications * Business Ownership Crosstabulation |  | \% within Business Ownership | 4.88\% | 11.54\% | 0.00\% | 0.00\% | 4.17\% | 0.00\% | 0.00\% | 4.62\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No | Count | 39 | 23 | 10 | 1 | 23 | 28 | 0 | 124 |
|  |  | \% within Q45e | 31.45\% | 18.55\% | 8.06\% | 0.81\% | 18.55\% | 22.58\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 95.12\% | 88.46\% | 100.00\% | 100.00\% | 95.83\% | 100.00\% | 0.00\% | 95.38\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q45e | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 41 | 26 | 10 | 1 | 24 | 28 | 0 | 130 |
|  |  | \% within Q45e | 31.54\% | 20.00\% | 7.69\% | 0.77\% | 18.46\% | 21.54\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



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| Business Ownership Crosstabulation | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within Q45f | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 45 | 31 | 10 | 1 | 24 | 29 | 1 | 141 |
|  |  | \% within Q45f | 31.91\% | 21.99\% | 7.09\% | 0.71\% | 17.02\% | 20.57\% | 0.71\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



|  | \% within <br> Business <br> Ownership | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |$\quad$| 0.00\% |
| :--- |



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| of the following been a barrier to attempting to do work or working on the HABC's projects? <br> Insurance requirements (general liability, professional liability, etc.) * Business Ownership Crosstabulation |  | \% within <br> Business <br> Ownership | 2.33\% | 3.13\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.44\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No | Count | 42 | 31 | 10 | 1 | 24 | 28 | 1 | 137 |
|  |  | \% within Q45i | 30.66\% | 22.63\% | 7.30\% | 0.73\% | 17.52\% | 20.44\% | 0.73\% | 100.00\% |
|  |  | \% within Business Ownership | 97.67\% | 96.88\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 98.56\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q45i | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 43 | 32 | 10 | 1 | 24 | 28 | 1 | 139 |
|  |  | \% within Q45i | 30.94\% | 23.02\% | 7.19\% | 0.72\% | 17.27\% | 20.14\% | 0.72\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
|  |  |  | Business Ownership |  |  |  |  |  |  |  |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know | Total |
| Q45j- Thinking about HABC contracts, have any of the following been a barrier to attempting to do work or working on the HABC's projects? Cost of bidding/proposing* Business Ownership Crosstabulation | Yes | Count | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
|  |  | \% within Q45j | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 16.13\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 3.65\% |
|  | No | Count | 42 | 26 | 9 | 2 | 24 | 28 | 1 | 132 |
|  |  | \% within Q45j | 31.82\% | 19.70\% | 6.82\% | 1.52\% | 18.18\% | 21.21\% | 0.76\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 83.87\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 96.35\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q45j | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |

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|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | Count | 42 | 31 | 9 | 2 | 24 | 28 | 1 | 137 |
|  |  | \% within Q45j | 30.66\% | 22.63\% | 6.57\% | 1.46\% | 17.52\% | 20.44\% | 0.73\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
|  |  |  | Business Ownership |  |  |  |  |  |  |  |
|  |  |  | African American | Asian American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know | Total |
| Q45k- Thinking about HABC contracts, have any of the following been a barrier to attempting to do work or working on the HABC's projects? Price of supplies/materials * Business Ownership Crosstabulation | Yes | Count | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 7 |
|  |  | \% within Q45k | 42.86\% | 57.14\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 7.14\% | 12.50\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 5.04\% |
|  | No | Count | 39 | 28 | 10 | 1 | 24 | 29 | 1 | 132 |
|  |  | \% within Q45k | 29.55\% | 21.21\% | 7.58\% | 0.76\% | 18.18\% | 21.97\% | 0.76\% | 100.00\% |
|  |  | \% within Business Ownership | 92.86\% | 87.50\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 94.96\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q45k | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 42 | 32 | 10 | 1 | 24 | 29 | 1 | 139 |
|  |  | \% within Q45k | 30.22\% | 23.02\% | 7.19\% | 0.72\% | 17.27\% | 20.86\% | 0.72\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q45I- Thinking about HABC contracts, have any of the following been a barrier to attempting to do work or working on the HABC's projects? <br> Competing with large companies* Business Ownership Crosstabulation | Yes | Count | 5 | 12 | 2 | 0 | 7 | 2 | 0 | 28 |
|  |  | \% within Q45I | 17.86\% | 42.86\% | 7.14\% | 0.00\% | 25.00\% | 7.14\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 13.51\% | 44.44\% | 22.22\% | 0.00\% | 31.82\% | 7.14\% | 0.00\% | 22.40\% |
|  | No | Count | 32 | 15 | 7 | 1 | 15 | 26 | 1 | 97 |
|  |  | \% within Q45I | 32.99\% | 15.46\% | 7.22\% | 1.03\% | 15.46\% | 26.80\% | 1.03\% | 100.00\% |
|  |  | \% within Business Ownership | 86.49\% | 55.56\% | 77.78\% | 100.00\% | 68.18\% | 92.86\% | 100.00\% | 77.60\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q45I | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 37 | 27 | 9 | 1 | 22 | 28 | 1 | 125 |
|  |  | \% within Q45I | 29.60\% | 21.60\% | 7.20\% | 0.80\% | 17.60\% | 22.40\% | 0.80\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |



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| the HABC's projects? Financing * Business Ownership Crosstabulation |  | \% within Q45m | 32.82\% | 20.61\% | 6.11\% | 0.76\% | 17.56\% | 22.14\% | 0.00\% | 100.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 93.10\% | 88.89\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 97.76\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q45m | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 43 | 29 | 9 | 1 | 23 | 29 | 0 | 134 |
|  |  | \% within Q45m | 32.09\% | 21.64\% | 6.72\% | 0.75\% | 17.16\% | 21.64\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |
|  |  |  | Business Ownership |  |  |  |  |  |  |  |
|  |  |  | African American | Asian American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know | Total |
| Q45n- Thinking about HABC contracts, have any of the following been a barrier to attempting to do work or working on the HABC's projects? Lack of experience * Business Ownership Crosstabulation | Yes | Count | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
|  |  | \% within Q45n | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 3.03\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.71\% |
|  | No | Count | 42 | 32 | 10 | 2 | 24 | 29 | 1 | 140 |
|  |  | \% within Q45n | 30.00\% | 22.86\% | 7.14\% | 1.43\% | 17.14\% | 20.71\% | 0.71\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 96.97\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 99.29\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q45n | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 42 | 33 | 10 | 2 | 24 | 29 | 1 | 141 |

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|  | \% within <br> Q45n | $29.79 \%$ | $23.40 \%$ | $7.09 \%$ | $1.42 \%$ | $17.02 \%$ | $20.57 \%$ |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| \% within <br> Business <br> Ownership | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q45o- Thinking about HABC contracts, have any of the following been a barrier to attempting to do work or working on the HABC's projects? Contract too large * Business Ownership Crosstabulation | Yes | Count | 2 | 3 | 2 | 0 | 0 | 0 | 0 | 7 |
|  |  | \% within Q45o | 28.57\% | 42.86\% | 28.57\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 4.76\% | 9.09\% | 20.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 5.07\% |
|  | No | Count | 40 | 30 | 8 | 2 | 23 | 28 | 0 | 131 |
|  |  | \% within Q45o | 30.53\% | 22.90\% | 6.11\% | 1.53\% | 17.56\% | 21.37\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 95.24\% | 90.91\% | 80.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 94.93\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q45o | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 42 | 33 | 10 | 2 | 23 | 28 | 0 | 138 |
|  |  | \% within Q45o | 30.43\% | 23.91\% | 7.25\% | 1.45\% | 16.67\% | 20.29\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



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| Q45p- Thinking about HABC contracts, have any of the following been a barrier to attempting to do work or working on the HABC's projects? Informal network of prime contractors and subcontractors that has excluded my company from doing business ("good ole boy" network) * Business Ownership Crosstabulation | Yes | Count | 1 | 11 | 3 | 0 | 4 | 0 | 0 | 19 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within Q45p | 5.26\% | 57.89\% | 15.79\% | 0.00\% | 21.05\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 2.56\% | 37.93\% | 30.00\% | 0.00\% | 16.67\% | 0.00\% | 0.00\% | 14.39\% |
|  | No | Count | 38 | 18 | 7 | 2 | 20 | 28 | 0 | 113 |
|  |  | \% within Q45p | 33.63\% | 15.93\% | 6.19\% | 1.77\% | 17.70\% | 24.78\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 97.44\% | 62.07\% | 70.00\% | 100.00\% | 83.33\% | 100.00\% | 0.00\% | 85.61\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q45p | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 39 | 29 | 10 | 2 | 24 | 28 | 0 | 132 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q45p } \end{aligned}$ | 29.55\% | 21.97\% | 7.58\% | 1.52\% | 18.18\% | 21.21\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African <br> American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q45q- Thinking about HABC contracts, have any of the following been a barrier to attempting to do work or working on the HABC's projects? Changes in the | Yes | Count | 2 | 3 | 0 | 0 | 2 | 0 | 0 | 7 |
|  |  | \% within Q45q | 28.57\% | 42.86\% | 0.00\% | 0.00\% | 28.57\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 4.65\% | 9.68\% | 0.00\% | 0.00\% | 8.33\% | 0.00\% | 0.00\% | 5.04\% |
|  | No | Count | 41 | 28 | 10 | 2 | 22 | 29 | 0 | 132 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q45q } \end{aligned}$ | 31.06\% | 21.21\% | 7.58\% | 1.52\% | 16.67\% | 21.97\% | 0.00\% | 100.00\% |


| scope of work (after work began)* <br> Business Ownership Crosstabulation |  | \% within <br> Business <br> Ownership | 95.35\% | 90.32\% | 100.00\% | 100.00\% | 91.67\% | 100.00\% | 0.00\% | 94.96\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q45q | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 43 | 31 | 10 | 2 | 24 | 29 | 0 | 139 |
|  |  | \% within Q45q | 30.94\% | 22.30\% | 7.19\% | 1.44\% | 17.27\% | 20.86\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q45r- Thinking about HABC contracts, have any of the following been a barrier to attempting to do work or working on the HABC's projects? <br> Slow payment or non-payment for project work * <br> Business Ownership Crosstabulation | Yes | Count | 6 | 8 | 2 | 0 | 3 | 1 | 0 | 20 |
|  |  | \% within Q45r | 30.00\% | 40.00\% | 10.00\% | 0.00\% | 15.00\% | 5.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 15.79\% | 30.77\% | 20.00\% | 0.00\% | 13.64\% | 3.70\% | 0.00\% | 16.13\% |
|  | No | Count | 32 | 18 | 8 | 1 | 19 | 26 | 0 | 104 |
|  |  | \% within Q45r | 30.77\% | 17.31\% | 7.69\% | 0.96\% | 18.27\% | 25.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 84.21\% | 69.23\% | 80.00\% | 100.00\% | 86.36\% | 96.30\% | 0.00\% | 83.87\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q45r } \end{aligned}$ | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 38 | 26 | 10 | 1 | 22 | 27 | 0 | 124 |

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|  | \% within <br> Q45r | $30.65 \%$ | $20.97 \%$ | $8.06 \%$ | $0.81 \%$ | $17.74 \%$ | $21.77 \%$ |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | \% within <br> Business <br> Ownership | $100.00 \%$ | $0.00 \%$ | $100.00 \%$ |  |  |  |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q46-Have you or your company experienced any of the following DISCRIMINATORY BEHAVIOR when attempting to do work or working on HABC projects? Harassment on the jobsite * Business Ownership Crosstabulation | Yes | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | \% within Q46a | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 2.33\% | 2.86\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.39\% |
|  | No | Count | 42 | 34 | 11 | 2 | 24 | 29 | 0 | 142 |
|  |  | \% within Q46a | 29.58\% | 23.94\% | 7.75\% | 1.41\% | 16.90\% | 20.42\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 97.67\% | 97.14\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 98.61\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q46a | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 43 | 35 | 11 | 2 | 24 | 29 | 0 | 144 |
|  |  | \% within Q46a | 29.86\% | 24.31\% | 7.64\% | 1.39\% | 16.67\% | 20.14\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q46-Have you or your company experienced any of the following DISCRIMINATORY BEHAVIOR when attempting to do work or working on HABC projects? Unequal or unfair treatment * <br> Business Ownership Crosstabulation | Yes | Count | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
|  |  | \% within Q46b | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business Ownership | 0.00\% | 3.23\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.73\% |
|  | No | Count | 42 | 30 | 10 | 2 | 23 | 29 | 0 | 136 |
|  |  | \% within Q46b | 30.88\% | 22.06\% | 7.35\% | 1.47\% | 16.91\% | 21.32\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business Ownership | 100.00\% | 96.77\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 99.27\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q46b | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 42 | 31 | 10 | 2 | 23 | 29 | 0 | 137 |
|  |  | \% within Q46b | 30.66\% | 22.63\% | 7.30\% | 1.46\% | 16.79\% | 21.17\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



|  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |

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| Q46-Have you or your company experienced any of the following DISCRIMINATORY BEHAVIOR when attempting to do work or working on HABC projects? <br> Denial of opportunity to bid <br> * Business Ownership Crosstabulation | Yes | Count | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within Q46d | 50.00\% | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 2.27\% | 3.13\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.41\% |
|  | No | Count | 43 | 31 | 10 | 2 | 24 | 29 | 1 | 140 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q46d } \end{aligned}$ | 30.71\% | 22.14\% | 7.14\% | 1.43\% | 17.14\% | 20.71\% | 0.71\% | 100.00\% |
|  |  | \% within Business Ownership | 97.73\% | 96.88\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 98.59\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q46d | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 44 | 32 | 10 | 2 | 24 | 29 | 1 | 142 |
|  |  | \% within Q46d | 30.99\% | 22.54\% | 7.04\% | 1.41\% | 16.90\% | 20.42\% | 0.70\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q46-Have you or your company experienced any of | Yes | Count | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
|  |  | \% within Q46e | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |


| the following DISCRIMINATORY BEHAVIOR when attempting to do work or working on HABC projects? Unfair denial of contract award * Business Ownership Crosstabulation |  | \% within <br> Business <br> Ownership | 0.00\% | 9.38\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 2.13\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No | Count | 44 | 29 | 10 | 2 | 24 | 29 | 0 | 138 |
|  |  | \% within Q46e | 31.88\% | 21.01\% | 7.25\% | 1.45\% | 17.39\% | 21.01\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 90.63\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 97.87\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q46e | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 44 | 32 | 10 | 2 | 24 | 29 | 0 | 141 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q46e } \end{aligned}$ | 31.21\% | 22.70\% | 7.09\% | 1.42\% | 17.02\% | 20.57\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



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| HABC projects? <br> Unfair contract termination * Business Ownership Crosstabulation |  | \% within Q46f | 30.28\% | 23.94\% | 7.04\% | 1.41\% | 16.90\% | 20.42\% | 0.00\% | 100.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q46f | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 43 | 34 | 10 | 2 | 24 | 29 | 0 | 142 |
|  |  | \% within Q46f | 30.28\% | 23.94\% | 7.04\% | 1.41\% | 16.90\% | 20.42\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



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| Ownership Crosstabulation | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within Q46g | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 44 | 31 | 10 | 2 | 24 | 29 | 0 | 140 |
|  |  | \% within <br> Q46g | 31.43\% | 22.14\% | 7.14\% | 1.43\% | 17.14\% | 20.71\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



|  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | Count | 32 | 17 | 10 | 2 | 22 | 27 | 0 | 110 |
|  | \% within Q46h | 29.09\% | 15.45\% | 9.09\% | 1.82\% | 20.00\% | 24.55\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



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| owner's: Veteran status * Business Ownership Crosstabulation | No | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within Q48c | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | Don't <br> know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q48c | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q48c | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q48-Have you or your company experienced discrimination on HABC contracts due to the owner's: <br> Disability* Business Ownership Crosstabulation | Yes | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q48d | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | No | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within <br> Q48d | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q48d } \end{aligned}$ | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |

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|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | \% within Q48d | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |




|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q53-Have you or your company experienced any DISCRIMINATORY BEHAVIOR when attempting to do work or working in the PRIVATE SECTOR? * Business | Yes | Count | 7 | 0 | 2 | 0 | 5 | 0 | 0 | 14 |
|  |  | \% within Q53 | 50.00\% | 0.00\% | 14.29\% | 0.00\% | 35.71\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 14.29\% | 0.00\% | 14.29\% | 0.00\% | 5.88\% | 0.00\% | 0.00\% | 5.32\% |
|  | No | Count | 37 | 28 | 12 | 1 | 70 | 77 | 0 | 225 |
|  |  | \% within Q53 | 16.44\% | 12.44\% | 5.33\% | 0.44\% | 31.11\% | 34.22\% | 0.00\% | 100.00\% |


| Ownership Crosstabulation |  | \% within <br> Business <br> Ownership | 75.51\% | 93.33\% | 85.71\% | 100.00\% | 82.35\% | 91.67\% | 0.00\% | 85.55\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Do not work in the private sector | Count | 3 | 1 | 0 | 0 | 10 | 6 | 0 | 20 |
|  |  | \% within Q53 | 15.00\% | 5.00\% | 0.00\% | 0.00\% | 50.00\% | 30.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 6.12\% | 3.33\% | 0.00\% | 0.00\% | 11.76\% | 7.14\% | 0.00\% | 7.60\% |
|  | Don't know | Count | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 4 |
|  |  | \% within Q53 | 50.00\% | 25.00\% | 0.00\% | 0.00\% | 0.00\% | 25.00\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 4.08\% | 3.33\% | 0.00\% | 0.00\% | 0.00\% | 1.19\% | 0.00\% | 1.52\% |
| Total |  | Count | 49 | 30 | 14 | 1 | 85 | 84 | 0 | 263 |
|  |  | \% within Q53 | 18.63\% | 11.41\% | 5.32\% | 0.38\% | 32.32\% | 31.94\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



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| Business Ownership Crosstabulation |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | Count | 31 | 31 | 5 | 1 | 9 | 4 | 1 | 82 |
|  | \% within Q54a | 37.80\% | 37.80\% | 6.10\% | 1.22\% | 10.98\% | 4.88\% | 1.22\% | 100.00\% |
|  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |



|  |  |  |  |  | Bus | ss Ownership |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know | Total |
| Q54- Which of the following | Yes | Count | 10 | 12 | 2 | 0 | 0 | 0 | 1 | 25 |
|  |  | \% within Q54c | 40.00\% | 48.00\% | 8.00\% | 0.00\% | 0.00\% | 0.00\% | 4.00\% | 100.00\% |
| DISCRIMINATORY BEHAVIOR have you experienced when attempting to do work or working in the PRIVATE SECTOR (nongovernment)? <br> Double standards in performance * Business Ownership Crosstabulation |  | \% within Business Ownership | 31.25\% | 34.29\% | 40.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 28.74\% |
|  | No | Count | 22 | 20 | 3 | 1 | 9 | 4 | 0 | 59 |
|  |  | \% within Q54c | 37.29\% | 33.90\% | 5.08\% | 1.69\% | 15.25\% | 6.78\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 68.75\% | 57.14\% | 60.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 67.82\% |
| Total |  | Count | 32 | 32 | 5 | 1 | 9 | 4 | 1 | 84 |
|  |  | \% within Q54c | 38.10\% | 38.10\% | 5.95\% | 1.19\% | 10.71\% | 4.76\% | 1.19\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 91.43\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 96.55\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | Non- <br> M/WBE | Don't <br> Know |  |
| Q54- Which of the following | Yes | Count | 5 | 10 | 1 | 0 | 2 | 0 | 0 | 18 |
|  |  | \% within Q54d | 27.78\% | 55.56\% | 5.56\% | 0.00\% | 11.11\% | 0.00\% | 0.00\% | 100.00\% |
| DISCRIMINATORY BEHAVIOR have you experienced when attempting to do work or |  | \% within <br> Business <br> Ownership | 15.63\% | 28.57\% | 20.00\% | 0.00\% | 22.22\% | 0.00\% | 0.00\% | 20.69\% |
|  | No | Count | 25 | 21 | 4 | 1 | 7 | 4 | 1 | 63 |




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|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q54- Which of the following <br> DISCRIMINATORY <br> BEHAVIOR have <br> you experienced <br> when attempting to do work or working in the PRIVATE SECTOR (nongovernment)? Unfair contract termination * Business Ownership Crosstabulation | Yes | Count | 1 | 4 | 1 | 0 | 1 | 1 | 0 | 8 |
|  |  | \% within Q54f | 12.50\% | 50.00\% | 12.50\% | 0.00\% | 12.50\% | 12.50\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 3.13\% | 11.43\% | 20.00\% | 0.00\% | 11.11\% | 25.00\% | 0.00\% | 9.20\% |
|  | No | Count | 29 | 27 | 4 | 1 | 8 | 3 | 1 | 73 |
|  |  | \% within Q54f | 39.73\% | 36.99\% | 5.48\% | 1.37\% | 10.96\% | 4.11\% | 1.37\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 90.63\% | 77.14\% | 80.00\% | 100.00\% | 88.89\% | 75.00\% | 100.00\% | 83.91\% |
| Total |  | Count | 30 | 31 | 5 | 1 | 9 | 4 | 1 | 81 |
|  |  | \% within Q54f | 37.04\% | 38.27\% | 6.17\% | 1.23\% | 11.11\% | 4.94\% | 1.23\% | 100.00\% |
|  |  | \% within Business Ownership | 93.75\% | 88.57\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 93.10\% |



| BEHAVIOR have you experienced when attempting to do work or working in the PRIVATE SECTOR (nongovernment)? Unequal price quotes from suppliers * Business Ownership Crosstabulation |  | \% within <br> Business <br> Ownership | 12.50\% | 25.71\% | 40.00\% | 0.00\% | 11.11\% | 0.00\% | 100.00\% | 19.54\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No | Count | 26 | 22 | 3 | 1 | 8 | 4 | 0 | 64 |
|  |  | \% within Q54g | 40.63\% | 34.38\% | 4.69\% | 1.56\% | 12.50\% | 6.25\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 81.25\% | 62.86\% | 60.00\% | 100.00\% | 88.89\% | 100.00\% | 0.00\% | 73.56\% |
| Total |  | Count | 30 | 31 | 5 | 1 | 9 | 4 | 1 | 81 |
|  |  | \% within Q54g | 37.04\% | 38.27\% | 6.17\% | 1.23\% | 11.11\% | 4.94\% | 1.23\% | 100.00\% |
|  |  | \% within Business Ownership | 93.75\% | 88.57\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 93.10\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q54- Which of the following | Yes | Count | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 4 |
|  |  | \% within Q54h | 0.00\% | 50.00\% | 0.00\% | 0.00\% | 50.00\% | 0.00\% | 0.00\% | 100.00\% |
| DISCRIMINATORY <br> BEHAVIOR have <br> you experienced <br> when attempting to do work or working in the PRIVATE SECTOR (nongovernment)? Other * Business Ownership Crosstabulation |  | \% within Business Ownership | 0.00\% | 5.71\% | 0.00\% | 0.00\% | 22.22\% | 0.00\% | 0.00\% | 4.60\% |
|  | No | Count | 15 | 12 | 3 | 1 | 5 | 2 | 1 | 39 |
|  |  | \% within Q54h | 38.46\% | 30.77\% | 7.69\% | 2.56\% | 12.82\% | 5.13\% | 2.56\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 46.88\% | 34.29\% | 60.00\% | 100.00\% | 55.56\% | 50.00\% | 100.00\% | 44.83\% |
| Total |  | Count | 15 | 14 | 3 | 1 | 7 | 2 | 1 | 43 |

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|  | \% within <br> Q54h | $34.88 \%$ | $32.56 \%$ | $6.98 \%$ | $2.33 \%$ | $16.28 \%$ | $4.65 \%$ | $2.33 \%$ |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | \% within <br> Business <br> Ownership | $46.88 \%$ | $100.00 \%$ |  |  |  |  |  |



|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African <br> American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q56-Which of the following do you consider the REASON(S) for your company being discriminated against on PRIVATE SECTOR (nongovernment) contracts or projects? Gender <br> * Business Ownership Crosstabulation | Yes | Count | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
|  |  | \% within Q56b | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 10.71\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 4.92\% |
|  | No | Count | 21 | 25 | 3 | 1 | 3 | 5 | 0 | 58 |
|  |  | \% within Q56b | 36.21\% | 43.10\% | 5.17\% | 1.72\% | 5.17\% | 8.62\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 89.29\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 95.08\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q56b | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 21 | 28 | 3 | 1 | 3 | 5 | 0 | 61 |
|  |  | \% within Q56b | 34.43\% | 45.90\% | 4.92\% | 1.64\% | 4.92\% | 8.20\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q56-Which of the following do you consider the REASON(S) for your company being discriminated against on PRIVATE SECTOR <br> (non-government) contracts or projects? <br> Disability* Business Ownership Crosstabulation | Yes | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q56d | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | No | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q56d | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q56d | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q56d | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |





| Ioan or credit? <br> Operating <br> Expense* <br> Business <br> Ownership <br> Crosstabulation |  | \% within Business Ownership | 4.17\% | 18.75\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 10.29\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No | Count | 23 | 26 | 3 | 1 | 3 | 5 | 0 | 61 |
|  |  | \% within Q59a | 37.70\% | 42.62\% | 4.92\% | 1.64\% | 4.92\% | 8.20\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 95.83\% | 81.25\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 89.71\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q59a | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 24 | 32 | 3 | 1 | 3 | 5 | 0 | 68 |
|  |  | \% within Q59a | 35.29\% | 47.06\% | 4.41\% | 1.47\% | 4.41\% | 7.35\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q59b } \end{aligned}$ | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | know | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 24 | 32 | 3 | 1 | 3 | 5 | 0 | 68 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q59b } \end{aligned}$ | 35.29\% | 47.06\% | 4.41\% | 1.47\% | 4.41\% | 7.35\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q59- What was the reason for applying for a loan or credit? Loss of revenue due to COVID-19* <br> Business <br> Ownership Crosstabulation | Yes | Count | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 7 |
|  |  | \% within Q59c | 14.29\% | 85.71\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 4.17\% | 18.75\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 10.29\% |
|  | No | Count | 23 | 26 | 3 | 1 | 3 | 5 | 0 | 61 |
|  |  | \% within Q59c | 37.70\% | 42.62\% | 4.92\% | 1.64\% | 4.92\% | 8.20\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 95.83\% | 81.25\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 89.71\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q59c | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 24 | 32 | 3 | 1 | 3 | 5 | 0 | 68 |
|  |  | \% within Q59c | 35.29\% | 47.06\% | 4.41\% | 1.47\% | 4.41\% | 7.35\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |

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| Ioan or credit? <br> Building <br> purchase* <br> Business <br> Ownership <br> Crosstabulation |  | \% within <br> Business <br> Ownership | 4.17\% | 18.75\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 10.29\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No | Count | 23 | 26 | 3 | 1 | 3 | 5 | 0 | 61 |
|  |  | \% within Q59e | 37.70\% | 42.62\% | 4.92\% | 1.64\% | 4.92\% | 8.20\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 95.83\% | 81.25\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 89.71\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q59e | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 24 | 32 | 3 | 1 | 3 | 5 | 0 | 68 |
|  |  | \% within Q59e | 35.29\% | 47.06\% | 4.41\% | 1.47\% | 4.41\% | 7.35\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



|  | Don't know | \% within Q59f | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 24 | 32 | 3 | 1 | 3 | 5 | 0 | 68 |
|  |  | \% within Q59f | 35.29\% | 47.06\% | 4.41\% | 1.47\% | 4.41\% | 7.35\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



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|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native <br> American/ <br> American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q63- Was your loan or credit approved? * Business Ownership Crosstabulation | Yes | Count | 20 | 14 | 3 | 1 | 10 | 9 | 1 | 58 |
|  |  | \% within Q63 | 34.48\% | 24.14\% | 5.17\% | 1.72\% | 17.24\% | 15.52\% | 1.72\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 63.64\% | 100.00\% | 100.00\% | 100.00\% | 90.00\% | 100.00\% | 86.57\% |
|  | No | Count | 0 | 8 | 0 | 0 | 0 | 1 | 0 | 9 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q63 } \\ & \hline \end{aligned}$ | 0.00\% | 88.89\% | 0.00\% | 0.00\% | 0.00\% | 11.11\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 0.00\% | 36.36\% | 0.00\% | 0.00\% | 0.00\% | 10.00\% | 0.00\% | 13.43\% |
| Total |  | Count | 20 | 22 | 3 | 1 | 10 | 10 | 1 | 67 |
|  |  | \% within Q63 | 29.85\% | 32.84\% | 4.48\% | 1.49\% | 14.93\% | 14.93\% | 1.49\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q64- Why do you think your loan or credit application was denied? Insufficient Documentation* Business Ownership Crosstabulation | Yes | Count | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 7 |
|  |  | $\begin{aligned} & \text { \% within } \\ & \text { Q64a } \end{aligned}$ | 14.29\% | 85.71\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 4.17\% | 18.75\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 10.29\% |
|  | No | Count | 23 | 26 | 3 | 1 | 3 | 5 | 0 | 61 |
|  |  | \% within Q64a | 37.70\% | 42.62\% | 4.92\% | 1.64\% | 4.92\% | 8.20\% | 0.00\% | 100.00\% |

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|  |  | \% within Business Ownership | 95.83\% | 81.25\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 89.71\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Don't | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | know | \% within Q64a | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 24 | 32 | 3 | 1 | 3 | 5 | 0 | 68 |
|  |  | \% within Q64a | 35.29\% | 47.06\% | 4.41\% | 1.47\% | 4.41\% | 7.35\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q64- Why do you think your loan or credit application was denied? Insufficient Business Process* Business Ownership Crosstabulation | Yes | Count | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 7 |
|  |  | \% within Q64b | 14.29\% | 85.71\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 4.17\% | 18.75\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 10.29\% |
|  | No | Count | 23 | 26 | 3 | 1 | 3 | 5 | 0 | 61 |
|  |  | \% within Q64b | 37.70\% | 42.62\% | 4.92\% | 1.64\% | 4.92\% | 8.20\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 95.83\% | 81.25\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 89.71\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q64b | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 24 | 32 | 3 | 1 | 3 | 5 | 0 | 68 |


|  | \% within <br> Q64b | $35.29 \%$ | $47.06 \%$ | $4.41 \%$ | $1.47 \%$ | $4.41 \%$ | $7.35 \%$ | $0.00 \%$ | $100.00 \%$ |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | \% within <br> Business <br> Ownership | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $0.00 \%$ | $100.00 \%$ |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q64- Why do you think your loan or credit application was denied?Confusion about the process* Business Ownership Crosstabulation | Yes | Count | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 7 |
|  |  | \% within Q64c | 14.29\% | 85.71\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 4.17\% | 18.75\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 10.29\% |
|  | No | Count | 23 | 26 | 3 | 1 | 3 | 5 | 0 | 61 |
|  |  | \% within Q64c | 37.70\% | 42.62\% | 4.92\% | 1.64\% | 4.92\% | 8.20\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 95.83\% | 81.25\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 89.71\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q64c | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 24 | 32 | 3 | 1 | 3 | 5 | 0 | 68 |
|  |  | \% within Q64c | 35.29\% | 47.06\% | 4.41\% | 1.47\% | 4.41\% | 7.35\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |


| Q64-Why do you think your loan or credit application was denied?Race or ethnicity of owner* Business Ownership Crosstabulation | Yes | Count | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within Q64d | 14.29\% | 85.71\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 4.17\% | 18.75\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 10.29\% |
|  | No | Count | 23 | 26 | 3 | 1 | 3 | 5 | 0 | 61 |
|  |  | \% within Q64d | 37.70\% | 42.62\% | 4.92\% | 1.64\% | 4.92\% | 8.20\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 95.83\% | 81.25\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 89.71\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q64d | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 24 | 32 | 3 | 1 | 3 | 5 | 0 | 68 |
|  |  | \% within Q64d | 35.29\% | 47.06\% | 4.41\% | 1.47\% | 4.41\% | 7.35\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q64- Why do you think your loan or credit application was denied? Gender of owner* Business Ownership Crosstabulation | Yes | Count | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 7 |
|  |  | \% within Q64e | 14.29\% | 85.71\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 4.17\% | 18.75\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 10.29\% |
|  | No | Count | 23 | 26 | 3 | 1 | 3 | 5 | 0 | 61 |
|  |  | \% within Q64e | 37.70\% | 42.62\% | 4.92\% | 1.64\% | 4.92\% | 8.20\% | 0.00\% | 100.00\% |


|  |  | \% within Business Ownership | 95.83\% | 81.25\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 89.71\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Don't | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | know | \% within Q64e | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within <br> Business <br> Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 24 | 32 | 3 | 1 | 3 | 5 | 0 | 68 |
|  |  | \% within Q64e | 35.29\% | 47.06\% | 4.41\% | 1.47\% | 4.41\% | 7.35\% | 0.00\% | 100.00\% |
|  |  | \% within <br> Business <br> Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |



|  | \% within <br> Q64f | $35.29 \%$ | $47.06 \%$ | $4.41 \%$ | $1.47 \%$ | $4.41 \%$ | $7.35 \%$ | $0.00 \%$ |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | \% within <br> Business <br> Ownership | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ |


|  |  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | African American | Asian <br> American/Pacific Islander | Hispanic American or Latino | Native American/ American Indian | Nonminority Female | NonM/WBE | Don't <br> Know |  |
| Q64- Why do you think your loan or credit application was denied? Other* Business Ownership Crosstabulation | Yes | Count | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 7 |
|  |  | \% within Q64f | 14.29\% | 85.71\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 4.17\% | 18.75\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 10.29\% |
|  | No | Count | 23 | 26 | 3 | 1 | 3 | 5 | 0 | 61 |
|  |  | \% within Q64f | 37.70\% | 42.62\% | 4.92\% | 1.64\% | 4.92\% | 8.20\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 95.83\% | 81.25\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 89.71\% |
|  | Don't know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | \% within Q64f | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  |  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Total |  | Count | 24 | 32 | 3 | 1 | 3 | 5 | 0 | 68 |
|  |  | \% within Q64f | 35.29\% | 47.06\% | 4.41\% | 1.47\% | 4.41\% | 7.35\% | 0.00\% | 100.00\% |
|  |  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |

## Appendix G

In-Depth Interview Guide
Pre-Interview Questions via Qualtrics - Firms that agree to participate in an interview will be provided link to complete pre-interview questions. The pre-interview will provide clarity and focus on specific questions for the interviewee.

## SURVEY INTRODUCTION

The City of Baltimore (City) and Housing Authority of Baltimore City (HABC) has retained MGT Consulting Group to conduct a Disparity Study. The disparity study is a research study to determine the effectiveness of the City's and HABC's contracting practices and policies to encourage minority, women, LGBTQ+, veterans, and disabled-owned business to participate in their procurements. The purpose of this pre-interview survey is to learn more about your firm and streamline the interview to questions around your specific business experiences with the City and/or HABC. Your responses to this research survey and interview responses will be aggregated for the overall analysis and used only for the disparity study. Individual information is kept confidential.

Your firm has been randomly selected to participate in an interview of businesses to evaluate how the City/HABC buys goods and services; the subcontracting practices of prime contractors/vendors who do business with the City/HABC; and information about doing business or attempting to do business with the City/HABC and/or prime contracting.

The survey and subsequent interview should be completed by the company's Owner, CEO, President, Vice President, or other decision-making authority with in-depth knowledge of the company. Questions in this survey relate to company ownership, contracting, and experience in doing business with the City or HABC.

This is a great opportunity for you to provide feedback regarding your experience doing business with or attempting to do business with the City/HABC. The survey will only take approximately 10 minutes of your time to complete. For participating in this important research study, your firm will be entered in a drawing for a chance to win a $\$ 500$ Amazon gift card. Winners will be announced at the end of the study.

## Please provide Company Name

```
What is your title?
() Owner
( ) CEO/President
( ) Manager/Financial Officer
( ) Other (What is your official title?)
```

Please provide your name just in case we have any further questions.

Is at least 51 percent of your company owned, managed, and controlled by a woman or women?
() Yes
() No
( ) Don't know

Is at least 51 percent of your company owned, managed, and controlled by a person or people of one of the following racial or ethnic group(s)?
( ) African American
() Asian American or Pacific Islander
( ) Caucasian/White
( ) Hispanic American or Latino
( ) Native American/American Indian
( ) Don't know
( ) Other - (Please specify the race or ethnicity of the owner(s)/manager(s):
Is at least 51 percent of your company owned, managed, and controlled by a person or people of the following groups:
( ) LGBTQA+
( ) Disabled
() Veteran

What is the highest level of education completed by the primary owner of your company?
() Some high school
( ) High school graduate
( ) Trade or technical education
( ) Associate Degree (AA, AS, etc.)
( ) Bachelor's Degree (BA, BS, etc.)
( ) Graduate or Professional Degree (MA, PhD, JD, etc.)
( ) Don't know
What is your company's primary line of business?
( ) Construction (for example: highway, general construction, excavating, mechanical, carpentry, site work, electrical, etc.)
( ) Architectural and Engineering Services (for example: Architecture, civil engineering, environmental engineering, etc.)
( ) Professional Services (for example: accounting, legal services, construction management, IT consulting, consultant, etc.)
( ) Other Services (for example: maintenance services, janitorial, security, auto repair, etc.)
( ) Goods (for example: furniture, computers, books, etc.)
( ) Other Please explain your company's primary line of business.

What is the age of the company?
( ) 0-2 years
( ) 3-5 years
( ) 6-10 years
( ) 11-15 years
( ) 16-20 years

## ( ) 21+ years

What is the average annual revenue of the company?
( ) <\$100k
( ) \$100k-\$500k
( ) \$500k-\$1M
( ) \$1M-\$5M
( ) \$5M-\$10M
( ) >\$10M
Do you bid or propose as:
A prime
A subcontractor
Both
Between July 2014 and June 2019, have you been awarded a contract, subcontract, work order, or purchase order on a project or projects for:
City of Baltimore
Housing Authority of Baltimore County
Both
Does your company hold any of the following certifications?

|  | Yes | No | I don't <br> know |
| :--- | :--- | :--- | :--- |
| A. Minority Business Enterprise (MBE) |  |  |  |
| B. Woman Business Enterprise (WBE) |  |  |  |
| C. LGBTQA+ |  |  |  |
| D. Veteran Business Enterprise (VBE) |  |  |  |
| E. Section 3 |  |  |  |
| F. Disabled-owned Business Enterprise (DOBE) |  |  |  |
| G. Other |  |  |  |

Have any of the following been a barrier to attempting to do work or working on the City's or HABC's projects?

|  | Yes | No | Don't know |
| :---: | :---: | :---: | :---: |
| A. Prequalification requirements |  |  |  |
| B. Bond requirements |  |  |  |
| C. Proposal/bid specifications |  |  |  |
| D. Short or limited time given to prepare bid package or quote |  |  |  |
| E. Unnecessarily restrictive contract specifications |  |  |  |
| F. Meeting MWBE/Section 3 program requirements |  |  |  |
| G. Identifying MWBE/Section 3 firms |  |  |  |
| H. Selection process/evaluation criteria |  |  |  |
| I. Insurance requirements (general liability, professional liability, etc.) |  |  |  |
| J. Cost of bidding/proposing |  |  |  |
| K. Price of supplies/materials |  |  |  |
| L. Competing with large companies |  |  |  |
| M. Financing |  |  |  |
| N. Lack of experience |  |  |  |
| O. Contract too large |  |  |  |
| P. Informal network of prime contractors and subcontractors that has excluded my company from doing business ("good ole boy" network) |  |  |  |
| Q. Changes in the scope of work (after work began) |  |  |  |
| R. Slow payment or non-payment for project work |  |  |  |

Have you ever witnessed or experienced any of the following?
Slow or non-payment.
Denial of opportunity to bid.
Unfair rejection of bid.
Bid shopping.
Bid manipulation.
Double standards for minority- or women-owned firms when performing work.
Unfair treatment regarding approval of work for minorities or women owned firms.
Unfavorable work environment for minorities or women (e.g., harassment based on race or gender on jobsites).
Any "fronts" or false reporting of good faith efforts or use of certified subs.
Unfair treatment by the City or HABC.

## IN-DEPTH INTERVIEW PHONESCRIPT

READ: Hello. My name is $\qquad$ and I am calling on behalf of the City of Baltimore (City) and the Housing Authority of Baltimore City (HABC) to speak with businesses that do business or has attempted to do business with the City and HABC.

Is this $\qquad$ (Company's name)? IF COMPANY NAME VERIFIED, CONTINUE.

Are you the owner or an authorized decision maker in your company? [IF NO] May I speak with that person? [IF NO, SCHEDULE CALL-BACK]?

IF TRANSFERRED TO ANOTHER PARTY (CFO, MANAGER, ETC): READ INTRO AGAIN then ask Are you able to answer questions concerning business practices of this company? IF YES, CONTINUE.

The City of Baltimore and the Housing Authority of Baltimore City has hired MGT Consulting Group to conduct a Disparity Study to assess the City and HABC's contracting practices and Minority and Women Business Enterprise Programs.

Gathering feedback and input from businesses is one of the most important elements of the study collecting information from firms in the Baltimore region about working in the private and public markets, and about firms' experience with the City and HABC. The results of the study will provide guidance regarding any potential changes to the agencies contracting practices and/or the MWBE Programs.

Your company was randomly selected to participate in an in-depth interview. The interview will last approximately 45 minutes.

When can we schedule your interview to receive your input and recommendations on doing business with the City or HABC?

## DAY OF IN-DEPTH INTERVIEW INTRO

Thank you for agreeing to participate. Your input is very important to outcome of the disparity study. Your responses to this interview will be aggregated for the overall analysis and used only for this research study. Individual information or identifying characteristics about your company will not be published.

If you have any questions regarding the disparity study or this interview, I will be happy to provide you contact information at the end of the interview.

By participating in this interview, you acknowledge that:
The opinions and perceptions you will provide are given freely and represent an accurate reflection of your experience doing business or attempting to do business with the City and HABC.

You have not been coerced or received any remuneration for your comments. You understand that neither your name nor your firm's name will be published in the report. Your participation in this interview has no direct benefits to your firm or to MGT.
This is a great opportunity for you to provide feedback regarding your experience doing business with or attempting to do business with the City and HABC.
Thank you for your participation!

## IN-DEPTH INTERVIEW QUESTIONNAIRE

## COMPANY INFORMATION

First, please tell me about your company. Tell me about the type of work you do, etc.
How did you start your business? Why did you start your business?
What challenges did you face starting a business in your line of work?
Are there additional challenges for minorities or women starting businesses in your line of work in your region?
Have you or others experienced any barriers to entering your industry?
Have you changed the type of work you do over time? If so, why?
Have there been any changes in the size of the firm over time?
Is your firm a seasonal business?
What led to your decision to bid as a prime (or as a sub or both)?
What determines the types and sizes of projects you will consider bidding on?
Do you work on both public sector and private sector work? Tell me more about your choice.
What are the key factors that contribute to your firm's success? (relationships, equipment, financing, materials cost, insurance, etc.)
Tell me about your experience applying for credit for your business.
Have you applied for credit in the last year?
If, yes, why did you apply for a loan?
If, yes, were you approved? Did you receive the full amount requested?
If you were not approved, why do you think that is?
If you did not apply, did you feel discouraged from applying? If yes, why?
Did you experience any discrimination in the loan application process?
If yes, please tell me about it.
Have you experienced discrimination when trying to work or working on the City or HABC contracts?
If yes, please tell me about what happened and by whom.

## CITY OR HABC

How do you learn about bid opportunities for the City or HABC?
Are there barriers to learning about prime or subcontract bidding opportunities?
Tell me about bidding for City or HABC projects. Have you won?
If not, why do you think you were not awarded the project?
Were you treated fairly during the bidding process?
If not, please tell me about that.

Tell me about your experience working on City or HABC projects. (be specific about the agencies) Were you treated fairly when you were working on the project?
If not, please tell me what happened.
Have you experienced discrimination when trying to work or working on City or HABC projects?
If yes, please tell me about what happened.
Is there a level playing field for minority- and women-owned firms in your industry City or HABC?
Do you think minority- or women-owned firms face challenges not faced by other businesses? Why or why not?
If there are any barriers or disadvantages for certified, minority- and women-owned firms, do you have suggestions for initiatives to address them?

## FOR PRIMES:

How do you hire firms as subcontractors? How are they selected?
Do you make any efforts to include certified firms in public contracts?
If so, why?
How?
Describe challenges or barriers that you might have faced when hiring and/or working with small, minority- or woman-owned businesses.
How are prime contractors/consultants encouraged to include subcontractors, M/WBE-certified firms or small businesses?

## MWBE/SECTION 3 PROGRAM

Please tell me about your experience with the MWBE or Section 3 Program.
What is your opinion about the effectiveness of the program(s)?
Does the program(s) make it harder or easier to do business?
How?
Without the Program, do you think small, or minority and woman owned firms would be successful in obtaining work on City or HABC projects?
Why or why not?
Will including certified LGBTQ+, DOBE, or VBE firms the City's program assist in meeting goals? What aspect of the Program are most helpful?
What aspect of the Program to you find the least helpful?
What business assistance and other programs does the City or HABC offer in its program(s)? (assistance with bonding, mentor/protégé, financing, technical assistance, networking events, etc.)
Do you have any recommendations on how the City or HABC can improve the tracking and utilization of MWBE or Section 3 firms on City or HABC projects and purchases?
In your opinion, what are the biggest obstacles faced by [MWBE or Section 3 businesses in securing prime contracts or subcontracts with the City or HABC?

## PRIVATE MARKET EXPERIENCES

## FOR PRIME FIRMS:

Do you make any efforts to include MWBE-certified firms on private contracts?
If so, why? How?
If not, why?
Do you use the same subs when you bid on private market contracts as you do on your bids for public projects?
If no, why?
FOR SUBS: Do primes who solicit bids from you on their public projects solicit bids from you for their private contract work?
If no, why do you think that is?
FOR ALL FIRMS:
Have you experienced discrimination when trying to work or working in the private market?
If yes, please tell me about what happened.
Have you seen or experienced any unfair treatment or disadvantages for minority- or women-owned firms in your field in the City or HABC market?
Do you think there is a "good ol' boy" network operating in the City or HABC market?
If so, how does it manifest?
How does it impact competition?

Is there anything else that you would like to share about the City or HABC, the MWBE or Section 3 Programs, or contracting in Baltimore region?

This concludes the interview. On behalf of the City and HABC, thank you for your participation.

If you have any questions or would like more information about the disparity study, please contact Vernetta at (850) 386-3191 or vmitchell@mgtconsulting.com, or visit the study website at www.cityofbaltimore-habcdisparitystudy.com

## Appendix H

## City of Baltimore Stakeholder Interview Guide

## INTRODUCTION

Hello, my name is $\qquad$ and I am calling on behalf of the City of Baltimore and Housing Authority of Baltimore City to gather input from area trade associations and business organization concerning the state of minority and women businesses in the Baltimore region. MGT Consulting Group is conducting a disparity studyto examine the procurement of services and goods by the City and Housing, the implementation of its M/WBE programs, and information about doing business in the public and private market. It is also important to include information from the local professional organizations that serve the business community, therefore we also conduct stakeholder interviews.

Your organization has been selected to participate in a stakeholder interview. During the interview, I will ask you to share information about:
services you provide to your members or the general business community, your relationship or interactions with the City and/or HABC, issues or concerns held by your organization or your members regarding doing business or attempting to do business with the City and/or HABC or their primes, and suggested recommendations to improve the city's and/or HABC's procurement process or M/WBE program implementation.

I'd like to schedule a date and time to talk with you to conduct this very important interview. Our meeting should last about an hour. When can we schedule your interview?

| Name of <br> Organization: |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| Date of Confirmation Call: |  | Industry Type: |  |
|  |  | Interview <br> Date: |  |

## Date of Interview

Interviewer's Name

| Interviewee Information |  |
| :--- | :--- |
| Organization Name |  |
| Interviewee Name |  |
| Interviewee Title |  |
| Interviewee Phone \# |  |
| Interviewee Email |  |
| Type of Organization |  |

Please describe your organization's mission and strategic objectives.
What is your organization's catchment area?
How long has your organization been in existence?

How would you describe the economic state of minority- and women-owned firms in the Baltimore region?

Are you seeing any trends in business growth or decline?
If so, what is happening?

Does your organization recognize or identify LGBT-, veteran- and/or disabled-owned and operated firms?

Does your organization provide professional or business development program or services for your members that addresses industry best practices, economic growth, business sustainability, etc.?

If so, what are your cornerstone programs and what has been the impact to your members?

Does your organization have a working relationship or partnership with the City and/or Housing Authority? For example, work together to host events or share information, staff are members, etc.
If so, how do you work with the City and/or Housing Authority?
Which department(s) do you work with? (This includes any committees, councils, boards, etc.)
[IF ORG IS NON-TYPE GROUP] Does your organization recruit M/WBE firms as a part of your membership campaigns? If so, what are some of the methods you use?

Does this include person with disabilities, LGBT and veteran owned businesses?

In the industry your organization represents, what barriers are there to entry into selfemployment?

Are the barriers different for firms that are owned by minorities or women than for firms owned by non-minorities?
What about LGBT-, veteran- and/or person with disability-owned business enterprises. Do they face the same or different barriers?

Do you feel that minority, and women firms face greater challenges operating their business and being competitive than non-minority firms? (Receiving and maintaining insurance, bonding, and financing, cost of materials, etc.)
Please tell me more about that.
Would the challenges be different or the same for LGBTBE?
Do firms owned by people with disabilities face any different challenges?

What do you consider to most interfere with your members ability to do business in the private sector? (Barriers to doing business, such as licensing, "good old boy" network, financing, stereotypes, etc.)
What recommendations would you suggest on ways firms may overcome these barriers?

Are you familiar with the M/WBE program administered by the City or HABC?
If so, what is your general knowledge about these programs?
Are you aware of any services offered to your members under these programs?
What recommendations do you have for improvement of the City's and/or HABC's M/WBE program?

What is your general knowledge about the City's/HABC's procurement and contracting practices?
What are some of the most challenging aspects of the contracting practices your member face? What recommendations do you have for improvements to the procurement and contracting practices?

Have your members expressed any concerns with their ability to work or difficulty working with the City's and/or HABC?

Do their concerns influence their willingness to do business with the City or HABC?
What processes or practices would you suggest to address their concerns?

What barriers do you feel your members face when doing business or trying to do business with the City/HABC or their primes?
What are your recommendations on how firms can overcome these barriers?
What actions do you think the City/HABC can take to minimize barriers?

Are there any other issues that you think are important for the study to address? Why is the issue significant?

On behalf of the City and HABC, thank you for your participation in this interview. If you would like more information on the Study contact MGT Consulting Group, Ms. Vernetta Mitchell at (850) 386-3191 or email at vmitchell@mgtconsulting.com. The city contact is Mr. Christopher Lundy at christopher. Iundy@baltimorecity.gov. The HABC contact is Steve Suit at Steve.Suit@habc.org.

## Appendix I

List of Trade Associations and Business Organizations

| 100 Black Men of Greater Washington, DC | Charles County Minority Business Advocacy Council's | Maryland Chamber of Commerce |
| :---: | :---: | :---: |
| African-American Chamber of Commerce of Montgomery | DC Chamber of Commerce | Maryland Commission on Indian Affairs |
| County | Georgetown University |  |
| Alliance for Hispanic | Greater Baltimore Black | Maryland Construction Network |
| Commercial Contractors - | Chamber of Commerce | Maryland Department of |
|  | Greater Baltimore Committee | Development |
| Anne Arundel County Economic |  |  |
| Development Authority | Greater Bowie Chamber of Commerce | Maryland Hispanic Chamber of Commerce |
| Asian Pacific American Chamber of Commerce | Greater Prince George's Business Roundtable | Maryland LGBT Chamber of Commerce |
| Associated General Contractors of Metro DC | Greater Washington Board of Trade | Maryland Minority Contractors Association |
| Baltimore Washington Corridor |  |  |
| Chamber | Greater Washington Hispanic | Maryland Procurement |
| Black Chamber of Commer | Chamber of Commerce | Technical Assistance Program (PTAP) |
| Anne Arundel County | Greater Washington Urban |  |
|  | League | Maryland Small Business |
| Bowie Business Innovation |  | Development Center |
| Center | Hispanic Chamber of Commerce of Montgomery County | Maryland Small Business |
| Calvert County Chamber of |  | Reserve |
| Commerce | Howard County Chamber of Commerce | shington Minority |
| Calvert County Minority |  | Companies Association, Inc. |
| Business Alliance | Howard County Economic |  |
|  | Development Authority | Maryland Works |
| Capital Region Minority Supplier |  |  |
| Development Council | KoBE | Maryland-India Business |
|  |  | Roundtable |
| Center for Business Inclusion \& | Laurel Board of Trade |  |
| Diversity |  | Maryland-National Capital |
|  | Maryland State Department of | Building Industry Association |
| Charles County Chamber of | Education |  |
| Commerce |  | Minority Business Development |
|  | Maryland Black Chamber of | Agency - Baltimore Business |
|  | Commerce | Center |




[^0]:    ${ }^{1}$ Chapter 4, Market Area and Utilization Analyses

[^1]:    ${ }^{2}$ Chapter 3, Section 3.4, pages 3-10 \& 3-11
    3 Nera Economic Consulting 2014 pp. 24

[^2]:    ${ }^{4}$ Business ownership classification was based on the race, ethnicity, and gender classification of the owner during the study period.

[^3]:    ${ }^{5}$ Richmond v. Croson, 488 U.S. 469 (1989).
    ${ }^{6}$ Adarand v. Peña, 515 U.S. 200 (1995).
    ${ }^{7}$ H.B. Rowe v. Tippett, 2010 WL 2871076 (4 ${ }^{\text {th }}$ Cir. 2010).

[^4]:    ${ }^{8}$ Id. at 479-80.
    ${ }^{9}$ Id. at 480
    10 Id.

[^5]:    ${ }^{11}$ Id. at 511.
    12 Id. at 493.
    ${ }^{13}$ Mississippi University for Women v. Hogan, 458 U.S. 718, 724 (1982) (quoting Kirchberg v. Feenstra, 450 U.S. 455,461 (1981)); see also United States v. Virginia, 518 U. S. 515, 531 (1996), Nguyen v. U.S., 533 U.S. 53, 60 (2001). For an earlier Fourth Circuit application of intermediate scrutiny see Adkins v. Rumsfeld, 464 F.3d 456, 468 (4 ${ }^{\text {th }} \mathrm{Cir}$. 2006).
    ${ }^{14}$ Hogan, 458 U.S. at 724 (internal quotation marks omitted).
    ${ }^{15}$ H.B. Rowe, at 10 (citing Engineering Contractors at 909).
    ${ }^{16}$ Id. at 10 (citing Engineering Contractors at 910, Concrete Works at 959).

[^6]:    ${ }^{17}$ Hunter v. Regents of University of California, 190 F.3d 1061 (9 ${ }^{\text {th }}$ Cir. 1999).
    ${ }^{18}$ Petit v. Chicago, 352 F.3d 1111 (7 ${ }^{\text {th }}$ Cir. 2003).
    ${ }^{19}$ Grutter v. Bollinger, 539 U.S. 306 (2003). For an argument that other bases could serve as a compelling interest in public contracting, see Michael K. Fridkin, "The Permissibility of Non-Remedial Justifications for Racial Preferences in Public Contracting," 24 N. III. U. L. Rev. 509 (Summer 2004).
    ${ }^{20}$ Croson, 488 U.S. at 492, 509-10.
    ${ }^{21}$ Coral Construction v. King County, 941 F.2d 910, 918 (9th Cir. 1991).
    22 Id. at 922.
    ${ }^{23}$ See, e.g., Engineering Contractors v. Dade County, 122 F.3d 895 (11 ${ }^{\text {th }}$ Cir. 1997); Contractors Association v. Philadelphia, 6 F.3d 990, 1009 n. 18 (3 $3^{\text {rd }}$ Cir. 1993); Concrete Works v. Denver, 36 F.3d 1513 (10 ${ }^{\text {th }} \mathrm{Cir} .1994$ ).
    ${ }^{24}$ See, e.g., Coral Construction, 941 F.2d 910, 920.
    25 Shaw v. Hunt, 517 U.S. 899 (1996).
    ${ }^{26}$ Id. at 910.

[^7]:    ${ }^{27}$ AUC v. Baltimore, 83 F.Supp.2d 613, 620-22 (D.Md. 2000); West Tenn. ABC v. Memphis City Schools, 64 F.Supp.2d 714, 718-21 (W.D. Tenn. 1999).
    ${ }^{28}$ Rothe v. U.S. Dept. of Defense, 413 F.3d 1327, 1328 (Fed Cir. 2005).
    29 Scott v. City of Jackson, 199 F.3d 206, 216-17 (5th 1999).
    ${ }^{30}$ Id. at 215 (quoting Bras v. California Public Utilities Commission, 59 F.3d 869, 875 (9 ${ }^{\text {th }}$ Cir. 1995)).
    ${ }^{31}$ Maryland Troopers Assn v. Evans, 993 F.2d 1072, 1078 (4 ${ }^{\text {th }}$ Cir. 1993).
    ${ }^{32}$ See, e.g., AGC v. Columbus, 936 F.Supp 1363, 1393 (SD Ohio 1996)(rev'd on other grounds).
    ${ }^{33}$ Rothe Development Corporation v. United States Department of Defense, 545 F.3d 1023, 1039 (Fed Cir 2008) (citing district court discussion of staleness in Western States Paving and Sherbrooke Turf).

[^8]:    ${ }^{34}$ Safeco Ins. Co. of America v. City of White House, 191 F.3d 675, 692 ( $6^{\text {th }}$ Cir. 1999) (citing Allen v. Alabama State Bd. of Education, 164 F.3d 1347 (11 ${ }^{\text {th }}$ Cir. 1999).
    35 Virdi v. DeKalb County School District, 135 Fed. Appx. 262, 267 (11 ${ }^{\text {th }}$ Cir. 2005).
    ${ }^{36}$ Scott v. City of Jackson, 199 F.3d 206, 215 (5th Cir. 1999).
    ${ }^{37}$ Houston Contractors Assn. v. Houston Metro, 1999 U.S. App. LEXIS 15100 (5 th Cir. 1999).
    ${ }^{38}$ Croson, 488 U.S. at 501, quoting Hazelwood School Division v. United States, 433 U.S. 299, 307-308 (1977).
    ${ }^{39}$ Id. at 501.
    ${ }^{40}$ Croson, 488 U.S. at 503-504.
    ${ }^{41}$ H.B. Rowe, at 11. See also, Engineering Contractors, 122 F.3d at 914; Concrete Works IV, 321 F.3d at 964-69.

[^9]:    ${ }^{42}$ Croson, 488 U.S. at 509 (emphasis added).
    ${ }^{43}$ Id., 488 U.S. at 498.
    ${ }^{44}$ H.B. Rowe, at 13. In Concrete Works, in the context of plaintiffs' complaint that the city of Denver had not used such information, the Tenth Circuit noted that bid information also has its limits. Firms that bid may not be qualified or able, and firms that do not bid may be qualified and able, to undertake agency contracts. Concrete Works II, 36 F.3d at 89-90; Concrete Works IV, 321 F. 3 d at 983-84.
    ${ }^{45}$ Contractors Ass'n of E. Pennsylvania v. City of Philadelphia, 91 F.3d 586, 605 (3rd Cir. 1996).
    ${ }^{46}$ Id.
    47 Id.
    48 George LaNoue, Who Counts? Determining the Availability of Minority Businesses for Contracting After Croson, 21 Harv. J. L. and Pub. Pol. 793, 833 (1998).
    49 Jon Wainright and Colette Holt, National Cooperative Highway Research Program: Report 644: Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program (2010).
    ${ }^{50} 488$ U.S. at 502.

[^10]:    51321 F.3d at 983-84.
    ${ }^{52} / \mathrm{ld}$.
    ${ }^{53}$ Croson, 488 U.S. at 501, quoting Hazelwood School District v. United States, 433 U.S. 299, 308, n. 13 (1977).
    ${ }^{54}$ H.B. Rowe, at 13.

[^11]:    ${ }^{55}$ Id. at 14-15.
    56 Id. at 14.
    57 Id. at 13.
    ${ }^{58} \mathrm{Id}$. at 12.
    ${ }^{59}$ Contractors Association, 91 F.3d at 599-601.
    ${ }^{60}$ H.B. Rowe, at 15.
    ${ }^{61}$ Concrete Works at 985; Sherbrooke Turf, 345 F.3d 964, 973 ( $8^{\text {th }}$ Cir. 2003).
    ${ }^{62}$ Coral Construction, 941 F.2d at 922 (citing Croson, 488 U.S. at 492) (emphasis added).

[^12]:    ${ }^{63}$ See Croson; see generally I. Ayres and F. Vars, "When Does Private Discrimination Justify Public Affirmative Action?" 98 Columbia Law Review 1577 (1998).
    ${ }^{64}$ Croson, 488 U.S. at 492.
    ${ }^{65}$ H.B. Rowe, at 27.
    ${ }^{66}$ Adarand v. Slater, 228 F.3d 1147 (10 th Cir. 2000).
    ${ }^{67}$ Associated General Contractors of Ohio, Inc. v. Drabik, 214 F.3d 730, 734-35 (6th Cir. 2000); See also Concrete Works II, 36 F.3d at 1529; Coral Construction, 941 F.2d at 916; AGC v. New Haven, 791 F.Supp. 941, 947 (D. Conn. 1992).
    ${ }^{68}$ Contractors Association of Eastern Pennsylvania, Inc., 91 F.3d at 602; Engineering Contractors Association of South Florida, Inc., 122 F.3d at 914.
    ${ }^{69}$ Contractors Association of Eastern Pennsylvania. Inc., 91 F.3d at 602; see also Webster, 51 F. Supp. 2d 1354.
    ${ }^{70}$ Concrete Works IV, 321 F.3d at 69.

[^13]:    ${ }^{71}$ Engineering Contractors Association of South Florida, Inc., 122 F.3d at 921-22.
    ${ }^{72}$ Id. at 922.
    ${ }^{73}$ Builders Association of Greater Chicago v. County of Cook, 123 F. Supp.2d 1087 (ND IL 2000).
    ${ }^{74}$ Builders Association of Greater Chicago v. County of Cook, 256 F.3d 642, 645 (7 ${ }^{\text {th }}$ Cir. 2001).
    ${ }^{75} \mathrm{Id}$.
    ${ }^{76} \mathrm{ld}$.
    ${ }^{77}$ Adarand v. Slater, 228 F.3d at 1169-70 (10 th $C i r .2000$ ).
    ${ }^{78}$ Concrete Works IV, 321 F.2d at 977. The district court rejected evidence of credit market discrimination as adequate to provide a factual predicate for an M/WBE program. Concrete Works v. City and County of Denver, 86 F. Supp. 2d 1042 (D. Colo. 2000) (Concrete Works I).
    79 Id. at 977.

[^14]:    ${ }^{80}$ Builders Association of Greater Chicago, 256 F.3d at 645.
    ${ }^{81}$ Concrete Works IV, 321 F.3d at 984-85.
    ${ }^{82}$ Concrete Works IV, 321 F.3d at 985; Sherbrooke Turf, 345 F.3d at 973.
    ${ }^{83}$ See, e.g., Northern Contracting v. Illinois. DOT., No. 00-C-4515.
    ${ }^{84}$ Croson, 488 U.S. at 509.
    ${ }^{85}$ H.B. Rowe, at 17.
    ${ }^{86}$ H.B. Rowe, at 15 (quoting Concrete Works, 321 F.3d at 989).
    ${ }^{87}$ H.B. Rowe at 17 (citing Maryland Troopers).

[^15]:    ${ }^{88}$ Eng'g Contrs. Ass'n of S. Florida, Inc., 122 F.3d at 925.
    ${ }^{89} 1 \mathrm{~d}$.
    ${ }^{90}$ Coral Construction, 941 F.2d at 919 (emphasis added).
    ${ }^{91}$ Id. See also $A G C C$ II, 950 F.2d at 1414-1415.
    ${ }^{92}$ Coral Construction, 941 F.2d at 917.
    ${ }^{93}$ Id. at 917-18.
    ${ }^{94} \mathrm{Id}$.
    ${ }^{95}$ AGCC II, 950 F.2d at 1414-1415.
    ${ }^{96}$ Id. at 1403-1405.

[^16]:    ${ }^{97}$ Id. at 1416. This evidence came from 10 public hearings and "numerous written submissions from the public." Id. at 1414.
    ${ }^{98}$ Id. at 1416, n. 11.
    ${ }^{99}$ Id. at 1416.
    ${ }^{100}$ Contractors Association, 91 F.3d at 605; Engineering Contractors, 122 F.3d at 926-929; Verdi v. DeKalb County School District, 135 Fed. Appx 262, 2005 WL 38942 (11 $1^{\text {th }}$ Cir. 2005).
    ${ }^{101}$ H.B. Rowe, at 18 (quoting Belk v. Charlotte-Mecklenburg Bd. of Educ., 269 F.3d 305, 344 (4 ${ }^{\text {th }}$ Cir. 2001)).
    ${ }^{102}$ H.B. Rowe, at 18 (quoting Alexander, 95 F.3d at 316).
    ${ }^{103}$ H.B. Rowe, at 18.

[^17]:    ${ }^{104}$ Adarand, 515 U.S. at 238 (internal quotations and citations omitted).
    ${ }^{105}$ H.B. Rowe, at 18 (quoting H.B. Rowe, Inc., 589 F. Supp. 2d at 597).
    106 Sherbrooke, 354 F.3d at 972.
    ${ }^{107}$ Adarand v. Slater, 228 F.3d at 1179, 1180.
    ${ }^{108}$ Contractors Association, 91 F.3d at 607 ("The district court also found ... that the ... Ordinance offered only one reference point for the percentages selected for the various set-asides -- the percentages of minorities and women in the general population."). See also Builders Association of Greater Chicago, 256 F.3d at 647.

[^18]:    ${ }^{109}$ Contractors Association, 91 F.3d at 606.
    ${ }^{110}$ H.B. Rowe, at 19.
    ${ }^{111}$ Compare federal regulation 49 CFR Part 26 Appendix A(2) with North Carolina regulation 19NCAC 02d.1109(7).
    11249 CFR, Section 26, Part 53.
    ${ }^{113}$ H.B. Rowe, at 20.
    ${ }^{114}$ N.C. Gen. Stat. § 136-28.4(c)(2).

[^19]:    ${ }^{115}$ See, generally, Thomas J. Hasty III, "Minority Business Enterprise Development and the Small Business
    Administration's 8(a) Program: Past, Present, and (Is There a) Future?" Military Law Review 145 (Summer 1994): 1-112.
    ${ }^{116} 10$ U.S.C. § 2301 (1976).
    11715 USC 631(a).
    118 See 32 C.F.R. §§ 1-701.1 to 1-707.7.
    11915 U.S.C. § 637(b)(11).
    ${ }^{120}$ Federal Acquisition Regulations 19.502-2.
    121706 F.2d 702 (5 ${ }^{\text {th }}$ Cir. 1983), cert. denied, 464 U.S. 1008 (1983).
    122 Administrative Procedures Act, 5 U.S.C. §§ 552(a)(1)(E) (1976) and the "fair proportion" language of the Armed Forces Procurement Act, 10 U.S.C. § 2301 et seq. (1976), and the Small Business Act, 15 U.S.C. §631 et seq. (1976).

[^20]:    ${ }^{123}$ J. H. Rutter Rex Manufacturing, at 706 F.2d at 730 (emphasis added). See also Dandridge v. Williams, 397 U.S. 471 (1970).
    ${ }^{124}$ For example, Florida started a small business preference program in 1985 (FL St Sec. 287); Minnesota, in 1979 (Mn Stat 137.31); New Jersey, in 1993 (N.J.S.A 52:32-17).
    ${ }^{125}$ Cleveland Construction v. Cincinnati, Case No. A0402638 (Ct Comm Pleas, Hamilton County, Ohio 2005).

[^21]:    126 Western States Paving, 407 F.3d at 992.
    ${ }^{127}$ Id. (citing Rothe Development Corporation. v. United States Department of Defense, 262 F.3d 1306, 1329 (Fed. Cir. 2001)).
    128 The Ninth Circuit distinguished a previous case which did not involve an 'as applied' challenge to the federal DBE program. Milwaukee County Pavers Association v. Fiedler, 922 F.2d 419 (7th Cir. 1991). The Seventh Circuit disagreed with the Ninth Circuit's reading of Milwaukee County Pavers. See Northern Contracting, 473 F.3d 715, 721 fn. 5 (7th Cir. 2007).
    129 Western States Paving, 407 F. 3d at 998.
    130 Western States Paving, 407 F. 3d at 1000.
    ${ }^{131}$ Sherbrooke Turf, 345 F.3d 964.
    ${ }^{132}$ Adarand v. Slater, 228 F.3d at 1174; see also Concrete Works IV, 321 F.3d at 985.

[^22]:    133 Western States Paving, 407 F.3d at 1001.
    ${ }^{134}$ Id. (quoting O'Donnell Construction Co. v. District of Columbia, 963 F.2d 420, 426 (D.C. Cir. 1992)).
    135 Western States Paving, 407 F.3d at 1001 (quoting Associated General Contractors of California, Inc., 950 F.2d at 1414).
    ${ }^{136}$ Kossman Contr. v. City of Houston, No. H-14-1203, 2016 U.S. Dist. LEXIS 37708 (S.D. Tex. Feb. 16, 2016), adopted by Kossman
    Contr. Co. v. City of Houston, No. H-14-1203, 2016 U.S. Dist. LEXIS 36758 (S.D. Tex. Mar. 22, 2016).
    ${ }^{137}$ Midwest Fence Corp. v. United States Dep't of Transp., 840 F.3d 932 (7th Cir. 2016).
    138 Dunnet Bay Constr. Co. v. Borggren, 799 F.3d 676 (7th Cir. 2015).
    ${ }^{139}$ Associated Gen. Contractors. of Am., San Diego Chapter, Inc. v. Cal. Dep't of Transp., 713 F.3d 1187, 1190 (9th Cir. 2013).

[^23]:    ${ }^{140}$ Summary of The Adopted Budget Fiscal 2021.

[^24]:    ${ }^{141}$ Organizational chart reflective during the current study period.
    ${ }^{142}$ Office of Inspector General Investigative Report Synopsis July 2, 2020.
    ${ }^{143}$ Request for Proposal Procurement Assessment and Transformation Solicitation Number B50006206.

[^25]:    144 Baltimore City Board of Estimates-Regulations on Procurement, Protests, Minority, and Women-owned Business Enterprise and Debarment/Suspension.

[^26]:    ${ }^{145}$ Request for Proposal Procurement Assessment and Transformation Solicitation Number B50006206.

[^27]:    ${ }^{146}$ Baltimore City Board of Estimates-Regulations on Procurement, Protests, Minority, and Women-owned Business Enterprise and Debarment/Suspension.

[^28]:    ${ }^{147}$ Article 5, Subtitle 28.
    148 The Minority and Women's Business Opportunity Annual Report 2020.
    149 The Minority and Women's Business Opportunity Annual Report 2020.

[^29]:    ${ }^{150}$ Article 5, Subtitle 28.
    ${ }^{151}$ Article 5, Subtitle 28.

[^30]:    Source: The Minority and Women's Business Opportunity Office Annual Report 2020.

[^31]:    152 The State of Minority- and Women-Owned Business Enterprise: Evidence from Baltimore; NERA Economic Consulting, 2014, page 185

[^32]:    ${ }^{153}$ Croson, 488 U.S. at 509; see Webster, 51 F.Supp.2d at 1363, 1375.
    ${ }^{154}$ Concrete Works of Colo. v. City \& Cnty. of Denver, 321 F.3d 950, 971 (10th Cir. 2003).
    ${ }^{155}$ Equal Employment Opportunity Commission, Uniform Guidelines on Employee Selection Procedures, Section 4, Part D, "Adverse impact and the 'four-fifths rule.'"
    ${ }^{156}$ In Teal and other affirmative action cases, the terms "adverse impact," "disparate impact," and "discriminatory impact" are used interchangeably to characterize values of 80 and below.

[^33]:    ${ }^{157}$ Transportation Research Board of the National Academies, National Cooperative Highway Research Program Report 644, Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program (2010), pages 49-50.

[^34]:    158 The State of Minority- and Women-Owned Business Enterprise: Evidence from Baltimore; NERA Economic Consulting, 2014, page 190

[^35]:    ${ }^{159}$ Richmond v. J. A. Croson Co., 488 U.S. 469, 492 (1989).
    ${ }^{160}$ Adarand Constructors, Inc. v. Slater, 228 F.3d 1147, 1168-70 (10th Cir. 2000).
    ${ }^{161}$ Concrete Works of Colo. v. City \& Cnty. of Denver, 321 F.3d 950, 977 (10th Cir. 2003).
    ${ }^{162}$ Adarand Constructors, Inc. v. Slater, 228 F.3d 1147 (10th Cir. 2000)

[^36]:    ${ }^{163}$ Concrete Works IV, 321 F.3d 950, 967-69 (10th Cir. 2003).
    164 These represent the most recent available data provided through the SBO program and were released in 2016

[^37]:    165 Sales includes total shipments, receipts, revenue, or business done by the firm.
    166 The two-digit NAICS code level was utilized as those codes are the most prevalent level across all the 2012 SBO data.

[^38]:    ${ }^{167}$ All firms, a compilation of employer firms and nonemployer firms, were examined since nonemployer firms can provide services at the subcontractor/subconsultant level, as well hire independent contractors to increase capacity.
    ${ }^{168}$ Employer firms include firms with payroll at any time during 2012.

[^39]:    ${ }^{169}$ Employer firms include firms with payroll at any time during 2017.

[^40]:    ${ }^{170}$ Concrete Works of Colo. v. City \& Cnty. of Denver, 321 F.3d 950 (10th Cir. 2003).
    171 See Journal of Econometrics, Vol. 61, Issue 1, devoted entirely to the econometrics of labor market discrimination and segregation.

[^41]:    172 Logistical regression, or logit, models generate predicted probabilities that are almost identical to those calculated by a probit procedure, used in Concrete Works v. City and County of Denver case. Logit, however, has the added advantage of dealing more effectively with observations at the extremes of a distribution. For a complete explanation, see Interpreting Probability Models (T.F. Liao, Text 101 in the Sage University series).

[^42]:    173 Due to inadequate sample size for all races in the architecture and engineering PUMS 2015 data, the architecture and engineering categories were merged with the professional services category.
    174 The variables used in this analysis were modeled after those incorporated in the same analysis from Concrete Works v. City and County of Denver.

[^43]:    ${ }^{175}$ Statistically significant is the likelihood that a relationship between two or more variables is caused by something other than random chance. MGT incorporates the statistical $95 \%$ confidence interval. This means that if the same population is sampled on numerous occasions and interval estimates are made on each occasion, the resulting intervals would bracket the true population parameter in approximately $95 \%$ of the cases.

[^44]:    ${ }^{176}$ See Chapter 5, Product Market, Utilization, and Disparity Analyses for explanation.

[^45]:    Source: Business Surveys, SkyBase7 \& Online Surveys.

[^46]:    Source: 2021 Business Surveys SkyBase7 and an online survey.

