

# Additional Report

The City of West Palm Beach



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# ***Foreword***

## ***I. Introduction***

Mason Tillman Associates, Ltd. (Mason Tillman) was commissioned in March 2015 to conduct the *2016 City of West Palm Beach Disparity Study* (2016 Disparity Study). The Disparity Study was conducted in compliance with the legal standards set forth in *J.A. Croson Co. v. City of Richmond*<sup>1</sup> and its progeny. Pursuant to *Croson*, the 2016 Disparity Study included a legal analysis, a market area analysis, a prime and subcontract utilization, availability, and disparity analysis and recommendations.

The 2016 Disparity Study documented a statistically significant disparity in the utilization of minority and woman-owned businesses (MWBES) available in the City’s market area. Where the available M/WBE prime contractors and subcontractors were underutilized, a statistical test was conducted to calculate the probability of observing the empirical disparity ratio. The test performed determined underutilization at a statistically significant level for both prime and subcontractors. Race and gender-conscious and race and gender-neutral recommendations were offered to address the documented disparity.

At the completion of the 2016 Disparity Study, an Additional Report was commissioned as a compendium to the Study. The findings from the additional research are presented in the six chapters of this Report. The Report documents socio-economic factors in the market area, and components of the procurement policy that could have contributed to the statistically significant disparity documented in the 2016 Disparity Study. It also presents anecdotal accounts that revealed patterns of practices in the contracting process that adversely affected M/WBES access to City prime and subcontracts.

The anecdotal research revealed discrimination that limited M/WBES access to City prime and subcontracts. This qualitative research also produced evidence that M/WBES perceive race and gender barriers in the award of the City’s prime contracts and subcontracts. The analysis of socioeconomic factors in the private sector revealed statistical evidence of discrimination against minorities and Caucasian females. Disparities, which evinced discrimination, were revealed when the education, number of employees and years in business of minorities and Caucasian females were compared to similarly situated Caucasian males. Furthermore, it is reasonable to assume that the availability of M/WBES enumerated in the 2016 Disparity Study would have been greater but for the presence of racial and gender-based socio-economic factors that restricted business ownership rates and business earnings. Had the formation of M/WBES not been restricted there is no doubt the statistical disparities documented in the 2016 Disparity Study would have been greater.



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<sup>1</sup> *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989).

Additionally, procurement policies were identified in the *General Procurement Procedures*<sup>2</sup> and the *Small Business Program Code Article IX*<sup>3</sup> that could limit M/WBEs' access to City contracts. The impact of the policies was evident in the 2016 Disparity Study statistical findings. While the policy examination revealed specific procurement procedures that could create barriers to adversely affect the award of contracts to small, minority, and women owned business enterprises (S/M/WBEs) the statistically significant discrimination revealed in the two studies was more profound.

The statistical and anecdotal findings from the Additional Report, when considered with the statistically significant underutilization of available MWBE prime and subcontractors documented in the 2016 Disparity Study, present a compelling portrayal of discrimination in the market area. In short, the findings from the Additional Report bolster the statistical evidence of disparity documented in the 2016 Disparity Study and, as Justice O'Connor opined, "evidence 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."<sup>4</sup>

Given the nature of the disparity findings, the remedy must be comprehensive and include both race and gender specific and race and gender-neutral policies. Mere modifications to the SBE program would be insufficient to address the statistically significant disparity that has been revealed in the 2016 Disparity Study and the Additional Report. Furthermore, a modified SBE program would not be responsive to the City's legal requirement, as set forth in *Engineering Contractors Ass'n v. Metropolitan Dade County*,<sup>5</sup> United States Court of Appeals for the Eleventh Circuit (Eleventh Circuit). In *Engineering Contractors Ass'n*, the Eleventh Circuit found that local governments in Florida have a compelling governmental interest in remedying disparity in the award of their contracts to available market area M/WBEs. It is therefore our considered opinion that the findings from the 2016 Disparity Study, bolstered by the data from the Additional Report dictate that the City promulgate a policy that establishes a race and gender-based program to remedy the discrimination.

The report findings are presented in six chapters. An outline of the chapters is listed below:

1. Chapter 1: *Legal Analysis of the Geographic Market Area Principle* presents an overview of the legal criteria for defining the geographic market area for a disparity study.
2. Chapter 2: *Procurement Process Review* presents an analysis of the procurement policy that could adversely affect the award of contracts to Small Business Enterprises that may be owned by a minority or a woman.



<sup>2</sup> *General Procurement Procedures*. City of West Palm Beach Procurement Department, 2017.

<sup>3</sup> *Article IX, Small Business Program* adopted October 6, 2008.

<sup>4</sup> *Croson*, 488 U.S. at 509; *see Teamsters*, 431 U.S. at 338.

<sup>5</sup> 943 F. Supp. 1546 (S.D. Fla. 1996) (“*Dade County I*”).

3. Chapter 3: *Private Sector Subcontract Analysis* presents an analysis of the utilization of M/WBE<sup>6</sup> subcontractors on private sector construction projects permitted in the City of West Palm Beach.
4. Chapter 4: *Private Sector Regression Analysis* presents an assessment of the impact of race and gender on self-employment rates and business earnings in the City of West Palm Beach.
5. Chapter 5: *NAICS Code Classification* presents the assignment of North American Industrial Classification System (NAICS) codes to the prime contracts examined in the 2016 Disparity Study and the available businesses enumerated.
6. Chapter 6: *Anecdotal Analysis* presents evidence from a focus group and an online survey of certified small businesses to garner evidence of patterns and practices that may have limited the access of M/WBEs to the City’s contract opportunities.



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<sup>6</sup> Hereinafter referred to as Minority and Caucasian female-owned businesses in the statistical tables.

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# **CHAPTER 1: Legal Analysis of the Geographic Market Area Principle**

## **I. Introduction**

This chapter is an overview of the legal criteria for defining the geographic market area for a disparity study. And it addresses the question of whether or not a geographic market area can represent 50 percent or less of the dollars spent by the government. The detailed legal review of the constitutional standard utilized by the federal courts to define a local government’s market area is set forth in the *Legal Analysis Chapter* of the 2016 Disparity Study. As discussed therein, there is no single definition of the market area.

The Supreme Court’s decision in *City of Richmond v. J.A. Croson Co.*<sup>7</sup> held that a race-based program established by a local government must be supported by evidence of past discrimination in the award of contracts to Minority Business Enterprises (MBE) located in its geographic market area. *Croson* found the City of Richmond, Virginia’s MBE construction program to be unconstitutional because there was insufficient evidence of discrimination in the local construction market.

*Croson* was explicit in saying that the local construction market area was the appropriate geographical framework within which to perform the statistical comparison of business availability in the market area to the government’s utilization of available market area businesses. Given this legal standard, the identification of the geographic market area is particularly important because it establishes the parameters within which to identify the available businesses needed to conduct a disparity study.

*Croson* does not specify a single methodology for determining the market area. It does, however, state that the market area cannot include geographic areas where the agency does not award contracts. Since *Croson*, several circuit courts have defined market area parameters. The market area definitions used by *Croson* and its progeny are discussed below.

## **II. Relevant Case Law**

While *Croson* emphasized the importance of the local market area, it provided little assistance in defining its parameters. In discussing the geographic parameters of the City of Richmond, Virginia’s market area, the Court interchangeably used the terms “relevant market,” “Richmond construction industry,”<sup>8</sup> and “city’s construction industry.”<sup>9</sup> In *Croson*, these terms were all used to define the proper scope for examining whether or not the city had discriminated in the award of



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<sup>7</sup> *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989).

<sup>8</sup> *Croson*, 488 U.S. at 500.

<sup>9</sup> *Id.* at 470.

its contracts. This interchangeable use of terms does not lend support to a single or simple definition of market area.

*Croson's* progeny have provided various definitions for market area. It is clear from the body of cases that the definition of market area is *fact-based*, rather than dictated by a specific formula.<sup>10</sup> The United States Court of Appeals for the Eleventh Circuit, in *Cone Corporation v. Hillsborough County*,<sup>11</sup> considered the term 'market area' as defined in a study supporting Hillsborough County, Florida's MBE Program. The study used Hillsborough County as the market area to measure the availability of businesses to perform the County's contracts. The program was found to be constitutional under the compelling governmental interest element of the strict scrutiny standard.

Hillsborough County extracted market area data from within its own jurisdictional boundaries and assessed the percentage of minority businesses available in Hillsborough County. The court stated that the disparity study was properly conducted within the "local construction industry," which was defined as the County.<sup>12</sup>

Similarly, in *Associated General Contractors v. Coalition for Economic Equity (AGCCII)*,<sup>13</sup> the United States Court of Appeals for the Ninth Circuit found the City and County of San Francisco, California's MBE Program to have the factual predicate necessary to survive strict scrutiny. The San Francisco MBE Program was supported by a study that assessed the number of available MBE contractors within the City and County of San Francisco. The Ninth Circuit found it appropriate to use the City and County as the relevant market area in which to conduct a disparity study.<sup>14</sup>

The courts have also approved a market area definition that extended beyond a jurisdiction's geographic boundaries. In *Concrete Works v. City and County of Denver*,<sup>15</sup> the United States Court of Appeals for the Tenth Circuit directly addressed the issue of whether or not extra-jurisdictional evidence of discrimination can be used to determine the "local market area" for a disparity study. In *Concrete Works*, the defendant relied on evidence of discrimination in the six-county Denver, Colorado Metropolitan Statistical Area (MSA) to support its MBE program. Plaintiffs argued that the federal constitution prohibited consideration of evidence beyond jurisdictional boundaries. The Tenth Circuit disagreed.

Critical to the court's acceptance of the Denver MSA as the relevant local market was the finding that more than 80% of construction and design contracts awarded by the City and County of Denver were awarded to contractors within the MSA. The finding of 80 percent reflected the spend by the City and County within two industries under examination in the study. Another

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<sup>10</sup> See e.g., *Concrete Works of Colorado v. City of Denver, Colorado*, 36 F.3d 1513, 1528 (10th Cir. 1994) ("*Concrete Works*").

<sup>11</sup> *Cone Corporation v. Hillsborough County*, 908 F.2d 908 (11th Cir. 1990).

<sup>12</sup> *Id.* at 915.

<sup>13</sup> *Associated General Contractors of California v. Coalition for Economic Equity and City and County of San Francisco*, 950 F.2d 1401 (9th Cir. 1991).

<sup>14</sup> *AGCCII*, 950 F.2d at 1415.

<sup>15</sup> *Concrete Works*, 36 F.3d at 1528.



consideration was that the City and County of Denver’s analysis was based on United States Census data, which were available for the Denver MSA but not for the City of Denver itself. The City’s use of availability data, the court found, did not place an undue burden on nonculpable parties, as the City and County of Denver had expended a majority of its construction contract dollars within the six-county area defined as the local market. Citing *AGCCII*,<sup>16</sup> the Tenth Circuit noted “that any plan that extends race-conscious remedies beyond territorial boundaries must be based on very specific findings that actions that the city has taken in the past have visited racial discrimination on such individuals.”<sup>17</sup>

### ***III. Conclusion***

Since the body of cases examining the definition of a reasonable market area is fact-based, rather than dictated by a specific formula<sup>18</sup> it follows from *Croson* and its progeny that an entity may consider a market area that is beyond its own jurisdiction if a broader market area captures a majority of the entity’s spend. The cases support both a definition where the geographic market area is limited to the government’s jurisdictional boundaries, and one that extends beyond, when there is evidence that a significant amount of the spend is outside the jurisdiction’s boundaries.

This latter condition was documented in the *2016 Disparity Study*. A total of 80.75% of the construction contract dollars were spent with businesses domiciled in Palm Beach County. In addition, 55.35% of professional services contract dollars and 32.01% of the goods and services contract dollars were spent with businesses domiciled in the county. In the aggregate, the total dollars spent with businesses domiciled in the County was 51.47%. Given the standards set forth in the caselaw and the fact that more than 50 percent of the City’s spend is outside its jurisdictional boundaries, there is a legal basis for the geographic market area as presented in the *2016 Disparity Study*.



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<sup>16</sup> *AGCC II*, 950 F.2d at 1401.

<sup>17</sup> *Concrete Works*, 36 F.3d at 1528.

<sup>18</sup> *See e.g., Concrete Works of Colorado v. City of Denver, Colorado*, 36 F.3d 1513, 1528 (10th Cir. 1994) (“*Concrete Works*”).

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# **CHAPTER 2: Procurement Process Review**

## **I. Introduction**

This chapter is a review of the City of West Palm Beach’s procurement process, as outlined in the *General Procurement Procedures*<sup>19</sup> and the *Small Business Program Code Article IX*<sup>20</sup>. These documents govern the City’s procurement in the three industries analyzed in the 2016 City of West Palm Beach Disparity Study<sup>21</sup> – construction, professional services, and goods and services. The review was undertaken to determine whether the solicitation, evaluation, and award process, as set forth in the two documents, create barriers that could adversely affect the award of contracts to small businesses and minority and woman-owned business enterprises (S/M/WBEs).

The 2016 Disparity Study examined the effectiveness of the City’s procurement procedures through an assessment of its Small Business Enterprise (SBE) Program, which was in operation during October 1, 2010, to September 30, 2014, study period. The Code of Ordinances, Chapter 66, Article IX that delineates the standards for the Program, was reviewed as part of the assessment. The SBE Program assessment revealed that a significant percentage of the SBEs utilized on subcontracts were non-minority male certified SBEs. The results reflected the findings in the disparity analysis, where M/WBEs were underutilized at a statistically significant level. The findings of statistical disparity in the award of subcontracts to M/WBEs documented in the 2016 Disparity Study demonstrates that the SBE Program did not prohibit racial and gender discrimination.

## **II. Procurement Procedures Analyses**

### **A. Small Purchases [Procedure 20-15]**

Procedure 20-15 of the City’s *General Procurement Procedures* outlines how small purchases for goods and services and construction contracts are procured.

#### **1. Procedure**

The solicitation of small goods and services purchase orders valued from \$25,000 to \$50,000 requires three verbal or written quotes.<sup>22</sup> The requesting departments can obtain quotes directly from vendors if the department has prior approval from the Procurement Director. After the procurement department reviews the three quotes and recommendations from the requesting



<sup>19</sup> *General Procurement Procedures*. City of West Palm Beach Procurement Department, 2017.

<sup>20</sup> *Article IX, Small Business Program* adopted October 6, 2008.

<sup>21</sup> City of West Palm Beach Disparity Study August 2016

<sup>22</sup> *General Procurement Procedures, Procedure 20-15 (1)*. City of West Palm Beach Procurement Department, 2017.

department, a purchase order is issued. The City does not require budget detail or City commission approval for good and services purchases that are valued at less than \$25,000.

Formal solicitation of small construction contracts valued at \$100,000 or less is not required. The requesting and the procurement departments must obtain one to three contractor quotes. These procurements are also not subject to small business goal setting. For all purchases valued at \$50,000 or less, the City does not require advertising of the opportunities, nor does it require formal bids or proposals.

## **2. Potential Barriers**

Small purchase orders offer the maximum opportunity for the City to utilize S/M/WBEs as prime contractors. Without a requirement of public advertisement or targeted outreach to S/M/WBEs, the solicitation of the required quotes is at the user department's discretion. Because the requesting departments have latitude in discretionary purchases, unconscious bias can have unintended consequences for S/M/WBEs. Unconscious bias and the absence of oversight may impact the equity in purchase order awards.

## **3. Recommendation**

We recommend that criteria should be formulated to better define the process to solicit and award small purchase orders. The City should also require requesting departments to obtain at least one price quote from an S/M/WBE. The City's SBE directory would provide the requesting department access to certified small firms that offer the needed goods or services. This process would allow the user departments to increase the diversity of their contract awards and have more options in the selection of prime contractors.

### ***B. Blanket Purchase Order [Procedure 20-30]***

Procedure 20-30 of the *General Procurement Procedures* outlines how blanket purchase orders are procured. A blanket purchase order is placed to allow multiple delivery dates over a period of time, often negotiated to take advantage of predetermined pricing. It is normally used when there is recurring need for goods.

#### **1. Procedure**

The City can procure goods or services, during a time period of one year or less, using a blanket purchase order. A blanket purchase order is a procurement method that allows a department to solicit a contract for goods or services that are not specified at the time of award. To secure a blanket purchase order, a user department must submit a requisition that states the kind of items or services to be procured, the period of service, the amount budgeted, and persons authorized to issue purchase orders against the contract. User departments are authorized to issue purchase orders against a blanket purchase order without competition.



## 2. Potential Barriers

The blanket purchase order procurement method functionally reduces the number of small contracts the City can award to S/M/WBEs. Furthermore, the qualifications set forth in the solicitation for the blanket purchase order are commensurate with the total value of the award rather than the scope of the specific purchase orders issued against the blanket purchase order. Qualifications required to compete for the blanket purchase order, which authorizes the issuance of multiple small purchase orders to a single contractor, is therefore another barrier for S/M/WBEs. The blanket purchase order also puts the prime contractor in an advantageous position to establish a working relationship with many managers in various user departments while under a single contract.

## 3. Recommendation

The City should restrict the use of the blanket purchase orders to increase the number of small contracts solicited through the City's sheltered markets program. When this procurement method is used, the qualifications should be more in line with the average size of the purchase orders issued against the blanket purchase order instead of the estimated total value of the blanket purchase order. This will allow more businesses the opportunity to participate in the procurement method. Furthermore, targeted outreach to S/M/WBEs should be conducted when this procurement method is used, and the evaluation process should ensure that there is diversity in the contractors selected.

S/M/WBE subcontracting provisions should also apply to purchase orders issued for services. The blanket purchase order should contain the SBE requirement, and failure to comply with the requirement on each purchase order or provide a good faith effort report should be deemed a material breach of the contract.

### ***C. Selection Panel Process [Procedure 20-40]***

Procedure 20-40 of the *General Procurement Procedures* outlines the selection panel process, which is used for professional services contracts.

#### 1. Procedure

The request for proposals or statements of qualifications can be used when an invitation to bid is not applicable or practical. The evaluation and ranking of responses to the solicitation are conducted by a selection committee. The committee is formed by the Procurement Director with input from the user department's project manager.<sup>23</sup> The selection committee evaluates the submissions deemed to best meet the specifications described in the solicitation and considered to be the best value to the City.



<sup>23</sup> *General Procurement Procedures, Procedure 20-40*. City of West Palm Beach Procurement Department, 2017.

## 2. Potential Barriers

The procedures, however, do not specify requirements for choosing the members of the selection committee, or for staff diversity. There is also no reference to ensuring that the body is diverse or includes the Procurement Programs Compliance Officer as a voting member. The fact that there are no formal standards for staffing the selection committee could result in the repeated utilization of the same staff members and the ranking of the submittals based on familiarity with the respondents. Thus, any implicit bias which may influence the decisions made by the committee, could be structural.

## 3. Recommendation

The selection committee should reflect the City's ethnic and gender diversity to ensure the diversification of opinions and views of the professionals responsible for contract award decisions. In addition to representatives from the Procurement Department and the user department, the committee should include the Procurement Programs Compliance Officer and two minority and women panel members with professional experience in a related field. This diversity should ensure that the committee's members collectively have the experience to provide informed opinions on contractors' qualifications in a fair and objective manner. The diversity of the committee membership should mitigate any implicit bias.

Additionally, the committee's evaluation criteria should consider the number of previous awards to each proposer to avoid repeatedly awarding contracts to the same prime contractors. All panel members should be charged with the responsibility of increasing diversity when evaluating the proposals and statements of qualifications. To further this objective, the committee's recommendations should be reviewed by the Procurement Department before the recommendation for award is approved. The review should evaluate the diversity of the committee rankings, the evaluation criteria, and the previous awards to the top ranked firms. The City should also ensure that the ranking criteria used by the committee is objective.

### ***D. Substitution of an SBE Subcontractor [Small Business Program Sec 66-233]***

Section 66-223 of *Small Business Program Code Article IX* outlines the procedures for the substitution of an SBE subcontractor by a prime contractor.

#### 1. Procedure

Prime contractors can substitute a subcontractor at any time with written approval. To replace the SBE, the prime contractor must submit an amendment to the subcontracting plan containing an explanation for the substitution. A letter of intent signed by the subcontractor must also be provided. The SBE must be replaced by another SBE unless approval to the contrary is granted by the procurement official.



## 2. Potential Barriers

There are no clear procedures to approve the subcontractor substitution, nor is there a due process procedure to ensure that the requested substitution comports with formal standards. In the absence of a formal process, the decision could be arbitrary and capricious. Furthermore, the standard for approval of a non-SBE replacement is not defined; therefore, the substitution decision could also be arbitrary.

## 3. Recommendation

Formal standards for both subcontract and prime contractor substitution should be promulgated and adhered to on all contracts. A solicitation that requires the participation of an SBE should include substitution standards obligating the prime contractor to substitute a listed SBE with another SBE-certified business. The due process provision should afford the SBE prime contractor or subcontractor the right to a hearing and an option to submit a written or oral response to the substitution request. In addition, the due process should be clearly set forth in the solicitation and the prime contract.

### ***E. Subcontracting for Other Projects [Small Business Program Sec 66-229]***

Section 66-229 of *Small Business Program Code Article IX* outlines the procedures for compliance with the SBE subcontract goal by a prime contractor.

## 1. Procedure

Section 66 of the *Small Business Program Code* discusses prime contractors' compliance with the SBE subcontracting goal for master agreements, construction projects and other contracts. The standard for compliance with the SBE goal is the same for each procurement method. The goal, which is applied as a percentage of the prime contract, must be reported on the subcontractor utilization plan and with the bid and the proposal. Failure to submit a subcontractor utilization plan shall be grounds for disqualification.

## 2. Potential Barriers

There are no clear procedures to approve the subcontractor utilization plan or ensure compliance with the approved plan. While the prime contractor's failure to fulfill the small business plan may be deemed a material breach of the contract, the SBE Program does not establish the authority to make the determination of a breach. Furthermore, there is no established timeline for reviewing compliance with the subcontractor utilization plan after contract award.

## 3. Recommendation

Formal standards for the review of the subcontractor utilization plan at the time of bid opening and during the term of the contract should be promulgated and applied on all contracts with an SBE





goal. When the solicitation requires the participation of an SBE, the specifications should specify the compliance standards that the prime contractor shall meet. The reporting format and schedule should be detailed in the prime contract, and the prime contractor should be required to include the SBE compliance standards in each subcontract.

### ***III. Conclusion***

The provisions in Article IX, of the SBE Program, which govern the procurement process should be incorporated into the relevant sections of the General Procurement Procedures. User departments with direct or delegated procurement authority would have a single and comprehensive procedures document to govern their procurement decisions. The consolidation of the two standards into a single document should eliminate some of the barriers to the participation of S/M/WBEs referenced in this chapter as possible barriers for S/M/WBEs seeking to contract with the City and its prime contractors. Barriers identified by the M/WBEs that provided testimony in the anecdotal research, presented in the Anecdotal Analysis chapter, might also be mitigated if the SBE Program provisions were integrated into the General Procurement Procedures.



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# **CHAPTER 3: Private Sector Subcontract Analysis**

## **I. Introduction**

The objective of this chapter is to analyze the utilization of Minority and Woman-owned Business Enterprises (M/WBE)<sup>24</sup> on private sector projects performed in the City of West Palm Beach (City). Private sector projects of the construction prime contractors identified in the *2016 City of West Palm Beach Disparity Study* (2016 Disparity Study) were reviewed to determine M/WBE subcontractor utilization. The City requested the private sector subcontractor analysis to measure their prime contractors' utilization of M/WBEs in the absence of the government provisions for equity in contracting.

## **II. Data Sources**

McGraw-Hill Construction's Dodge Report, Construction Market Data Group's Reed Bulletin, and the building permits of the City's Development Services Department, Building Division were reviewed as possible sources to identify private sector construction projects conducted in the City during the January 1, 2015, to December 31, 2017, study period. The only useful data were captured from the City's building permit records.

### **A. Private Sector Data Sources**

McGraw-Hill Construction's Dodge Report and Construction Market Data Group's Reed Bulletin were reviewed for private sector construction contracts. These two data sources were not used because it was determined that each database essentially contained information about government funded projects retrieved from public records.

### **B. Public Sector Data Sources**

The City's Development Services Department, Building Division was assessed as a source for the needed data because private sector projects built in the City are required to secure a building permit. The City was provided a list of 31 prime contractors that were awarded at least one City construction contract, as documented in the Study. An electronic file containing data for all building permits issued from January 1, 2015 to December 31, 2017 was produced by the City. Mason Tillman Associates, Ltd. queried the dataset to identify all permits pulled by prime contractors during the study period for private sector projects valued at \$300,000 and over. Four prime contractors had pulled eight building permits for private sector projects valued at \$300,000 and over.



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<sup>24</sup> Hereinafter referred to as Minority and Caucasian female-owned businesses in the statistical tables.

The Study identified 38 construction prime contracts awarded to these four prime contractors. Table 3.1 lists the number and contract amount of the 38 prime contracts awarded to each of the four prime contractors and the number of subcontractors, suppliers, and truckers utilized on each prime contract. As noted in the table, only two of the four prime contractors reported using subcontractors, suppliers, or truckers on their City contracts.

**Table 3.1: City Construction Prime Contracts Awarded to 38 Construction Contractors, October 1, 2010, to September 30, 2014**

<b>Prime Contractor</b>	<b>Total Contract Dollars</b>	<b>Number of Prime Contracts</b>	<b>Number of Subcontracts</b>
Contractor #1	\$1,023,461	13	0
Contractor #2	\$8,019,115	1	13
Contractor #3	\$364,792	13	0
Contractor #4	\$11,619,945	11	32
<b>Total</b>	<b>\$21,027,313</b>	<b>38</b>	<b>45</b>

A survey was administered to compile data on the four construction prime contractors' utilization of M/WBEs on their private sector projects. The survey, sent to the four prime contractors, requested the name, contact information, award and payment amount, ethnicity, and gender for each subcontractor, supplier, and trucker used on the eight private sector projects. To maximize the response rate from the surveyed prime contractors, a transmittal letter from the City's Procurement Director requesting the prime contractor's cooperation accompanied each survey. Additionally, Mason Tillman made follow-up calls to each prime contractor to address any questions concerning the research and encourage the business to submit the requested records for their private sector projects.

Only Contractor #3 responded to the survey and provided the requested records. The prime contractor listed one subcontractor used on one of its private sector contracts. The subcontract was valued at \$2,900 on the prime contract valued at \$300,000.

### ***III. Subcontract Comparative Data Analysis***

The proposed comparative analysis between the construction prime contractors' utilization of subcontractors, suppliers, and truckers on their private and public projects could not be performed because the number of private sector projects was insufficient. Because only one of the four prime contractors provided the requested information, the survey yielded too few data to perform even a simple comparison of the four prime contractors use of subcontractors, suppliers, and truckers.

### ***IV. Conclusion***

This chapter's objective was to present an analysis of the City's prime contractors' utilization of M/WBEs on the private sector projects performed in the City. While a private sector analysis could illustrate prime contractors' business practices when unimpeded by public policy, the compiled



data were insufficient to perform any comparative analysis of the subcontracting practices of the City's prime contractors.

In general, it is inherently more difficult to collect information on private sector contracts than on public contracts. On private sector projects, contractors do not have the same incentive to respond to inquiries regarding business practices, as evidenced by the refusal of the surveyed prime contractors to even acknowledge the request for private sector data. The collection of subcontract data on public contracts has historically been daunting, though the government requires the submission of the subcontract data.

The inability to perform this analysis had no bearing of the disparity findings in the 2016 Disparity Study. The factual predicate used to perform the disparity analysis was based on the legal requirement set forth in *Croson*. The Supreme Court ruled 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 actually engaged by the locality or the locality's prime contractors, an inference of discriminatory exclusion could arise.<sup>25</sup>

Since the analysis in the 2016 Disparity Study revealed a statistically significant underutilization of minority and woman-owned subcontractors, suppliers, and truckers on the City's prime contracts, the City has met the constitutional standard for instituting a Minority and Woman-owned Business Enterprise program. Thus, the City does not need to produce a private sector statistical disparity as a predicate for a Minority and Woman-owned Business Enterprise program.



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<sup>25</sup> *Croson* quoting *Bazemore v. Friday*, 478 U.S., at 398 ; *Teamsters v. United States*, 431 U.S., at 337 -339.

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# **CHAPTER 4: Private Sector Regression Analysis**

## **I. Introduction**

The objective of this chapter is to assess the impact of race- and gender on self-employment rates and business earnings in the City of West Palm Beach. The data available to perform the regression analyses were county-based statistics compiled by the United States Census Bureau (Census). The analyses compared the socio-economic profile of minority group members and women to Caucasian males to determine if the growth rate of minority and woman-owned businesses in the Palm Beach County was affected by race and gender. The findings were considered as a possible factor affecting the availability of Minority and Women-owned Business Enterprises documented in the 2016 *Disparity Study*.

## **II. Regression Analysis Methodology**

### **A. Data Source**

The United States Census Public Use Microdata Sample (PUMS) data for Palm Beach County, Florida, derived from the 2009 to 2013 PUMS dataset, were used to compare the probability of minorities and Caucasian females owning a business to the probability of Caucasian males owning a business. PUMS data is a subset of the American Community Survey, conducted by the United States Census Bureau, and compiled through yearly telephone and mail surveys. The survey estimates demographic information for occupation, education, and home and business ownership. The PUMS data allowed for an analysis of the rate of business formation by race, gender, and geographic area. The data did not allow for an exact match to the goods and services industry analyzed in the Study. Therefore, the goods and services described in this analysis were those that most closely mirrored the industry definitions in the Study.<sup>26</sup>

Two court-approved regression analytical models were employed<sup>27</sup>: 1) the Business Ownership Analysis, a measure of business formation, and 2) the Business Earnings Analysis, a measure of self-employment wages. Each of the two regression analyses compared minorities<sup>28</sup> and Caucasian females to Caucasian males by controlling for race- and gender-neutral explanatory variables. The findings present the impact of explanatory variables on outcome variables. The explanatory variables included race- and gender-neutral factors, such as age, education, and creditworthiness.



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<sup>26</sup> The three industries in the City's Study were defined as construction, professional services, including architecture and engineering (hereinafter referred to as professional services), and goods and services.

<sup>27</sup> Detailed description of the steps taken to clean and merge data are listed in the Regression Analysis Technical Appendix.

<sup>28</sup> Minority group members include both males and females.

The findings present unremediated market characteristics that could have adversely affected the availability of minority and Caucasian female-owned businesses in the City.<sup>29</sup>

## ***B. Regression Analytical Models***

Logistic or logit regression was the statistical measure used to determine if race and gender have a statistically significant effect on the probability of business ownership. Ordinary Least Squares (OLS) regression was utilized to analyze the United States Census Public Use Microdata Area (PUMA) data for disparity in owner-reported incomes when controlling for race- and gender-neutral factors. Business ownership rates and business earnings of minorities and Caucasian females were compared to Caucasian males.

### **1. Business Ownership Analysis**

The Business Ownership Analysis examined the relationship between the likelihood of being a business owner and independent socioeconomic variables. Business ownership, as a dependent variable, included business owners of incorporated and unincorporated firms. The business ownership variable utilized two values: a value of “1” indicates that a person is a business owner, whereas a value of “0” indicates that a person is not a business owner. When the dependent variable is defined this way, it is called a binary variable. In this case, a logistic regression model is utilized to predict the likelihood of business ownership using independent socioeconomic variables. Two logistic models were run to predict the probability of business ownership in each of the three industries examined in the City’s Study. Categories of the independent variables analyzed include personal characteristics, business characteristics, educational level, race, and gender.

In Tables 4.3 to 4.5, a finding of disparity is denoted by an asterisk (\*) when the independent variable is statistically significant at or above the 95% confidence level ( $p < .05$ ). A finding of disparity indicates that there is a non-random relationship between the probability of owning a business and the independent variable. The regression results indicate the sign of each variable’s coefficient—if the coefficient sign is positive, it indicates that there is a positive relationship between the dependent and independent variables. If the coefficient sign for the independent variable is negative, this implies an inverse relationship between the dependent and independent variables.

For each of the three industries, the logistic regression was used to identify the likelihood of an individual owning a business given his/her background, including race, gender, and other race- and gender-neutral factors. The dependent variables in all regressions are binary variables coded as “1” for individuals who are self-employed and “0” for individuals who are not self-employed. Table 4.1 presents the independent variables used for the Business Ownership Analysis.<sup>30</sup>



<sup>29</sup> Unremediated markets characteristics is a measure of the disparate impact of discrimination that a minority or Caucasian female-owned business experiences in markets that are not subject to race- and gender-conscious goals.

<sup>30</sup> Note: The terms “business owner” and “self-employed” are used interchangeably throughout this chapter.

**Table 4.1: Independent Variables Used for the Business Ownership Analysis**

Personal Characteristics	Educational Attainment	Ethnicity	Gender	Time
Age	Bachelor's Degree	Caucasian American	Female	Year**
Age-squared	Advanced Degree	African American		
Home Ownership		Asian American		
Home Value		Hispanic American		
Monthly Mortgage Payment		Native American		
Interest and Dividends		Other Minority*		
Speaks English at Home				
Has a Child Under the Age of Six				
Marital Status				

(\*) Other Minority includes individuals who belong to two or more racial groups.

(\*\*) The baseline year for analysis is 2009, as the constant reference point for assessing changes and impact.

## 2. Business Earnings Analysis

The Business Earnings Analysis examines the relationship between annual self-employment wages and independent socioeconomic variables. Wages are defined as the total dollar amount earned in the previous 12 months. The independent socioeconomic variables analyzed include personal characteristics, business characteristics, educational level, race, and gender.

All the independent variables are regressed against wages in an OLS regression model. The OLS model estimates a linear relationship between the independent variables and the dependent variable. This multivariate regression model estimates a line similar to the standard  $y=mx+b$  form, but with additional independent variables. The mathematical purpose of a regression analysis is to estimate a best-fit line for the model and assess which findings are statistically significant.

In Tables 4.7 to 4.9, a finding of disparity is denoted by an asterisk (\*) when an independent variable is statistically significant at or above the 95% confidence level ( $p<.05$ ). A finding of disparity indicates that there is a non-random relationship between wages and the independent variable. The regression results indicate the sign of each variable's coefficient from the regression output. If the coefficient sign is positive, it means that there is a positive relationship between the dependent and independent variables. For example, if age is positively related to wages, this implies that older business owners have higher business earnings, holding all other variables constant. If the coefficient sign for the independent variable is negative, it implies an inverse relationship between the dependent and independent variables. For example, if the coefficient for having a child under the age of six is negative, it implies that business owners with children under the age of six have lower business earnings.

An OLS regression analysis is used to assess the presence of business earning disparities. OLS regressions have been conducted separately for each industry. Table 4.2 presents the independent variables used for the Business Earnings Analysis.<sup>31</sup>

<sup>31</sup> If an independent variable is a binary variable, it will be coded as "1" or "0" if the individual has that variable present (i.e. for the Hispanic American variable, it is coded as "1" if the individual is Hispanic American and "0" if not). If an independent variable is a continuous variable, that variable will be used (i.e. one's age can be labeled as 35).



**Table 4.2: Independent Variables Used for the Business Earnings Analysis**

<b>Personal Characteristics</b>	<b>Educational Attainment</b>	<b>Ethnicity</b>	<b>Gender</b>	<b>Time</b>
Age	Bachelor's Degree	Caucasian American	Female	Year**
Age-squared	Advanced Degree	African American		
Incorporated Business		Asian American		
Home Ownership		Hispanic American		
Home Value		Native American		
Monthly Mortgage Payment		Other Minority*		
Interest and Dividends				
Speaks English at Home				
Has a Child Under the Age of Six				
Marital Status				

(\*) Other Minority includes individuals who belong to two or more racial groups.

(\*\*) The baseline year for analysis is 2009, as the constant critical reference point for assessing changes and impact.

### **III. Findings**

#### **A. Business Ownership Analysis**

The business ownership variable is defined by the number of self-employed individuals in each of the three industries: construction, professional services, including architecture and engineering (hereinafter referred to as professional services), and goods and services. The data in this section come from Palm Beach County, Florida, which was specified using a PUMA dataset.<sup>32</sup>

Previous studies have shown that many non-discriminatory factors, such as age, education, and marital status, are associated with self-employment. In this analysis, race- and gender-neutral factors are combined with race- and gender-specific factors in a logistic regression model to determine if observed race or gender disparities are independent of the factors known to be associated with self-employment. It must be noted that many of these variables, such as having an advanced degree, while seeming to be race- and gender-neutral, may be correlated with race- and gender. Caucasian females are less likely to have advanced degrees and the regression results show that individuals with advanced degrees are more likely to own a business at a statistically significant level. Caucasian females may have statistically significant lower business ownership rates, so they face a direct disadvantage as a group. They may also be indirectly disadvantaged since fewer tend to have advanced degrees, which increases one's chances of owning a business at a statistically significant level. Thus, Caucasian females may be doubly disadvantaged.

#### **1. Logistic Model Results for Construction Business Ownership**

Table 4.3 presents the logistic regression results for the likelihood of owning a business in the construction industry based on the 21 variables analyzed in this model.



<sup>32</sup> Public Use Microdata Areas (PUMAs) are statistical geographic areas defined for the dissemination of Public Use Microdata Sample (PUMS) data. The PUMS data were collected by the United States Census Bureau from a five-percent sample of United States households. The observations were weighted to preserve the representative nature of the sample in relation to the population as a whole.



**Table 4.3: Construction Industry Logistic Model**

<b>Business Ownership Model</b>	<b>Coefficient</b>	<b>Significance</b>	<b>Standard Error</b>	<b>Z-score</b>	<b>P&gt; z </b>
Age	0.1346293	*	0.0251361	5.36	0
Age-squared	-0.0011736	*	0.0002534	-4.63	0
Bachelor's Degree (a)	0.3674479	*	0.1412541	2.6	0.009
Advanced Degree	0.139647		0.3438004	0.41	0.685
Home Owner	0.2192812		0.1379876	1.59	0.112
Home Value	0.0000005	*	0.0000002	2.98	0.003
Monthly Mortgage Payment	0.0001146		0.0000639	1.79	0.073
Interest and Dividends	0.0000003		0.0000002	1.3	0.194
Speaks English at Home	-0.2718622		0.1870737	-1.45	0.146
Has a Child under the Age of Six	0.1737182		0.5242909	0.33	0.74
Married	0.1335569		0.121619	1.1	0.272
Caucasian Female (b)	-1.010242	*	0.2281602	-4.43	0
African American	-0.932453	*	0.2380504	-3.92	0
Asian American	-0.3594702		0.6970605	-0.52	0.606
Hispanic American	-0.7800401	*	0.2164677	-3.6	0
Native American	-0.2735266		1.22325	-0.22	0.823
Other Minority	-1.138736	*	0.5738827	-1.98	0.047
Year 2010 (c)	0.1548495		0.1702087	0.91	0.363
Year 2011	0.4258999	*	0.1749946	2.43	0.015
Year 2012	0.140289		0.1845421	0.76	0.447
Year 2013	0.10361		0.1701798	0.61	0.543
Constant	-4.647616	*	0.6573587	-7.07	0

(a) For the variables bachelor's degree and advanced degree, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian Male.

(c) For the year variables, the baseline variable is Year 2009.

(P>|z|) of less than 0.05 denotes findings of statistical significance.

(\*) denotes a statistically significant variable with 95% confidence.



The construction industry logistic regression results indicate the following:

- The likelihood of construction business ownership is positively associated with increased age. Older individuals are more likely to be business owners in the construction industry at a statistically significant level. However, as individuals reach advanced age, the likelihood of being a business owner decreases in the construction industry to a statistically significant level.
- Individuals with a bachelor's degree are more likely to be business owners in the construction industry at a statistically significant level. Individuals with an advanced degree are more likely to be business owners in the construction industry, but not at a statistically significant level.
- Individuals who have a higher-valued home are more likely to be business owners in the construction industry at a statistically significant level.
- Caucasian females, African Americans, Hispanic Americans, and other minorities are less likely than Caucasian males to be business owners in the construction industry at a statistically significant level.
- Asian Americans and Native Americans are less likely to be business owners than Caucasian males in the construction industry, but not at a statistically significant level.
- Individuals were more likely to be business owners in the construction industry in 2011 than in 2009 at a statistically significant level.



## 2. Logistic Model Results for Professional Services Business Ownership

Table 4.4 presents the logistic regression results for the likelihood of owning a business in the professional services industry based on the 21 variables analyzed in this model.

**Table 4.4: Professional Services Industry Logistic Model**

Business Ownership Model	Coefficient	Significance	Standard Error	Z-score	P> z
Age	0.080029	*	0.0191903	4.17	0
Age-squared	-0.000435	*	0.0001775	-2.45	0.014
Bachelor's Degree (a)	0.2041372	*	0.1041162	1.96	0.05
Advanced Degree	0.4628726	*	0.1153673	4.01	0
Home Owner	0.0171376		0.1200081	0.14	0.886
Home Value	0.0000003	*	0.0000001	3.39	0.001
Monthly Mortgage Payment	0.0000261		0.0000417	0.63	0.531
Interest and Dividends	0.0000001		0.0000001	0.61	0.544
Speaks English at Home	-0.168596		0.1371807	-1.23	0.219
Has a Child under the Age of Six	0.4556297	*	0.2053335	2.22	0.026
Married	0.1899077	*	0.0937091	2.03	0.043
Caucasian Female (b)	-0.2509934	*	0.1016079	-2.47	0.014
African American	-0.6563642	*	0.1853569	-3.54	0
Asian American	-0.6673867		0.3949246	-1.69	0.091
Hispanic American	-0.1218543		0.1757003	-0.69	0.488
Native American	-		-	-	-
Other Minority	-0.6373581		0.3886902	-1.64	0.101
Year 2010 (c)	0.2999633	*	0.1335666	2.25	0.025
Year 2011	0.3807634	*	0.1343911	2.83	0.005
Year 2012	0.284531	*	0.1353866	2.1	0.036
Year 2013	0.0071056		0.1298353	0.05	0.956
Constant	-4.139762	*	0.543818	-7.61	0

(a) For the variables bachelor's degree and advanced degree, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian Male.

(c) For the year variables, the baseline variable is year 2009.

(P>|z|) of less than 0.05 denotes findings of statistical significance.

(\*) denotes a statistically significant variable with 95% confidence.

(-) denotes a variable with too few available data to determine statistical significance.

The professional services industry logistic regression results indicate the following:

- The likelihood of professional services business ownership is positively associated with increased age. Older individuals are more likely to be business owners in the professional services industry at a statistically significant level. However, as individuals reach advanced age, the likelihood of being a business owner decreases in the professional services industry to a statistically significant level.



- Individuals with a bachelor's or an advanced degree are more likely to be business owners in the professional services industry at a statistically significant level.
- Individuals who have a higher-valued home are more likely to be business owners in the professional services industry at a statistically significant level.
- Individuals who have a child under the age of six are more likely to be business owners in the professional services industry at a statistically significant level.
- Married individuals are more likely to be business owners in the professional services industry at a statistically significant level.
- Caucasian females and African Americans are less likely to be business owners than Caucasian males in the professional services industry at a statistically significant level.
- Asian Americans, Hispanic Americans, and other minorities are less likely to be business owners than Caucasian males in the professional services industry, but not at a statistically significant level.
- Individuals were more likely to be business owners in the professional services industry in 2010, 2011, and 2012 than in 2009 at a statistically significant level.



### 3. Logistic Model Results for Goods and Services Business Ownership

Table 4.5 presents the logistic regression results for the likelihood of owning a business in the goods and services industry based on the 21 variables analyzed in this model.

**Table 4.5: Goods and Services Industry Logistic Model**

Business Ownership Model	Coefficient	Significance	Standard Error	Z-score	P> z
Age	0.1185084	*	0.0267104	4.44	0
Age-squared	-0.0010138	*	0.0002721	-3.73	0
Bachelor's Degree (a)	-0.0782887		0.1538808	-0.51	0.611
Advanced Degree	-0.4015653		0.3313926	-1.21	0.226
Home Owner	0.5802071	*	0.1715238	3.38	0.001
Home Value	-0.0000001		0.0000003	-0.58	0.565
Monthly Mortgage Payment	0.0000999		0.0000734	1.36	0.173
Interest and Dividends	0.0000005	*	0.0000002	2.33	0.02
Speaks English at Home	0.3504819		0.221652	1.58	0.114
Has a Child under the Age of Six	0.1121459		0.455557	0.25	0.806
Married	0.3910946	*	0.144308	2.71	0.007
Caucasian Female (b)	-0.588515	*	0.1923859	-3.06	0.002
African American	-0.2708584		0.2253142	-1.2	0.229
Asian American	-0.5281926		0.6010035	-0.88	0.379
Hispanic American	-0.19985		0.2593878	-0.77	0.441
Native American	-		-	-	-
Other Minority	0.8205156		0.4900823	1.67	0.094
Year 2010 (c)	0.1232615		0.2000878	0.62	0.538
Year 2011	-0.072859		0.2104764	-0.35	0.729
Year 2012	-0.0333882		0.2055721	-0.16	0.871
Year 2013	0.0950652		0.2017539	0.47	0.638
Constant	-5.431223	*	0.6899173	-7.87	0

(a) For the variables bachelor's degree and advanced degree, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian Male.

(c) For the year variables, the baseline variable is year 2009.

(P>|z|) of less than 0.05 denotes findings of statistical significance.

(\*) denotes a statistically significant variable with 95% confidence.

(-) denotes a variable with too few available data to determine statistical significance.

The goods and services industry logistic regression results indicate the following:

- The likelihood of goods and services business ownership is positively associated with increased age. Older individuals are more likely to be business owners in the goods and services industry at a statistically significant level. However, as individuals reach advanced



age, the likelihood of being a business owner decreases in the goods and services industry to a statistically significant level.

- Home owners are more likely to be business owners in the goods and services industry at a statistically significant level.
- Individuals who have higher interest and dividends income are more likely to be business owners in the goods and services industry at a statistically significant level.
- Married individuals are more likely to be business owners in the goods and services industry at a statistically significant level.
- Caucasian females are less likely than Caucasian males to be business owners in the goods and services industry at a statistically significant level.
- African Americans, Asian Americans, and Hispanic Americans are less likely than Caucasian males to be business owners in the goods and services industry, but not at a statistically significant level.
- Other minorities are more likely to be business owners than Caucasian males in the goods and services industry, but not at a statistically significant level.

**B. Business Ownership Analysis Summary**

The Business Ownership Analysis examined the different explanatory variables’ impact on an individual’s likelihood of owning a business in the construction, professional services, and goods and services industries. Controlling for race- and gender-neutral factors, the Business Ownership Analysis results show that statistically significant disparities in the likelihood of owning a business exist for minorities and Caucasian females when compared to Caucasian males.

Caucasian females experienced disparity in business ownership in more industries than the minority groups; they are less likely to own a business in the construction, professional services, and goods and services industries than Caucasian males at a statistically significant level. African Americans are also less likely to own a business in the construction and professional services industries at a statistically significant level. Hispanic Americans and other minorities are also less likely to own a business in the construction industry at a statistically significant level. Table 4.6 shows the business ownership regression analysis results by ethnicity, gender, and industry.

**Table 4.6: Statistically Significant Business Ownership Disparities**

<b>Ethnicity/Gender</b>	<b>Construction</b>	<b>Professional Services</b>	<b>Goods and Services</b>
Caucasian Female	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
African American	<i>Disparity</i>	<i>Disparity</i>	No Disparity
Asian American	No Disparity	No Disparity	No Disparity
Hispanic American	<i>Disparity</i>	No Disparity	No Disparity
Native American	No Disparity	No Disparity	No Disparity
Other Minority	<i>Disparity</i>	No Disparity	No Disparity



### **C. Business Earnings Analysis**

The business earnings variable is identified by self-employment income<sup>33</sup> from 2009 to 2013 for the three industries: construction, professional services, and goods and services. The analysis considered incorporated and unincorporated businesses.

Previous studies have shown that many non-discriminatory factors, such as education, age, and marital status are associated with self-employment income.<sup>34</sup> In this analysis, race- and gender-neutral factors are combined with race and gender groups in an OLS regression model to determine if observed race or gender disparities are independent of the race- and gender-neutral factors known to be associated with self-employment income.



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<sup>33</sup> The terms “business earnings” and “self-employment income” are used interchangeably.

<sup>34</sup> Mason Tillman Associates, Ltd. *State Of New York 2016 MWBE Disparity Study Personal Net Worth Final Report* (2016).

## 1. OLS Regression Results in the Construction Industry

Table 4.7 presents the results of the OLS regression for business earnings in the construction industry based on the 22 variables analyzed in this model.

**Table 4.7: Construction Industry OLS Regression**

Business Earnings Model	Coefficient	Significance	Standard Error	t-value	P> t
Age	2253.832	*	564.686	3.99	0
Age-squared	-21.113	*	6.947	-3.04	0.002
Incorporated Business	-4063.436		3453.794	-1.18	0.24
Bachelor's Degree (a)	14699.54	*	3403.814	4.32	0
Advanced Degree	8935.633		6434.244	1.39	0.165
Home Owner	1483.214		1969.167	0.75	0.451
Home Value	0.026	*	0.008	3.38	0.001
Monthly Mortgage Payment	4.214	*	2.115	1.99	0.046
Interest and Dividends	0.038		0.021	1.84	0.066
Speaks English at Home	4654.501	*	2260.009	2.06	0.04
Has a Child under the Age of Six	6123.754		7446.16	0.82	0.411
Married	7138.289	*	1815.89	3.93	0
Caucasian Female (b)	-17725.28	*	3352.821	-5.29	0
African American	-14837.89	*	2057.511	-7.21	0
Asian American	-13993.95		9738.352	-1.44	0.151
Hispanic American	-9936.375	*	2308.067	-4.31	0
Native American	-7042.356		7426.632	-0.95	0.343
Other Minority	-7643.716	*	3133.324	-2.44	0.015
Year 2010 (c)	-3360.449		3002.048	-1.12	0.263
Year 2011	-2585.048		3157.904	-0.82	0.413
Year 2012	-6265.491	*	2832.462	-2.21	0.027
Year 2013	-2109.039		3386.043	-0.62	0.533
Constant	-25111.14	*	11256.15	-2.23	0.026

(a) For the variables bachelor's degree and advanced degree, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian Male.

(c) For the year variables, the baseline variable is year 2009.

(P>|t|) of less than 0.05 denotes findings of statistical significance.

(\*) denotes a statistically significant variable with 95% confidence.

The OLS regression results for business earnings in the construction industry indicate the following:

- Older business owners have higher business earnings in the construction industry at a statistically significant level. However, as business owners reach advanced age, they have lower business earnings in the construction industry at a statistically significant level.





- Business owners with a bachelor’s degree have higher business earnings in the construction industry at a statistically significant level. Business owners with an advanced degree have higher business earnings in the construction industry, but not at a statistically significant level.
- Business owners who have a higher-valued home have higher business earnings in the construction industry at a statistically significant level.
- Business owners who pay higher monthly mortgages have higher business earnings in the construction industry at a statistically significant level.
- Business owners who speak English at home have higher business earnings in the construction industry at a statistically significant level.
- Married business owners have higher business earnings in the construction industry at a statistically significant level.
- Caucasian female, African American, Hispanic American, and other minority business owners have lower business earnings than Caucasian males in the construction industry at a statistically significant level.
- Asian American and Native American business owners have lower business earnings than Caucasian males in the construction industry, but not at a statistically significant level.
- Business owners had lower adjusted business earnings in 2012 than in 2009 in the construction industry at a statistically significant level.
- Business owners had lower adjusted business earnings in 2010, 2011, and 2013 than in 2009 in the construction industry, but not at a statistically significant level.



## 2. OLS Regression Results in the Professional Services Industry

Table 4.8 presents the results of the OLS regression for business earnings in the professional services industry based on the 22 variables analyzed in this model.

**Table 4.8: Professional Services Industry OLS Regression**

Business Earnings Model	Coefficient	Significance	Standard Error	t-value	P> t
Age	4189.508	*	408.305	10.26	0
Age-squared	-42.794	*	4.629	-9.24	0
Incorporated Business	-8938.705	*	4205.009	-2.13	0.034
Bachelor's Degree (a)	18685.03	*	2385.652	7.83	0
Advanced Degree	55854.01	*	4599.833	12.14	0
Home Owner	3346.962		2534.793	1.32	0.187
Home Value	0.031	*	0.006	5.14	0
Monthly Mortgage Payment	6.411	*	1.945	3.3	0.001
Interest and Dividends	0.018		0.01	1.73	0.084
Speaks English at Home	10941.72	*	3433.489	3.19	0.001
Has a Child under the Age of Six	4281.232		5931.405	0.72	0.47
Married	11755.95	*	2558.565	4.59	0
Caucasian Female (b)	-34033.17	*	3092.296	-11.01	0
African American	-31004.05	*	3244.775	-9.56	0
Asian American	-24454.88	*	7348.412	-3.33	0.001
Hispanic American	-27430.28	*	4149.833	-6.61	0
Native American	-26979.21		16869.25	-1.6	0.11
Other Minority	-21018.83	*	9789.187	-2.15	0.032
Year 2010 (c)	-2249.139		3822.392	-0.59	0.556
Year 2011	4654.695		4073.247	1.14	0.253
Year 2012	2144.243		4026.931	0.53	0.594
Year 2013	6161.18		4060.689	1.52	0.129
Constant	-63777.99	*	8940.51	-7.13	0

(a) For the variables bachelor's degree and advanced degree, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian Male.

(c) For the year variables, the baseline variable is year 2009.

(P>|t|) of less than 0.05 denotes findings of statistical significance.

(\*) denotes a statistically significant variable with 95% confidence.

The OLS regression results for business earnings in the professional services industry indicate the following:

- Older business owners have higher business earnings in the professional services industry at a statistically significant level. However, as business owners reach advanced age, they



have lower business earnings in the professional services industry at a statistically significant level.

- Incorporated businesses have lower business earnings in the professional services industry at a statistically significant level.
- Business owners with a bachelor's or advanced degree have higher business earnings in the professional services industry at a statistically significant level.
- Individuals who have a higher-valued home are more likely to have higher business earnings in the professional services industry at a statistically significant level.
- Business owners who pay higher monthly mortgages have higher business earnings in the professional services industry at a statistically significant level.
- Business owners who speak English at home have higher business earnings in the professional services industry at a statistically significant level.
- Married business owners have higher business earnings in the professional services industry at a statistically significant level.
- Caucasian female, African American, Asian American, Hispanic American, and other minority business owners have lower business earnings than Caucasian males in the professional services industry at a statistically significant level.
- Native American business owners have lower business earnings than Caucasian males in the professional services industry, but not at a statistically significant level.
- Business owners had lower adjusted business earnings in 2010 than in 2009 in the professional services industry, but not at a statistically significant level.
- Business owners had higher adjusted business earnings in 2011, 2012, and 2013 than in 2009 in the professional services industry, but not at a statistically significant level.



### 3. OLS Regression Results in the Goods and Services Industry

Table 4.9 presents the results of the OLS regression for business earnings in the goods and services industry based on the 22 variables analyzed in this model.

**Table 4.9: Goods and Services Industry OLS Regression**

Business Earnings Model	Coefficient	Significance	Standard Error	t-value	P> t
Age	2308.084	*	406.453	5.68	0
Age-squared	-22.958	*	4.858	-4.73	0
Incorporated Business	-5674.405		3929.719	-1.44	0.149
Bachelor's Degree (a)	19803.09	*	2770.481	7.15	0
Advanced Degree	58734.83	*	9165.31	6.41	0
Home Owner	-130.491		2241.772	-0.06	0.954
Home Value	0.027	*	0.01	2.58	0.01
Monthly Mortgage Payment	4.472	*	2.056	2.18	0.03
Interest and Dividends	0.086	*	0.015	5.91	0
Speaks English at Home	6225.385	*	2761.952	2.25	0.024
Has a Child under the Age of Six	2790.986		4870.704	0.57	0.567
Married	4024.46	*	1923.521	2.09	0.037
Caucasian Female (b)	-12653.59	*	2992.132	-4.23	0
African American	-13466.49	*	2617.119	-5.15	0
Asian American	-15049.09	*	6205.906	-2.42	0.015
Hispanic American	-10051.01	*	3096.5	-3.25	0.001
Native American	-		-	-	-
Other Minority	-12620.14		6584.823	-1.92	0.055
Year 2010 (c)	-8462.622	*	2563.321	-3.3	0.001
Year 2011	-4956.761		2871.47	-1.73	0.084
Year 2012	-2539.068		2889.187	-0.88	0.38
Year 2013	-52.809		2828.306	-0.02	0.985
Constant	-24126.43	*	9403.267	-2.57	0.01

(a) For the variables bachelor's degree and advanced degree, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian Male.

(c) For the year variables, the baseline variable is year 2009.

(P>|t|) of less than 0.05 denotes findings of statistical significance.

(\*) denotes a statistically significant variable with 95% confidence.

(-) denotes a variable with too few available data to determine statistical significance.



The OLS regression results for business earnings in the goods and services industry indicate the following:

- Older business owners have higher business earnings in the goods and services industry at a statistically significant level. However, as business owners reach advanced age, they have lower business earnings in the goods and services industry at a statistically significant level.
- Business owners with a bachelor's or advanced degree have higher business earnings in the goods and services industry at a statistically significant level.
- Business owners who have a higher-valued home have higher business earnings in the goods and services industry at a statistically significant level.
- Business owners who pay higher monthly mortgages have higher business earnings in the goods and services industry at a statistically significant level.
- Business owners who have higher interest and dividends income are more likely to have higher business earnings in the goods and services industry at a statistically significant level.
- Business owners who speak English at home have higher business earnings in the goods and services industry at a statistically significant level.
- Married business owners have higher business earnings in the goods and services industry at a statistically significant level.
- Caucasian female, African American, Asian American, and Hispanic American business owners have lower business earnings than Caucasian males in the goods and services industry at a statistically significant level.
- Other minority business owners have lower business earnings than Caucasian males in the goods and services industry, but not at a statistically significant level.
- Business owners had lower adjusted business earnings in 2010 than in 2009 in the goods and services industry at a statistically significant level.
- Business owners had lower adjusted business earnings in 2011, 2012, and 2013 than in 2009 in the goods and services industry, but not at a statistically significant level.

#### ***D. Business Earnings Analysis Summary***

Controlling for race- and gender-neutral factors, the Business Earnings Analysis documented statistically significant disparities in business earnings for minorities and Caucasian females compared to similarly-situated Caucasian males. Caucasian females, African Americans, and Hispanic Americans have lower business earnings in the construction, professional services, and goods and services industries at a statistically significant level. Asian Americans have lower business earnings in the professional services and goods and services industries at a statistically significant level. Other minorities have lower business earnings in the construction and professional services industries at a statistically significant level. Table 4.10 shows the business earnings regression results by ethnicity, gender, and industry.



**Table 4.10: Statistically Significant Business Earnings Disparities**

<b>Ethnicity/Gender</b>	<b>Construction</b>	<b>Professional Services</b>	<b>Goods and Services</b>
Caucasian Female	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
African American	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Asian American	No Disparity	<i>Disparity</i>	<i>Disparity</i>
Hispanic American	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Native American	No Disparity	No Disparity	No Disparity
Other Minority	<i>Disparity</i>	<i>Disparity</i>	No Disparity

#### **IV. Conclusion**

The two outcome variables examined in the logit regression analysis were business ownership, as a measure of business formation, and business earnings, as a measure of self-employment wages. The two regression analyses were performed for the three industries in the City’s Study—construction, professional services, and goods and services. The analyses examined the effect of race and gender on the two outcome variables. The Business Ownership Analysis and the Business Earnings Analysis used data from the 2009 to 2013 PUMS datasets for Palm Beach County and compared business ownership rates and earnings for minority group members and Caucasian females to those of Caucasian males.<sup>35</sup>

Even though the minority and Caucasian female-owned businesses’ age, education, business characteristics, and creditworthiness were comparable to Caucasian males’ socioeconomic profiles, the regression analysis of business ownership documented a disparity for minority and Caucasian female-owned businesses compared to Caucasian males with all other factors being equal. As indicated in Table 4.11, business ownership disparity was found for Caucasian females in the construction, professional services, and goods and services industries; for African Americans in the construction and professional services industries; and for Hispanic Americans and other minorities in the construction industry.

**Table 4.11: Statistically Significant Business Ownership Disparities**

<b>Ethnicity/Gender</b>	<b>Construction</b>	<b>Professional Services</b>	<b>Goods and Services</b>
Caucasian Female	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
African American	<i>Disparity</i>	<i>Disparity</i>	No Disparity
Asian American	No Disparity	No Disparity	No Disparity
Hispanic American	<i>Disparity</i>	No Disparity	No Disparity
Native American	No Disparity	No Disparity	No Disparity
Other Minority	<i>Disparity</i>	No Disparity	No Disparity

The regression analysis of business earnings also determined that there is disparity for minority and Caucasian female-owned businesses in comparison to Caucasian males, with all other factors being equal. As indicated in Table 4.12, business ownership disparity was found for Caucasian females African Americans, and Hispanic Americans in the construction, professional services, and goods and services industries; for Asian Americans in the professional services and goods and



<sup>35</sup> Controlling for race- and gender-neutral factors, such as age, education, and creditworthiness, the results show the likelihood of owning a business exist and earnings for minorities and Caucasian females compared to Caucasian males.

services industries; and for other minorities in the construction and professional services industries. Although minority and Caucasian female-owned businesses have comparable experience and education, they were less likely to own a business and as business owners they earned less than Caucasian males, at a statistically significant level.

**Table 4.12: Statistically Significant Business Earnings Disparities**

<b>Ethnicity/Gender</b>	<b>Construction</b>	<b>Professional Services</b>	<b>Goods and Services</b>
Caucasian Female	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
African American	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Asian American	No Disparity	<i>Disparity</i>	<i>Disparity</i>
Hispanic American	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Native American	No Disparity	No Disparity	No Disparity
Other Minority	<i>Disparity</i>	<i>Disparity</i>	No Disparity

This statistical analysis of socioeconomic factors in the private sector revealed evidence of discrimination against minorities and Caucasian females. Disparities were revealed when the education, number of employees, years in business of minorities and Caucasian females were compared to similarly situated Caucasian males. Given these facts, it is reasonable to assume that the availability of M/WBEs enumerated in the 2016 Disparity Study would have been greater but for the presence of racial and gender-based factors affecting business ownership rates and business earnings. However, *Crosen* nor its progeny require a private sector regression analysis as a predicate for race and gender-conscious remedies.



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# **CHAPTER 5: NAICS Code Classification**

## **I. Introduction**

This chapter presents the North American Industrial Classification System (NAICS) codes assigned to the prime contracts and available prime contractors examined in the *2016 City of West Palm Beach Disparity Study* (2016 Disparity Study). For the Study, the prime contracts awarded by the City of West Palm Beach and available businesses identified during the October 1, 2010 to September 30, 2014 study period were classified into one of three industries—construction, professional services, and goods and services—based on a two-digit NAICS code. For this presentation, a six-digit NAICS code was assigned to the prime contracts and contractors identified in the Study when data were available.

## **II. Assignment of NAICS Codes**

There were several steps undertaken in an effort to assign a six-digit NAICS code to each prime contract. The initial step in assigning a NAICS code to the prime contracts was to review the prime contract records provided by the City that included a NAICS code. The NAICS code(s) in the provided records were reviewed for accuracy by comparing the NAICS code(s) to the contract description. The balance of the contracts was reviewed to determine if a six-digit NAICS code could be assigned based on the contract description. The contract descriptions with keywords that could be used to search the United States Census Bureau's NAICS database was the method of assigning a six-digit NAICS code.<sup>36</sup> The contracts that had an insufficient description to assign a six-digit NAICS code were assigned a two-digit NAICS code based on the industry assigned in the Study.

The assignment of a six-digit NAICS code to records in the available business dataset was more complex because the dataset contained only the business name and address. However, there were some businesses in the dataset identified from a certification list that had one or more NAICS codes assigned in their certification record. In addition, the utilized businesses in the available business dataset were assigned the NAICS code(s) of the prime contract(s) that they had been awarded by the City. For the remainder of the available businesses, Mason Tillman requested NAICS codes from Dun & Bradstreet (D&B). For a fee, D&B queried its Hoovers business database and provided at least one NAICS code for 73% of the 1,678 businesses submitted to it. The businesses for which D&B could not provide a six-digit NAICS code were submitted to InfoUSA, another company that provides NAICS code data for a fee. InfoUSA provided six-digit NAICS codes for 53% of the 748 businesses submitted for research. The businesses that could not be assigned a six-digit NAICS code using one of these methods were assigned a two-digit NAICS code based on the industry assigned in the Study.



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<sup>36</sup> <https://www.census.gov/eos/www/naics/>



### ***III. Prime Contracts Grouped by NAICS Code***

The prime contracts awarded by the City in each of the three industries during the October 1, 2010 to September 30, 2014 study period are grouped by NAICS code. All but 4.88% of the prime contracts were assigned a six-digit NAICS code. For each NAICS code, the amount and percent of dollars spent with Minority and Woman Business Enterprises (M/WBE) and Non-minority Male Business Enterprise (non-M/WBE) are reported by industry.

A total of 590 construction contracts valued at \$94,612,899 were awarded during the October 1, 2010 to September 30, 2014 study period. There were 25 unique six-digit NAICS codes assigned to 590 of the construction contracts. Table 5.1 lists the distribution of construction contracts and dollars awarded numerically by NAICS code.



**Table 5.13: Construction Contracts Grouped by NAICS Codes**

NAICS Code	Description	Total Contracts			Percent			Dollar Amount			Percent		
		MWBE	Non-M/WBE	ALL	MWBE	Non-M/WBE	All	MWBE	Non-M/WBE	Total	MWBE	Non-M/WBE	Total
236115	New Single-Family Housing Construction (except For-Sale Builders)	8	36	44	1.36%	6.10%	7.46%	\$1,623,563	\$722,231	\$2,345,794	1.72%	0.76%	2.48%
236117	New Housing Operative Builders	0	1	1	0.00%	0.17%	0.17%	\$0	\$8,019,115	\$8,019,115	0.00%	8.48%	8.48%
236118	Residential Remodelers	24	15	39	4.07%	2.54%	6.61%	\$1,588,906	\$1,514,996	\$3,103,902	1.68%	1.60%	3.28%
236220	Commercial and Institutional Building Construction	3	30	33	0.51%	5.08%	5.59%	\$1,472,093	\$7,824,998	\$9,297,091	1.56%	8.27%	9.83%
237110	Water and Sewer Line and Related Structures Construction	0	59	59	0.00%	10.00%	10.00%	\$0	\$23,261,163	\$23,261,163	0.00%	24.59%	24.59%
237120	Oil and Gas Pipeline and Related Structures Construction	0	1	1	0.00%	0.17%	0.17%	\$0	\$2,489,633	\$2,489,633	0.00%	2.63%	2.63%
237130	Power and Communication Line and Related Structures Construction (pt)	0	20	20	0.00%	3.39%	3.39%	\$0	\$2,338,188	\$2,338,188	0.00%	2.47%	2.47%
237210	Land Subdivision	0	1	1	0.00%	0.17%	0.17%	\$0	\$12,500	\$12,500	0.00%	0.01%	0.01%
237310	Highway, Street, and Bridge Construction	6	31	37	1.02%	5.25%	6.27%	\$950,151	\$32,396,800	\$33,346,950	1.00%	34.24%	35.25%
237990	Other Heavy and Civil Engineering Construction	1	13	14	0.17%	2.20%	2.37%	\$50,700	\$921,729	\$972,429	0.05%	0.97%	1.03%
238110	Poured Concrete Foundation and Structure Contractors	0	20	20	0.00%	3.39%	3.39%	\$0	\$207,270	\$207,270	0.00%	0.22%	0.22%
238140	Masonry Contractors	0	3	3	0.00%	0.51%	0.51%	\$0	\$37,722	\$37,722	0.00%	0.04%	0.04%
238150	Glass and Glazing Contractors	0	6	6	0.00%	1.02%	1.02%	\$0	\$293,576	\$293,576	0.00%	0.31%	0.31%
238160	Roofing Contractors	1	21	22	0.17%	3.56%	3.73%	\$60,277	\$501,133	\$561,410	0.06%	0.53%	0.59%
238190	Other Foundation, Structure, and Building Exterior Contractors	1	0	1	0.17%	0.00%	0.17%	\$1,000	\$0	\$1,000	0.00%	0.00%	0.00%
238210	Electrical Contractors and Other Wiring Installation Contractors	10	90	100	1.69%	15.25%	16.95%	\$422,235	\$3,337,136	\$3,759,371	0.45%	3.53%	3.97%
238220	Plumbing, Heating, and Air-Conditioning Contractors	35	38	73	5.93%	6.44%	12.37%	\$266,452	\$265,106	\$531,558	0.28%	0.28%	0.56%
238290	Other Building Equipment Contractors	0	17	17	0.00%	2.88%	2.88%	\$0	\$191,838	\$191,838	0.00%	0.20%	0.20%
238310	Drywall and Insulation Contractors	0	5	5	0.00%	0.85%	0.85%	\$0	\$635,281	\$635,281	0.00%	0.67%	0.67%
238320	Painting and Wall Covering Contractors	0	9	9	0.00%	1.53%	1.53%	\$0	\$181,700	\$181,700	0.00%	0.19%	0.19%
238330	Flooring Contractors	0	2	2	0.00%	0.34%	0.34%	\$0	\$13,565	\$13,565	0.00%	0.01%	0.01%
238350	Finish Carpentry Contractors	0	3	3	0.00%	0.51%	0.51%	\$0	\$66,442	\$66,442	0.00%	0.07%	0.07%



NAICS Code	Description	Total Contracts			Percent			Dollar Amount			Percent		
		MWBE	Non-M/WBE	ALL	MWBE	Non-M/WBE	All	MWBE	Non-M/WBE	Total	MWBE	Non-M/WBE	Total
238390	Other Building Finishing Contractors	1	3	4	0.17%	0.51%	0.68%	\$5,200	\$26,814	\$32,014	0.01%	0.03%	0.03%
238910	Site Preparation Contractors	8	6	14	1.36%	1.02%	2.37%	\$545,872	\$46,921	\$592,793	0.58%	0.05%	0.63%
238990	All Other Specialty Trade Contractors (pt)	38	24	62	6.44%	4.07%	10.51%	\$530,804	\$1,789,790	\$2,320,594	0.56%	1.89%	2.45%
<b>Total</b>		<b>136</b>	<b>454</b>	<b>590</b>	<b>23.05%</b>	<b>76.95%</b>	<b>100.00%</b>	<b>\$7,517,251</b>	<b>\$87,095,647</b>	<b>\$94,612,899</b>	<b>7.95%</b>	<b>92.05%</b>	<b>100.00%</b>



A total of 929 professional services contracts valued at \$75,535,324 were awarded during the October 1, 2010 to September 30, 2014 study period. There were 60 unique six-digit NAICS codes assigned to 923 of the professional services contracts. There were six professional contracts that had insufficient description to assign a six-digit NAICS code and were instead assigned a two-digit NAICS code based on the industry assigned in the City's Study. Table 5.2 illustrates the distribution of professional services contracts and dollars awarded numerically by NAICS codes, including the two-digit and six-digit level.

**Table 5.14: Professional Services Contracts Grouped by NAICS Codes**

NAICS Code	Description	Total Contracts			Percent			Dollar Amount			Percent		
		MWBE	Non-M/WBE	ALL	MWBE	Non-M/WBE	All	MWBE	Non-M/WBE	Total	MWBE	Non-M/WBE	Total
511120	Periodical Publishers	0	2	2	0.00%	0.22%	0.22%	\$0	\$5,700	\$5,700	0.00%	0.01%	0.01%
511130	Book Publishers	0	10	10	0.00%	1.08%	1.08%	\$0	\$65,755	\$65,755	0.00%	0.09%	0.09%
511210	Software Publishers	2	72	74	0.22%	7.75%	7.97%	\$43,397	\$1,469,295	\$1,512,692	0.06%	1.95%	2.00%
522110	Commercial Banking	0	2	2	0.00%	0.22%	0.22%	\$0	\$957,099	\$957,099	0.00%	1.27%	1.27%
522320	Financial Transactions Processing, Reserve, and Clearinghouse Activities	0	8	8	0.00%	0.86%	0.86%	\$0	\$165,348	\$165,348	0.00%	0.22%	0.22%
523930	Investment Advice	0	3	3	0.00%	0.32%	0.32%	\$0	\$108,000	\$108,000	0.00%	0.14%	0.14%
531120	Lessors of Nonresidential Buildings (except Miniwarehouses)	1	0	1	0.11%	0.00%	0.11%	\$56,400	\$0	\$56,400	0.07%	0.00%	0.07%
531130	Lessors of Miniwarehouses and Self-Storage Units	0	1	1	0.00%	0.11%	0.11%	\$0	\$3,500	\$3,500	0.00%	0.00%	0.00%
532120	Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing	0	9	9	0.00%	0.97%	0.97%	\$0	\$772,927	\$772,927	0.00%	1.02%	1.02%
54	Professional, Scientific, and Technical Services	1	5	6	0.11%	0.54%	0.65%	\$44,548	\$125,222	\$169,770	0.06%	0.17%	0.22%
541110	Offices of Lawyers	1	62	63	0.11%	6.67%	6.78%	\$172	\$1,899,988	\$1,900,160	0.00%	2.52%	2.52%
541211	Offices of Certified Public Accountants	2	5	7	0.22%	0.54%	0.75%	\$166,100	\$435,747	\$601,847	0.22%	0.58%	0.80%
541214	Payroll Services	0	4	4	0.00%	0.43%	0.43%	\$0	\$11,464	\$11,464	0.00%	0.02%	0.02%
541219	Other Accounting Services	0	10	10	0.00%	1.08%	1.08%	\$0	\$316,104	\$316,104	0.00%	0.42%	0.42%
541310	Architectural Services	11	10	21	1.18%	1.08%	2.26%	\$173,009	\$1,449,964	\$1,622,973	0.23%	1.92%	2.15%
541320	Landscape Architectural Services	1	9	10	0.11%	0.97%	1.08%	\$49,800	\$1,581,674	\$1,631,474	0.07%	2.09%	2.16%
541330	Engineering Services	26	107	133	2.80%	11.52%	14.32%	\$2,653,513	\$34,628,040	\$37,281,553	3.51%	45.84%	49.36%
541350	Building Inspection Services	0	4	4	0.00%	0.43%	0.43%	\$0	\$192,327	\$192,327	0.00%	0.25%	0.25%





NAICS Code	Description	Total Contracts			Percent			Dollar Amount			Percent		
		MWBE	Non-M/WBE	ALL	MWBE	Non-M/WBE	All	MWBE	Non-M/WBE	Total	MWBE	Non-M/WBE	Total
541370	Surveying and Mapping (except Geophysical) Services	1	2	3	0.11%	0.22%	0.32%	\$9,600	\$21,475	\$31,075	0.01%	0.03%	0.04%
541380	Testing Laboratories	6	42	48	0.65%	4.52%	5.17%	\$240,443	\$1,079,606	\$1,320,049	0.32%	1.43%	1.75%
541410	Interior Design Services	0	1	1	0.00%	0.11%	0.11%	\$0	\$24,750	\$24,750	0.00%	0.03%	0.03%
541430	Graphic Design Services	2	4	6	0.22%	0.43%	0.65%	\$3,705	\$18,964	\$22,669	0.00%	0.03%	0.03%
541490	Other Specialized Design Services	0	2	2	0.00%	0.22%	0.22%	\$0	\$72,219	\$72,219	0.00%	0.10%	0.10%
541511	Custom Computer Programming Services	4	126	130	0.43%	13.56%	13.99%	\$132,443	\$10,491,238	\$10,623,681	0.18%	13.89%	14.06%
541512	Computer System Design Services	2	33	35	0.22%	3.55%	3.77%	\$17,598	\$1,164,223	\$1,181,821	0.02%	1.54%	1.56%
541513	Computer Facilities Management Services	3	17	20	0.32%	1.83%	2.15%	\$7,393	\$401,827	\$409,220	0.01%	0.53%	0.54%
541519	Other Computer Related Services	0	21	21	0.00%	2.26%	2.26%	\$0	\$753,997	\$753,997	0.00%	1.00%	1.00%
541611	Administrative Management and General Management Consulting Services	3	11	14	0.32%	1.18%	1.51%	\$68,135	\$650,272	\$718,407	0.09%	0.86%	0.95%
541612	Human Resources Consulting Services	1	75	76	0.11%	8.07%	8.18%	\$10,000	\$412,939	\$422,939	0.01%	0.55%	0.56%
541613	Marketing consulting services	2	18	20	0.22%	1.94%	2.15%	\$92,109	\$3,200,639	\$3,292,748	0.12%	4.24%	4.36%
541614	Process, Physical Distribution, and Logistics Consulting Services	0	12	12	0.00%	1.29%	1.29%	\$0	\$235,780	\$235,780	0.00%	0.31%	0.31%
541618	Other Management Consulting Services	3	18	21	0.32%	1.94%	2.26%	\$20,025	\$251,657	\$271,682	0.03%	0.33%	0.36%
541620	Environmental Consulting Services	3	11	14	0.32%	1.18%	1.51%	\$5,300	\$708,385	\$713,685	0.01%	0.94%	0.94%
541690	Other Scientific and Technical Consulting Services	1	9	10	0.11%	0.97%	1.08%	\$6,000	\$614,646	\$620,646	0.01%	0.81%	0.82%
541715	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	0	1	1	0.00%	0.11%	0.11%	\$0	\$5,625	\$5,625	0.00%	0.01%	0.01%
541720	Research and Development in Social Sciences and Humanities	1	3	4	0.11%	0.32%	0.43%	\$692,161	\$81,150	\$773,311	0.92%	0.11%	1.02%
541810	Advertising Agencies	2	3	5	0.22%	0.32%	0.54%	\$25,000	\$22,000	\$47,000	0.03%	0.03%	0.06%
541820	Public Relations Agencies	8	0	8	0.86%	0.00%	0.86%	\$179,371	\$0	\$179,371	0.24%	0.00%	0.24%
541850	Display Advertising	0	1	1	0.00%	0.11%	0.11%	\$0	\$1,000	\$1,000	0.00%	0.00%	0.00%
541870	Advertising Material Distribution Services	0	8	8	0.00%	0.86%	0.86%	\$0	\$761,622	\$761,622	0.00%	1.01%	1.01%
541890	Other Services Related to Advertising	0	4	4	0.00%	0.43%	0.43%	\$0	\$35,269	\$35,269	0.00%	0.05%	0.05%
541910	Marketing Research and Public Opinion Polling	5	1	6	0.54%	0.11%	0.65%	\$91,000	\$10,000	\$101,000	0.12%	0.01%	0.13%

NAICS Code	Description	Total Contracts			Percent			Dollar Amount			Percent		
		MWBE	Non-M/WBE	ALL	MWBE	Non-M/WBE	All	MWBE	Non-M/WBE	Total	MWBE	Non-M/WBE	Total
541921	Photography Studios, Portrait	0	5	5	0.00%	0.54%	0.54%	\$0	\$11,231	\$11,231	0.00%	0.01%	0.01%
541990	All Other Professional, Scientific, and Technical Services	0	9	9	0.00%	0.97%	0.97%	\$0	\$89,887	\$89,887	0.00%	0.12%	0.12%
561110	Office Administrative Services	13	0	13	1.40%	0.00%	1.40%	\$1,023,461	\$0	\$1,023,461	1.35%	0.00%	1.35%
561410	Document Preparation Services	3	0	3	0.32%	0.00%	0.32%	\$58,167	\$0	\$58,167	0.08%	0.00%	0.08%
561621	Security Systems Services (except Locksmiths)	0	17	17	0.00%	1.83%	1.83%	\$0	\$379,907	\$379,907	0.00%	0.50%	0.50%
562211	Hazardous Waste Treatment and Disposal	1	2	3	0.11%	0.22%	0.32%	\$5,651	\$21,381	\$27,032	0.01%	0.03%	0.04%
562910	Remediation Services	3	6	9	0.32%	0.65%	0.97%	\$1,326,019	\$138,951	\$1,464,971	1.76%	0.18%	1.94%
611420	Computer Training	1	1	2	0.11%	0.11%	0.22%	\$5,243	\$1,800	\$7,043	0.01%	0.00%	0.01%
611430	Professional and Management Development Training	0	1	1	0.00%	0.11%	0.11%	\$0	\$1,000	\$1,000	0.00%	0.00%	0.00%
611519	Other Technical and Trade Schools	0	2	2	0.00%	0.22%	0.22%	\$0	\$19,196	\$19,196	0.00%	0.03%	0.03%
611620	Sports and Recreation Instruction	0	1	1	0.00%	0.11%	0.11%	\$0	\$900	\$900	0.00%	0.00%	0.00%
611699	All Other Miscellaneous Schools and Instruction	0	3	3	0.00%	0.32%	0.32%	\$0	\$13,872	\$13,872	0.00%	0.02%	0.02%
621111	Offices of Physicians (except Mental Health Specialists)	0	1	1	0.00%	0.11%	0.11%	\$0	\$1,790	\$1,790	0.00%	0.00%	0.00%
621511	Medical Laboratories	1	2	3	0.11%	0.22%	0.32%	\$516	\$23,667	\$24,183	0.00%	0.03%	0.03%
624110	Child and Youth Services	0	3	3	0.00%	0.32%	0.32%	\$0	\$30,200	\$30,200	0.00%	0.04%	0.04%
624190	Other Individual and Family Services	0	1	1	0.00%	0.11%	0.11%	\$0	\$25,000	\$25,000	0.00%	0.03%	0.03%
711510	Independent Artists, Writers, and Performers	0	5	5	0.00%	0.54%	0.54%	\$0	\$99,520	\$99,520	0.00%	0.13%	0.13%
811212	Computer and Office Machine Repair and Maintenance	0	9	9	0.00%	0.97%	0.97%	\$0	\$2,218,426	\$2,218,426	0.00%	2.94%	2.94%
925110	Administration of Housing Programs	0	1	1	0.00%	0.11%	0.11%	\$0	\$44,880	\$44,880	0.00%	0.06%	0.06%
<b>Total</b>		<b>114</b>	<b>815</b>	<b>929</b>	<b>12.27%</b>	<b>87.73%</b>	<b>100.00%</b>	<b>\$7,206,279</b>	<b>\$68,329,046</b>	<b>\$75,535,324</b>	<b>9.54%</b>	<b>90.46%</b>	<b>100.00%</b>



A total of 3,562 goods and services contracts valued at \$108,729,596 were awarded during the October 1, 2010 to September 30, 2014 study period. There were 195 unique six-digit NAICS codes assigned to 3,311 of the goods and services contracts. There were 242 professional contracts that had insufficient description to assign a six-digit NAICS code and were instead assigned a two-digit NAICS code based on the industry assigned in the City's Study. Additionally, nine goods and services contracts could not be assigned either a six-digit or two-digit NAICS code based on company information or contract description. Table 5.3 illustrates the distribution of goods and services contracts and dollars awarded numerically by NAICS codes, including the two-digit and six-digit level.

**Table 5.15: Goods and Services Contracts Grouped by NAICS Codes**

NAICS Code	Description	Total Contracts			Percent			Dollar Amount			Percent		
		MWBE	Non-M/WBE	ALL	MWBE	Non-M/WBE	All	MWBE	Non-M/WBE	Total	MWBE	Non-M/WBE	Total
111421	Nursery and Tree Production	0	10	10	0.00%	0.28%	0.28%	\$0	\$72,201	\$72,201	0.00%	0.07%	0.07%
112519	Other Aquaculture	0	1	1	0.00%	0.03%	0.03%	\$0	\$8,176	\$8,176	0.00%	0.01%	0.01%
115s112	Soil Preparation, Planting, and Cultivating	0	1	1	0.00%	0.03%	0.03%	\$0	\$62,403	\$62,403	0.00%	0.06%	0.06%
221122	Electric Power Distribution	0	1	1	0.00%	0.03%	0.03%	\$0	\$2,533	\$2,533	0.00%	0.00%	0.00%
221310	Water Supply and Irrigation Systems	0	4	4	0.00%	0.11%	0.11%	\$0	\$51,662	\$51,662	0.00%	0.05%	0.05%
221320	Sewage Treatment Facilities	1	8	9	0.03%	0.22%	0.25%	\$20,000	\$61,599	\$81,599	0.02%	0.06%	0.08%
313310	Textile and Fabric Finishing Mills	4	2	6	0.11%	0.06%	0.17%	\$17,199	\$211,229	\$228,428	0.02%	0.19%	0.21%
314910	Textile Bag and Canvas Mills	0	11	11	0.00%	0.31%	0.31%	\$0	\$133,591	\$133,591	0.00%	0.12%	0.12%
314994	Rope, Cordage, Twine, Tire Cord, and Tire Fabric Mills	0	5	5	0.00%	0.14%	0.14%	\$0	\$2,745	\$2,745	0.00%	0.00%	0.00%
314999	All Other Miscellaneous Textile Product Mills	0	9	9	0.00%	0.25%	0.25%	\$0	\$34,767	\$34,767	0.00%	0.03%	0.03%
315220	Men's and Boys' Cut and Sew Apparel Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$737	\$737	0.00%	0.00%	0.00%
315990	Apparel Accessories and Other Apparel Manufacturing	0	4	4	0.00%	0.11%	0.11%	\$0	\$20,348	\$20,348	0.00%	0.02%	0.02%
316210	Footwear Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$25,000	\$25,000	0.00%	0.02%	0.02%
32	Manufacturing	0	2	2	0.00%	0.06%	0.06%	\$0	\$11,546	\$11,546	0.00%	0.01%	0.01%
323111	Commercial Printing (except Screen and Books)	12	32	44	0.34%	0.90%	1.24%	\$126,354	\$130,061	\$256,415	0.12%	0.12%	0.24%
325180	Other Basic Inorganic Chemical Manufacturing	0	17	17	0.00%	0.48%	0.48%	\$0	\$4,037,066	\$4,037,066	0.00%	3.71%	3.71%
325211	Plastics Material and Resin Manufacturing	0	3	3	0.00%	0.08%	0.08%	\$0	\$4,941	\$4,941	0.00%	0.00%	0.00%
325612	Polish and Other Sanitation Good Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$4,383	\$4,383	0.00%	0.00%	0.00%



NAICS Code	Description	Total Contracts			Percent			Dollar Amount			Percent		
		MWBE	Non-M/WBE	ALL	MWBE	Non-M/WBE	All	MWBE	Non-M/WBE	Total	MWBE	Non-M/WBE	Total
325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing	1	3	4	0.03%	0.08%	0.11%	\$45,069	\$170,000	\$215,069	0.04%	0.16%	0.20%
326122	Plastics Pipe and Pipe Fitting Manufacturing	0	2	2	0.00%	0.06%	0.06%	\$0	\$4,116	\$4,116	0.00%	0.00%	0.00%
326199	All Other Plastics Product Manufacturing	0	10	10	0.00%	0.28%	0.28%	\$0	\$70,380	\$70,380	0.00%	0.06%	0.06%
326299	All Other Rubber Product Manufacturing	0	6	6	0.00%	0.17%	0.17%	\$0	\$51,854	\$51,854	0.00%	0.05%	0.05%
327110	Pottery, Ceramics, and Plumbing Fixture Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$10,000	\$10,000	0.00%	0.01%	0.01%
327390	Other Concrete Product Manufacturing	0	6	6	0.00%	0.17%	0.17%	\$0	\$13,999	\$13,999	0.00%	0.01%	0.01%
327992	Ground or Treated Mineral and Earth Manufacturing	0	6	6	0.00%	0.17%	0.17%	\$0	\$985,353	\$985,353	0.00%	0.91%	0.91%
331511	Iron Foundries	0	1	1	0.00%	0.03%	0.03%	\$0	\$19,500	\$19,500	0.00%	0.02%	0.02%
332311	Prefabricated Metal Building and Component Manufacturing	0	2	2	0.00%	0.06%	0.06%	\$0	\$6,061	\$6,061	0.00%	0.01%	0.01%
332312	Fabricated Structural Metal Manufacturing	0	3	3	0.00%	0.08%	0.08%	\$0	\$8,054	\$8,054	0.00%	0.01%	0.01%
332321	Metal Window and Door Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$1,990	\$1,990	0.00%	0.00%	0.00%
332322	Sheet Metal Work Manufacturing	2	0	2	0.06%	0.00%	0.06%	\$9,522	\$0	\$9,522	0.01%	0.00%	0.01%
332710	Machine Shops	0	15	15	0.00%	0.42%	0.42%	\$0	\$257,001	\$257,001	0.00%	0.24%	0.24%
332912	Fluid Power Valve and Hose Fitting Manufacturing	0	2	2	0.00%	0.06%	0.06%	\$0	\$4,507	\$4,507	0.00%	0.00%	0.00%
332919	Other Metal Valve and Pipe Fitting Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$1,936	\$1,936	0.00%	0.00%	0.00%
332994	Small Arms Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$6,560	\$6,560	0.00%	0.01%	0.01%
332999	All Other Miscellaneous Fabricated Metal Product Manufacturing	0	15	15	0.00%	0.42%	0.42%	\$0	\$86,827	\$86,827	0.00%	0.08%	0.08%
333111	Farm Machinery and Equipment Manufacturing	0	2	2	0.00%	0.06%	0.06%	\$0	\$56,475	\$56,475	0.00%	0.05%	0.05%
333120	Construction Machinery Manufacturing	0	11	11	0.00%	0.31%	0.31%	\$0	\$2,821,323	\$2,821,323	0.00%	2.59%	2.59%
333249	Other Industrial Machinery Manufacturing	0	12	12	0.00%	0.34%	0.34%	\$0	\$194,328	\$194,328	0.00%	0.18%	0.18%
333314	Optical Instrument and Lens Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$3,530	\$3,530	0.00%	0.00%	0.00%
333318	Other Commercial and Service Industry Machinery Manufacturing	0	18	18	0.00%	0.51%	0.51%	\$0	\$474,465	\$474,465	0.00%	0.44%	0.44%
333413	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing	0	2	2	0.00%	0.06%	0.06%	\$0	\$37,577	\$37,577	0.00%	0.03%	0.03%







NAICS Code	Description	Total Contracts			Percent			Dollar Amount			Percent		
		MWBE	Non-M/WBE	ALL	MWBE	Non-M/WBE	All	MWBE	Non-M/WBE	Total	MWBE	Non-M/WBE	Total
333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	0	14	14	0.00%	0.39%	0.39%	\$0	\$1,351,728	\$1,351,728	0.00%	1.24%	1.24%
333517	Machine Tool Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$5,983	\$5,983	0.00%	0.01%	0.01%
333611	Turbine and Turbine Generator Set Units Manufacturing	0	2	2	0.00%	0.06%	0.06%	\$0	\$429,077	\$429,077	0.00%	0.39%	0.39%
333613	Mechanical Power Transmission Equipment Manufacturing	0	5	5	0.00%	0.14%	0.14%	\$0	\$73,382	\$73,382	0.00%	0.07%	0.07%
333618	Other Engine Equipment Manufacturing	0	4	4	0.00%	0.11%	0.11%	\$0	\$287,013	\$287,013	0.00%	0.26%	0.26%
333911	Pump and Pumping Equipment Manufacturing	0	4	4	0.00%	0.11%	0.11%	\$0	\$117,659	\$117,659	0.00%	0.11%	0.11%
333912	Air and Gas Compressor Manufacturing	0	3	3	0.00%	0.08%	0.08%	\$0	\$188,029	\$188,029	0.00%	0.17%	0.17%
333923	Overhead Traveling Crane, Hoist, and Monorail System Manufacturing	3	0	3	0.08%	0.00%	0.08%	\$9,678	\$0	\$9,678	0.01%	0.00%	0.01%
333999	All Other Miscellaneous General Purpose Machinery Manufacturing	0	34	34	0.00%	0.95%	0.95%	\$0	\$416,044	\$416,044	0.00%	0.38%	0.38%
334111	Electronic Computer Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$13,191	\$13,191	0.00%	0.01%	0.01%
334118	Computer Terminal and Other Computer Peripheral Equipment Manufacturing	0	3	3	0.00%	0.08%	0.08%	\$0	\$10,043	\$10,043	0.00%	0.01%	0.01%
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	0	2	2	0.00%	0.06%	0.06%	\$0	\$312,804	\$312,804	0.00%	0.29%	0.29%
334290	Other Communications Equipment Manufacturing	0	3	3	0.00%	0.08%	0.08%	\$0	\$18,212	\$18,212	0.00%	0.02%	0.02%
334310	Audio and Video Equipment Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$2,952	\$2,952	0.00%	0.00%	0.00%
334513	Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables	1	1	2	0.03%	0.03%	0.06%	\$20,880	\$4,609	\$25,489	0.02%	0.00%	0.02%
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	0	2	2	0.00%	0.06%	0.06%	\$0	\$3,009	\$3,009	0.00%	0.00%	0.00%
334519	Other measuring & controlling devices	0	11	11	0.00%	0.31%	0.31%	\$0	\$67,738	\$67,738	0.00%	0.06%	0.06%
335121	Residential Electric Lighting Fixture Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$6,542	\$6,542	0.00%	0.01%	0.01%
335129	Other Lighting Equipment Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$158,500	\$158,500	0.00%	0.15%	0.15%
335210	Small Electrical Appliance Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$6,250	\$6,250	0.00%	0.01%	0.01%
335314	Relay and Industrial Control Manufacturing	0	4	4	0.00%	0.11%	0.11%	\$0	\$69,894	\$69,894	0.00%	0.06%	0.06%
335911	Storage Battery Manufacturing	0	2	2	0.00%	0.06%	0.06%	\$0	\$15,342	\$15,342	0.00%	0.01%	0.01%

NAICS Code	Description	Total Contracts			Percent			Dollar Amount			Percent		
		MWBE	Non-M/WBE	ALL	MWBE	Non-M/WBE	All	MWBE	Non-M/WBE	Total	MWBE	Non-M/WBE	Total
335999	All Other Miscellaneous Electrical Equipment and Component Manufacturing	5	8	13	0.14%	0.22%	0.36%	\$178,335	\$220,928	\$399,263	0.16%	0.20%	0.37%
336120	Heavy Duty Truck Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$564,987	\$564,987	0.00%	0.52%	0.52%
336211	Motor Vehicle Body Manufacturing	0	3	3	0.00%	0.08%	0.08%	\$0	\$256,388	\$256,388	0.00%	0.24%	0.24%
336999	All Other Transportation Equipment Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$4,537	\$4,537	0.00%	0.00%	0.00%
337127	Institutional Furniture Manufacturing	0	5	5	0.00%	0.14%	0.14%	\$0	\$45,681	\$45,681	0.00%	0.04%	0.04%
337214	Office Furniture (except Wood) Manufacturing	0	3	3	0.00%	0.08%	0.08%	\$0	\$34,784	\$34,784	0.00%	0.03%	0.03%
337910	Mattress Manufacturing	0	2	2	0.00%	0.06%	0.06%	\$0	\$10,031	\$10,031	0.00%	0.01%	0.01%
339113	Surgical Appliance and Supplies Manufacturing	0	4	4	0.00%	0.11%	0.11%	\$0	\$45,481	\$45,481	0.00%	0.04%	0.04%
339920	Sporting and Athletic Goods Manufacturing	0	10	10	0.00%	0.28%	0.28%	\$0	\$31,298	\$31,298	0.00%	0.03%	0.03%
339950	Sign Manufacturing	1	2	3	0.03%	0.06%	0.08%	\$508	\$891,469	\$891,977	0.00%	0.82%	0.82%
339992	Musical Instrument Manufacturing	0	1	1	0.00%	0.03%	0.03%	\$0	\$53,825	\$53,825	0.00%	0.05%	0.05%
339999	All Other Miscellaneous Manufacturing	4	23	27	0.11%	0.65%	0.76%	\$372,492	\$239,950	\$612,442	0.34%	0.22%	0.56%
42	Wholesale Trade	8	122	130	0.22%	3.43%	3.65%	\$68,222	\$3,705,902	\$3,774,124	0.06%	3.41%	3.47%
423110	Automobile and Other Motor Vehicle Merchant Wholesalers	0	1	1	0.00%	0.03%	0.03%	\$0	\$980,937	\$980,937	0.00%	0.90%	0.90%
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	0	2	2	0.00%	0.06%	0.06%	\$0	\$7,448	\$7,448	0.00%	0.01%	0.01%
423130	Tire and Tube Merchant Wholesalers	0	1	1	0.00%	0.03%	0.03%	\$0	\$386	\$386	0.00%	0.00%	0.00%
423210	Furniture Merchant Wholesalers	0	22	22	0.00%	0.62%	0.62%	\$0	\$352,900	\$352,900	0.00%	0.32%	0.32%
423220	Home Furnishing Merchant Wholesalers	0	2	2	0.00%	0.06%	0.06%	\$0	\$13,332	\$13,332	0.00%	0.01%	0.01%
423310	Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers	0	2	2	0.00%	0.06%	0.06%	\$0	\$3,523	\$3,523	0.00%	0.00%	0.00%
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	6	21	27	0.17%	0.59%	0.76%	\$38,539	\$5,614,392	\$5,652,931	0.04%	5.16%	5.20%
423390	Other Construction Material Merchant Wholesalers	5	1	6	0.14%	0.03%	0.17%	\$29,870	\$4,760	\$34,630	0.03%	0.00%	0.03%
423410	Photographic Equipment and Supplies Merchant Wholesalers	0	3	3	0.00%	0.08%	0.08%	\$0	\$21,882	\$21,882	0.00%	0.02%	0.02%
423420	Office Equipment Merchant Wholesalers	0	55	55	0.00%	1.54%	1.54%	\$0	\$1,121,539	\$1,121,539	0.00%	1.03%	1.03%
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	21	297	318	0.59%	8.34%	8.93%	\$405,030	\$4,031,131	\$4,436,161	0.37%	3.71%	4.08%





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		MWBE	Non-M/WBE	ALL	MWBE	Non-M/WBE	All	MWBE	Non-M/WBE	Total	MWBE	Non-M/WBE	Total
423440	Other Commercial Equipment Merchant Wholesalers	1	8	9	0.03%	0.22%	0.25%	\$1,194	\$25,282	\$26,476	0.00%	0.02%	0.02%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	3	17	20	0.08%	0.48%	0.56%	\$63,000	\$257,795	\$320,795	0.06%	0.24%	0.30%
423490	Other Professional Equipment and Supplies Merchant Wholesalers	5	84	89	0.14%	2.36%	2.50%	\$33,973	\$1,680,836	\$1,714,808	0.03%	1.55%	1.58%
423510	Metal Service Centers and Other Metal Merchant Wholesalers	1	3	4	0.03%	0.08%	0.11%	\$5,951	\$470,619	\$476,570	0.01%	0.43%	0.44%
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	33	146	179	0.93%	4.10%	5.03%	\$395,391	\$5,549,166	\$5,944,556	0.36%	5.10%	5.47%
423690	Other Electronic Parts and Equipment Merchant Wholesalers	0	47	47	0.00%	1.32%	1.32%	\$0	\$453,857	\$453,857	0.00%	0.42%	0.42%
423710	Hardware Merchant Wholesalers	2	5	7	0.06%	0.14%	0.20%	\$12,176	\$41,285	\$53,461	0.01%	0.04%	0.05%
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers	0	224	224	0.00%	6.29%	6.29%	\$0	\$2,555,527	\$2,555,527	0.00%	2.35%	2.35%
423730	Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers	14	0	14	0.39%	0.00%	0.39%	\$876,436	\$0	\$876,436	0.81%	0.00%	0.81%
423740	Refrigeration Equipment and Supplies Merchant Wholesalers	3	2	5	0.08%	0.06%	0.14%	\$8,462	\$10,290	\$18,752	0.01%	0.01%	0.02%
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers	7	16	23	0.20%	0.45%	0.65%	\$4,092,270	\$421,040	\$4,513,310	3.76%	0.39%	4.15%
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers	0	17	17	0.00%	0.48%	0.48%	\$0	\$199,389	\$199,389	0.00%	0.18%	0.18%
423830	Industrial Machinery and Equipment Merchant Wholesalers	6	197	203	0.17%	5.53%	5.70%	\$63,647	\$4,281,238	\$4,344,884	0.06%	3.94%	4.00%
423840	Industrial Supplies Merchant Wholesalers	0	37	37	0.00%	1.04%	1.04%	\$0	\$460,276	\$460,276	0.00%	0.42%	0.42%
423850	Service Establishment Equipment and Supplies Merchant Wholesalers	7	107	114	0.20%	3.00%	3.20%	\$276,865	\$1,471,279	\$1,748,144	0.25%	1.35%	1.61%
423860	Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers	0	2	2	0.00%	0.06%	0.06%	\$0	\$9,270	\$9,270	0.00%	0.01%	0.01%
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers	6	19	25	0.17%	0.53%	0.70%	\$36,832	\$185,491	\$222,323	0.03%	0.17%	0.20%
423930	Recyclable Material Merchant Wholesalers	0	28	28	0.00%	0.79%	0.79%	\$0	\$297,263	\$297,263	0.00%	0.27%	0.27%
423940	Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers	0	1	1	0.00%	0.03%	0.03%	\$0	\$16,203	\$16,203	0.00%	0.01%	0.01%
423990	Other Miscellaneous Durable Goods Merchant Wholesalers	7	172	179	0.20%	4.83%	5.03%	\$8,008	\$2,829,825	\$2,837,833	0.01%	2.60%	2.61%

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		MWBE	Non-M/WBE	ALL	MWBE	Non-M/WBE	All	MWBE	Non-M/WBE	Total	MWBE	Non-M/WBE	Total
424110	Printing and Writing Paper Merchant Wholesalers	0	19	19	0.00%	0.53%	0.53%	\$0	\$90,033	\$90,033	0.00%	0.08%	0.08%
424120	Stationery and Office Supplies Merchant Wholesalers	0	1	1	0.00%	0.03%	0.03%	\$0	\$7,247	\$7,247	0.00%	0.01%	0.01%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	0	1	1	0.00%	0.03%	0.03%	\$0	\$2,000	\$2,000	0.00%	0.00%	0.00%
424320	Men's and Boys' Clothing and Furnishings Merchant Wholesalers	2	17	19	0.06%	0.48%	0.53%	\$9,760	\$159,110	\$168,870	0.01%	0.15%	0.16%
424330	Women's, Children's, and Infants' Clothing and Accessories Merchant Wholesalers	0	12	12	0.00%	0.34%	0.34%	\$0	\$374,796	\$374,796	0.00%	0.34%	0.34%
424340	Footwear Merchant Wholesalers	0	3	3	0.00%	0.08%	0.08%	\$0	\$158,823	\$158,823	0.00%	0.15%	0.15%
424410	General Line Grocery Merchant Wholesalers	0	1	1	0.00%	0.03%	0.03%	\$0	\$1,584	\$1,584	0.00%	0.00%	0.00%
424490	Other Grocery and Related Products Merchant Wholesalers	0	24	24	0.00%	0.67%	0.67%	\$0	\$522,812	\$522,812	0.00%	0.48%	0.48%
424610	Plastics Materials and Basic Forms and Shapes Merchant Wholesalers	0	1	1	0.00%	0.03%	0.03%	\$0	\$14,260	\$14,260	0.00%	0.01%	0.01%
424690	Other Chemical and Allied Products Merchant Wholesalers	0	43	43	0.00%	1.21%	1.21%	\$0	\$1,192,964	\$1,192,964	0.00%	1.10%	1.10%
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	0	25	25	0.00%	0.70%	0.70%	\$0	\$13,829,004	\$13,829,004	0.00%	12.72%	12.72%
424910	Farm Supplies Merchant Wholesalers	3	49	52	0.08%	1.38%	1.46%	\$7,302	\$652,304	\$659,607	0.01%	0.60%	0.61%
424930	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers	2	17	19	0.06%	0.48%	0.53%	\$25,230	\$51,045	\$76,275	0.02%	0.05%	0.07%
424950	Paint, Varnish, and Supplies Merchant Wholesalers	0	1	1	0.00%	0.03%	0.03%	\$0	\$7,102	\$7,102	0.00%	0.01%	0.01%
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers	0	4	4	0.00%	0.11%	0.11%	\$0	\$20,594	\$20,594	0.00%	0.02%	0.02%
425110	Business to Business Electronic Markets	0	2	2	0.00%	0.06%	0.06%	\$0	\$751,852	\$751,852	0.00%	0.69%	0.69%
425120	Wholesale Trade Agents and Brokers	0	1	1	0.00%	0.03%	0.03%	\$0	\$29,885	\$29,885	0.00%	0.03%	0.03%
44	Retail Trade	0	32	32	0.00%	0.90%	0.90%	\$0	\$676,537	\$676,537	0.00%	0.62%	0.62%
441110	New Car Dealers	0	26	26	0.00%	0.73%	0.73%	\$0	\$2,960,751	\$2,960,751	0.00%	2.72%	2.72%
441222	Boat Dealers	0	3	3	0.00%	0.08%	0.08%	\$0	\$71,982	\$71,982	0.00%	0.07%	0.07%
441228	Motorcycle, ATV, and All Other Motor Vehicle Dealers	0	6	6	0.00%	0.17%	0.17%	\$0	\$116,133	\$116,133	0.00%	0.11%	0.11%
441310	Automotive Parts and Accessories Stores	0	15	15	0.00%	0.42%	0.42%	\$0	\$111,976	\$111,976	0.00%	0.10%	0.10%



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		MWBE	Non-M/WBE	ALL	MWBE	Non-M/WBE	All	MWBE	Non-M/WBE	Total	MWBE	Non-M/WBE	Total
441320	Tire Dealers	0	1	1	0.00%	0.03%	0.03%	\$0	\$87,513	\$87,513	0.00%	0.08%	0.08%
442110	Furniture Stores	1	21	22	0.03%	0.59%	0.62%	\$1,523	\$135,874	\$137,397	0.00%	0.12%	0.13%
442210	Floor Covering Stores	0	5	5	0.00%	0.14%	0.14%	\$0	\$37,082	\$37,082	0.00%	0.03%	0.03%
443142	Electronics Stores	0	19	19	0.00%	0.53%	0.53%	\$0	\$246,291	\$246,291	0.00%	0.23%	0.23%
444110	Home Centers	0	1	1	0.00%	0.03%	0.03%	\$0	\$6,575	\$6,575	0.00%	0.01%	0.01%
444190	Other Building Material Dealers	0	113	113	0.00%	3.17%	3.17%	\$0	\$1,975,674	\$1,975,674	0.00%	1.82%	1.82%
444210	Outdoor Power Equipment Stores	59	40	99	1.66%	1.12%	2.78%	\$107,478	\$96,997	\$204,475	0.10%	0.09%	0.19%
444220	Nursery, Garden Center, and Farm Supply Stores	11	88	99	0.31%	2.47%	2.78%	\$245,122	\$888,374	\$1,133,496	0.23%	0.82%	1.04%
448110	Men's Clothing Stores	0	3	3	0.00%	0.08%	0.08%	\$0	\$19,046	\$19,046	0.00%	0.02%	0.02%
448120	Women's Clothing Stores	0	3	3	0.00%	0.08%	0.08%	\$0	\$5,797	\$5,797	0.00%	0.01%	0.01%
448150	Clothing Accessories Stores	0	1	1	0.00%	0.03%	0.03%	\$0	\$2,800	\$2,800	0.00%	0.00%	0.00%
448190	Other Clothing Stores	0	28	28	0.00%	0.79%	0.79%	\$0	\$106,638	\$106,638	0.00%	0.10%	0.10%
451110	Sporting Goods Stores	14	22	36	0.39%	0.62%	1.01%	\$294,458	\$578,827	\$873,285	0.27%	0.53%	0.80%
453220	Gift Novelty & Souvenir Stores	0	1	1	0.00%	0.03%	0.03%	\$0	\$6,850	\$6,850	0.00%	0.01%	0.01%
453998	All Other Miscellaneous Store Retailers (except Tobacco Stores)	13	14	27	0.36%	0.39%	0.76%	\$11,439	\$104,853	\$116,292	0.01%	0.10%	0.11%
484210	Used Household and Office Goods Moving	0	6	6	0.00%	0.17%	0.17%	\$0	\$110,853	\$110,853	0.00%	0.10%	0.10%
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance	0	11	11	0.00%	0.31%	0.31%	\$0	\$210,560	\$210,560	0.00%	0.19%	0.19%
485510	Charter Bus Industry	1	0	1	0.03%	0.00%	0.03%	\$123,771	\$0	\$123,771	0.11%	0.00%	0.11%
488410	Motor Vehicle Towing	1	2	3	0.03%	0.06%	0.08%	\$4,257	\$6,038	\$10,295	0.00%	0.01%	0.01%
488510	Freight Transportation Arrangement	0	1	1	0.00%	0.03%	0.03%	\$0	\$2,500	\$2,500	0.00%	0.00%	0.00%
488999	All Other Support Activities for Transportation	0	1	1	0.00%	0.03%	0.03%	\$0	\$6,500	\$6,500	0.00%	0.01%	0.01%
493110	General Warehousing and Storage	0	3	3	0.00%	0.08%	0.08%	\$0	\$23,222	\$23,222	0.00%	0.02%	0.02%
493190	Other Warehousing and Storage	0	10	10	0.00%	0.28%	0.28%	\$0	\$141,742	\$141,742	0.00%	0.13%	0.13%
517911	Telecommunications Resellers	0	2	2	0.00%	0.06%	0.06%	\$0	\$17,122	\$17,122	0.00%	0.02%	0.02%
532289	All Other Consumer Goods Rental	1	9	10	0.03%	0.25%	0.28%	\$2,000	\$185,159	\$187,159	0.00%	0.17%	0.17%
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	0	18	18	0.00%	0.51%	0.51%	\$0	\$487,512	\$487,512	0.00%	0.45%	0.45%



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		MWBE	Non-M/WBE	ALL	MWBE	Non-M/WBE	All	MWBE	Non-M/WBE	Total	MWBE	Non-M/WBE	Total
532420	Office Machinery and Equipment Rental and Leasing	0	100	100	0.00%	2.81%	2.81%	\$0	\$460,819	\$460,819	0.00%	0.42%	0.42%
532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing	4	9	13	0.11%	0.25%	0.36%	\$17,920	\$109,036	\$126,956	0.02%	0.10%	0.12%
56	Administrative and Support and Waste Management and Remediation Services	0	41	41	0.00%	1.15%	1.15%	\$0	\$785,816	\$785,816	0.00%	0.72%	0.72%
561210	Facilities Support Services	0	1	1	0.00%	0.03%	0.03%	\$0	\$10,000	\$10,000	0.00%	0.01%	0.01%
561320	Temporary Help Services	0	1	1	0.00%	0.03%	0.03%	\$0	\$3,000	\$3,000	0.00%	0.00%	0.00%
561421	Telephone Answering Services	0	2	2	0.00%	0.06%	0.06%	\$0	\$8,735	\$8,735	0.00%	0.01%	0.01%
561440	Collection Agencies	0	1	1	0.00%	0.03%	0.03%	\$0	\$4,500	\$4,500	0.00%	0.00%	0.00%
561499	All Other Business Support Services	1	2	3	0.03%	0.06%	0.08%	\$2,648	\$44,914	\$47,562	0.00%	0.04%	0.04%
561611	Investigation Services	3	16	19	0.08%	0.45%	0.53%	\$90,250	\$341,685	\$431,935	0.08%	0.31%	0.40%
561612	Security Guards and Patrol Services	0	11	11	0.00%	0.31%	0.31%	\$0	\$3,015,295	\$3,015,295	0.00%	2.77%	2.77%
561622	Locksmiths	3	4	7	0.08%	0.11%	0.20%	\$1,946	\$8,947	\$10,893	0.00%	0.01%	0.01%
561710	Exterminating & Pest Control Svcs	0	21	21	0.00%	0.59%	0.59%	\$0	\$98,734	\$98,734	0.00%	0.09%	0.09%
561720	Janitorial Services	9	22	31	0.25%	0.62%	0.87%	\$10,972	\$5,284,237	\$5,295,209	0.01%	4.86%	4.87%
561730	Landscape care and maintenance services; Tree trimming services; Weed control and fertilizing services	12	8	20	0.34%	0.22%	0.56%	\$488,207	\$998,270	\$1,486,477	0.45%	0.92%	1.37%
561790	Other Services to Buildings and Dwellings	0	9	9	0.00%	0.25%	0.25%	\$0	\$97,454	\$97,454	0.00%	0.09%	0.09%
561920	Convention and Trade Show Organizers	1	0	1	0.03%	0.00%	0.03%	\$4,594	\$0	\$4,594	0.00%	0.00%	0.00%
561990	All Other Support Services	1	21	22	0.03%	0.59%	0.62%	\$1,674	\$976,854	\$978,528	0.00%	0.90%	0.90%
562119	Other Waste Collection	0	1	1	0.00%	0.03%	0.03%	\$0	\$1,000	\$1,000	0.00%	0.00%	0.00%
562212	Solid Waste Landfill	0	2	2	0.00%	0.06%	0.06%	\$0	\$1,177,000	\$1,177,000	0.00%	1.08%	1.08%
562219	Other Nonhazardous Waste Treatment and Disposal	0	2	2	0.00%	0.06%	0.06%	\$0	\$20,818	\$20,818	0.00%	0.02%	0.02%
562920	Materials Recovery Facilities	2	5	7	0.06%	0.14%	0.20%	\$9,495	\$40,547	\$50,042	0.01%	0.04%	0.05%
562991	Septic Tank and Related Services	0	1	1	0.00%	0.03%	0.03%	\$0	\$5,296	\$5,296	0.00%	0.00%	0.00%
562998	All Other Miscellaneous Waste Management Services	0	6	6	0.00%	0.17%	0.17%	\$0	\$118,642	\$118,642	0.00%	0.11%	0.11%
713940	Fitness and Recreational Sports Centers	0	3	3	0.00%	0.08%	0.08%	\$0	\$58,080	\$58,080	0.00%	0.05%	0.05%
713990	All Other Amusement and Recreation Industries	0	5	5	0.00%	0.14%	0.14%	\$0	\$134,490	\$134,490	0.00%	0.12%	0.12%



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		MWBE	Non-M/WBE	ALL	MWBE	Non-M/WBE	All	MWBE	Non-M/WBE	Total	MWBE	Non-M/WBE	Total
722410	Drinking Places (Alcoholic Beverages)	0	1	1	0.00%	0.03%	0.03%	\$0	\$11,511	\$11,511	0.00%	0.01%	0.01%
722511	Full-Service Restaurants	0	1	1	0.00%	0.03%	0.03%	\$0	\$7,500	\$7,500	0.00%	0.01%	0.01%
81	Other Services (except Public Administration)	0	37	37	0.00%	1.04%	1.04%	\$0	\$1,246,286	\$1,246,286	0.00%	1.15%	1.15%
811111	General Automotive Repair	0	6	6	0.00%	0.17%	0.17%	\$0	\$23,109	\$23,109	0.00%	0.02%	0.02%
811118	Other Automotive Mechanical and Electrical Repair and Maintenance	0	2	2	0.00%	0.06%	0.06%	\$0	\$480	\$480	0.00%	0.00%	0.00%
811121	Automotive Body, Paint, and Interior Repair and Maintenance	0	9	9	0.00%	0.25%	0.25%	\$0	\$49,369	\$49,369	0.00%	0.05%	0.05%
811122	Automotive Glass Replacement Shops	0	10	10	0.00%	0.28%	0.28%	\$0	\$34,905	\$34,905	0.00%	0.03%	0.03%
811192	Car Washes	0	5	5	0.00%	0.14%	0.14%	\$0	\$3,830	\$3,830	0.00%	0.00%	0.00%
811198	All Other Automotive Repair and Maintenance	0	13	13	0.00%	0.36%	0.36%	\$0	\$11,925	\$11,925	0.00%	0.01%	0.01%
811211	Consumer Electronics Repair and Maintenance	0	5	5	0.00%	0.14%	0.14%	\$0	\$27,895	\$27,895	0.00%	0.03%	0.03%
811213	Communication Equipment Repair and Maintenance	0	2	2	0.00%	0.06%	0.06%	\$0	\$134,847	\$134,847	0.00%	0.12%	0.12%
811219	Other Electronic and Precision Equipment Repair and Maintenance	0	8	8	0.00%	0.22%	0.22%	\$0	\$39,076	\$39,076	0.00%	0.04%	0.04%
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	1	31	32	0.03%	0.87%	0.90%	\$45,000	\$1,040,564	\$1,085,564	0.04%	0.96%	1.00%
811411	Home and Garden Equipment Repair and Maintenance	1	3	4	0.03%	0.08%	0.11%	\$8,100	\$5,277	\$13,377	0.01%	0.00%	0.01%
811490	Other Personal and Household Goods Repair and Maintenance	0	10	10	0.00%	0.28%	0.28%	\$0	\$133,019	\$133,019	0.00%	0.12%	0.12%
812331	Linen Supply	0	3	3	0.00%	0.08%	0.08%	\$0	\$3,112	\$3,112	0.00%	0.00%	0.00%
812910	Pet Care (except Veterinary) Services	0	2	2	0.00%	0.06%	0.06%	\$0	\$17,000	\$17,000	0.00%	0.02%	0.02%
812930	Parking Lots and Garages	0	8	8	0.00%	0.22%	0.22%	\$0	\$2,711,723	\$2,711,723	0.00%	2.49%	2.49%
812990	All Other Personal Services	0	3	3	0.00%	0.08%	0.08%	\$0	\$37,031	\$37,031	0.00%	0.03%	0.03%
813410	Civil & Social Organizations	0	1	1	0.00%	0.03%	0.03%	\$0	\$22,592	\$22,592	0.00%	0.02%	0.02%
Unclassified		0	9	9	0.00%	0.25%	0.25%	\$0	\$149,890	\$149,890	0.00%	0.14%	0.14%
	Total	315	3,247	3,562	8.84%	91.16%	100.00%	\$8,729,047	\$100,000,548	\$108,729,596	8.03%	91.97%	100.00%



#### **IV. Available Businesses Grouped by NAICS Code**

The available businesses identified in the Study are grouped by NAICS codes. For each NAICS code, the available businesses are reported by ethnicity, gender, and industry. If more than one NAICS code was identified for a business, then it was counted as available for each relevant NAICS code.

A total of 1,013 construction contractors were assigned NAICS codes based on the classification of their work. There were 25 unique six-digit NAICS codes assigned to 1,013 available construction contractors. The distribution of available construction contractors is summarized in Table 5.4 numerically by six-digit NAICS codes.

**Table 5.16: Available Construction Contractors by NAICS Code**

NAICS Code	Definition	African Americans	Asian Americans	Hispanic Americans	Native Americans	Caucasian Females	Non-Minority Males	All
236115	New Single-Family Housing Construction (except For-Sale Builders)	1.38%	0.10%	1.38%	0.10%	0.49%	2.86%	6.32%
236117	New Housing Operative Builders	0.59%	0.10%	0.79%	0.00%	0.20%	0.59%	2.27%
236118	Residential Remodelers	1.28%	0.10%	1.09%	0.10%	0.49%	1.68%	4.74%
236220	Commercial and Institutional Building Construction	2.37%	0.59%	1.68%	0.10%	1.28%	5.73%	11.75%
237110	Water and Sewer Line and Related Structures Construction	0.99%	0.20%	1.18%	0.00%	0.49%	3.26%	6.12%
237120	Oil and Gas Pipeline and Related Structures Construction	0.10%	0.00%	0.39%	0.00%	0.00%	0.39%	0.89%
237130	Power and Communication Line and Related Structures Construction (pt)	0.00%	0.10%	0.59%	0.00%	0.20%	0.79%	1.68%
237210	Land Subdivision	0.20%	0.00%	0.10%	0.00%	0.20%	0.69%	1.18%
237310	Highway, Street, and Bridge Construction	0.99%	0.20%	0.79%	0.00%	1.48%	2.17%	5.63%
237990	Other Heavy and Civil Engineering Construction	0.30%	0.10%	0.79%	0.10%	0.49%	2.07%	3.85%
238110	Poured Concrete Foundation and Structure Contractors	0.89%	0.10%	0.89%	0.00%	0.39%	1.38%	3.65%
238140	Masonry Contractors	0.30%	0.00%	0.30%	0.00%	0.10%	0.79%	1.48%
238150	Glass and Glazing Contractors	0.00%	0.20%	0.59%	0.00%	0.10%	0.79%	1.68%
238160	Roofing Contractors	0.39%	0.00%	0.49%	0.10%	0.20%	2.67%	3.85%
238190	Other Foundation, Structure, and Building Exterior Contractors	0.20%	0.00%	0.39%	0.00%	0.20%	0.59%	1.38%
238210	Electrical Contractors and Other Wiring Installation Contractors	0.99%	0.20%	1.28%	0.00%	1.38%	5.13%	8.98%
238220	Plumbing, Heating, and Air-Conditioning Contractors	0.89%	0.20%	1.38%	0.00%	1.18%	3.36%	7.01%
238290	Other Building Equipment Contractors	0.00%	0.10%	0.10%	0.00%	0.30%	0.79%	1.28%
238310	Drywall and Insulation Contractors	0.49%	0.00%	0.39%	0.00%	0.69%	0.89%	2.47%
238320	Painting and Wall Covering Contractors	0.39%	0.00%	0.79%	0.10%	0.79%	1.28%	3.36%





NAICS Code	Definition	African Americans	Asian Americans	Hispanic Americans	Native Americans	Caucasian Females	Non-Minority Males	All
238330	Flooring Contractors	0.00%	0.00%	0.39%	0.10%	0.49%	0.39%	1.38%
238350	Finish Carpentry Contractors	0.10%	0.00%	0.39%	0.00%	0.20%	0.89%	1.58%
238390	Other Building Finishing Contractors	0.10%	0.10%	0.39%	0.00%	0.30%	0.99%	1.88%
238910	Site Preparation Contractors	1.58%	0.39%	1.28%	0.10%	1.38%	1.88%	6.61%
238990	All Other Specialty Trade Contractors (pt)	1.48%	0.30%	1.38%	0.00%	2.76%	3.06%	8.98%
	<b>Total</b>	<b>15.99%</b>	<b>3.06%</b>	<b>19.25%</b>	<b>0.79%</b>	<b>15.79%</b>	<b>45.11%</b>	<b>100.00%</b>

A total of 1,553 professional services contractors were assigned NAICS codes based on the classification of their work. There were 57 unique six-digit NAICS codes assigned to 1,552 professional services contractors. There were 54 professional services contractors that had insufficient company description to assign a six-digit NAICS code and were instead assigned a two-digit NAICS code based on the industry assigned in the City's Study. There were three NAICS codes assigned to professional services contracts that were not represented in the available business dataset. The distribution of available professional services contractors is summarized in Table 5.5 numerically by NAICS codes, including the two-digit and six-digit level.

**Table 5.17: Available Professional Services Contractors by NAICS Code**

NAICS Code	Definition	African Americans	Asian Americans	Hispanic Americans	Native Americans	Caucasian Females	Non-Minority Males	All
511120	Periodical Publishers	0.00%	0.00%	0.00%	0.00%	0.06%	0.00%	0.06%
511130	Book Publishers	0.00%	0.06%	0.00%	0.00%	0.00%	0.06%	0.13%
511210	Software Publishers	0.00%	0.32%	0.06%	0.00%	0.19%	0.19%	0.77%
522110	Commercial Banking	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
522320	Financial Transactions Processing, Reserve, and Clearinghouse Activities	0.06%	0.06%	0.00%	0.00%	0.00%	0.06%	0.19%
523930	Investment Advice	0.00%	0.06%	0.00%	0.00%	0.00%	0.00%	0.06%
531120	Lessors of Nonresidential Buildings (except Miniwarehouses)	0.06%	0.00%	0.00%	0.00%	0.06%	0.13%	0.26%
531130	Lessors of Miniwarehouses and Self-Storage Units	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%	0.06%
532120	Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing	0.00%	0.00%	0.00%	0.00%	0.13%	0.06%	0.19%
54	Professional, Scientific, and Technical Services	0.71%	0.13%	0.19%	0.00%	0.71%	1.74%	3.48%
541110	Offices of Lawyers	0.84%	0.06%	0.45%	0.00%	0.77%	8.05%	10.17%
541211	Offices of Certified Public Accountants	0.45%	0.00%	0.19%	0.00%	0.26%	1.03%	1.93%
541214	Payroll Services	0.19%	0.06%	0.00%	0.00%	0.06%	0.06%	0.39%
541219	Other Accounting Services	0.45%	0.06%	0.13%	0.00%	0.32%	0.39%	1.35%
541310	Architectural Services	0.26%	0.26%	0.97%	0.00%	0.64%	1.55%	3.67%
541320	Landscape Architectural Services	0.13%	0.06%	0.19%	0.06%	0.39%	1.22%	2.06%
541330	Engineering Services	1.67%	1.55%	2.32%	0.13%	1.42%	5.99%	13.07%



NAICS Code	Definition	African Americans	Asian Americans	Hispanic Americans	Native Americans	Caucasian Females	Non-Minority Males	All
541350	Building Inspection Services	0.26%	0.06%	0.19%	0.00%	0.19%	0.19%	0.90%
541370	Surveying and Mapping (except Geophysical) Services	0.19%	0.13%	0.13%	0.00%	0.26%	0.90%	1.61%
541380	Testing Laboratories	0.06%	0.19%	0.26%	0.13%	0.45%	0.39%	1.48%
541410	Interior Design Services	0.19%	0.00%	0.13%	0.00%	0.45%	0.32%	1.09%
541430	Graphic Design Services	0.39%	0.00%	0.13%	0.00%	0.58%	0.39%	1.48%
541490	Other Specialized Design Services	0.06%	0.06%	0.06%	0.00%	0.13%	0.26%	0.58%
541511	Custom Computer Programming Services	0.52%	0.71%	0.77%	0.00%	0.71%	0.84%	3.54%
541512	Computer System Design Services	0.45%	0.64%	0.58%	0.06%	0.84%	0.84%	3.41%
541513	Computer Facilities Management Services	0.19%	0.58%	0.39%	0.00%	0.26%	0.32%	1.74%
541519	Other Computer Related Services	0.45%	0.58%	0.26%	0.00%	0.77%	0.39%	2.45%
541611	Administrative Management and General Management Consulting Services	2.00%	0.64%	0.84%	0.00%	1.55%	1.55%	6.57%
541612	Human Resources Consulting Services	0.26%	0.39%	0.26%	0.00%	0.32%	0.58%	1.80%
541613	Marketing consulting services	0.71%	0.06%	0.26%	0.00%	1.03%	0.90%	2.96%
541614	Process, Physical Distribution, and Logistics Consulting Services	0.19%	0.06%	0.19%	0.00%	0.58%	0.26%	1.29%
541618	Other Management Consulting Services	1.55%	0.71%	0.64%	0.00%	1.22%	1.42%	5.54%
541620	Environmental Consulting Services	0.71%	0.52%	0.45%	0.13%	0.90%	0.64%	3.35%
541690	Other Scientific and Technical Consulting Services	0.64%	0.52%	0.64%	0.06%	1.09%	0.77%	3.73%
541715	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
541720	Research and Development in Social Sciences and Humanities	0.13%	0.00%	0.00%	0.00%	0.19%	0.19%	0.52%
541810	Advertising Agencies	0.13%	0.00%	0.06%	0.00%	0.26%	0.26%	0.71%
541820	Public Relations Agencies	0.64%	0.13%	0.00%	0.00%	0.45%	0.32%	1.55%
541850	Display Advertising	0.00%	0.00%	0.00%	0.00%	0.06%	0.13%	0.19%
541870	Advertising Material Distribution Services	0.13%	0.00%	0.00%	0.00%	0.13%	0.00%	0.26%
541890	Other Services Related to Advertising	0.06%	0.00%	0.00%	0.00%	0.71%	0.26%	1.03%
541910	Marketing Research and Public Opinion Polling	0.19%	0.06%	0.13%	0.00%	0.39%	0.13%	0.90%
541921	Photography Studios, Portrait	0.00%	0.00%	0.00%	0.00%	0.06%	0.13%	0.19%
541990	All Other Professional, Scientific, and Technical Services	0.64%	0.58%	1.09%	0.13%	1.22%	0.39%	4.06%
561110	Office Administrative Services	0.77%	0.13%	0.32%	0.00%	0.32%	0.58%	2.12%
561410	Document Preparation Services	0.13%	0.06%	0.19%	0.00%	0.26%	0.00%	0.64%
561621	Security Systems Services (except Locksmiths)	0.13%	0.00%	0.13%	0.00%	0.06%	0.39%	0.71%
562211	Hazardous Waste Treatment and Disposal	0.06%	0.00%	0.00%	0.00%	0.06%	0.06%	0.19%
562910	Remediation Services	0.00%	0.13%	0.32%	0.06%	0.32%	0.26%	1.09%
611420	Computer Training	0.00%	0.06%	0.06%	0.00%	0.19%	0.26%	0.58%



NAICS Code	Definition	African Americans	Asian Americans	Hispanic Americans	Native Americans	Caucasian Females	Non-Minority Males	All
611430	Professional and Management Development Training	0.52%	0.13%	0.19%	0.00%	0.58%	0.32%	1.74%
611519	Other Technical and Trade Schools	0.06%	0.00%	0.06%	0.00%	0.06%	0.13%	0.32%
611620	Sports and Recreation Instruction	0.00%	0.00%	0.00%	0.00%	0.06%	0.00%	0.06%
611699	All Other Miscellaneous Schools and Instruction	0.06%	0.00%	0.13%	0.00%	0.06%	0.13%	0.39%
621111	Offices of Physicians (except Mental Health Specialists)	0.00%	0.00%	0.06%	0.00%	0.06%	0.06%	0.19%
621511	Medical Laboratories	0.00%	0.00%	0.00%	0.00%	0.06%	0.00%	0.06%
624110	Child and Youth Services	0.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%
624190	Other Individual and Family Services	0.06%	0.00%	0.00%	0.00%	0.06%	0.00%	0.13%
711510	Independent Artists, Writers, and Performers	0.19%	0.00%	0.00%	0.00%	0.13%	0.19%	0.52%
811212	Computer and Office Machine Repair and Maintenance	0.00%	0.00%	0.06%	0.00%	0.26%	0.06%	0.39%
925110	Administration of Housing Programs	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Total</b>		<b>17.64%</b>	<b>9.85%</b>	<b>13.52%</b>	<b>0.77%</b>	<b>22.41%</b>	<b>35.80%</b>	<b>100.00%</b>

A total of 1,429 goods and services contractors were assigned NAICS codes based on the classification of their work. There were 189 unique six-digit NAICS codes assigned to 1,213 goods and services contractors. There were 213 goods and services contractors that had insufficient company description to assign a six-digit NAICS code and were instead assigned a two-digit NAICS code based on the industry assigned in the City's Study. Additionally, three goods and services contractors had insufficient company description to assign either a six-digit or two-digit NAICS code based on the industry assigned in the City's Study. The distribution of available goods and services contractors is summarized in Table 5.6 numerically by NAICS codes, including the two-digit and six-digit level and the unclassified goods and services contractors.

**Table 5.18: Available Goods and Services Contractors by NAICS Code**

NAICS Code	Definition	African Americans	Asian Americans	Hispanic Americans	Native Americans	Caucasian Females	Non-Minority Males	All
111421	Nursery and Tree Production	0.00%	0.00%	0.00%	0.00%	0.07%	0.49%	0.56%
112519	Other Aquaculture	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%	0.14%
115112	Soil Preparation, Planting, and Cultivating	0.00%	0.00%	0.00%	0.00%	0.07%	0.21%	0.28%
221122	Electric Power Distribution	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%
221310	Water Supply and Irrigation Systems	0.21%	0.07%	0.00%	0.00%	0.07%	0.28%	0.63%
221320	Sewage Treatment Facilities	0.07%	0.07%	0.07%	0.00%	0.07%	0.21%	0.49%
313310	Textile and Fabric Finishing Mills	0.00%	0.00%	0.00%	0.00%	0.14%	0.00%	0.14%
314910	Textile Bag and Canvas Mills	0.07%	0.00%	0.07%	0.00%	0.07%	0.28%	0.49%
314994	Rope, Cordage, Twine, Tire Cord, and Tire Fabric Mills	0.00%	0.00%	0.07%	0.00%	0.07%	0.07%	0.21%
314999	All Other Miscellaneous Textile Product Mills	0.00%	0.00%	0.07%	0.00%	0.07%	0.07%	0.21%



NAICS Code	Definition	African Americans	Asian Americans	Hispanic Americans	Native Americans	Caucasian Females	Non-Minority Males	All
315220	Men's and Boys' Cut and Sew Apparel Manufacturing	0.00%	0.00%	0.07%	0.00%	0.00%	0.07%	0.14%
315990	Apparel Accessories and Other Apparel Manufacturing	0.00%	0.00%	0.07%	0.00%	0.00%	0.00%	0.07%
316210	Footwear Manufacturing	0.00%	0.00%	0.07%	0.00%	0.00%	0.00%	0.07%
32	Manufacturing	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%
323111	Commercial Printing (except Screen and Books)	0.07%	0.00%	0.21%	0.00%	0.35%	0.98%	1.61%
325180	Other Basic Inorganic Chemical Manufacturing	0.00%	0.00%	0.07%	0.00%	0.00%	0.00%	0.07%
325211	Plastics Material and Resin Manufacturing	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%	0.14%
325612	Polish and Other Sanitation Good Manufacturing	0.00%	0.00%	0.21%	0.00%	0.00%	0.14%	0.35%
325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing	0.07%	0.00%	0.00%	0.00%	0.00%	0.07%	0.14%
326122	Plastics Pipe and Pipe Fitting Manufacturing	0.00%	0.00%	0.07%	0.00%	0.07%	0.00%	0.14%
326199	All Other Plastics Product Manufacturing	0.07%	0.00%	0.07%	0.00%	0.28%	0.14%	0.56%
326299	All Other Rubber Product Manufacturing	0.07%	0.00%	0.00%	0.00%	0.14%	0.07%	0.28%
327110	Pottery, Ceramics, and Plumbing Fixture Manufacturing	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%
327390	Other Concrete Product Manufacturing	0.00%	0.00%	0.00%	0.00%	0.07%	0.35%	0.42%
327992	Ground or Treated Mineral and Earth Manufacturing	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%
331511	Iron Foundries	0.00%	0.00%	0.00%	0.00%	0.07%	0.00%	0.07%
332311	Prefabricated Metal Building and Component Manufacturing	0.00%	0.07%	0.00%	0.00%	0.00%	0.14%	0.21%
332312	Fabricated Structural Metal Manufacturing	0.00%	0.07%	0.00%	0.00%	0.14%	0.28%	0.49%
332321	Metal Window and Door Manufacturing	0.00%	0.00%	0.07%	0.00%	0.07%	0.21%	0.35%
332322	Sheet Metal Work Manufacturing	0.00%	0.00%	0.00%	0.00%	0.28%	0.07%	0.35%
332710	Machine Shops	0.07%	0.14%	0.07%	0.00%	0.28%	0.14%	0.70%
332912	Fluid Power Valve and Hose Fitting Manufacturing	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%
332919	Other Metal Valve and Pipe Fitting Manufacturing	0.07%	0.00%	0.00%	0.00%	0.00%	0.07%	0.14%
332994	Small Arms Manufacturing	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%
332999	All Other Miscellaneous Fabricated Metal Product Manufacturing	0.14%	0.07%	0.14%	0.00%	0.14%	0.21%	0.70%
333111	Farm Machinery and Equipment Manufacturing	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%	0.14%
333120	Construction Machinery Manufacturing	0.00%	0.00%	0.00%	0.00%	0.14%	0.14%	0.28%
333249	Other Industrial Machinery Manufacturing	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%	0.14%
333314	Optical Instrument and Lens Manufacturing	0.07%	0.00%	0.07%	0.00%	0.14%	0.00%	0.28%
333318	Other Commercial and Service Industry Machinery Manufacturing	0.00%	0.07%	0.07%	0.00%	0.07%	0.14%	0.35%
333413	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%
333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	0.00%	0.00%	0.07%	0.00%	0.00%	0.21%	0.28%



NAICS Code	Definition	African Americans	Asian Americans	Hispanic Americans	Native Americans	Caucasian Females	Non-Minority Males	All
333517	Machine Tool Manufacturing	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%
333611	Turbine and Turbine Generator Set Units Manufacturing	0.00%	0.00%	0.00%	0.00%	0.14%	0.00%	0.14%
333613	Mechanical Power Transmission Equipment Manufacturing	0.00%	0.00%	0.00%	0.00%	0.14%	0.07%	0.21%
333618	Other Engine Equipment Manufacturing	0.07%	0.00%	0.00%	0.00%	0.07%	0.14%	0.28%
333911	Pump and Pumping Equipment Manufacturing	0.07%	0.00%	0.00%	0.00%	0.14%	0.14%	0.35%
333912	Air and Gas Compressor Manufacturing	0.07%	0.00%	0.07%	0.00%	0.00%	0.00%	0.14%
333923	Overhead Traveling Crane, Hoist, and Monorail System Manufacturing	0.00%	0.07%	0.00%	0.00%	0.14%	0.00%	0.21%
333999	All Other Miscellaneous General Purpose Machinery Manufacturing	0.07%	0.07%	0.00%	0.00%	0.07%	0.14%	0.35%
334111	Electronic Computer Manufacturing	0.07%	0.00%	0.07%	0.00%	0.07%	0.07%	0.28%
334118	Computer Terminal and Other Computer Peripheral Equipment Manufacturing	0.07%	0.00%	0.00%	0.00%	0.00%	0.07%	0.14%
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	0.07%	0.00%	0.14%	0.00%	0.35%	0.00%	0.56%
334290	Other Communications Equipment Manufacturing	0.00%	0.00%	0.07%	0.00%	0.21%	0.14%	0.42%
334310	Audio and Video Equipment Manufacturing	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%	0.14%
334513	Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables	0.07%	0.00%	0.07%	0.00%	0.07%	0.21%	0.42%
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	0.07%	0.00%	0.07%	0.00%	0.07%	0.00%	0.21%
334519	Other measuring & controlling devices	0.07%	0.14%	0.00%	0.00%	0.21%	0.07%	0.49%
335121	Residential Electric Lighting Fixture Manufacturing	0.00%	0.00%	0.07%	0.00%	0.00%	0.00%	0.07%
335129	Other Lighting Equipment Manufacturing	0.07%	0.00%	0.00%	0.00%	0.00%	0.07%	0.14%
335210	Small Electrical Appliance Manufacturing	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
335314	Relay and Industrial Control Manufacturing	0.00%	0.00%	0.00%	0.00%	0.00%	0.14%	0.14%
335911	Storage Battery Manufacturing	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%
335999	All Other Miscellaneous Electrical Equipment and Component Manufacturing	0.07%	0.00%	0.07%	0.00%	0.14%	0.21%	0.49%
336120	Heavy Duty Truck Manufacturing	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
336211	Motor Vehicle Body Manufacturing	0.00%	0.00%	0.00%	0.00%	0.14%	0.00%	0.14%
336999	All Other Transportation Equipment Manufacturing	0.00%	0.07%	0.00%	0.00%	0.07%	0.00%	0.14%
337127	Institutional Furniture Manufacturing	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%
337214	Office Furniture (except Wood) Manufacturing	0.00%	0.00%	0.00%	0.00%	0.00%	0.14%	0.14%
337910	Mattress Manufacturing	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%
339113	Surgical Appliance and Supplies Manufacturing	0.00%	0.00%	0.14%	0.00%	0.07%	0.14%	0.35%



NAICS Code	Definition	African Americans	Asian Americans	Hispanic Americans	Native Americans	Caucasian Females	Non-Minority Males	All
339920	Sporting and Athletic Goods Manufacturing	0.00%	0.00%	0.07%	0.00%	0.00%	0.07%	0.14%
339950	Sign Manufacturing	0.07%	0.00%	0.00%	0.00%	0.28%	0.14%	0.49%
339992	Musical Instrument Manufacturing	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%
339999	All Other Miscellaneous Manufacturing	0.07%	0.07%	0.07%	0.00%	0.35%	0.35%	0.91%
42	Wholesale Trade	0.00%	0.07%	0.07%	0.00%	0.42%	2.45%	3.01%
423110	Automobile and Other Motor Vehicle Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	0.00%	0.00%	0.07%	0.00%	0.14%	0.28%	0.49%
423130	Tire and Tube Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.00%	0.21%	0.21%
423210	Furniture Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.21%	0.28%	0.49%
423220	Home Furnishing Merchant Wholesalers	0.07%	0.00%	0.00%	0.00%	0.14%	0.14%	0.35%
423310	Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers	0.00%	0.00%	0.07%	0.00%	0.07%	0.35%	0.49%
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	0.00%	0.00%	0.07%	0.00%	0.14%	0.21%	0.42%
423390	Other Construction Material Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.14%	0.21%	0.35%
423410	Photographic Equipment and Supplies Merchant Wholesalers	0.00%	0.00%	0.07%	0.00%	0.07%	0.00%	0.14%
423420	Office Equipment Merchant Wholesalers	0.07%	0.00%	0.14%	0.00%	0.21%	0.35%	0.77%
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	0.00%	0.07%	0.07%	0.00%	0.28%	0.42%	0.84%
423440	Other Commercial Equipment Merchant Wholesalers	0.00%	0.00%	0.07%	0.00%	0.14%	0.42%	0.63%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	0.14%	0.00%	0.07%	0.00%	0.21%	0.35%	0.77%
423490	Other Professional Equipment and Supplies Merchant Wholesalers	0.07%	0.00%	0.07%	0.00%	0.14%	0.35%	0.63%
423510	Metal Service Centers and Other Metal Merchant Wholesalers	0.07%	0.00%	0.14%	0.00%	0.35%	0.49%	1.05%
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	0.07%	0.00%	0.28%	0.00%	0.70%	1.19%	2.24%
423690	Other Electronic Parts and Equipment Merchant Wholesalers	0.14%	0.00%	0.07%	0.00%	0.21%	0.28%	0.70%
423710	Hardware Merchant Wholesalers	0.00%	0.07%	0.21%	0.00%	0.63%	0.35%	1.26%
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.14%	0.49%	0.63%
423730	Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers	0.07%	0.00%	0.07%	0.00%	0.00%	0.21%	0.35%
423740	Refrigeration Equipment and Supplies Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.00%	0.14%	0.14%
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers	0.00%	0.00%	0.07%	0.00%	0.21%	0.28%	0.56%
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.00%	0.28%	0.28%



NAICS Code	Definition	African Americans	Asian Americans	Hispanic Americans	Native Americans	Caucasian Females	Non-Minority Males	All
423830	Industrial Machinery and Equipment Merchant Wholesalers	0.00%	0.00%	0.28%	0.00%	0.49%	1.40%	2.17%
423840	Industrial Supplies Merchant Wholesalers	0.00%	0.00%	0.21%	0.00%	0.56%	0.14%	0.91%
423850	Service Establishment Equipment and Supplies Merchant Wholesalers	0.00%	0.00%	0.28%	0.00%	0.35%	0.21%	0.84%
423860	Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers	0.14%	0.00%	0.07%	0.00%	0.28%	0.35%	0.84%
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers	0.00%	0.00%	0.14%	0.00%	0.07%	0.21%	0.42%
423930	Recyclable Material Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.07%	0.14%	0.21%
423940	Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%
423990	Other Miscellaneous Durable Goods Merchant Wholesalers	0.00%	0.00%	0.14%	0.00%	0.35%	0.56%	1.05%
424110	Printing and Writing Paper Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.07%	0.21%	0.28%
424120	Stationery and Office Supplies Merchant Wholesalers	0.00%	0.00%	0.07%	0.00%	0.35%	0.28%	0.70%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	0.00%	0.00%	0.14%	0.00%	0.07%	0.00%	0.21%
424320	Men's and Boys' Clothing and Furnishings Merchant Wholesalers	0.00%	0.00%	0.07%	0.00%	0.07%	0.00%	0.14%
424330	Women's, Children's, and Infants' Clothing and Accessories Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%	0.14%
424340	Footwear Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.00%	0.14%	0.14%
424410	General Line Grocery Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%
424490	Other Grocery and Related Products Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%
424610	Plastics Materials and Basic Forms and Shapes Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.07%	0.21%	0.28%
424690	Other Chemical and Allied Products Merchant Wholesalers	0.00%	0.00%	0.14%	0.00%	0.00%	0.42%	0.56%
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	0.00%	0.00%	0.00%	0.00%	0.07%	0.14%	0.21%
424910	Farm Supplies Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.00%	0.21%	0.21%
424930	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.14%	0.28%	0.42%
424950	Paint, Varnish, and Supplies Merchant Wholesalers	0.00%	0.00%	0.00%	0.00%	0.00%	0.14%	0.14%
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers	0.00%	0.07%	0.07%	0.00%	0.21%	0.21%	0.56%
425110	Business to Business Electronic Markets	0.07%	0.00%	0.00%	0.00%	0.14%	0.07%	0.28%
425120	Wholesale Trade Agents and Brokers	0.07%	0.00%	0.00%	0.00%	0.14%	0.00%	0.21%
44	Retail Trade	0.14%	0.00%	0.07%	0.07%	0.56%	2.66%	3.50%
441110	New Car Dealers	0.00%	0.00%	0.00%	0.00%	0.00%	0.56%	0.56%
441222	Boat Dealers	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
441228	Motorcycle, ATV, and All Other Motor Vehicle Dealers	0.00%	0.00%	0.00%	0.00%	0.00%	0.21%	0.21%
441310	Automotive Parts and Accessories Stores	0.00%	0.00%	0.00%	0.00%	0.07%	0.42%	0.49%



NAICS Code	Definition	African Americans	Asian Americans	Hispanic Americans	Native Americans	Caucasian Females	Non-Minority Males	All
441320	Tire Dealers	0.00%	0.00%	0.00%	0.00%	0.00%	0.21%	0.21%
442110	Furniture Stores	0.00%	0.00%	0.00%	0.00%	0.28%	0.14%	0.42%
442210	Floor Covering Stores	0.00%	0.00%	0.07%	0.00%	0.14%	0.56%	0.77%
443142	Electronics Stores	0.07%	0.07%	0.14%	0.00%	0.07%	0.21%	0.56%
444110	Home Centers	0.00%	0.00%	0.07%	0.00%	0.00%	0.21%	0.28%
444190	Other Building Material Dealers	0.00%	0.00%	0.14%	0.00%	0.28%	0.63%	1.05%
444210	Outdoor Power Equipment Stores	0.00%	0.00%	0.00%	0.00%	0.14%	0.14%	0.28%
444220	Nursery, Garden Center, and Farm Supply Stores	0.07%	0.00%	0.00%	0.00%	0.00%	0.42%	0.49%
448110	Men's Clothing Stores	0.00%	0.00%	0.00%	0.00%	0.07%	0.00%	0.07%
448120	Women's Clothing Stores	0.00%	0.00%	0.00%	0.00%	0.14%	0.00%	0.14%
448150	Clothing Accessories Stores	0.00%	0.00%	0.00%	0.00%	0.07%	0.00%	0.07%
448190	Other Clothing Stores	0.00%	0.00%	0.14%	0.00%	0.21%	0.21%	0.56%
451110	Sporting Goods Stores	0.00%	0.00%	0.07%	0.00%	0.14%	0.28%	0.49%
453220	Gift Novelty & Souvenir Stores	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%
453998	All Other Miscellaneous Store Retailers (except Tobacco Stores)	0.00%	0.00%	0.00%	0.00%	0.35%	0.98%	1.33%
484210	Used Household and Office Goods Moving	0.00%	0.00%	0.00%	0.00%	0.07%	0.21%	0.28%
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance	0.07%	0.00%	0.21%	0.00%	0.07%	0.14%	0.49%
485510	Charter Bus Industry	0.00%	0.00%	0.00%	0.00%	0.07%	0.00%	0.07%
488410	Motor Vehicle Towing	0.00%	0.14%	0.00%	0.00%	0.14%	0.14%	0.42%
488510	Freight Transportation Arrangement	0.07%	0.00%	0.07%	0.00%	0.07%	0.21%	0.42%
488999	All Other Support Activities for Transportation	0.00%	0.00%	0.00%	0.00%	0.21%	0.07%	0.28%
493110	General Warehousing and Storage	0.00%	0.00%	0.07%	0.00%	0.14%	0.28%	0.49%
493190	Other Warehousing and Storage	0.00%	0.00%	0.00%	0.00%	0.14%	0.28%	0.42%
517911	Telecommunications Resellers	0.00%	0.00%	0.07%	0.00%	0.28%	0.21%	0.56%
532289	All Other Consumer Goods Rental	0.00%	0.00%	0.00%	0.00%	0.07%	0.14%	0.21%
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	0.00%	0.00%	0.14%	0.00%	0.00%	0.42%	0.56%
532420	Office Machinery and Equipment Rental and Leasing	0.00%	0.00%	0.00%	0.00%	0.14%	0.00%	0.14%
532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing	0.00%	0.00%	0.00%	0.00%	0.21%	0.42%	0.63%
56	Administrative and Support and Waste Management and Remediation Services	0.42%	0.00%	0.14%	0.00%	0.63%	2.24%	3.43%
561210	Facilities Support Services	0.42%	0.21%	0.56%	0.00%	0.28%	0.42%	1.89%
561320	Temporary Help Services	0.07%	0.14%	0.28%	0.00%	0.28%	0.28%	1.05%
561421	Telephone Answering Services	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%
561440	Collection Agencies	0.00%	0.00%	0.00%	0.00%	0.14%	0.00%	0.14%
561499	All Other Business Support Services	0.28%	0.07%	0.21%	0.00%	0.21%	0.63%	1.40%





NAICS Code	Definition	African Americans	Asian Americans	Hispanic Americans	Native Americans	Caucasian Females	Non-Minority Males	All
561611	Investigation Services	0.28%	0.07%	0.07%	0.00%	0.28%	0.42%	1.12%
561612	Security Guards and Patrol Services	0.21%	0.00%	0.21%	0.00%	0.28%	0.56%	1.26%
561622	Locksmiths	0.00%	0.07%	0.00%	0.00%	0.00%	0.56%	0.63%
561710	Exterminating & Pest Control Svcs	0.07%	0.00%	0.00%	0.00%	0.07%	0.63%	0.77%
561720	Janitorial Services	0.91%	0.14%	0.77%	0.00%	0.35%	1.05%	3.22%
561730	Landscape care and maintenance services; Tree trimming services; Weed control and fertilizing services	0.84%	0.07%	0.77%	0.00%	0.98%	1.12%	3.78%
561790	Other Services to Buildings and Dwellings	0.28%	0.07%	0.21%	0.00%	0.21%	0.28%	1.05%
561920	Convention and Trade Show Organizers	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%
561990	All Other Support Services	0.35%	0.14%	0.35%	0.00%	0.42%	1.89%	3.15%
562119	Other Waste Collection	0.00%	0.00%	0.00%	0.07%	0.00%	0.14%	0.21%
562212	Solid Waste Landfill	0.00%	0.00%	0.00%	0.00%	0.00%	0.21%	0.21%
562219	Other Nonhazardous Waste Treatment and Disposal	0.00%	0.00%	0.00%	0.00%	0.07%	0.14%	0.21%
562920	Materials Recovery Facilities	0.00%	0.00%	0.00%	0.00%	0.14%	0.14%	0.28%
562991	Septic Tank and Related Services	0.00%	0.00%	0.00%	0.00%	0.07%	0.28%	0.35%
562998	All Other Miscellaneous Waste Management Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%
713940	Fitness and Recreational Sports Centers	0.00%	0.00%	0.00%	0.00%	0.07%	0.21%	0.28%
713990	All Other Amusement and Recreation Industries	0.00%	0.00%	0.00%	0.00%	0.07%	0.21%	0.28%
722410	Drinking Places (Alcoholic Beverages)	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.07%
722511	Full-Service Restaurants	0.07%	0.00%	0.00%	0.00%	0.00%	0.14%	0.21%
81	Other Services (except Public Administration)	0.63%	0.00%	0.00%	0.00%	0.77%	3.50%	4.90%
811111	General Automotive Repair	0.00%	0.00%	0.00%	0.00%	0.07%	0.21%	0.28%
811118	Other Automotive Mechanical and Electrical Repair and Maintenance	0.07%	0.00%	0.00%	0.00%	0.00%	0.21%	0.28%
811121	Automotive Body, Paint, and Interior Repair and Maintenance	0.07%	0.00%	0.28%	0.00%	0.00%	0.21%	0.56%
811122	Automotive Glass Replacement Shops	0.00%	0.00%	0.35%	0.00%	0.00%	0.07%	0.42%
811192	Car Washes	0.00%	0.00%	0.07%	0.00%	0.00%	0.14%	0.21%
811198	All Other Automotive Repair and Maintenance	0.00%	0.00%	0.00%	0.00%	0.00%	0.14%	0.14%
811211	Consumer Electronics Repair and Maintenance	0.00%	0.00%	0.07%	0.00%	0.07%	0.07%	0.21%
811213	Communication Equipment Repair and Maintenance	0.00%	0.00%	0.00%	0.00%	0.21%	0.07%	0.28%
811219	Other Electronic and Precision Equipment Repair and Maintenance	0.00%	0.14%	0.07%	0.00%	0.07%	0.35%	0.63%
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	0.07%	0.00%	0.00%	0.00%	0.14%	0.70%	0.91%
811411	Home and Garden Equipment Repair and Maintenance	0.00%	0.00%	0.07%	0.00%	0.00%	0.14%	0.21%
811490	Other Personal and Household Goods Repair and Maintenance	0.00%	0.00%	0.07%	0.00%	0.00%	0.35%	0.42%
812331	Linen Supply	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%



NAICS Code	Definition	African Americans	Asian Americans	Hispanic Americans	Native Americans	Caucasian Females	Non-Minority Males	All
812910	Pet Care (except Veterinary) Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
812930	Parking Lots and Garages	0.00%	0.00%	0.07%	0.00%	0.07%	0.07%	0.21%
812990	All Other Personal Services	0.21%	0.00%	0.14%	0.00%	0.00%	0.07%	0.42%
813410	Civil & Social Organizations	0.07%	0.00%	0.00%	0.00%	0.00%	0.07%	0.14%
Unclassified		0.00%	0.00%	0.00%	0.00%	0.14%	0.07%	0.21%
	<b>Total</b>	<b>9.17%</b>	<b>2.59%</b>	<b>11.76%</b>	<b>0.14%</b>	<b>24.28%</b>	<b>52.06%</b>	<b>100.00%</b>

## ***V. Conclusion***

This chapter presents the NAICS code assignment for the prime contracts and available prime contractors analyzed in the *2016 Disparity Study*. A total of 286 unique six-digit NAICS codes were assigned to the prime contracts awarded by the City during the October 1, 2010 to September 30, 2014 study period. And 275 unique six-digit NAICS codes were assigned to the available prime contractors. This industry classification of the analyzed contracts and available contractors confirmed the accuracy of the industry assignments, for both datasets, as used in the 2016 Disparity Study.



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# ***CHAPTER 6: Anecdotal Analysis***

## ***I. Introduction***

This chapter evaluates qualitative evidence to determine the extent to which unlawful race or gender discrimination led to the race and gender disparities that were documented in the 2016 Disparity Study. This analysis includes anecdotal evidence collected directly from owners of businesses located in West Palm Beach (City) using an online survey and focus group.

Responses from the survey were more limited but correlated with the experiences expressed by the focus group participants. Businesses reported various impediments to the formation, growth, availability, and utilization of M/WBEs as prime contractors and subcontractors. Although the survey responses were more limited than the comments in the focus group, many did correlate with the experiences expressed by the focus group participants.

The findings from these two methods provided insight on the business community's perception of barriers attributed to the practices of the City and its prime contractors. They also offer a perspective regarding the context within which the City's contracting process occurred during the study period. The evidence, however, did not define the extent to which the race and gender statistical disparities that were documented in the 2016 Disparity Study could be attributed to actions of the City or its prime contractors. Nor can these data be used as a predicate for race or gender-based remedies.

## ***II. Focus Group Overview***

### ***A. Focus Group Guide***

The focus group discussion guide was designed to stimulate conversation and reveal information about the barriers that M/WBEs encounter in working with or seeking work from the City and its prime contractors. The guide was based, in part, on a review of the City's procurement procedures, as set forth in the City of West Palm Beach Procedure 20-05 and the City of West Palm Beach Small Business Program.<sup>37</sup> The probes touched on numerous issues that arise in the solicitation and awarding of public contracts.

Common issues have been identified from the focus group discussion and are highlighted below as themes; selected excerpts proceed each numbered theme in the findings section.



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<sup>37</sup> City of West Palm Beach General Procurement Procedures, revised November 2017, which is also known as Procedure 20-05 of the City's General Procedures; and the City of West Palm Beach Small Business Program, as set for in Ord. No. 4548-15, § 1, adopted Feb. 2, 2015, which is also known as Art. IX.

## ***B. Time and Location***

Mason Tillman held the focus group from 1 p.m. to 3 p.m. on March 29, 2018, at the Mandel Public Library of West Palm Beach, at 411 Clematis Street, West Palm Beach, Florida.

## ***C. Participant Selection Process***

Potential focus group participants who provide the services that the City typically procures were identified by local business development partners. Utilized MWBEs were also contacted. Fourteen business owners agreed to participate in the focus group, and 10 attended.

## ***D. Participant Demographics***

The focus group participants all owned businesses headquartered in West Palm Beach; six were construction businesses and four provided professional services. All the focus group participants were members of minority groups. There were nine African Americans, including four women, and one Hispanic American male. The homogeneity of the group allowed for social cohesion and a robust discussion.

## ***E. Findings***

Several themes emerged from the focus group discussion about the barriers experienced by business owners who participated. The quotes presented below about the City's procurement for construction and professional services represent views expressed by a majority of respondents. In sum, the focus group discussion revealed the following five consistent themes:

- Procurement awards are often limited to a small group of contractors.
- Contract bundling limits SBE participation in City contracts.
- Florida's CCNA pre-qualification requirements are subjectively applied by the City.
- SBE substitution policies are not enforced, and the City lacks enforcement procedures.
- Late payments to subcontractors are pervasive.

Many M/WBEs complained that they had little interaction with the City while working as subcontractors on City projects. They also said that the City's bonding requirements will keep small business owners from responding to bids and that M/WBE subcontractors struggle to meet prime contractors' bonding requirements. The discussion concluded with a dialogue about the exemplary practices employed by the City to increase M/WBEs participation on its contracts. Focus group participants also applauded the City for its commitment to inclusiveness, as evidenced by its commission of the 2016 Disparity Study and the hosted focus group.



## 1. Procurement limited to small group of contractors

There was a widespread feeling among the focus group participants of selection bias in city contracting. The contractors view the City as repeatedly giving contracts to the same older, more established firms, even when smaller firms have the required capacity. This perceived selection bias diminishes SBE firms' chances of getting city contracts that afford opportunities to build relationships with City departments. The focus group participants consider relationships with City managers as a resource that can benefit a business through its lifecycle.

The current procurement policy requires that the City select contractors who provide the best value, not only in terms of price but also of skill, experience, ability to meet project requirements, and other notable factors.<sup>38</sup> Given this procurement policy and the concerns voiced by the businesses, it is apparent that the grading system for proposals and qualifications is not strict or transparent.

*If you look at how many projects certain contractors have done with the City, it will feed the notion that the same old characters are always getting the opportunities.*

*Yes, I am certain they always use the same contractors.*

*If you were to look at projects over the last five years, you will see that there's been a short list of maybe two primes who get the vast majority of the contracts.*

*Some get work by making political contributions.*

*The evaluation criteria have so many points in one category that they can use as much discretion as they want as a way to select their preferred contractor. They should award on a rotational process to avoid the same contractors getting the work.*

*We can't get in the room with the preferred contractors.*

*Firms like [names withheld] are all firms that they like to use. These are all firms that generally get work with the City.*

## 2. Contract bundling limits SBE participation

Bundling small contracts into a larger, single contract or blanket purchase order creates a barrier to small businesses' ability to bid because of the capacity that a larger bundle requires. SBEs in the focus group assert that the City unnecessarily bundles contracts to enable the continual use of familiar high-capacity firms. The contractors understand the need to reduce the administration costs to oversee contracts, but they say this practice prevents the formation and growth of smaller firms.

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<sup>38</sup> Selection of respondent; best value, Code of Ordinances, (West Palm Beach, 2010), Section 66-71.



Even though bundling deprives equally capable and efficient firms from competing for contracts, the City has not abandoned the practice. However, federal laws, like the Small Business Act and Small Business Jobs Act, are intended to aid transparency and reduce the number of bundled contracts.<sup>39</sup>

*They put many small projects together to form one big construction project.*

*The City's projects are very large. I believe they're large because they don't have enough project managers. So, they bundle as many projects as they can so that about four or five project managers can carry about 10 to 16 projects.*

*They should unbundle rehabilitation and other smaller projects. They could create different types of projects to help build capacity.*

*Bundling is a problem. I have to bid depending on my company size, but the RFPs they are putting out are too large. It's not that we can't do the work, but to them a new or small entity can't do the work. It's claimed that they don't know the quality of our work, so we are a higher risk and thus they don't want to work with us. They generally work with companies that they have used in the past.*

*The City uses master agreements to give multiple contracts to one contractor.*

*Master agreements cut out small contractors.*

*The master contracts should be broken up to create more opportunities.*

### **3. CCNA pre-qualification requirements subjectively applied**

The focus group participants report selection bias in the processing of the Consultant's Competitive Negotiation Act (CCNA) application used to qualify consultants. They said the presence of bias depends, in part, on which City engineer reviews the CCNA application. Focus group participants reported inconsistencies and irregularities in the CCNA certification standards. They called for more concrete and objective certification requirements to ensure that the process is equitable, which would benefit M/WBEs and Caucasian males.

Based on the CCNA application and related documents on the West Palm Beach procurement web page, the business owners' concerns merit review. The CCNA application is ambiguous when referencing the number of previous projects or the requirements for a firm's capabilities in each type of work.<sup>40</sup> The CCNA application similarly lacks a concrete rating rubric to determine a firm's competency to carry out each type of work. The description of each type of work in the CCNA



<sup>39</sup> Kate M. Manuel, *Contract "Bundling" Under the Small Business Act: Existing Law and Proposed Amendments*, (Congressional Research Service, 2012), 1-3.

<sup>40</sup> "Application for Pre-Qualification as a Professional CCNA", (City of West Palm Beach Procurement, 2017), 2,3- 7-11.

application is nearly identical to the others, which propagates uncertainty about the capabilities actually needed for any given type of work.

*I think the CCNA certification process is subjective based on the engineer who reviews it. One of the comments I received was that we did not have a laboratory. In the geotechnical industry, we don't necessarily need a lab; most technical engineering companies starting out don't have a lab. Instead, we use other labs and generate reports based on them. So, the CCNA certification is not really separated by the various elements under geotechnical engineering. Instead, they put it all under one umbrella. We have an agreement with a lab in order to do our work.*

*The staff engineer who conducts the technical review will say we don't have enough experience with the City to be certified with the City. But I'm not sure where they want us to get the experience with the City.*

*The City's CCNA certification requirement is not very clear regarding how many years of experience, how many different projects, and the complexity of the projects that are required.*

*They require experience on a number of projects; not all projects are the same. However, the basic premise of the State of Florida CCNA standards is that the requirements must be specific to the discipline certification, otherwise the process will be a deterrent as well. A debriefing regarding the CCNA evaluation scores should be offered.*

*Engineers having the authority to approve the CCNA application is a lot of authority. The director of engineering should have the final say.*

#### **4. SBE substitution policies not enforced and procedures lacking**

Focus group participants voiced strong concern about SBE substitutions and enforcement of the City's small business program rules. They reported that the City's policies on substitution are incomplete and there are no standard substitution procedures or enforcement.

Focus group participants reported that the City does not monitor or evaluate a prime contractor's adherence to the subcontractor utilization plan after contract award. They believe there are no compliance provisions to enforce SBE utilization and no avenues for subcontractors to respond to or dispute a substitution.

*They don't monitor any subcontractor substitution procedures.*

*I don't think they have any substitution procedures.*



*They have [substitution procedures] in the agreement, but nobody monitors it, and nobody enforces it.*

*As soon as a prime contractor gets on the job, he's going to do something to disqualify the M/WBE subcontractor, and not get anybody else to replace the subcontractor. That happens all the time.*

## **5. Late payments from prime contractors pervasive**

Prime contractors' practice of paying M/WBEs late or not at all causes tremendous strain on a small contractor and can affect the business' ability to make payroll and hinder its growth and development. However, M/WBEs are struggling to obtain payment from prime contractors, despite state policy that should help. Conversely, the City has maintained goodwill with M/WBEs by regularly paying them within the state-designated timeframe.

Given the legal ramifications behind late payment, both by municipal agencies and prime contractors, there should be little reason for slow payment between the City and subconsultants or between primes and subconsultants. The Florida Prompt Payment Act requires state government agencies to pay prime contractors within 20 days and prime contractor to pay subcontractors and suppliers within 10 days after the contractor's receipt of payment.<sup>41</sup> Given state and federal protection, it is disappointing that subcontractors remain unpaid by primes, and unable to voice the stress that slow payment places on them without fear of being blacklisted.

*The prime owed me money which contractually they knew they owed me. After I went to the administration, I stopped getting work. Bottom line: I was blackballed.*

*Receiving payment within two weeks should be required.*

*The Finance Department should show it on their website each time they pay a prime contractor, so we can see what is going on.*

*Even if the subcontractor knows the prime has gotten paid and he wants to continue to work with that contractor, and you say, "You got your pay, now where's mine?" You know that subcontractor will not keep his job.*

*Primes should be told they will not get paid until they prove that their subcontractors have been paid.*

*We do a public records request and find out they've been paid... And then when you come to the meeting, the City officials just give you a blank stare because their attorneys are saying, "Well, you can't discuss that because it might be a potential legal situation." And you just have to give up because you don't have the money to hire an attorney, and you're too small to waste a whole lot of time fighting the powers that be.*



<sup>41</sup> The Florida Prompt Payment Act, Title XIV, Chapter 218, (Online Sunshine, The Florida Legislature, 2001), 218.73.



### **III. Online Survey Overview**

#### **A. Online Survey Guide**

A survey was created to illuminate the business experience of SBEs in West Palm Beach. The survey addressed 34 aspects of contracting relationships and was intended to collect qualitative information from a greater representation of business owners than could participate in a focus group.

#### **B. Time and Location**

The survey was uploaded to MailChimp and emailed on April 30, 2018. Recipients were given 10 days to respond. In an attempt to increase the response rate and decrease non-response bias, the survey was sent out a second time on May 7, 2018.

#### **C. Participant Selection Process**

A survey was emailed to the full list of 295 businesses that are certified with the City as SBEs and that provide construction, design professional services, other professional services, or goods and services that the City typically procures. The list was provided by Sandra Hammerstein and entitled SBE Vendors List.

Of the 295 business owners who were emailed the link, 10.7 percent responded. That response rate is within the range (10 to 15 percent) that leading survey companies consider typical. It is therefore reasonable to generalize the survey results to larger portions of the City's market area.

#### **D. Participant Demographics**

Participants were found based on the City's SBE Business List that has both M/WBE and non-M/WBEs that are certified small businesses. The following table illustrates the gender and race breakdown of the online survey respondents.

**Table 6.1: Demographics of Online Survey Respondents\***

<b>Gender</b>	<b>African American</b>	<b>Asian American</b>	<b>Caucasian American</b>	<b>Hispanic American</b>	<b>Native Americans</b>	<b>Total</b>
Female	10%		13%	17%	3%	<b>43%</b>
Male	20%	7%	23%	7%		<b>57%</b>
<b>Total</b>	<b>30%</b>	<b>7%</b>	<b>37%</b>	<b>23%</b>	<b>3%</b>	<b>100%</b>

\*Note that percentages in this table have been rounded to the nearest whole number.



## ***E. Findings***

The data from the electronic survey correlate with at least two of the themes that emerged from the focus group—that the City uses a select group of contractors, and that late payments are a chronic issue for small businesses.

### **1. City’s use of the same contractors**

Of the respondents to this survey, 31 percent said the City awards contracts to a select few businesses, while almost half of survey respondents said they did not know if the City uses a select few contractors to complete their projects. In reviewing the data, there is no measurable difference between the way that M/WBEs and non-M/WBEs view the City’s contracting habits.

**Table 6.2: Perceived Likelihood the City Contracts with Select Few Businesses**

<b>Owner Gender/Ethnicity</b>	<b>Bidder Status</b>	<b>Yes</b>	<b>No</b>	<b>I Don't Know</b>	<b>Total</b>
M/WBE	Bidder	7	4	6	<b>17</b>
	Non-Bidder	2	1	3	<b>6</b>
Caucasian Male	Bidder		1	4	<b>5</b>
	Non-Bidder			2	<b>2</b>
<b>Total</b>	<b>Total</b>	<b>9</b>	<b>6</b>	<b>15</b>	<b>28</b>

\*Two survey respondents refused to answer

### **2. Occurrences of late payment from Prime Contractors**

Table 5.3 suggests that M/WBEs face late payment from prime contractors more often than Caucasian males. The majority of the M/WBE and Caucasian male bidders said they received late payments sometimes or frequently.

**Table 6.3: Frequency of Late Payment from Primes by Ethnicity**

<b>Owner Gender/Ethnicity</b>	<b>Bidder Status</b>	<b>Never</b>	<b>Sometimes</b>	<b>Frequently</b>	<b>Total</b>
M/WBE	Bidder	5	3	6	<b>14</b>
	Non-Bidder	2		1	<b>3</b>
Caucasian Male	Bidder		2	1	<b>3</b>
	Non-Bidder	1			<b>1</b>
<b>Total</b>	<b>Total</b>	<b>8</b>	<b>5</b>	<b>8</b>	<b>21</b>

\*Nine survey respondents refused to answer

## ***IV. Summary***

Findings from the anecdotal research present evidence of discrimination that may have contributed to the unlawful race and gender statistical disparities documented in the 2016 Disparity Study. The anecdotal research included a focus group and an online survey of certified small business owners whose firms provide the services that the city of West Palm Beach procures. The research produced



qualitative evidence that businesses in the City perceive race and gender barriers in the award of the City’s prime contracts and subcontracts.

The data from the online survey were associated with two of the themes that emerged from the focus group. The focus group and online survey research tools both indicated that the City uses a select group of contractors, and the prime contractors pay the subcontractors late. The focus group participants said the City must advocate for M/WBEs to level the playing field in City contracting. Additionally, the focus group participants expressed hope that the 2016 Disparity Study results will prompt the City to implement race- and gender-conscious remedies to increase the participation of M/WBEs on its contracts.

However, *Croson* nor its progeny require an anecdotal analysis as a prerequisite to the implementation of race and gender-conscious remedies. Furthermore, *Croson and its progeny* have concurred that anecdotal testimony is insufficient evidence to support race and gender conscious remedies. In *Croson*, Justice O’Connor opined that “evidence 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.”<sup>42</sup>



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<sup>42</sup> *Croson*, 488 U.S. at 509; see *Teamsters*, 431 U.S. at 338.