

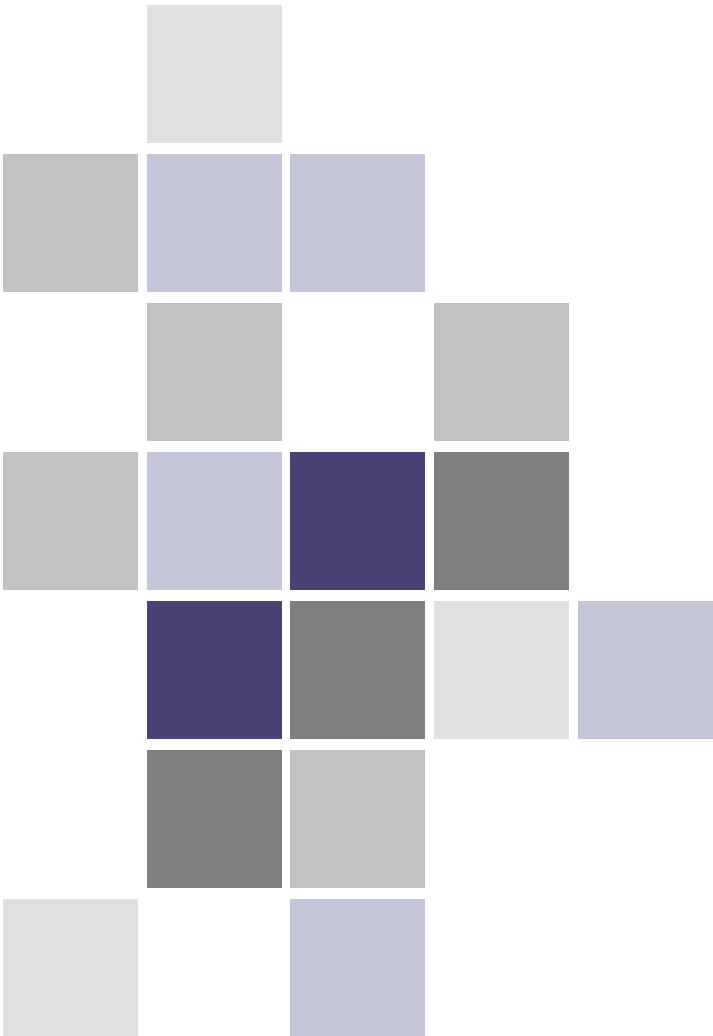


AVAILABILITY AND DISPARITY STUDY

CITY OF DALLAS, TEXAS

Final Report

July 31, 2020



CITY OF DALLAS, TEXAS
 AVAILABILITY AND DISPARITY STUDY

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CHAPTER I. INTRODUCTION

Availability and Disparity Study

City of Dallas, Texas



I.1 INTRODUCTION

Dallas, Texas is the third most populous city in Texas, and the ninth largest city in the country. In 2018, the estimated population was 1,345,076. The City of Dallas is the county seat of Dallas County and parts of the city extend into Collin, Denton Kaufman and Rockwall counties. The City is the most populous city in the Dallas-Fort Worth metroplex, which is comprised of 13 counties.

The goal of the City’s Business Inclusion and Development Plan (BID) is to increase procurement opportunities for minority and women business enterprises¹ (M/WBE). The Office of Business Diversity is charged with creating opportunities for minority and women vendors, building capacity of minority and women vendors, and diversity compliance in contract awards. The BID Plan applies to all City contracts for the procurement of construction, architectural and engineering, goods, other services and professional services, with emphasis on first tier subcontracts on City contracts over \$50,000.

In September 2018, the City retained MGT of America Consulting, LLC (MGT) to conduct an availability and disparity study to determine if there are any disparities between the utilization of minority, or women business enterprises (M/WBEs) compared to the availability of M/WBEs in the marketplace who are ready, willing, and able to perform work. MGT examined the statistical data using the following business categories:

- ◆ Construction;
- ◆ Architecture & Engineering;
- ◆ Professional Services;
- ◆ Other Services; and
- ◆ Goods and Supplies.

CHAPTER SECTIONS	
◆◆◆	
1.1	Introduction
1.2	Study Team
1.3	Overview of Study Approach
1.4	Report Organization
1.5	Glossary of Terms

I.2 STUDY TEAM

The MGT team who conducted the City’s Availability and Disparity Study is the most experienced and skilled team in the disparity study business. MGT staff has extensive social science research experience and experience in all aspects of disparity research. The experience of our team enables us to navigate the challenges, obstacles, and volatility associated with conducting a thorough Disparity Study, which can derail even the most well-planned and executed study.

¹ “Woman-owned businesses” refers to non-Hispanic white woman owned businesses.

1.2.1 MGT PROJECT TEAM

MGT is a Tampa-based research and management consulting firm. Since 1990, MGT has conducted over 225 disparity and disparity-related studies. The team of experts who dedicated their time, attention, and expertise to this study include:

Dr. Fred Seamon, Executive Vice President/Qualitative Researcher

Dr. Seamon was responsible for ensuring the team had the necessary staff and resources to address the deliverables set forth in the scope of work. Dr. Seamon also conducted policy interviews with City officials and stakeholders. Dr. Seamon has over 30 years of consulting, research, and teaching experience. He has been conducting research related to access and equity since he was a graduate student. Dr. Seamon has been involved in over 100 of MGT's disparity and disparity-related research studies. His disparity study areas of expertise include qualitative research methods, community engagement, and outreach and policy analysis. He has extensive experience analyzing the structure, operations, and processes of public sector organizations and nonprofit agencies and conducting research studies related to access, equity, and disparities in education, business, and human services. His consulting experience also includes workforce development, organizational development, program evaluation, program auditing, and performance management in workforce development, developmental disabilities, and community philanthropy.

Mr. Reggie Smith, Vice President/Project Director

Mr. Smith is the leader of MGT's disparity study business unit and is nationally recognized for managing and directing disparity studies. He has directed over 36 disparity studies since joining MGT and has managed some of the largest disparity studies in the country. He plays a key role in developing, refining, and executing MGT's methodology and quality standards for conducting disparity studies. Mr. Smith is a highly skilled project manager with the knowledge and skills necessary to manage the complexity of a disparity study. In addition to his disparity study experience, Mr. Smith has extensive experience providing consulting, training, and public relations services to private and public sector agencies, particularly in local government. Mr. Smith also specializes in managing and conducting reengineering, operational assessments, organizational and performance reviews, and administrative technology projects for city, county, and state government agencies.

Mr. Andres Bernal, Senior Consultant/Quantitative Data Manager

Mr. Bernal was responsible for collecting and analyzing City's contracting and procurement data and serves as the data manager for MGT's disparity studies. He has extensive experience in the collection and analysis of large complex data and applying various statistical and mathematical computations to reach reliable and valid conclusions that are used to shape disparity study findings and recommendations. Mr. Bernal has a law degree and an impressive background in economic theories, including Microeconomic Theory, Macroeconomic Theory, Econometrics, Urban Economics, Experimental Economics, Human and Labor Resource Economics, and Regression Analysis.

MGT SUBCONSULTANTS

Innovative Strategies – (MBE)

Mr. Treviño is a nationally recognized expert in the business diversity/inclusion and minority, women, local, and disadvantaged business economic development. As past Chairman of the Airport Minority Advisory Council (AMAC), the leading organization promoting minority/women-owned business (disadvantaged business) participation in our nation's airports, his technical expertise, leadership, and vision transformed the airport industry's approach to and programs affecting disadvantaged business consideration and inclusion. Innovative Strategies assisted with the review and draft summary of policies and procedures, conducted 35 In-Depth Interviews, conducted 20 stakeholder interviews, coordinated and managed two focus groups, and provided M/WBE recommendations for the final report.

Consumer & Market Insights – (MBE)

Consumer & Market Insights (CMI) is a certified, award winning People and Process Improvement company skilled with helping its client's improvement through marketing research, training, and community engagement. Ms. Reid is known for her skills in developing and implementing outreach programs for the business and non-profit sectors. She has a long history of business, community and philanthropic accomplishments in the Dallas/Fort Worth Metroplex and throughout the nation. Consumer & Market Insights developed the Community Outreach Plan and conducted 40 In-Depth Interviews.

Rincón & Associates – (MBE)

Over the past 40 years, Dr. Rincón has provided consulting services to a broad range of academic, public and private organizations. These projects have involved quantitative studies (i.e., telephone, mail, online, mixed-mode surveys) qualitative studies (i.e., focus groups, ethnographic studies, in-depth interviews), and demographic and statistical analyses. Rincón & Associates conducted the custom census surveys and the survey of vendors.

I.3 OVERVIEW OF STUDY APPROACH

The City's study includes procurement activity from October 1, 2013, through September 30, 2018 (FY2014 – FY2018). The objectives of this study were:

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

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

The work plan consisted of, but was not limited to, the following major tasks:

Phase I:

- ◆ Establish data parameters and finalize the work plan.
- ◆ Conduct a legal review.
- ◆ Review City's policies, procedures, and programs.
- ◆ Conduct public engagement meetings
- ◆ Determine City's geographic and product markets.
- ◆ Conduct market area and utilization analyses.
- ◆ Determine the availability of qualified firms.
- ◆ Conduct a review of identified peer M/WBE programs.

RESEARCH QUESTIONS

These research questions are embedded in relevant chapters throughout this report.

1. Is there factual predicate evidence to support a race- and gender-conscious M/WBE program for the City?
2. How does case law inform the research methodology for City's disparity study?
3. Are there disparities between the availability and utilization of M/WBE primes and subcontractors?
4. If so, what is the cause of the disparity? Is there other evidence that supports and/or explains why there is disparity?
5. Does the City passively engage in private sector discrimination?
6. Are there statistically significant disparities in the utilization of M/WBEs by primes on projects where there are no MWBE goals?
7. Is there qualitative/anecdotal evidence of disparate treatment of M/WBE subcontractors by prime contractors?

Phase II:

- ◆ Quantify the disparity between availability and utilization for primes and subcontractors.
- ◆ Analyze disparities in the private sector.
- ◆ Collect and analyze workforce reports.
- ◆ Conduct a survey of business owners.
- ◆ Collect and analyze anecdotal information.
- ◆ Prepare and present draft and final reports for the study.

I.4 REPORT ORGANIZATION

In addition to this introductory chapter, the City’s 2019 Disparity Study report consists of:

CHAPTER 2	<p>LEGAL FRAMEWORK</p> <p>Chapter 2 presents the legal framework and an overview of the controlling legal precedents that impact remedial procurement programs with a particular concentration on the United States Court of Appeals for the Fifth Circuit.</p>
CHAPTER 3	<p>REVIEW OF POLICIES, PROCEDURES, AND PROGRAMS</p> <p>Chapter 3 provides MGT’s analysis of the City’s race- and gender-neutral and race- and gender-conscious policies, procedures, and programs.</p>
CHAPTER 4	<p>MARKET AREA AND UTILIZATION ANALYSES</p> <p>Chapter 4 presents the methodology used to determine City’s relevant market area, and the analyses of vendor utilization by the City for the procurement of Construction, Architecture & Engineering, Professional Services, Other Services, and Goods & Supplies procurement.</p>
CHAPTER 5	<p>AVAILABILITY AND DISPARITY ANALYSES</p> <p>Chapter 5 presents the availability of M/WBEs in City’s geographic and product markets and the disparity between the availability and utilization of M/WBEs by the City.</p>
CHAPTER 6	<p>PRIVATE SECTOR ANALYSIS</p> <p>Chapter 6 provides an analysis of the disparities present in the private sector and the effect on M/WBEs. This private sector analysis demonstrates why the City’s race and gender-conscious programs and goals are necessary to ensure it does not become a passive participant in private sector discrimination.</p>

CHAPTER 7	ANECDOTAL ANALYSIS Chapter 7 contains an analysis of anecdotal data collected from the survey of business owners, one-on-one interviews, and public meetings.
CHAPTER 8	PEER AGENCY REVIEW Chapter 8 provides a summary of our review of several local governments MWBE programs, comparing them with the City’s program.
CHAPTER 9	WORKFORCED ANALYSIS Chapter 9 provides an overview and analysis related to race and gender regarding the workforce of City prime contractors.
CHAPTER 10	FINDINGS, COMMENDATIONS AND RECOMMENDATIONS Chapter 10 provides a summary of the findings, commendations, and recommendations based upon the analyses presented in this study.
APPENDICES	The appendices contain additional analyses and supporting documentation and data.

MGT recommends reading the 2019 Disparity Study in its entirety to understand the basis for the findings and conclusions presented in **Chapter 10, Findings, Commendations and Recommendations**.

I.5 GLOSSARY OF TERMS

This glossary contains definitions of common terms and acronyms used throughout the City’s 2019 Disparity Study. Additional and more detailed definitions can be found in various chapters of the report.

Anecdotal	A personal account of experiences of businesses doing business with or attempting to do business with the City collected through surveys, interviews, and public hearings.
Aspirational Goal	A benchmark percentage of spending by an agency with a particular group over a period of time. The aspirational goal is typically an annual goal.
Anecdotal Database	A compiled list of utilized firms, registered vendors, and certification lists developed from several different sources, including Dun & Bradstreet. This list was used to develop the pool of available firms to participate in the anecdotal activities.
Awards	Awards reflect anticipated dollar amounts a prime contractor or vendor are scheduled to receive upon completion of a contract.

Combined Statistical Area	Combined Statistical Area (CSA) are geographic entities defined by the U.S. Office of Management and Budget (OMB) for use by Federal statistical agencies in collecting, tabulating, and publishing Federal statistics.
Contract	All types of City agreements, to include direct payments and purchase orders, for the procurement of goods and services.
Custom Census	Custom census involves using Dun & Bradstreet as a source of business availability. A short survey is conducted on a random sample of firms supplied by Dun & Bradstreet, requesting specific information, i.e. ethnic and gender status, willingness to work on City projects.
DBE	An acronym for a Disadvantaged Business Enterprise. A DBE is a for-profit business which is at least 51% owned and controlled by one or more socially or economically disadvantaged individuals, whose personal net worth does not exceed the US Department of Transportation’s current threshold.
Direct Payment	Payment made to prime contractors or vendors without the development of a contract.
Disparity Index/ Disparity Ratio	The ratio of the percentage of utilization and the percentage of availability for a particular demographic group times 100. Disparities were calculated for primes and subcontractors for each of the business categories.
Disparity Study	A study that reviews and analyzes the utilization and availability of disadvantaged, minority- and women-owned businesses in a particular market area to determine if disparity exists in the awarding of contracts to minority and women business enterprises by a public entity.
Expenditures	Expenditures are payments made by City to primes and payments made by primes to subcontractors.
Good Faith Efforts	Documented evidence of the primes’ efforts to meet established project goals to contract with M/WBE firms.
Intermediate Scrutiny	The second level of federal judicial review to determine whether certain governmental policies are constitutional. Less demanding than “strict scrutiny.”
Lowest Responsible, Responsive Bidder	An entity that provides the lowest price, has responded to the needs of the requestor, and has not violated statutory requirements for vendor eligibility.
M/WBE	An acronym for a minority, or woman-owned business enterprise. An MWBE is a business that is at least 51% owned and operated by one or more individuals who are African American, Asian American, Hispanic American, Native American or Nonminority Women.

Master Utilization Database	A database that maintains firms who have conducted business with the City and were paid by the City for goods and services.
MBE	An acronym for a minority-owned business enterprise. An MBE is a business that is at least 51% owned and operated by one or more individuals who are African American, Asian American, Hispanic American, or Native American.
Non-M/WBE	An acronym for firms not identified as minority- or women-owned.
Passive Discrimination	The act of perpetuating discrimination by awarding contracts to firms that discriminate against minority and women-owned firms.
Prima Facie	Evidence which is legally sufficient to establish a fact or a case unless disproved or rebutted.
Prime	The contractor or vendor to whom a purchase order or contract is issued by City.
Private Sector	The for-profit part of the national economy that is not under direct government control.
Procurement Category	The type of service or good provided under a contract awarded. The categories analyzed are Construction, Professional Services, Other Services, and Goods & Supplies.
Project Goals	Goals placed on an individual project or contract, as opposed to aspirational goals placed on overall agency spending.
Public Sector	The non-profit part of the economy that is controlled by the government.
PUMS	An acronym for Public Use Microdata Sample. PUMS contains records for a sample of housing units with information on the characteristics of each unit and each person in it. PUMS files are available from the American Community Survey (ACS) and the Decennial Census.
Purchase Order	A commercial document and first official offer issued by a buyer to a seller, indicating types, quantities, and agreed prices for products or services.
Regression Analysis	A technique for modeling and analyzing several variables when the focus is on the relationship between a dependent variable and one or more independent variables. More specifically, regression analysis helps one understand how the typical value of the dependent variable changes when any one of the independent variables is varied, while the other independent variables are held constant. For the purpose of this study, a multivariate regression analysis was used to examine the influence of an owner’s race and gender on gross revenues reported by firms participating in a survey of vendors administered during the study.
Relevant Geographic Market	The geographical area where the firms that have been awarded the majority of the City contract dollars are located.

Sole Source	The contracting or purchasing of goods or services, without bidding, when performance or price competition for a product are not available; when a needed product is available from only one source of supply; or when standardization or compatibility is the overriding consideration
Statistically Significant	The likelihood that a result or relationship is caused by something other than mere random chance. Statistical hypothesis testing is traditionally employed to determine if a result is statistically significant or not. This provides a "p-value" representing the probability that random chance could explain the result. In general, a 5% or lower p-value is considered to be statistically significant.
Strict Scrutiny	The highest level of federal judicial review to determine whether certain governmental policies are constitutional. Applies to race-conscious programs.
Subcontractor	A vendor or contractor providing goods or services to a prime contractor or vendor under contract with City.
Utilization	Examines the expenditures and awards made to primes and subcontractors in the City's geographic market area for each procurement category. The utilization data is presented as the dollars spent or awarded and the percentage of the total dollars by racial, ethnic, and gender classification.
WBE	An acronym for a women-owned business enterprise. A WBE is a business that is at least 51% owned and operated by one or more nonminority women.

CHAPTER 2. LEGAL FRAMEWORK

Availability and Disparity Study

City of Dallas, Texas



2.1 INTRODUCTION

This chapter discusses the legal framework applying to government affirmative-action programs involving procurement of goods or services. This chapter represents previous work that MGT has conducted for the 5th Circuit and has been reviewed to ensure that it is current and applicable for the city of Dallas. It examines relevant judicial decisions, particularly from the U.S. Supreme Court and the Court of Appeals for the Fifth Circuit. The Supreme Court, in *City of Richmond v. J.A. Croson Company (Croson)*² and subsequent cases, has established and construed constitutional standards for government-contracting affirmative-action programs. This chapter identifies and analyzes those decisions, summarizing how courts evaluate the constitutionality of race-specific and gender-specific programs.

Race-conscious affirmative-action programs are subject to a judicial test of strict scrutiny under the Equal Protection Clause of the Fourteenth Amendment to the U.S. Constitution. To survive a constitutional challenge under a strict scrutiny standard, a race-conscious governmental procurement program must be (1) justified by a compelling governmental interest in remedying identified discrimination or the present effects of past discrimination in the marketplace; and (2) narrowly tailored to remedy that discrimination.

In applying this strict scrutiny framework to race-conscious governmental procurement programs, courts have focused on the following key principles and standards:

- ◆ A remedial race-conscious program must be based on a compelling government interest.
 - “Compelling interest” means the government must prove past or present racial discrimination requiring remedial attention.
 - There must be a specific “strong basis in the evidence” for the compelling governmental interest.
 - Statistical evidence is preferred, and possibly necessary as a practical matter. Anecdotal evidence is permissible and can offer substantial support, but likely insufficient on its own.
- ◆ A race-conscious program designed to address the compelling governmental interest must also be narrowly tailored to remedy the identified discrimination.
 - “Narrow tailoring” means the remedy must fit the findings.
 - The evidence showing compelling interest must guide the tailoring very closely.

CHAPTER SECTIONS



- 2.1 Introduction
- 2.2 Standards of Review for Race-Conscious and Gender-Conscious Programs
- 2.3 To Withstand Strict Scrutiny, an M/WBE Program Must Be Based on Thorough Evidence Showing a Compelling Governmental Interest
- 2.4 To Withstand Strict Scrutiny, an M/WBE Program Must Be Narrowly Tailored to Remedy Identified Discrimination
- 2.5 DBE Programs
- 2.6 Small Business Procurement Preferences
- 2.7 Recent Developments
- 2.8 Conclusions

² 488 U.S. 469 (1989).

- Race-neutral alternatives must be considered first.
- ♦ A lesser standard, intermediate judicial scrutiny, applies to programs that establish gender preferences. To survive the intermediate scrutiny standard, a remedial gender-conscious program must (1) serve important governmental objectives and (2) be substantially related to the achievement of those objectives.

This chapter will also discuss the legal standards that apply to federal Disadvantaged Business Enterprise (DBE) Programs and small-business procurement programs. Finally, this chapter will discuss recent legal developments in the area of government contracting affirmative-action programs.

2.2 STANDARDS OF REVIEW FOR RACE-CONSCIOUS AND GENDER-CONSCIOUS PROGRAMS

RACE-CONSCIOUS PROGRAMS

THE *CROSON* DECISION

The United States Supreme Court *Croson* decision established the framework for evaluating the constitutionality of affirmative-action government procurement programs designed to counteract racial discrimination. In that case, the Court found that race-conscious affirmative action procurement programs are subject to strict scrutiny under the Equal Protection Clause, and that the Minority Business Utilization Plan (the “Plan”) adopted by the Richmond City Council could not survive such strict scrutiny.

The Richmond City Council established the Plan in 1983 following a public hearing in which seven citizens testified about historical societal discrimination. In adopting the Plan, the council also relied on a study indicating that “while the general population of Richmond was 50 percent African American, only 0.67 percent of the City’s prime construction contracts had been awarded to minority businesses in the five-year period from 1978 to 1983.”³ The evidence before the council also established that a variety of state and local contractor associations had little or no minority business membership. The council relied on a council member’s statement that “the general conduct of the construction industry in this area, the state, and around the nation, is one in which race discrimination and exclusion on the basis of race is widespread.”⁴ There was, however, no direct evidence of race discrimination by the City in its contracting activities and no evidence that the City’s prime contractors had discriminated against minority-owned subcontractors.⁵

The Plan required the City’s prime contractors to subcontract at least 30 percent of the dollar amount of each contract to one or more minority-owned business enterprises (MBEs). The Plan did not establish any geographic limits for eligibility. Therefore, an otherwise qualified MBE from anywhere in the United States could benefit from the 30 percent set-aside.

³ *Id.* at 479-80.

⁴ *Id.* at 480.

⁵ *Id.*

J. A. Croson Company, a non-MBE mechanical, plumbing, and heating contractor, filed a lawsuit against the city of Richmond alleging that the Plan was unconstitutional because it violated the Equal Protection Clause of the Fourteenth Amendment. On appeal, the Fourth Circuit struck down the Richmond Plan and the U.S. Supreme Court affirmed.⁶ The Supreme Court determined that strict scrutiny was the appropriate standard of judicial review for state and local MBE procurement programs. Under this standard, a race-conscious program (1) must be based on a compelling governmental interest and (2) be narrowly tailored to achieve its objectives.⁷ A plurality of the Court stated that this standard requires a “firm evidentiary basis” for concluding that the underutilization of minorities is a product of past discrimination.⁸

Under the first prong of this standard, the Court found that “none of the evidence presented by the city points to any identified discrimination in the Richmond construction industry,” and therefore the City had “failed to demonstrate a compelling interest in apportioning public contracting opportunities on the basis of race.”⁹ The “compelling interest” standard will be discussed in more detail in Section 2.3 below.

As to the second prong, the Court found that it was “almost impossible” to determine whether the Plan was “narrowly tailored to remedy prior discrimination since it [was] not linked to identified discrimination in any way.”¹⁰ The Court went on to discuss factors that could show a program is appropriately narrowly tailored, such as a consideration of race-neutral means to increase minority participation in contracting and a lack of “rigid numerical quota[s].”¹¹ The “narrow tailoring” standard will be discussed in more detail in Section 2.4 below.

While the Richmond plan was struck down as unconstitutional, the Court concluded that its decision would not “preclude a state or local entity from taking action to rectify the effects of identified discrimination within its jurisdiction.”¹² The plurality stated that “[w]here there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality’s prime contractors, an inference of discriminatory exclusion could arise.”¹³ A discussion of statistical studies that have formed the basis for successful defenses of minority- and women- owned business enterprise (M/WBE) programs is included at Section 2.3 below.

STRICT SCRUTINY, DBE PROGRAMS, AND GOALS-ONLY PROGRAMS

DBE Programs, like programs involving racial classifications, are subject to strict scrutiny. In *W.H. Scott Construction Co., Inc. v. City of Jackson*, the City argued that its disadvantaged-business program was not a racial classification subject to strict scrutiny because (1) it was based upon disadvantage, not race, and (2) it was a goals program, not a quota.¹⁴ The Fifth Circuit disagreed with the claim that the City’s DBE

⁶ *Id.* at 511.

⁷ *Id.* at 505, 507.

⁸ *Croson*, 488 U.S. at 493.

⁹ *Id.* at 505.

¹⁰ *Id.* at 507.

¹¹ *Id.*

¹² *Id.* at 509.

¹³ *Id.*

¹⁴ 199 F.3d 206 (5th Cir. 1999).

classification was not based on race, because the City acted under the federal Section 8(d), which grants a rebuttable presumption of social and economic disadvantage to firms owned by minorities.¹⁵ Such a presumption is subject to strict scrutiny. The Fifth Circuit also found that it was irrelevant whether the program established “goals” or “quotas,” since “they can and surely will result in individuals being granted a preference because of their race.”¹⁶ Further, the Eleventh Circuit has held that “strict scrutiny applies to *all* racial classifications, not just those creating binding racial preferences.”¹⁷ Thus, a goals-only program must still meet the strict scrutiny standard.

GENDER-CONSCIOUS PROGRAMS

While *Croson* evaluated the constitutionality of an MBE program, the Supreme Court has not specifically addressed the constitutionality of a gender-based classification in the context of a Women-Owned Business Enterprise (WBE) Program. In evaluating gender-based classifications in other contexts, the court has applied “intermediate scrutiny,” a less stringent standard of review than the “strict scrutiny” applied to race-based classifications. Intermediate scrutiny requires that programs classifying persons on the basis of gender “must carry the burden of showing an exceedingly persuasive justification for the classification.”¹⁸ In order to meet this burden, the proponent of the classification must show (1) “that the classification serves important governmental objectives” and (2) “that the discriminatory means employed are substantially related to the achievement of those objectives.”¹⁹

Courts have uniformly applied intermediate scrutiny to WBE programs. In *Coral Construction v. King County (Coral Construction)*, for example, the Ninth Circuit upheld a WBE program under the intermediate scrutiny standard at the same time that it remanded for further factual development on a similar race-conscious program under the strict scrutiny standard.²⁰ In that case, the court held that under intermediate scrutiny, “a gender-based classification must serve an important governmental objective, and there must be a direct, substantial relationship between the objective and the means chosen to accomplish the objective.”²¹ To that end, the court found that some degree of discrimination must be demonstrated in a particular industry before a gender-specific remedy may be applied and that “[t]he mere recitation of a benign, compensatory purpose will not automatically shield a gender-specific program from constitutional scrutiny.”²² Accordingly, many courts have held gender-conscious programs unconstitutional under the intermediate scrutiny standard when the record does not include sufficient evidence that remedial action was necessary.²³

¹⁵ *Id.* at 215-17.

¹⁶ *Id.* at 215 (quoting *Lutheran Church-Missouri Synod v. FCC*, 141 F.3d 344, 350 (D.C.Cir. 1998)).

¹⁷ *Virdi v. DeKalb Cnty. School Dist.*, 135 Fed.Appx. 262, 267 (11th Cir. 2005) (emphasis in original).

¹⁸ *Mississippi Univ. for Women v. Hogan*, 458 U.S. 718, 724 (1982) (quoting *Kirchberg v. Feenstra*, 450 U.S. 455, 461 (1981)); see also *United States v. Virginia*, 518 U.S. 515, 531 (1996); *Nguyen v. United States*, 533 U.S. 53, 60 (2001).

¹⁹ *Mississippi Univ.*, 458 U.S. at 724 (quoting *Wengler v. Druggists Mutual Insurance Company*, 446 U.S. 142, 150 (1980)); see also *Virginia*, 518 U.S. at 533; *Nguyen*, 533 U.S. at 60.

²⁰ 941 F.2d 910 (9th Cir. 1991).

²¹ *Id.* at 931.

²² *Id.* at 932.

²³ See, e.g., *Associated Util. Contractors of Maryland, Inc. v. Mayor & City Council of Baltimore*, 83 F. Supp. 2d 613 (D. Md. 2000); *Eng’g Contractors Ass’n of S. Florida Inc. v. Metro. Dade Cnty.*, 122 F.3d 895 (11th Cir. 1997).

Given that there has not been a Supreme Court case interpreting intermediate scrutiny in the context of WBE procurement preferences, it is unclear exactly how much easier it is as a practical matter to establish and defend a WBE program than a MBE program. In *Coral Construction*, the Ninth Circuit held that “intermediate scrutiny does not require any showing of governmental involvement, active or passive, in the discrimination it seeks to remedy.”²⁴ Other courts, however, have not provided a significant distinction between the evidence required to uphold a WBE program and that required to uphold a MBE program.²⁵ The Tenth Circuit, on the second appeal in *Concrete Works of Colorado v. City and County of Denver (Concrete Works IV)*, stated in dicta that while the Ninth and Eleventh Circuits have held WBE programs could be constitutional even without evidence of governmental involvement in gender discrimination, it did not need to resolve the issue because the WBE program at issue would also survive the strict scrutiny standard.²⁶ The Fifth Circuit declined to address the intermediate scrutiny standard required for gender-based preferences in a case where the parties focused the inquiry on racial preferences.²⁷

AN OVERVIEW OF THE APPLICABLE CASE LAW

Before wading into the case law, a few other general legal standards should be noted. First, affirmative action programs involving government contracting are distinct from affirmative action programs in other areas, such as education. Justice O’Connor, distinguishing her majority opinion on affirmative action in law school admissions from her opinions in government contracting cases, stated:

Context matters when reviewing race-based governmental action under the Equal Protection Clause . . . Not every decision influenced by race is equally objectionable and strict scrutiny is designed to provide a framework for carefully examining the importance and the sincerity of the reasons advanced by the governmental decision-maker for the use of race in that particular context.²⁸

Second, the nature of federal district courts—which make both findings of fact and conclusions of law—should be recalled when reviewing district court opinions. District courts must follow precedent from higher courts, including the circuit court in which they sit and the U.S. Supreme Court, when they make conclusions of law. When deciding factual issues, however, district courts are bound by the precise record before them, so considerations like the credibility and expertise of witnesses are important. Such factual findings are not binding precedents, even if they may suggest the kind of evidence and arguments that might succeed elsewhere.

Thus, most of this review is based on federal circuit court decisions applying *Croson* to city or county programs designed to increase participation by M/WBEs in government contracting. That is not a large body of case law. Ultimately, only two circuit court decisions since *Croson* have thoroughly evaluated local disparity studies and determined whether they fulfill the two prongs of the strict scrutiny standard: *Engineering Contractors Association of South Florida, Inc. v. Metro. Dade County (Engineering*

²⁴ 941 F.2d at 932.

²⁵ See, e.g., *Builders Ass’n of Greater Chicago v. Cnty. of Cook*, 256 F.3d 642 (7th Cir. 2001); *W. States Paving Co., Inc. v. Washington State Dept. of Transp.*, 407 F.3d 983, 991 n.6 (9th Cir. 2005).

²⁶ 321 F.3d 950 (10th Cir. 2003).

²⁷ *W.H. Scott Const. Co.*, 199 F.3d at 215 n.9.

²⁸ *Grutter v. Bollinger*, 539 U.S. 306, 327 (2003).

Contractors)²⁹ and *Concrete Works IV*.³⁰ In *Engineering Contractors*, the Eleventh Circuit upheld the district court's finding that Dade County's disparity studies were inadequate to support an M/WBE program.³¹ By contrast, in *Concrete Works IV*, the Tenth Circuit, after holding that the district court had used an improper standard for weighing the evidence, went on to evaluate the evidence and determine that it was adequate as a matter of law to establish a compelling justification for Denver's program. The Supreme Court declined to hear the appeal in *Concrete Works IV*,³² although the refusal has no precedential effect. The dissent to that denial, written by Justice Scalia with the Chief Justice joining, argues that these cases may mark a split in approach among the circuits that will need to be reconciled.³³

2.3 TO WITHSTAND STRICT SCRUTINY, AN MBE PROGRAM MUST BE BASED ON THOROUGH EVIDENCE SHOWING A COMPELLING GOVERNMENTAL INTEREST

Courts have recognized only one compelling government interest to be sufficient to support race-conscious³⁴ procurement programs: remedying discrimination in the relevant marketplace. As the Eleventh Circuit stated in *Engineering Contractors*:

In practice, the interest that is alleged in support of racial preferences is almost always the same—remedying past or present discrimination. That interest is widely accepted as compelling. As a result, the true test of an affirmative action program is usually not the nature of the government's interest, but rather the adequacy of the evidence of discrimination offered to show that interest. If a race- or ethnicity-conscious affirmative action program is to be upheld, the district court must make a factual determination that [there exists] a strong basis in evidence to support the conclusion that remedial action is necessary.³⁵

Thus, the relevant question for this inquiry is: What evidence of discrimination is sufficient to withstand a strict scrutiny standard? *Croson* identified two necessary factors that would show the existence of a compelling interest in remedying racial discrimination. First, there needs to be evidence that actual, identifiable discrimination has occurred within the local industry affected by the program.³⁶ Second, "the governmental actor enacting the set-aside program must have somehow perpetuated the discrimination

²⁹ 122 F.3d 895.

³⁰ 321 F.3d 950. The Third Circuit decided an additional case on the basis of the narrow tailoring prong but declined to issue a decision on the compelling interest prong. *Contractors Ass'n of E. Pennsylvania v. City of Philadelphia*, 91 F.3d 586, 605 (3rd Cir. 1996).

³¹ *Cf. Cone Corp. v. Hillsborough Cnty.*, 908 F.2d 908 (11th Cir. 1990) (reversing summary judgment against an MBE program where more limited statistical evidence was found adequate to require a trial on the merits in the face of a relatively weak challenge).

³² *Concrete Works of Colorado, Inc. v. City & Cnty. of Denver, Colo.*, 540 U.S. 1027 (2003) (Scalia, J. and Roberts, C.J., dissenting).

³³ *Id.*

³⁴ As discussed above, strict scrutiny applies to race-conscious programs and intermediate scrutiny applies to gender-conscious programs.

³⁵ 122 F.3d 895, 906 (11th Cir. 1997) (quoting *Ensley Branch, NAACP v. Seibels*, 31 F.3d 1548, 1564 (11th Cir. 1994)) (citations and internal quotation marks omitted).

³⁶ *Croson*, 488 U.S. at 492, 509-10.

to be remedied by the program,” either actively or passively through the “infusion of tax dollars into a discriminatory industry.”³⁷ We will look at each of these factors in turn.

EVIDENCE OF DISCRIMINATION IN THE RELEVANT MARKET

In *Croson*, the Supreme Court stated that “where gross statistical disparities can be shown, they alone in a proper case may constitute *prima facie* proof of a pattern or practice of discrimination.”³⁸ The Court stressed, however, that these statistics must go well beyond comparing the rate of minority presence in the general population to the rate of prime construction contracts awarded to MBEs. Instead, the Court indicated that the proper statistical evaluation would compare the percentage of qualified MBEs in the relevant market with the percentage of total municipal construction dollars awarded to them.³⁹ Such statistical measures of disparity are commonly referred to as “disparity indices.” Following *Croson*, courts throughout the country have accepted properly calculated disparity indices in the relevant market as sufficient evidence of discrimination.⁴⁰

The Fifth Circuit considered what evidence would suffice to show discrimination in the relevant market in *W.H. Scott Construction Co.*⁴¹ The court noted that “other courts considering equal protection challenges to minority-participation programs have looked to disparity indices, or to computation of disparity percentages, in determining whether *Croson*’s evidentiary burden is satisfied.”⁴² At the same time, the Fifth Circuit stated that it was not attempting to “craft a precise mathematical formula to assess the quantum of evidence that rises to the *Croson* ‘strong basis in evidence’ benchmark.”⁴³

Although there is no one method that must be used in order to craft a defensible race-conscious procurement program, courts have tended to consider the following factors in analyzing whether the evidence of discrimination in a market is sufficient to support such a program: (1) the availability of qualified minority contractors; (2) the specific racial groups that have been shown to experience said discrimination; (3) the relevant geographic market area; (4) whether the identified minority firms are qualified to provide the required services; (5) whether the identified minority firms are willing to provide the required services; (6) whether the identified minority firms have the capacity to provide the required services; (7) whether the data showing discrimination is statistically sufficient; (8) any anecdotal evidence of discrimination; and (9) the quality of the data. The subsections below discuss each of these issues in turn.

DETERMINING AVAILABILITY

To perform a proper disparity analysis, the government must determine “availability,” or the number of qualified minority contractors willing and able to perform a particular service for the municipality. In *Croson*, the Court stated, “[w]here there is a significant statistical disparity between the number of

³⁷ *Coral Constr.*, 941 F.2d at 916 (“It is beyond dispute that any public entity, state or federal, has a compelling interest in assuring that public dollars, drawn from the tax contributions of all citizens, do not serve to finance the evil of private prejudice.” (quoting *Croson*, 488 U.S. at 492)).

³⁸ 488 U.S. at 501 (quoting *Hazelwood Sch. Dist. v. United States*, 433 U.S. 299, 307-08 (1977)).

³⁹ *Id.*

⁴⁰ See, e.g., *Eng’g Contractors Ass’n of S. Florida*, 122 F.3d at 914; *Concrete Works IV*, 321 F.3d at 964-69.

⁴¹ 199 F.3d 206.

⁴² *Id.* at 218.

⁴³ *Id.* at 218 n.11.

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."⁴⁴

An accurate determination of availability also permits the government to meet the requirement that it "determine the precise scope of the injury it seeks to remedy" by its program.⁴⁵ Following *Croson's* guidance on availability, lower courts have considered how legislative bodies may determine the scope of the injury sought to be remedied by an MBE program. Federal courts have not prescribed precisely what data sources or techniques must be used to measure M/WBE availability. However, courts have rejected studies where the methods used to measure availability were considered insufficient. For instance, in *W.H. Scott Construction Co.*, the Fifth Circuit rejected a study that "was restricted to the letting of prime contracts by the City under the City's Program; [and which] did not include an analysis of the availability and utilization of qualified minority subcontractors, the relevant statistical pool, in the City's construction projects."⁴⁶

Courts have permitted the use of census data to measure availability. Census data has the benefit of being accessible, comprehensive, and objective in measuring availability. In *Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia*, the Third Circuit acknowledged some of the limitations of census data, but nonetheless stated that such data could appropriately be used in disparity studies.⁴⁷ In that case, the City's consultant calculated a disparity using data showing the total amount of contract dollars awarded by the City, the amount that went to MBEs, and the number of African American construction firms. The consultant combined this data with data from the Census Bureau on the number of construction firms in the Philadelphia Standard Metropolitan Statistical Area.⁴⁸ Although the Third Circuit declined to rule on the compelling interest prong, the court's discussion of the data sources indicated that it may be inclined to accept such data sources.⁴⁹

Another potential data source that could be used to determine minority firm availability is the agency's bidder data.⁵⁰ However, as pointed out in the National Cooperative Highway Research Program's Report 644, the bidder list approach has several drawbacks, including the fact that minority firms are likely to be underrepresented in such lists because of current and past discrimination.⁵¹ Further, *Croson* does not require the use of bidder data to determine availability.⁵² In *Concrete Works IV*, in the context of plaintiff's complaint that the city of Denver had not used such information, the Tenth Circuit rejected the plaintiff's claim that the availability data was unreliable because it was not based on the City's bidder data.⁵³ As the court noted, the usefulness of bid information is limited, since some firms that bid may not be qualified

⁴⁴ 488 U.S. at 509 (emphasis added).

⁴⁵ *Id.* at 498.

⁴⁶ 199 F.3d at 218.

⁴⁷ 91 F.3d at 605.

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ George LaNoue, *Who Counts? Determining the Availability of Minority Businesses for Contracting After Croson*, 21 HARV. J. L. AND PUB. POL. 793, 833 (1998).

⁵¹ Jon Wainwright and Colette Holt, *National Cooperative Highway Research Program: Report 644: Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program* (2010).

⁵² 488 U.S. at 502.

⁵³ 321 F.3d at 983-84.

or able to undertake agency contracts, whereas other firms that do not bid may be qualified and able to do so.⁵⁴

RACIAL CLASSIFICATIONS

In determining availability, classifying the included racial groups is an important threshold issue.⁵⁵ In *Croson*, the Supreme Court criticized the city of Richmond’s inclusion of “Spanish-speaking, Oriental, Indian, Eskimo, or Aleut persons” in its affirmative-action program.⁵⁶ These groups had not previously participated in city contracting, and “the random inclusion of racial groups that, as a practical matter, may never have suffered from discrimination in the construction industry in Richmond suggests that perhaps the City’s purpose was not in fact to remedy past discrimination.”⁵⁷ To evaluate availability properly, data must be gathered for each racial group in the marketplace. The Federal Circuit has also required that evidence as to the inclusion of particular groups be kept reasonably current.⁵⁸

RELEVANT MARKET AREA

Another issue in availability analysis is defining the relevant geographic market area. The relevant market area can be defined as the area from which a specific percentage of purchases are made, the area in which a specific percentage of willing and able contractors may be located, or the area determined by a fixed geopolitical boundary.

The Supreme Court has not specifically established how the relevant market area should be defined, but some circuit courts have done so, including the Tenth Circuit in *Concrete Works II*.⁵⁹ In that case, a non-M/WBE construction company argued that, under *Croson*, Denver’s affirmative action program could only rely on data from within the City and County of Denver—not from the larger six-county Denver Metropolitan Statistical Area (MSA). The Tenth Circuit disagreed, holding “[t]he relevant area in which to measure discrimination, then, is the local construction market, but that is not necessarily confined by jurisdictional boundaries.”⁶⁰ The court further stated that “[i]t is important that the pertinent data closely relate to the jurisdictional area of the municipality whose program we scrutinize, but here Denver’s contracting activity, insofar as construction work is concerned, is closely related to the Denver MSA.”⁶¹ Because more than 80 percent of Denver Department of Public Works construction and design contracts were awarded to firms located within the Denver MSA, the Tenth Circuit held that the appropriate market area was the Denver MSA, not the City and County of Denver alone.⁶² Accordingly, data from the Denver MSA was “adequately particularized for strict scrutiny purposes.”⁶³

⁵⁴ *Id.*

⁵⁵ As the term is used herein, “racial groups” include both racial and ethnic categories.

⁵⁶ 488 U.S. at 506.

⁵⁷ *Id.*

⁵⁸ *Rothe Dev. Corp. v. U.S. Dep’t of Def.*, 262 F.3d 1306, 1323 (Fed. Cir. 2001); see also *Rothe Dev. Corp. v. U.S. Dep’t of Def.*, 545 F.3d 1023, 1039 (Fed. Cir. 2008).

⁵⁹ *Concrete Works of Colorado, Inc. v. City and Cnty. of Denver*, 36 F.3d 1513, 1520 (10th Cir. 1994).

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.*

⁶³ *Id.*

FIRM QUALIFICATIONS

Another consideration is whether the identified minority-owned firms in the relevant market are qualified to perform the required services. In *Croson*, the Supreme Court noted that although gross statistical disparities may demonstrate *prima facie* proof of discrimination, “when special qualifications are required to fill particular jobs, comparisons to the general population (rather than to the smaller group of individuals who possess the necessary qualifications) may have little probative value.”⁶⁴ The Court, however, did not define a specific test for determining whether a firm is qualified.

Considering firm qualifications is important not only to assess whether minority firms in the relevant market area can provide the goods and services required, but also to ensure proper comparison between the number of qualified minority-owned firms and the total number of similarly qualified contractors in the marketplace.⁶⁵ In short, proper comparisons ensure the required integrity and specificity of the statistical analysis. For instance, the Fifth Circuit held that the government must examine prime contractors and subcontractors separately when the M/WBE program is aimed primarily at one or the other.⁶⁶

WILLINGNESS

Croson requires that an “available” firm be not only qualified but also “willing” to provide the required services. Willingness can be difficult to measure. Courts have approved the inclusion of businesses in the availability pool that may not be on the government’s certification list. In *Concrete Works II*, Denver’s availability analysis indicated that while most MBEs and WBEs had never participated in city contracts, “almost all firms contacted indicated that they were interested in municipal work.”⁶⁷ In *Contractors Association of Eastern Pennsylvania, Inc.*, the Third Circuit posited, “one can normally assume that participants in a market with the ability to undertake gainful work will be ‘willing’ to undertake it.”⁶⁸ The court went on to note:

Past discrimination in a marketplace may provide reason to believe the minorities who would otherwise be willing are discouraged from trying to secure the work . . . [I]f there has been discrimination in City contracting, it is to be expected that black firms may be discouraged from applying, and the low numbers [of African American owned firms seeking to prequalify for city-funded contracts] may tend to corroborate the existence of discrimination rather than belie it.⁶⁹

Thus, including information about the willingness of M/WBEs to perform the required services strengthens a disparity study.

⁶⁴ *Croson*, 488 U.S. at 501 (quoting *Hazelwood School District v. United States*, 433 U.S. 299, 308 n.13 (1977)).

⁶⁵ See *Contractors Ass’n of E. Pennsylvania*, 91 F.3d at 603.

⁶⁶ *W.H. Scott Const. Co.*, 199 F.3d at 218.

⁶⁷ *Concrete Works II*, 36 F.3d at 1529.

⁶⁸ 91 F.3d at 603.

⁶⁹ *Id.* at 603-04.

ABILITY/CAPACITY

Another availability consideration is whether the firms being considered are able to perform a particular service. Those who challenge affirmative action often question whether M/WBE firms have the “capacity” to perform particular services.

In *Eng’g Contractors*, the Eleventh Circuit held that the district court did not err in finding that firm size, rather than discrimination, was the cause of the disparity in the utilization of minority owned firms.⁷⁰ The district court had based this conclusion on the fact that firm size has a strong impact on ability to enter into contracts, and minority owned firms tend to be smaller than non-minority owned firms.⁷¹ Business capacity was also considered by the Federal Circuit in *Rothe Development Corp v. Department of Defense*, which involved the federal Small Disadvantaged Business (SDB) Program. The *Rothe* decision criticized elements of factual predicate studies used to support the Section 1207 Program that did not adequately consider the size and capacity of firms in evaluating disparity.⁷²

By contrast, the Tenth Circuit in *Concrete Works II and IV* recognized the shortcomings of this treatment of firm size.⁷³ In *Concrete Works IV*, the court noted that the small size of such firms can itself be a result of discrimination.⁷⁴ The Tenth Circuit acknowledged the city of Denver’s argument that a small construction firm’s precise capacity can be highly elastic.⁷⁵ Under this view, a consideration of firm size is less relevant to an availability analysis.

STATISTICAL SUFFICIENCY

While courts have indicated that anecdotal evidence may suffice without statistical evidence, no case without statistical evidence has been given serious consideration by any circuit court. In practical effect, courts require statistical evidence. Further, the statistical evidence needs to be held to appropriate professional standards.⁷⁶ The Eleventh Circuit has addressed the role of statistical significance in assessing levels of disparity in public contracting. Generally, disparity indices of 80 percent or higher—indicating close to full participation—are not considered significant.⁷⁷ The court referenced the Equal Employment Opportunity Commission’s disparate impact guidelines, which establish the 80 percent test as the threshold for determining a *prima facie* case of discrimination.⁷⁸ According to the Eleventh Circuit, no circuit that has explicitly endorsed using disparity indices has held that an index of 80 percent or greater is probative of discrimination, but they have held that indices below 80 percent indicate “significant disparities.”⁷⁹

⁷⁰ 122 F.3d at 918.

⁷¹ *Id.*

⁷² *Rothe Dev. Corp. v. Dep’t of Def.*, 545 F.3d 1023, 1043-44 (Fed. Cir. 2008).

⁷³ *Concrete Works II*, 36 F.3d at 1528-29; *Concrete Works IV*, 321 F.3d at 980-82.

⁷⁴ 321 F.3d at 980-84.

⁷⁵ *Id.* at 981.

⁷⁶ See *Contrs. Ass’n of E. Pennsylvania, Inc.*, 91 F.3d at 599-601.

⁷⁷ *Eng’g Contrs. Ass’n of S. Florida, Inc.*, 122 F.3d at 914.

⁷⁸ *Id.* at 914, citing 29 C.F.R. § 1607.4D (concerning the disparate impact guidelines and threshold used in employment cases).

⁷⁹ *Id.* at 914, citing *Contrs. Ass’n of E. Pennsylvania, Inc.*, 6 F.3d at 1005 (crediting disparity index of 4 percent) and *Concrete Works II*, 36 F.3d at 1524 (crediting disparity indices ranging from 0 percent to 3.8 percent).

In support of the use of standard deviation analyses to test the statistical significance of disparity indices, the Eleventh Circuit observed that “[s]ocial scientists consider a finding of two standard deviations significant, meaning there is about one chance in 20 that the explanation for the deviation could be random and the deviation must be accounted for by some factor other than chance.”⁸⁰ With standard deviation analyses, the reviewer can determine whether the disparities are substantial or statistically significant, lending further statistical support to a finding of discrimination. On the other hand, if such analyses can account for the apparent disparity, the study will have little, if any, weight as evidence of discrimination.

Further, the interpretations of the studies must not assume discrimination has caused the disparities, but must account for alternative explanations of the statistical patterns.⁸¹ The Third and Fifth Circuits have also indicated that statistics about prime contracting disparity have little, if any, weight when the eventual M/WBE program offers its remedies solely to subcontractors.⁸² In *Engineering Contractors* there was a separate analysis of prime contracting and subcontracting.⁸³

ANECDOTAL EVIDENCE

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

In *Engineering Contractors*, the County presented testimony from M/WBE program staff, affidavits from 23 M/WBEs and a survey of Black-owned firms. The Eleventh Circuit acknowledged that the “picture painted by the anecdotal evidence [was] not a good one.”⁸⁵ However, The Eleventh Circuit had a limited discussion of the requirements for anecdotal evidence because the statistical evidence was weak and the Court noted that “only in the rare case will anecdotal evidence suffice standing alone.”⁸⁶

Although *Croson* did not expressly consider the form or level of specificity required for anecdotal evidence, the Ninth Circuit has addressed both issues. In *Coral Construction*, the Ninth Circuit addressed the use of anecdotal evidence alone to prove discrimination. Although King County’s anecdotal evidence was

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

Concrete Works IV, 321 F.3d at 989.

⁸⁰ *Eng’g Contrs. Ass’n of S. Florida, Inc.*, 122 F.3d at 914 quoting *Peightal v. Metropolitan Dade County*, 26 F.3d 1545, 1556 n.16 (11th Cir. 1994) (quoting *Waisome v. Port Authority*, 948 F.2d 1370, 1376 (2nd Cir. 1991)).

⁸¹ *Eng’g Contrs. Ass’n of S. Florida, Inc.*, 122 F.3d at 922.

⁸² *Contrs. Ass’n of E. Pennsylvania, Inc.*, 91 F.3d at 599 (3rd Cir.); *W.H. Schott Constr. Co.*, 199 F.3d at 218 (5th Cir.)

⁸³ *Eng’g Contrs. Ass’n of S. Florida, Inc.*, 122 F.3d 895, 920.

⁸⁴ *Croson*, 488 U.S. at 509.

⁸⁵ *Eng’g Contrs. Ass’n of S. Florida, Inc.*, 122 F.3d at 925.

⁸⁶ *Id.*

extensive, the court noted the absence in the record of any statistical data in support of the program. Additionally, the court stated, “While anecdotal evidence may suffice to prove individual claims of discrimination, rarely, if ever, can such evidence show a *systemic pattern of discrimination necessary for the adoption of an affirmative action plan.*”⁸⁷ The court concluded, by contrast, that “the combination of convincing anecdotal and statistical evidence is potent.”⁸⁸

Regarding the appropriate form of anecdotal evidence, the Ninth Circuit in *Coral Construction* noted that the record provided by King County was “considerably more extensive than that compiled by the Richmond City Council in *Croson.*”⁸⁹ The King County record contained “affidavits of at least 57 minority or [female] contractors, each of whom complain[ed] in varying degree[s] of specificity about discrimination within the local construction industry.”⁹⁰ The *Coral Construction* court stated that the M/WBE affidavits “reflect[ed] a broad spectrum of the contracting community” and the affidavits “certainly suggest[ed] that ongoing discrimination may be occurring in much of the King County business community.”⁹¹

In *Associated General Contractors of California v. Coalition for Economic Equity (AGCC II)*, the Ninth Circuit discussed the specificity of anecdotal evidence required by *Croson*.⁹² Seeking a preliminary injunction, the contractors contended that the evidence presented by the city of San Francisco lacked the specificity required by both an earlier appeal in that case and by *Croson*.⁹³ The court held that the City’s findings were based on substantially more evidence than the anecdotes in the two prior cases, and “were clearly based upon dozens of specific instances of discrimination that are laid out with particularity in the record, as well as significant statistical disparities in the award of contracts.”⁹⁴

The court also ruled that the City was under no burden to identify specific practices or policies that were discriminatory.⁹⁵ Reiterating the City’s perspective, the court stated that the City “must simply demonstrate the existence of past discrimination with specificity; there is no requirement that the legislative findings specifically detail each and every instance that the legislative body ha[d] relied upon in support of its decision that affirmative action is necessary.”⁹⁶ Not only have courts found that a municipality does not have to specifically identify all the discriminatory practices impeding M/WBE utilization, but the Tenth Circuit in *Concrete Works IV* also held that anecdotal evidence collected by a municipality does not have to be verified.

⁸⁷ *Coral Construction*, 941 F.2d at 919 (emphasis added).

⁸⁸ *Id.* See also *AGCC II*, 950 F.2d at 1414-1415.

⁸⁹ *Coral Construction*, 941 F.2d at 917.

⁹⁰ *Id.* at 917-18.

⁹¹ *Id.*

⁹² *AGCC II*, 950 F.2d at 1414-1415.

⁹³ *Id.* at 1403-1405.

⁹⁴ *Id.* at 1416. This evidence came from 10 public hearings and “numerous written submissions from the public.” *Id.* at 1414.

⁹⁵ *Id.* at 1416, n.11.

⁹⁶ *Id.* at 1416.

QUALITY OF DATA

Courts also evaluate the dependability of the underlying data introduced to support race-conscious procurement programs. For instance, courts have considered the volume of data, how current it is, and how much data must be reviewed in order to satisfy strict scrutiny. Although there is not a strict requirement as to how many years must be included in a study (*i.e.*, the data time range), some courts caution against relying on small sample sizes.⁹⁷ With regard to the age of data, in *Rothe*, a federal appeals court held that disparity studies with 2003 data could support reenacting a federal program in 2006.⁹⁸ Agencies could rely on the most current available data, noting other circuit court decisions involving “studies containing data more than five years old when conducting compelling interest analyses.”⁹⁹

CONNECTION BETWEEN AGENCY AND PUBLIC OR PRIVATE DISCRIMINATION

As part of the compelling-interest analysis, courts require showing a connection between the government or agency and the public or private discrimination. In *Croson*, the Supreme Court stated that “[i]t is beyond dispute that any public entity, state or federal, has a compelling interest in assuring that public dollars, drawn from the tax contributions of all citizens, do not serve to finance the evil of private prejudice.”¹⁰⁰ *Croson* provided that the government “can use its spending powers to remedy private discrimination, if it identifies that discrimination with the particularity required by the Fourteenth Amendment.”¹⁰¹ The government agency’s active or passive participation in discriminatory practices in the marketplace may give rise to a compelling interest. Defining passive participation, *Croson* stated that “if the city could show that it had essentially become a ‘passive participant’ in a system of racial exclusion practiced by elements of the local construction industry, we think it clear that the city could take affirmative steps to dismantle such a system.”¹⁰²

Many cases following *Croson* have affirmed that the government has a compelling interest in avoiding the financing of private discrimination with public dollars.¹⁰³ In *Concrete Works IV*, for example, the Tenth Circuit held that the city of Denver could “establish its compelling interest by presenting evidence of its own direct participation in racial discrimination or its passive participation in private discrimination.”¹⁰⁴ The court found that barriers to business formation in the private sector were relevant to the passive participation determination if the evidence demonstrated that M/WBEs were “precluded from the outset from competing for public construction contracts.”¹⁰⁵ That court also found a regression analysis of census data to be relevant evidence showing barriers to M/WBE formation.¹⁰⁶ Further, the court expressly cited the fact that M/WBE subcontractors used by prime contractors on city of Denver projects were not used

⁹⁷ *Associated Gen. Contractors of Am. v. City of Columbus*, 936 F. Supp. 1363 (S.D. Ohio 1996).

⁹⁸ *Rothe Dev. Corp. v. U.S. Dep’t of Def.*, 545 F.3d 1023, 1039 (Fed. Cir. 2008).

⁹⁹ *Id.* (citing district court’s discussion of staleness in *W. States Paving Co.*, 407 F.3d at 992 and *Sherbrooke Turf, Inc. v. Minn. Dep’t of Transp.*, 345 F.3d 964, 970 (8th Cir. 2003)).

¹⁰⁰ *Coral Constr.*, 941 F.2d at 922 (citing *Croson*, 488 U.S. at 492) (emphasis added).

¹⁰¹ See *Croson*, 488 U.S. at 492; see also, generally, I. Ayres & F. Vars, *When Does Private Discrimination Justify Public Affirmative Action?* 98 COLUM. L. REV. 1577 (1998).

¹⁰² 488 U.S. at 492.

¹⁰³ See *Associated Gen. Contractors of Ohio, Inc. v. Drabik*, 214 F.3d 730, 734-35 (6th Cir. 2000); *Concrete Works II*, 36 F.3d at 1529; *Coral Constr.*, 941 F.2d at 916; *AGC v. New Haven*, 791 F. Supp. 941, 947 (D. Conn. 1992).

¹⁰⁴ *Concrete Works IV*, 321 F.3d at 958 (emphasis added).

¹⁰⁵ *Id.* at 977. The district court rejected evidence of credit-market discrimination as adequate to provide a factual predicate for an M/WBE program. *Concrete Works v. City and Cnty. of Denver*, 86 F. Supp. 2d 1042 (D. Colo. 2000) (*Concrete Works I*).

¹⁰⁶ *Concrete Works IV*, 321 F.3d at 977.

by the same prime contractors for private-sector contracts as evidence of discrimination.¹⁰⁷ Similarly, the Tenth Circuit in its *Adarand* decision found that evidence of capital-market discrimination was relevant to establishing the factual predicate for the federal DBE program.¹⁰⁸ Finally, a district court upheld North Carolina's M/WBE Program in road construction based largely on similar private-sector evidence supplemented by evidence from databases covering private-sector commercial construction.¹⁰⁹

Courts have found evidence of private discrimination insufficient in other cases, however.¹¹⁰ The Third Circuit found that evidence of discrimination by local trade associations did not indicate that the city of Philadelphia was a passive participant in discrimination, since trade association membership was not required to bid on City contracts.¹¹¹ In *Engineering Contractors*, the Eleventh Circuit considered a study comparing entry rates into the construction business for M/WBEs and non-M/WBEs.¹¹² The analysis provided statistically significant evidence that minorities and women entered the construction business at rates lower than would be otherwise expected, even after the application of appropriate statistical controls. The Eleventh Circuit found that the district court did not err in finding that the study did not constitute sufficient evidence to support an M/WBE program.¹¹³

The ruling in *Builders Association of Greater Chicago v. County of Cook* suggests that the Seventh Circuit may have a higher bar than other circuits for connecting private discrimination with government action. The trial court in that case relied on evidence that prime contractors simply did not solicit M/WBEs as subcontractors for private sector projects.¹¹⁴ The Seventh Circuit held that this evidence was largely irrelevant.¹¹⁵ The court reasoned that evidence that contractors failed to solicit M/WBEs was not the same as evidence that M/WBEs were denied the opportunity to bid.¹¹⁶ Furthermore, the court found that the county was not a passive participant in the prime contractors' potential discrimination because there was no evidence the county was aware of any such discriminatory actions.¹¹⁷

Finally, evidence of a decline in M/WBE utilization following a change in or termination of an M/WBE program may establish relevant and persuasive evidence of discrimination. The Eighth Circuit in *Sherbrooke Turf*¹¹⁸ and the Tenth Circuit in *Concrete Works IV*¹¹⁹ both found that such declines in M/WBE

¹⁰⁷ *Id.* at 984-85.

¹⁰⁸ *Adarand v. Slater*, 228 F.3d at 1169-70 (10th Cir. 2000).

¹⁰⁹ *H.B. Rowe, Inc. v. Tippett*, 589 F.Supp.2d 587 (E.D.N.C. 2008). The Fourth Circuit subsequently found that the program was unconstitutional as applied to women, since WBEs were significantly over-utilized by the governmental actor during the study period. 615 F.3d 233, 255-56 (4th Cir. 2010).

¹¹⁰ *Contractors Ass'n of E. Pennsylvania*, 91 F.3d at 602; *Webster v. Fulton Cnty., Georgia*, 51 F. Supp. 2d 1354, 1369 (N.D. Georgia 1999) (finding no "linkage between private sector discrimination and the County's contracting policies").

¹¹¹ *Contractors Ass'n of E. Pennsylvania*, 91 F.3d at 602 (holding that "racial discrimination can justify a race-based remedy only if the city has somehow participated in or supported that discrimination).

¹¹² *Eng'g Contractors*, 122 F.3d at 921-22.

¹¹³ *Id.* at 924.

¹¹⁴ *Builders Ass'n of Greater Chicago v. Cnty. of Cook*, 123 F. Supp. 2d 1087 (N.D. Ill. 2000).

¹¹⁵ *Builders Ass'n of Greater Chicago v. Cnty. of Cook*, 256 F.3d 642, 645 (7th Cir. 2001).

¹¹⁶ *Id.*

¹¹⁷ *Id.*

¹¹⁸ 345 F.3d at 973.

¹¹⁹ 321 F.3d at 985.

utilization was evidence that prime contractors were not willing to use M/WBEs in the absence of legal requirements. Other lower courts have arrived at similar conclusions.¹²⁰

2.4 TO WITHSTAND STRICT SCRUTINY, AN MBE PROGRAM MUST BE NARROWLY TAILORED TO REMEDY IDENTIFIED DISCRIMINATION

Even when courts hold that a MBE Program advances a compelling interest, they sometimes conclude that the program has not been narrowly tailored.¹²¹ Following Supreme Court precedent, the circuit courts have considered the following in evaluating narrow tailoring: (1) the efficacy of alternative, race-neutral remedies; (2) the flexibility and duration of the race-conscious remedy; (3) the relationship of the numerical goals to the relevant labor market; (4) the impact of the remedy on third parties; and (5) the possibility of over- or under-inclusiveness.

RACE-NEUTRAL ALTERNATIVES

In *Croson*, the Supreme Court concluded that a governmental entity must demonstrate that it considered race-neutral means to increase minority business participation in contracting or purchasing activities.¹²² Circuit court cases considering the race-neutral alternatives included in the federal DBE regulations are instructive regarding this requirement. For example, the Eighth Circuit noted that the DBE regulations “place strong emphasis on the use of race-neutral means to increase minority business participation in government contracting.”¹²³ The Tenth Circuit noted that the DBE regulations provide that “if a recipient can meet its overall goal through race-neutral means, it must implement its program without the use of race-conscious contracting measures, and enumerate a list of race-neutral measures.”¹²⁴ Those measures included “helping overcome bonding and financing obstacles, providing technical assistance, [and] establishing programs to assist start-up firms.”¹²⁵ The Fourth Circuit noted that the consideration of the race-neutral alternatives found in the federal DBE regulations is evidence of narrow tailoring in a state M/WBE program.¹²⁶

Strict scrutiny does not mandate that every race-neutral measure be considered and found wanting, however. The Eighth Circuit held that “narrow tailoring does not require exhaustion of every conceivable race neutral alternative,” but it does require “serious, good faith consideration of workable race-neutral alternatives.”¹²⁷

¹²⁰ See, e.g., *N. Contracting, Inc. v. State of Ill.*, No. 00-C-4515, 2005 WL 2230195 (N.D. Ill. Sept. 8, 2005) (mem. op.).

¹²¹ See, e.g., *Contractors Ass’n of E. Pennsylvania, Inc.*, 91 F.3d at 605; *Eng’g Contractors*, 122 F.3d at 926–29. *Virdi v. DeKalb Cnty. Sch. Dist.*, 135 F. App’x 262, 2005 WL 38942 (11th Cir. 2005).

¹²² 488 U.S. at 471–72.

¹²³ *Sherbrooke Turf*, 345 F.3d at 972 (quotation omitted).

¹²⁴ *Adarand v. Slater*, 228 F.3d at 1178–79 (quotation omitted).

¹²⁵ *Id.* (citation omitted).

¹²⁶ *H.B. Rowe Co.*, 615 F.3d at 252.

¹²⁷ *Sherbrooke Turf*, 345 F.3d at 972 (quoting *Grutter*, 539 U.S. at 337); see also *Coral Constr.*, 941 F.2d at 923; *AGCC II*, 950 F.2d at 1417.

FLEXIBILITY AND DURATION OF THE REMEDY

Courts also consider how flexible and onerous an affirmative-action program is when evaluating whether the program is narrowly tailored. For instance, in upholding a preference program under the federal DBE program, the Eighth Circuit favorably noted that the “DBE program has substantial flexibility,”¹²⁸ and added:

A State may obtain waivers or exemptions from any requirement and is not penalized for a good faith failure to meet its overall goal. In addition, the program limits preferences to small businesses falling beneath an earnings threshold, and any individual whose net worth exceeds \$750,000 cannot qualify as economically disadvantaged.¹²⁹

Waivers and project goals are important to this analysis. Virtually all successful race-conscious preference programs achieve flexibility by using waivers and variable project goals rather than merely setting a quota.¹³⁰ The federal DBE regulations, for example, set aspirational, not mandatory, goals; expressly forbid quotas; and use overall goals simply as a framework for setting local contract goals, if any, based on local data. All of these factors have been favorably noted by courts holding the revised Department of Transportation (DOT) DBE program constitutional.¹³¹

With respect to program duration, in *Adarand v. Peña (Peña)*, the Supreme Court held that courts should consider whether a challenged program is “appropriately limited such that it will not last longer than the discriminatory effects it is designed to eliminate.”¹³² The Eighth Circuit noted the limits in the DBE program, stating that “the DBE program contains built-in durational limits,” and that a governmental actor “may terminate its DBE program if it meets its annual overall goal through race-neutral means for two consecutive years.”¹³³

Other appellate courts have noted possible mechanisms for limiting program duration, including termination if goals have been met,¹³⁴ decertification of MBEs who achieve certain levels of success,¹³⁵ or mandatory review of MBE certification at regular, relatively brief periods.¹³⁶ Governments thus have some duty to ensure that they update their evidence of discrimination regularly enough to review the need for their programs and to revise programs as necessary.¹³⁷

¹²⁸ *Sherbrooke Turf*, 345 F.3d at 972 (citation omitted).

¹²⁹ *Id.* at 972 (citing 49 C.F.R. § 26.67(b)).

¹³⁰ See *Coral Constr.*, 941 F.2d at 925.

¹³¹ *Id.*

¹³² 515 U.S. at 238 (internal quotations and citations omitted).

¹³³ *Sherbrooke Turf*, 345 F.3d at 972 (citing 49 C.F.R. § 26.51(f)(3)).

¹³⁴ *Sherbrooke Turf*, 345 F.3d at 972.

¹³⁵ *Adarand v. Slater*, 228 F.3d at 1179.

¹³⁶ *Id.* at 1180.

¹³⁷ *Rothe*, 262 F.3d at 1324 (commenting on the possible staleness of information after 7, 12, and 17 years).

RELATIONSHIP OF GOALS TO AVAILABILITY

Narrow tailoring requires consistency between remedial goals and measured availability. Merely setting percentages without a basis in statistical evidence, as the city of Richmond did in *Croson*, has strongly influenced decisions finding programs unconstitutional.¹³⁸

By contrast, the Eighth, Ninth, and Tenth Circuits have approved the goal-setting process for the federal DBE program, as revised in 1999, and these decisions are instructive when considering whether any race-conscious preference program is narrowly tailored.¹³⁹ The DBE regulations require goals based on one of several methods for measuring DBE availability.¹⁴⁰ The Eighth Circuit noted that the “DOT has tied the goals for DBE participation to the relevant labor markets,” insofar as the regulations “require grantee States to set overall goals based upon the likely number of minority contractors that would have received federally assisted highway contracts but for the effects of past discrimination.”¹⁴¹ The Eighth Circuit acknowledged that goal setting was inexact but also stated:

The exercise requires the States to focus on establishing realistic goals for DBE participation in the relevant contracting markets. This stands in stark contrast to the program struck down in *Croson*, which rested upon the completely unrealistic assumption that minorities will choose a particular trade in lockstep proportion to their representation in the local population.¹⁴²

Moreover, the approved DBE regulations use built-in mechanisms to ensure that DBE goals are not set excessively high relative to DBE availability. For example, the approved DBE goals are to be set aside if the overall goal has been met for two consecutive years by race-neutral means.¹⁴³ The approved DBE contract goals also must be reduced if overall goals have been exceeded with race-conscious means for two consecutive years.¹⁴⁴ The Eighth Circuit has found these provisions to be evidence of narrow tailoring, particularly when the provisions are implemented according to local disparity studies that carefully calculate the applicable goals.¹⁴⁵

BURDEN ON THIRD PARTIES

Narrow tailoring also requires minimizing the burden of the program on third parties. The Eighth Circuit stated the following with respect to the federal DBE program:

Congress and DOT have taken significant steps to minimize the race-based nature of the DBE program. Its benefits are directed at all small businesses owned and controlled by the socially and economically disadvantaged. While TEA-21 creates a rebuttable presumption that members of certain racial minorities fall within that class, the

¹³⁸ See, e.g., *Builders Ass’n of Greater Chicago*, 256 F.3d at 647; *Kohlbeck v. Omaha*, 447 F.3d at 556.

¹³⁹ *Adarand v. Slater*, 228 F.3d at 1182; *Sherbrooke Turf*, 345 F.3d at 972; *W. States Paving*, 407 F.3d at 995.

¹⁴⁰ 49 C.F.R. § 26.45.

¹⁴¹ *Sherbrooke Turf*, 345 F.3d at 972 (citing 49 C.F.R. § 26.45(c)-(d) (Steps 1 and 2)).

¹⁴² *Id.* at 972 (citing *Croson*, 488 U.S. at 507).

¹⁴³ 49 C.F.R. § 26.51(f)(3).

¹⁴⁴ 49 C.F.R. § 26.51(f)(4).

¹⁴⁵ *Sherbrooke Turf*, 345 F.3d at 973-974.

presumption is rebuttable, wealthy minority owners and wealthy minority-owned firms are excluded, and certification is available to persons who are not presumptively disadvantaged but can demonstrate actual social and economic disadvantage. Thus, race is made relevant in the program, but it is not a determinative factor.¹⁴⁶

Waivers and good-faith compliance are also tools that serve this purpose of reducing the burden on third parties.¹⁴⁷ The DOT DBE regulations have also sought to reduce the program burden on non-DBEs by avoiding DBE concentration in certain specialty areas.¹⁴⁸ These features gained the approval of the circuit court in *Adarand* which discussed them at length as measures of lowering impact on third parties.¹⁴⁹

OVER-INCLUSION

Narrow tailoring also involves limiting the number and type of beneficiaries of the program. As noted, there has to be evidence of discrimination to justify a group-based remedy and over-inclusion of uninjured individuals or groups can endanger the entire program.¹⁵⁰ Federal DBE programs have succeeded in part because regulations covering DBE certification do not provide blanket protection to all minority groups.¹⁵¹

Further, the MBE program must be limited in its geographical scope to the boundaries of the enacting government's marketplace. In *Croson*, the Supreme Court indicated that a local agency has the power to address discrimination only within its own marketplace.¹⁵² The Court took issue with the fact that the Richmond MBE program certified minority firms from around the United States.¹⁵³

In *Coral Construction*, the Ninth Circuit concluded that the King County MBE program was not narrowly tailored because the definition of MBEs eligible to benefit from the program was overbroad.¹⁵⁴ The definition included MBEs that had had no prior contact with King County, as long as the MBE could demonstrate it had been "discriminated against in the particular geographic areas in which it operates."¹⁵⁵ This MBE definition suggested that the program was designed to eradicate discrimination not only in King County but also in the particular area in which a non-local MBE conducted business. In essence, King County's program aimed to eliminate societal discrimination, which is outside the power of a state or local government. Because "the County's interest is limited to the eradication of discrimination within King County, the only question that the County may ask is whether a business has been discriminated against in King County."¹⁵⁶

In clarifying an important aspect of the narrow-tailoring requirement, the court defined the issue of eligibility for MBE programs as one of participation, not location. For an MBE to reap the benefits of an

¹⁴⁶ See *Grutter*, 539 U.S. at 339-41; *Gratz v. Bollinger*, 539 U.S. 244 (2003).

¹⁴⁷ 49 C.F.R. § 26.53.

¹⁴⁸ 49 C.F.R. § 26.33.

¹⁴⁹ *Adarand v. Slater*, 228 F.3d at 1182.

¹⁵⁰ See, e.g., *Builders Ass'n of Greater Chicago*, 256 F.3d at 647.

¹⁵¹ *Sherbrooke Turf*, 345 F.3d at 972-73.

¹⁵² *Croson*, 488 U.S. at 509-10.

¹⁵³ *Id.* at 478.

¹⁵⁴ *Coral Constr.*, 941 F.2d at 925.

¹⁵⁵ *Id.* (quotation omitted).

¹⁵⁶ *Id.*

affirmative-action program, the business must have been discriminated against in the jurisdiction that established the program.¹⁵⁷ As a threshold matter, before a business can claim to have suffered discrimination, it must have attempted to do business with the governmental entity.¹⁵⁸ It was found significant that “if the County successfully proves malignant discrimination within the King County business community, an MBE would be presumptively eligible for relief if it had previously sought to do business in the County.”¹⁵⁹

2.5 DBE PROGRAMS

FACTUAL PREDICATE FOR DBE PROGRAMS

Federal courts have found that DBE programs established pursuant to federal regulations issued under the 1998 Transportation Equity Act are narrowly tailored to serve a compelling interest.¹⁶⁰ The Ninth Circuit in *W. States Paving Co. v. Washington State Dep’t of Transp.* cited the following evidence that Congress considered in finding a factual predicate supporting the federal DBE program:

- ♦ Minority business ownership percentage does not reflect the percentage of the population.
- ♦ MBEs have gross receipts that are on average approximately one-third of those of firms owned by non-minorities.
- ♦ MBEs own 9 percent of all businesses but receive only 4.1 percent of federal contracting dollars.
- ♦ WBEs constitute almost one-third of all small businesses but receive less than 3 percent of federal contracting dollars.
- ♦ Majority-owned construction firms receive more than 50 times as many loan dollars per dollar of equity capital as firms owned by African Americans with the same borrowing characteristics.
- ♦ After many state and local governments terminated their M/WBE programs, there was a significant drop in M/WBE utilization in the construction industry.
- ♦ The U.S. Department of Justice study, *The Compelling Interest for Affirmative Action in Federal Procurement: A Preliminary Survey*, found discrimination by trade unions, financial lenders, prime contractors, business networks, suppliers, bonding companies, and “old boys network.”¹⁶¹

The Ninth Circuit also concurred, finding that Congress did not need evidence of discrimination in every state to enact the national DBE program.¹⁶²

¹⁵⁷ *Id.*

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

¹⁶⁰ See, e.g., *Adarand v. Slater*, 228 F.3d 1147; *Sherbrooke Turf*, 345 F.3d 964; *W. States Paving*, 407 F.3d 983 (9th Cir. 2005). Prior to the 1997 Act, federal courts had ruled that while there was a factual predicate for the federal DBE program, the program’s earlier versions were not narrowly tailored. See, e.g., *In re Sherbrooke Sodding Co.*, 17 F.Supp.2d 1026 (D. Minn. 1998); *Peña*, 965 F. Supp. 1556, 1570 (D. Colo. 1997).

¹⁶¹ *W. States Paving*, 407 F.3d at 992.

¹⁶² *Id.* (citing *Rothe Dev. Corp. v. United States Dep’t of Def.*, 262 F.3d 1306, 1329 (Fed. Cir. 2001)).

“AS APPLIED” CHALLENGE IN WESTERN STATES PAVING

Western States Paving demonstrates how state and federal programs can interact and how states must provide evidence of narrow tailoring independent of federal programs. In that case, a non-minority subcontractor brought a civil-rights action against the state, county, and city alleging that the award of road construction contracts (financed by federal transportation funds) violated the subcontractor’s constitutional rights. The court noted that “[w]hether Washington’s DBE program is narrowly tailored to further Congress’s remedial objective depends upon the presence or absence of discrimination in the State’s transportation contracting industry.”¹⁶³ Without evidence of such state-specific discrimination, “the State’s DBE program does not serve a remedial purpose; it instead provides an unconstitutional windfall to minority contractors solely on the basis of their race or sex.”¹⁶⁴

While the Washington DOT conceded that it had no studies of discrimination in highway contracting, it argued that there was evidence of discrimination as DBEs received 9 percent of subcontracting dollars on state-funded projects where there were no DBE goals and 18 percent of federal-funded projects where there were DBE goals. But the Ninth Circuit stated that “even in States in which there has never been discrimination, the proportion of work that DBEs receive on contracts that lack affirmative action requirements will be lower than the share that they obtain on contracts that include such measures because minority preferences afford DBEs a competitive advantage.”¹⁶⁵

The Ninth Circuit also dismissed the disparity between the proportion of DBE subcontractors and the proportion of DBE dollars on state-funded contracts, because “DBE firms may be smaller and less experienced than non-DBE firms (especially if they are new businesses started by recent immigrants) or they may be concentrated in certain geographic areas of the State, rendering them unavailable for a disproportionate amount of work.”¹⁶⁶ The Ninth Circuit stated:

[M]inority firms may not have bid on . . . construction contracts because they were generally small companies incapable of taking on large projects; or they may have been fully occupied on other projects; or the District’s contracts may not have been as lucrative as others available in the Washington metropolitan area; or they may not have had the expertise needed to perform the contracts; or they may have bid but were rejected because others came in with a lower price.¹⁶⁷

The Ninth Circuit noted further that “to the extent this small disparity has any probative value, it is insufficient, standing alone, to establish the existence of discrimination against DBEs.”¹⁶⁸ The Ninth Circuit contrasted this minor disparity with the Ninth Circuit’s decision in *AGCC II*, where “discrimination was

¹⁶³ *W. States Paving*, 407 F.3d at 997-98.

¹⁶⁴ *Id.*

¹⁶⁵ *Id.* at 1000. By contrast, the Eighth Circuit and the Tenth Circuit found that a decline in DBE utilization following a change in or termination of a DBE program was relevant evidence of discrimination in subcontracting. *Sherbrooke Turf*, 345 F.3d 964; *Adarand v. Slater*, 228 F.3d at 1174. The Tenth Circuit stated that while this evidence “standing alone is not dispositive, it strongly supports the government’s claim that there are significant barriers to minority competition in the public subcontracting.” *Adarand v. Slater*, 228 F.3d at 1174; see also *Concrete Works IV*, 321 F.3d at 985.

¹⁶⁶ *W. States Paving*, 407 F.3d at 1001.

¹⁶⁷ *Id.* (quoting *O’Donnell Constr. v. D.C.*, 963 F.2d 420, 426 (D.C. Cir. 1992)).

¹⁶⁸ *W. States Paving*, 407 F.3d at 1000.

likely to exist where minority availability for prime contracts was 49.5% but minority dollar participation was only 11.1%.”¹⁶⁹

Because Washington did not proffer any evidence of discrimination within its own contracting market, the subcontractor’s as-applied challenge was successful.¹⁷⁰

2.6 SMALL BUSINESS PROCUREMENT PREFERENCES

Small business procurement preferences have existed since the 1940s. The first small business program had its origins in the Smaller War Plants Corporation (SWPC), established during World War II.¹⁷¹ The SWPC was created to channel war contracts to small businesses. In 1947, Congress passed the Armed Forces Procurement Act, declaring, “It is the policy of Congress that a fair proportion of the purchases and contracts under this chapter be placed with small business concerns.”¹⁷² Continuing this policy, the 1958 Small Business Act requires that government agencies award a “fair proportion” of procurement contracts to small business concerns.¹⁷³ The regulations implement this general policy.¹⁷⁴

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

... to make studies and recommendations to the appropriate Federal agencies to insure that a fair proportion of the total purchases and contracts for property and services for the Government be placed with small-business enterprises, to insure that a fair proportion of Government contracts for research and development be placed with small-business concerns, to insure that a fair proportion of the total sales of Government property be made to small-business concerns, and to insure a fair and equitable share of materials, supplies, and equipment to small-business concerns.¹⁷⁵

Every acquisition of goods and services anticipated to be between \$3,500 and \$150,000 is set aside exclusively for small businesses unless the contracting officer has a reasonable expectation of fewer than two bids.¹⁷⁶

There have been limited constitutional challenges to the long-standing federal SBE programs. In *J.H. Rutter Rex Manufacturing v. United States*,¹⁷⁷ a federal vendor unsuccessfully challenged the Army’s small business set-aside as violating the due process clause of the Fifth Amendment to the U.S. Constitution, as

¹⁶⁹ *Id.* (citing *Associated Gen. Contractors of California, Inc.*, 950 F.2d at 1414).

¹⁷⁰ *W. States Paving*, 407 F.3d at 1003.

¹⁷¹ See generally, Thomas J. Hasty III, *Minority Business Enterprise Development and the Small Business Administration’s 8(a) Program: Past, Present, and (Is There a) Future?* MIL. L. REV. (Summer 1994).

¹⁷² 10 U.S.C. § 2301 (1976).

¹⁷³ 15 U.S.C. 631(a).

¹⁷⁴ See 32 C.F.R. §§ 1-701.1-1-707.7.

¹⁷⁵ 15 U.S.C. § 637(b)(11).

¹⁷⁶ 48 C.F.R. § 19.502-2.

¹⁷⁷ 706 F.2d 702 (5th Cir. 1983).

well as the Administrative Procedures Act and the Armed Forces Procurement Act. The court held that classifying businesses as small was not a “suspect classification” subject to strict scrutiny. Instead, the court ruled:

Since no fundamental rights are implicated, we need only determine whether the contested socioeconomic legislation rationally relates to a legitimate governmental purpose. Our previous discussion adequately demonstrates that the procurement statutes and the regulations promulgated thereunder are *rationally related* to the sound legislative purpose of promoting small businesses in order to contribute to the security and economic health of this Nation.¹⁷⁸

A large number of state and local governments have maintained small business preference programs for many years.¹⁷⁹ One possible reason for the relatively low level of litigation in this area is the lack of significant organizational opposition to SBE programs. Indeed, the legal foundations that have typically sued M/WBE programs have actually promoted SBE procurement preference programs as a race-neutral substitute for M/WBE programs.

2.7 RECENT DEVELOPMENTS

Recent years have brought further challenges to race- and gender-conscious preference programs in the transportation-construction industry. In the Seventh Circuit, the federal DBE program and the programs of the Illinois Department of Transportation (IDOT) and the Illinois State Toll Highway Authority survived a Fourteenth Amendment equal protection challenge.¹⁸⁰ A 2015 challenge to the constitutionality of the IDOT DBE was also unsuccessful before the Seventh Circuit.¹⁸¹ In 2013, the Ninth Circuit dismissed an appeal, on standing grounds, of a ruling adverse to a constitutional challenge to the California Department of Transportation’s DBE program, stating that the program would survive strict scrutiny.¹⁸²

Within the Fifth Circuit, the Southern District of Texas recently considered a challenge to Houston’s M/WBE program in *Kossmann Contracting v. City of Houston*.¹⁸³ The case addressed an equal-protection challenge to the city of Houston’s 2013 Small/Minority Business Enterprise Program for Construction Contracts. The opinion provides an up-to-date discussion of current constitutional standards, relying primarily on *Crosby*, more recent Supreme Court guidance, and Fifth Circuit analysis.

The court conducted an extensive review of the disparity and availability study commissioned by the city of Houston and determined that the study provided strong evidence of ongoing discrimination in construction contracting processes, which justified the remedial program to combat the discrimination.

¹⁷⁸ *Id.* at 712 (internal citation omitted and emphasis added); see *Dandridge v. Williams*, 397 U.S. 471 (1970).

¹⁷⁹ For example, Florida started a small business preference program in 1985 (Fla. St. Sec. 287); Minnesota in 1979 (Mn. Stat. 137.31); and New Jersey in 1993 (N.J.S.A. 52:32-17).

¹⁸⁰ *Midwest Fence Corp. v. United States Dep’t of Transp.*, 840 F.3d 932 (7th Cir. 2016).

¹⁸¹ *Dunnet Bay Constr. Co. v. Borggren*, 799 F.3d 676 (7th Cir. 2015).

¹⁸² *Associated Gen. Contractors of Am., San Diego Chapter, Inc. v. Cal. Dep’t of Transp.*, 713 F.3d 1187, 1190 (9th Cir. 2013).

¹⁸³ *Kossmann Contr. v. City of Houston*, No. H-14-1203, 2016 U.S. Dist. LEXIS 37708 (S.D. Tex. Feb. 16, 2016), *adopted by Kossmann Contr. Co. v. City of Houston*, No. H-14-1203, 2016 U.S. Dist. LEXIS 36758 (S.D. Tex. Mar. 22, 2016).

The study's statistical analysis and anecdotal evidence were held to support the disparity findings. The court analyzed five and one-half years of the City's construction contract records.

In upholding the constitutionality of all aspects of the program, except as to goals for one ethnic group for which the evidence did not show discrimination, the court relied on the following Fifth Circuit cases:

- ◆ *Dean v. City of Shreveport*, 438 F.3d 448 (5th Cir. 2006).
- ◆ *Police Ass'n of New Orleans ex rel. Cannatella v. City of New Orleans*, 100 F.3d 1159 (5th Cir. 1996).
- ◆ *Houston Contractors Ass'n v. Metro. Transit Auth. of Harris Cnty.*, 189 F.3d 467 (5th Cir. 1999).
- ◆ *W.H. Scott Constr. Co. v. City of Jackson, Miss.*, 199 F.3d 206 (5th Cir. 1999).
- ◆ *Fisher v. Univ. of Tex. at Austin*, 133 S. Ct. 2411 (2013).

2.8 CONCLUSION

A governmental entity designing and implementing an affirmative-action program must navigate complex legal issues for that program to survive legal challenge. Fortunately, a significant body of case law has developed in the wake of *Croson*, providing guidance.

Those decisions have made several principles clear. Most fundamentally, programs involving racial classifications will be subject to strict scrutiny, requiring demonstration of a compelling government interest and a narrowly tailored remedy. The first part of this test—a compelling interest—requires evidence of past or present discrimination. Statistical evidence (based on sound methodology) of discrimination has been considered most persuasive, but anecdotal evidence may also be introduced. For the second prong of the strict scrutiny analysis, narrow tailoring, the government must show that race-neutral remedies were considered, and the remedial program must be closely tied to the evidence of discrimination.

While strict scrutiny imposes a high bar for constitutionality, it is not insurmountable if programs are designed and maintained with this legal framework in mind.

CHAPTER 3. REVIEW OF POLICIES,
PROCEDURES, AND PROGRAMS

Availability and Disparity Study

City of Dallas, Texas



3.1 INTRODUCTION

Chapter 3 provides a review of the City’s procurement policies, procedures, and programs for the study period. In addition, this chapter examines the City’s efforts to remove barriers to participation in procurement by businesses owned by minorities, women, or other socially and economically disadvantaged individuals.

MGT’s review of policies and procedures is presented in five sections. Section 2 describes the methodology used to conduct the review of the City’s procurement policies, procedures, and programs. The remaining sections summarize procurement policies and describe efforts to remove any barriers to participation in procurement. The review and examination of policies in this chapter is intended to provide the foundation for the analysis of utilization and availability in **Chapters 4 and 5** and the findings and recommendations in **Chapter 10**.

CHAPTER SECTIONS



- 3.1 Introduction
- 3.2 Methodology and Definitions
- 3.3 Procurement Environment and Organization
- 3.4 Procurement Policies and Procedures
- 3.5 Business Diversity and Inclusion
- 3.6 Conclusion

3.2 METHODOLOGY AND DEFINITIONS

This section summarizes the overall approach and methods undertaken to review the City’s procurement policies. MGT’s review included developing an understanding of the City’s organization structure and procurement roles and responsibilities of Procurement Services and other City departments. The policy review was conducted with complete cooperation of City staff who provided data, information, and assistance to MGT throughout the policy review. To conduct the policy review and to prepare this chapter, MGT’s approach included collecting and reviewing source documents related to procurement and contracting. Procurement policies and practices were also reviewed and discussed with staff to better understand procurement operations and practices. However, an overall assessment of the impact of these policies and procedures can only be made in conjunction with the statistical and anecdotal evidence contained in **Chapters 5 and 7** of this report. The review of policies and procedures included the following major steps:

- ◆ Finalizing the scope of the policy review.
- ◆ Collection, review, and summarization of the City’s current contracting and purchasing policies.
- ◆ Collection, review, and summarization of policies, procedures, and other information and data pertaining to the City’s business inclusion efforts.
- ◆ Review of applicable federal and state laws governing procurement.
- ◆ Interviews with staff to review and discuss procurement policies and practices.

Interviews and meetings were initially held with City staff in November 2018. In addition to meetings and interviews with procurement staff, MGT also met with staff in the City Manager’s office, City Attorney, Finance, IT and Public Works. Follow-up contacts were made to obtain additional information and insight.

MGT collected and reviewed a variety of source documents and information pertinent to the policy review. Major source documents and other information collected and reviewed are itemized in **Exhibit 3-1**.

EXHIBIT 3-1.
DOCUMENTS REVIEWED DURING THE POLICY AND PROCEDURES REVIEW

INDEX	DESCRIPTION
City Procurement Documents	
1.	Dallas City Code
2.	Business Inclusion and Development Administration Guide
3.	Contract Management Manual-Contract Management Manual for General Services and Revenue Contracts Adopted 11/01/2019
4.	Administrative Directive 4-5, Contracting Standards and Procedures
5.	Bk1520 April 2015 Business Survey
6.	BHZ1414 Request for Competitive Sealed Proposal (RFCSP) April 2014 Consultant Services for Dallas-Fire Rescue Department Dispatch and Emergency Medical Services
7.	BK21514 RFCSP April 2015 Fees for Services: Cost/Revenue Study
8.	RFQ August 2015 Departmental Assessment and Consulting Focus: Organizational Behavior/Organizational Culture
9.	BTZ 1506 RFP February 2015 Strategic Planning Dallas Public Library
10.	BQZ1708 RFCSP Consultant or Team to Develop a Cultural Plan and Updated Cultural Policy
11.	BKZ 1803 May 2018 RFCSP Availability and Disparity Study
Statutes and Regulations	
12.	<i>Texas Local Government Code Chapter 252 Purchasing and Contracting Authority of Municipalities</i>
13.	Texas Local Government Code Chapter 271 Purchasing and Contracting Authority of Municipalities, Counties, and Certain other Local Governments
14.	Texas Local Government Chapter 2269 Contracting and Delivery Procedures for Construction Projects
15.	Texas Local Government Code Chapter 2252 – Contracts with Governmental Entity
16.	Texas Local Government Code Chapter 2254 – Professional and Consulting Services
17.	Texas Local Government Code Chapter 176 – Disclosure of Certain Relationships with Local Government Officers, Providing Public Access to Certain Information (Chapter 176 Disclosure of Relationships)
18.	Texas Local Government Code Chapter 171 – Regulation of Conflicts of Interest of Officers of Municipalities, Counties, and Certain Other Local Governments (Chapter 171 Conflict of Interest)
19.	Texas Local Government Code Chapter 2258 Prevailing Wage Rates
20.	Dallas City Council Resolution 15-2141
21.	Texas Government Code Title 10 General Government Subtitle D Purchasing and General Services Chapter 2155 Purchasing General Rules and Procedures Subchapter A General Provisions
Other Related Documents	
22.	Business Inclusion and Development Affidavit (BDPS-FRM-203)
23.	Ethnic Workforce Composition Report (BDPS-FRM-204)
24.	Contractor’s Affidavit History of M/WBE Utilization Form (BDPS-FRM-205)
25.	Contractor’s Affidavit Type of Work by Prime and Subconsultant Form (BDPS-FRM-206)
26.	Wage Floor Affidavit (BDPS-FRM-150)

INDEX	DESCRIPTION
27.	<i>Insurance Requirements Affidavit (BDPS-FRM-122)</i>

3.2.1 DEFINITIONS

This section provides selected definitions extracted from the City’s Contract Management Manual.¹⁸⁴ Documenting and understanding definitions provided proper context for the policies and procedures reviewed by MGT.

Administrative Action – A form document established by the City Manager’s Office to award a contract or otherwise authorize expenditure of City funds when a Council Resolution is not required, or a purchase order is not permitted. This includes procurements \$70,000 or less required to be competitively bid or proposed or procurements competitively bid or proposed subject to Cooperative Purchasing.

Administrative Action Contract – Informal contract executed by the City Manager and approved by the City Attorney according to the Administrative Action approval process which includes documentation in the form of a signed proposal letter, change order, invoice, or bid document signed by the vendor or consultant.

Amendment – A change made to a material term of the contract, such as the scope of work, the term of the contract, the payments to be made, that requires a written Supplemental Agreement signed by both parties to approve the change. An Administrative Action or City Council action is required, depending upon the scope of the change.

Business Inclusion and Development (BID) – The City’s policy is to involve Minority and Women-Owned Business Enterprise (M/WBE) to the greatest extent feasible on City Contracts. M/WBE participation is required on all expenditures greater than \$50,000 and BID evaluation criteria is required on all proposals estimated to exceed \$250,000.

Change Order – In construction contracts the City as Owner may give a written change order request setting forth in detail the nature of the requested change(s). The Contractor then provides a cost estimate for the changes set forth in the Change Order Request. The Change Order must be approved in writing by the City through its approval process.

Contract Administrator – Manages the actions taken following the award of a Contract to assure full compliance with all Terms and Conditions contained within the Contract document, including price. Contract Administration activities include payment, monitoring of progress, Inspection and Acceptance, Quality Assurance, Monitoring and Surveillance, Modifications, Negotiations, contract closeout, and other activities.

¹⁸⁴ City of Dallas Contract Management Manual, 2019.

Contract Manager – Oversees the entire contracting process from identifying the need through closeout and retention.

Contract Management – Contract Management incorporates the entire contracting process from identifying the need through closeout and retention.

End User – Staff member from Initiation or Lead Department.

Extension Request – Is generally used in Master Agreements for the purchase of goods where there is no written contract. The City sends a request to the vendor to extend the term of the contract for a set period or until the exhaustion of funds, whichever occurs first. It requires an Administrative Action for approval after the vendor signs the request.

Initiating Department (End User) – The City department that initiates, is responsible for initiation, or is designated to initiate processes for the purpose of obtaining or finalizing a contract for that department or other departments.

Lead Department – The user department responsible for contract monitoring, planning, administrating, and coordinating contractual activities for a contract.

Project Champion – An administrative level employee with a vested interest in the project, who has the authority to aid the progress and success of the project.

Purchase Order – A buyer’s written document to a vendor formalizing all the Terms and Conditions of a proposed transaction, including a description of the requested items, delivery schedule, terms of payment, and transportation.

Renewal – The exercise of an option to renew the Contract for an additional time period at the terms and conditions in the contract. This may be done by Administrative Action or by City Council action, depending upon the cost of the renewal.

Responsible – A Contractor, business entity, or individual who is capable of meeting all requirements of the Solicitation and subsequent Contract.

Responsive – A Contractor, business entity or individual who has submitted a Bid or Proposal that fully conforms in all material respects to the solicitation and all requirements.

Scope/Statement of Work – A detailed, written description of the conceptual requirements for the project contained within a specification. The scope of work should establish a clear understanding of what the entity requires.

Short List – A list of two or more proposers that may be invited or selected, after a review of all statements of qualification or proposals, to provide additional information or to discuss entering into a possible contract.

Solicitation – An invitation for Bids, a Request for Proposals, telephone calls, or any document used to obtain Bids or Proposals for the purpose of entering into a Contract.

Specifications – A precise description of the physical or functional characteristics of a commodity, i.e., product or service; and a description of the characteristics of a commodity the buyer seeks to purchase and that a Supplier must offer in order to be considered for award of a contract.

Stakeholders – Any entity, group, or individual that can place a claim on the entity’s resources or services or is affected by what the entity does or the services it provides.

Subject Matter Expert (SME) – An individual who possesses exceptional skill and knowledge in a particular area of expertise. Generally, the SME understands technical details and terminology, is current with changing trends, and possesses historical knowledge. Procurement may invite SMEs to provide technical assistance or to serve on evaluation committees.

Supplemental Agreement – A written amendment to a Contract signed by both parties to the Contract. A Supplemental Agreement may be authorized by either an Administrative Action or a City Council action, depending upon the amount of money involved.

Surety – A pledge or guarantee by an insurance company, bank, individual, or corporation on behalf of the Bidder/Proposer that protects against default or failure of the principal to satisfy the contractual obligations. This is in the form of a payment, performance or maintenance bond.

3.3 PROCUREMENT ENVIRONMENT AND ORGANIZATION

The City’s commitment to business diversity and inclusion is operationalized in City ordinances, policies and initiatives to increase utilization of minority- and women-owned businesses. Taken on the whole City policies and initiatives recognize that in addition to ensuring user departments can procure needed goods and services, procurement can also be a powerful tool for growing the capacity of minority- and women-owned businesses. MGT’s experience conducting over 215 disparity studies has shown that if policies and remedies are effectively executed, they can result in significant positive social and economic outcomes. The City’s Business Inclusion and Development Plan and related compliance mechanisms operate with this premise in mind. The current disparity study is another key indicator of the City’s commitment to contracting equity and inclusion. This is the City’s third comprehensive disparity study. Previous disparity studies resulted in policies, processes, mechanisms to increase M/WBE participation in procurement. Based on MGT’s disparity study experience, few municipalities can match the City’s investment in business diversity and inclusion. Compared to other municipalities the City’s efforts are unique and commendable. The efforts and initiatives undertaken by the City served as an important backdrop for the policy review and the context in which the review was conducted.

Given the size of the City’s operating budget, procurement is an essential and necessary activity. **Exhibit 3-2** shows the City’s organizational structure. The organizational units shown in **Exhibit 3-2** purchase a variety of goods and services for internal use and to provide essential services to citizens. To operate

efficiently and effectively procurement must be continuous and ongoing. Within this context, the organization units shown in **Exhibit 3-2** engage in procurement at varying levels and on a regular basis. **Exhibit 3-3** shows the organization structure for Procurement Services which is housed in Finance and report to the Chief Financial Officer (CFO). Procurement Services is staffed with 23 full-time employees (FTEs). According to staff there are two Senior Buyers and six Buyers for each Senior Buyer responsible for purchasing goods and services.

EXHIBIT 3-2.
CITY OF DALLAS ORGANIZATION CHART

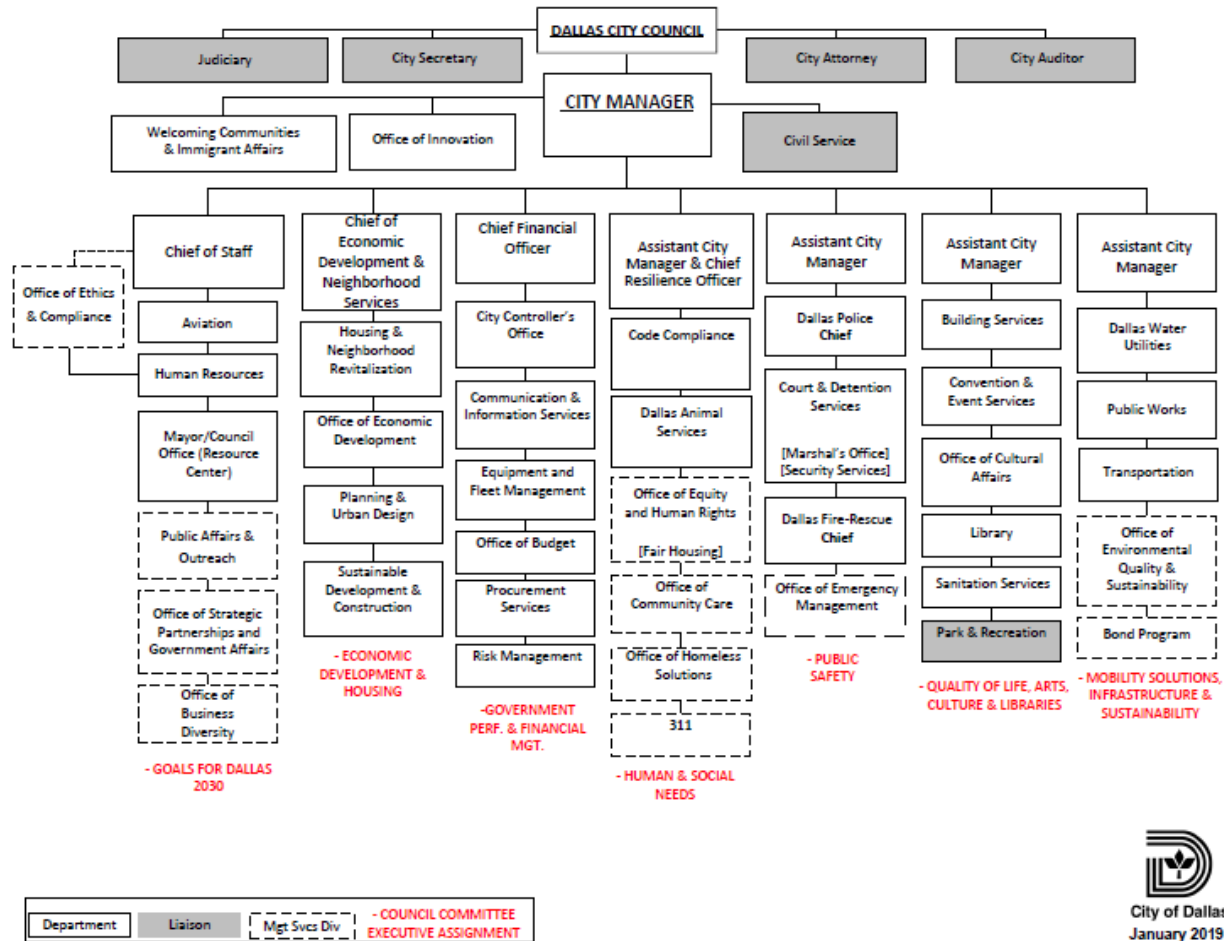
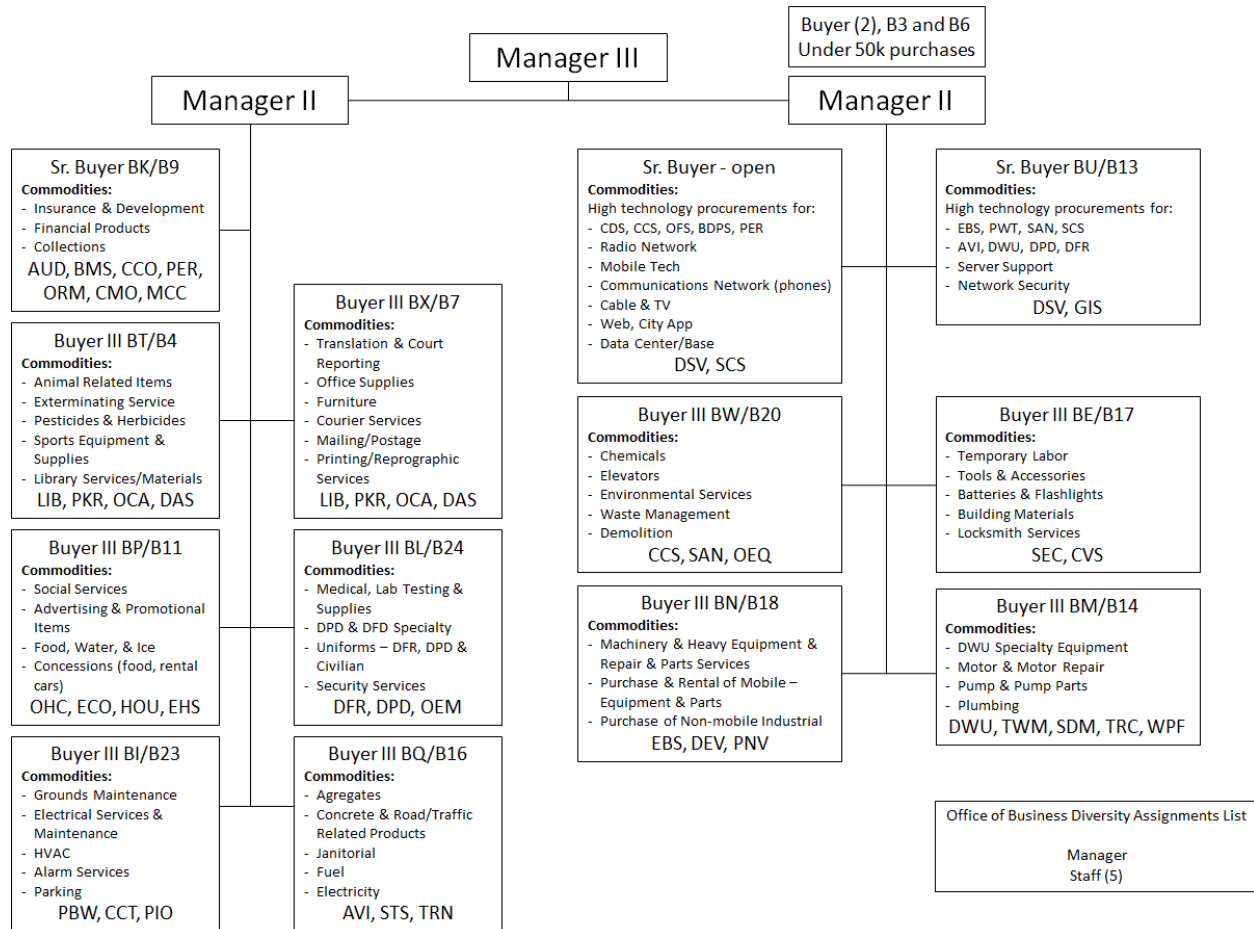


EXHIBIT 3-3.
CITY OF DALLAS PROCUREMENT SERVICES ORGANIZATION CHART



Source: City of Dallas.

Procurement Services is responsible for the acquisition and procurement of goods and services according to established policies and procedures for advertisement, solicitation, and approval. The City operates a centralized procurement system for goods and general services and a decentralized system for Construction and Architectural & Engineering (A&E). It was noted during the review that Procurement Services follows the standards set forth by the National Institute of Governmental Purchasing (NIGP) in performing the following basic functions:

- ◆ Coordination of all phases of the procurement process from identifying the need to closeout.
- ◆ Procurement of goods, services, and equipment used by the City.
- ◆ Coordination, support, and technical assistance to organizational units in the procurement of essential goods and services.
- ◆ Coordination, support, and guidance to businesses seeking opportunities with the City.

According to the City's website, the Office of Procurement Services is also responsible for the following:

- ◆ Developing bid specifications jointly with City departments.
- ◆ Obtaining bids through advertising and direct solicitation.
- ◆ Establishing and monitoring price agreement contracts.
- ◆ Issuing purchase orders.
- ◆ Administering the sale and auctioning of City surplus property.

To facilitate M/WBE participation, Procurement Services works in coordination and collaboration with the Office of Business Diversity which maintains the City's M/WBE registry. Interviews and meetings with staff in Procurement Services and other departments provided insight into how policies are operationalized, how end users and businesses are affected and the structure, environment and context in which procurement take place. Staff comments also revealed an emphasis on ensuring that policies and procedures are consistently and routinely followed in acquiring goods and services to meet user department needs.

Operationalizing procurement within the organizational structure shown in **Exhibits 3-2** and **3-3** require coordination and collaboration among City departments and the 14 buyers and 8 administrative and support staff in Procurement Services. Efforts to increase participation of M/WBEs is an important part of procurement operations. The Office of Business Diversity is staffed by the Director, 4 compliance staff and one staff responsible for outreach. The Business Inclusion and Development Plan which is discussed in detail later in the chapter is in place to ensure M/WBE participation in construction, procurement and professional services contracts.

Procurement processes are included in Administrative Directive 4-5 (A.D. 4-5), the Procurement Contracting Manual and the Business Inclusion and Development Administration Guide. A.D. 4-5 details procurement and contract procedures for goods, services, and revenue contracts. Procurement responsibilities extracted from A.D.4-5 are summarized below.¹⁸⁵

Purchasing Responsibilities for Non-Construction Procurements

Except for Civil Works Project and Building Facility construction procurements, Purchasing shall have the following responsibilities:

- ◆ Coordinate the preparation and development of the specifications with all user departments identified by Purchasing.
- ◆ Ensure that specifications are reviewed by the appropriate reviewing departments, when necessary or when requested (i.e., City Attorney's Office, Risk Management, departments that may have expertise regarding the goods or services, for example, EBS in reference to vehicles, CIS in reference to high tech computer equipment).

¹⁸⁵ Administrative Directive 4-5, Contracting Standards and Procedures.

- ◆ Perform a complete and accurate review of all bids received, in conjunction with other user departments.
- ◆ Prepare a bid tabulation sheet and letter of recommendation identifying the lowest responsible bidder, with concurrence of the initiating department, and provide the master bid tabulation to all affected user departments after verifying the tabulation.
- ◆ Submit bid documentation to the City Attorney's Office when a formal contract is required or when legal issues related to a bid irregularity or protest must be addressed. Purchasing shall forward to all City Council members any protest received and any response to that protest before City Council considers awarding that City contract pursuant to Section 12A-15.8 (g)(2) of the Dallas City Code which provides: "A city council member shall not discuss a request for bids or a request for proposals on a city contract either directly (with the person or entity submitting the bid or proposal) or indirectly (with a lobbyist, representative, employee, or agent of the person or entity submitting the bid or proposal) from the time the advertisement or public notification of the request for bids or request for proposals is made until the time the contract is awarded by the city council. The department issuing the request for bids or request for proposals shall forward to all city council members any protest received and any response to that protest before city council considers awarding that city contract."
- ◆ Obtain insurance certificates and proof of insurance from the successful bidder after award and submit to Risk Management for review and approval prior to execution of the contract.
- ◆ Obtain payment and performance bonds from the successful bidder. Performance and payment bonds should be maintained in a secured area by the lead department.
- ◆ Ensure that contracts are signed by the appropriate parties and that copies of signed contracts are provided to the City Attorney's Office, City Secretary's Office (the original record copy), Purchasing, and City Controller's Office Accounts Payable and Cost Accounting.

Purchasing Agent

The Purchasing Agent's responsibilities do not include Civil Works Projects and Building Facility construction, which are the responsibility of the Directors of the Initiating Construction Departments. Purchasing Agent responsibilities include procuring all goods, high technology items, and services.

- ◆ Review of specifications, ensuring that requirements of end users are clearly stated, competition is not restricted, methods for testing and inspection of goods and services are required when appropriate, and a responsible award is made at the lowest possible cost to the City.
- ◆ Maintenance of adequate records of all City procurements made by requisition or master agreement and keeping information on the non-performance of vendors or contractors who provide goods or services to the City through the requisition or master agreement process.
- ◆ Obtaining completed, originally signed City of Dallas Insurance Requirement Affidavits from all bidders stating that they will be able to meet all insurance requirements as specified in the RFB/RFP.
- ◆ Ensuring that sole source procurements and only bids on all procurement processes, other than Civil Works Project and Building Facility construction procurements, are reviewed by the Office of Procurement Services to ensure sole source procurements meet at least one general exception

as stated in Texas Local Government Code section 252.022, subsection 7 and that reasonable effort was made to generate competition for competitive bids resulting in only one bid received. Documentation evidencing the review and findings shall become part of the file.

Risk Management

- ◆ Perform a risk assessment review and document a risk transfer method on all services, construction, professional services and Building Facility construction, including alteration, renovation or repair contract procurements greater than \$50,000; it is the responsibility of the Initiating Construction Department to provide Risk Management a scope of services written in detail to perform the risk assessment review.
- ◆ Provide risk assessment review and appropriate risk transfer method for assessing risks on all goods contract procurements and services (other than Civil Works Project and Building Facility construction) contract procurements of \$50,000 or less and to Initiating Construction Departments on construction professional service and Building Facility construction including alteration, renovation or repair contract procurements of \$50,000 or less.

Office of Business Diversity

- ◆ The Office of Business Diversity is responsible for reviewing bid or proposal documents of recommended vendors and consultants prior to award to ensure that a good faith effort to achieve M/WBE participation was demonstrated.

Department Directors

- ◆ Adherence to all governing standards and procedures related to City procurements and contracting.
- ◆ Compliance with all applicable requirements of State law, City Charter, City Code, the City Code of Ethics and the City Personnel Rules.
- ◆ Develop specifications and ensure that funding has been appropriated for the procurement of goods and services prior to submission of bid specifications, proposals or requisitions to Purchasing.
- ◆ Ensure that bid recommendation letters for goods and services in excess of \$50,000 but less than or equal to \$70,000 are signed by a department manager, and for goods and services in excess of \$70,000 by a department executive (director/assistant director).
- ◆ Ensure that opportunities for M/WBE participation in subcontracting on any City contract (except as provided in the City's Business Inclusion and Development Plan) are identified, in conjunction with the Office of Business Diversity.
- ◆ Ensure that forms for the City's Business Inclusion and Development Plan are submitted to the Office of Business Diversity within seven (7) business days after submission of recommendation of the lowest responsible bid, including any changes in M/WBE participation and the final M/WBE participation on any contracts which required Council action.
- ◆ Ensure that all contracts are properly executed prior to commencement of work or purchase (when applicable), and that the record copy of the executed contract has been submitted, including all exhibits, documents incorporated by reference, and necessary supporting

documentation, to the City Secretary upon execution of the contracts. Vendors and consultants should not be authorized to begin work until the contract, bonding (if bonding is required), and appropriate insurance, including amendments, have been fully executed and delivered.

- ◆ Monitor the contract to ensure vendors or consultants comply with the specifications or proposal and terms and conditions of the contract.
- ◆ Copy the Purchasing Agent on correspondence to vendors involving nonperformance problems or other contractual violations relating to contracts other than Civil Works Project and Building Facility construction contracts.
- ◆ Ensure that all contractual activities are adequately documented and that record copies of complete documents are maintained in accordance with requirements established in the Directive, the Public Information Act, the Local Government Records Act, and other applicable laws or policy.

Construction Department

- ◆ Each Initiating Construction Department is responsible for accumulating and making available, at the closeout of any contract, a central database of information regarding City architectural and engineering consultant contracts, Civil Works Project contracts, and Building Facility construction contracts on the past performance of architectural and engineering consultants and construction contractors.

Construction Department Director

- ◆ Make recommendations to the City Manager's Office as to whether it desires to use an alternative delivery method for a Building Facility construction project, and which method it considers as providing the best value to the City.
- ◆ Evaluate bids or proposals received for Civil Works Project and Building Facility construction procurements solicited through Purchasing and make recommendations for award.
- ◆ Ensure that all sole source procurements and only bids for Civil Works Project and Building Facility construction are reviewed by the requesting department to ensure sole source procurements meet at least one general exception as stated in Texas Local Government Code section 252.022, subsection 7 and that reasonable effort was made to generate competition for competitive bids resulting in only one bid received. Documentation evidencing review and findings shall become part of the file.
- ◆ Designate, by written memorandum filed with the City Manager in the case of those appointed by the City Manager and with the City Secretary, City Auditor and the City Attorney, one of his or her assistants as temporary acting department director who shall have and exercise the powers of the department director during the director's absence from the City for any reason in accordance with Section 2-119 of the City Code.

3.4 PROCUREMENT POLICIES AND PROCEDURES

The overview which follows is narrowly focused on policies and practices which have a more direct impact on access to procurement opportunities. To evaluate procurement policies, MGT reviewed the policy related documents and information listed in **Exhibit 3-1** with a major focus on AD 4-5, Contract Management Manual, and the Business Inclusion and Development Plan. In its review, MGT paid considerable attention to M/WBE participation requirements/provisions since the underlying premise for conducting a disparity study is improving contracting and procurement opportunities for M/WBEs. As such, how procurement policies are operationalized to facilitate M/WBE participation is important. The sections which follow are intended to provide a high-level summary of procurement policies and procedures. It is not intended to provide a detailed discussion of processes associated with each policy or the “nuts and bolts” of how policies are carried out. MGT’s primary focus was on how policies are being used to facilitate increased access to procurement opportunities and whether there are barriers and impediments to increased access.

MGT’s experience has shown that efficient and effective procurement processes are largely dependent upon well-defined and consistently followed policies for advertisement, solicitation, vendor evaluation/selection, contract negotiation and approval executed and supported by knowledgeable and skilled staff. Based upon MGT’s discussions, staff appear to be very knowledgeable about procurement operations and processes and have a sense of urgency about increasing access to procurement. From staff’s perspective the City’s procurement is intended to:

- ◆ Ensure fair and open competition;
- ◆ Provide equitable treatment of all vendors seeking to do business with the City;
- ◆ Increase utilization of minority- and women-owned businesses;
- ◆ Maintain a responsive and responsible centralized procurement system; and
- ◆ Procure the materials, services, and construction required by the City in a cost-effective manner.

MGT concluded that the purposes above are embodied in the roles and responsibilities of staff responsible for enforcement and compliance with policies and procedures. MGT’s review also concluded that the City has detailed and clearly articulated procurement policies and procedures to guide user departments and businesses seeking procurement opportunities. Overall, MGT found policies and procedures to be comprehensive and user-friendly and the resources and information available on the City’s website helpful to all businesses seeking procurement opportunities with the City.

In conducting the policy review MGT reviewed solicitation documents shown in **Exhibit 3-4**. Examining bid solicitation documents was important because solicitations are the starting point in the procurement process for most businesses seeking procurement opportunities with the City. Examining solicitation documents was also important in determining whether the documents adhere to the policies and procedures reviewed by MGT. Particular attention was paid to M/WBE participation requirements and provisions. For example, the solicitation documents included BID requirements such as the Business and Inclusion Affidavit, Ethnic Workforce Composition, History of M/WBE Utilization and Type of Work by

Prime and Sub-Consultants. M/WBE participation is required on all expenditures greater than \$50,000 and BID evaluation criteria are required on all proposals that exceed \$250,000. MGT also noted the nondiscrimination language in the General Warranty section of solicitations which reference non-discrimination in Chapter 15B of the Dallas City Code.

EXHIBIT 3-4.
CITY OF DALLAS SOLICITATION DOCUMENTS

Solicitation	Type
BK1520 Business Survey	
Fire-Rescue Department Dispatch and Emergency Medical Services	RFCSP
BK21514 Fees for Services Cost /Revenue Study	RFCSP
Departmental Assessment and Consulting Focus: Organizational Behavior/Organizational Culture	RFQ
BTZ 1506 Strategic Planning Dallas Public Library	RFP
BQZ 1708 Consultant or Team to Develop a Cultural Plan and Updated Cultural Policy	RFCSP
BKZ 1803 Availability and Disparity Study	RFCSP

Source: Created by MGT, 2019.

The solicitations in **Exhibit 3-4** do not include other sourcing methods such as emergency or sole source purchases which are discussed later in the chapter.

Purchasing Authority

Delegation of purchasing authority is a common procurement practice. Policies that delineate purchasing authority provide guidance, direction, and boundaries for contracting and procurement. The Dallas City Code, Section 2-30 (General Delegation of Contracting Authority) delineate delegation of purchasing authority to approve contracts and contract amendments without city council action. Pursuant to AD 4-5¹⁸⁶ expenditure authority is outlined as follow:

- ◆ It is the responsibility of the Purchasing Agent to procure goods and general services.
- ◆ The Purchasing Agent currently approves a purchase order (PO) for the purchase of goods of less than \$50,000.
- ◆ The City Manager may approve expenditures exceeding \$50,000, but not exceeding \$70,000, for the purchase of goods, general services, (or construction services) required to be procured through competitive bid or competitive sealed proposal via Administrative Action.
- ◆ The City Council shall approve expenditures greater than \$50,000 for goods and general services when procured through another method other than through a competitive bid or competitive sealed proposal process.

¹⁸⁶ Administrative Directive 4-5.

- ◆ Change Orders
 - Greater than \$50,000 by Council Resolution
 - Less than \$50,000 by Administrative Action

Exhibit 3-5 summarizes the expenditure process for goods and services according to provisions in AD 4-5 and the Contract Management Manual. Solicitation methods are summarized in **Exhibit 3-6**.

EXHIBIT 3-5.
EXPENDITURE PROCESS FOR GENERAL GOODS AND SERVICES

Expenditure Amount	Process	Approval Process
Less than \$1,000	Informal Solicitation (IFS) or if unable to wait for the solicitation process, the department may obtain three quotes (preferred but not required) by Department. For services, department is responsible for sending specifications to Risk for an insurance risk review and include with requisition or provide to vendor during quote process.	Goods – Purchase Order Service – Administrative Action Council Action – No
Greater than \$1,000 but less than \$3,000	<ul style="list-style-type: none"> ◆ Department enters requisition. Informal Solicitation (IFS) by BDPS. ◆ If unable to wait for the solicitation process, the department shall obtain three quotes. ◆ Quotes obtained from vendors shall be included in the requisition header. ◆ Departments obtaining three quotes shall adhere to State Historically Underutilized Businesses and Minority/ Women Business Enterprise notice requirements. For services, department is responsible for sending specifications to Risk for an insurance risk review and include with requisition or provide to vendor during quote process.	Goods – Purchase Order Services – Administrative Action Council Action – No
Greater than \$3,000 but less than \$50,000	<ul style="list-style-type: none"> ◆ Department enters requisition. ◆ Informal Solicitation (IFS) by BDPS. If unable to wait for the solicitation process, the department shall obtain three quotes. ◆ Quotes obtained from vendors shall be included in the Requisition header. ◆ Departments obtaining three quotes shall adhere to State Historically Underutilized Businesses and Minority/Women Business Enterprise notice requirements. ◆ For services, department is responsible for sending specifications to Risk for an insurance risk review and include with requisition or provide to vendor during quote process. 	Goods – Purchase Order Services – Administrative Action Council Action – No

<p>Less than \$50,000 – Sole Source, Interlocal Agreement, Cooperative Agreement</p>	<ul style="list-style-type: none"> ◆ Department shall submit a requisition. ◆ Sole Source procurements shall comply with sole source process and procurement request must include department justification as why no other product will meet their needs. ◆ Memo for sole source less than \$50k can be signed by a manager. ◆ The department shall obtain a sole source letter from vendor on vendor letterhead. ◆ The buyer shall determine sole source status. ◆ Goods/Services from interlocal - agency's procurement must have gone through a competitive process and shall reference the agency's resolution and/or solicitation number. ◆ Goods/Services from cooperative agreement - must have gone through a competitive process and shall reference the contract award number. ◆ Service requests must be reviewed by Risk Management for a risk review. 	<p>Goods – Purchase Order</p> <p>Services – Administrative Action</p> <p>Council Action – No</p>
<p>Greater than \$50,000 – Sole Source, Interlocal Agreement, Cooperative Agreement</p>	<ul style="list-style-type: none"> ◆ Sole Source procurements shall comply with sole source process and procurement request must include department justification as why no other product will meet their needs. ◆ Sole source greater than \$50k shall be signed by an executive. BDPS shall conduct research and obtain all necessary supporting documentation and shall determine sole source status. ◆ Goods/Services from interlocal - agency's procurement must have gone through a competitive process and shall reference the agency's resolution and/or solicitation number. ◆ Goods/Services from cooperative agreement - must have gone through a competitive process and shall reference the contract award number. ◆ Service requests must be reviewed by Risk Management for a risk review. 	<p>Goods – Purchase Order</p> <p>Services – Contract</p> <p>Council Action – Yes</p>
<p>Services greater than \$50,000 but less than \$70,000</p>	<ul style="list-style-type: none"> ◆ Department enters RQS or provides specifications document. ◆ Advertise two consecutive weeks by State law. Shall follow the appropriate formal solicitation process, and evaluation process if a proposal process, and respective timetable. ◆ Service requests must be reviewed by Risk Management for a risk review. 	<p>Goods – Not applicable</p> <p>Services – Administrative Action</p> <p>Council Action – No</p>
<p>Goods greater than \$50,000</p>	<ul style="list-style-type: none"> ◆ Department enters RQS and provides specifications document. ◆ Advertise two consecutive weeks by State law. Shall follow the appropriate formal solicitation process, 	<p>Goods – Purchase Order</p> <p>Council Action – Yes</p>

	and evaluation process if a proposal process, and respective timetable.	
Service greater than \$70,000	Department enters RQS and provides specifications document. Advertise two consecutive weeks by State law. Shall follow the appropriate formal solicitation process, and evaluation process if a proposal process, and respective timetable.	Services – Contract Council Action – Yes

Source: Contract Management Manual, 2019.

**EXHIBIT 3-6.
SOLICITATION METHODS**

Method	Pros	Cons
Informal Solicitation (IFS {less than \$50,000}) Request for Bid (RFB {greater than \$50,000})	<ul style="list-style-type: none"> ◆ Best used for standard goods or services with a clear description. ◆ Pricing is the deciding factor. ◆ Quicker process. 	<ul style="list-style-type: none"> ◆ Poorly written descriptions result in wrong product or service being offered. ◆ Vendor innovation or expertise not taken advantage of. ◆ Cannot negotiate.
Request for Proposal (RFP) Request for Competitive Sealed Proposal (RFCSP) Note: These methods are common solicitation methods used for procurements greater than \$50K	<ul style="list-style-type: none"> ◆ Allows factors other than price in consideration of award. ◆ Allows offers to include innovation/expertise of vendor. ◆ Customized approaches to solution. ◆ Allows negotiations. ◆ Best and Final Offer (BAFO). 	<ul style="list-style-type: none"> ◆ Evaluation criteria could be subjective instead of objective. ◆ Takes longer.
Request for Qualifications (RFQ) Note: This method of solicitation is associated with professional services as defined in chapter 2254 of the Government Code.	<ul style="list-style-type: none"> ◆ Allow selection of most highly qualified and competent vendor. ◆ Allows negotiations. ◆ BAFO. 	<ul style="list-style-type: none"> ◆ Price cannot be used as a selection criterion. ◆ Will not know cost until negotiations take place.
Request for Information (RFI) NOT a procurement method but an optional planning tool	Tool to be used to identify: <ul style="list-style-type: none"> ◆ Interest of vendor community. ◆ Innovations in the industry. ◆ Performance measures. ◆ Industry methods. ◆ Information important to include in solicitation. 	<ul style="list-style-type: none"> ◆ Temptation to use response verbatim. ◆ Inadvertent inclusion of information that only one vendor can provide. ◆ Not a decision-making tool. Research only

Source: Contract Management Manual, 2019.

3.4.1 CONSTRUCTION AND A&E

As mentioned, Construction and Architect & Engineering (A&E) purchases are decentralized. Without question, construction is a very significant factor in the City’s procurement and contracting and provides the most opportunities for M/WBEs to participate as subcontractors or primes. The Dallas City Code, Section 2-27, defines construction services to include capital improvements (Construction/Renovation) to city-owned property or right-of-way and facility construction to buildings including rehabilitation and repair. Section 2-41 includes language related to sustainable development and construction. Section 2-49

outlines responsibilities of Public Works including construction and paving of streets, sewers and storm drainage except when the work is being done by a private developer. AD 4-5 Section 9.5 includes provisions and requirements for construction contracts and Section 9.5.1 includes the contracts related to public works (facility) construction and lists the types of selection processes available for each. Selection processes in Section 9.5.6 for Building Facility Construction include competitive bidding, construction manager-agent, construction manager at risk, design build and job order contracting. Selection methods in Section 9.5.7 include competitive bidding, competitive sealed proposals (RFCSP), construction manager-agent, construction manager at risk, and design build. All selection methods are subject to Chapter 252 and Chapter 2269 in the Texas Government code. In the Contract Management Manual, Chapter 7 (Construction, A&E and Professional Services) outlines requirements and provisions for pre-contract award activities, and bidding, selection, and award.

3.4.2 EXEMPT PROCUREMENT

In AD 4-5 procurement not subject to competitive bidding and/or defined as exempt is found in several sections. Section 10.4 (General Exemptions) includes a variety of goods and services exempt including personal, professional or planning services, utility services, management services provided by nonprofit organizations to name a few. Section 10.5 includes the following procurements not subject to bidding or RFCSP:

- ◆ Sole Source Procurement
- ◆ Emergency Procurement
- ◆ Informal Price Quotation
- ◆ RFP (Exempt professional services)

AD 4-5 Section 11 (Non-Procurement Contracts) includes the following contracts that are exempt from competitive bid requirements:

- ◆ Honorarium Contracts are subject to an informal honorarium contract process and are authorized by Administrative Action (AA) and cannot exceed \$50,000.
- ◆ Interlocal Agreements do not require a selection process and are normally authorized by City Council Resolution.
- ◆ Cooperative Purchasing Agreements do not require any selection process and may be authorized by the City Manager pursuant to City Council Resolution 06-1805 and Local Government Code Chapter 271, Subchapter F.
- ◆ Development and Participation Agreements do not require a selection process and are authorized by Resolution except for agreements \$50,000 or less which may be authorized by Administrative Action (AA).
- ◆ No Cost Parks Beautification, Maintenance and Development Agreements do not require a selection process. Residents, homeowner associations and non-profit organizations typically volunteer services at no cost to the City.

3.5 BUSINESS DIVERSITY AND INCLUSION

The major impetus of this disparity study is the availability and utilization of businesses owned by minorities, women, or other socially and economically disadvantaged individuals. MGT's experience has shown that business inclusion, particularly for minority- and women-owned businesses is dependent upon policies and procedures that are consistently followed, strong enforcement and compliance mechanisms, effective outreach, information about resources and assistance, and staff who are supportive and sensitive to the inclusion of M/WBEs. As discussed throughout this chapter, the City has ample policies in place to provide guidance and direction for staff engaged in procurement and for inclusion of M/WBEs in procurement. The sections which follow focus on the City's efforts to create more opportunities for the inclusion and participation of minority- and women-owned business.

3.5.1 BUSINESS INCLUSION DIVERSITY PLAN

The City's Business Inclusion and Development Plan (BID) was established to help focus and coordinate the City's efforts to increase procurement opportunities for minority- and woman-owned firms. The creation of the Office of Business Diversity established an organizational entity and function responsible for coordinating and collaborating with procurement services and other departments as well as reaching out to the minority and women vendor community. In reviewing roles and responsibilities that emanate from the BID, MGT recognized the importance of the Office of Business Diversity and BID as a vital resource to Procurement Services and other departments. Keeping departments informed about business inclusion opportunities and providing information and support are key strategies that have a significant impact on access to procurement opportunities. Externally, as well as internally, the goal is to improve participation and minimize barriers to participation. Internal mechanisms to support business inclusion are in place given the policy documents and other source documents and information reviewed by MGT. Based on MGT's experience, the City has more in place to address equity and access to procurement opportunities than any municipality MGT has conducted a disparity study for in recent years.

Organizationally and functionally, the Office of Business Diversity Mission is as follows:

“To increase competition and M/WBE participation while resourcing vendors to their next step in their Business Life Cycle”

The Office of Business Diversity is responsible for meeting three major objectives:

- ◆ Opportunity Creation- Provide conditions for growth and development through training communications, and resource connections.
- ◆ Building Capacity- Develop strategic partnerships through intentional, coordinated and mission-driven efforts aimed at strengthening the management and operations of S/M/WBE businesses to improve their performance and economic impact.
- ◆ Diversity Compliance- Advocate for the importance of diversity and inclusion in the awarding of City contracts.¹⁸⁷

¹⁸⁷ Office of Business Diversity.

3.5.1.1 BUSINESS INCLUSION AND DEVELOPMENT ADMINISTRATION GUIDE

The Business Inclusion and Development Administration Guide¹⁸⁸ is used to help operationalize the BID Plan. Key sections of the Guide are summarized in the sections which follow.

Policy Statement

The City and its contractors shall not discriminate on the basis of race, color, religion, national origin, age or sex in the award and performance of contracts. In consideration of this policy, the City of Dallas has adopted the Business Inclusion and Development Plan (BID Plan) for all City of Dallas contracts.

Scope of BID Plan

The BID Plan shall apply to all City contracts for the procurement of construction, architectural and engineering, goods, other services and professional services, with emphasis on first tier subcontracts on City contracts over \$50,000. As a prerequisite for City Council award, the prime contractor must make a good faith effort to meet established M/WBE subcontracting goals and if goals are not met, must demonstrate and document its good faith effort to meet the established goals. The BID Plan describes administrative accountability and responsibilities within the City, formalizes the certification and goal setting process and establishes specific guidelines to ensure adequate demonstration of good faith effort to obtain M/WBE participation.

In addition to the goal-based policy, it is the preference of the City of Dallas for the workforce of contract awardees to be reflective of the diversity of the citizens of the City of Dallas. In accordance with Chapter 15 B of the Dallas City Code, awardees of construction contracts of more than \$10,000 and awardees for the procurement of goods and competitively bid services of more than \$50,000 are required to take affirmative action steps to ensure that applicants are employed, and that employees are treated equally during employment without regard to race, age, color, religion, sex, national origin or handicap status

Objectives

- ◆ Promote inclusion of M/WBEs by providing equal opportunity for participating in City construction, architectural and engineering, procurement and professional services contracts.
- ◆ Granting evaluation points to encourage a meaningful inclusion of M/WBE participation in response to proposals estimated to be in excess of \$250,000.
- ◆ Provide procedures for monitoring compliance with M/WBE requirements.

Administration of the BID Plan

Administration of the BID Plan will be centralized in the City Manager's Office. The City Manager will take all usual and legal administrative actions necessary to implement the BID Plan and is ultimately responsible for the administration of the BID Plan. The Business Development and Procurement Services Department (BDPS) will assist the City Manager's Office in administering the BID Plan and will also implement and monitor M/WBE activities. Individual contracting departments will assist BDPS in the administration of the City's BID Plan. According to the City's website the function of the BID Office is to assist with the development, management, implementation, and evaluation of the M/WBE program.

¹⁸⁸ Business Inclusion and Development Administration Guide.

Within this context the focus is on M/WBE participation on construction, procurement, and professional services contracts and assisting M/WBEs with the procurement process.

Established BID Goals by Contracting Category:

- ◆ Construction: 25.00%
- ◆ Architectural & Engineering: 25.66%
- ◆ Other Professional Services: 36.30%
- ◆ Other Services: 23.80%
- ◆ Goods: 18.00%

Prime contractors are required to use M/WBEs which have been certified by North Central Texas Regional Certification Agency (NCTRCA), Dallas Fort Worth Minority Business Council, or the Women’s Business Council-Southwest.

Submission of BID Documentation Forms

BID is responsible for ensuring that all required BID forms are submitted by the apparent low bidder/most advantageous proposer. Required BID forms must be submitted to BID prior to award by City Council.

1. Prime contractors who will meet or exceed the BID goal must submit the following forms:
 - ◆ Business Inclusion and Development Affidavit (BDPS-FRM- 203)
 - ◆ Ethnic Workforce Composition Report (BDPS-FRM-204)
 - ◆ Contractor’s Affidavit Schedule of Work and Actual Payment Form (BDPS-FRM-213)
 - ◆ Subcontractor Intent Form(s) (BDPS-FRM-214)
2. Prime contractors who will not meet the BID goal must submit the following forms:
 - ◆ Business Inclusion and Development Affidavit (BDPS-FRM-203)
 - ◆ Ethnic Workforce Composition Report (BDPS-FRM-204)
 - ◆ Contractor’s Affidavit Schedule of Work and Actual Payment Form (BDPS-FRM-213)
 - ◆ Subcontractor Intent Form(s) (BDPS-FRM-214)
 - ◆ Business Inclusion and Development Documentation Form (BDPS-FRM-215)

Workforce Development Procedures

For construction contracts of more than \$15,000, at least 25% of the intended awardee’s workforce should be comprised of minority employees. If upon review of the Ethnic Workforce Composition Report, less than 25% of employees are minority, or if there are no minority employees in a specific ethnic category, BID will request an affirmative action plan from the prime contractor. For goods and services contracts of more than \$50,000, the same shall apply. BID will be responsible for attaching the affirmative action plan to the Council Agenda item.

If the company does not have a written affirmative action plan, an Affirmative Action Requirements (BDPS-PRO-204) template will be provided to guide the company in formulating a formal written plan. Elements of the plan should include, but are not limited to:

1. A policy statement reflecting the company's hiring policy.
2. Dissemination techniques including methods of advertisement for open positions to target minority populations.
3. Recruitment activities.
4. Responsibility for administration and implementation of the affirmative action plan.

In addition, for all construction, architectural and engineering, professional services or goods and services contracts awarded by City Council, the prime contractor should be asked if additional staff/employees will be needed to complete the project. If so, BID should direct the potential awardee to the local workforce development agencies. These agencies will be able to assist the contractor in hiring from the local workforce to complete the project.

3.5.1.2 DOING BUSINESS WITH THE CITY

Navigating the procurement process is essential for doing business with any governmental entity. As such, the guidance, direction, and support provided to minority- and women-owned businesses is a critical success factor. In today's environment, the information available on an organization's website and access to staff who are willing to provide assistance is extremely important. Typically, an organization's website is the starting point for seeking information about procurement processes and procurement opportunities. As part of this review, MGT navigated the City's website to determine what information is provided regarding procurement processes, resources, and assistance available to all vendors. Overall, MGT found the information about procurement processes, opportunities and resources to be very useful and provided in a user-friendly manner. MGT found the information specific to M/WBEs to be particularly helpful in navigating the procurement process. Resources, such as the Office of Business Diversity Outreach Team, that specialize in connecting businesses with resources and information about doing business with the City can be very helpful to M/WBEs if consistently utilized. Also, the Office of Business Diversity provides other resources and information to inform and acclimate M/WBEs to the City's procurement processes and opportunities, including the following:

- ◆ Doing Business with City of Dallas- provides a detailed and comprehensive overview of procurement including pre-solicitation/outreach, verification/compliance, post-award monitoring.
- ◆ Seminar Sessions- Procurement 101-Learning the Ropes, Informal Solicitation, Understanding Master Agreements, Request for Proposal.

MGT also noted the value of the M/WBE Compliance Management System, which is a web-based system for tracking DBE and M/WBE participation on City contracts. The system has several features including automated vendor reporting, automated communication with contractors, online utilization reporting, online tracking of contract goals and participation, and verification of subcontractor payments. Most important, the system is accessible to all firms doing business with the City.

The information on the City’s website about doing business with the City coupled with the resources and information from the Office of Business Diversity, provide the necessary guidance and direction for businesses seeking procurement opportunities for the first time and businesses with more experience with the City’s procurement. Based on MGT’s review, information about the procurement process and available resources is provided in a manner that’s relatively easy to digest and follow.

3.6 CONCLUSION

MGT’s policy review focused on the City’s procurement policies, procedures, and practices and increasing procurement opportunities for M/WBEs. MGT’s review clearly shows that the City has detailed policies and procedures that govern all aspects of procurement. Based on MGT’s review, policy source documents provide ample guidance to department end users and businesses seeking procurement opportunities. MGT’s policy review did not uncover any inherent or built-in barriers that intentionally restrain or constrain any businesses from participating in procurement opportunities. Taken on the whole, current policies and initiatives advance goals related to procurement opportunities for M/WBEs. As alluded to earlier, the City has much more in place in terms of both policies, directives and plans to address inclusion in procurement opportunities than other local governments MGT has worked with in recent years.

In summary, City policies and procedures underscore the City’s urgency to ensure inclusion in procurement opportunities. Based on the discussions and meetings during the policy review, there is recognition that inclusion of M/WBEs is an organization-wide responsibility and not solely the responsibility of Procurement Services and BID. The extent to which the City increases participation of minority-and women-owned firms will be determined by the results of organization-wide efforts and departments working collaboratively to increase awareness, interest, and participation in City contracting and procurement.

CHAPTER 4. MARKET AREA AND
UTILIZATION ANALYSIS

Availability and Disparity Study

City of Dallas, Texas



4.1 INTRODUCTION

This chapter presents the results of MGT Consulting’s (MGT) market area and utilization analyses of firms used on city of Dallas (“City”) procurements during October 1, 2013 through September 30, 2018. The specific procurement categories analyzed were Architecture & Engineering, Construction, Professional Services, Other Services, and Goods & Supplies.

The market area is essential to establishing the universe of available vendors and spending that will be considered in identification of any disparate treatment of assorted classifications of firms. Utilization data are central to defining this market area and thus are first presented as a means of identifying the market area for consideration, and then are examined within that market area to assess assorted levels of contracting activity as the first step in the quantitative determination of disparity.

CHAPTER SECTIONS



- 4.1 Introduction
- 4.2 Data Collection and Management
- 4.3 Market Area Analysis
- 4.4 Utilization Analysis

4.2 DATA COLLECTION AND MANAGEMENT

MGT staff compiled and reconciled electronic data provided by the City to develop a master set of prime and subcontractor contract data into a Master Utilization Database to support the needs of the study. MGT utilized the City’s Encumbrance financial data as the source of prime data and the City’s MWBE Quarterly Reports as the source of subcontractor data. Based on a common contract ID across both data sets, MGT merged the subcontractor data with the prime data to make up the Master Utilization Database.

4.2.1 STUDY PERIOD

The preliminary market area analysis is based on contract transactions for October 1, 2013 through September 30, 2018.

4.2.2 PROCUREMENT CATEGORIES AND EXCLUSIONS

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

- ◆ Construction: Services provided for the construction, renovation, rehabilitation, repair, alteration, improvement, demolition, and excavation of physical structures, excluding the performance of routine maintenance.
- ◆ Architecture & Engineering: A class of services specifically related to the preparation of plans and specifications for Construction projects.
- ◆ Professional Services: Services that require the provider to possess specialized skills, including the holding of advanced degrees and exercise of independent judgement.

- ◆ Other Services: Services that do not typically require a provider to have experience in a specialized field or hold an advanced degree.
- ◆ Goods & Supplies: This category includes all purchases of physical items, including but not limited to equipment and materials, excluding land or a permanent interest in land.

The following types of transactions were excluded from the analysis:

- ◆ Transactions outside of the study period.
- ◆ Transactions associated with non-procurement activities, for example:
 - Administrative items such as utility payments, leases for real estate, or insurance.
 - Salary and fringe benefits, training, parking, or conference fees.
- ◆ Transactions associated with nonprofit organizations and governmental agencies.

4.3 MARKET AREA ANALYSIS

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

4.3.1 METHODOLOGY

Based on *Croson* guidelines, the City should include in its relevant market area the geographic areas from which the majority of its purchases are procured. MGT recommends using counties located within the Dallas-Fort Worth-Arlington Metropolitan Statistical Area (MSA) as the geographic unit of measurement by which the relevant market area is established. The choice of counties as the unit of measurement is based on the following: 1) the courts have accepted counties as a standard geographical unit of analysis in conducting equal employment and disparity analyses; 2) county boundaries are externally determined and, hence, are free from any researcher bias that might result from any arbitrary determinations of boundaries of geographical units of analysis; 3) U.S. Census data and other federal and county data are routinely collected and reported using county boundaries. The following presents the methodology used to determine the overall market area and relevant market area.

- ◆ **Overall Market Area.** To determine the full extent of the market area in which the City utilized firms, MGT staff determined geographic locations of utilized vendors by their county jurisdictions. The overall market area presents the total dollars awarded for each procurement category included within the scope of the study. The overall market area results by procurement category are presented in **Section 4.3.3** of this chapter.

- ◆ **Relevant Market Area.** Once the overall market area was established, the relevant market area was determined by examining geographic areas from which the majority of its purchases are procured. Based on the results of the market area analysis conducted for each business category, the recommended relevant market area are the 13 counties within the Dallas-Fort Worth-Arlington MSA (“Dallas MSA”).

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

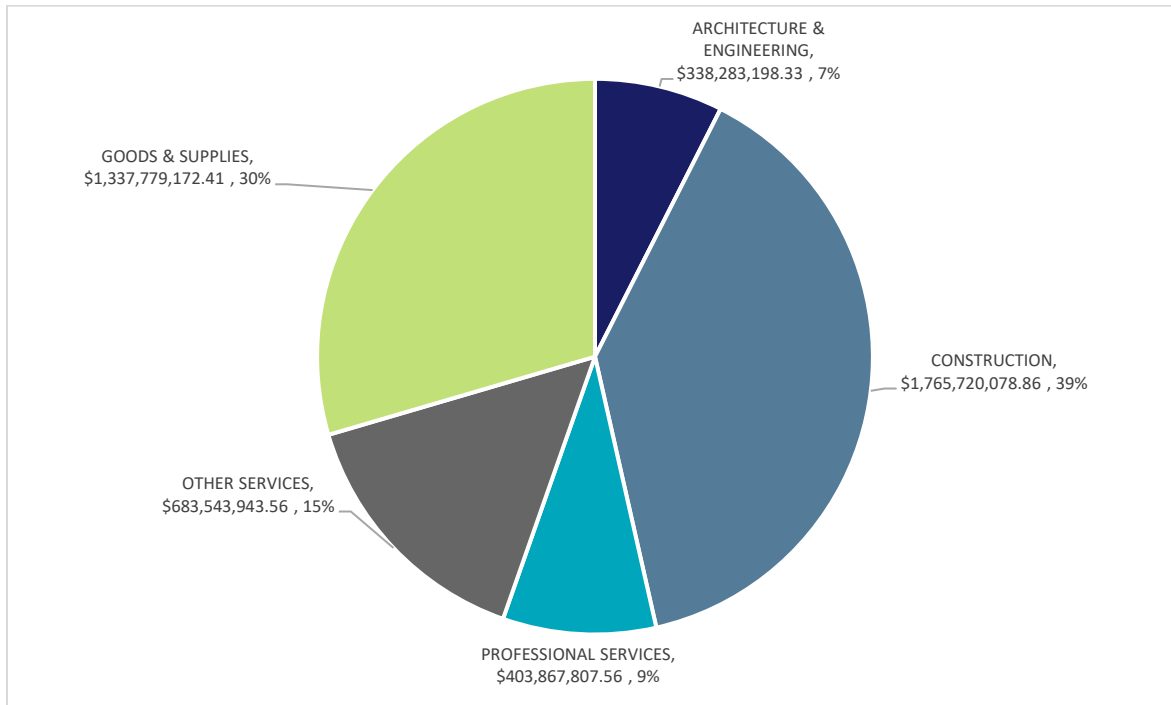
4.3.2 ANALYSIS AND IDENTIFICATION OF RELEVANT MARKET AREA

As described in the preceding section, an overall market area was first established to account for all relevant City payments, after which more specific regions were analyzed to arrive at a relevant market area to support the goals of the study. Detailed information supporting this market area analyses are presented in **Appendix A** and **Appendix B** to this report.

Figure 4-1 shows \$4.529 billion were paid to firms located within the overall market area between October 1, 2013 through September 30, 2018.

City of Dallas Relevant Market Area
Collin County, TX
Dallas County, TX
Denton County, TX
Ellis County, TX
Hood County, TX
Hunt County, TX
Johnson County, TX
Kaufman County, TX
Parker County, TX
Rockwall County, TX
Somervell County, TX
Tarrant County, TX
Wise County, TX

FIGURE 4-1. SUMMARY OF DOLLARS, TOTAL CONTRACTS (AWARDED) BY PROCUREMENT CATEGORY, OVERALL MARKET AREA



Narrowing the geographic scope, **Table 4-1** shows that firms located within the relevant market area accounted for 75.52 percent of spend across all procurement categories. When broken down by procurement categories, firms located within the relevant market area accounted for:

- ◆ 93.82 percent of the dollars awarded in Architecture & Engineering;
- ◆ 84.17 percent of the dollars awarded in Construction;
- ◆ 59.05 percent of the dollars awarded in Professional Services;
- ◆ 67.03 percent of the dollars awarded in Other Services; and
- ◆ 68.79 percent of the dollars awarded in Goods & Supplies.

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

ARCHITECTURE & ENGINEERING	Amount	Percent
<i>Inside Dallas MSA</i>	\$317,384,558.68	93.82%
Outside Dallas MSA	\$20,898,639.65	6.18%
ARCHITECTURE & ENGINEERING, TOTAL	\$338,283,198.33	100.00%
CONSTRUCTION	Amount	Percent
<i>Inside Dallas MSA</i>	\$1,486,292,692.05	84.17%
Outside Dallas MSA	\$279,427,386.81	15.83%
CONSTRUCTION, TOTAL	\$1,765,720,078.86	100.00%

PROFESSIONAL SERVICES	Amount	Percent
<i>Inside Dallas MSA</i>	\$238,479,048.04	59.05%
Outside Dallas MSA	\$165,388,759.52	40.95%
PROFESSIONAL SERVICES, TOTAL	\$403,867,807.56	100.00%
OTHER SERVICES	Amount	Percent
<i>Inside Dallas MSA</i>	\$458,166,395.27	67.03%
Outside Dallas MSA	\$225,377,548.29	32.97%
OTHER SERVICES, TOTAL	\$683,543,943.56	100.00%
GOODS & SUPPLIES	Amount	Percent
<i>Inside Dallas MSA</i>	\$920,268,590.81	68.79%
Outside Dallas MSA	\$417,510,581.60	31.21%
GOODS & SUPPLIES, TOTAL	\$1,337,779,172.41	100.00%
ALL BUSINESS CATEGORIES	Amount	Percent
<i>Inside Dallas MSA</i>	\$3,420,591,284.85	75.52%
Outside Dallas MSA	\$1,108,602,915.87	24.48%
ALL BUSINESS CATEGORIES, TOTAL	\$4,529,194,200.72	100.00%

Source: MGT developed a Master Prime File based on the City of Dallas' system between October 1, 2013 through September 30, 2018.

Corresponding market area analyses showing the dollars awarded by county for each procurement category are presented in [Appendix A](#).

4.3.3 MARKET AREA CONCLUSIONS

Based on the market area analysis of the City's procurement activity it was determined that the 13 counties in the Dallas MSA should be used as the market area. This 13-County Market Area represents a majority of the City's procurement activity, with 75.52 percent of the payments to vendors within this market area. Individually all of the categories represent a majority of the City's procurement activity within the corresponding categories. Architecture & Engineering having the highest spend in the market area with 93.82 percent of payments; and Professional Services with the smallest at 59.05 percent. The definition of the relevant market area allows for detailed examinations of contracting activity with local vendors. The following section describes the results of this utilization analysis for the City.

4.4 UTILIZATION ANALYSIS

The utilization analysis presents a summary of payments within the scope of the study and an initial assessment of the effectiveness of initiatives in promoting the inclusion of M/WBEs in the City's contracting and procurement activities.

The utilization analysis is based on the defined relevant market area, as described in the preceding sections of this chapter. The payments data included within this analysis encompass both (1) total dollars paid to primes located within the market area (excluding all subcontracting payments) and (2) dollars

allocated to subcontractors located within the market area, independent of their respective prime contractor location. Analysis of these data is broken down by the procurement categories of Construction, Architecture & Engineering, Professional Services, Other Services, and Goods & Supplies, and encompasses payments between October 1, 2013 through September 30, 2018.

4.4.1 CLASSIFICATION OF FIRMS

Firms included in the utilization analysis have been assigned to business owner classifications according to the definitions provided below.¹⁸⁹

- ◆ **M/WBE Firms.** In this study, businesses classified as minority- and women-owned firms (M/WBE) are firms that are at least 51 percent owned and controlled by members of one of five groups: African Americans, Asian Americans, Hispanic Americans, Native Americans, or nonminority women. These groups were defined according to the United States (U.S.) Census Bureau as follows:
 - **African Americans:** U.S. citizens or lawfully admitted permanent residents having an origin in any of the black racial groups of Africa.
 - **Asian Americans:** U.S. citizens or lawfully admitted permanent residents who originate from the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands.
 - **Hispanic Americans:** U.S. citizens or lawfully admitted permanent residents of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish or Portuguese cultures or origins regardless of race.
 - **Native Americans:** U.S. citizens or lawfully admitted permanent residents who originate from any of the original peoples of North America and who maintain cultural identification through tribal affiliation or community recognition.
 - **Nonminority Female:** U.S. citizens or lawfully admitted permanent residents who are non-Hispanic white female. Minority female were included in their respective minority category.
 - Minority female- and male-owned firms were classified and assigned to their corresponding minority groups. For example, a Hispanic American female- or Hispanic American male-owned firm was assigned to the Hispanic American-owned firm minority group.
- ◆ **Non-M/WBE Firms.** Firms that were identified as nonminority male or majority-owned were classified as non-M/WBE firms. If there was no indication of business ownership, these firms were also classified as non-M/WBE firms.
- ◆ **MBE Firms.** All minority-owned firms, regardless of gender.
- ◆ **WBE Firms.** All nonminority women-owned firms.

¹⁸⁹ Business ownership classification was based on the race, ethnicity, and gender classification of the owner during the study period.

4.4.2 OVERALL UTILIZATION

Table 4-2 shows the M/WBE utilization amounted to 29.68 percent of total awards. Corresponding detailed analyses showing the utilization of firms by business ownership classification are presented in **Appendix C**.

TABLE 4-2.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
ALL PROCUREMENT CATEGORIES

BUSINESS OWNERSHIP CLASSIFICATION	ALL PROCUREMENT CATEGORIES	
	DOLLARS AWARDED	PERCENT OF DOLLARS
MBE FIRMS	\$719,404,452.36	21.03%
WBE FIRMS	\$295,787,757.84	8.65%
TOTAL M/WBE FIRMS	\$1,015,192,210.20	29.68%
NON-M/WBE FIRMS	\$2,405,399,074.65	70.32%
TOTAL	\$3,420,591,284.85	100.00%

Source: MGT developed a Master Prime File based on the City of Dallas' system between October 1, 2013 through September 30, 2018.

4.4.2.1 UTILIZATION BY PROCUREMENT CATEGORY

The next series of tables show the summary results of MGT's utilization analysis of each of the procurement categories. Corresponding detailed analyses, showing the utilization of firms by business ownership classification for each procurement category, are presented in **Appendix C**.

Beginning with an examination of **Architecture & Engineering**, **Table 4-3** shows the utilization of M/WBE firms was 32.46 percent. Otherwise, utilization for specific classifications was:

- ◆ 26.67 percent for MBE firms; and
- ◆ 5.79 percent for WBE firms.

TABLE 4-3.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
ARCHITECTURE & ENGINEERING

BUSINESS OWNERSHIP CLASSIFICATION	A&E	
	DOLLARS AWARDED	PERCENT OF DOLLARS
MBE FIRMS	\$84,649,916.28	26.67%
WBE FIRMS	\$18,375,063.25	5.79%
TOTAL M/WBE FIRMS	\$103,024,979.53	32.46%
NON-M/WBE FIRMS	\$214,359,579.15	67.54%
TOTAL	\$317,384,558.68	100.00%

Source: MGT developed a Master Prime File based on the City of Dallas' system between October 1, 2013 through September 30, 2018.

Table 4-4 shows the utilization of M/WBE firms was 27.94 percent in **Construction**. By individual classification, M/WBE utilization was:

- ◆ 22.35 percent for MBE firms; and
- ◆ 5.59 percent for WBE firms.

TABLE 4-4.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
CONSTRUCTION

BUSINESS OWNERSHIP CLASSIFICATION	CONSTRUCTION	
	DOLLARS AWARDED	PERCENT OF DOLLARS
MBE FIRMS	\$332,246,834.07	22.35%
WBE FIRMS	\$82,988,103.63	5.59%
TOTAL M/WBE FIRMS	\$415,234,937.70	27.94%
NON-M/WBE FIRMS	\$1,071,057,754.35	72.06%
TOTAL	\$1,486,292,692.05	100.00%

Source: MGT developed a Master Prime File based on the City of Dallas' system between October 1, 2013 through September 30, 2018.

Table 4-5 shows the utilization of M/WBE firms was 30.74 percent in **Professional Services**. Individually, the M/WBE utilization was:

- ◆ 18.86 percent for MBE firms; and
- ◆ 11.88 percent for WBE firms.

TABLE 4-5.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
PROFESSIONAL SERVICES

BUSINESS OWNERSHIP CLASSIFICATION	PROFESSIONAL SERVICES	
	DOLLARS AWARDED	PERCENT OF DOLLARS
MBE FIRMS	\$44,977,141.16	18.86%
WBE FIRMS	\$28,320,451.97	11.88%
TOTAL M/WBE FIRMS	\$73,297,593.13	30.74%
NON-M/WBE FIRMS	\$165,181,454.91	69.26%
TOTAL	\$238,479,048.04	100.00%

Source: MGT developed a Master Prime File based on the City of Dallas' system between October 1, 2013 through September 30, 2018.

Table 4-6 shows the utilization of M/WBE firms was 39.04 percent in **Other Services**. Individually, the M/WBE utilization was:

- ◆ 32.25 percent for MBE firms; and

- ◆ 6.79 percent for WBE firms.

TABLE 4-6.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
OTHER SERVICES

BUSINESS OWNERSHIP CLASSIFICATION	OTHER SERVICES	
	DOLLARS AWARDED	PERCENT OF DOLLARS
MBE FIRMS	\$147,763,527.66	32.25%
WBE FIRMS	\$31,111,893.67	6.79%
TOTAL M/WBE FIRMS	\$178,875,421.33	39.04%
NON-M/WBE FIRMS	\$279,290,973.94	60.96%
TOTAL	\$458,166,395.27	100.00%

Source: MGT developed a Master Prime File based on the City of Dallas’ system between October 1, 2013 through September 30, 2018.

Table 4-7 shows the utilization of M/WBE firms was 26.60 percent in the **Goods & Supplies** sector. Individually, the M/WBE utilization was:

- ◆ 11.93 percent for MBE firms; and
- ◆ 14.67 percent for WBE firms.

TABLE 4-7.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
GOODS & SUPPLIES

BUSINESS OWNERSHIP CLASSIFICATION	GOODS AND SUPPLIES	
	DOLLARS AWARDED	PERCENT OF DOLLARS
MBE FIRMS	\$109,767,033.19	11.93%
WBE FIRMS	\$134,992,245.32	14.67%
TOTAL M/WBE FIRMS	\$244,759,278.51	26.60%
NON-M/WBE FIRMS	\$675,509,312.30	73.40%
TOTAL	\$920,268,590.81	100.00%

Source: MGT developed a Master Prime File based on the City of Dallas’ system between October 1, 2013 through September 30, 2018.

4.4.2.2 UTILIZATION CONCLUSIONS

The utilization analysis shows that M/WBE firms are utilized at substantially lower rates than their non-M/WBE counterparts. Overall, 29.68 percent of the City’s awards went to M/WBE firms, while 70.32 percent went to non-M/WBE firms. While M/WBE utilization is low throughout the views on utilization that have been presented in this chapter, the proportion of firms willing and able to provide services to the City are a critical qualifying context in any determinations of disparity. Availability and resulting disparity ratios are presented in **Chapter 5**, which follows, to provide more definitive conclusions in this respect.

CHAPTER 5. AVAILABILITY AND
DISPARITY ANALYSES

Availability and Disparity Study

City of Dallas, Texas



5.1 INTRODUCTION

This chapter presents the results of MGT’s analyses regarding **availability** and **disparity**. Availability is a measure of the numbers and proportions of vendors willing and able to work with an agency, while disparity is an observed statistically significant difference between the utilization of minority- and women-owned firms (as discussed in **Chapter 4**) relative to their respective availability. Consistent with prior chapters, this analysis focuses on procurements in the categories of Architecture & Engineering, Construction, Professional Services, Other Services, and Goods & Supplies sectors between October 1, 2013 through September 30, 2018.

CHAPTER SECTIONS



- 5.1 Introduction
- 5.2 Availability Estimations
- 5.3 Disparity Analyses and Significance Testing
- 5.4 Conclusions

5.2 AVAILABILITY ESTIMATIONS

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

5.2.1 AVAILABILITY METHODOLOGY

As noted in **Chapter 2**, the Supreme Court stated in *Croson* that,

“Where there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality’s prime contractors, an inference of discriminatory exclusion could arise.”

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

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

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

MGT’s data assessment and evaluation of alternative methods for measuring the numbers of firms of the types and classifications available to work with the City confirmed that a version of a custom census of firms in the relevant market area would provide the most accurate representation of available firms. The custom census approach used by MGT in this instance required development of representative samples of firms within each of the five procurement categories identified for the study, each of which had to cover the defined 13-county geographic boundaries of the relevant market area.

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

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

5.2.2 AVAILABILITY ANALYSIS

Following the methodology prescribed in the previous section, MGT derived estimates for proportions of available firms for the racial, ethnic, and gender ownership classes and five defined procurement categories. Within each table portraying availability, as in previous sections, “MBE” refers to minority-owned business enterprises regardless of gender, “WBE” refers to nonminority women-owned business enterprises, and the abbreviation “M/WBE” refers to Minority- or Women-Owned Business Enterprises and includes all racial or ethnic minority and women-owned firms. Corresponding detailed analyses showing the availability of firms by race, ethnicity, and gender are presented in [Appendix D](#).

Table 5-1 presents availability estimates spanning across all procurement categories, in aggregate. We observe that:

- ◆ MBE firms represented 23.32 percent of available vendors;
- ◆ WBE firms represented 15.61 percent of available vendors; and
- ◆ M/WBEs represented 38.93 percent of available vendors.

TABLE 5-1.
ESTIMATION OF AVAILABLE FIRMS, ALL PROCUREMENT CATEGORIES

BUSINESS OWNERSHIP CLASSIFICATION	% OF AVAILABLE FIRMS
MBE FIRMS	23.32%
WBE FIRMS	15.61%
TOTAL M/WBE FIRMS	38.93%
NON-M/WBE FIRMS	61.07%
TOTAL	100.00%

Source: Custom Census Analysis.
Study Period: October 1, 2013 through September 30, 2018.

Within the **Architecture & Engineering** category (**Table 5-2**), availability estimates are as follows:

- ◆ MBE firms represented 24.44 percent of available vendors;
- ◆ WBE firms represented 12.42 percent of available vendors; and
- ◆ M/WBEs represented 36.87 percent of available vendors.

TABLE 5-2.
ESTIMATION OF AVAILABLE FIRMS, ARCHITECTURE & ENGINEERING

BUSINESS OWNERSHIP CLASSIFICATION	% OF AVAILABLE FIRMS
MBE FIRMS	24.44%
WBE FIRMS	12.42%
TOTAL M/WBE FIRMS	36.87%
NON-M/WBE FIRMS	63.13%
TOTAL	100.00%

Source: Custom Census Analysis.
Study Period: October 1, 2013 through September 30, 2018.

In the **Construction** category, we observe the following availability proportions (**Table 5-3**):

- ◆ MBE firms represented 22.92 percent of available vendors;
- ◆ WBE firms represented 15.39 percent of available vendors; and
- ◆ M/WBEs represented 38.31 percent of available vendors.

TABLE 5-3.
ESTIMATION OF AVAILABLE FIRMS, CONSTRUCTION

BUSINESS OWNERSHIP CLASSIFICATION	% OF AVAILABLE FIRMS
MBE FIRMS	22.92%
WBE FIRMS	15.39%
TOTAL M/WBE FIRMS	38.31%
NON-M/WBE FIRMS	61.69%
TOTAL	100.00%

Source: Custom Census Analysis.
Study Period: October 1, 2013 through September 30, 2018.

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

- ◆ MBE firms represented 29.41 percent of available vendors;
- ◆ WBE firms represented 21.50 percent of available vendors; and
- ◆ M/WBEs represented 50.91 percent of available vendors.

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

BUSINESS OWNERSHIP CLASSIFICATION	% OF AVAILABLE FIRMS
MBE FIRMS	29.41%
WBE FIRMS	21.50%
TOTAL M/WBE FIRMS	50.91%
NON-M/WBE FIRMS	49.09%
TOTAL	100.00%

Source: Custom Census Analysis.
Study Period: October 1, 2013 through September 30, 2018.

In **Other Services (Table 5-5)**, availability estimates consisted of:

- ◆ MBE firms represented 21.36 percent of available vendors;
- ◆ WBE firms represented 10.83 percent of available vendors; and
- ◆ M/WBEs represented 32.19 percent of available vendors.

TABLE 5-5.
ESTIMATION OF AVAILABLE FIRMS, OTHER SERVICES

BUSINESS OWNERSHIP CLASSIFICATION	% OF AVAILABLE FIRMS
MBE FIRMS	21.36%
WBE FIRMS	10.83%
TOTAL M/WBE FIRMS	32.19%
NON-M/WBE FIRMS	67.81%
TOTAL	100.00%

Source: Custom Census Analysis.
Study Period: October 1, 2013 through September 30, 2018.

Finally, in the **Goods & Supplies sector (Table 5-6)**, availability estimates included:

- ◆ MBE firms represented 23.03 percent of available vendors;
- ◆ WBE firms represented 17.97 percent of available vendors; and
- ◆ M/WBEs represented 41.00 percent of available vendors.

TABLE 5-6.
ESTIMATION OF AVAILABLE FIRMS, GOODS & SUPPLIES

BUSINESS OWNERSHIP CLASSIFICATION	% OF AVAILABLE FIRMS
MBE FIRMS	23.03%
WBE FIRMS	17.97%
TOTAL M/WBE FIRMS	41.00%
NON-M/WBE FIRMS	59.00%
TOTAL	100.00%

Source: Custom Census Analysis.
Study Period: October 1, 2013 through September 30, 2018.

5.3 DISPARITY ANALYSES AND SIGNIFICANCE TESTING

Building on our understanding of the City’s vendor utilization (**Chapter 4**) and the availability estimates presented in the previous section of this chapter (**Section 5.2**), we can use this information to identify potential disparities in City’s procurement. A brief summary of the approach is provided in **Section 5.3.1** followed by the results of these disparity calculations and associated statistical significance testing in **Section 5.3.2**.

5.3.1 DISPARITY ANALYSIS METHODOLOGY

Disparity, in this context, is the analysis of the differences between the utilization of minority- and women-owned firms (as presented in **Chapter 4**) and the respective availability of those firms (**Section 5.2**). Thus, MGT calculated disparity indices to examine whether minority- and women-owned firms received a proportional share of dollars based on the respective availability of minority- and women-owned firms located in the study’s defined relevant market area (as presented in **Chapter 4**).

MGT’s disparity index methodology yields a value that is easily calculable, understandable in its interpretation, and universally comparable such that a disparity in utilization within minority- and women-owned firms can be assessed with reference to the utilization of nonminority- and male-owned firms.

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

$$\text{Disparity Index} = \frac{\%U_{mip_i}}{\%A_{mip_i}} \times 100$$

U_{mip_i} = utilization of minorities- and women-owned firms_i for procurement_i

A_{mip_i} = availability of minorities- and women-owned firms_i for procurement_i

Since there is no standardized measurement to evaluate the levels of underutilization or overutilization within a procurement context, MGT’s methodology to measure disparity, if disparity is found, is based on the Equal Employment Opportunity Commission’s (EEOC) “80 percent rule.”¹⁹⁰ In the employment discrimination framework, an employment disparity index below 80 indicates a “substantial disparity.” The Supreme Court has

accepted the use of the “80 percent rule” in *Connecticut v. Teal* (*Teal*), 457 U.S. 440 (1982).¹⁹¹ Therefore, following a similar pattern, firms are considered substantially underutilized (substantial disparity) if the disparity indices are 80 or less.

¹⁹⁰ Equal Employment Opportunity Commission, *Uniform Guidelines on Employee Selection Procedures*, Section 4, Part D, “Adverse impact and the ‘four-fifths rule.’”

¹⁹¹ In *Teal* and other affirmative action cases, the terms “adverse impact,” “disparate impact,” and “discriminatory impact” are used interchangeably to characterize values of 80 and below.

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

Standard deviation measures the probability that a result is a random deviation from a predicted result, where the greater the number of standard deviations, the lower the probability the result is a random one. The accepted standard used by Courts in disparity testing has been two standard deviations. That is, if there is a result that falls within two standard deviations, then one can assume that the results are nonsignificant, or that no disparity has been confidently established.

Regarding the use of statistical significance in the disparity study context the National Cooperative Highway Research Program Report 644¹⁹² notes that:

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

Statistical Significance Testing

$$t = \frac{u - a}{\sqrt{\frac{a * (1 - a) * \sum c_i^2}{(\sum c_i)^2}}}$$

t = the t-statistic

u = the ratio of minorities- and women-owned firms’ dollars compared to total dollars
 a = the ratio of M/W/DBE firms to all firms
 c_i = the dollar amount.

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

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

¹⁹² Transportation Research Board of the National Academies, National Cooperative Highway Research Program Report 644, *Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program* (2010), pages 49-50.

5.3.2 DISPARITY ANALYSES AND STATISTICAL SIGNIFICANCE

Included in this section are inputs and calculations of disparity indices and significance testing for each of the procurement categories and ownership classifications. Corresponding detailed analyses showing the disparity analysis of firms by race, ethnicity, and gender are presented in **Appendix E**. Analysis of disparities across all procurement categories in **Table 5-7** reveals:

- ◆ MBE firms were underutilized, with a statistically significant disparity index of 90.19;
- ◆ WBE firms were underutilized, with a substantial and statistically significant disparity index of 55.41; and
- ◆ M/WBEs firms were underutilized, with a substantial and statistically significant disparity index of 76.25.

TABLE 5-7.
DISPARITY INDICES AND SIGNIFICANCE TESTING,
ALL PROCUREMENT CATEGORIES

Ethnic/Gender Classification	Utilization	Availability	Disparity Index	Disparity Impact	Statistical Significance	Disparity Conclusion
MBE FIRMS	21.03%	23.32%	90.19	Underutilization	Yes	Disparity
WBE FIRMS	8.65%	15.61%	55.41	Underutilization	Yes	Disparity
TOTAL M/WBE	29.68%	38.93%	76.25	Underutilization	Yes	Disparity
NON-M/WBE	70.32%	61.07%	115.14	Overutilization	Yes	No Disparity

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability.

BOLD Indicates a substantial level of disparity, which is a disparity index below 80.00.

The calculation of disparity indices and significance testing for the **Architecture & Engineering** procurement category are depicted in **Table 5-8**. Relevant findings include:

- ◆ MBE firms were overutilized, with a statistically significant disparity index of 109.12;
- ◆ WBE firms were underutilized, with a substantial and statistically significant disparity index of 46.60; and
- ◆ M/WBEs firms were underutilized, with a statistically significant disparity index of 88.05.

TABLE 5-8.
DISPARITY INDICES AND SIGNIFICANCE TESTING,
ARCHITECTURE & ENGINEERING

Ethnic/Gender Classification	Utilization	Availability	Disparity Index	Disparity Impact	Statistical Significance	Disparity Conclusion
MBE FIRMS	26.67%	24.44%	109.12	Overutilization	Yes	No Disparity
WBE FIRMS	5.79%	12.42%	46.60	Underutilization	Yes	Disparity
TOTAL M/WBE	32.46%	36.87%	88.05	Underutilization	Yes	Disparity
NON-M/WBE	67.54%	63.13%	106.98	Overutilization	Yes	No Disparity

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability.

BOLD Indicates a substantial level of disparity, which is a disparity index below 80.00.

Disparity indices and significance testing for **Construction** appear in **Table 5-9**. Noteworthy observations include:

- ◆ MBE firms were underutilized, with a disparity index of 97.54;
- ◆ WBE firms were underutilized, with a substantial and statistically significant disparity index of 36.28; and
- ◆ M/WBEs firms were underutilized, with a substantial and statistically significant disparity index of 72.93.

TABLE 5-9.
DISPARITY INDICES AND SIGNIFICANCE TESTING,
CONSTRUCTION

Ethnic/Gender Classification	Utilization	Availability	Disparity Index	Disparity Impact	Statistical Significance	Disparity Conclusion
MBE FIRMS	22.35%	22.92%	97.54	Underutilization		Disparity
WBE FIRMS	5.58%	15.39%	36.28	Underutilization	Yes	Disparity
TOTAL M/WBE	27.94%	38.31%	72.93	Underutilization	Yes	Disparity
NON-M/WBE	72.06%	61.69%	116.81	Overutilization	Yes	No Disparity

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability.

BOLD Indicates a substantial level of disparity, which is a disparity index below 80.00.

Disparity indices and significance testing for the **Professional Services** sector are presented in **Table 5-10**. Some findings include that:

- ◆ MBE firms were underutilized, with a substantial and statistically significant disparity index of 64.13;
- ◆ WBE firms were underutilized, with a substantial and statistically significant disparity index of 55.23; and
- ◆ M/WBEs firms were underutilized, with a substantial and statistically significant disparity index of 60.37.

TABLE 5-10. DISPARITY INDICES AND SIGNIFICANCE TESTING, PROFESSIONAL SERVICES

Ethnic/Gender Classification	Utilization	Availability	Disparity Index	Disparity Impact	Statistical Significance	Disparity Conclusion
MBE FIRMS	18.86%	29.41%	64.13	Underutilization	Yes	Disparity
WBE FIRMS	11.88%	21.50%	55.23	Underutilization	Yes	Disparity
TOTAL M/WBE	30.74%	50.91%	60.37	Underutilization	Yes	Disparity
NON-M/WBE	69.26%	49.09%	141.10	Overutilization	Yes	No Disparity

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability.

BOLD Indicates a substantial level of disparity, which is a disparity index below 80.00.

Table 5-11 presents disparity indices and significance testing for the **Other Services** sector.

- ◆ MBE firms were overutilized, with a statistically significant disparity index of 150.98.
- ◆ WBE firms were underutilized, with a substantial and statistically significant disparity index of 62.72; and
- ◆ M/WBEs firms were overutilized, with a statistically significant disparity index of 121.29.

TABLE 5-11. DISPARITY INDICES AND SIGNIFICANCE TESTING, OTHER SERVICES

Ethnic/Gender Classification	Utilization	Availability	Disparity Index	Disparity Impact	Statistical Significance	Disparity Conclusion
MBE FIRMS	32.25%	21.36%	150.98	Overutilization	Yes	No Disparity
WBE FIRMS	6.79%	10.83%	62.72	Underutilization	Yes	Disparity
TOTAL M/WBE	39.04%	32.19%	121.29	Overutilization	Yes	No Disparity
NON-M/WBE	60.96%	67.81%	89.89	Underutilization	Yes	Disparity

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability.

BOLD Indicates a substantial level of disparity, which is a disparity index below 80.00.

Depicted in **Table 5-12** are the disparity indices and results of significance testing for the **Goods & Supplies** sector.

- ◆ MBE firms were underutilized, with a substantial and statistically significant disparity index of 51.79;
- ◆ WBE firms were underutilized, with a statistically significant disparity index of 81.63; and
- ◆ M/WBEs firms were underutilized, with a substantial and statistically significant disparity index of 64.87.

TABLE 5-12. DISPARITY INDICES AND SIGNIFICANCE TESTING, GOODS & SUPPLIES

Ethnic/Gender Classification	Utilization	Availability	Disparity Index	Disparity Impact	Statistical Significance	Disparity Conclusion
MBE FIRMS	11.93%	23.03%	51.79	Underutilization	Yes	Disparity
WBE FIRMS	14.67%	17.97%	81.63	Underutilization	Yes	Disparity
TOTAL M/WBE	26.60%	41.00%	64.87	Underutilization	Yes	Disparity
NON-M/WBE	73.40%	59.00%	124.42	Overutilization	Yes	No Disparity

Note: Disparity index values may vary slightly from calculations of depicted figures due to rounding of presented levels of utilization and availability.

BOLD Indicates a substantial level of disparity, which is a disparity index below 80.00.

5.4 CONCLUSIONS

The calculations of availability and disparity within this chapter and the preceding depiction of utilization serve as the foundation for the future of the City’s M/WBE program. These analyses provide the quantitative legal justification for any current or future remedies to assist M/WBE enterprises within the market. As summarized in the table below (**Table 5-13**), disparities between utilization and availability have been observed for most procurement and M/WBE categories included within the scope of the study,

both in terms of the order of magnitude (Disparity Indices less than or equal to 80) and statistical significance.

TABLE 5-13. DISPARITY ANALYSIS SUMMARY

Procurement Category	All	Architecture & Engineering	Construction	Professional Services	Other Services	Goods & Supplies
MBE	Disparity	No Disparity	Disparity	Disparity	No Disparity	Disparity
WBE	Disparity	Disparity	Disparity	Disparity	Disparity	Disparity
M/WBE	Disparity	Disparity	Disparity	Disparity	No Disparity	Disparity

BOLD Indicates a substantial level of disparity, which is a disparity index below 80.00.

CHAPTER 6. PRIVATE SECTOR
ANALYSIS

Availability and Disparity Study

City of Dallas, Texas



6.1 INTRODUCTION

The **Legal Framework** presented in **Chapter 2** of this report documented how a government entity must have a record of active or passive discrimination to justify remedies promoted through the institution of a minority- and women-owned business enterprise (M/WBE) program. Courts further require a *compelling-interest analysis* showing a connection between the government or agency and the public or private discrimination that may exist within their jurisdiction. Following documentation of disparities that exist in the public sector in **Chapter 5**, this chapter focuses on an over-arching question:

- ♦ ***Do disparities exist in the private sector which compel the City to continue its M/WBE program to avoid becoming a passive participant in discrimination?***

Passive discrimination describes a circumstance where a public entity resides in a market with measurably disparate circumstances in the private sector but is failing to take proactive actions to implement remedies within the domain of its control. Substantiating the relevance of an analysis of the private sector:

- ♦ Defining passive participation, the Supreme Court in *Croson* stated, “if the city could show that it had essentially become a ‘passive participant’ in a system of racial exclusion practiced by elements of the local construction industry, we think it clear that the city could take affirmative steps to dismantle such a system.”¹⁹³ This does not mean that the public entity is continuously turning a blind eye to discrimination but rather that the public entity has a compelling interest to mitigate private sector discrimination or risk becoming a passive participant to discrimination.
- ♦ Also stated in *Croson* is, “it is beyond dispute that any public entity, state or federal, has a compelling interest in assuring that *public* dollars, drawn from the tax contributions of all citizens, do not serve to finance the evil of *private* prejudice.”¹⁹⁴
- ♦ *Croson* further provided that the government “can use its spending powers to remedy private discrimination, if it identifies that discrimination with the particularity required by the Fourteenth Amendment.”¹⁹⁵
- ♦ In *Concrete Works IV*, the courts expressly cited as evidence of discrimination that M/WBE contractors used for business with the city of Denver were not used by the same prime contractors for private sector contracts.¹⁹⁶

CHAPTER SECTIONS



- 6.1 Introduction
- 6.2 Private Sector Construction Permits
- 6.3 Private Sector Disparities in SBO Census Data
- 6.4 Analysis of Race, Ethnicity, and Gender Effects on Self-Employment Rates
- 6.5 Access to Credit
- 6.6 Conclusion

¹⁹³ *Croson*, 488 U.S. at 492.

¹⁹⁴ *Coral Construction*, 941 F.2d at 922 (citing *Croson*, 488 U.S. at 492) (emphasis added).

¹⁹⁵ See *Croson*; see generally I. Ayres and F. Vars, “When Does Private Discrimination Justify Public Affirmative Action?” 98 *Columbia Law Review* 1577 (1998).

¹⁹⁶ *Concrete Works IV*, 321 F.3d at 984-85.

- ♦ In *Adarand v. Slater*, the Tenth Circuit favorably cited evidence of capital market discrimination as relevant in establishing the factual predicate for the federal DBE program.¹⁹⁷ The same court, in *Concrete Works IV*, found that barriers to business formation were relevant insofar as this evidence demonstrated that M/WBEs were “precluded from the outset from competing for public construction contracts.”¹⁹⁸
- ♦ Also in *Adarand*, the courts concluded there was a compelling interest for a government Disadvantaged Business Enterprise (DBE) program based primarily on evidence of private sector discrimination.¹⁹⁹
- ♦ Along related lines, the court found a regression analysis of census data to be relevant evidence showing barriers to M/WBE formation.²⁰⁰
- ♦ A district court upheld the state of North Carolina M/WBE program in road construction based largely on similar private sector evidence supplemented by evidence from databases covering private sector commercial construction.²⁰¹

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

With these decisions supporting investigation into this domain, as part of the development of a comprehensive framework and set of perspectives that have traditionally been used to justify M/WBE programs, this chapter provides an accumulation of evidence for the overarching question of whether or not the City of Dallas, TX has continued compelling interest to maintain its M/WBE program based on circumstances observed in the private sector. This is investigated using two specific sources of data leveraged to address three specific questions substantiating the over-arching research question regarding disparities in the private sector:

- **City construction permits data**, which are used to determine:
 1. *Do disparities exist in the utilization of firms owned by minorities or women for commercial private sector construction projects?*
- **2012 Census Survey of Business Owners (SBO) data**, which are used to determine:
 1. *Do marketplace disparities exist in the private sector regarding revenue within the five procurement categories for firms owned by minorities or women?*

¹⁹⁷ *Adarand v. Slater*, 228 F.3d at 1169-70 (10th Cir. 2000).

¹⁹⁸ *Concrete Works IV*, 321 F.2d at 977. The district court rejected evidence of credit market discrimination as adequate to provide a factual predicate for an M/WBE program. *Concrete Works v. City and County of Denver*, 86 F. Supp. 2d 1042 (D. Colo. 2000) (*Concrete Works I*).

¹⁹⁹ *Adarand v. Slater*, 228 F.3d 1147 (10th Cir. 2000).

²⁰⁰ *Id.* at 977.

²⁰¹ *H.B. Rowe, Inc. v. Tippet*, 589 F.Supp. 2d 587 (ED NC 2008). The court, however, was very brief in discussing what factors in the study accounted for its ruling. The program was subsequently found to be unconstitutional as applied to women. *H.B. Rowe, Inc. v. Tippet*, 615 F.3d 233 (4th Cir. 2010).

- **2014-2018 Census American Community Survey (ACS) Public Used Microdata Sample (PUMS)** data, which are used to determine:
1. *Are racial, ethnic, and gender minority groups less likely than nonminority males (non-M/WBEs) to be self-employed? If so, does race, ethnicity or gender have a role in the disparity?*
 2. *Does racial, ethnic, and gender status have an impact on self-employed individuals' earnings?*

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

6.2 PRIVATE SECTOR UTILIZATION ANALYSIS BASED ON CONSTRUCTION PERMITS

To help answer the over-arching research question regarding the existence of disparities in the private sector, as well as the specific question:

1. *Do disparities exist in the utilization of firms owned by minorities or women for commercial private sector construction projects?*

Construction permits issued by the City were analyzed. The value in examining permits is that they offer up-to-date records of actual construction activity undertaken in the area. In order to isolate only commercial construction projects as the focus of analysis, public sector and residential permit records, where identified, were excluded. Additionally, to distinguish between primes and subs, MGT assigned general contractors as primes and all others as subs. Since the private sector permits data did not contain the contractor's race, ethnic, or gender information, MGT assigned business ownership classification using the various vendor lists collected, as described in chapter 4. This vendor match procedure allowed MGT to assign business ownership classification to firms presented in the permit data. In order to achieve the greatest number of potential match combinations, in addition to electronically linking the various lists to the permits data, a manual match was also conducted. Firms identified as nonminority male, and firms for which there was no business ownership classification, were considered to be non-M/WBE firms and counted as non-M/WBE firms in the analysis conducted for this Study.

For the procurement category analysis, findings reported in this chapter deal only with private sector construction for two reasons: (1) permit data, by its nature, pertains only to construction activities, which is also the category for which data tends to be most extensive and reliable, and (2) courts have historically scrutinized construction activity in a given jurisdiction more than any other procurement category because, in both public and private sector business activity, it tends to be the most financially lucrative in terms of its impact on a local economy.

A total of \$7,590,852,038 prime + subcontractor construction permits issued by the City during the study period (October 1, 2013 through September 31, 2018.) were analyzed as part of this investigation. **Table**

6-1 also shows that 5.37 percent of the prime + subcontractor permits were let to M/WBEs, with highest M/WBE utilization observed for Asian American firms (3.94%) followed by African American firms (1.03%).

TABLE 6-1. UTILIZATION ANALYSIS OF FIRMS
COMMERCIAL CONSTRUCTION

BUSINESS OWNERSHIP CLASSIFICATION	PRIME + SUBCONTRACTOR PERMIT AMOUNT	PERCENT OF PRIME + SUBCONTRACTOR PERMIT DOLLARS
AFRICAN AMERICAN FIRMS	\$78,136,169.05	1.03%
ASIAN AMERICAN FIRMS	\$299,384,988.30	3.94%
HISPANIC AMERICAN FIRMS	\$4,988,505.00	0.07%
NATIVE AMERICAN FIRMS	\$3,485,565.16	0.05%
TOTAL MINORITY FIRMS	\$385,995,227.51	5.09%
NONMINORITY FEMALE FIRMS	\$21,650,000.94	0.29%
TOTAL M/WBE FIRMS	\$407,645,228.45	5.37%
TOTAL NON-M/WBE	\$7,183,206,809.61	94.63%
TOTAL FIRMS	\$7,590,852,038.06	100.00%

Source: MGT developed a Master Commercial Private Sector Database based on commercial construction permitting data between October 1, 2013 through September 30, 2018.

With this point of reference established, MGT utilized two data sets of prime contracts to compare relative utilization of firms and gauge the scale of any differences. In **Table 6-2**, the first of these comparison data sets contained a listing of permits issued to contractors which appeared in both the permits and City public sector construction data, while the second data set contained firms utilized on City public sector construction projects during the study period that are present in the permits data. The goal of this analysis was to examine public sector and private sector contracting patterns for construction. MGT compared the public sector utilization of firms in City-issued data with private sector utilization of the same firms, as reflected in the private commercial permit data, to analyze to what extent utilized contractors which appear in the City data also appear in the permitting data for commercial construction projects.

TABLE 6-2. UTILIZATION ANALYSIS OF FIRMS
COMMERCIAL CONSTRUCTION – PRIME + SUBCONTRACTOR ONLY

BUSINESS OWNERSHIP CLASSIFICATION	PERMIT TOTALS ISSUED TO PRIME + SUBCONTRACTORS	PERCENT OF PERMITS DOLLARS	PUBLIC SECTOR UTILIZATION	PERCENT OF PRIME + SUBCONTRACT DOLLARS
AFRICAN AMERICAN FIRMS	\$16,017,117.70	3.26%	\$12,094,258.43	3.86%
ASIAN AMERICAN FIRMS	\$21,315,212.00	4.34%	\$0.00	0.00%
HISPANIC AMERICAN FIRMS	\$169,117.00	0.03%	\$14,232,504.49	4.55%
NATIVE AMERICAN FIRMS	\$0.00	0.00%	\$7,676,315.60	2.45%
TOTAL MINORITY FIRMS	\$37,501,446.70	7.63%	\$34,003,078.52	10.86%
NONMINORITY FEMALE FIRMS	\$14,149,782.24	2.88%	\$37,210,742.56	11.88%
TOTAL M/WBE FIRMS	\$51,651,228.94	10.51%	\$71,213,821.08	22.74%
TOTAL NON-M/WBE FIRMS	\$439,764,506.27	89.49%	\$241,892,558.84	77.26%
TOTAL FIRMS	\$491,415,735.21	100.00%	\$313,106,379.92	100.00%

Source: MGT developed a Master Commercial Private Sector Database based on commercial construction permitting data between October 1, 2013 through September 30, 2018.

The goal of this analysis was to examine public sector and private sector contracting patterns for construction. MGT compared the public sector utilization of firms in City-issued data with private sector utilization of the same firms, as reflected in the private commercial permit data, to analyze to what extent utilized contractors which appear in the City data also appear in the permitting data for commercial construction projects.

When the permit results are compared to the City utilization results, the city utilizes M/WBEs at higher rates than the commercial sector. From **Table 6-2**, the City M/WBEs accounted for 22.74 percent of the dollars of construction contracts, while M/WBEs accounted for 10.51 percent of the dollars of private sector construction permits. Specifically, MBEs accounted for 10.86 percent of the dollars of City construction contracts, while MBEs accounted for only 7.63 percent of the dollars of private sector construction permits; and nonminority female firms accounted for 11.88 percent of the dollars of City construction contracts, while nonminority female firms accounted for only 2.88 percent of the dollars of private sector construction permits.

While not definitive in isolation, the data does clearly show a pronounced difference in utilization of M/WBE firms within the private sector versus what we observed for the public sector, where program goals facilitate more equitable participation. Combining this perspective with others (such as the public sector disparity ratios presented in **Chapter 5** and vendor survey results and anecdotal evidence to be presented in **Chapter 7**), we see a prevailing theme in a pattern of cumulatively overwhelming evidence that disparities in contracting are fairly pervasive in this market.

6.3 PRIVATE SECTOR DISPARITIES IN SBO CENSUS DATA

To answer the over-arching research question regarding the existence of disparities in the private sector, as well as the specific question (1) of whether these disparities exist in procurement categories relevant to the City's contracting domain, MGT obtained and analyzed U.S. Census Bureau's 2012 Survey of Business Owners (SBO) data to measure private sector disparities.²⁰² SBO provides data on economic and demographic characteristics for businesses and business owners by geography (such as states and metropolitan areas), categorized by industries defined by North American Industry Classification System (NAICS) codes, and supporting information including firm receipts (sales),²⁰³ firm employment size, and business ownership classification. The survey has been administered every five years since 1972 as part of the economic census.

The SBO gathers and reports data on (1) firms with paid employees, including workers on the payroll (employer firms), and (2) firms without paid employees, including sole proprietors and partners of unincorporated businesses that do not have any other employees on the payroll (non-employer firms), as well as (3) in aggregate across all firms. MGT calculated private sector disparity indices to examine whether M/WBE firms in any of these categories received a proportionate share of firm sales based on the availability of M/WBE firms, measured consistently with public sector availability presented in **Chapter 5**, as the number of classified firms divided by the total universe. Disparity indices were examined for all firms and employer firms.

The following NAICS codes²⁰⁴ were analyzed because they align with the categories of utilization analyzed for the City:

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

6.3.1 RESULTS OF ANALYSIS

This private sector analysis presents disparity results based on the following geographic market areas: (1) the state of Texas and (2) the Dallas, TX Market Area, which contains the following counties in Texas: Collin, Dallas, Denton, Ellis, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, Somervell, Tarrant, and Wise. These marketplaces were chosen because they are the area's most readily available in the SBO data that allow for similar comparison to the public-sector utilization. The results based on the state of Texas are presented first, followed by the Dallas, TX Market Area.

STATE OF TEXAS MARKETPLACE

Tables 6-3 through **6-7** show the measures of private sector disparities based on U.S. Census, 2012 SBO data for the population of available firms in the state of Texas by race, ethnicity, and gender for

²⁰² These represent the most recent available data provided through the SBO program and were released in 2016.

²⁰³ Sales includes total shipments, receipts, revenue, or business done by the firm.

²⁰⁴ The two-digit NAICS code level was utilized as those codes are the most prevalent level across all the 2012 SBO data.

construction; wholesale trade; professional, scientific, and technical services; administrative and support and waste management and remediation services; and other services (except public administration).

Based on the analysis of the U.S. Census, 2012 SBO data, overall, there remains a significant gap between the market share of M/WBE firms and their share of the state of Texas business population, where data were available.

NAICS CODE 23: CONSTRUCTION, STATE MARKETPLACE

Table 6-3 shows the availability, sales, and disparity results for construction. The results were derived from those firms which provide construction or construction-related services based on the NAICS Code 23.

There was a total of 288,277 construction firms (all firms²⁰⁵) in the State of Texas in 2012.

- ◆ African American firms (disparity index of 17.38) were substantially underutilized, accounting for 3.58 percent of all firms and 0.62 percent of sales.
- ◆ Native American firms (disparity index of 22.54) were substantially underutilized, accounting for 1.20 percent of all firms and 0.27 percent of sales.
- ◆ Asian American firms (disparity index of 43.51) were substantially underutilized, accounting for 1.47 percent of all firms and 0.64 percent of sales.
- ◆ Hispanic American firms (disparity index of 19.51) were substantially underutilized, accounting for 49.04 percent of all firms and 9.57 percent of sales.
- ◆ Nonminority women firms (disparity index of 67.08) were substantially underutilized, accounting for 15.36 percent of all firms and 10.31 percent of sales.

There was a total of 37,683 construction employer firms²⁰⁶ in the State of Texas in 2012.

- ◆ Data for African American firms were withheld; therefore, private sector disparities were not conducted.
- ◆ Native American firms (disparity index of 31.47) were substantially underutilized, accounting for 0.51 percent of employer firms and 0.16 percent of sales.
- ◆ Asian American firms (disparity index of 44.80) were substantially underutilized, accounting for 1.34 percent of employer firms and 0.60 percent of sales.
- ◆ Hispanic American firms (disparity index of 36.63) were substantially underutilized, accounting for 16.57 percent of employer firms and 6.07 percent of sales.
- ◆ Nonminority women firms (disparity index of 39.39) were substantially underutilized, accounting for 24.71 percent of employer firms and 9.73 percent of sales.

²⁰⁵ All firms, a compilation of employer firms and non-employer firms, were examined since non-employer firms can provide services at the subcontractor/subconsultant level, as well hire independent contractors to increase capacity.

²⁰⁶ Employer firms include firms with payroll at any time during 2012.

TABLE 6-3. PRIVATE SECTOR CENSUS DISPARITIES
 NAICS CODE 23, CONSTRUCTION
 U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,
 STATE OF TEXAS MARKETPLACE

BUSINESS OWNERSHIP CLASSIFICATION	ALL FIRMS (#)	ALL FIRMS, SALES (\$1,000)	EMPLOYER FIRMS (#)	EMPLOYER FIRMS SALES (\$1,000)
All Firms	288,277	\$151,579,714	37,683	\$137,392,766
African American Firms	10,330	\$943,969	366	S
Native American Firms ¹	3,468	\$411,007	193	\$221,445
Asian American Firms ²	4,236	\$969,075	506	\$826,480
Hispanic American Firms ³	141,372	\$14,500,913	6,245	\$8,340,771
Nonminority Women Firms ⁴	44,286	\$15,620,888	9,313	\$13,374,821
PERCENTAGE OF MARKETPLACE				
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	3.58%	0.62%	0.97%	S
Native American Firms ¹	1.20%	0.27%	0.51%	0.16%
Asian American Firms ²	1.47%	0.64%	1.34%	0.60%
Hispanic American Firms ³	49.04%	9.57%	16.57%	6.07%
Nonminority Women Firms ⁴	15.36%	10.31%	24.71%	9.73%
DISPARITY INDEX				
		ALL FIRMS		EMPLOYER FIRMS
All Firms		100.00		100.00
African American Firms		17.38		S
Native American Firms ¹		22.54		31.47
Asian American Firms ²		43.51		44.80
Hispanic American Firms ³		19.51		36.63
Nonminority Women Firms ⁴		67.08		39.39

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.

¹ Native American consists of American Indian- and Alaska Native-owned firms.

² Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

³ Hispanic American consists of all races and genders.

⁴ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.

Sales includes total shipments, receipts, revenue, or business done by the firm.

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

NAICS CODE 42: WHOLESALE TRADE, STATE MARKETPLACE

Table 6-4 shows the availability, sales, and disparity results for wholesale trade firms. The results were derived from those firms which sell capital or durable goods to other businesses based on NAICS Code 42.

There was a total of 58,715 wholesale trade firms (all firms) in the State of Texas in 2012.

- ◆ African American firms (disparity index of 2.02) were substantially underutilized, accounting for 3.90 percent of all firms and 0.08 percent of sales.
- ◆ Native American firms (disparity index of 6.23) were substantially underutilized, accounting for 1.01 percent of all firms and 0.06 percent of sales.
- ◆ Asian American firms (disparity index of 14.45) were substantially underutilized, accounting for 8.34 percent of all firms and 1.20 percent of sales.
- ◆ Hispanic American firms (disparity index of 7.16) were substantially underutilized, accounting for 21.89 percent of all firms and 1.57 percent of sales.
- ◆ Nonminority women firms (disparity index of 11.77) were substantially underutilized, accounting for 29.16 percent of all firms and 3.43 percent of sales.

There was a total of 25,052 wholesale trade employer firms in the State of Texas in 2012.

- ◆ African American firms (disparity index of 7.17) were substantially underutilized, accounting for 0.95 percent of employer firms and 0.07 percent of sales.
- ◆ Native American firms (disparity index of 8.52) were substantially underutilized, accounting for 0.71 percent of employer firms and 0.06 percent of sales.
- ◆ Asian American firms (disparity index of 11.47) were substantially underutilized, accounting for 10.26 percent of employer firms and 1.18 percent of sales.
- ◆ Hispanic American firms (disparity index 11.70) were substantially underutilized, accounting for 12.92 percent of employer firms and 1.51 percent of sales.
- ◆ Nonminority women firms (disparity index of 16.20) were substantially underutilized, accounting for 20.76 percent of employer firms and 3.36 percent of sales.

TABLE 6-4.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 42, WHOLESALE TRADE
U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,
STATE OF TEXAS MARKETPLACE

BUSINESS OWNERSHIP CLASSIFICATION	ALL FIRMS (#)	ALL FIRMS, SALES (\$1,000)	EMPLOYER FIRMS (#)	EMPLOYER FIRMS SALES (\$1,000)
All Firms	58,715	\$1,124,572,456	25,052	\$1,121,182,746
African American Firms	2,291	\$886,947	238	\$763,536
Native American Firms ¹	595	\$709,960	178	\$678,438
Asian American Firms ²	4,895	\$13,546,545	2,571	\$13,200,675
Hispanic American Firms ³	12,855	\$17,617,942	3,237	\$16,948,756
Nonminority Women Firms ⁴	17,120	\$38,600,160	5,201	\$37,719,637
PERCENTAGE OF MARKETPLACE				
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	3.90%	0.08%	0.95%	0.07%
Native American Firms ¹	1.01%	0.06%	0.71%	0.06%
Asian American Firms ²	8.34%	1.20%	10.26%	1.18%
Hispanic American Firms ³	21.89%	1.57%	12.92%	1.51%
Nonminority Women Firms ⁴	29.16%	3.43%	20.76%	3.36%
DISPARITY INDEX				
		ALL FIRMS		EMPLOYER FIRMS
All Firms		100.00		100.00
African American Firms		2.02		7.17
Native American Firms ¹		6.23		8.52
Asian American Firms ²		14.45		11.47
Hispanic American Firms ³		7.16		11.70
Nonminority Women Firms ⁴		11.77		16.20

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.

¹ Native American consists of American Indian- and Alaska Native-owned firms.

² Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

³ Hispanic American consists of all races and genders.

⁴ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.

Sales includes total shipments, receipts, revenue, or business done by the firm.

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

NAICS CODE 54: PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES, STATE MARKETPLACE

Table 6-5 shows the availability, sales, and disparity results for professional, scientific, and technical services. Professional, scientific, and technical services, which require a high degree of expertise and training, were derived from those firms specializing in performing professional, scientific, and technical activities (such as legal advice, accounting, architecture, engineering, computer services, consulting services, advertising services) for others in NAICS Code 54.

There was a total of 306,963 professional, scientific, and technical services firms (all firms) in the State of Texas in 2012.

- ◆ African American firms (disparity index of 13.04) were substantially underutilized, accounting for 6.05 percent of all firms and 0.79 percent of sales.
- ◆ Native American firms (disparity index of 29.12) were substantially underutilized, accounting for 0.83 percent of all firms and 0.24 percent of sales.
- ◆ Asian American firms (disparity index of 48.49) were substantially underutilized, accounting for 6.28 percent of all firms and 3.04 percent of sales.
- ◆ Hispanic American firms (disparity index of 24.81) were substantially underutilized, accounting for 15.55 percent of all firms and 3.86 percent of sales.
- ◆ Nonminority women firms (disparity index of 28.19) were substantially underutilized, accounting for 34.48 percent of all firms and 9.72 percent of sales.

There was a total of 56,705 professional, scientific, and technical services employer firms in the State of Texas in 2012.

- ◆ African American firms (disparity index of 25.91) were substantially underutilized, accounting for 2.07 percent of employer firms and 0.54 percent of sales.
- ◆ Native American firms (disparity index of 28.72) were substantially underutilized, accounting for 0.68 percent of all firms and 0.20 percent of sales.
- ◆ Asian American firms (disparity index of 37.05) were substantially underutilized, accounting for 7.51 percent of employer firms and 2.78 percent of sales,
- ◆ Hispanic American firms (disparity index 35.70) were substantially underutilized, accounting for 8.65 percent of employer firms and 3.09 percent of sales.
- ◆ Nonminority women firms (disparity index of 29.49) were substantially underutilized, accounting for 26.67 percent of employer firms and 7.87 percent of sales.

TABLE 6-5.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 54, PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES
U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,
STATE OF TEXAS MARKETPLACE

BUSINESS OWNERSHIP CLASSIFICATION	ALL FIRMS (#)	ALL FIRMS, SALES (\$1,000)	EMPLOYER FIRMS (#)	EMPLOYER FIRMS SALES (\$1,000)
All Firms	306,963	\$143,867,061	56,705	\$131,175,420
African American Firms	18,562	\$1,134,840	1,171	\$701,846
Native American Firms ¹	2,554	\$348,607	388	\$257,747
Asian American Firms ²	19,271	\$4,379,346	4,258	\$3,649,286
Hispanic American Firms ³	47,739	\$5,550,224	4,904	\$4,049,464
Nonminority Women Firms ⁴	105,854	\$13,986,254	15,125	\$10,319,471
PERCENTAGE OF MARKETPLACE				
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	6.05%	0.79%	2.07%	0.54%
Native American Firms ¹	0.83%	0.24%	0.68%	0.20%
Asian American Firms ²	6.28%	3.04%	7.51%	2.78%
Hispanic American Firms ³	15.55%	3.86%	8.65%	3.09%
Nonminority Women Firms ⁴	34.48%	9.72%	26.67%	7.87%
DISPARITY INDEX				
	ALL FIRMS		EMPLOYER FIRMS	
All Firms	100.00		100.00	
African American Firms	13.04		25.91	
Native American Firms ¹	29.12		28.72	
Asian American Firms ²	48.49		37.05	
Hispanic American Firms ³	24.81		35.70	
Nonminority Women Firms ⁴	28.19		29.49	

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.

¹ Native American consists of American Indian- and Alaska Native-owned firms.

² Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

³ Hispanic American consists of all races and genders.

⁴ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.

Sales includes total shipments, receipts, revenue, or business done by the firm.

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

NAICS CODE 56: ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT AND REMEDIATION SERVICES, STATE MARKETPLACE

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

There was a total of 236,808 administrative and support and waste management and remediation services firms (all firms) in the State of Texas in 2012.

- ◆ African American firms (disparity index of 11.06) were substantially underutilized, accounting for 11.07 percent of all firms and 1.22 percent of sales.
- ◆ Native American firms (disparity index of 21.87) were substantially underutilized, accounting for 1.24 percent of all firms and 0.27 percent of sales.
- ◆ Asian American firms (disparity index of 63.07) were substantially underutilized, accounting for 3.18 percent of all firms and 2.00 percent of sales.
- ◆ Hispanic American firms (disparity index of 15.65) were substantially underutilized, accounting for 46.65 percent of all firms and 7.30 percent of sales.
- ◆ Nonminority women firms (disparity index of 36.20) were substantially underutilized, accounting for 40.06 percent of all firms and 14.50 percent of sales.

There was a total of 22,359 administrative and support and waste management and remediation services employer firms in the State of Texas in 2012.

- ◆ African American firms (disparity index 25.41) were substantially underutilized, accounting for 3.33 percent of employer firms and 0.85 percent of sales.
- ◆ Data for Native American firms were withheld; therefore, private sector disparities were not conducted.
- ◆ Asian American firms (disparity index of 41.03) were substantially underutilized, accounting for 4.63 percent of employer firms and 1.90 percent of sales.
- ◆ Hispanic American firms (disparity index of 39.61) were substantially underutilized, accounting for 12.77 percent of employer firms and 5.06 percent of sales.
- ◆ Nonminority women firms (disparity index of 41.13) were substantially underutilized, accounting for 32.20 percent of employer firms and 13.24 percent of sales.

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

BUSINESS OWNERSHIP CLASSIFICATION	ALL FIRMS (#)	ALL FIRMS, SALES (\$1,000)	EMPLOYER FIRMS (#)	EMPLOYER FIRMS SALES (\$1,000)
All Firms	236,808	\$68,225,947	22,359	\$63,534,227
African American Firms	26,207	\$834,933	745	\$537,817
Native American Firms ¹	2,942	\$185,390	166	S
Asian American Firms ²	7,526	\$1,367,610	1,035	\$1,206,647
Hispanic American Firms ³	110,461	\$4,979,155	2,856	\$3,214,251
Nonminority Women Firms ⁴	94,866	\$9,893,376	7,199	\$8,414,410
PERCENTAGE OF MARKETPLACE				
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	11.07%	1.22%	3.33%	0.85%
Native American Firms ¹	1.24%	0.27%	0.74%	S
Asian American Firms ²	3.18%	2.00%	4.63%	1.90%
Hispanic American Firms ³	46.65%	7.30%	12.77%	5.06%
Nonminority Women Firms ⁴	40.06%	14.50%	32.20%	13.24%
DISPARITY INDEX				
	ALL FIRMS		EMPLOYER FIRMS	
All Firms	100.00		100.00	
African American Firms	11.06		25.41	
Native American Firms ¹	21.87		S	
Asian American Firms ²	63.07		41.03	
Hispanic American Firms ³	15.65		39.61	
Nonminority Women Firms ⁴	36.20		41.13	

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.

¹ Native American consists of American Indian- and Alaska Native-owned firms.

² Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

³ Hispanic American consists of all races and genders.

⁴ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.

Sales includes total shipments, receipts, revenue, or business done by the firm.

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

NAICS CODE 81: OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION), STATE MARKETPLACE

Table 6-7 shows the availability, sales, and disparity results for other services (except Public Administration) firms in NAICS Code 81. Firms in this sector primarily engage in equipment and machinery repairing, automotive repair services, electronic and precision equipment repair and maintenance services, providing laundry services, personal care services, and photofinishing services.

There was a total of 308,157 other services (except Public Administration) firms (all firms) in the State of Texas in 2012.

- ♦ African American firms (disparity index of 17.74) were substantially underutilized, accounting for 15.85 percent of all firms and 2.81 percent of sales.
- ♦ Native American firms (disparity index of 42.89) were substantially underutilized, accounting for 1.10 percent of all firms and close to 0.47 percent of sales.
- ♦ Asian American (disparity index of 61.98) firms were substantially underutilized, accounting for 14.22 percent of all firms and close to 8.81 percent of sales.
- ♦ Hispanic American firms (disparity index of 42.50) were substantially underutilized, accounting for 31.39 percent of all firms and 13.34 percent of sales.
- ♦ Nonminority women firms (disparity index of 69.59) were substantially underutilized, accounting for 32.74 percent of all firms and 22.79 percent of sales

There was a total of 23,762 administrative and support and waste management and remediation services employer firms in the State of Texas in 2012.

- ♦ African American firms (disparity index 62.84) were substantially underutilized, accounting for 1.52 percent of employer firms and 0.95 percent of sales.
- ♦ Native American firms (disparity index of 85.64) were underutilized, accounting for 0.36 percent of employer firms and close to 0.31 percent of sales.
- ♦ Asian American firms (disparity index of 51.22) were substantially underutilized, accounting for 11.19 percent of employer firms and 5.73 percent of sales.
- ♦ Hispanic American firms (disparity index of 54.34) were substantially underutilized, accounting for 16.05 percent of employer firms and 8.72 percent of sales.
- ♦ Nonminority women firms (disparity index of 58.76) were substantially underutilized, accounting for 33.96 percent of employer firms and 19.95 percent of sales.

TABLE 6-7.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 81, OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION)
U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,
STATE OF TEXAS MARKETPLACE

BUSINESS OWNERSHIP CLASSIFICATION	ALL FIRMS (#)	ALL FIRMS, SALES (\$1,000)	EMPLOYER FIRMS (#)	EMPLOYER FIRMS SALES (\$1,000)
All Firms	308,157	\$30,852,904	23,762	\$22,938,957
African American Firms	48,855	\$867,843	361	\$218,991
Native American Firms ¹	3,395	\$145,778	85	\$70,270
Asian American Firms ²	43,808	\$2,718,714	2,658	\$1,314,372
Hispanic American Firms ³	96,737	\$4,116,467	3,814	\$2,000,614
Nonminority Women Firms ⁴	100,905	\$7,030,529	8,070	\$4,577,391
PERCENTAGE OF MARKETPLACE				
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	15.85%	2.81%	1.52%	0.95%
Native American Firms ¹	1.10%	0.47%	0.36%	0.31%
Asian American Firms ²	14.22%	8.81%	11.19%	5.73%
Hispanic American Firms ³	31.39%	13.34%	16.05%	8.72%
Nonminority Women Firms ⁴	32.74%	22.79%	33.96%	19.95%
DISPARITY INDEX				
	ALL FIRMS		EMPLOYER FIRMS	
All Firms	100.00		100.00	
African American Firms	17.74		62.84	
Native American Firms ¹	42.89		85.64	
Asian American Firms ²	61.98		51.22	
Hispanic American Firms ³	42.50		54.34	
Nonminority Women Firms ⁴	69.59		58.76	

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.

¹ Native American consists of American Indian- and Alaska Native-owned firms.

² Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

³ Hispanic American consists of all races and genders.

⁴ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.

Sales includes total shipments, receipts, revenue, or business done by the firm.

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

DALLAS, TX MARKET AREA MARKETPLACE²⁰⁷

Tables 6-8 through **6-12** show the measures of private sector disparities based on U.S. Census, 2012 SBO data for the population of available firms in the Dallas, TX Market Area marketplace by race, ethnicity, and gender for construction; wholesale trade; professional, scientific, and technical services; administrative and support and waste management and remediation services; and other services (except public administration).

Based on the analysis of the U.S. Census, 2012 SBO data, overall there remains a significant gap between the market share of M/WBE firms and their share of the Dallas, TX Market Area marketplace business population, where data was available.

NAICS CODE 23: CONSTRUCTION, DALLAS, TX MARKET AREA

Table 6-8 shows the availability, sales, and disparity results for construction (NAICS Code 23).

There was a total of 69,507 construction firms (all firms²⁰⁸) in the Dallas, TX area marketplace in 2012

- ◆ African American firms (disparity index 9.65) were substantially underutilized, accounting for 4.67 percent of all firms and 0.45 percent of sales.
- ◆ Native American firms (disparity index of 15.10) were substantially underutilized, accounting for 1.13 percent of all firms and 0.17 percent of sales.
- ◆ Asian American firms (disparity index 25.70) were substantially underutilized, accounting for 1.54 percent of all firms and 0.40 percent of sales.
- ◆ Hispanic American firms (disparity index of 18.37) were substantially underutilized, accounting for 39.91 percent of all firms and 7.33 percent of sales.
- ◆ Data for Nonminority Women firms were withheld; therefore, private sector disparities were not conducted.

There was a total of 9,817 construction employer firms²⁰⁹ in the Dallas, TX area marketplace in 2012.

- ◆ African American firms (disparity index 31.38) were substantially underutilized, accounting for 1.19 percent of all firms and 0.37 percent of sales.
- ◆ Native American firms (disparity index of 39.51) were substantially underutilized, accounting for 0.38 percent of all firms and 0.15 percent of sales.
- ◆ Data for Asian American firms were withheld; therefore, private sector disparities were not conducted.
- ◆ -Hispanic American firms (disparity index of 45.90) were substantially underutilized, accounting for 10.92 percent of all firms and 5.01 percent of sales.

²⁰⁷ Based on all sectors (NAICS codes 00), there was a total of 648,510 firms (all firms) in the Dallas area marketplace compared to 2,356,748 for the State of Texas marketplace. Therefore, the following results by NAICS code may present data (such as the number of firms, firm sales) lower than the State of Texas marketplace.

²⁰⁸ All firms include firms with and without payroll at any time during 2012.

²⁰⁹ Employer firms include firms with payroll at any time during 2012.

- ◆ Data for Nonminority Women firms were withheld; therefore, private sector disparities were not conducted.

TABLE 6-8.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 23, CONSTRUCTION
U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,
DALLAS, TX MARKETPLACE

BUSINESS OWNERSHIP CLASSIFICATION	ALL FIRMS (#)	ALL FIRMS, SALES (\$1,000)	EMPLOYER FIRMS (#)	EMPLOYER FIRMS SALES (\$1,000)
All Firms	69,507	\$41,793,439	9,817	\$37,464,830
African American Firms	3,245	\$188,333	117	\$140,103
Native American Firms ¹	787	\$71,463	37	\$55,789
Asian American Firms ²	1,070	\$165,357	169	S
Hispanic American Firms ³	27,742	\$3,064,269	1,072	\$1,877,797
Nonminority Women Firms ⁴	S	S	S	S
PERCENTAGE OF MARKETPLACE				
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	4.67%	0.45%	1.19%	0.37%
Native American Firms ¹	1.13%	0.17%	0.38%	0.15%
Asian American Firms ²	1.54%	0.40%	1.72%	N/A
Hispanic American Firms ³	39.91%	7.33%	10.92%	5.01%
Nonminority Women Firms ⁴	S	S	S	S
DISPARITY INDEX				
	ALL FIRMS		EMPLOYER FIRMS	
All Firms	100.00		100.00	
African American Firms	9.65		31.38	
Native American Firms ¹	15.10		39.51	
Asian American Firms ²	25.70		S	
Hispanic American Firms ³	18.37		45.90	
Nonminority Women Firms ⁴	S		S	

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.

¹ Native American consists of American Indian- and Alaska Native-owned firms.

² Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

³ Hispanic American consists of all races and genders.

⁴ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.

Sales includes total shipments, receipts, revenue, or business done by the firm.

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

NAICS CODE 42: WHOLESALE TRADE, DALLAS, TX MARKET AREA

Table 6-9 shows the availability, sales, and disparity results for wholesale trade (NAICS Code 42).

There was a total of 18,352 wholesale trade firms (all firms) in the Dallas, TX marketplace in 2012

- ◆ African American firms (disparity index 3.83) were substantially underutilized, accounting for 4.56 percent of all firms and 0.17 percent of sales.
- ◆ Data for Native American firms were withheld; therefore, private sector disparities were not conducted.
- ◆ Asian American firms (disparity index of 15.14) were substantially underutilized, accounting for 7.80 percent of all firms and 1.18 percent of sales.
- ◆ Hispanic American firms (disparity index of 9.97) were substantially underutilized, accounting for 8.04 percent of all firms and 0.80 percent of sales.
- ◆ Data for Nonminority Women firms were withheld; therefore, private sector disparities were not conducted.

There was a total of 8,291 wholesale trade employer firms in the Dallas.

- ◆ African American firms (disparity index 23.43) were substantially underutilized, accounting for 0.60 percent of all firms and 0.14 percent of sales.
- ◆ Data for Native American firms were withheld; therefore, private sector disparities were not conducted.
- ◆ Asian American firms (disparity index of 13.05) were substantially underutilized, accounting for 8.94 percent of all firms and 1.17 percent of sales.
- ◆ Hispanic American firms (disparity index of 15.76) were substantially underutilized, accounting for 5.01 percent of all firms and 0.79 percent of sales.
- ◆ Data for Nonminority Women firms were withheld; therefore, private sector disparities were not conducted.

TABLE 6-9.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 42, WHOLESALE TRADE
U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,
DALLAS, TX MARKETPLACE

BUSINESS OWNERSHIP CLASSIFICATION	ALL FIRMS (#)	ALL FIRMS, SALES (\$1,000)	EMPLOYER FIRMS (#)	EMPLOYER FIRMS SALES (\$1,000)
All Firms	18,352	\$259,944,514	8,291	\$258,883,070
African American Firms	836	\$453,371	50	\$365,830
Native American Firms ¹	276	S	66	S
Asian American Firms ²	1,431	\$3,069,509	741	\$3,020,284
Hispanic American Firms ³	1,475	\$2,083,538	415	\$2,041,828
Nonminority Women Firms ⁴	S	S	S	S
PERCENTAGE OF MARKETPLACE				
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	4.56%	0.17%	0.60%	0.14%
Native American Firms ¹	1.50%	N/A	0.80%	N/A
Asian American Firms ²	7.80%	1.18%	8.94%	1.17%
Hispanic American Firms ³	8.04%	0.80%	5.01%	0.79%
Nonminority Women Firms ⁴	S	S	S	S
DISPARITY INDEX				
	ALL FIRMS		EMPLOYER FIRMS	
All Firms	100.00		100.00	
African American Firms	3.83		23.43	
Native American Firms ¹	S		S	
Asian American Firms ²	15.14		13.05	
Hispanic American Firms ³	9.97		15.76	
Nonminority Women Firms ⁴	S		S	

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.

¹Native American consists of American Indian- and Alaska Native-owned firms.

²Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

³Hispanic American consists of all races and genders.

⁴Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.

Sales includes total shipments, receipts, revenue, or business done by the firm.

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

NAICS CODE 54: PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES, DALLAS, TX MARKET AREA

Table 6-10 shows the availability, sales, and disparity results for professional, scientific, and technical services (NAICS Code 54).

There was a total of 94,705 professional, scientific and technical services firms (all firms) in the Dallas, TX marketplace in 2012.

- ♦ African American firms (disparity index 9.85) were substantially underutilized, accounting for 7.24 percent of all firms and 0.71 percent of sales.
- ♦ Native American firms (disparity index of 19.97) were substantially underutilized, accounting for 0.95 percent of all firms and 0.19 percent of sales.
- ♦ Asian American firms (disparity index of 54.31) were substantially underutilized, accounting for 7.62 percent of all firms and 4.14 percent of sales.
- ♦ Hispanic American firms (disparity index of 28.47) were substantially underutilized, accounting for 8.57 percent of all firms and 2.44 percent of sales.
- ♦ Data for Nonminority Women firms were withheld; therefore, private sector disparities were not conducted.

There was a total of 18,236 professional, scientific and technical services employer firms in the Dallas, TX marketplace in 2012.

- ♦ African American firms (disparity index 20.94) were substantially underutilized, accounting for 2.20 percent of all firms and 0.46 percent of sales.
- ♦ Native American firms (disparity index of 18.39) were substantially underutilized, accounting for 0.90 percent of all firms and 0.17 percent of sales.
- ♦ Asian American firms (disparity index of 40.95) were substantially underutilized, accounting for 9.64 percent of all firms and 3.95 percent of sales.
- ♦ Hispanic American firms (disparity index of 38.42) were substantially underutilized, accounting for 4.91 percent of all firms and 1.89 percent of sales.
- ♦ Data for Nonminority Women firms were withheld; therefore, private sector disparities were not conducted.

TABLE 6-10.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 54, PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES
U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,
DALLAS, TX MARKETPLACE

BUSINESS OWNERSHIP CLASSIFICATION	ALL FIRMS (#)	ALL FIRMS, SALES (\$1,000)	EMPLOYER FIRMS (#)	EMPLOYER FIRMS SALES (\$1,000)
All Firms	94,705	\$48,306,345	18,236	\$44,239,472
African American Firms	6,859	\$344,544	401	\$203,706
Native American Firms ¹	903	\$91,988	164	\$73,165
Asian American Firms ²	7,215	\$1,998,854	1,758	\$1,746,319
Hispanic American Firms ³	8,117	\$1,178,590	895	\$834,253
Nonminority Women Firms ⁴	S	S	S	S
PERCENTAGE OF MARKETPLACE				
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	7.24%	0.71%	2.20%	0.46%
Native American Firms ¹	0.95%	0.19%	0.90%	0.17%
Asian American Firms ²	7.62%	4.14%	9.64%	3.95%
Hispanic American Firms ³	8.57%	2.44%	4.91%	1.89%
Nonminority Women Firms ⁴	S	S	S	S
DISPARITY INDEX				
	ALL FIRMS		EMPLOYER FIRMS	
All Firms	100.00		100.00	
African American Firms	9.85		20.94	
Native American Firms ¹	19.97		18.39	
Asian American Firms ²	54.31		40.95	
Hispanic American Firms ³	28.47		38.42	
Nonminority Women Firms ⁴	S		S	

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.

¹ Native American consists of American Indian- and Alaska Native-owned firms.

² Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

³ Hispanic American consists of all races and genders.

⁴ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.

Sales includes total shipments, receipts, revenue, or business done by the firm.

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

NAICS CODE 56: ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT AND REMEDIATION SERVICES, DALLAS, TX MARKET AREA

Table 6-11 shows the availability, sales, and disparity results for administrative and support and waste management and remediation services (NAICS Code 56).

There was a total 61,854 administrative and support and waste management and remediation services firms (all firms) in the Dallas, TX marketplace in 2012

- ♦ African American firms (disparity index 6.79) were substantially underutilized, accounting for 16.11 percent of all firms and 1.09 percent of sales.
- ♦ Native American firms (disparity index of 1.40) were substantially underutilized, accounting for 1.43 percent of all firms and 0.02 percent of sales.
- ♦ Asian American firms (disparity index of 39.28) were substantially underutilized, accounting for 3.85 percent of all firms and 1.51 percent of sales.
- ♦ Hispanic American firms (disparity index of 12.32) were substantially underutilized, accounting for 35.27 percent of all firms and 4.34 percent of sales.
- ♦ Data for Nonminority Women firms were withheld; therefore, private sector disparities were not conducted.

There was a total of 7,118 administrative and support and waste management and remediation services employer firms in the Dallas, TX marketplace in 2012

- ♦ African American firms (disparity index 18.01) were substantially underutilized, accounting for 3.65 percent of all firms and 0.66 percent of sales.
- ♦ Data for Native American firms were withheld; therefore, private sector disparities were not conducted.
- ♦ Asian American firms (disparity index of 25.71) were substantially underutilized, accounting for 4.76 percent of all firms and 1.22 percent of sales.
- ♦ Hispanic American firms (disparity index of 23.17) were substantially underutilized, accounting for 9.08 percent of all firms and 2.10 percent of sales.
- ♦ Data for Nonminority Women firms were withheld; therefore, private sector disparities were not conducted.

TABLE 6-11.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 56
ADMINISTRATIVE AND SUPPORT / WASTE MANAGEMENT AND REMEDIATION SERVICES
U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,
DALLAS, TX MARKETPLACE

BUSINESS OWNERSHIP CLASSIFICATION	ALL FIRMS (#)	ALL FIRMS, SALES (\$1,000)	EMPLOYER FIRMS (#)	EMPLOYER FIRMS SALES (\$1,000)
All Firms	61,854	\$22,390,025	7,118	\$20,411,129
African American Firms	9,963	\$244,708	260	\$134,280
Native American Firms ¹	885	\$4,472	58	S
Asian American Firms ²	2,380	\$338,391	339	\$249,893
Hispanic American Firms ³	21,816	\$972,634	646	\$429,120
Nonminority Women Firms ⁴	S	S	S	S
PERCENTAGE OF MARKETPLACE				
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	16.11%	1.09%	3.65%	0.66%
Native American Firms ¹	1.43%	0.02%	0.81%	N/A
Asian American Firms ²	3.85%	1.51%	4.76%	1.22%
Hispanic American Firms ³	35.27%	4.34%	9.08%	2.10%
Nonminority Women Firms ⁴	S	S	S	S
DISPARITY INDEX				
	ALL FIRMS		EMPLOYER FIRMS	
All Firms	100.00		100.00	
African American Firms	6.79		18.01	
Native American Firms ¹	1.40		S	
Asian American Firms ²	39.28		25.71	
Hispanic American Firms ³	12.32		23.17	
Nonminority Women Firms ⁴	S		S	

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.

¹ Native American consists of American Indian- and Alaska Native-owned firms.

² Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

³ Hispanic American consists of all races and genders.

⁴ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.

Sales includes total shipments, receipts, revenue, or business done by the firm.

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

NAICS CODE 81: OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION), DALLAS, TX MARKET AREA

Table 6-12 shows the availability, sales, and disparity results for NAICS Code, other services (except public administration).

There was a total 88,142 other services (except public administration) firms (all firms) in the Dallas, TX marketplace in 2012.

- ♦ African American firms (disparity index 14.49) were substantially underutilized, accounting for 21.98 percent of all firms and 3.19 percent of sales.
- ♦ Native American firms (disparity index of 7.66) were substantially underutilized, accounting for 1.12 percent of all firms and 0.09 percent of sales.
- ♦ Asian American firms (disparity index of 74.07) were substantially underutilized, accounting for 17.61 percent of all firms and 13.04 percent of sales.
- ♦ Hispanic American firms (disparity index of 39.43) were substantially underutilized, accounting for 20.12 percent of all firms and 7.93 percent of sales.
- ♦ Data for Nonminority Women firms were withheld; therefore, private sector disparities were not conducted.

There was a total of 6,553 other services (except public administration) employer firms in the Dallas, TX marketplace in 2012.

- ♦ African American firms (disparity index 34.23) were substantially underutilized, accounting for 1.27 percent of all firms and 0.43 percent of sales.
- ♦ Data for Native American firms were withheld; therefore, private sector disparities were not conducted.
- ♦ Asian American firms (disparity index of 81.51) were underutilized, accounting for 12.76 percent of all firms and 10.40 percent of sales.
- ♦ Hispanic American firms (disparity index of 49.79) were substantially underutilized, accounting for 8.73 percent of all firms and 4.35 percent of sales.
- ♦ Data for Nonminority Women firms were withheld; therefore, private sector disparities were not conducted.

TABLE 6-12.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 81, OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION)
U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,
DALLAS, TX MARKETPLACE

BUSINESS OWNERSHIP CLASSIFICATION	ALL FIRMS (#)	ALL FIRMS, SALES (\$1,000)	EMPLOYER FIRMS (#)	EMPLOYER FIRMS SALES (\$1,000)
All Firms	88,142	\$8,834,682	6,553	\$6,487,779
African American Firms	19,373	\$281,385	83	\$28,128
Native American Firms ¹	991	\$7,612	27	S
Asian American Firms ²	15,519	\$1,152,209	836	\$674,649
Hispanic American Firms ³	17,737	\$700,993	572	\$281,966
Nonminority Women Firms ⁴	S	S	S	S
PERCENTAGE OF MARKETPLACE				
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	21.98%	3.19%	1.27%	0.43%
Native American Firms ¹	1.12%	0.09%	0.41%	N/A
Asian American Firms ²	17.61%	13.04%	12.76%	10.40%
Hispanic American Firms ³	20.12%	7.93%	8.73%	4.35%
Nonminority Women Firms ⁴	S	S	S	S
DISPARITY INDEX				
	ALL FIRMS		EMPLOYER FIRMS	
All Firms	100.00		100.00	
African American Firms	14.49		34.23	
Native American Firms ¹	7.66		S	
Asian American Firms ²	74.07		81.51	
Hispanic American Firms ³	39.43		49.79	
Nonminority Women Firms ⁴	S		S	

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.

¹ Native American consists of American Indian- and Alaska Native-owned firms.

² Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

³ Hispanic American consists of all races and genders.

⁴ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.

Sales includes total shipments, receipts, revenue, or business done by the firm.

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

6.3.2 SBO CONCLUSION

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

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

6.4 ANALYSIS OF RACE, ETHNICITY, AND GENDER EFFECTS ON SELF-EMPLOYMENT AND EARNINGS

This section examines further evidence regarding the over-arching research question of whether disparities exist in the private sector and addresses the two more specific questions:

1. *Are racial, ethnic, and gender minority groups less likely than nonminority males (non-M/WBEs) to be self-employed? If so, does race, ethnicity or gender have a role in the disparity?*
2. *Does racial, ethnic, and gender status have an impact on self-employed individuals' earnings?*

This is achieved through an examination of the effects of race, ethnicity, and gender, alongside controls for individual economic and demographic characteristics, on individuals' participation in the private sector as self-employed business operators, as well as the effects of these variables on their earnings. The analysis is targeted to four categories of private sector business activity (Construction, Professional Services, Other Services, and Goods & Supplies) that generally align with the City procurement categories defined for the study, noting that Professional Services also encompasses Architecture and Engineering, due to observations in this category being too limited in this subset to support separate analysis.

Adopting the methodology and variables employed by a City of Denver disparity study (see *Concrete Works v. City and County of Denver*²¹⁰), we use Public Use Microdata Samples (PUMS) data derived from the 2014-2018 American Community Survey (ACS), to which we apply appropriate regression statistics to draw conclusions.

6.4.1 LINKS TO BUSINESS FORMATION AND MAINTENANCE

Research in economics consistently finds group differences by race, ethnicity, and gender in rates of business formation.²¹¹ We know, for instance, that in general most minorities and women²¹² have a lower median age than do nonminority males (ACS PUMS, 2014-2018) and that, in general, the likelihood of being self-employed increases with age (ACS PUMS, 2014-2018). An examination of these variables within the context of a disparity study, therefore, seeks to control for these other important demographic and economic variables in conjunction with race, ethnicity, and gender – since they also influence group rates of business formation – to determine if we can assert that inequities specific to minorities and women are demonstrably present to warrant consideration of public sector remedies. Questions about marketplace dynamics affecting self-employment—or, more specifically, the odds of being able to form one's own business and then to excel (i.e., generate earnings growth)—are at the heart of disparity analysis research.

²¹⁰ *Concrete Works v. City and County of Denver*, 321 F.3 950 (10th Cir. 2003).

²¹¹ See *Journal of Econometrics*, Vol. 61, Issue 1, devoted entirely to the econometrics of labor market discrimination and segregation.

²¹² Minority groups here refers to African American, Asian Americans, Hispanic Americans and Native Americans.

6.4.2 STATISTICAL MODELS AND METHODS

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

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

- ◆ Dependent variables are the phenomena to be explained by influences such as age, race, gender, and disability status (i.e., the independent or “explanatory” variables).
- ◆ The first dependent variable is the probability of self-employment status, which is a binary, categorical variable based on two possible values: 0 (not self-employed) versus 1 (self-employed).
 - Logistic regression is appropriately used to perform an analysis in which the dependent variable is binary and categorical, and therefore was employed for the analysis of self-employment.²¹³
- ◆ The second dependent variable is earnings from self-employment, which is a continuous variable with many possible values.
 - Continuous variables are best explained using simple linear regression.

6.4.3 THE INFLUENCES OF RACE, ETHNICITY, AND GENDER ON SELF EMPLOYMENT

To derive a set of variables known to predict employment status (self-employed/not self-employed), we used the 2014-2018 U.S. Census ACS 5 percent PUMS data. Logistic regression was used to calculate the probability of being self-employed, the dependent variable, with respect to socioeconomic and demographic characteristics selected for their potential to influence the likelihood of self-employment. The sample for the analysis was limited to labor force participants who met the following criteria:

- ◆ Resident of Dallas, TX MSA.

²¹³ Logistical regression, or logit, models generate predicted probabilities that are almost identical to those calculated by a probit procedure, used in *Concrete Works v. City and County of Denver* case. Logit, however, has the added advantage of dealing more effectively with observations at the extremes of a distribution. For a complete explanation, see *Interpreting Probability Models* (T.F. Liao, Text 101 in the Sage University series).

- ♦ Self-employed in construction, professional services, other services, architecture and engineering,²¹⁴ or goods and supplies.
- ♦ Employed full-time (more than 35 hours a week).
- ♦ 18 years of age or older.
- ♦ Employed in the private sector.

Next, we derived the following variables²¹⁵ hypothesized as predictors of employment status:

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

This analysis examined the statistical effects of these variables on the likelihood of being self-employed in the Dallas MSA. From the inverse of this value, we can interpret a likelihood value of its effect on self-employment. The results are interpretable based on the inverse of the “odds ratios.” For example, the “odds ratio” for an African American is 0.471 as seen in the top portion of **Table 6-14**, while the inverse of this is 2.12, as seen in the lower portion of this table. This inverse value means that a nonminority male is 2.12 times more likely to be self-employed than an African American. Comparisons are made to nonminority males as a control group, where the influence of any of the race, ethnicity, or gender variables is considered absent. In this sense, the circumstance of the nonminority male is considered to be a baseline for what might be expected for self-employment rates for this market – with race, ethnicity, or gender variables being tested for their positive or negative influence. The results in the following tables present rates for the groups after variables such as age and education, have been factored out of the equation. Results of logistic regression can be found in **Appendix F**.

²¹⁴ Due to inadequate sample size for all races in the architecture and engineering PUMS 2015 data, the architecture and engineering categories were merged with the professional services category.

²¹⁵ The variables used in this analysis were modeled after those incorporated in the same analysis from *Concrete Works v. City and County of Denver*.

TABLE 6-13.
SELF-EMPLOYMENT ODDS RATIOS AND THEIR INVERSES FOR MINORITY GROUPS RELATIVE TO
NONMINORITY MALES AFTER CONTROLLING FOR DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

BUSINESS OWNERSHIP CLASSIFICATION	ALL INDUSTRIES	CONSTRUCTION	PROFESSIONAL SERVICES	OTHER SERVICES	GOODS & SUPPLIES
ODDS-RATIOS					
African American Firms	0.471	0.527	0.351	0.676	0.412
Hispanic American Firms	0.727	0.744	0.410	0.854	0.488
Asian American Firms	0.741	0.580	0.645	0.920	0.735
Native American Firms	0.764	0.468	0.525	1.340	0.604
Nonminority Women Firms	0.580	0.345	0.334	0.941	0.766
INVERSE OF ODDS-RATIOS					
African American Firms	2.121	1.896	2.846	1.479	2.429
Hispanic American Firms	1.375	1.344	2.440	1.171	2.047
Asian American Firms	1.349	1.725	1.550	1.087	1.360
Native American Firms	1.308	2.137	1.904	0.746	1.656
Nonminority Women Firms	1.725	2.899	2.991	1.062	1.305

Source: PUMS data from 2014-2018 American Community Survey (Dallas, TX MSA) and MGT, calculations using SPSS Statistics software. Note: Shading and **bold** indicates the estimated “odds ratio” for the group was statistically significant at 95% confidence interval.²¹⁶ The architecture and engineering business industry was excluded from this analysis because of the insufficient data.

Are racial, ethnic, and gender minority groups less likely than nonminority males to be self-employed? The findings show that racial, ethnic, and gender minority groups are nearly universally less likely than nonminority males to be self-employed after adjusting for the effects of age, education, etc. For example, nonminority males were 2.85 times more likely than African Americans to be self-employed in the Professional Services; and nonminority males were 2.14 times more likely than Native Americans to be self-employed in the Construction industry.

With respect to the over-arching research question, these findings again communicate that disparities do exist in the market. Within this circumstance and in response to the specific research question, it is also evident that racial, ethnic, and gender variables have a statistically significant negative impact on rates of self-employment after other factors are controlled for.

6.4.4 THE INFLUENCES OF RACE, ETHNICITY, AND GENDER ON INDIVIDUAL EARNINGS

To explore whether there are any measurable impacts on earnings, we compared self-employed, minority, and women entrepreneurs’ earnings to those of nonminority males in the Dallas, TX MSA, when the effect of other demographic and economic characteristics were controlled or neutralized. That is, we were able

²¹⁶ Statistically significant is the likelihood that a relationship between two or more variables is caused by something other than random chance. MGT incorporates the statistical 95% confidence interval. This means that if the same population is sampled on numerous occasions and interval estimates are made on each occasion, the resulting intervals would bracket the true population parameter in approximately 95% of the cases.

to examine the earnings of self-employed individuals of similar education levels, ages, etc., to permit earnings comparisons more purely by race, ethnicity, and gender.

First, we derived a set of independent variables known to predict earnings, including:

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

For the dependent variable, we used 2014-2018 wages from employment for self-employed individuals, as reported in the 5 percent PUMS data.

This analysis examined the statistical effects of these variables on income from self-employment for business owners in Dallas, TX MSA. As yielded by the linear regression analysis, each number in **Table 6-14** represents a percent change in earnings associated with the introduction of the variable (business ownership classification) in the left-hand column. For example, across all industries, the adjustment factor for an African American is -0.486, meaning that an African American would be predicted to earn 48.60 percent less than a nonminority male, all other variables considered or controlled for. Full results of linear regression outputs can be found in **Appendix F**.

TABLE 6-14.
EARNINGS ELASTICITIES OF MINORITY GROUPS RELATIVE TO NONMINORITY MALES AFTER
CONTROLLING FOR DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

BUSINESS OWNERSHIP CLASSIFICATION	ALL INDUSTRIES	CONSTRUCTION	PROFESSIONAL SERVICES	OTHER SERVICES	GOODS & SUPPLIES
African American Firms	-0.486	-0.529	-0.619	-0.434	-0.360
Hispanic American Firms	-0.576	-0.477	-0.584	-0.550	-0.341
Asian American Firms	-0.330	-0.203	-0.015	-0.377	-0.426
Native American Firms	-0.293	-0.632	-0.064	-0.225	-0.330
Nonminority Women Firms	-0.415	-0.257	-0.563	-0.421	-0.333

Source: PUMS data from 2014-2018 American Community Survey (Dallas, TX MSA) and MGT, calculations using SPSS Statistics software. Note: Shading and **bold** indicates the estimated "elasticities" for the group were statistically significant at 95% confidence interval. The architecture and engineering business industry was excluded from this analysis because of insufficient data. In terms of the regression "elasticity" means the percent change resulting by being a member of one of the M/WBE groups.

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

6.5 ACCESS TO CREDIT

6.5.1 SMALL BUSINESS ADMINISTRATION, OFFICE OF ADVOCACY

In February 2018 Alicia Robb, Ph.D., conducted a study on behalf of the Small Business Administration entitled, “*Financing Patterns and Credit Market Experiences: A Comparison by Race and Ethnicity For U.S. Employer Firms.*” The study used U.S. Census Bureau 2014 data from the Annual Survey of Entrepreneurs. Ms. Robb examined differences in financing and access to capital for small firms. Findings iterated other reports – there are disparities in the access and cost of capital between minority and non-minority owned firms. The barriers to access to affordable credit have a negative impact on the profitability and stability of minority owned firms.

She reports finding that among Blacks or African Americans who chose not to apply for financing despite needing it, nearly 60 percent said they didn’t apply because they didn’t think they would be approved by the lender.

Here we provide some summary statistics from this report.

TABLE 6-15.
NEGATIVE IMPACT FROM ACCESS TO FINANCIAL CAPITAL

	Minority	Non-Minority
Construction	18.2%	11.5%
Professional Services	13.6%	7.2%

Source: Table 17, *Financing Patterns and Credit Market Experiences: A Comparison by Race and Ethnicity For U.S. Employer Firms.*

TABLE 6-16.
NEGATIVE IMPACT FROM COST OF FINANCIAL CAPITAL

	Minority	Non-Minority
Construction	15.8%	11.7%
Professional Services	12.3%	7.1%

Source: Table 17, *Financing Patterns and Credit Market Experiences: A Comparison by Race and Ethnicity For U.S. Employer Firms.*

TABLE 6-17.
DID NOT RECEIVE AMOUNT REQUESTED

	Percentage
White	24.50%
Black	53.00%
Asian	34.20%
Hispanic	39.00%
Minority	38.60%
Non-Minority	23.60%

Source: Table 9, *Financing Patterns and Credit Market Experiences: A Comparison by Race and Ethnicity For U.S. Employer Firms*.

TABLE 6-18.
FIRMS 16+ YEARS OLD DID NOT RECEIVE AMOUNT REQUESTED

	Percentage
Minority	30.20%
Non-Minority	14.30%

Source: Table 11, *Financing Patterns and Credit Market Experiences: A Comparison by Race and Ethnicity For U.S. Employer Firms*.

Ms. Robb also provides information found in the 2015 study entitled, “Rejected, Shackled, and Alone: The Experience of Systematic Restricted Consumer Choice Among Minority Entrepreneurs.”²¹⁷ This study reports on testing that was done regarding applying for business credit using testers as applicants. Findings included:

In comparison to white testers, minorities were more often asked to provide:

- ♦ business financial statements - 83% vs. 50%
- ♦ income-tax returns – 86% vs. 52%
- ♦ bank account information – 25% vs. 0%
- ♦ personal financial asset details – 60% vs. 22 %
- ♦ credit-card debt information – 42% vs. 13%

She writes, “Overall, minorities were consistently offered less assistance and subjected to greater scrutiny, in comparison with the white testers” (p. 37).

6.5.2 MINORITY BUSINESS DEVELOPMENT AGENCY

The U.S. Department of Commerce, Minority Business Development Agency published a report in January 2010 entitled, “*Disparities in Capital Access between Minority and Non-Minority-Owned Businesses: The*

²¹⁷ Bone, S., Christensen, G., and Williams, J. 2015. Rejected, shackled, and alone: The experience of systematic restricted consumer choice among minority entrepreneurs, *Journal of Consumer Research*.

Troubling Reality of Capital Limitations Faced by MBEs.” Findings confirmed that access to affordable credit remains one of the main impediments to minority-owned firm growth.

General findings show that minority-owned businesses: pay higher interest rates on loans; are more likely to be denied credit; and, are less likely to apply for loans because they fear their applications will be denied.

- ◆ Among high sales firms 52% of non-minority firms received loans compared with 41% of minority firms.
- ◆ The average loan amount for all high sales minority firms was \$149,000. The non-minority average was more than twice this amount at \$310,000.
- ◆ Among firms with gross receipts under \$500,000, loan denial rates for minority firms were about 3 times higher, at 42%, compared to those of non-minority-owned firms, 16%.
- ◆ Among firms with gross receipts under \$500,000, 33% of minority firms did not apply for loans because of fear of rejection compared to 17% of non-minority firms.
- ◆ For all firms, minority firms paid 7.8% on average for loans compared with 6.4% for non-minority firms.

6.5.3 THE FEDERAL RESERVE SMALL BUSINESS CREDIT SURVEY

The Small Business Credit Survey (SBCS) is a national collaboration of the 12 Reserve Banks of the Federal Reserve System. This survey has been conducted annually since 2015. Survey responses are collected from firms throughout the United States and while there is statistics provided regarding how many responses are from each census region and division, the data provided online does not report information by race by division. The reports vary somewhat from year to year. For example, the 2016 reports include specific reports for minority and women owned firms; and, the 2018 reports included one regarding disaster-affected firms. Overall, each year’s report documents that minority- and women-owned firms, and in particular, Black-owned firms, have less access to credit and pay more for credit than similarly situated white-owned firms. Data from four consecutive years documents the continuing challenge that minority-owned firms, and Black-owned firms in particular, face regarding access to, and cost of, credit. Summary information from reports for employer firms is provided below.²¹⁸

SBCS 2016

REPORT ON MINORITY-OWNED FIRMS

The 2016 SBCS, which was fielded in Q3 and Q4 2016, yielded 7,916 responses from employer firms with race/ethnicity information in 50 states and the District of Columbia.

- ◆ Black-owned firm application rates for new funding are 10 percentage points higher than White-owned firms, but their approval rates are 19 percentage points lower.
- ◆ 40% of Black-owned firms did not apply for financing because they were discouraged (i.e., they did not think they would be approved), compared with 14% of White-owned firms.

²¹⁸ Source: Small Business Credit Survey, Federal Reserve Banks.

- ◆ Looking at just firms that were approved for at least some financing, when comparing minority- and nonminority-owned firms with good credit scores, 40% of minority-owned firms received full amount sought compared to 68% of nonminority-owned firms.
- ◆ Black-owned firms report more credit availability challenges (58% vs. 32%) and difficulty obtaining funds for expansion (62% vs. 31%) than White-owned firms.

REPORT ON WOMEN-OWNED FIRMS

- ◆ Low credit risk women-owned firms were less likely to be approved for business loans than their low credit risk male counterparts (68% compared to 78%).
- ◆ Sixty-four percent of women-owned firms reported a funding gap, receiving only some or none of the financing sought, compared to 56% of men-owned firms.
- ◆ Fewer women-owned firms received all of the funding sought than men-owned firms and more women received none. Among low credit risk firms, 48% of women-owned firms received all of the financing requested, compared to 57% of men-owned firms.

SBCS 2017

REPORT ON EMPLOYER FIRMS

Fielded in Q3 and Q4 2017, the survey yielded 8,169 responses from small employer firms in the 50 states and the District of Columbia.

- ◆ Minority-owned firms report higher rates of financial challenges in the previous 12 months due to credit availability than white-owned firms. For firms with revenues less than \$1M, Black-owned firms (58%) are at almost twice the rate of white-owned firms (32%) (Asian 42%, Hispanic 45%). For firms with revenues at more than \$1M, we see the same ratio: Black-owned firms, 49% and White-owned firms, 24% (Asian 38%, Hispanic 34%).
- ◆ Rates of firms reporting receiving at least some of the financing requested: for Black-owned firms, 61%, and for White-owned firms 80% (Asian 73%, Hispanic 74%).
- ◆ For low credit risk firms, 85% of nonminority-owned firms received at least some of the financing requested compared with only 75% for similarly situated minority-owned firms.
- ◆ For low credit risk firms receiving full financing, 68% of nonminority owned firms were approved compared to only 40% of minority-owned firms.

SBCS 2018

REPORT ON EMPLOYER FIRMS

There were 8,072 responses received for this survey from firms throughout the United States.

- ◆ Minority-owned firms report higher rates of financial challenges in the prior 12 months due to credit availability than white-owned firms. Rates were: Black-owned firms, 50%; Asian, 33%; Hispanic, 41%; and White-owned firms, 28%.
- ◆ Rates of firms receiving at least some of the financing requested ranged from a high of 80% for White-owned firms to a low of 59% for Black-owned firms.

- ◆ Rates of firms receiving the full amount requested ranged from a high of 49% for White-owned firms to a low of 23% for Black-owned firms.
- ◆ 38% of black-owned firms did not apply for financing because they were discouraged (i.e., they did not think they would be approved), compared with 12% of white-owned firms.

SBCS 2019

REPORT ON MINORITY-OWNED FIRMS & REPORT ON EMPLOYER FIRMS

The annual survey of businesses was fielded in the third and fourth quarters of 2018 and generated 6,614 responses from employer firms.

- ◆ Minority-owned firms report higher rates of financial challenges in the prior 12 months due to credit availability than white-owned firms. Rates were: Black-owned firms, 51%; Asian, 36%; Hispanic, 40%; and White-owned firms, 30%.
- ◆ Rates of firms receiving at least some of the financing requested ranged from a high of 80% for White-owned firms to a low of 62% for Black-owned firms.
- ◆ Rates of firms receiving the full amount requested ranged from a high of 49% for White-owned firms to a low of 31% for Black-owned firms.
- ◆ 28% of black-owned firms did not apply for financing because they were discouraged (i.e., they did not think they would be approved), compared with 13% of white-owned firms.
- ◆ On average, Black- and Hispanic-owned firm applicants received approval for smaller shares of the financing they sought compared to White-owned small businesses that applied for financing.
- ◆ Larger shares of Black- and Hispanic-owned firm applicants did not receive any of the financing they applied for—38% and 33%, respectively—compared to 20% of White-owned business applicants.
- ◆ A larger share of White-owned business applicants received approval for all the financing they applied for: 49%, compared to 39% of Asian-, 35% of Hispanic-, and 31% of Black-owned firm applicants.

6.6 CONCLUSIONS

Analysis of the U.S. Census 2012 SBO data and the PUMS 2014-2018 data demonstrate, in response to the over-arching research question driving this analysis, that disparities do exist for M/WBE firms operating in the private sector within the City’s market area. Thus, based on guidance offered by the courts into this domain, the City may have a compelling interest to continue its current M/WBE program to avoid becoming a passive participant to discrimination.

To the more specific research questions:

- ◆ The permits analysis presented a summary of firm utilization by racial, ethnic and gender classification comparing M/WBE utilization for the City private sector construction projects with

commercial construction projects from October 1, 2013 through September 30, 2018. According to the findings from commercial construction projects, substantial M/WBE underutilization was evident in the private sector. When compared to findings from the commercial construction projects, M/WBE firms fared better on City projects.

- City M/WBEs accounted for 22.74 percent of the dollars of prime + subcontractor construction contracts, while M/WBEs accounted for 10.51 percent of the dollars of prime + subcontractor private sector construction permits.
- MBEs accounted for 10.86 percent of the dollars of prime + subcontractor construction contracts, while MBEs accounted for 7.63 percent of the dollars of private sector construction permits; and WBEs accounted for 11.88 percent of the dollars of construction contracts, while WBEs accounted for only 2.88 percent of the dollars of private sector construction permits.
- ◆ Findings from the U.S Census 2012 SBO data indicate that there are substantial disparities for most M/WBE firms across industry sectors resembling the procurement categories identified for this study.
- ◆ Findings from the 2014-2018 PUMS data indicate that:
 - M/WBE firms were significantly less likely than nonminority males to be self-employed.
 - Overall, nonminority male firms were over 2 times as likely as African Americans to be self-employed. The most egregious business category being Professional Services, where nonminority male firms were nearly 3 times as likely as African Americans to be self-employed.
 - If they were self-employed, M/WBE firms earned significantly less in 2014-2018 than did self-employed nonminority males.
 - Overall, Hispanic firms earned far less than their nonminority male counterparts; 57.6 percent less. The most egregious businesses category being Professional Services, where Hispanic American firms earned 58.4 percent less than nonminority male firms.

A review of access to credit indicates that minorities and women tend to receive less than the requested amount, when they are approved, than non-minority men; that they are approved for credit less often than non-minority males; and that credit costs them more than non-minority males. In light of these findings, credence may be given to the proposition established in *Crosby*, which suggested a government could be a passive participant in private sector discrimination if it did not act to counter these dynamics at least within the domain of its influence. This evidence stands alongside the disparities observed in public sector contracting to illustrate the substantial inequities that continue to exist in the City's marketplace, underscoring its compelling interest in continuing to pursue remedies to address these extant gaps.

CHAPTER 7. ANECDOTAL ANALYSIS

Availability and Disparity Study

City of Dallas, Texas



7.1 INTRODUCTION

This chapter examines anecdotal evidence of conditions and obstacles faced by M/WBE firms in the study market area in their experiences working with the City of Dallas (the City), the City's prime contractors, and the private sector. The collection and analysis of anecdotal data was focused on firms registered to do business with the City and helps to explain and provide context for the quantitative data analyses found in **Chapter 4, Market Area and Utilization Analyses** and **Chapter 5, Availability and Disparity Analyses**. In conjunction with the quantitative data, MGT also was able to draw inferences from the anecdotal data as to the prevalence of obstacles perceived as limiting the participation of M/WBEs and other firms in the City's procurement transactions.

CHAPTER SECTIONS



- 7.1. Introduction
- 7.2. Methodology
- 7.3. Demographics
- 7.4. Findings
- 7.5. Suggested Remedies from Anecdotal Participants
- 7.6. Stakeholder Interviews
- 7.7. Conclusions

Qualitative or anecdotal comments in this chapter detail the perceptions and opinions of individuals, and the evidentiary weight of these opinions depends on how much they are corroborated by statements of others and the quantitative data that has been compiled to substantiate these perceptions. Unlike conclusions derived from other types of analysis in this report, the conclusions derived from anecdotal analyses do not rely solely on quantitative data. Rather, the analysis in this chapter utilizes qualitative data to describe the context of the examined social, political, and economic environment in which all businesses and other relevant entities applicable to the study operate.

The collective anecdotal activities gathered input from over 625 business owners or representatives regarding their opinions and perceptions of their experiences working with the City, or on City projects as subcontractors.

7.2 METHODOLOGY

The blueprint for collecting and analyzing anecdotal information for this Study was provided by the U.S. Supreme Court in *City of Richmond v. J.A. Croson*, 488 U.S. 469, 109 S.Ct. 706 (1989) (*Croson*). In that case, the Court held that race-conscious programs must be supported by strong documentation of discrimination, including evidentiary findings that go beyond the demographics of a community. Anecdotal information can bolster the quantitative analyses of contract expenditures to explain whether minority business creation, growth, and retention are negatively affected by discrimination. In *Croson*, the Court held that anecdotal accounts of discrimination could help establish a compelling interest for a local government to institute a race-conscious remedy. Moreover, such information can provide a local entity with a firm basis for fashioning a program that is narrowly tailored to remedy identified forms of marketplace discrimination and other barriers to M/WBE participation in contract opportunities. Further discussion regarding the basis and motivation for collection and analysis of anecdotal data is contained in **Chapter 2, Legal Framework**.

MGT used a combination of surveys, community meetings, online comments, focus groups, and one-on-one interviews with businesses to collect anecdotal information that are analyzed to identify issues and concerns that were common to businesses in the market area. In addition to the anecdotal data collection from area businesses, MGT conducted focus groups with area trade associations, and business organizations to gather anecdotes on their perceptions on City's procurement process and impact of the M/WBE program to firms in the market area, both MWBEs and non-MWBEs. While the collection of these anecdotes is not required by the courts, input from advocacy and professional development organizations give a third-party perspective of M/WBE issues and broadens the collection of M/WBE firms experiences doing business or attempting to do business with the City of Dallas.

7.2.1 COMMUNITY OUTREACH

MGT developed a master vendor database of firms that incorporated data sets from the City's vendor and certification lists; membership lists provided by area trade associations and business organizations; and vendor and certification lists collected from other public agencies to establish a base for the outreach efforts. This database was created to ensure that a broad range of firms in the marketplace were notified about the qualitative data collection activities.

MGT worked with the City to create a community outreach plan that included various outreach methods geared to inform and encourage the business community's involvement and engagement for the anecdotal data collection activities. As such, MGT created a disparity study website that informed the community of the project objectives, work tasks, anecdotal activities, frequently asked questions, and general information about the study. The website allowed businesses to submit online comments directly to MGT about their experiences doing business or attempting to do business with the City, primes, and the private sector. Additional outreach methods included:

- ◆ MGT and the City identified area trade associations and business organizations, referred to as stakeholders for purposes of this report, whose insights would be valuable to understanding the dynamics and perceptions of the vendor community. The stakeholders were notified via e-mail blasts of anecdotal data collection activities and asked to encourage their members to participate.
- ◆ Email blasts to the business community to increase awareness and engagement.
- ◆ Printed and digital ads (included in various ethnic media publications).

7.2.2 SAMPLING

MGT's sampling methodology for the in-depth interviews, and business surveys was to randomly select firms from the study's master vendor database. Each sample pulled included M/WBE and non-M/WBE firms in each procurement category studied in this report. To avoid contacting business multiple times the database was cross referenced with previous extractions to ensure that firms did not participate in more than one anecdotal activity.

7.2.3 BUSINESS SURVEY

The business survey asked respondents to provide information on business ownership, demographics and structure; work bid or performed as prime contractors with the City; work bid or performed as subcontractors to City prime contractors; whether the respondent firm bid or performed work in the private sector; and any perceived barriers to doing business with the City or its primes that the respondents believed they had experienced during the study period. The survey was administered via telephone and online survey to a randomly selected list of firms.

Disparity study survey analyses are commonly plagued by sample size limitations, especially where the size of the minority business population is insufficient to permit a valid and representative sample. This problem is compounded when analyses are stratified further by business category. Insufficient sample size can pose problems for the statistical confidence of the results. MGT attempted to collect data in proportion to the distribution of M/WBEs and non-M/WBEs in the relevant market area. Although MGT's goal is to report data that can satisfy the 95 percent confidence level, this does not mean that data should not be reported because of slightly reduced confidence intervals, especially when extreme due diligence has been exercised in attempting to meet the 95 percent standard. For this reason, our conclusions from the responses received do not reflect a statistical finding for Native American firms in the anecdotal findings. The survey of vendors questionnaire is included in this report as **Appendix G, Business Survey Instrument**.

The data from the survey responses were analyzed to determine the types of firms represented in the findings included within this chapter. These survey demographics are included as **Appendix H, Demographics of Business Survey Respondents**.

7.2.4 COMMUNITY MEETINGS

Area businesses and stakeholders were invited to attend community meetings to learn about the study and provide their anecdotal input on doing business with the City and in the marketplace. Each community meeting began with a presentation outlining the study's objectives, work tasks, and methods by which anecdotal input can be received. Following the presentation, attendees who wanted to provide comments did so individually. In addition to in-person attendance, MGT provided virtual attendance via telephone and webinar that enabled virtual attendees to provide anecdotal comments.

Community meetings were held on:

- ◆ February 5, 2019 at the Dallas City Hall Council Chambers
- ◆ February 26, 2019 at the Bill J. Priest Economic Development Center

The community meetings were open to the public, therefore, firms that participated in the community meetings may have been randomly selected for other anecdotal activities.

7.2.5 IN-DEPTH INTERVIEWS

The in-depth interviews were one-on-one interviews with M/WBE and non-M/WBE business owners or representatives to gather information about the firms' experiences in attempting to do, and conducting, business with the City (both directly as a prime and/or as a subcontractor). During the interviews we

gathered demographic information such as the firm's primary line of business, ethnicity, gender, education/training background of the owner, business history, size and gross revenues during selected calendar and/or fiscal years, and information. The in-depth interviews were structured settings in which an interviewer or facilitator used an interview guide (**Appendix I**) to obtain input from participants. The interviews provided more latitude for additional information gathering on issues that are unique to the respondents' experiences than the community meetings or surveys. The interviewer made no attempt to prompt or guide responses from the participants, although follow-up questions were asked to obtain further clarification or information as necessary and appropriate. Before the interviews began, each participant attested that their responses were given freely and were true and accurate reflections of their experience with the City or its prime contractors.

7.2.6 STAKEHOLDER OUTREACH

Outreach to stakeholders (trade associations and business organizations) was beneficial to the outreach efforts because their assistance extended communication efforts to inform and engage the business community in anecdotal activities. Stakeholders were asked to provide their feedback on the M/WBE Program, and on procurement processes from the perspective of the objectives of the organization. In addition, stakeholders were asked to disseminate community meeting notices and encourage their members to participation in the anecdotal data collection activities.

Stakeholders were also asked to provide MGT with a copy of membership or vendor lists which were used to help build the master vendor outreach database. As an alternative to providing their membership or vendor lists, an online form was provided to allow individual members to submit their business information directly to the consultant team. The organizations and associations included in these efforts are identified in **Appendix J, List of Trade Associations and Business Organizations**.

7.2.7 ONLINE COMMENTS

All communications that were distributed to the community were also provided via the disparity study website. The option to provide written comments via the disparity study website allowed firms who were not selected for interviews, surveys, etc. the opportunity to provide their anecdotal comments. Comments were accepted until outreach efforts were concluded to ensure that firms were allowed time to submit their comments.

7.3 DEMOGRAPHICS

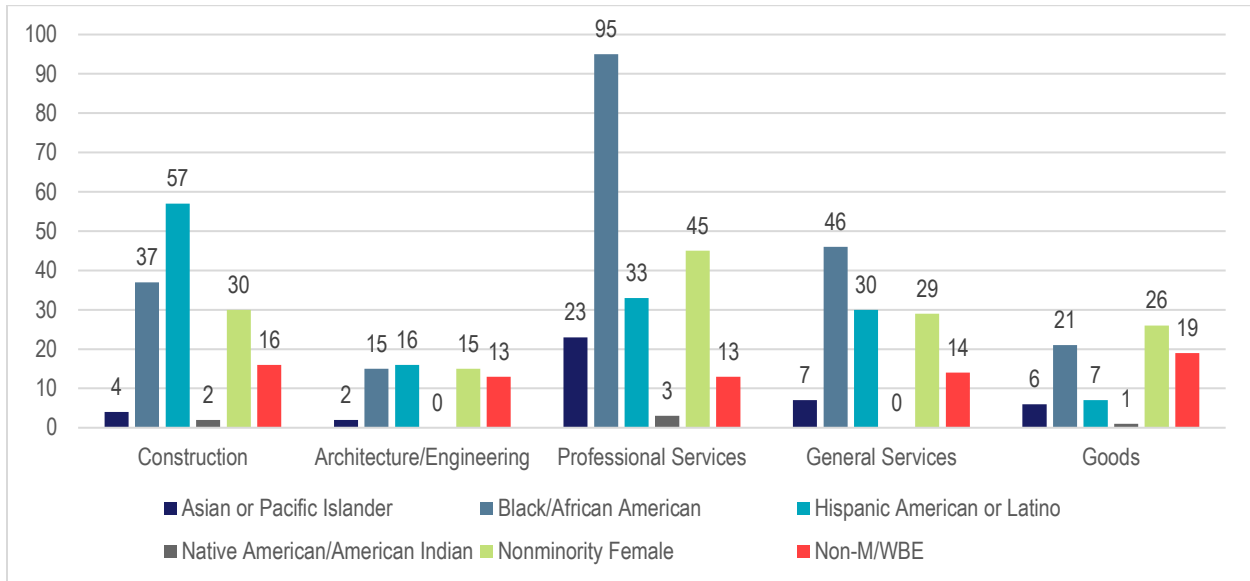
As mentioned, the use of a multi-pronged approach to collecting qualitative data provided a broader reach within the relevant market area. The self-reported demographic characteristics of anecdotal participants by data collection activity type are presented in the sections below.

COLLECTIVE ANECDOTAL DATA

This section provides demographic data of firms that participated in the various data collection activities such as the number of M/WBE firms and the industries the firms represent in comparison to non-M/WBE firms.

Figure 7-1 illustrates the overall participation of M/WBE and non-M/WBE firms in all qualitative collection activities. African American (34.2% of participants), Nonminority Women (23.2% of participants), and Hispanic American (22.9% of participants), respectively, represented the largest group of participants.

FIGURE 7-1.
CITY OF DALLAS
ANECDOTAL BUSINESS DEMOGRAPHICS
PROPORTION OF RESPONDENTS BY OWNERSHIP & INDUSTRY

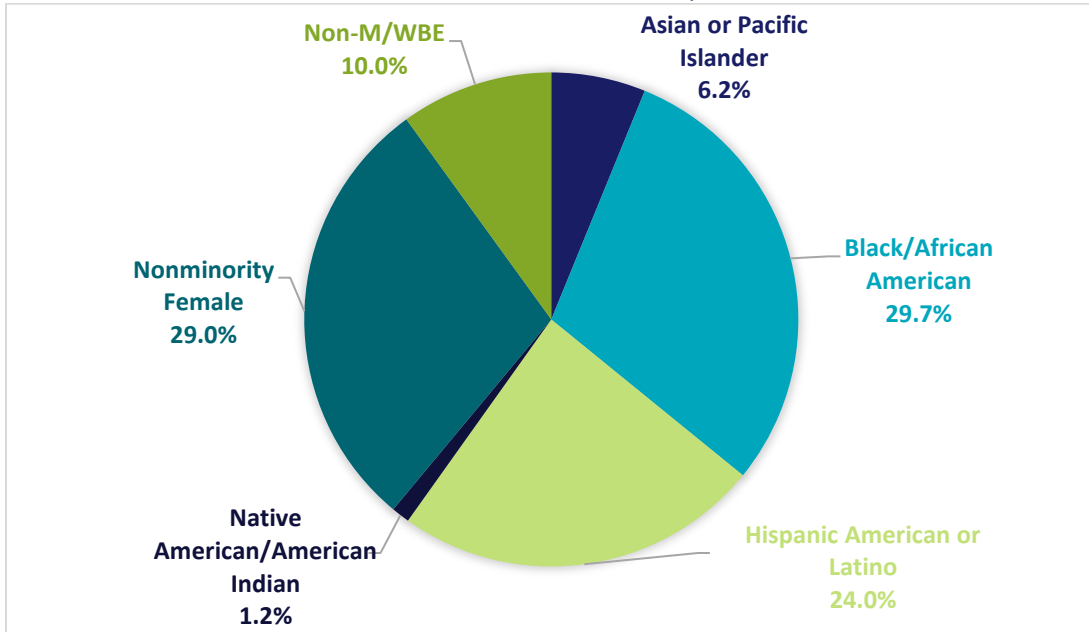


Source: Qualitative participants from community meetings, in-depth interviews, and business surveys.

7.3.1 BUSINESS SURVEYS

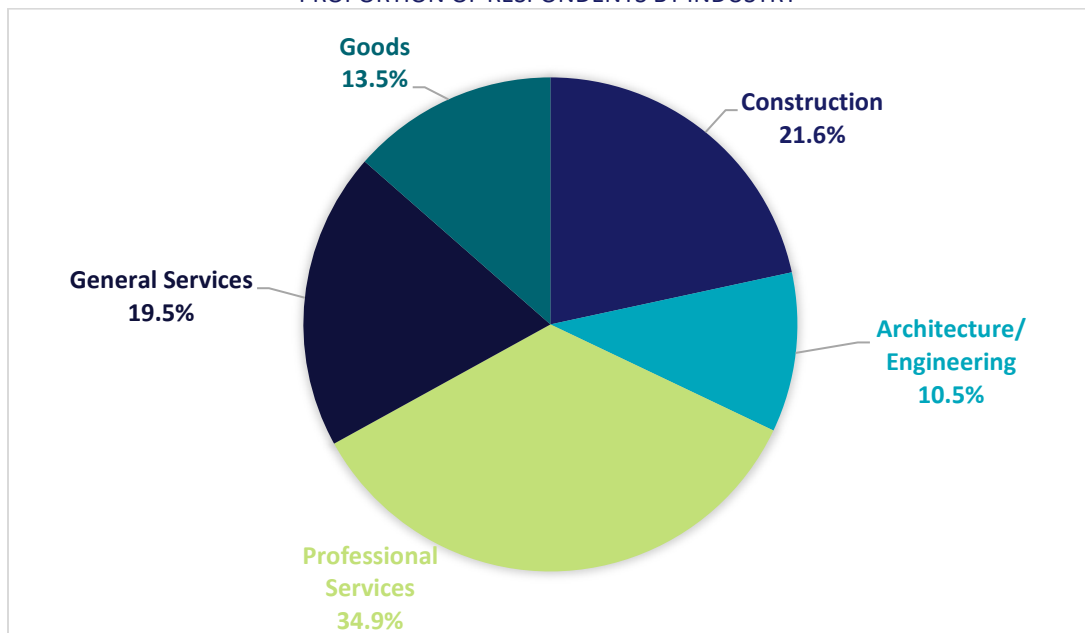
This survey collected 421 responses from firm owners and representatives in the City’s relevant market area. **Figure 7-2** provides the race, ethnicity, and gender of respondents. M/WBE firms accounted for 90 percent of the total respondents with African American firms at 29.7 percent of those that participated followed by Nonminority Female firms making up 29 percent, Hispanic Americans at 24 percent, Asian Americans at 6.2 percent, and Native Americans at 1.2 percent. In total, there were 379 M/WBE respondents. **Figure 7-3** shows response rates per business category.

FIGURE 7-2.
SURVEY OF VENDORS DEMOGRAPHICS:
PROPORTION OF RESPONDENTS BY M/WBE CLASS



Source: Business Surveys, Rincon & Associates 2020.

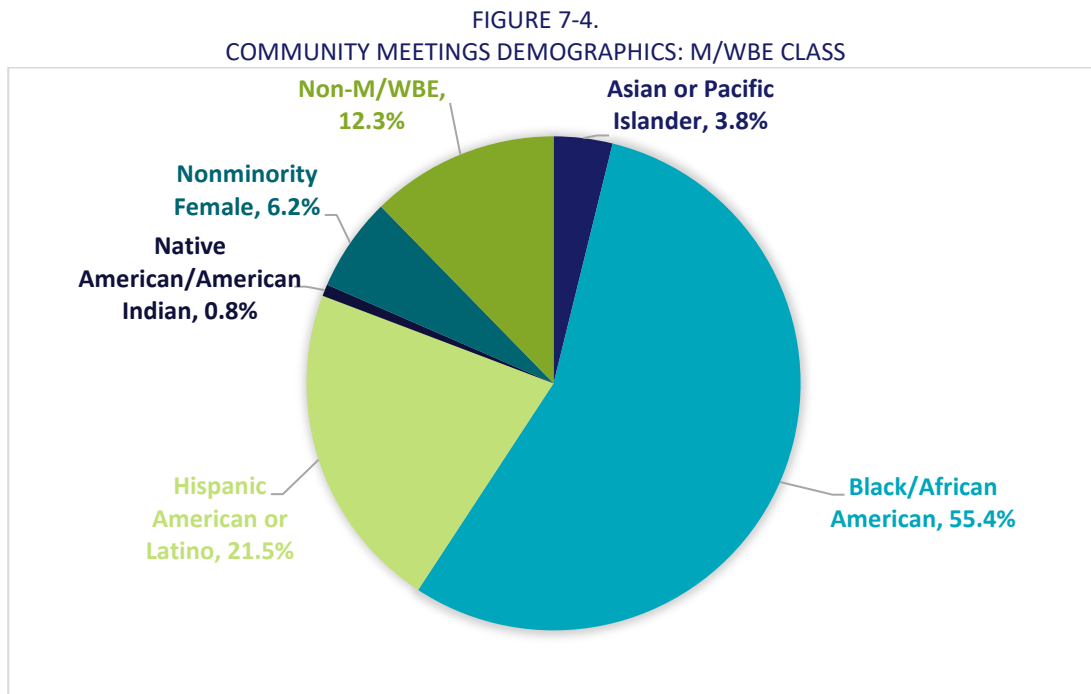
FIGURE 7-3.
SURVEY OF VENDORS DEMOGRAPHICS:
PROPORTION OF RESPONDENTS BY INDUSTRY



Source: Business Surveys, Rincon & Associates 2020.

7.3.2 COMMUNITY MEETINGS

MGT held two community meetings attended by 130 business owners and representatives representing varying industries, including construction, supplies, engineering, educational consulting, and environmental consulting. Official testimonies were received and recorded from 29 attendees. The racial, ethnic and gender compositions of the all attendees are provided in **Figure 7-4**.



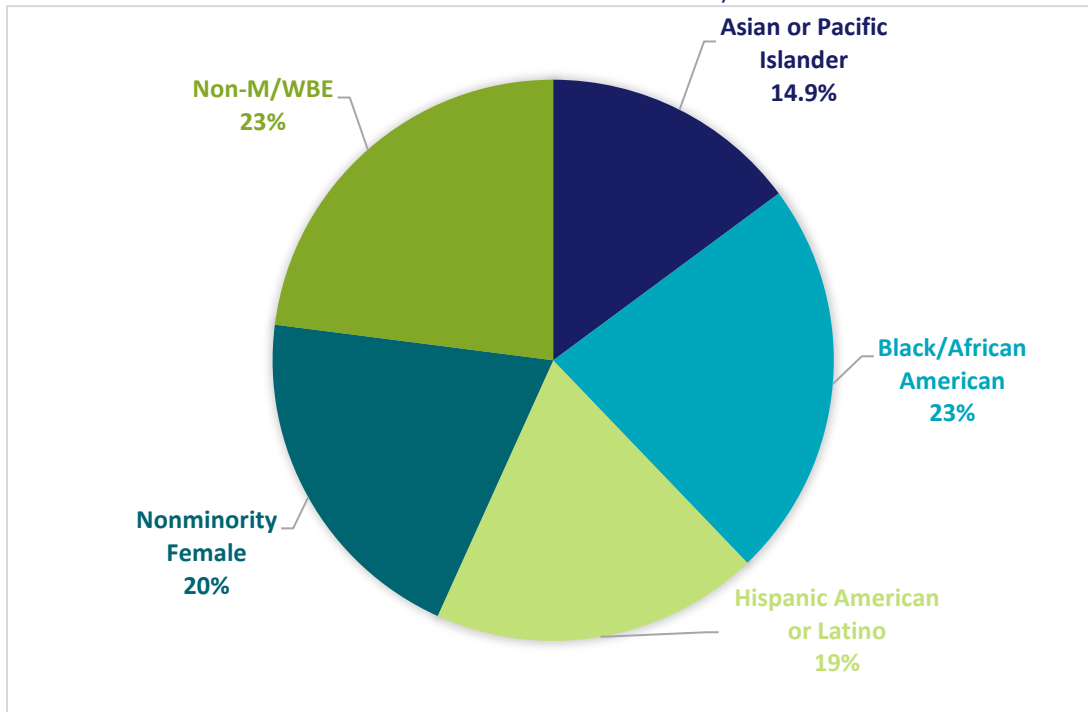
Source: Attendance rosters from February 5 and 26, 2019 community meetings.

7.3.3 IN-DEPTH FIRM INTERVIEWS

The in-depth interviews were conducted with randomly selected firms extracted from the master vendor database and located in the City’s relevant market area.²¹⁹ MGT cross referenced the list of firms for the interviews to ensure they were not previously selected for other anecdotal activities. In total, 75 firms were interviewed. The racial and ethnic composition of the firms that completed an interview are illustrated in **Figure 7-5**. There were no Native American firms interviewed for the study.

²¹⁹ See Chapter 4, Market Area and Utilization Analyses.

FIGURE 7-5.
IN-DEPTH INTERVIEW DEMOGRAPHICS: M/WBE CLASS



Source: In-depth interviews.
Note: There were no Native American firms interviewed.

7.3.4 ONLINE COMMENTS

Submission of online comments was available via the disparity study website to firms to provide their comments regarding their experiences doing business with the City, its primes, or in the private marketplace. Any comments received via the disparity study website were reviewed for study inclusion.

7.4 FINDINGS

The findings below reflect the opinions and perceptions of anecdotal participants characterized in the preceding demographic summary. As such, the themes are drawn from a very broad base of participants reflecting a comprehensive array of viewpoints and experiences regarding work with the City or its primes.

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

7.4.1 PROCUREMENT PROCESS ISSUES AND CHALLENGES OF M/WBES

Procurement process issues and challenges are frequent issues of concern among vendors in the relevant market. The fair and equal opportunity to bid or propose on City contracts is critical to the growth and success of all firms, and particularly those of disadvantaged social or economic circumstances, such as M/WBES.

Included below is a sampling of comments from participants reflecting specific instances of these barriers:

- ♦ An African American owner of an information technology firm stated that notifications of winners should be made public. They went on to state that at a minimum the firms that were not selected should be notified.
- ♦ An African American owned professional services firm stated that there needs to be full transparency on opportunities available and notification of awardees.
- ♦ A Nonminority Female architect stated that post-award debriefings are needed. She stated that she submitted responses to request for qualification and was not informed of the results.
- ♦ A Hispanic American construction contractor stated that the City rejected their bid without notifying the firm of the reason.
- ♦ A Nonminority Male owner of a professional training firm stated that they completed multiple prequalification applications but were never notified whether they were qualified or not. He continued by stating that he contacted the requesting department several times but never received a call back.
- ♦ A Hispanic American specialty trade contracting firm owner stated that the City uses the same firms.
- ♦ A Nonminority Female owner of a general services firm stated it's difficult to participate on request for proposals when the same firms are used over and over.
- ♦ An African American general services firm owner stated that contracts are too large for small to medium sized firms. They also stated that the time restrictions of when solicitations are made public and the due date are too short, thereby, placing time constraints on firms with fewer employees.
- ♦ A Nonminority Male construction owner stated that the City needs to provide more time to submit bids. Extend the time from announcing to submission. He continued by stating that, "too often the window is just too short to give companies time to get pricing together to submit".
- ♦ A Nonminority Male owner of an architect firm stated that the City's contracts "are tailored towards large firms." He went on to state that as a small business he does not have the personnel to commit to the City to be on-call and exclusive to the City.
- ♦ A Hispanic American supplier stated that the City favors large businesses and incumbents. The owner also stated, "[City] does not take action to bring in new or small companies."

7.4.2 M/WBE BUSINESS DIVERSITY PROGRAM

The Office of Business Diversity provides support, policy guidelines, compliance, and oversight to ensure minority- and women-owned business have a fair opportunity to compete on City contracts.

Included below is a sampling of comments from participants reflecting specific instances of barriers:

- ◆ An African American architectural firm owner stated that the city is not aggressive enough, not serious enough to make sure they engage the people enough, but also have good faith effort so they don't really care.
- ◆ An African American specialty trade contractor stated that the Business Diversity Program has no true enforcement when firms violate the policy or do not following the program guidelines.
- ◆ A Nonminority Female environmental services firm owner stated that the City should provide specific training on how to bid on contracts.
- ◆ An Asian American owner of an engineering firm stated that the Program staff needs to be involved in scope development to provide input on separating scopes of work into smaller packages/bids.
- ◆ A Nonminority Male owner of an architecture firm stated that the Program treats M/WBEs and SBEs as a means to satisfy a requirement and not to help businesses grow.
- ◆ A Nonminority Male owned construction company representative stated that there is no “qualified” database of M/WBE firms. They continued by stating that a “generic” list of all construction firms does not meet the program’s objective and is used to just check the box on good faith efforts.
- ◆ An Asian American owner of a services firm stated that the City certifies affiliate firms of larger non-M/WBEs which essentially means the non-M/WBE firm is getting the contract.

7.4.3 FINANCIAL BARRIERS

Limited access to capital and inconsistent cash flow impacts M/WBE and small firms’ ability to successfully complete projects, apply for and receive bonds, hire employees, and operate their businesses. Similarly, cash flow becomes a barrier for M/WBE firms, particularly smaller M/WBE firms, because it limits the amount of work they can bid.

Included below is a sampling of comments on this barrier.

- ◆ A Nonminority Male owner of a small construction firm stated that the cost of insurance and bonds are very expensive and smaller firms cannot compete against large firms with more capital.
- ◆ An African American construction business owner stated that payment from the City takes too long which impacts his cash flow to pay for materials, supplies, and employees.
- ◆ An African American owner of a construction firm states that 60-90 days to wait for payment is too long.

- ◆ A Hispanic American construction firm owner states that access to capital is a barrier because you must pay for services up front.
- ◆ A Hispanic American services firm owner stated that the insurance requirements are “one-size fits all” which is excessive for most work and cannot be negotiated.
- ◆ A Nonminority Male construction contractor stated that his firm must carry the cost of materials for a project then the City delays payments and that effects his firm’s ability to finance the purchase of the materials.
- ◆ A Nonminority Female specialty trade contractor stated that capital financing limits their ability to compete on larger projects.

7.4.4 PRIME CONTRACTING BEHAVIOR

Subcontracting offers M/WBE firms a way to grow their businesses. Primes that treat M/WBEs unfairly or deny the opportunity to bid on contracts impacts the local economy but also potentially negatively impacts the growth of M/WBEs in the marketplace. Specific issues and challenges noted in this area include:

- ◆ An African American professional services firm owner stated that primes do the “bait and switch” when they win a contract.
- ◆ A Nonminority Female owner of a general services firm stated that primes use the same firms over and over so it’s difficult to “break in the loop.”
- ◆ A Hispanic American owner of an architectural firm stated that primes change the scope to keep more work for them and reduces the scope for M/WBEs.
- ◆ An Asian American supplier stated that there needs to be transparency when the primes are paid.
- ◆ An African American specialty contractor stated that there is a good ole’ boy network and they will expect minority firms to work at a substantially discounted price which doesn’t allow minority firms to make money.
- ◆ An Asian American service firm owner stated that if there is no M/WBE requirement on contracts the primes will not call you.

7.4.5 DISCRIMINATION AND DISPARATE TREATMENT

Included below (**Table 7-1**) is a summary of survey of vendors responses by firms as to whether they encountered disparate treatment or discrimination working with the City, or with the City’s primes. Proportions of M/WBEs indicating such experiences were as follows:

- ◆ The number of respondents that indicated they work as a prime was 285. M/WBE firms working as primes that claimed to have experienced discrimination or disparate treatment working with the City – 5.3 percent.

- ♦ The number of respondents that indicated they work as a subcontractor or subconsultant was 109. M/WBE firms working as subcontractors that indicated discrimination or disparate treatment working with the City’s primes –7.3 percent.

TABLE 7-1.
DISCRIMINATION EXPERIENCES IDENTIFIED BY SURVEY OF VENDORS RESPONDENTS

	By City	By Primes
M/WBE (Prime)	5.3%	
Non-M/WBE (Prime)	2.5%	
M/WBE (Subcontractor)		7.3%
Non-M/WBE (Subcontractor)		0.0%

In **Table 7-2**, M/WBE survey respondents further elaborated on how they experienced various forms of disparate treatment by primes as subcontractors.

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

TABLE 7-2.
DISPARATE TREATMENT IDENTIFIED BY SUBCONTRACTORS

	African American	Asian American	Hispanic American	Native American	Nonminority Female
Harassment	0.00%	0.00%	0.99%	0.00%	0.99%
Unequal or unfair treatment	7.92%	0.00%	3.96%	0.99%	2.97%
Bid shopping or bid manipulation	9.90%	0.99%	5.94%	1.98%	6.93%
Double standards in performance	5.94%	0.99%	3.96%	0.00%	1.98%
Denial of opportunity to bid	2.97%	0.99%	0.99%	1.98%	0.99%
Unfair denial of contract award	4.95%	0.99%	0.99%	0.00%	1.98%
Unfair termination	1.98%	0.00%	0.99%	0.00%	0.00%
Unequal price quotes from suppliers	3.96%	0.99%	4.95%	0.00%	3.96%

Source: 2020 Business Surveys, Rincon & Associates.

7.4.6 BARRIERS TO DOING BUSINESS

Survey respondents that indicated that they were subcontractors or suppliers were asked how often prime contractors/vendors solicited their firm to bid on projects where there were M/WBE goals compared to those projects without M/WBE goals. The survey sought to determine if prime behavior was the same when projects applied M/WBE goals versus projects without goals. Of the M/WBE subcontractors, 44.6 percent responded they are “very often” or “sometimes” solicited to bid on projects without goals. 37.6 % of the M/WBE subcontractors that responded stated that they were “seldom” or “never” solicited to bid on projects without goals.

The top three barriers for all anecdotal participants were:

- ◆ Competing with large companies - 50.66%
- ◆ Short or limited time given to prepare bid package or quote - 29.82%
- ◆ Slow payment or non-payment - 26.65%

M/WBE primes had a unique set of barriers doing business with the City which are:

- ◆ Selection process/evaluation criteria - 39.76%
- ◆ Unnecessarily restrictive contract specs - 36.55%

7.5 SUGGESTED REMEDIES FROM ANECDOTAL PARTICIPANTS

All anecdotal data collection included the opportunity for participants to express their ideas and recommendations for improving the procurement process, M/WBE Program, or to increase M/WBE participation. A few recurring ideas and/or suggested remedies provided by participants are:

- ◆ Results of bids and proposals need to be publicly released.
- ◆ Hold firms accountable to meet M/WBE goals and enforce compliance of the program for all bidders/proposers.
- ◆ Create a broader awareness of contracting opportunities for primes and subcontractors by conducting meetings of upcoming projects on a regular basis.
- ◆ Establish a vendor/subcontractor rotation process to broaden the pool of firms working on City contracts and projects.
- ◆ Offer meaningful and specific business development workshops targeted to problem areas M/WBEs face in attempting to obtain work with the City.
- ◆ Enact a program with metrics – who is and who is not achieving goals, how many M/WBE firms win direct contracts with the City, contract evaluations of primes and subcontracts at the end of a contract.
- ◆ Implement better tracking of data.
- ◆ Stronger policy and program enforcement.

7.6 STAKEHOLDER INTERVIEWS

Stakeholders were identified as area trade associations and business organizations that have a stake in the development and growth of area businesses, including minority- and women-owned businesses. MGT invited stakeholders to participate in focus groups. The stakeholder organizations that participated in the focus groups provide capacity building, advocacy, and technical and/or business development to their members, many of which are M/WBE firms. The common themes expressed by stakeholders included a

need for (1) a proactive engagement with City and stakeholders to support mutual objectives; (2) feedback from the City to firms that were not awarded contracts; and (3) stricter enforcement and accountability of primes or bidders that violate the M/WBE policy.

7.7 CONCLUSIONS

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

CHAPTER 8. PEER AGENCY REVIEW

Availability and Disparity Study

City of Dallas, Texas



8.1 INTRODUCTION

MGT Consulting Group conducted a peer review of relevant minority, women, disadvantaged, and small business programs established by similar sized cities throughout Texas. The peer review does not evaluate the effectiveness of the programs. Instead, the purpose of the peer review is to gain insight into program components and operations compared to the City of Dallas, and possible options that the City may consider for adoption and implementation. Therefore, the review included identifying selected practices, processes, and regulations of Minority, Women and Small Business Enterprise Programs.

CHAPTER SECTIONS



- 8.1. Introduction
- 8.2. City of Fort Worth, TX
- 8.3. City of Houston, TX
- 8.4. City of Austin, TX
- 8.5. City of Arlington, TX
- 8.6. City of San Antonio, TX
- 8.7. Conclusion

The programs that were reviewed included the following:

1. City of Fort Worth, TX
2. City of Houston, TX
3. City of Austin, TX
4. City of Arlington, TX
5. City of San Antonio, TX

MGT reached out via phone and email to all cities but did not speak directly with the City of Austin. The City of Austin review is based on available online documentation.

The peer review included the following program elements:

1. Certification criteria to determine eligibility;
2. Project specific or annual M/WBE goals established;
3. Program changes due to disparity studies;
4. Policies or procedures to increase M/WBE prime and subcontractor utilization; and
5. Outreach, Technical Assistance and Other Program Components.

8.2 CITY OF FORT WORTH, TX

The City of Fort Worth Office of Business Diversity has had an M/WBE program for over 25 years and in 2012 the City Council approved a new Business Diversity Enterprise (BDE) ordinance. The agency administers MBE, MBE-African American (MBE-AA), SBE, M/WBE, and DBE programs. The Office of Business Diversity reports to the Economic Development Department and is separate from the Purchasing Division, which reports to the Financial Management Services Department.

8.2.1 CERTIFICATION CRITERIA

The Office of Business Diversity does not certify businesses but does accept MBE, WBE, SBE, and DBE certifications from the following agencies:

- ◆ North Central Texas Regional Certification Agency (NCTRCA),
- ◆ Dallas/Fort Worth Minority Supplier Development Council (DFWMSDC),
- ◆ Women’s Business Council- Southwest, and
- ◆ Texas Department of Transportation (TxDOT).

MBEs, WBEs, and SBEs must be located in the six-county area of Tarrant, Dallas, Denton, Johnson, Parker, and Wise.

8.2.2 PROJECT AND/OR ANNUAL GOALS

The City of Fort Worth has both project specific goals and overall aspirational goals. Project specific goals for MBE, MBE-AA, M/WBE, SBE, and DBE subcontracting participation or participation through the MBE Joint Venture program applies for project total dollar amounts of \$50,000.01 or more.

Industry aspirational goals apply for projects over \$50,000 when there are two or more firms available for the specific supplies or service. The industry specific goals and race specific subcontracting opportunities include:

- ◆ Construction Services
 - Goal: 25%
 - Subcontracting opportunities available for African American, Asian-American Hispanic-American and Native-American businesses
- ◆ Professional Services
 - Goal: 15%
 - Subcontracting opportunities available for African American businesses only
- ◆ Architectural & Engineering Services
 - Goal: 15%
 - Subcontracting opportunities available for SBEs
- ◆ Goods & Non-Professional Services
 - Goal: 25%
 - Subcontracting opportunities available for M/WBEs

The City does have good faith efforts and requires primes to submit a good faith effort form at bid if subcontractor utilization is less than the stated goal.

8.2.3 PROGRAM CHANGES DUE TO DISPARITY STUDIES

The City of Fort Worth contracted with Mason Tillman Associates, Ltd. in 2010 to conduct a disparity study. The City removed WBEs from Construction in response to the findings in the disparity study. The aspirational goal of 25% in Construction only applies to MBEs. African American minority-owned

businesses were the only group for which a disparity was found in Professional Services, which resulted in aspirational goals of 15%. An SBE goal of 15% in Architecture & Engineering was assigned in response to findings in the disparity study.

8.2.4 POLICIES AND PROCEDURES TO INCREASE M/WBE UTILIZATION

In an effort to increase M/WBE prime utilization, the Office of Business Diversity encourages prequalification requirements. In some cases, the City waives bid bond requirements, performance/payment bond requirements, and breaks down the scope of work to reduce competing with large companies. The City assists primes in identifying firms that can help primes to meet M/WBE goals. The Office of Business Diversity reviews proposal or bid specifications and ensures sufficient time is given to prepare bid responses.

The Office of Business Diversity also administers a M/WBE Prime Program and a Joint Venture Program. The M/WBE Prime program is used in cases where construction projects do not exceed \$100,000 and architectural and engineering or other professional services do not exceed \$150,000. With the M/WBE Prime program, primes cannot subcontract more than 49% of the work to non-M/WBEs. The M/WBE Prime Program allows for allocations up to 20% of weighted selection criteria for M/WBEs on bids. With the Joint Venture Program, a jointly owned business enterprise ownership percentage will be counted towards the M/WBE subcontracting goal. The joint venture must share the initial investment, risks, and profits, and one of the businesses must be a certified M/WBE firm. In the bid document, the joint venture must show that the M/WBE firm has a defined portion of work to be performed, which is equal to the share in ownership, control, knowledge, management, responsibility, risks, and profits of the joint venture. The joint venture agreement establishes a new company created for a specific project and is subject to review and acceptance by the City.

The Office of Business Diversity attempts to increase M/WBE subcontractor utilization through a variety of best practices. The Office of Business Diversity ensures that subcontractors are given sufficient time to prepare bid responses or quotes. The City breaks down scopes of work to reduce competing with large companies. Prompt payment to subcontractors is required.

8.2.5 OUTREACH, TECHNICAL ASSISTANCE, AND OTHER PROGRAM COMPONENTS

The Office of Business Diversity also hosts workshops and events for M/WBE subcontractors. The following are the currently offered workshops and events:

- ◆ Quarterly Certification Workshops
- ◆ RFQ, RFP, ITB & Best Value Solicitation Workshops
- ◆ Bi-Monthly Vendor Information Forums

8.3 CITY OF HOUSTON, TX

The City of Houston Office of Business Opportunity (OBO) operates and manages Houston’s M/WBE, SBE, Persons with Disabilities Business Enterprises (PDBE), and DBE programs. The Office of Business Opportunity reports directly to the mayor and is separate from Procurement, which reports to the Finance Department.

The OBO is responsible for managing certifications, community outreach, and collaborating with other business service organizations.

8.3.1 CERTIFICATION CRITERIA

The OBO is responsible for certifying targeted businesses for participation on City projects with targeted business goals.

- ◆ Small Business Enterprise (SBE) – an independent business that meets the Small Business Administration Size Standard(s) for its industry classification.
- ◆ Minority Business Enterprise (MBE) - an independent business 51% or more owned and controlled by racial/ethnic affirmative action group members.
- ◆ Woman Business Enterprise (WBE) - an independent business 51% or more owned and controlled by women.
- ◆ Disadvantaged Business Enterprise (DBE) - an independent business 51% or more owned and controlled by socially and economically disadvantaged individuals. Applicants must have a personal net worth less than \$1,320,000, excluding value of home and ownership interest in the business.
- ◆ Persons with Disabilities Business Enterprise (PDBE)- an independent business 51% or more owned and controlled by persons with a disability. PDBE applicants are required to submit a Disability Affidavit and an accompanying letter from a State of Texas certified medical doctor. Disabled veterans must provide documentation from the Department of Veterans Affairs or the Department of Defense.
- ◆ SBEs, M/WBEs, and PDBEs must have at least one or more staff located in Harris County, Austin County, Brazoria County, Chambers County, Fort Bend County, Galveston County, Liberty County, Montgomery County, San Jacinto County, or Waller County. DBEs are not required to have a local presence.
- ◆ SBEs, M/WBEs and PDBEs do not have a personal net worth amount requirement.

8.3.2 PROJECT AND/OR ANNUAL GOALS

The City of Houston has citywide goals, which departments should achieve collectively. Due to *Kossmann Contracting Co., Inc. v. City of Houston*, there are categorical goals for construction contracts when there is a high frequency of the same type of project. It is the official policy of the City of Houston that as an overall goal, thirty-four percent (34%) of the construction project funds be expended with certified small

business enterprises (SBE). Good Faith Efforts are required if a goal is not met, by policy at pre-award and are evaluated after awarding the project.

8.3.3 PROGRAM CHANGES DUE TO DISPARITY STUDIES

The City of Houston M/WBE program that was established in 1984 had no major changes until litigation in 2009 (*Kossmann Contracting Co., Inc. v. City of Houston*). As a result of litigation, WBEs were replaced by SBEs in the M/WBE program and the City created a 22% M/SBE construction goal until a comprehensive construction disparity study was completed. From that disparity study in 2012 conducted by NERA, new aspirational goals were established as well as revisions to contract specific goals. Contract specific goals require both MBE and WBE goals or SBE participation up to 4%. The Office of Business Opportunity works with City of Houston departments to set contract specific goals. The 2012 disparity study also resulted in operational changes to the Office of Business Opportunity, expanded the Office's functions and revised policies and procedures.

8.3.4 POLICIES AND PROCEDURES TO INCREASE M/WBE UTILIZATION

In an effort to increase M/WBE prime utilization, the City of Houston ensures sufficient time is given to prepare bid responses or quotes. Houston breaks down scopes of work to reduce competing with large companies. The City also assists primes to identify firms that can meet goals. To increase M/WBE subcontractor utilization, Houston requires that primes to pay subcontractors promptly and sets contract specific goals.

8.3.5 OUTREACH, TECHNICAL ASSISTANCE, AND OTHER PROGRAM COMPONENTS

Outreach and technical assistance functions reside with OBO. The City offers vendors online resources, e.g., M/WBE, SBE, and DBE directories, downloadable forms, a fully online certification process, and recorded seminars. Online resources are available in multiple languages. The OBO Solutions Center provides no cost services to business owners that include:

- ◆ Experienced on-site staff members available to provide information on permits, licenses, and fee schedules
- ◆ Business counseling with SCORE Business Advisors
- ◆ MWSBE certification information
- ◆ Other resources and business planning materials

8.4 CITY OF AUSTIN, TX

The City of Austin Small & Minority Business Resources (SMBR) Department operates and manages Austin's M/WBE and DBE programs. SMBR is a department within the Economic & Affordability Department. SMBR oversees nine divisions or roles in the department:

- ◆ Bonding for Construction Projects
- ◆ Certification
- ◆ Certification for Small Business Enterprises (SBE)- Small Business Construction Program
- ◆ Contract Compliance
- ◆ Disadvantaged Business Enterprise
- ◆ Disadvantaged Business Enterprise Plan- Part 26
- ◆ Outreach
- ◆ Service Provider Outreach
- ◆ SMBR Plans Room

The M/WBE and DBE programs were created in 1987 and new rules were adopted in March of 2019. SMBR evaluates compliance plans to ensure M/WBEs are certified in the scope of work listed by the bidder.

8.4.1 CERTIFICATION CRITERIA

SMBR certifies SBEs, MBEs, WBEs, DBEs, and ACDBEs.

- ◆ MBE and WBE certification applies to projects that are funded by the City of Austin. MBE, WBE eligibility:
 - Fifty-one percent (51%) owned, managed, and controlled by an economically and socially disadvantaged individual (Asian American, African American, Native American, Hispanic, or a Woman)
 - Small Business as defined by the Small Business Administration
 - Applicants personal net worth must not exceed \$1,540,000
 - Applicants must have a facility in the state of Texas.
- ◆ DBE certification applies for federally funded aviation, transportation, and highway projects. ACBDE certification is for firms that provide support or concessions in or around a federally funded airport. DBE and ACDBE eligibility:
 - Fifty-one percent (51%) owned, managed, and controlled by an economically and socially disadvantaged individual.
 - Small Business as defined by the Small Business Administration
 - Applicants must have a personal net worth less than \$1,320,000.

SMBR also certifies SBEs for the Small Business Construction Program (SBCP). The program is a race- and gender-neutral construction and construction-related project program for projects with an estimated budget of less than \$50,000.

8.4.2 PROJECT AND/OR ANNUAL GOALS

The City of Austin sets contract specific procurement goals on City contracts above the City Manager's spending authority. Goals will depend on the type of contract, M/WBE availability, and other factors. Goals are either aggregate or can be race-conscious. **Exhibit 8-1** shows the current annual overall participation goals.

EXHIBIT 8-1.
CITY OF AUSTIN, TX CURRENT PARTICIPATION GOALS

Race/Ethnicity Group	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)
African American	1.70	1.90	2.50	0.30
Hispanic American	9.70	9.00	9.90	2.50
Native/Asian American	2.30	4.90	1.70	0.70
MBE	13.70	15.80	14.10	3.50
WBE	13.80	15.80	15.00	6.20

8.4.3 PROGRAM CHANGES DUE TO DISPARITY STUDIES

In 2014, the City of Austin contracted with NERA to conduct a disparity study and findings and recommendations were released in 2016. The disparity study found that projects without M/WBE goals had an average of 17% participation, but projects with goals saw an average participation rate of 31%. It was recommended that the M/WBE ordinance be tailored to specific types of procurement, certification eligibility be revised, and contract award policies and procedures be revised.

8.4.4 POLICIES AND PROCEDURES TO INCREASE M/WBE UTILIZATION

In an effort to increase M/WBE utilization, the City of Austin monitors M/WBE participation throughout a project. The Compliance division is responsible for setting project goals, validating Compliance Plan information, assessing compliance via project site visits, and facilitates performance or payment issues. The City also has a Joint Venture program to encourage M/WBE utilization on City of Austin projects. In the most recent disparity study, it was recommended that the City continue to work on breaking down scopes of work and standardize Good Faith Efforts requirements and policies.

8.4.5 OUTREACH, TECHNICAL ASSISTANCE, AND OTHER PROGRAM COMPONENTS

The City has employed various efforts to increase outreach and technical assistance for M/WBEs. SMBR employs a Bonding Financial Consultant to assist business owners with bonding needs. SMBR provides electronic and hardcopy access of plans and drawings via the Plan Room program. The City provides training on their online Plan Room access.

SMBR provides assistance and outreach via monthly workshops and provides links to a variety of online resources. SMBR contracted with the Asian Contractors Association, Austin Area Black Contractors Association, Inc., and the U.S. Hispanic Contractors Association de Austin to help increase outreach

efforts, the number of certified firms, and the number of certified firms doing business with the City of Austin. There is also an online list of small business resources and minority chambers that are able to provide information and support for business owners. SMBR also publishes a quarterly newsletter.

8.5 CITY OF ARLINGTON, TX

The City of Arlington's Bidding & Procurement Department administers and ensures compliance of the Local and MWBE Policy through the MWBE Coordinator. The MWBE Coordinator is responsible for encouraging joint ventures, partnering, mentor-protégé, and teaming arrangements that increase local and M/WBE participation.

8.5.1 CERTIFICATION CRITERIA

The City of Arlington does not certify businesses as M/WBE. The City accepts certifications from the following:

- ◆ North Central Texas Regional Certification Agency (NCTRCA)
- ◆ State of Texas Historically Underutilized Business (HUB)
- ◆ Texas Department of Transportation (TxDOT)
- ◆ Dallas-Fort Worth Minority Supplier Development Council (DFWMSDC)
- ◆ Woman's Business Council Southwest

8.5.2 PROJECT AND/OR ANNUAL GOALS

Arlington has set annual M/WBE goals. For construction and professional services, there is a M/WBE participation good-faith effort goal of 25% but is not a mandatory goal. Certification is required for M/WBE participation to be counted toward the City's goal.

8.5.3 PROGRAM CHANGES DUE TO DISPARITY STUDIES

Arlington underwent an Availability and Disparity Study as a part of the North Central Texas Council of Governments in 2008. Results were published by Mason Tillman Associates, Ltd. in 2010. Various pre-award policies and best practices recommendations included:

- ◆ Reduce project scope to reduce competing with large companies
- ◆ Develop mentor/protégé program
- ◆ Create a direct purchase program for construction contracts
- ◆ Create an online plan room
- ◆ Utilize relationships with lending institutions
- ◆ Remove brand name requirements in solicitations

- ◆ Reevaluate bonding requirements
- ◆ Require prompt payment to subcontractors
- ◆ Increase outreach and marketing to HUBs

8.5.4 POLICIES AND PROCEDURES TO INCREASE M/WBE UTILIZATION

The M/WBE Coordinator is required to work with City staff to identify subcontracting opportunities prior to solicitation and to attend pre-bid conferences to increase awareness of the City's Local and M/WBE Policy.

8.5.5 OUTREACH, TECHNICAL ASSISTANCE, AND OTHER PROGRAM COMPONENTS

The City's online Supplier Portal provides a directory of local and M/WBE businesses for City departments and businesses seeking prime or subcontracting opportunities. The M/WBE Coordinator is charged with promoting partnerships with local businesses and chambers to increase awareness of and support for the M/WBE program.

8.6 CITY OF SAN ANTONIO, TX

The City of San Antonio's Small Business Office operates the Small Business Economic Development Advocacy Program (SBEDA). The Small Business Office is responsible for managing the SBE, Emerging Small Business Enterprise (ESBE), M/WBE, and Emerging M/WBE (EM/WBE) programs, certifications, goals and outreach.

8.6.1 CERTIFICATION CRITERIA

The Small Business Office requires re-certification every two years for SBEs and M/WBEs. The City does accept certifications from other agencies, if the outside agency follows similar policies and standards.

- ◆ Small Business Enterprise (SBE) – an independent business that meets the Small Business Administration Size Standard(s) for its industry classification.
- ◆ Minority Business Enterprise (MBE) - an independent business 51% or more owned and controlled by racial/ethnic affirmative action group members.
- ◆ Woman Business Enterprise (WBE) - an independent business 51% or more owned and controlled by a woman.
- ◆ Emerging Small Business Enterprise (ESBE)- an independent business with 25% of the annual revenue or number of employees of the SBA's small business size standards for the relevant industry category.
- ◆ Emerging M/WBE (EM/WBE)- an independent business 51% or more owned and controlled by racial/ethnic affirmative action group members or women and a small business with 25% of the

annual revenue or number of employees of the SBA's small business size standards for the relevant industry category.

- ◆ Businesses must have a significant business presence within Atascosa, Bandera, Bexar, Comal, Guadalupe, Kendall, Medina, or Wilson counties.

8.6.2 PROJECT AND/OR ANNUAL GOALS

The City of San Antonio has industry specific aspirational goals with various programs to achieve these goals. These goals are set by a Goal Setting Committee (GSC), which is appointed by the City Manager. The GSC reviews aspirational goals annually. **Exhibit 8-2** contains the FY2018 aspirational goals by industry.

EXHIBIT 8-2.
CITY OF SAN ANTONIO, TX FY 2018 ASPIRATIONAL GOALS BY INDUSTRY

Race/Ethnicity Group	Overall (%)	Construction (%)	Architecture & Engineering (%)	Professional Services (%)	Non-professional Services (%)	Goods & Supplies (%)
African American	2.80	1.90	1.20	6.30	4.00	2.00
Asian American	2.00	1.70	3.10	0.70	2.10	4.00
Hispanic American	25.20	29.70	15.80	22.50	32.30	23.30
Native American	1.10	1.00	2.50	0.20	1.10	1.40
Non-Minority Women	10.00	10.10	8.00	10.00	15.30	11.40
M/WBE Total	41.20	44.40	30.60	39.70	54.80	42.10

Through the SBEDA Subcontracting Program, contracts could be required to have 40% of a contract be subcontracted to SBEs and/or M/WBEs.

POLICIES AND PROCEDURES TO INCREASE M/WBE UTILIZATION

SBEDA has developed a variety of programs to increase prime and subcontractor SBE and M/WBE utilization.

- ◆ SBE and M/WBE Prime Contractor Tools
 - **Prime Contractor Program:** Up to 20 of 100 evaluation points for prime SBE and/or M/WBEs
 - **Emerging Prime Contractor Program:** Up to 20 of 100 evaluation points for Emerging SBE and/or M/WBEs
 - **Joint Venture Program:** Up to 20 of 100 evaluation points for joint venture respondents per their SBE and/or M/WBE percent on a contract

- **Mentor Protégé Program:** Up to 5 of 100 evaluation points for qualified SBE and/or M/WBE mentors
- **HUBZone Program:** Up to 20 of 100 evaluation points for HUBZone prime respondents that have been certified by the U.S. Small Business Administration
- ◆ SBE and M/WBE Subcontractor Programs
 - **Subcontracting Program:** Can require up to 40% of a contract be subcontracted to SBEs and/or M/WBEs
 - **Segmented Contracting Program:** Subcontracting goals for specific ethnicities that are based on those that are experiencing the greatest disparity in a given year and industry based on the most recent utilization data
 - **HUBZone Program:** Can require up to 40% of a contract be subcontracted to HUBZone firms
- ◆ Incentives for Large Firms to Build Capacity of SBEs and M/WBEs
 - **Joint Venture Incentives:** Contract incentives to respondents if an SBE and/or M/WBE is performing more than 40% of the tasks on a contract
 - **Distributionship Development Program:** Contract incentives for prime manufacturers if they subcontract to a local SBE and/or M/WBE distributor
- ◆ SBE and M/WBE Capacity Building Tools
 - **Prime Contractor Self-Performance:** SBEs and M/WBEs can self-perform any subcontracting goals that apply if the contract is less than \$10 million
 - **Mentor Protégé Program:** SBEs and M/WBEs are eligible for business classes and will be partnered with a mentor for a 2-year period
 - **Bonding Assistance Program:** SBEs and M/WBEs are eligible to participate in Credit Repair or Access to Capital classes and receive a letter of credit at the end of the program that enhances their bonding capacity

Exhibit 8-3 shows which programs apply for each industry.

EXHIBIT 8-3.
CITY OF SAN ANTONIO, TX PROGRAM COMPONENTS BY INDUSTRY

		Architecture & Engineering	Construction	Goods & Supplies	Professional Services	Other Services
SBE and M/WBE Prime Contractor Tools	Prime Contractor Program	✓	✓	✓	✓	✓
	Emerging Prime Contractor Program	✓	✓	✓	✓	✓
	Joint Venture Program	✓	✓		✓	✓
	Mentor Protégé Program	✓	✓	✓	✓	✓

		Architecture & Engineering	Construction	Goods & Supplies	Professional Services	Other Services
SBE and M/WBE Subcontractor Programs	HUBZone Program		✓			
	Subcontracting Program	✓	✓	✓	✓	✓
	Segmented Subcontracting Program	✓	✓	✓	✓	✓
	HUBZone Program		✓			
Incentives for Large Firms to Build Capacity of SBEs and M/WBEs	Joint Venture Incentives			✓		✓
	Distributionship Development Program			✓		
SBE and M/WBE Capacity Building Tools	Prime Contractor Self-Performance	✓	✓	✓	✓	✓
	Mentor Protégé Program	✓	✓	✓	✓	✓
	Bonding Assistance Program		✓	✓	✓	✓

8.6.3 PROGRAM CHANGES DUE TO DISPARITY STUDIES

The City of San Antonio revised its SBEDA program after a 2015 disparity study conducted by NERA. Many of the programs above were revised or added to new industries as a result of the study.

- ◆ Prime Contractor Program: expanded application of tool to M/WBEs that are also SBEs in Construction, Goods & Supplies, and Other Services.
- ◆ Emerging Prime Contractor Program: expanded application of tool to Emerging M/WBEs that are also Emerging SBEs in Professional Services, Goods & Supplies, and other Services
- ◆ Joint Venture Program: expanded application of tool for SBEs and M/WBEs in Architecture & Engineering, Construction, and Other Services
- ◆ Mentor Protégé Program: expanded application of tool to Architecture & Engineering,
- ◆ Subcontracting Program: expanded application of tool to M/WBEs that are also SBEs in Architecture & Engineering.

- ◆ Segmented Subcontracting: revised to apply to ethnicities experiencing the greatest disparity for a given year and industry based on the latest utilization data. Program was expanded to M/WBEs that are also SBEs in Architecture & Engineering and Goods & Supplies.
- ◆ Joint Venture Incentives: expanded application of tool to joint ventures that include M/WBEs that are also SBEs in Other Services.
- ◆ Distributionship Development Program: program was added for M/WBEs that are also SBEs in Goods & Supplies.
- ◆ Bonding Assistance Program: expanded application of tool to SBEs and/or M/WBEs in Professional Services

8.6.4 OUTREACH, TECHNICAL ASSISTANCE, AND OTHER PROGRAM COMPONENTS

The SBEDA website provides forms, resource guides, and other online resources that allow for easy access of information about their programs. The Small Business Office also has a Small Business Liaison that is available for small businesses to meet with to ask questions, and request or obtain counseling.

All primes and subcontractors must use the City Contract Management System (CCMS) that allows the City to monitor the utilization of SBEs and M/WBEs. CCMS allows the Small Business Office's to monitor contract compliance with the SBEDA program.

8.7 CONCLUSION

Each program reviewed has elements that were similar and many unique to the agency's needs. Program components and available resources have been tailored to fit program goals based on disparity study findings. Many cities had an abundance of online resources to aid M/WBE businesses as well as assist non-M/WBE primes in contracting with M/WBE subcontractors. Exhibit 8-4 is a summary of the program components of the agencies reviewed, as well as the City of Dallas.

EXHIBIT 8-4.
SUMMARY OF PEER AGENCY PROGRAM COMPONENTS

M/WBE PROGRAM COMPONENT		CITY OF DALLAS	CITY OF FORT WORTH	CITY OF HOUSTON	CITY OF AUSTIN	CITY OF ARLINGTON	CITY OF SAN ANTONIO
TYPE OF PROGRAM	SBE	✓	✓	✓	Construction only		✓
	M/WBE	✓	✓	✓	✓	✓	✓
	DBE	✓	✓	✓	✓		✓
	PDBE			✓			✓
	MBE-AA		✓				✓
	E-SBE						✓
	E-M/WBE						✓
CERTIFICATIONS	Certifies businesses			✓	✓		✓
	Accepts certifications from other agencies	✓	✓			✓	✓
	Personal Net Worth Requirement			DBE only	✓		
	Local Presence Requirement		✓	✓	✓		✓
	Online certification			✓			
PROGRAM GOALS	Industry goals	✓	✓	✓	✓	✓	✓
	Project specific goals		✓	✓	✓		
	Race-conscious goals		✓	✓	✓		
	Race/gender neutral goals		✓	✓	✓		✓
PROGRAM COMPONENTS	Prequalification requirements		✓				
	Contract Unbundling		✓	✓			
	Prompt payment of subcontractors	✓	✓	✓	✓		

	Joint Venture Program		✓		✓		✓
	Mentor-Protege Program	✓				✓	✓
OUTREACH & TECHNICAL ASSISTANCE	In-person/Online Seminars & Video recordings	✓	✓	✓			✓
	Online Forms, Resource Guides & Program Documentation	✓	✓	✓			✓
	Online Directory of SBEs, M/WBEs, and/or DBEs	✓		✓		✓	
	Liaison & Consultation Resources	✓		✓			✓
	Online plan room/documentation				✓		

8.7.1 SUMMARY OF PEER AGENCY M/WBE UTILIZATION

All cities in this comparison were found to have underutilized minority- and women-owned enterprises in their prime contract payment amounts. The only cities with an overall utilization analysis in recent disparity studies were San Antonio and Austin, which both saw highest utilization among Hispanic Americans followed by non-minority women, Asian Americans, African Americans, and Native Americans. **Exhibit 8-5** summarizes the most recent study's M/WBE utilization findings.

EXHIBIT 8-5.
SUMMARY OF PEER AGENCY M/WBE UTILIZATION

INDUSTRY	ETHNICITY/ GENDER	DALLAS 2002 STUDY*	FORT WORTH 2008 STUDY	HOUSTON 2012 STUDY	AUSTIN 2016 STUDY*	ARLINGTON 2008 STUDY	SAN ANTONIO 2015 STUDY
Overall Utilization	African American			N/A	1.84		0.79
	Asian American			N/A	2.27		3.54
	Hispanic American			N/A	8.61		13.05
	Native American			N/A	0.09		0.14
	Non-Minority women			N/A	5.94		5.79
	M/WBE Total				N/A	18.75	
Construction	African American	22.49	0.2	2.82	1.49	0.08	0.25
	Asian		0.32	2.44	1.62	0.06	0.68
	Hispanic American		2.6	13.64	15.3	0.77	24.07
	Native American		0.03	1.49	0.03	0.03	0.34
	Non-Minority women	2.38	4.75	9.47	6.52	7.58	8.47
	M/WBE Total	24.87	7.9	29.87	24.95	8.52	
Architecture & Engineering	African American	21.94	2.68	N/A	N/A	1.14	1.49
	Asian		0.89	N/A	N/A	2.61	3.97
	Hispanic American		3.99	N/A	N/A	4.74	14.59
	Native American		0.24	N/A	N/A	0	0.1
	Non-Minority women	1.89	3.39	N/A	N/A	2.83	11.73
	M/WBE Total	23.83	11.19	N/A	N/A	11.32	
Professional Services	African American	11.07	1.85	N/A	3.7	5.41	0.35
	Asian		0.01	N/A	5.63	1.14	0.45
	Hispanic American		4.42	N/A	12.63	13.18	3.98
	Native American		1.32	N/A	0.02	0.14	0

INDUSTRY	ETHNICITY/ GENDER	DALLAS 2002 STUDY*	FORT WORTH 2008 STUDY	HOUSTON 2012 STUDY	AUSTIN 2016 STUDY*	ARLINGTON 2008 STUDY	SAN ANTONIO 2015 STUDY
	Non-Minority women	5.19	2.57	N/A	11.37	0	2.46
	M/WBE Total	16.26	10.17	N/A	33.35	19.87	7.25
Non-Professional services	African American	7.64	2.13	N/A	1.91	1.4	0.1
	Asian		0.44	N/A	3.04	2.2	0.27
	Hispanic American		1.97	N/A	3.51	1.76	15.55
	Native American		0.08	N/A	0.13	0.41	0
	Non-Minority women	6.21	3.39	N/A	5.45	11.83	7.45
	M/WBE	13.85	8	N/A	14.03	17.6	23.37
Goods & Supplies	African American		0.06	N/A	1.19		1.68
	Asian		1.82	N/A	0.26		10.32
	Hispanic American		1.92	N/A	5.54		2.54
	Native American		0.12	N/A	0.16		0
	Non-Minority women		2.76	N/A	3.1		0.99
	M/WBE Total		6.68	N/A	10.24		15.53

*The 2016 City of Austin Disparity & Availability Study included architecture and engineering contracts in the professional services industry. The 2002 City of Dallas Availability & Disparity Study included goods & supplies in the non-professional services industry.

8.7.2 SUMMARY OF PEER AGENCY DISPARITY RATIOS

A comparison of all recent availability and disparity studies shows that many cities were found to have significant disparities for many races and genders across all procurement categories. **Exhibit 8-6** summarizes the disparity ratios across the studies.

EXHIBIT 8-6.
SUMMARY OF PEER AGENCY M/WBE DISPARITY RATIOS

INDUSTRY	ETHNICITY/ GENDER	DALLAS 2002 STUDY	FORT WORTH 2008 STUDY	HOUSTON 2012 STUDY	AUSTIN 2016 STUDY	ARLINGTON 2008 STUDY	SAN ANTONIO 2015 STUDY
Overall Disparity	African American			N/A	63.05*		15.81*
	Asian American			N/A	95.72		
	Hispanic American			N/A	94.63		42.42*
	Native American			N/A	23.74*		9.43*

INDUSTRY	ETHNICITY/ GENDER	DALLAS 2002 STUDY	FORT WORTH 2008 STUDY	HOUSTON 2012 STUDY	AUSTIN 2016 STUDY	ARLINGTON 2008 STUDY	SAN ANTONIO 2015 STUDY
	Non-Minority women			N/A	53.01*		31.99*
	M/WBE Total			N/A	72.17*		43.07*
Construction	African American	0.52*	0.08*	57.82*	64.74*	0.03*	0.00*
	Asian		0.39*	49.52*		0.14*	73.71
	Hispanic American		0.34*			0.33*	65.43*
	Native American		0.08*		5.25*	0.11*	25.88*
	Non-Minority women	0.18*	0.41*	80.61	68.19*	0.46*	45.31*
	M/WBE Total	0.44*	0.27*	84.08*		0.25*	57.82*
Architecture & Engineering	African American	0.52*	0.23*	N/A	N/A	0.23*	3.77*
	Asian		0.25*	N/A	N/A	0.94	91.87
	Hispanic American		0.60*	N/A	N/A	0.03*	63.97*
	Native American		0.00*	N/A	N/A	0	4.90*
	Non-Minority women	0.15*	0.33*	N/A	N/A	0.45*	85.93
	M/WBE Total	0.44*	0.34*	N/A	N/A	0.36*	65.19*
Professional Services	African American	0.28*	0.14*	N/A		0.00*	0.00*
	Asian		0.32*	N/A		0.29*	0.00*
	Hispanic American		0.41*	N/A		2.4	1.12*
	Native American		0.02*	N/A	4.60*	0.22	0.00*
	Non-Minority women	0.22*	0.13*	N/A		0.00*	2.27*
	M/WBE Total	0.26*	0.19*	N/A		0.38*	1.25*
Non-Professional services	African American	0.31*	0.22*	N/A	44.08*	0.14*	0.00*
	Asian		0.37*	N/A		1.33	0.00*
	Hispanic American		0.36*	N/A	37.30*	0.37*	42.78*
	Native American		0.18	N/A	49.74	0.95	0.00*
	Non-Minority women	0.44*	0.33*	N/A	35.23*	0.29*	33.55*
	M/WBE	0.36*	0.29*	N/A	43.89*	0.32*	34.03*

INDUSTRY	ETHNICITY/ GENDER	DALLAS 2002 STUDY	FORT WORTH 2008 STUDY	HOUSTON 2012 STUDY	AUSTIN 2016 STUDY	ARLINGTON 2008 STUDY	SAN ANTONIO 2015 STUDY
Goods & Supplies	African American		0.01*	N/A	62.74*		78.6
	Asian		0.61*	N/A	8.26*		
	Hispanic American		0.19*	N/A	67.88*		11.17*
	Native American		0.10*	N/A	34.18*		0.00*
	Non-Minority women		0.26*	N/A	33.66*		9.85*
	M/WBE Total			0.20*	N/A	44.77*	

*Indicates that the disparity ratio was statistically significant

CHAPTER 9. PRIME CONTRACTOR
WORKFORCE REPORT

Availability and Disparity Study

City of Dallas, Texas



9.1 INTRODUCTION

This chapter reviews the city of Dallas' (City) existing workforce composition data. The City collects ethnic and gender workforce composition reports for prime contractors as hard copy files. MGT input the hard copy forms into a database to be analyzed. This chapter will analyze the City's current data and provide recommendations. Detailed charts that further analyze the City's primes' workforce can be found in **Appendix K**.

CHAPTER SECTIONS



- 9.1 Introduction
- 9.2 Analysis of Ethnic & Gender Workforce Composition Data
- 9.3 Conclusions and Recommendations

9.2 ANALYSIS OF ETHNIC & GENDER WORKFORCE COMPOSITION DATA

The City collects ethnic and gender workforce composition forms from prime contractors. Data used in this analysis was for fiscal year 2019. In total, there were 369 prime contractor ethnic workforce composition forms entered into the database.

9.2.1 DATA LIMITATIONS

Limitations in the dataset that was provided created challenges in the analysis. When analyzing the data, the following limitations were encountered:

1. Firms were assigned to business category per City project rather than primary industry of the firm, thus some firms were assigned to multiple business categories if they were primes on different types of projects.
2. Sixty-two firms in the provided dataset were located outside of the Dallas-Fort Worth-Arlington, TX market area. These firms were entered into the database but were excluded from the analysis.
3. Because the City's form grouped Asian American, Native American, and other race categories as "Other", the comparison to Census data combined all Census non-Hispanic race categories together, except for White non-Hispanic, Black non-Hispanic, and Hispanic, to create a comparable "Other" race category. For firms that submitted EEO-1 forms instead of the City form, EEO-1 race categories were combined to be comparable to the City's race categories.
4. Some firms submitted EEO-1 forms instead of the City form or altered the City form's job categories. In these cases, categories below were combined to match the City's job categories as such:
 - a. Executive/Senior Level Officials & Managers + First/Mid Level Officials & Managers = Administrative/Managerial
 - Professionals = Professionals
 - Technicians = Technical

Sales workers + craft workers = Skilled

Operatives = Semiskilled

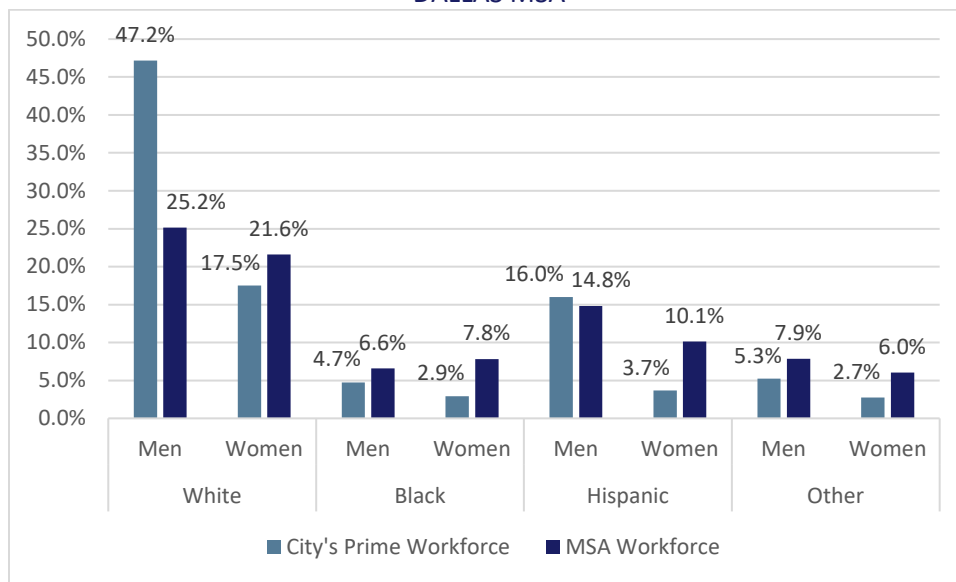
Laborers = Unskilled

Service workers = Seasonal

9.2.2 ETHNIC & GENDER WORKFORCE COMPOSITION

As seen in **Figure 9-1**, the City contracted with prime firms with workforces that employ 47.2% white men, 17.5% white women, 4.7% black men, 2.9% black women, 16.0% Hispanic men, 3.7% Hispanic women, 5.3% other men, and 2.7% other women. Data from the 2018 American Community Survey shows that for the employed civilian population 16 years and over in the Dallas-Fort Worth-Arlington MSA consists of 25.2% white men, 21.6% white women, 6.6% black men, 7.8% black women, 14.8% Hispanic men, 10.1% Hispanic women, 7.9% other men, and 6.0% other women (**Figure 9-1**).

FIGURE 9-1. COMPOSITION OF WORKFORCE
COMPARISON OF PRIME WORKFORCE TO ACS MSA WORKFORCE
DALLAS MSA

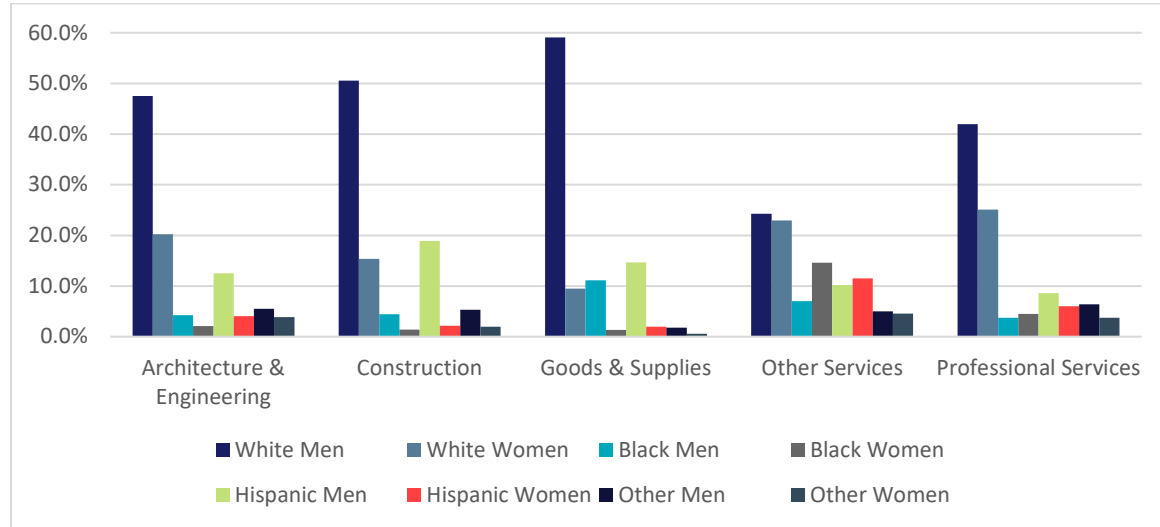


Source: MGT analyzed prime contractor ethnic workforce composition forms for fiscal year 2019. MGT obtained U.S. Census' 2018 American Community Survey 5-Year Data tables from IPUMS NHGIS, University of Minnesota, www.nhgis.org.

9.2.3 CITY'S PRIME CONTRACTOR WORKFORCE BY JOB CATEGORY

When looking at the ethnic composition of the City's primes' workforce by business category, the most diverse business category is Other Services (**Figure 9-2**). Data also shows that White males make up the majority of the workforce for all categories.

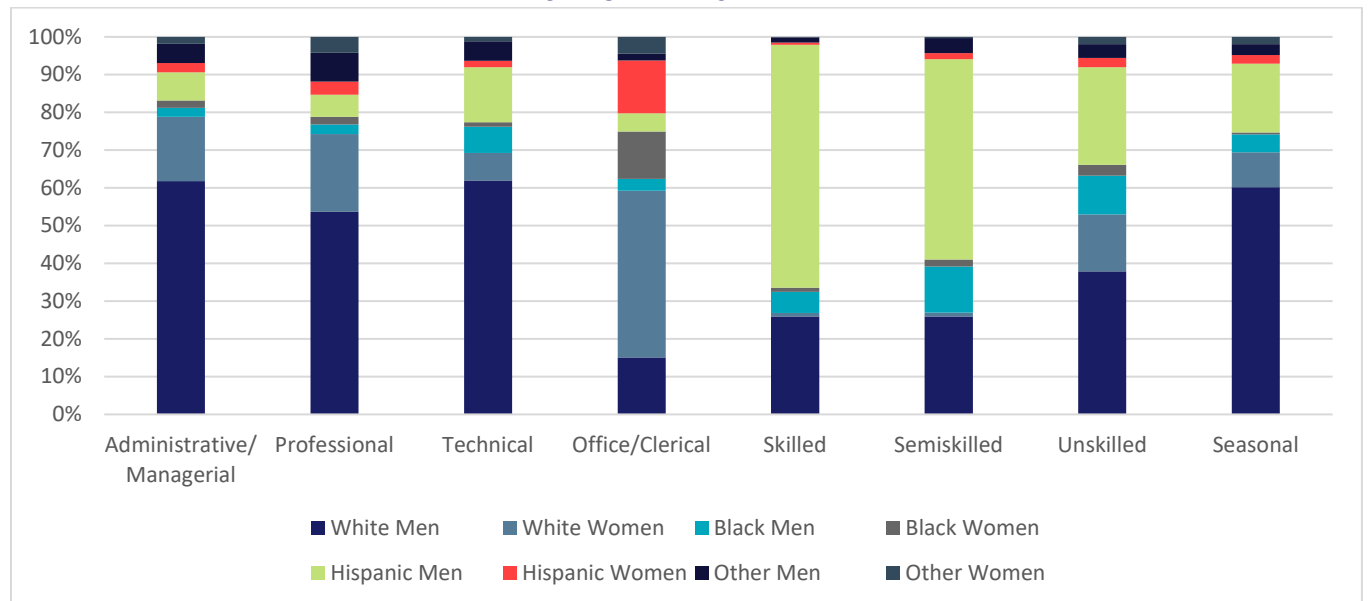
FIGURE 9-2. COMPOSITION OF WORKFORCE BY BUSINESS CATEGORY
PRIME FIRMS
CITY OF DALLAS



Source: MGT analyzed prime contractor ethnic workforce composition forms for fiscal year 2019.

The City contracted with prime firms that employ a majority white male in Administrative/Managerial, Professional, Technical, and Seasonal job categories (**Figure 9-3**). Over 40% of Office/Clerical positions are filled by white women. A majority of skilled and semi-skilled positions are filled by Hispanic men.

FIGURE 9-3. OVERALL COMPOSITION OF JOB CATEGORIES BY RACIAL/ETHNIC GROUP AND SEX
PRIME FIRMS
CITY OF DALLAS



Source: MGT analyzed prime contractor ethnic workforce composition forms for fiscal year 2019.

The City data shows that White males make up the vast majority of the top three income level job categories (**Table 9-1**).

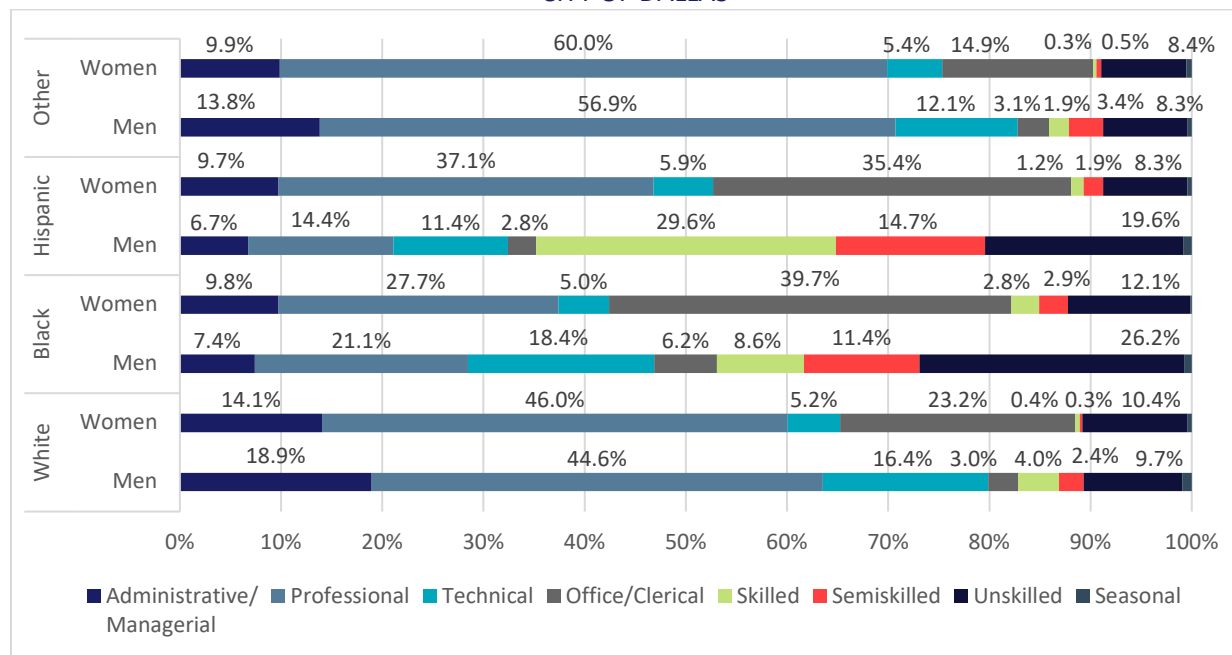
**TABLE 9-1. OVERALL COMPOSITION OF ADMINISTRATIVE, PROFESSIONAL, TECHNICAL JOB CATEGORIES BY RACIAL/ETHNIC GROUP AND SEX FOR PRIME FIRMS
CITY OF DALLAS**

	Administrative	Professional	Technical
White male	61.80%	53.70%	61.90%
White female	17.00%	20.60%	7.30%
Black male	2.40%	2.60%	7.00%
Black female	2.00%	2.10%	1.20%
Hispanic male	7.40%	5.90%	14.60%
Hispanic female	2.50%	3.50%	1.70%
Other male	5.00%	7.60%	5.10%
Other female	1.90%	4.20%	1.20%

9.2.4 CITY’S PRIME CONTRACTOR WORKFORCE BY ETHNIC & GENDER GROUP

Figure 9-4 shows the percentage of each race/ethnic and sex group that are employed in each job category. A majority of other men, other women, white men, and white women employed by the City’s primes are employed in the professional job category. Nearly thirty percent of Hispanic men are in the skilled job category.

FIGURE 9-4. PERCENT OF RACIAL/ETHNIC GROUP AND SEX BY JOB CATEGORY
PRIME FIRMS
CITY OF DALLAS



Source: MGT analyzed prime contractor ethnic workforce composition forms for fiscal year 2019.

The data from the City shows the highest percentage of each race/gender group engaged in the following job categories:

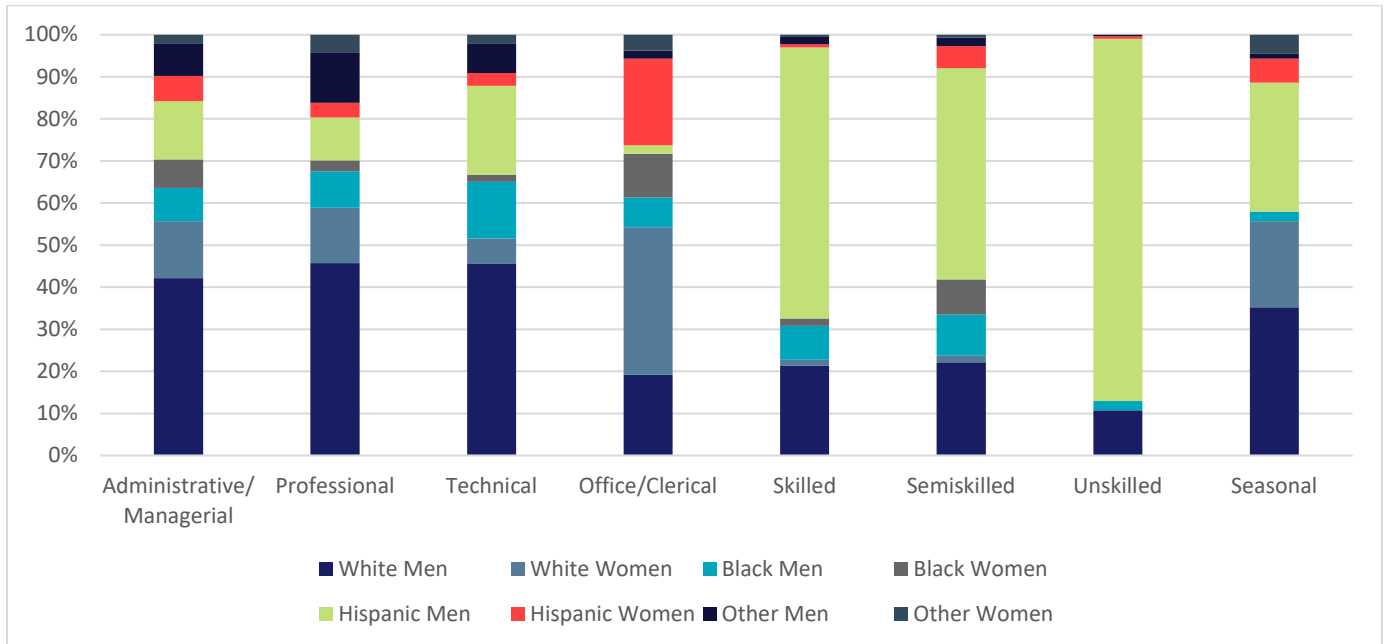
- 44.6% of White males are employed in the Professional job category.
- 46% of White females are employed in the Professional job category.
- 26.2% of Black males are employed in the Unskilled job category.
- 39.7 of Black females are employed in the Office job category.
- 29.6% of Hispanic males are employed in the Skilled job category.
- 37.1% of Hispanic females are employed in the Professional job category.
- 56.9% of Other males are employed in the Professional job category.
- 60% of Other females are employed in the Professional job category.

9.2.5 COMPARISON OF ETHNIC WORKFORCE BY M/WBE OWNERSHIP

MGT assigned M/WBE ownership type to each prime based on membership lists collected. Of the 369 projects' workforce composition forms entered into the database, 181 projects were identified as non-minority male owned prime firms within the Dallas-Fort Worth-Arlington MSA and 109 projects were identified as minority or women owned firms within the MSA. From this sample, a comparison of racial/ethnic group and sex per job category was conducted. As seen in the following charts, similar patterns appear in both M/WBE and non-minority owned firms, although the order of magnitude is generally lower when looking at M/WBE firms. Both ownership types employee a majority of white males in administrative/managerial, professional, and technical roles; however, **Figure 9-5** shows that for

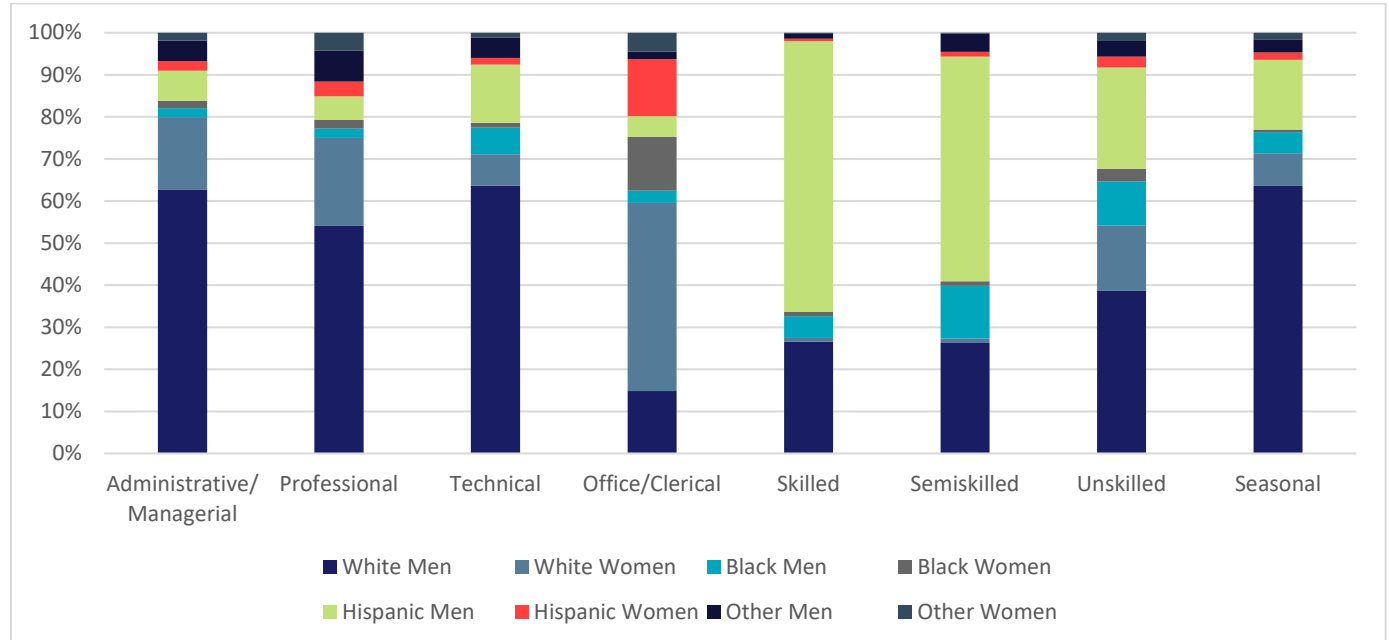
M/WBE owned firms the white male percentage is lower for those roles compared to non-minority owned firms in **Figure 9-6**. This comparison suggests that these job categories are more diverse in M/WBE owned firms than non-minority owned firms.

**FIGURE 9-5. COMPOSITION OF JOB CATEGORIES BY RACIAL/ETHNIC GROUP AND SEX
M/WBE OWNED PRIME FIRMS
CITY OF DALLAS**



Source: MGT analyzed prime contractor ethnic workforce composition forms for fiscal year 2019.

FIGURE 9-6. COMPOSITION OF JOB CATEGORIES BY RACIAL/ETHNIC GROUP AND SEX
NON-M/WBE OWNED PRIME FIRMS
CITY OF DALLAS



Source: MGT analyzed prime contractor ethnic workforce composition forms for fiscal year 2019.

9.3 CONCLUSIONS AND RECOMMENDATIONS

The City’s primes employ a workforce that is not similar to the civilian workforce in the Dallas-Fort Worth-Arlington MSA as shown in the most recent American Community Survey data. A majority of the primes’ administrative/managerial, professional and technical job categories are filled by white men, while Hispanic men comprise a majority of primes’ skilled, semiskilled, and unskilled job categories.

9.3.1 RECOMMENDATIONS

It is recommended that the City continue to require ethnic workforce composition forms at the time of project award, but the City should change the job categories and race categories to be similar to the U.S. Equal Employment Opportunity Commission’s EEO-1 forms. By changing the job categories and race categories, the City will be able to establish measurements of comparable workforce job category data to state and the CBSA EEO-1 report produced by the U.S. Equal Employment Opportunity Commission. In order to increase awareness and understanding, it is recommended the City should offer or partner with workforce training centers, non-profit organizations, and technical schools and state the purpose of the required forms on the bid documents.

CHAPTER 10. FINDINGS,
COMMENDATIONS, AND
RECOMMENDATIONS

Availability and Disparity Study

City of Dallas, Texas



10.1 INTRODUCTION

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

CHAPTER SECTIONS



- 10.1 Introduction
- 10.2 Findings
- 10.3 Commendations and Recommendations
- 10.4 Conclusions

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

The results of this study and conclusions drawn are presented in detail in **Chapters 3 through 9** of this report. This chapter summarizes the evidence on the central research question: *Is there factual predicate evidence for the continuation of a race- and gender-conscious M/WBE program for the City?* MGT’s findings and evidence are based on fact finding to analyze City procurement trends and practices between October 1, 2013 and September 30, 2018; evaluation of the impact of race-and gender-neutral remedial efforts; and evaluation of options for future program development. *MGT found sufficient evidence of disparity to recommend the continuation of a narrowly tailored race- and gender-based procurement program to address identified disparities.*

10.2 FINDINGS

FINDING A: RELEVANT GEOGRAPHIC MARKET AREA (CHAPTER 4)

MGT determined the total spend during the study period in all procurement categories was \$4.52 billion dollars as reflected in **Table 10-1** below. Expenditure data was utilized to determine the relevant geographic market area for the study.²²⁰ Based on the results of the geographic market area analysis conducted for each business category, the recommended relevant geographic market area is the Dallas-Fort Worth-Arlington MSA (Dallas MSA), which includes Dallas County, Collin County, Denton County, Ellis County, Hood County, Hunt County, Johnson County, Kaufman County, Parker County, Rockwall County, Somervell County, Tarrant County, and Wise County. Findings of the relevant geographic market area

²²⁰ Chapter 4, Market Area and Utilization Analyses.

establishes the area in which your outreach is conducted and identification of firms to meet program goals. The spending in the relevant geographic market area is represented in **Table 10-1**.

TABLE 10-1.
RELEVANT GEOGRAPHIC MARKET AREA ANALYSIS
DISTRIBUTION OF DOLLARS BY PROCUREMENT CATEGORY,
DALLAS MSA

ARCHITECTURE & ENGINEERING	Amount	Percent
<i>Inside Dallas MSA</i>	\$317,384,558.68	93.82%
Outside Dallas MSA	\$20,898,639.65	6.18%
ARCHITECTURE & ENGINEERING, TOTAL	\$338,283,198.33	100.00%
CONSTRUCTION	Amount	Percent
<i>Inside Dallas MSA</i>	\$1,486,292,692.05	84.17%
Outside Dallas MSA	\$279,427,386.81	15.83%
CONSTRUCTION, TOTAL	\$1,765,720,078.86	100.00%
PROFESSIONAL SERVICES	Amount	Percent
<i>Inside Dallas MSA</i>	\$238,479,048.04	59.05%
Outside Dallas MSA	\$165,388,759.52	40.95%
PROFESSIONAL SERVICES, TOTAL	\$403,867,807.56	100.00%
OTHER SERVICES	Amount	Percent
<i>Inside Dallas MSA</i>	\$458,166,395.27	67.03%
Outside Dallas MSA	\$225,377,548.29	32.97%
OTHER SERVICES, TOTAL	\$683,543,943.56	100.00%
GOODS & SUPPLIES	Amount	Percent
<i>Inside Dallas MSA</i>	\$920,268,590.81	68.79%
Outside Dallas MSA	\$417,510,581.60	31.21%
GOODS & SUPPLIES, TOTAL	\$1,337,779,172.41	100.00%
ALL BUSINESS CATEGORIES	Amount	Percent
<i>Inside Dallas MSA</i>	\$3,420,591,284.85	75.52%
Outside Dallas MSA	\$1,108,602,915.87	24.48%
ALL BUSINESS CATEGORIES, TOTAL	\$4,529,194,200.72	100.00%

Source: Chapter 4

FINDING B: MWBE UTILIZATION (CHAPTER 4)

Table 10-2 shows the M/WBE utilization amounted to 29.68 percent of total awards for all procurement categories combined.

TABLE 10-2.
UTILIZATION ANALYSIS
DALLAS MSA

BUSINESS OWNERSHIP CLASSIFICATION	A&E	CONSTRUCTION	PROFESSIONAL SERVICES	OTHER SERVICES	GOODS AND SUPPLIES	ALL PROCUREMENT CATEGORIES
	PERCENT OF DOLLARS	PERCENT OF DOLLARS	PERCENT OF DOLLARS	PERCENT OF DOLLARS	PERCENT OF DOLLARS	PERCENT OF DOLLARS
MBE FIRMS	26.67%	22.35%	18.86%	32.25%	11.93%	21.03%
WBE FIRMS	5.79%	5.59%	11.88%	6.79%	14.67%	8.65%
TOTAL M/WBE FIRMS	32.46%	27.94%	30.74%	39.04%	26.60%	29.68%
NON-M/WBE FIRMS	67.54%	72.06%	69.26%	60.96%	73.40%	70.32%
TOTAL	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Chapter 4, Market Area & Utilization Analysis, Tables 4-2 through 4-7.

FINDING C: AVAILABILITY ESTIMATES (CHAPTER 5)

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

MGT uses the availability estimates to calculate aspirational goals proposed later in this chapter. The availability estimates are illustrated in **Table 10-3**.

TABLE 10-3.
ESTIMATION OF AVAILABLE FIRMS,
BY BUSINESS OWNERSHIP CLASSIFICATION AND BY PROCUREMENT CATEGORIES
WITHIN THE RELEVANT GEOGRAPHIC MARKET AREA

BUSINESS OWNERSHIP CLASSIFICATION	A&E	CONSTRUCTION	PROFESSIONAL SERVICES	OTHER SERVICES	GOODS AND SUPPLIES	ALL CATEGORIES
	% OF AVAILABLE FIRMS	% OF AVAILABLE FIRMS	% OF AVAILABLE FIRMS	% OF AVAILABLE FIRMS	% OF AVAILABLE FIRMS	% OF AVAILABLE FIRMS
MBE FIRMS	24.44%	22.92%	29.41%	21.36%	23.03%	23.32%
WBE FIRMS	12.42%	15.39%	21.50%	10.83%	17.97%	15.61%
TOTAL M/WBE FIRMS	36.87%	38.31%	50.91%	32.19%	41.00%	38.93%
NON-M/WBE FIRMS	63.13%	61.69%	49.09%	67.81%	59.00%	61.07%
TOTAL	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Chapter 5, Availability & Disparity Analysis, Tables 5-1 through 5-6.

FINDING D: DISPARITY (CHAPTER 5)

Analysis of disparities for all procurement categories combined in **Table 10-4** reveals:

- ◆ MBE firms were underutilized, with a substantial and statistically significant disparity ratio of 90.19; and
- ◆ WBE firms were underutilized, with a substantial and statistically significant disparity ratio of 55.41; and
- ◆ M/WBE firms were underutilized, with a substantial and statistically significant disparity ratio of 76.25.
- ◆ Non-M/WBE firms were overutilized, with a substantial and statistically significant disparity ratio of 115.14.

TABLE 10-4.
DISPARITY RATIO AND SIGNIFICANCE TESTING,
ALL PROCUREMENT CATEGORIES

ETHNIC/GENDER CLASSIFICATION	UTILIZATION	AVAILABILITY	DISPARITY INDEX	DISPARITY IMPACT	STATISTICAL SIGNIFICANCE	DISPARITY CONCLUSION
MBE FIRMS	21.03%	23.32%	90.19	Underutilization	Yes	Disparity
WBE FIRMS	8.65%	15.61%	55.41	Underutilization	Yes	Disparity
TOTAL M/WBE	29.68%	38.93%	76.25	Underutilization	Yes	Disparity
NON-M/WBE	70.32%	61.07%	115.14	Overutilization	Yes	No Disparity

Source: Chapter 5, Availability & Disparity Analysis, Table 5-7.

Disparity index is the ration of the percentage of dollars to the percentage of available firms multiplied by 100.00.

The index is based on actual percentage value and not the rounded utilization and availability estimates percentage values presented. The disparity indices have been rounded.

The totals may not equal the sum of components due to rounding.

FINDING E: DISPARITIES IN COMMERCIAL AND PUBLIC CONSTRUCTION (CHAPTER 6)

According to the findings from commercial construction projects, substantial M/WBE underutilization was evident in the private sector. Comparing these to the City’s public utilization, shows that M/WBEs are significantly underutilized in both private and public projects. As such, a M/WBE program would be beneficial to remedy this underutilization and prevent the City from becoming a passive participant to discrimination.

FINDING F: DISPARITIES IN SELF-EMPLOYMENT AND REVENUE EARNINGS (CHAPTER 6)

Findings from the Public Use Microdata Sample (PUMS) from 2014-2018 data indicate minorities were significantly less likely than nonminority males to be self-employed and, if they were self-employed, they earned significantly less in 2018 than did self-employed nonminority males. Overall, nonminority male firms were over 2 times as likely as African Americans to be self-employed. The most egregious business category being Professional Services, where nonminority male firms were nearly 3 times as likely as African Americans to be self-employed. Overall, Hispanic firms earned far less than their nonminority male counterparts; 57.6 percent less.

When self-employment rates were stratified by race and by business type, trends varied within individual race-by-type cells, but disparities persisted, in general, for all minorities and nonminority females. When group self-employment rates were submitted to MGT's disparity-due-to-minority-status analysis, findings supported the conclusion that disparities for these groups (of adequate sample size to permit interpretation) were likely the result of differences in the marketplace due to race, gender, and ethnicity.

FINDING G: ACCESS TO CREDIT ANALYSIS (CHAPTER 6)

A review of access to credit indicates that minorities and women tend to receive less than the requested amount, when they are approved, than non-minority men; that they are approved for credit less often than non-minority males; and that credit costs them more than non-minority males. In light of these findings, credence may be given to the proposition established in *Croson*, which suggested a government could be a passive participant in private sector discrimination if it did not act to counter these dynamics at least within the domain of its influence.

FINDING H: ANECDOTAL COMMENTS (CHAPTER 7)

Anecdotal data was collected through public meetings, in-depth interviews, stakeholder interviews, and surveys. In total, 625 participants provided their experiences with the City and primes contracted by the City. Both M/WBE and non-M/WBE firms stated that current procurement process creates barriers for smaller or newer firms. Comments from participants on these barriers included anecdotes such as contracts are too large, and that City contracts are catered to larger firms. These anecdotes support the survey responses to barriers to doing business. The top three barriers were:

- ◆ Competing with large companies – 50.66%
- ◆ Short or limited time given to prepare bid package or quote – 29.82%
- ◆ Slow payment or non-payment – 26.65%

Firms were asked if they experienced disparate treatment or discrimination from the City or primes and asked to describe the type of disparate or discriminatory behavior. The most frequently cited experiences for M/WBE firms were unequal or unfair treatment, bid shopping, and double standard in performance.

10.3 COMMENDATIONS AND RECOMMENDATIONS

Most of the following commendations and recommendations are based on multiple findings and do not necessarily tie to one finding.

RECOMMENDATION A: RACE- AND GENDER-BASED PROGRAM

This study's findings support the continuation of a M/WBE program within the relevant market area. Based on the statistical analyses undertaken in the study, there is a quantitatively significant disparity between utilization of M/WBEs and their availability in the marketplace. The findings presented in the anecdotal analysis provide additional corroboration of the barriers that M/WBEs face in participating in

the City’s procurement process. Furthermore, the evidence from the private sector analysis illustrates the substantial inequities that exist in the City’s marketplace, underscoring its compelling interest in continuing to pursue remedies to address these extant gaps.

RECOMMENDATION B: ASPIRATIONAL M/WBE GOALS

Proposed goals are listed in **Table 10-5**. The calculation of the proposed MWBE goals was based on a similar goal setting process that is established in 49 CFR 26, the U.S Department of Transportation (USDOT) Disadvantaged Business Enterprise (DBE) regulations. The US DOT DBE approach to goal setting is not the only approach to goal setting.

The proposed goals are based on a weighted average of M/WBE utilization and availability. MWBE utilization was weighted at 60 percent plus 40 percent of availability to arrive at the proposed goals (see **Table 10-5**). The formula for goals calculation is below:

$$G = (\text{Utilization \%} * \% \text{ weight}) + (\text{Availability \%} * \% \text{ weight})$$

For example: Construction MWBE Goal=(27.94% * .60) + (38.31% * .40) = 32.09%

During the goal setting process, different weights may be utilized to establish reasonable and achievable goals for the agency. The point is to factor in availability and utilization. These aspirational goals should not be applied rigidly to every individual City procurement. Instead M/WBE goals should vary from project to project.

Proposed goals are listed in **Table 10-5**.

TABLE 10-5.
PROPOSED M/WBE GOALS

BUSINESS CATEGORY	ASPIRATIONAL MWBE GOALS
Construction	32.09%
A&E	34.22%
Professional Services	38.81%
Other Services	N/A
Goods and Supplies	32.36%

RECOMMENDATION C: NARROWLY TAILORED M/WBE PROGRAM

Any new M/WBE Program modifications implemented to address the findings of this study should be narrowly tailored to specifically address identified disparity in accordance with guidance from case law regarding race- and gender-based procurement programs. Developments in court cases involving federal disadvantaged business enterprise (DBE) programs provide important insight into the design of local M/WBE programs. Federal courts found have consistently found DBE regulations in 49 CFR 26 to be

narrowly tailored.²²¹ The federal DBE program has the features in **Table 10-6** that contribute to this characterization as a narrowly tailored remedial procurement preference program. The City should adopt these features in any new M/WBE program.

TABLE 10-6.
NARROWLY TAILORED M/WBE PROGRAM FEATURES

NARROWLY TAILORED GOAL-SETTING FEATURES	DBE REGULATIONS
The City should not use M/WBE quotas.	49 CFR 26(43)(a)
The City should use race- or gender-conscious set-asides only in extreme cases.	49 CFR 26(43)(b)
The City should meet the maximum amount of M/WBE goals through race-neutral means.	49 CFR 26(51)(a)

Source: Suggested features in a proposed narrowly tailored M/WBE program based on USDOT 49 CFR 26.

COMMENDATION AND RECOMMENDATION D: EXPANDED DATA COLLECTION AND MANAGEMENT

The City should be commended for implementing a subcontractor payment utilization module which enhances MWBE compliance reporting. This module allows subcontractors to verify that they received payment for work performed.

The City should implement data systems and processes to monitor and track progress on key performance indicators (KPIs) and establish solid processes to collect and analyze M/WBE utilization data by race, ethnicity, and gender to monitor goal attainment. Data collection should include:

- ◆ Require primes to report subcontractor and supplier utilization (both M/WBE and non-M/WBE). As identified in this report, M/WBE subcontracting data were available, but not all non-M/WBE data were available. All subcontracting/supplier utilization should be maintained to analyze and report total M/WBE and non-M/WBE subcontracting participation.
- ◆ Consistently collect bid and proposal responses and identify those that are M/WBE firms. Bid and proposal data will assist the City in monitoring marketplace availability. For example, if data illustrates there are enough M/WBEs in the market presumed to be available to bid but do not bid, the City should contact firms and determine the cause.
- ◆ Data system should connect intuitively with the City's payment data system from the beginning of a contract to its completion.
- ◆ Collect and report spend and percentage of spend by each City department.
- ◆ List of certified M/WBE firms in the established relevant market area. The database of firms located in the relevant market area should be readily available to City departments and potential bidders or proposers.

²²¹ *Adarand v. Slater*, 228 F.3d 1147 (10th Cir. 2000), *Gross Seed. v. State of Nebraska*, 345 F.3d 968 (8th Cir. 2003); cert denied, 158 L.Ed. 2d 729 (2004).

- ◆ A utilization scorecard or annual report should be developed and available on the City’s website. This report should provide accountability and transparency around progress towards M/WBE goals.

RECOMMENDATION E: M/WBE STAFF AND DEPARTMENTAL LIAISONS

The Office of Business Diversity has a significant role in education, compliance, and advocacy of staff as well as for the M/WBE community. Partnerships with City departments and area trade associations increases the outreach and education, however, there must be enough staff to monitor, track, report, and coordinate all of the efforts and policies of the M/WBE Program. The City should consider allocating resources to support a staff member whose responsibilities include inspecting the work performed on the site of construction and repair projects. Having an advocate in the field could ensure inspection standards are applied fairly, subcontract agreements are upheld, and verification of scope issues that may arise. This person could also use their knowledge of market conditions in the goal setting process. The City should conduct a desk audit to determine the purpose and function of staff necessary to meet program’s objectives. If necessary, the City should consider hiring an outside consultant to assist with M/WBE functions until new staff are hired.

All City departments can play a role in promoting the City M/WBE utilization. Staff within departments with purchasing authority should act as a liaison between the department and the M/WBE Division. Liaisons will maintain outreach and bid records and report activity to the M/WBE Division. The liaison will also work with the M/WBE Division to identify available M/WBE firms.

COMMENDATION AND RECOMMENDATION F: DEVELOP A FORMAL STRATEGY FOR BUSINESS RELATIONSHIPS WITH ORGANIZATIONS

The City should develop a more formal and structured business relationship with organizations that promote M/WBEs for a more comprehensive and effective outreach and technical assistance effort. Prior to developing the more formal relationships, the City should develop a formal strategic plan to incorporate local support groups and organizations, such as minority chambers of commerce and technical assistance centers, to support and augment city development and growth of small, minority, and women-owned firms. The strategic plan should outline the goals and objectives for creating these strategic partnerships.

- ◆ The City should be commended for conducting quarterly training meeting with local organizations that support M/WBEs. This effort provides a more structured basis to “index” and coordinate available assistance and support to M/WBEs. The City should expand its technical assistance programs to include bonding and insurance assistance for MWBEs.
- ◆ The City should be commended for creating the Business Diversity Taskforce. The objective of this taskforce, which meets monthly, is to enhance the City’s Business Inclusion Program. The City should consider repurposing this taskforce into a public sector advisory board that is comprised of businesses that doing work in the public sector. The advisory board could more effectively develop and institute “best practices” and effect business development mechanisms and a more strategic process by which to build capacity and capability.

- ♦ The City should consider increasing the budget of the M/WBE Division to support additional outreach, workshops, marketing, professional development, and overall capacity building of M/WBE firms. Additional outreach in the community is critical to the success of the M/WBE program. It is recommended that the Office of Business Diversity host more trainings, workshops, and professional development opportunities throughout the City to encourage participation and to increase access and attendance.

RECOMMENDATION G: CHANGES TO EVALUATION CRITERIA

In bid documents, the evaluation criteria should be overhauled to include an evaluation of prime construction contractor's utilization of M/WBEs in the private sector, supplier diversity practices, and workforce composition specific to the project compared to overall workforce.

COMMENDATION AND RECOMMENDATION H: REQUIRED PRE-SUBMISSION MEETINGS

The City should be commended for conducting pre-submission meetings on projects where aspirational and/or project goals will be established. Pre-submission meetings create more networking opportunities for primes and potential subs. The City should continue this practice to ensure goals are set for aspirational and project specific projects.

RECOMMENDATION I: PERFORMANCE REVIEW METRIC

The City should consider including MWBE utilization into the performance review process for department heads and other employees with procurement authority. This would result in greater accountability for MWBE utilization, particularly if there are performance incentives for increased utilization.

RECOMMENDATION J: M/WBE COMPLIANCE EFFORTS

The City should ensure that regular site visits and project audits to ensure primes are utilizing subcontractors according to submitted business inclusion plans occur and that results are recorded.

COMMENDATION AND RECOMMENDATION K: DIVERSIFY SUPPLIER UTILIZATION

The City should consider implementing initiatives to support the diversification of the City's supplier utilization.

- ♦ The City should be commended for their business-to-business mentor-protégé program, Act Now!. It is an impactful program that has and should continue to train prime contractors on how to do business with the City. The partnership with Cedar Valley College allows for the development of coursework that educates and trains business owners and employees. The program started as prime contractors only and should be expanded to sub-contractors.
- ♦ The City should consider utilizing a vendor rotation system for on-call contracts to increase the opportunity for M/WBE firms to do business with the city as prime. Implementing a vendor

rotation model on contracts of this nature will maintain a diverse pool of available services providers instead of “locking-in” one vendor for a multi-year contract.

- ◆ The City should consider implementing a Joint Venture program. Many peer M/WBE programs in the state of Texas have implemented a Joint Venture program that would allow for a jointly owned business enterprise ownership percentage to be counted towards the M/WBE goal. In order for a joint venture program to be successful, the joint venture must define the portion of work to be performed, which is equal to the share in ownership, control, knowledge, management, responsibility, risks, and profits of the joint venture.
- ◆ The City should consider implementing an emerging vendor program. This program could focus resources and staff to work directly with small, local businesses that have been in business for less than 2 years. Specialized training to help these businesses would focus, for example, on credit, applying for credit, legal, and technology.

10.4 CONCLUSIONS

The City has implemented multiple methods and initiatives to inform, educate, and increase M/WE utilization. The City should continue and expand these efforts. MGT found sufficient evidence of disparity and recommends the continuation of a narrowly tailored race- and gender-based procurement program to address identified disparities. Disparity was identified overall in all business ownership categories except for Non-M/WBE firms. This evidence is based on quantitative and qualitative data from public and private sources. Any program efforts must be narrowly tailored to rectify the issues identified in this report.

The City of Dallas has implemented a solid program to increase the utilization of M/WBE firms in the market area. The recommendations of this study provide guidance on policy modifications that will meet the narrowly tailored standard.

CITY OF DALLAS, TEXAS

AVAILABILITY AND DISPARITY STUDY

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APPENDIX A. GEOGRAPHIC MARKET
AREA ANALYSIS

Availability and Disparity Study

City of Dallas, Texas



EXHIBIT A-1.
CITY OF DALLAS MARKET AREA
ALL FIRMS

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
DALLAS COUNTY, TX	\$2,262,200,970.57	49.95%	49.95%
DENTON COUNTY, TX	\$544,278,084.01	12.02%	61.96%
TARRANT COUNTY, TX	\$432,914,561.30	9.56%	71.52%
COLLIN COUNTY, TX	\$94,971,690.00	2.10%	73.62%
JOHNSON COUNTY, TX	\$45,763,523.81	1.01%	74.63%
ELLIS COUNTY, TX	\$19,776,220.50	0.44%	75.07%
ROCKWALL COUNTY, TX	\$6,597,663.67	0.15%	75.21%
KAUFMAN COUNTY, TX	\$6,005,734.91	0.13%	75.34%
WISE COUNTY, TX	\$2,728,756.63	0.06%	75.40%
HUNT COUNTY, TX	\$2,279,082.76	0.05%	75.46%
HOOD COUNTY, TX	\$1,901,505.25	0.04%	75.50%
PARKER COUNTY, TX	\$1,169,076.69	0.03%	75.52%
SOMERVELL COUNTY, TX	\$4,414.75	0.00%	75.52%
MARICOPA COUNTY, AZ	\$157,100,018.52	3.47%	78.99%
HARRIS COUNTY, TX	\$139,804,301.98	3.09%	82.08%
TRAVIS COUNTY, TX	\$77,322,865.55	1.71%	83.79%
LOS ANGELES COUNTY, CA	\$44,688,414.55	0.99%	84.77%
BOWIE COUNTY, TX	\$39,579,320.40	0.87%	85.65%
MORRIS COUNTY, NJ	\$32,673,378.75	0.72%	86.37%
MONTGOMERY COUNTY, TX	\$30,901,347.81	0.68%	87.05%
WILLIAMSON COUNTY, TX	\$25,514,307.12	0.56%	87.61%
HENNEPIN COUNTY, MN	\$22,420,288.11	0.50%	88.11%
FULTON COUNTY, GA	\$18,387,685.32	0.41%	88.51%
DISTRICT OF COLUMBIA COUNTY, DC	\$16,505,040.95	0.36%	88.88%
MCLENNAN COUNTY, TX	\$15,239,949.44	0.34%	89.22%
SAINT LOUIS COUNTY, MO	\$14,865,063.57	0.33%	89.54%
OKLAHOMA COUNTY, OK	\$14,698,108.00	0.32%	89.87%
COOK COUNTY, IL	\$14,388,374.72	0.32%	90.19%
BEXAR COUNTY, TX	\$12,840,882.38	0.28%	90.47%
ARLINGTON COUNTY, VA	\$12,242,838.03	0.27%	90.74%
FAIRFAX COUNTY, VA	\$11,861,751.88	0.26%	91.00%
HOWARD COUNTY, IN	\$11,031,837.00	0.24%	91.24%
SANTA CLARA COUNTY, CA	\$10,835,469.41	0.24%	91.48%
LYCOMING COUNTY, PA	\$10,339,041.80	0.23%	91.71%
MECKLENBURG COUNTY, NC	\$10,087,426.52	0.22%	91.94%
LIBERTY COUNTY, GA	\$9,876,734.15	0.22%	92.15%
AUSTIN COUNTY, TX	\$9,605,911.42	0.21%	92.37%
MILWAUKEE COUNTY, WI	\$9,122,628.02	0.20%	92.57%
SMITH COUNTY, TX	\$8,999,614.51	0.20%	92.77%
JEFFERSON COUNTY, KY	\$8,803,288.74	0.19%	92.96%
CUYAHOGA COUNTY, OH	\$8,437,175.30	0.19%	93.15%
ROWAN COUNTY, NC	\$8,035,669.91	0.18%	93.32%
IREDELL COUNTY, NC	\$7,540,179.02	0.17%	93.49%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
CHESTER COUNTY, PA	\$7,396,740.52	0.16%	93.65%
SAN BERNARDINO COUNTY, CA	\$7,380,387.05	0.16%	93.82%
CLARK COUNTY, WA	\$6,958,884.91	0.15%	93.97%
LAMPASAS COUNTY, TX	\$6,671,685.00	0.15%	94.12%
FAYETTE COUNTY, KY	\$6,559,486.64	0.14%	94.26%
GRAYSON COUNTY, TX	\$6,196,741.38	0.14%	94.40%
LUCAS COUNTY, OH	\$5,888,280.98	0.13%	94.53%
WASHOE COUNTY, NV	\$5,827,533.68	0.13%	94.66%
MONTGOMERY COUNTY, PA	\$5,171,829.59	0.11%	94.77%
LUBBOCK COUNTY, TX	\$4,829,364.09	0.11%	94.88%
LARIMER COUNTY, CO	\$4,473,461.84	0.10%	94.98%
VIRGINIA BEACH CITY COUNTY, VA	\$4,352,964.84	0.10%	95.07%
JEFFERSON COUNTY, CO	\$4,045,100.76	0.09%	95.16%
FANNIN COUNTY, TX	\$3,953,958.03	0.09%	95.25%
MACON COUNTY, IL	\$3,859,100.36	0.09%	95.33%
KING COUNTY, WA	\$3,839,738.23	0.08%	95.42%
LA SALLE COUNTY, IL	\$3,793,107.60	0.08%	95.50%
JEFFERSON COUNTY, NY	\$3,772,451.38	0.08%	95.59%
CAMERON COUNTY, TX	\$3,765,415.25	0.08%	95.67%
SHELBY COUNTY, TN	\$3,753,198.92	0.08%	95.75%
SAN DIEGO COUNTY, CA	\$3,572,012.93	0.08%	95.83%
CADDO COUNTY, LA	\$3,545,626.50	0.08%	95.91%
ELMORE COUNTY, AL	\$3,527,932.30	0.08%	95.99%
ORANGE COUNTY, FL	\$3,512,938.55	0.08%	96.07%
BROWN COUNTY, WI	\$3,307,888.76	0.07%	96.14%
COBB COUNTY, GA	\$3,210,369.59	0.07%	96.21%
SEDGWICK COUNTY, KS	\$3,147,212.52	0.07%	96.28%
ALAMEDA COUNTY, CA	\$3,058,593.23	0.07%	96.35%
NAVARRO COUNTY, TX	\$3,053,124.49	0.07%	96.41%
CHEROKEE COUNTY, GA	\$3,000,000.00	0.07%	96.48%
BALTIMORE CITY COUNTY, MD	\$2,930,492.11	0.06%	96.54%
HILLSBOROUGH COUNTY, FL	\$2,907,068.88	0.06%	96.61%
ORANGE COUNTY, CA	\$2,758,353.30	0.06%	96.67%
CAMDEN COUNTY, NJ	\$2,732,658.07	0.06%	96.73%
JEFFERSON COUNTY, TX	\$2,642,757.70	0.06%	96.79%
TANGIPAHOA COUNTY, LA	\$2,549,596.14	0.06%	96.84%
GUADALUPE COUNTY, TX	\$2,420,738.93	0.05%	96.90%
CANADA	\$2,417,154.00	0.05%	96.95%
RICHLAND COUNTY, OH	\$2,227,809.77	0.05%	97.00%
SCOTT COUNTY, IA	\$2,221,020.11	0.05%	97.05%
PORTAGE COUNTY, OH	\$2,189,227.21	0.05%	97.10%
MADISON COUNTY, AL	\$2,105,406.24	0.05%	97.14%
KENDALL COUNTY, TX	\$2,062,349.68	0.05%	97.19%
DUPAGE COUNTY, IL	\$2,058,758.03	0.05%	97.24%
FRANKLIN COUNTY, OH	\$2,040,920.88	0.05%	97.28%
FORSYTH COUNTY, GA	\$2,016,562.01	0.04%	97.33%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
HAYS COUNTY, TX	\$2,010,476.01	0.04%	97.37%
SAINT LOUIS CITY COUNTY, MO	\$2,003,703.99	0.04%	97.41%
EATON COUNTY, MI	\$1,977,011.11	0.04%	97.46%
PHILADELPHIA COUNTY, PA	\$1,959,482.29	0.04%	97.50%
MIAMI DADE COUNTY, FL	\$1,941,947.57	0.04%	97.54%
PLACER COUNTY, CA	\$1,880,677.05	0.04%	97.59%
SACRAMENTO COUNTY, CA	\$1,824,079.77	0.04%	97.63%
ECTOR COUNTY, TX	\$1,811,236.79	0.04%	97.67%
TULSA COUNTY, OK	\$1,799,476.13	0.04%	97.71%
DELAWARE COUNTY, PA	\$1,684,127.11	0.04%	97.74%
BALTIMORE COUNTY, MD	\$1,662,073.18	0.04%	97.78%
JACKSON COUNTY, MO	\$1,644,901.15	0.04%	97.82%
LAKE COUNTY, IL	\$1,572,000.97	0.03%	97.85%
KINGS COUNTY, NY	\$1,542,780.83	0.03%	97.88%
CALHOUN COUNTY, TX	\$1,505,397.86	0.03%	97.92%
EAST BATON ROUGE COUNTY, LA	\$1,452,636.65	0.03%	97.95%
RICHLAND COUNTY, SC	\$1,446,791.00	0.03%	97.98%
WINDSOR COUNTY, VT	\$1,436,989.00	0.03%	98.01%
NEW YORK COUNTY, NY	\$1,431,216.75	0.03%	98.04%
ARAPAHOE COUNTY, CO	\$1,391,161.20	0.03%	98.08%
GWINNETT COUNTY, GA	\$1,372,143.63	0.03%	98.11%
COOKE COUNTY, TX	\$1,350,702.62	0.03%	98.14%
RAMSEY COUNTY, MN	\$1,328,829.86	0.03%	98.16%
WILLIAMSON COUNTY, TN	\$1,327,628.22	0.03%	98.19%
HARTFORD COUNTY, CT	\$1,303,633.68	0.03%	98.22%
BROWARD COUNTY, FL	\$1,180,635.73	0.03%	98.25%
JEFFERSON COUNTY, AL	\$1,179,664.39	0.03%	98.28%
SALT LAKE COUNTY, UT	\$1,144,196.63	0.03%	98.30%
WILL COUNTY, IL	\$1,141,286.68	0.03%	98.33%
UK	\$1,125,617.16	0.02%	98.35%
SEMINOLE COUNTY, FL	\$1,104,457.34	0.02%	98.37%
JEFFERSON COUNTY, LA	\$1,040,171.19	0.02%	98.40%
MARION COUNTY, IN	\$1,029,440.50	0.02%	98.42%
DUBUQUE COUNTY, IA	\$1,020,409.18	0.02%	98.44%
MIDDLESEX COUNTY, MA	\$1,003,743.84	0.02%	98.47%
JOHNSON COUNTY, KS	\$978,000.32	0.02%	98.49%
HOPKINS COUNTY, TX	\$972,030.86	0.02%	98.51%
COMAL COUNTY, TX	\$970,112.07	0.02%	98.53%
GALVESTON COUNTY, TX	\$908,694.83	0.02%	98.55%
DUVAL COUNTY, TX	\$903,037.50	0.02%	98.57%
WARREN COUNTY, NY	\$895,669.26	0.02%	98.59%
LEON COUNTY, FL	\$878,131.42	0.02%	98.61%
LEE COUNTY, MS	\$877,876.68	0.02%	98.63%
SUNFLOWER COUNTY, MS	\$864,933.79	0.02%	98.65%
WICHITA COUNTY, TX	\$853,340.63	0.02%	98.67%
TALBOT COUNTY, MD	\$852,141.00	0.02%	98.68%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
DAKOTA COUNTY, MN	\$845,686.07	0.02%	98.70%
MONROE COUNTY, NY	\$833,006.96	0.02%	98.72%
MIDDLESEX COUNTY, NJ	\$804,940.39	0.02%	98.74%
ONONDAGA COUNTY, NY	\$801,676.99	0.02%	98.76%
ORANGE COUNTY, NY	\$799,532.21	0.02%	98.78%
KERN COUNTY, CA	\$781,298.00	0.02%	98.79%
ALLEGHENY COUNTY, PA	\$775,104.97	0.02%	98.81%
CONTRA COSTA COUNTY, CA	\$774,041.45	0.02%	98.83%
SUFFOLK COUNTY, NY	\$743,133.98	0.02%	98.84%
HARDIN COUNTY, TX	\$719,760.20	0.02%	98.86%
BURLINGTON COUNTY, NJ	\$710,403.36	0.02%	98.87%
PASSAIC COUNTY, NJ	\$703,327.93	0.02%	98.89%
LAMAR COUNTY, TX	\$691,098.35	0.02%	98.91%
HAMILTON COUNTY, IN	\$686,560.16	0.02%	98.92%
HENDERSON COUNTY, TX	\$682,615.30	0.02%	98.94%
CALVERT COUNTY, MD	\$669,250.85	0.01%	98.95%
NEW LONDON COUNTY, CT	\$652,248.58	0.01%	98.96%
FAIRFIELD COUNTY, CT	\$646,088.67	0.01%	98.98%
WALKER COUNTY, TX	\$645,195.68	0.01%	98.99%
OCEAN COUNTY, NJ	\$638,549.35	0.01%	99.01%
YORK COUNTY, ME	\$636,998.10	0.01%	99.02%
CASS COUNTY, ND	\$629,812.24	0.01%	99.04%
OTTAWA COUNTY, MI	\$612,760.31	0.01%	99.05%
FRANKLIN COUNTY, WA	\$594,785.00	0.01%	99.06%
WAYNE COUNTY, MI	\$594,107.42	0.01%	99.08%
FORT BEND COUNTY, TX	\$573,151.84	0.01%	99.09%
BERRIEN COUNTY, MI	\$570,590.00	0.01%	99.10%
NEW HAVEN COUNTY, CT	\$555,986.95	0.01%	99.11%
POLK COUNTY, FL	\$552,490.53	0.01%	99.12%
BURLESON COUNTY, TX	\$551,906.26	0.01%	99.14%
MOORE COUNTY, NC	\$551,812.20	0.01%	99.15%
KENT COUNTY, MI	\$547,760.85	0.01%	99.16%
SHAWNEE COUNTY, KS	\$540,662.61	0.01%	99.17%
CAPE GIRARDEAU COUNTY, MO	\$535,375.64	0.01%	99.19%
CHEROKEE COUNTY, TX	\$535,040.38	0.01%	99.20%
ANDERSON COUNTY, TN	\$512,452.50	0.01%	99.21%
BELL COUNTY, TX	\$500,512.95	0.01%	99.22%
RIVERSIDE COUNTY, CA	\$499,313.69	0.01%	99.23%
RICHMOND COUNTY, VA	\$493,700.00	0.01%	99.24%
MONTGOMERY COUNTY, MD	\$493,365.08	0.01%	99.25%
GREGG COUNTY, TX	\$490,367.00	0.01%	99.26%
WINNEBAGO COUNTY, WI	\$486,589.00	0.01%	99.27%
ADA COUNTY, ID	\$484,285.67	0.01%	99.28%
OAKLAND COUNTY, MI	\$469,981.80	0.01%	99.29%
MAHASKA COUNTY, IA	\$468,301.95	0.01%	99.31%
GRAYS HARBOR COUNTY, WA	\$468,000.00	0.01%	99.32%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
ALBANY COUNTY, NY	\$465,657.96	0.01%	99.33%
WAUSHARA COUNTY, WI	\$465,265.00	0.01%	99.34%
SARPY COUNTY, NE	\$463,105.75	0.01%	99.35%
KANE COUNTY, IL	\$459,853.81	0.01%	99.36%
NASSAU COUNTY, NY	\$457,904.28	0.01%	99.37%
ERATH COUNTY, TX	\$453,863.70	0.01%	99.38%
MARION COUNTY, FL	\$446,433.89	0.01%	99.39%
HARRISON COUNTY, MS	\$444,873.86	0.01%	99.40%
HORRY COUNTY, SC	\$430,773.25	0.01%	99.41%
VAN ZANDT COUNTY, TX	\$429,431.13	0.01%	99.42%
RACINE COUNTY, WI	\$420,465.00	0.01%	99.42%
PULASKI COUNTY, AR	\$415,626.31	0.01%	99.43%
SAN FRANCISCO COUNTY, CA	\$415,409.00	0.01%	99.44%
PAYNE COUNTY, OK	\$404,840.87	0.01%	99.45%
BUCKS COUNTY, PA	\$403,110.00	0.01%	99.46%
HAMILTON COUNTY, NE	\$393,904.68	0.01%	99.47%
RANKIN COUNTY, MS	\$388,769.95	0.01%	99.48%
CLERMONT COUNTY, OH	\$384,848.40	0.01%	99.49%
ANDERSON COUNTY, SC	\$382,999.83	0.01%	99.49%
LARAMIE COUNTY, WY	\$375,000.00	0.01%	99.50%
LOUDOUN COUNTY, VA	\$369,267.08	0.01%	99.51%
CRAVEN COUNTY, NC	\$369,247.51	0.01%	99.52%
NACOGDOCHES COUNTY, TX	\$360,190.00	0.01%	99.53%
ALEXANDRIA CITY COUNTY, VA	\$348,304.00	0.01%	99.54%
HAMILTON COUNTY, TN	\$343,790.97	0.01%	99.54%
BOONE COUNTY, MO	\$341,206.80	0.01%	99.55%
SUMMIT COUNTY, OH	\$333,394.50	0.01%	99.56%
DENVER COUNTY, CO	\$333,300.42	0.01%	99.56%
GREENE COUNTY, MO	\$321,749.80	0.01%	99.57%
SUSSEX COUNTY, DE	\$319,560.50	0.01%	99.58%
SONOMA COUNTY, CA	\$316,964.98	0.01%	99.59%
BALDWIN COUNTY, AL	\$315,830.25	0.01%	99.59%
MULTNOMAH COUNTY, OR	\$308,166.99	0.01%	99.60%
MADISON COUNTY, IL	\$305,000.00	0.01%	99.61%
WOOD COUNTY, WI	\$299,396.00	0.01%	99.61%
YOLO COUNTY, CA	\$296,664.45	0.01%	99.62%
ERIE COUNTY, NY	\$295,908.29	0.01%	99.63%
BERGEN COUNTY, NJ	\$295,806.62	0.01%	99.63%
WAKE COUNTY, NC	\$290,248.00	0.01%	99.64%
HAMILTON COUNTY, OH	\$287,522.32	0.01%	99.65%
EAST FELICIANA COUNTY, LA	\$277,630.00	0.01%	99.65%
DOUGLAS COUNTY, NE	\$273,557.62	0.01%	99.66%
ANNE ARUNDEL COUNTY, MD	\$269,504.02	0.01%	99.66%
KALAMAZOO COUNTY, MI	\$267,711.14	0.01%	99.67%
LITCHFIELD COUNTY, CT	\$266,000.00	0.01%	99.68%
WASHTENAW COUNTY, MI	\$259,621.33	0.01%	99.68%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
PALM BEACH COUNTY, FL	\$259,471.10	0.01%	99.69%
BRYAN COUNTY, OK	\$256,178.00	0.01%	99.69%
DUVAL COUNTY, FL	\$240,730.61	0.01%	99.70%
SAINT CHARLES COUNTY, MO	\$238,394.00	0.01%	99.70%
NEW CASTLE COUNTY, DE	\$237,680.59	0.01%	99.71%
BOULDER COUNTY, CO	\$232,606.20	0.01%	99.71%
BRAZOS COUNTY, TX	\$227,805.51	0.01%	99.72%
POLK COUNTY, IA	\$225,834.33	0.00%	99.72%
ANGELINA COUNTY, TX	\$223,864.14	0.00%	99.73%
FRESNO COUNTY, CA	\$220,307.19	0.00%	99.73%
WEBSTER COUNTY, MO	\$218,012.03	0.00%	99.74%
PLATTE COUNTY, MO	\$217,347.09	0.00%	99.74%
MONTEREY COUNTY, CA	\$212,120.22	0.00%	99.75%
UNION COUNTY, NJ	\$211,961.48	0.00%	99.75%
STARK COUNTY, OH	\$207,644.36	0.00%	99.76%
GREENVILLE COUNTY, SC	\$207,516.77	0.00%	99.76%
NEW HANOVER COUNTY, NC	\$200,138.72	0.00%	99.77%
LANE COUNTY, OR	\$198,055.13	0.00%	99.77%
SANTA BARBARA COUNTY, CA	\$195,299.40	0.00%	99.77%
CALUMET COUNTY, WI	\$194,428.00	0.00%	99.78%
CENTRE COUNTY, PA	\$191,377.18	0.00%	99.78%
CLARK COUNTY, OH	\$190,814.00	0.00%	99.79%
CUMBERLAND COUNTY, PA	\$189,646.98	0.00%	99.79%
LUZERNE COUNTY, PA	\$188,556.80	0.00%	99.80%
TULARE COUNTY, CA	\$186,535.11	0.00%	99.80%
PENOBSCOT COUNTY, ME	\$185,897.79	0.00%	99.80%
ROBERTSON COUNTY, TX	\$183,510.78	0.00%	99.81%
RUTHERFORD COUNTY, TN	\$181,561.58	0.00%	99.81%
CLARK COUNTY, NV	\$179,883.06	0.00%	99.82%
CLINTON COUNTY, NY	\$178,947.00	0.00%	99.82%
MONMOUTH COUNTY, NJ	\$178,739.80	0.00%	99.82%
SAINT TAMMANY COUNTY, LA	\$173,726.43	0.00%	99.83%
FAYETTE COUNTY, GA	\$173,555.00	0.00%	99.83%
LEE COUNTY, TX	\$165,085.00	0.00%	99.84%
TAYLOR COUNTY, TX	\$164,549.98	0.00%	99.84%
SNOHOMISH COUNTY, WA	\$160,763.00	0.00%	99.84%
UTAH COUNTY, UT	\$160,338.96	0.00%	99.85%
EASTLAND COUNTY, TX	\$157,864.00	0.00%	99.85%
CHITTENDEN COUNTY, VT	\$156,594.63	0.00%	99.85%
WASHINGTON COUNTY, MN	\$154,896.83	0.00%	99.86%
SUFFOLK COUNTY, MA	\$152,813.07	0.00%	99.86%
KENNEBEC COUNTY, ME	\$152,346.99	0.00%	99.86%
BRISTOL COUNTY, RI	\$152,121.76	0.00%	99.87%
BENTON COUNTY, AR	\$149,064.76	0.00%	99.87%
DEKALB COUNTY, GA	\$147,792.58	0.00%	99.87%
POTTER COUNTY, TX	\$142,601.33	0.00%	99.88%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
MERCER COUNTY, WV	\$140,713.48	0.00%	99.88%
SPOTSYLVANIA COUNTY, VA	\$140,182.59	0.00%	99.88%
ROCKINGHAM COUNTY, NH	\$139,413.40	0.00%	99.89%
TALLADEGA COUNTY, AL	\$139,097.51	0.00%	99.89%
FAYETTE COUNTY, PA	\$137,746.00	0.00%	99.89%
BREVARD COUNTY, FL	\$134,610.65	0.00%	99.89%
MARTIN COUNTY, FL	\$132,381.45	0.00%	99.90%
SAINT MARY COUNTY, LA	\$124,842.26	0.00%	99.90%
LAWRENCE COUNTY, PA	\$122,550.00	0.00%	99.90%
SAINT LAWRENCE COUNTY, NY	\$121,921.00	0.00%	99.91%
WRIGHT COUNTY, MN	\$121,819.00	0.00%	99.91%
WESTMORELAND COUNTY, PA	\$120,214.27	0.00%	99.91%
ESSEX COUNTY, MA	\$119,323.42	0.00%	99.91%
SAN MATEO COUNTY, CA	\$118,922.30	0.00%	99.92%
BUTLER COUNTY, OH	\$118,730.00	0.00%	99.92%
CALHOUN COUNTY, AL	\$116,973.04	0.00%	99.92%
RILEY COUNTY, KS	\$114,913.55	0.00%	99.92%
ORANGE COUNTY, NC	\$112,559.42	0.00%	99.93%
BERNALILLO COUNTY, NM	\$109,991.87	0.00%	99.93%
HOWARD COUNTY, MD	\$108,893.78	0.00%	99.93%
BASTROP COUNTY, TX	\$105,652.98	0.00%	99.93%
CALLAHAN COUNTY, TX	\$105,434.00	0.00%	99.94%
HARRISON COUNTY, TX	\$104,270.25	0.00%	99.94%
MORGAN COUNTY, AL	\$101,992.86	0.00%	99.94%
BERKS COUNTY, PA	\$101,333.70	0.00%	99.94%
LIMESTONE COUNTY, AL	\$100,906.31	0.00%	99.94%
RICHMOND CITY COUNTY, VA	\$100,000.00	0.00%	99.95%
HILLSDALE COUNTY, MI	\$99,797.16	0.00%	99.95%
PINELLAS COUNTY, FL	\$96,192.16	0.00%	99.95%
LANCASTER COUNTY, PA	\$95,598.51	0.00%	99.95%
WAYNE COUNTY, OH	\$94,780.00	0.00%	99.96%
QUEEN ANNES COUNTY, MD	\$90,882.87	0.00%	99.96%
DAVIDSON COUNTY, TN	\$89,870.21	0.00%	99.96%
MEDINA COUNTY, TX	\$86,576.00	0.00%	99.96%
VOLUSIA COUNTY, FL	\$84,473.52	0.00%	99.96%
PLYMOUTH COUNTY, MA	\$83,940.51	0.00%	99.97%
LAFAYETTE COUNTY, LA	\$82,659.20	0.00%	99.97%
CANADIAN COUNTY, OK	\$81,924.55	0.00%	99.97%
EL PASO COUNTY, CO	\$81,513.55	0.00%	99.97%
ROCKLAND COUNTY, NY	\$80,124.41	0.00%	99.97%
WASHINGTON COUNTY, FL	\$78,600.00	0.00%	99.97%
BOND COUNTY, IL	\$78,479.95	0.00%	99.98%
CHAMPAIGN COUNTY, IL	\$78,345.17	0.00%	99.98%
MANATEE COUNTY, FL	\$75,962.62	0.00%	99.98%
MIDLAND COUNTY, TX	\$75,568.05	0.00%	99.98%
COLLIER COUNTY, FL	\$75,338.96	0.00%	99.98%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
WARREN COUNTY, NJ	\$74,465.13	0.00%	99.98%
SAGINAW COUNTY, MI	\$72,526.76	0.00%	99.99%
DURHAM COUNTY, NC	\$71,236.71	0.00%	99.99%
BRAZORIA COUNTY, TX	\$71,131.07	0.00%	99.99%
VENTURA COUNTY, CA	\$68,238.98	0.00%	99.99%
BROOMFIELD COUNTY, CO	\$66,633.56	0.00%	99.99%
WILSON COUNTY, TN	\$66,443.76	0.00%	99.99%
FRANKLIN COUNTY, NC	\$66,038.77	0.00%	99.99%
KERR COUNTY, TX	\$65,441.00	0.00%	100.00%
PIMA COUNTY, AZ	\$65,210.06	0.00%	100.00%
PROVIDENCE COUNTY, RI	\$65,136.70	0.00%	100.00%
BRISTOL COUNTY, MA	\$64,300.78	0.00%	100.00%
LEE COUNTY, FL	\$63,369.00	0.00%	100.00%
SPOKANE COUNTY, WA	\$63,306.00	0.00%	100.00%
WESTCHESTER COUNTY, NY	\$63,168.78	0.00%	100.00%
DOUGLAS COUNTY, CO	\$62,780.00	0.00%	100.01%
DELAWARE COUNTY, OH	\$62,237.35	0.00%	100.01%
KNOX COUNTY, TN	\$61,102.00	0.00%	100.01%
SIOUX COUNTY, IA	\$58,985.84	0.00%	100.01%
WARREN COUNTY, MS	\$58,800.00	0.00%	100.01%
HILLSBOROUGH COUNTY, NH	\$58,277.34	0.00%	100.01%
LINN COUNTY, IA	\$57,728.00	0.00%	100.01%
NORFOLK COUNTY, MA	\$57,261.25	0.00%	100.02%
LANCASTER COUNTY, NE	\$56,275.98	0.00%	100.02%
HERNANDO COUNTY, FL	\$55,755.00	0.00%	100.02%
HAMPTON CITY COUNTY, VA	\$53,107.20	0.00%	100.02%
BLAINE COUNTY, ID	\$51,942.76	0.00%	100.02%
SAINT JOHNS COUNTY, FL	\$51,671.29	0.00%	100.02%
POWESHIEK COUNTY, IA	\$50,218.04	0.00%	100.02%
SULLIVAN COUNTY, PA	\$49,950.00	0.00%	100.02%
ORLEANS COUNTY, LA	\$49,884.97	0.00%	100.02%
CUMBERLAND COUNTY, ME	\$49,330.92	0.00%	100.03%
GUILFORD COUNTY, NC	\$49,065.64	0.00%	100.03%
DAVIDSON COUNTY, NC	\$48,956.03	0.00%	100.03%
KANAWHA COUNTY, WV	\$48,232.15	0.00%	100.03%
HOCKING COUNTY, OH	\$47,947.00	0.00%	100.03%
DAVIS COUNTY, UT	\$47,773.58	0.00%	100.03%
PIERCE COUNTY, WA	\$47,325.20	0.00%	100.03%
QUEENS COUNTY, NY	\$46,805.74	0.00%	100.03%
WELD COUNTY, CO	\$46,600.00	0.00%	100.03%
SOMERSET COUNTY, NJ	\$46,426.84	0.00%	100.04%
LEHIGH COUNTY, PA	\$46,100.00	0.00%	100.04%
BLACK HAWK COUNTY, IA	\$45,950.00	0.00%	100.04%
FRANKLIN COUNTY, PA	\$45,872.50	0.00%	100.04%
WAUKESHA COUNTY, WI	\$45,441.64	0.00%	100.04%
CRAWFORD COUNTY, KS	\$45,000.00	0.00%	100.04%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
WASHINGTON COUNTY, OR	\$44,447.04	0.00%	100.04%
FRANKLIN COUNTY, MA	\$43,725.59	0.00%	100.04%
BELKNAP COUNTY, NH	\$43,544.29	0.00%	100.04%
MAHONING COUNTY, OH	\$43,191.50	0.00%	100.04%
MERCER COUNTY, NJ	\$42,847.38	0.00%	100.04%
INDIAN RIVER COUNTY, FL	\$42,806.71	0.00%	100.05%
NUECES COUNTY, TX	\$42,453.73	0.00%	100.05%
MONTGOMERY COUNTY, OH	\$42,236.04	0.00%	100.05%
WARREN COUNTY, PA	\$41,654.60	0.00%	100.05%
CRAIGHEAD COUNTY, AR	\$41,562.70	0.00%	100.05%
SAN LUIS OBISPO COUNTY, CA	\$40,686.15	0.00%	100.05%
MCHENRY COUNTY, IL	\$40,061.00	0.00%	100.05%
ESSEX COUNTY, NJ	\$38,458.45	0.00%	100.05%
CHEYENNE COUNTY, NE	\$37,657.29	0.00%	100.05%
MARIN COUNTY, CA	\$37,360.10	0.00%	100.05%
SARATOGA COUNTY, NY	\$37,077.95	0.00%	100.05%
ERIE COUNTY, PA	\$36,993.34	0.00%	100.06%
HILL COUNTY, TX	\$36,884.63	0.00%	100.06%
JACKSON COUNTY, OR	\$36,869.80	0.00%	100.06%
CLEVELAND COUNTY, OK	\$36,720.00	0.00%	100.06%
CHEROKEE COUNTY, IA	\$36,617.33	0.00%	100.06%
WOOD COUNTY, TX	\$36,085.67	0.00%	100.06%
WINNEBAGO COUNTY, IL	\$36,036.00	0.00%	100.06%
BUTLER COUNTY, AL	\$35,757.78	0.00%	100.06%
BENTON COUNTY, OR	\$35,466.67	0.00%	100.06%
ALAMANCE COUNTY, NC	\$35,178.94	0.00%	100.06%
KENT COUNTY, DE	\$34,725.31	0.00%	100.06%
ANDROSCOGGIN COUNTY, ME	\$34,668.45	0.00%	100.06%
CASS COUNTY, MO	\$34,600.00	0.00%	100.07%
BLAIR COUNTY, PA	\$34,392.45	0.00%	100.07%
DAWSON COUNTY, GA	\$34,082.32	0.00%	100.07%
SARASOTA COUNTY, FL	\$33,233.33	0.00%	100.07%
HIDALGO COUNTY, TX	\$33,063.37	0.00%	100.07%
YORK COUNTY, PA	\$31,764.13	0.00%	100.07%
CRITTENDEN COUNTY, AR	\$31,374.75	0.00%	100.07%
HAMPSHIRE COUNTY, MA	\$30,987.50	0.00%	100.07%
UNION COUNTY, NC	\$30,706.32	0.00%	100.07%
CREEK COUNTY, OK	\$29,830.00	0.00%	100.07%
COLUMBIA COUNTY, AR	\$29,554.00	0.00%	100.07%
EL PASO COUNTY, TX	\$29,465.08	0.00%	100.07%
DODGE COUNTY, MN	\$29,230.92	0.00%	100.07%
VICTORIA COUNTY, TX	\$29,197.00	0.00%	100.07%
MONTGOMERY COUNTY, NY	\$28,999.56	0.00%	100.07%
OZAUKEE COUNTY, WI	\$28,890.00	0.00%	100.08%
UNION COUNTY, GA	\$28,100.00	0.00%	100.08%
WASHINGTON COUNTY, OH	\$27,998.50	0.00%	100.08%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
CAMPBELL COUNTY, KY	\$27,694.90	0.00%	100.08%
STRAFFORD COUNTY, NH	\$27,589.83	0.00%	100.08%
WATAUGA COUNTY, NC	\$27,446.00	0.00%	100.08%
MIDDLESEX COUNTY, CT	\$27,323.98	0.00%	100.08%
CLACKAMAS COUNTY, OR	\$26,077.33	0.00%	100.08%
GRANT COUNTY, IN	\$25,976.46	0.00%	100.08%
FORSYTH COUNTY, NC	\$25,568.00	0.00%	100.08%
CACHE COUNTY, UT	\$25,114.00	0.00%	100.08%
ESCAMBIA COUNTY, FL	\$25,056.11	0.00%	100.08%
GUATEMALA	\$25,000.00	0.00%	100.08%
POTTAWATOMIE COUNTY, KS	\$24,850.00	0.00%	100.08%
ADAMS COUNTY, CO	\$24,816.00	0.00%	100.08%
WASHINGTON COUNTY, TN	\$24,737.15	0.00%	100.08%
HARRISON COUNTY, IA	\$24,316.00	0.00%	100.08%
PRINCE GEORGES COUNTY, MD	\$23,635.00	0.00%	100.09%
GENESEE COUNTY, MI	\$22,879.55	0.00%	100.09%
BAY COUNTY, MI	\$21,314.00	0.00%	100.09%
MORRISON COUNTY, MN	\$21,100.00	0.00%	100.09%
CHAUTAUQUA COUNTY, NY	\$21,000.00	0.00%	100.09%
SCHOHARIE COUNTY, NY	\$20,925.28	0.00%	100.09%
SUMMIT COUNTY, UT	\$20,895.25	0.00%	100.09%
MESA COUNTY, CO	\$20,750.00	0.00%	100.09%
WALLER COUNTY, TX	\$20,720.00	0.00%	100.09%
CALDWELL COUNTY, TX	\$19,600.00	0.00%	100.09%
ONEIDA COUNTY, WI	\$19,585.90	0.00%	100.09%
NIAGARA COUNTY, NY	\$18,848.28	0.00%	100.09%
HALL COUNTY, NE	\$18,222.00	0.00%	100.09%
GLOUCESTER COUNTY, NJ	\$18,197.30	0.00%	100.09%
BOONE COUNTY, AR	\$18,097.00	0.00%	100.09%
STANISLAUS COUNTY, CA	\$17,897.00	0.00%	100.09%
CANYON COUNTY, ID	\$17,863.00	0.00%	100.09%
WAYNE COUNTY, IN	\$17,536.08	0.00%	100.09%
STEARNS COUNTY, MN	\$17,220.00	0.00%	100.09%
CHISAGO COUNTY, MN	\$16,937.82	0.00%	100.09%
EMMET COUNTY, MI	\$16,725.15	0.00%	100.09%
STEELE COUNTY, MN	\$16,608.22	0.00%	100.09%
CASS COUNTY, MN	\$15,662.74	0.00%	100.09%
MARION COUNTY, OH	\$15,468.28	0.00%	100.09%
ALLEN COUNTY, OH	\$15,444.00	0.00%	100.09%
ALLEGAN COUNTY, MI	\$15,378.00	0.00%	100.10%
BARTHOLOMEW COUNTY, IN	\$15,150.26	0.00%	100.10%
TITUS COUNTY, TX	\$14,836.20	0.00%	100.10%
SALINE COUNTY, AR	\$14,820.00	0.00%	100.10%
MONTAGUE COUNTY, TX	\$14,729.78	0.00%	100.10%
ATHENS COUNTY, OH	\$14,639.21	0.00%	100.10%
MCLEAN COUNTY, IL	\$14,599.04	0.00%	100.10%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
WORCESTER COUNTY, MA	\$14,337.88	0.00%	100.10%
WABASH COUNTY, IN	\$14,177.70	0.00%	100.10%
LINCOLN COUNTY, WI	\$14,144.70	0.00%	100.10%
TETON COUNTY, WY	\$14,000.00	0.00%	100.10%
CITRUS COUNTY, FL	\$13,850.00	0.00%	100.10%
CHESAPEAKE CITY COUNTY, VA	\$13,784.96	0.00%	100.10%
LACKAWANNA COUNTY, PA	\$13,247.62	0.00%	100.10%
STEPHENS COUNTY, OK	\$13,145.00	0.00%	100.10%
KIMBLE COUNTY, TX	\$12,996.81	0.00%	100.10%
HAMPDEN COUNTY, MA	\$12,564.96	0.00%	100.10%
HINDS COUNTY, MS	\$12,219.70	0.00%	100.10%
CHARLESTON COUNTY, SC	\$11,988.66	0.00%	100.10%
CARVER COUNTY, MN	\$11,882.80	0.00%	100.10%
ST JOSEPH COUNTY, IN	\$11,660.00	0.00%	100.10%
YAVAPAI COUNTY, AZ	\$11,278.35	0.00%	100.10%
JONES COUNTY, MS	\$11,021.99	0.00%	100.10%
ATASCOSA COUNTY, TX	\$10,820.00	0.00%	100.10%
PUTNAM COUNTY, NY	\$10,795.84	0.00%	100.10%
IOWA COUNTY, WI	\$10,781.28	0.00%	100.10%
ANDERSON COUNTY, TX	\$10,430.00	0.00%	100.10%
SEBASTIAN COUNTY, AR	\$10,252.65	0.00%	100.10%
INGHAM COUNTY, MI	\$9,768.80	0.00%	100.10%
VIGO COUNTY, IN	\$9,500.00	0.00%	100.10%
GRAND TRAVERSE COUNTY, MI	\$9,400.00	0.00%	100.10%
ADAMS COUNTY, IL	\$9,368.00	0.00%	100.10%
NEVADA COUNTY, CA	\$9,300.00	0.00%	100.10%
RAINS COUNTY, TX	\$8,992.50	0.00%	100.10%
WEBER COUNTY, UT	\$8,970.00	0.00%	100.10%
LAMOILLE COUNTY, VT	\$8,890.00	0.00%	100.10%
FRANKLIN COUNTY, VA	\$8,634.30	0.00%	100.10%
GREENE COUNTY, AR	\$8,551.65	0.00%	100.10%
HOUSTON COUNTY, GA	\$8,540.00	0.00%	100.11%
WORCESTER COUNTY, MD	\$8,500.00	0.00%	100.11%
DOUGLAS COUNTY, GA	\$8,399.00	0.00%	100.11%
WASECA COUNTY, MN	\$8,385.00	0.00%	100.11%
PALO PINTO COUNTY, TX	\$8,160.00	0.00%	100.11%
PITT COUNTY, NC	\$8,052.49	0.00%	100.11%
GARLAND COUNTY, AR	\$8,000.00	0.00%	100.11%
MUSCATINE COUNTY, IA	\$7,984.00	0.00%	100.11%
ORLEANS COUNTY, VT	\$7,825.00	0.00%	100.11%
LARUE COUNTY, KY	\$7,797.31	0.00%	100.11%
WASHINGTON COUNTY, PA	\$7,524.33	0.00%	100.11%
FAYETTE COUNTY, IN	\$7,500.00	0.00%	100.11%
JOHNSTON COUNTY, OK	\$7,381.87	0.00%	100.11%
COFFEE COUNTY, TN	\$7,351.83	0.00%	100.11%
JEFFERSON COUNTY, MO	\$6,956.00	0.00%	100.11%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
NORTHUMBERLAND COUNTY, PA	\$6,930.50	0.00%	100.11%
COLUMBIANA COUNTY, OH	\$6,800.00	0.00%	100.11%
BURNET COUNTY, TX	\$6,575.00	0.00%	100.11%
CARROLL COUNTY, IA	\$6,564.00	0.00%	100.11%
MACOMB COUNTY, MI	\$6,500.00	0.00%	100.11%
SANTA FE COUNTY, NM	\$6,495.00	0.00%	100.11%
LIMESTONE COUNTY, TX	\$6,450.00	0.00%	100.11%
VANDEBURGH COUNTY, IN	\$6,371.90	0.00%	100.11%
ONEIDA COUNTY, NY	\$6,270.00	0.00%	100.11%
PULASKI COUNTY, KY	\$5,745.22	0.00%	100.11%
MANITOWOC COUNTY, WI	\$5,425.15	0.00%	100.11%
GRATIOT COUNTY, MI	\$5,280.00	0.00%	100.11%
TUSCALOOSA COUNTY, AL	\$5,250.13	0.00%	100.11%
ALBANY COUNTY, WY	\$5,111.70	0.00%	100.11%
HAMILTON COUNTY, TX	\$4,998.00	0.00%	100.11%
PRINCE WILLIAM COUNTY, VA	\$4,762.00	0.00%	100.11%
ROCKDALE COUNTY, GA	\$4,550.00	0.00%	100.11%
RANDALL COUNTY, TX	\$4,532.88	0.00%	100.11%
RAVALLI COUNTY, MT	\$4,479.23	0.00%	100.11%
GRAVES COUNTY, KY	\$4,476.70	0.00%	100.11%
SPAIN	\$4,450.00	0.00%	100.11%
GRUNDY COUNTY, IL	\$4,430.76	0.00%	100.11%
JOHNSON COUNTY, AR	\$4,374.65	0.00%	100.11%
POLK COUNTY, WI	\$4,321.08	0.00%	100.11%
LAKE COUNTY, OH	\$4,318.55	0.00%	100.11%
CURRY COUNTY, NM	\$4,249.00	0.00%	100.11%
ANDERSON COUNTY, KY	\$4,125.00	0.00%	100.11%
COCHISE COUNTY, AZ	\$3,950.00	0.00%	100.11%
COWLITZ COUNTY, WA	\$3,800.00	0.00%	100.11%
SUSSEX COUNTY, NJ	\$3,700.00	0.00%	100.11%
HERKIMER COUNTY, NY	\$3,560.75	0.00%	100.11%
HENRY COUNTY, IL	\$3,550.15	0.00%	100.11%
HENRICO COUNTY, VA	\$3,545.04	0.00%	100.11%
KNOX COUNTY, IL	\$3,507.71	0.00%	100.11%
BARNWELL COUNTY, SC	\$3,299.50	0.00%	100.11%
SANTA CRUZ COUNTY, CA	\$3,297.85	0.00%	100.11%
NORTHAMPTON COUNTY, PA	\$3,200.00	0.00%	100.11%
CARROLL COUNTY, IL	\$3,192.20	0.00%	100.11%
ROANOKE CITY COUNTY, VA	\$3,095.00	0.00%	100.11%
CERRO GORDO COUNTY, IA	\$3,030.72	0.00%	100.11%
HURON COUNTY, OH	\$3,001.75	0.00%	100.11%
OSBORNE COUNTY, KS	\$3,000.00	0.00%	100.11%
WARREN COUNTY, OH	\$2,962.70	0.00%	100.11%
BERKELEY COUNTY, SC	\$2,939.90	0.00%	100.11%
LIVINGSTON COUNTY, NY	\$2,920.00	0.00%	100.11%
CHATHAM COUNTY, GA	\$2,728.62	0.00%	100.11%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
MCCLAIN COUNTY, OK	\$2,618.50	0.00%	100.11%
MORGAN COUNTY, GA	\$2,550.00	0.00%	100.11%
FLUVANNA COUNTY, VA	\$2,525.00	0.00%	100.11%
ALBEMARLE COUNTY, VA	\$2,495.00	0.00%	100.11%
PORTAGE COUNTY, WI	\$2,485.00	0.00%	100.11%
LOWNDES COUNTY, GA	\$2,400.00	0.00%	100.11%
FLATHEAD COUNTY, MT	\$2,376.00	0.00%	100.11%
CLALLAM COUNTY, WA	\$2,346.00	0.00%	100.11%
JOHNSON COUNTY, IA	\$2,230.96	0.00%	100.11%
KOSCIUSKO COUNTY, IN	\$2,167.26	0.00%	100.11%
PASCO COUNTY, FL	\$2,085.00	0.00%	100.11%
FLORENCE COUNTY, SC	\$2,014.02	0.00%	100.11%
SALINE COUNTY, KS	\$1,949.30	0.00%	100.11%
NORFOLK CITY COUNTY, VA	\$1,910.00	0.00%	100.11%
TIPPECANOE COUNTY, IN	\$1,895.00	0.00%	100.11%
WASHINGTON COUNTY, VT	\$1,895.00	0.00%	100.11%
KERSHAW COUNTY, SC	\$1,864.00	0.00%	100.11%
DARE COUNTY, NC	\$1,860.00	0.00%	100.11%
BEAVER COUNTY, PA	\$1,771.38	0.00%	100.11%
PUEBLO COUNTY, CO	\$1,733.34	0.00%	100.11%
NASH COUNTY, NC	\$1,614.46	0.00%	100.11%
HOUSTON COUNTY, TX	\$1,550.00	0.00%	100.11%
MIAMI COUNTY, OH	\$1,499.60	0.00%	100.11%
COLORADO COUNTY, TX	\$1,471.01	0.00%	100.11%
CATAWBA COUNTY, NC	\$1,448.14	0.00%	100.11%
EAU CLAIRE COUNTY, WI	\$1,425.00	0.00%	100.11%
LAKE COUNTY, FL	\$1,424.62	0.00%	100.11%
BROOME COUNTY, NY	\$1,406.61	0.00%	100.11%
SUMTER COUNTY, SC	\$1,314.00	0.00%	100.11%
HIGHLANDS COUNTY, FL	\$1,225.00	0.00%	100.11%
JOSEPHINE COUNTY, OR	\$1,140.00	0.00%	100.11%
EAGLE COUNTY, CO	\$1,125.00	0.00%	100.11%
LICKING COUNTY, OH	\$1,115.00	0.00%	100.11%
CALCASIEU COUNTY, LA	\$1,108.00	0.00%	100.11%
TAYLOR COUNTY, FL	\$1,096.00	0.00%	100.11%
BANNOCK COUNTY, ID	\$991.30	0.00%	100.11%
EDGEcombe COUNTY, NC	\$978.50	0.00%	100.11%
MCPHERSON COUNTY, KS	\$977.00	0.00%	100.11%
TIPTON COUNTY, TN	\$972.41	0.00%	100.11%
COWETA COUNTY, GA	\$932.34	0.00%	100.11%
SUWANNEE COUNTY, FL	\$920.00	0.00%	100.11%
HALE COUNTY, TX	\$909.94	0.00%	100.11%
TOMPKINS COUNTY, NY	\$887.00	0.00%	100.11%
FAULKNER COUNTY, AR	\$856.00	0.00%	100.11%
MEDINA COUNTY, OH	\$785.42	0.00%	100.11%
CLARK COUNTY, IN	\$764.00	0.00%	100.11%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
IMPERIAL COUNTY, CA	\$704.09	0.00%	100.11%
SAUK COUNTY, WI	\$539.40	0.00%	100.11%
MADERA COUNTY, CA	\$486.50	0.00%	100.11%
BEAUFORT COUNTY, SC	\$482.48	0.00%	100.11%
JEFFERSON COUNTY, WI	\$463.43	0.00%	100.11%
BUTLER COUNTY, PA	\$448.00	0.00%	100.11%
SANDOVAL COUNTY, NM	\$443.91	0.00%	100.11%
ROCK ISLAND COUNTY, IL	\$436.50	0.00%	100.11%
YELLOWSTONE COUNTY, MT	\$406.95	0.00%	100.11%
BARRON COUNTY, WI	\$392.00	0.00%	100.11%
ROCK COUNTY, WI	\$390.52	0.00%	100.11%
DAVIESS COUNTY, KY	\$377.40	0.00%	100.11%
CHESTERFIELD COUNTY, VA	\$352.80	0.00%	100.11%
JOHNSON COUNTY, IN	\$300.00	0.00%	100.11%
CROW WING COUNTY, MN	\$280.00	0.00%	100.11%
BOLIVAR COUNTY, MS	\$244.47	0.00%	100.11%
VERMILION COUNTY, IL	\$211.20	0.00%	100.11%
KENT COUNTY, RI	\$198.00	0.00%	100.11%
FALLS CHURCH CITY COUNTY, VA	\$190.00	0.00%	100.11%
TUSCARAWAS COUNTY, OH	\$164.00	0.00%	100.11%
CLAY COUNTY, MO	\$158.40	0.00%	100.11%
SHELBY COUNTY, TX	\$150.00	0.00%	100.11%
TILLAMOOK COUNTY, OR	\$75.00	0.00%	100.11%
HAMBLÉN COUNTY, TN	\$68.89	0.00%	100.11%
SHELBY COUNTY, IA	\$68.00	0.00%	100.11%
ATLANTIC COUNTY, NJ	\$58.82	0.00%	100.11%
ALLEN COUNTY, IN	\$51.80	0.00%	100.11%
RED RIVER COUNTY, TX	\$42.65	0.00%	100.11%
SEWARD COUNTY, NE	\$42.60	0.00%	100.11%
CAROLINE COUNTY, MD	\$31.48	0.00%	100.11%
WASHINGTON COUNTY, TX	\$0.00	0.00%	100.11%
PARK COUNTY, CO	\$0.00	0.00%	100.11%
WOODBURY COUNTY, IA	\$0.00	0.00%	100.11%
WINONA COUNTY, MN	\$0.00	0.00%	100.11%
SCOTT COUNTY, IN	\$0.00	0.00%	100.11%
SALEM COUNTY, VA	\$0.00	0.00%	100.11%
JUNIATA COUNTY, PA	\$0.00	0.00%	100.11%
CLARKE COUNTY, GA	\$0.00	0.00%	100.11%
ALACHUA COUNTY, FL	\$0.00	0.00%	100.11%
GRAYSON COUNTY, KY	\$0.00	0.00%	100.11%
FRANKLIN COUNTY, TX	\$0.00	0.00%	100.11%
HENDERSON COUNTY, KY	\$0.00	0.00%	100.11%
CARROLL COUNTY, GA	\$0.00	0.00%	100.11%
BAYLOR COUNTY, TX	\$0.00	0.00%	100.11%
DE KALB COUNTY, AL	\$0.00	0.00%	100.11%
POLK COUNTY, AR	-\$125.40	0.00%	100.11%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
SUMNER COUNTY, TN	-\$7,865.00	0.00%	100.11%
DANE COUNTY, WI	-\$38,066.53	0.00%	100.11%
SAINT CLAIR COUNTY, AL	-\$74,279.00	0.00%	100.11%
HUDSON COUNTY, NJ	-\$190,817.09	0.00%	100.11%
ANOKA COUNTY, MN	-\$297,075.78	-0.01%	100.10%
LIBERTY COUNTY, TX	-\$729,386.30	-0.02%	100.08%
FREDERICK COUNTY, MD	-\$3,823,528.56	-0.08%	100.00%
Total	\$4,529,194,200.72	100.00%	

EXHIBIT A-2.
CITY OF DALLAS MARKET AREA
ARCHITECTURE & ENGINEERING

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
DALLAS COUNTY, TX	\$284,645,143.77	84.14%	84.14%
DENTON COUNTY, TX	\$13,174,894.47	3.89%	88.04%
TARRANT COUNTY, TX	\$10,692,318.61	3.16%	91.20%
COLLIN COUNTY, TX	\$7,135,043.62	2.11%	93.31%
ROCKWALL COUNTY, TX	\$1,699,158.21	0.50%	93.81%
JOHNSON COUNTY, TX	\$38,000.00	0.01%	93.82%
KAUFMAN COUNTY, TX	\$0.00	0.00%	93.82%
PARKER COUNTY, TX	\$0.00	0.00%	93.82%
SANTA CLARA COUNTY, CA	\$5,160,000.00	1.53%	95.35%
MARICOPA COUNTY, AZ	\$3,155,214.49	0.93%	96.28%
COBB COUNTY, GA	\$1,786,687.77	0.53%	96.81%
HARRIS COUNTY, TX	\$1,750,809.97	0.52%	97.33%
BEXAR COUNTY, TX	\$1,372,450.00	0.41%	97.73%
JEFFERSON COUNTY, LA	\$1,039,250.00	0.31%	98.04%
COOKE COUNTY, TX	\$999,483.78	0.30%	98.33%
TRAVIS COUNTY, TX	\$709,885.17	0.21%	98.54%
JACKSON COUNTY, MO	\$524,676.15	0.16%	98.70%
PASSAIC COUNTY, NJ	\$508,593.03	0.15%	98.85%
SMITH COUNTY, TX	\$505,260.00	0.15%	99.00%
CANADA	\$320,710.12	0.09%	99.09%
ALBANY COUNTY, NY	\$310,376.15	0.09%	99.19%
SAN FRANCISCO COUNTY, CA	\$305,540.60	0.09%	99.28%
SAINT LOUIS COUNTY, MO	\$302,844.53	0.09%	99.37%
CAMDEN COUNTY, NJ	\$281,655.73	0.08%	99.45%
FAIRFAX COUNTY, VA	\$254,376.10	0.08%	99.52%
SACRAMENTO COUNTY, CA	\$251,985.80	0.07%	99.60%
RAMSEY COUNTY, MN	\$220,656.87	0.07%	99.66%
LOS ANGELES COUNTY, CA	\$193,678.50	0.06%	99.72%
CUYAHOGA COUNTY, OH	\$174,816.77	0.05%	99.77%
VIRGINIA BEACH CITY COUNTY, VA	\$144,669.78	0.04%	99.82%
LARIMER COUNTY, CO	\$144,160.00	0.04%	99.86%
ALLEGHENY COUNTY, PA	\$136,466.03	0.04%	99.90%
ANNE ARUNDEL COUNTY, MD	\$128,209.00	0.04%	99.94%
COOK COUNTY, IL	\$114,855.55	0.03%	99.97%
ANDERSON COUNTY, SC	\$105,038.00	0.03%	100.00%
BELL COUNTY, TX	\$88,144.00	0.03%	100.03%
FAIRFIELD COUNTY, CT	\$80,585.62	0.02%	100.05%
SHELBY COUNTY, TN	\$65,150.00	0.02%	100.07%
CHAMPAIGN COUNTY, IL	\$64,993.00	0.02%	100.09%
SUFFOLK COUNTY, MA	\$61,750.00	0.02%	100.11%
WARREN COUNTY, MS	\$58,800.00	0.02%	100.13%
KING COUNTY, WA	\$53,220.00	0.02%	100.14%
ORANGE COUNTY, FL	\$49,716.04	0.01%	100.16%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
EAST BATON ROUGE COUNTY, LA	\$49,226.00	0.01%	100.17%
LEHIGH COUNTY, PA	\$46,100.00	0.01%	100.18%
WILLIAMSON COUNTY, TX	\$44,793.00	0.01%	100.20%
MONMOUTH COUNTY, NJ	\$40,452.00	0.01%	100.21%
SEDGWICK COUNTY, KS	\$40,000.00	0.01%	100.22%
DAKOTA COUNTY, MN	\$38,036.00	0.01%	100.23%
UK	\$36,200.00	0.01%	100.24%
BRAZOS COUNTY, TX	\$32,491.15	0.01%	100.25%
ERIE COUNTY, NY	\$31,016.00	0.01%	100.26%
BERNALILLO COUNTY, NM	\$29,812.41	0.01%	100.27%
ADAMS COUNTY, CO	\$23,820.00	0.01%	100.28%
MESA COUNTY, CO	\$20,750.00	0.01%	100.28%
LEON COUNTY, FL	\$19,455.00	0.01%	100.29%
FORT BEND COUNTY, TX	\$18,534.38	0.01%	100.29%
ESSEX COUNTY, MA	\$14,000.00	0.00%	100.30%
WAYNE COUNTY, IN	\$13,669.00	0.00%	100.30%
NORFOLK COUNTY, MA	\$12,000.00	0.00%	100.31%
CONTRA COSTA COUNTY, CA	\$11,396.80	0.00%	100.31%
MIAMI DADE COUNTY, FL	\$9,456.00	0.00%	100.31%
MECKLENBURG COUNTY, NC	\$8,844.00	0.00%	100.32%
LUBBOCK COUNTY, TX	\$6,657.00	0.00%	100.32%
HILLSBOROUGH COUNTY, FL	\$5,945.00	0.00%	100.32%
FULTON COUNTY, GA	\$5,795.00	0.00%	100.32%
MARION COUNTY, OH	\$5,755.00	0.00%	100.32%
ROCKDALE COUNTY, GA	\$4,550.00	0.00%	100.32%
CENTRE COUNTY, PA	\$3,591.90	0.00%	100.32%
HENRICO COUNTY, VA	\$3,545.04	0.00%	100.33%
CHESTER COUNTY, PA	\$2,300.00	0.00%	100.33%
WESTCHESTER COUNTY, NY	\$1,745.00	0.00%	100.33%
DANE COUNTY, WI	\$900.00	0.00%	100.33%
WASHTENAW COUNTY, MI	\$817.00	0.00%	100.33%
DEKALB COUNTY, GA	\$670.00	0.00%	100.33%
SAN DIEGO COUNTY, CA	\$486.50	0.00%	100.33%
MONTGOMERY COUNTY, PA	\$77.90	0.00%	100.33%
TILLAMOOK COUNTY, OR	\$75.00	0.00%	100.33%
RICHLAND COUNTY, OH	\$13.17	0.00%	100.33%
NASSAU COUNTY, NY	\$4.00	0.00%	100.33%
GRAND TRAVERSE COUNTY, MI	\$0.00	0.00%	100.33%
POLK COUNTY, AR	-\$125.40	0.00%	100.33%
CUMBERLAND COUNTY, PA	-\$2,752.02	0.00%	100.33%
HENNEPIN COUNTY, MN	-\$7,400.00	0.00%	100.32%
OKLAHOMA COUNTY, OK	-\$17,354.00	-0.01%	100.32%
MIDDLESEX COUNTY, MA	-\$51,603.20	-0.02%	100.30%
NEW YORK COUNTY, NY	-\$162,952.23	-0.05%	100.26%
LIBERTY COUNTY, TX	-\$866,861.30	-0.26%	100.00%
Total	\$338,283,198.33		

EXHIBIT A-3.
CITY OF DALLAS MARKET AREA
CONSTRUCTION

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
DALLAS COUNTY, TX	\$712,060,291.78	40.33%	40.33%
DENTON COUNTY, TX	\$443,109,704.12	25.10%	65.42%
TARRANT COUNTY, TX	\$292,628,326.98	16.57%	81.99%
COLLIN COUNTY, TX	\$18,478,079.35	1.05%	83.04%
ELLIS COUNTY, TX	\$7,253,022.43	0.41%	83.45%
JOHNSON COUNTY, TX	\$5,603,027.89	0.32%	83.77%
KAUFMAN COUNTY, TX	\$3,489,194.16	0.20%	83.97%
WISE COUNTY, TX	\$2,564,705.78	0.15%	84.11%
ROCKWALL COUNTY, TX	\$1,029,099.56	0.06%	84.17%
PARKER COUNTY, TX	\$38,750.00	0.00%	84.17%
HUNT COUNTY, TX	\$38,490.00	0.00%	84.17%
HOOD COUNTY, TX	\$0.00	0.00%	84.17%
MARICOPA COUNTY, AZ	\$143,568,023.24	8.13%	92.31%
MONTGOMERY COUNTY, TX	\$26,947,055.59	1.53%	93.83%
WILLIAMSON COUNTY, TX	\$20,291,716.24	1.15%	94.98%
HARRIS COUNTY, TX	\$17,057,842.00	0.97%	95.95%
SAINT LOUIS COUNTY, MO	\$11,257,859.00	0.64%	96.58%
SMITH COUNTY, TX	\$7,567,392.85	0.43%	97.01%
LAMPASAS COUNTY, TX	\$6,671,685.00	0.38%	97.39%
FANNIN COUNTY, TX	\$3,922,658.03	0.22%	97.61%
CAMERON COUNTY, TX	\$3,650,000.00	0.21%	97.82%
SAN BERNARDINO COUNTY, CA	\$3,312,490.00	0.19%	98.01%
CHEROKEE COUNTY, GA	\$3,000,000.00	0.17%	98.18%
NAVARRO COUNTY, TX	\$2,330,740.53	0.13%	98.31%
RICHLAND COUNTY, OH	\$2,227,628.00	0.13%	98.44%
PORTAGE COUNTY, OH	\$2,189,227.21	0.12%	98.56%
KENDALL COUNTY, TX	\$2,050,000.00	0.12%	98.68%
EATON COUNTY, MI	\$1,977,011.11	0.11%	98.79%
ECTOR COUNTY, TX	\$1,532,357.15	0.09%	98.87%
CALHOUN COUNTY, TX	\$1,505,397.86	0.09%	98.96%
COOK COUNTY, IL	\$1,288,974.83	0.07%	99.03%
HAYS COUNTY, TX	\$1,179,837.50	0.07%	99.10%
BALTIMORE CITY COUNTY, MD	\$1,091,933.87	0.06%	99.16%
TRAVIS COUNTY, TX	\$882,078.84	0.05%	99.21%
LEE COUNTY, MS	\$851,043.68	0.05%	99.26%
JEFFERSON COUNTY, AL	\$764,964.75	0.04%	99.30%
SEDGWICK COUNTY, KS	\$743,305.00	0.04%	99.34%
LAMAR COUNTY, TX	\$682,623.35	0.04%	99.38%
MCLENNAN COUNTY, TX	\$617,303.36	0.03%	99.42%
MONROE COUNTY, NY	\$612,382.18	0.03%	99.45%
FRANKLIN COUNTY, WA	\$594,785.00	0.03%	99.49%
BERRIEN COUNTY, MI	\$570,590.00	0.03%	99.52%
GRAYSON COUNTY, TX	\$552,580.00	0.03%	99.55%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
MOORE COUNTY, NC	\$550,996.95	0.03%	99.58%
RICHMOND COUNTY, VA	\$493,700.00	0.03%	99.61%
ERATH COUNTY, TX	\$453,863.70	0.03%	99.64%
POLK COUNTY, FL	\$445,675.00	0.03%	99.66%
WAUSHARA COUNTY, WI	\$440,265.00	0.02%	99.69%
LUBBOCK COUNTY, TX	\$406,129.20	0.02%	99.71%
HAMILTON COUNTY, NE	\$393,904.68	0.02%	99.73%
COOKE COUNTY, TX	\$351,218.84	0.02%	99.75%
VAN ZANDT COUNTY, TX	\$346,141.84	0.02%	99.77%
LAKE COUNTY, IL	\$313,236.00	0.02%	99.79%
MADISON COUNTY, IL	\$305,000.00	0.02%	99.81%
WOOD COUNTY, WI	\$299,396.00	0.02%	99.82%
ALAMEDA COUNTY, CA	\$250,535.48	0.01%	99.84%
COMAL COUNTY, TX	\$231,551.80	0.01%	99.85%
SHELBY COUNTY, TN	\$211,549.06	0.01%	99.86%
HENNEPIN COUNTY, MN	\$203,162.00	0.01%	99.87%
JEFFERSON COUNTY, CO	\$200,771.00	0.01%	99.88%
MARION COUNTY, IN	\$187,597.39	0.01%	99.90%
FORT BEND COUNTY, TX	\$187,355.92	0.01%	99.91%
FULTON COUNTY, GA	\$166,971.00	0.01%	99.92%
FAYETTE COUNTY, GA	\$125,550.00	0.01%	99.92%
ROBERTSON COUNTY, TX	\$124,578.35	0.01%	99.93%
WRIGHT COUNTY, MN	\$121,819.00	0.01%	99.94%
SHAWNEE COUNTY, KS	\$113,400.00	0.01%	99.94%
HOWARD COUNTY, MD	\$107,597.78	0.01%	99.95%
HARRISON COUNTY, TX	\$104,270.25	0.01%	99.95%
LOS ANGELES COUNTY, CA	\$82,239.15	0.00%	99.96%
WASHINGTON COUNTY, FL	\$78,600.00	0.00%	99.96%
KERR COUNTY, TX	\$65,441.00	0.00%	99.97%
CHEROKEE COUNTY, TX	\$61,580.00	0.00%	99.97%
SIOUX COUNTY, IA	\$58,985.84	0.00%	99.97%
BEXAR COUNTY, TX	\$55,424.00	0.00%	99.98%
SAN DIEGO COUNTY, CA	\$49,000.00	0.00%	99.98%
ORLEANS COUNTY, LA	\$48,968.17	0.00%	99.98%
FREDERICK COUNTY, MD	\$48,699.33	0.00%	99.99%
JEFFERSON COUNTY, KY	\$48,139.94	0.00%	99.99%
PASSAIC COUNTY, NJ	\$46,902.38	0.00%	99.99%
BELKNAP COUNTY, NH	\$43,544.29	0.00%	99.99%
CASS COUNTY, MO	\$34,600.00	0.00%	100.00%
CUYAHOGA COUNTY, OH	\$29,150.00	0.00%	100.00%
WASHINGTON COUNTY, OH	\$27,998.50	0.00%	100.00%
GREENE COUNTY, MO	\$27,849.00	0.00%	100.00%
SAN LUIS OBISPO COUNTY, CA	\$25,000.00	0.00%	100.00%
BRYAN COUNTY, OK	\$25,000.00	0.00%	100.00%
LEE COUNTY, FL	\$19,635.00	0.00%	100.00%
EL PASO COUNTY, TX	\$17,170.00	0.00%	100.01%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
CANADIAN COUNTY, OK	\$14,100.00	0.00%	100.01%
TAYLOR COUNTY, TX	\$13,887.98	0.00%	100.01%
CHESAPEAKE CITY COUNTY, VA	\$13,784.96	0.00%	100.01%
HILLSBOROUGH COUNTY, FL	\$10,024.00	0.00%	100.01%
GRAND TRAVERSE COUNTY, MI	\$9,400.00	0.00%	100.01%
DAVIS COUNTY, UT	\$8,500.00	0.00%	100.01%
DELAWARE COUNTY, PA	\$8,400.00	0.00%	100.01%
LARUE COUNTY, KY	\$7,797.31	0.00%	100.01%
HARTFORD COUNTY, CT	\$7,042.00	0.00%	100.01%
NORTHUMBERLAND COUNTY, PA	\$6,930.50	0.00%	100.01%
GUADALUPE COUNTY, TX	\$5,819.38	0.00%	100.01%
HENDERSON COUNTY, TX	\$5,560.00	0.00%	100.01%
MIAMI DADE COUNTY, FL	\$5,160.00	0.00%	100.01%
WAKE COUNTY, NC	\$4,815.00	0.00%	100.01%
ADAMS COUNTY, IL	\$2,200.00	0.00%	100.01%
LANCASTER COUNTY, NE	\$1,920.00	0.00%	100.01%
EDGEcombe COUNTY, NC	\$978.50	0.00%	100.01%
SUFFOLK COUNTY, NY	\$909.45	0.00%	100.01%
NUECES COUNTY, TX	\$486.50	0.00%	100.01%
JOHNSON COUNTY, IN	\$300.00	0.00%	100.01%
ORANGE COUNTY, CA	\$57.00	0.00%	100.01%
HILLSBOROUGH COUNTY, NH	\$0.00	0.00%	100.01%
BELL COUNTY, TX	\$0.00	0.00%	100.01%
ALACHUA COUNTY, FL	\$0.00	0.00%	100.01%
DANE COUNTY, WI	\$0.00	0.00%	100.01%
BOWIE COUNTY, TX	\$0.00	0.00%	100.01%
CANADA	\$0.00	0.00%	100.01%
BERNALILLO COUNTY, NM	\$0.00	0.00%	100.01%
DOUGLAS COUNTY, NE	\$0.00	0.00%	100.01%
MONTGOMERY COUNTY, OH	\$0.00	0.00%	100.01%
SAINT LOUIS CITY COUNTY, MO	-\$26,280.99	0.00%	100.01%
ADA COUNTY, ID	-\$196,053.79	-0.01%	100.00%
Total	\$1,765,720,078.86		

EXHIBIT A-4.
CITY OF DALLAS MARKET AREA
PROFESSIONAL SERVICES

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
DALLAS COUNTY, TX	\$207,930,919.87	51.48%	51.48%
TARRANT COUNTY, TX	\$13,098,596.36	3.24%	54.73%
COLLIN COUNTY, TX	\$6,587,620.28	1.63%	56.36%
DENTON COUNTY, TX	\$6,372,680.57	1.58%	57.94%
ELLIS COUNTY, TX	\$2,091,440.29	0.52%	58.46%
HOOD COUNTY, TX	\$1,716,115.63	0.42%	58.88%
ROCKWALL COUNTY, TX	\$454,110.99	0.11%	58.99%
PARKER COUNTY, TX	\$90,600.00	0.02%	59.01%
JOHNSON COUNTY, TX	\$83,914.05	0.02%	59.04%
KAUFMAN COUNTY, TX	\$53,050.00	0.01%	59.05%
TRAVIS COUNTY, TX	\$23,340,640.08	5.78%	64.83%
DISTRICT OF COLUMBIA COUNTY, DC	\$16,423,585.95	4.07%	68.89%
OKLAHOMA COUNTY, OK	\$14,430,608.75	3.57%	72.47%
HARRIS COUNTY, TX	\$12,003,785.07	2.97%	75.44%
HENNEPIN COUNTY, MN	\$11,223,450.65	2.78%	78.22%
LIBERTY COUNTY, GA	\$9,876,734.15	2.45%	80.66%
FAIRFAX COUNTY, VA	\$9,225,368.30	2.28%	82.95%
JEFFERSON COUNTY, KY	\$8,400,572.77	2.08%	85.03%
LOS ANGELES COUNTY, CA	\$7,983,294.68	1.98%	87.01%
COOK COUNTY, IL	\$4,412,839.77	1.09%	88.10%
VIRGINIA BEACH CITY COUNTY, VA	\$4,171,977.86	1.03%	89.13%
JEFFERSON COUNTY, CO	\$3,758,339.82	0.93%	90.06%
ORANGE COUNTY, FL	\$2,882,634.04	0.71%	90.78%
SAN BERNARDINO COUNTY, CA	\$2,116,731.34	0.52%	91.30%
FORSYTH COUNTY, GA	\$2,016,562.01	0.50%	91.80%
DELAWARE COUNTY, PA	\$1,468,582.71	0.36%	92.16%
WILLIAMSON COUNTY, TX	\$1,454,859.77	0.36%	92.52%
WINDSOR COUNTY, VT	\$1,436,989.00	0.36%	92.88%
PHILADELPHIA COUNTY, PA	\$1,381,957.32	0.34%	93.22%
CUYAHOGA COUNTY, OH	\$1,257,387.26	0.31%	93.53%
NEW YORK COUNTY, NY	\$1,219,261.96	0.30%	93.83%
SACRAMENTO COUNTY, CA	\$1,186,198.96	0.29%	94.13%
UK	\$1,048,485.16	0.26%	94.39%
BEXAR COUNTY, TX	\$989,030.77	0.24%	94.63%
JACKSON COUNTY, MO	\$940,865.41	0.23%	94.87%
HILLSBOROUGH COUNTY, FL	\$919,935.73	0.23%	95.09%
MARION COUNTY, IN	\$782,850.14	0.19%	95.29%
SAINT LOUIS COUNTY, MO	\$780,139.33	0.19%	95.48%
LEON COUNTY, FL	\$707,048.68	0.18%	95.66%
NAVARRO COUNTY, TX	\$703,028.96	0.17%	95.83%
FULTON COUNTY, GA	\$651,632.02	0.16%	95.99%
CONTRA COSTA COUNTY, CA	\$646,940.00	0.16%	96.15%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
BALTIMORE COUNTY, MD	\$626,874.36	0.16%	96.31%
ARLINGTON COUNTY, VA	\$563,031.13	0.14%	96.45%
KENT COUNTY, MI	\$538,087.61	0.13%	96.58%
HENDERSON COUNTY, TX	\$490,061.00	0.12%	96.70%
CANADA	\$432,841.40	0.11%	96.81%
SANTA CLARA COUNTY, CA	\$409,117.24	0.10%	96.91%
PAYNE COUNTY, OK	\$404,840.87	0.10%	97.01%
MONTGOMERY COUNTY, MD	\$402,705.14	0.10%	97.11%
MARION COUNTY, FL	\$375,214.19	0.09%	97.20%
LARAMIE COUNTY, WY	\$375,000.00	0.09%	97.29%
CLERMONT COUNTY, OH	\$359,061.92	0.09%	97.38%
ALEXANDRIA CITY COUNTY, VA	\$348,304.00	0.09%	97.47%
DAKOTA COUNTY, MN	\$327,399.45	0.08%	97.55%
TULSA COUNTY, OK	\$283,223.19	0.07%	97.62%
MIDDLESEX COUNTY, MA	\$277,057.00	0.07%	97.69%
LITCHFIELD COUNTY, CT	\$266,000.00	0.07%	97.75%
SALT LAKE COUNTY, UT	\$265,806.85	0.07%	97.82%
DUPAGE COUNTY, IL	\$256,095.52	0.06%	97.88%
ORANGE COUNTY, CA	\$245,577.34	0.06%	97.94%
NEW CASTLE COUNTY, DE	\$228,525.59	0.06%	98.00%
PLATTE COUNTY, MO	\$217,347.09	0.05%	98.06%
BALTIMORE CITY COUNTY, MD	\$213,646.40	0.05%	98.11%
POLK COUNTY, IA	\$210,490.00	0.05%	98.16%
SARPY COUNTY, NE	\$208,846.00	0.05%	98.21%
SAINT CHARLES COUNTY, MO	\$199,089.00	0.05%	98.26%
MONTEREY COUNTY, CA	\$195,195.38	0.05%	98.31%
GREENVILLE COUNTY, SC	\$190,815.25	0.05%	98.36%
CENTRE COUNTY, PA	\$186,314.14	0.05%	98.40%
MAHASKA COUNTY, IA	\$176,320.00	0.04%	98.45%
MILWAUKEE COUNTY, WI	\$174,053.02	0.04%	98.49%
SNOHOMISH COUNTY, WA	\$160,763.00	0.04%	98.53%
DENVER COUNTY, CO	\$160,732.48	0.04%	98.57%
BROWARD COUNTY, FL	\$160,220.70	0.04%	98.61%
CUMBERLAND COUNTY, PA	\$159,000.00	0.04%	98.65%
HAMILTON COUNTY, OH	\$157,048.72	0.04%	98.69%
WICHITA COUNTY, TX	\$153,664.03	0.04%	98.73%
DUVAL COUNTY, FL	\$150,515.50	0.04%	98.76%
NEW HANOVER COUNTY, NC	\$150,511.72	0.04%	98.80%
WINNEBAGO COUNTY, WI	\$136,589.00	0.03%	98.83%
BRISTOL COUNTY, RI	\$135,000.00	0.03%	98.87%
LANE COUNTY, OR	\$133,021.54	0.03%	98.90%
ANNE ARUNDEL COUNTY, MD	\$128,543.02	0.03%	98.93%
POTTER COUNTY, TX	\$123,316.23	0.03%	98.96%
BUTLER COUNTY, OH	\$118,730.00	0.03%	98.99%
CLARK COUNTY, WA	\$114,918.00	0.03%	99.02%
GWINNETT COUNTY, GA	\$110,293.67	0.03%	99.05%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
SANTA BARBARA COUNTY, CA	\$104,400.00	0.03%	99.07%
SAN DIEGO COUNTY, CA	\$103,869.84	0.03%	99.10%
DOUGLAS COUNTY, NE	\$101,940.00	0.03%	99.12%
HAMILTON COUNTY, TN	\$99,699.15	0.02%	99.15%
JEFFERSON COUNTY, TX	\$98,840.94	0.02%	99.17%
BOULDER COUNTY, CO	\$95,282.75	0.02%	99.20%
SAN FRANCISCO COUNTY, CA	\$92,528.39	0.02%	99.22%
QUEEN ANNES COUNTY, MD	\$90,882.87	0.02%	99.24%
MECKLENBURG COUNTY, NC	\$87,100.00	0.02%	99.26%
MIDDLESEX COUNTY, NJ	\$83,650.34	0.02%	99.28%
SAINT TAMMANY COUNTY, LA	\$82,500.00	0.02%	99.31%
UTAH COUNTY, UT	\$80,850.00	0.02%	99.33%
JOHNSON COUNTY, KS	\$79,720.70	0.02%	99.34%
PINELLAS COUNTY, FL	\$79,595.00	0.02%	99.36%
MONTGOMERY COUNTY, TX	\$76,000.00	0.02%	99.38%
MIDLAND COUNTY, TX	\$75,568.05	0.02%	99.40%
PALM BEACH COUNTY, FL	\$73,240.57	0.02%	99.42%
WAYNE COUNTY, OH	\$70,880.00	0.02%	99.44%
CHITTENDEN COUNTY, VT	\$70,750.78	0.02%	99.46%
KING COUNTY, WA	\$69,928.28	0.02%	99.47%
MONMOUTH COUNTY, NJ	\$69,200.00	0.02%	99.49%
HARTFORD COUNTY, CT	\$68,475.10	0.02%	99.51%
WILSON COUNTY, TN	\$66,443.76	0.02%	99.52%
ARAPAHOE COUNTY, CO	\$65,124.94	0.02%	99.54%
RIVERSIDE COUNTY, CA	\$64,627.30	0.02%	99.56%
DELAWARE COUNTY, OH	\$62,237.35	0.02%	99.57%
VOLUSIA COUNTY, FL	\$60,164.26	0.01%	99.59%
WESTCHESTER COUNTY, NY	\$59,535.00	0.01%	99.60%
CHESTER COUNTY, PA	\$58,198.04	0.01%	99.61%
ALLEGHENY COUNTY, PA	\$57,050.95	0.01%	99.63%
SUMMIT COUNTY, OH	\$54,755.50	0.01%	99.64%
MONTGOMERY COUNTY, PA	\$50,713.00	0.01%	99.66%
SUFFOLK COUNTY, MA	\$50,000.00	0.01%	99.67%
SULLIVAN COUNTY, PA	\$49,950.00	0.01%	99.68%
VENTURA COUNTY, CA	\$49,000.00	0.01%	99.69%
DAVIDSON COUNTY, TN	\$48,670.21	0.01%	99.70%
MARICOPA COUNTY, AZ	\$48,187.94	0.01%	99.72%
FAYETTE COUNTY, GA	\$48,005.00	0.01%	99.73%
FORT BEND COUNTY, TX	\$47,230.78	0.01%	99.74%
GUILFORD COUNTY, NC	\$47,121.64	0.01%	99.75%
SHELBY COUNTY, TN	\$46,955.28	0.01%	99.76%
TULARE COUNTY, CA	\$46,591.11	0.01%	99.77%
FRANKLIN COUNTY, PA	\$45,872.50	0.01%	99.79%
CRAWFORD COUNTY, KS	\$45,000.00	0.01%	99.80%
NASSAU COUNTY, NY	\$43,555.90	0.01%	99.81%
RAMSEY COUNTY, MN	\$43,200.00	0.01%	99.82%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
MAHONING COUNTY, OH	\$43,191.50	0.01%	99.83%
FAIRFIELD COUNTY, CT	\$42,725.20	0.01%	99.84%
SUFFOLK COUNTY, NY	\$41,438.57	0.01%	99.85%
PLACER COUNTY, CA	\$40,800.00	0.01%	99.86%
FRESNO COUNTY, CA	\$39,589.99	0.01%	99.87%
DAVIS COUNTY, UT	\$39,273.58	0.01%	99.88%
ALAMEDA COUNTY, CA	\$38,243.00	0.01%	99.89%
HILL COUNTY, TX	\$36,884.63	0.01%	99.90%
WINNEBAGO COUNTY, IL	\$36,036.00	0.01%	99.91%
BENTON COUNTY, OR	\$35,466.67	0.01%	99.92%
OAKLAND COUNTY, MI	\$34,500.00	0.01%	99.92%
CUMBERLAND COUNTY, ME	\$33,459.00	0.01%	99.93%
HAMPSHIRE COUNTY, MA	\$27,975.00	0.01%	99.94%
MIDDLESEX COUNTY, CT	\$27,323.98	0.01%	99.95%
LEE COUNTY, MS	\$26,833.00	0.01%	99.95%
CLACKAMAS COUNTY, OR	\$25,925.00	0.01%	99.96%
CACHE COUNTY, UT	\$25,000.00	0.01%	99.97%
MERCER COUNTY, NJ	\$25,000.00	0.01%	99.97%
CADDO COUNTY, LA	\$25,000.00	0.01%	99.98%
WAUSHARA COUNTY, WI	\$25,000.00	0.01%	99.98%
POTTAWATOMIE COUNTY, KS	\$24,850.00	0.01%	99.99%
JEFFERSON COUNTY, AL	\$24,503.50	0.01%	100.00%
PRINCE GEORGES COUNTY, MD	\$23,635.00	0.01%	100.00%
BERGEN COUNTY, NJ	\$23,124.00	0.01%	100.01%
SAINT LOUIS CITY COUNTY, MO	\$22,410.00	0.01%	100.01%
SCHOHARIE COUNTY, NY	\$20,925.28	0.01%	100.02%
ROCKINGHAM COUNTY, NH	\$20,900.00	0.01%	100.02%
SMITH COUNTY, TX	\$20,810.56	0.01%	100.03%
LEE COUNTY, FL	\$20,400.00	0.01%	100.03%
ESSEX COUNTY, MA	\$20,000.00	0.00%	100.04%
DODGE COUNTY, MN	\$17,869.52	0.00%	100.04%
CLARK COUNTY, NV	\$17,747.62	0.00%	100.05%
MCHENRY COUNTY, IL	\$17,725.00	0.00%	100.05%
LANCASTER COUNTY, NE	\$17,400.00	0.00%	100.06%
CAMPBELL COUNTY, KY	\$17,300.90	0.00%	100.06%
STEARNS COUNTY, MN	\$17,220.00	0.00%	100.07%
GRAYSON COUNTY, TX	\$16,565.50	0.00%	100.07%
BERNALILLO COUNTY, NM	\$15,529.50	0.00%	100.07%
ALLEGAN COUNTY, MI	\$15,378.00	0.00%	100.08%
UNION COUNTY, NJ	\$14,914.00	0.00%	100.08%
TETON COUNTY, WY	\$14,000.00	0.00%	100.08%
CHAMPAIGN COUNTY, IL	\$13,352.17	0.00%	100.09%
LACKAWANNA COUNTY, PA	\$13,247.62	0.00%	100.09%
BURLINGTON COUNTY, NJ	\$12,551.12	0.00%	100.09%
SUMMIT COUNTY, UT	\$12,300.00	0.00%	100.10%
LINN COUNTY, IA	\$12,278.00	0.00%	100.10%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
KENDALL COUNTY, TX	\$12,184.48	0.00%	100.10%
COLLIER COUNTY, FL	\$11,789.00	0.00%	100.11%
HIDALGO COUNTY, TX	\$11,564.00	0.00%	100.11%
SEMINOLE COUNTY, FL	\$10,090.10	0.00%	100.11%
VIGO COUNTY, IN	\$9,500.00	0.00%	100.11%
NUECES COUNTY, TX	\$9,450.00	0.00%	100.12%
MARIN COUNTY, CA	\$8,520.00	0.00%	100.12%
LAMAR COUNTY, TX	\$8,475.00	0.00%	100.12%
MCLEAN COUNTY, IL	\$8,150.00	0.00%	100.12%
ANDERSON COUNTY, TN	\$7,945.50	0.00%	100.12%
ERIE COUNTY, NY	\$7,920.00	0.00%	100.13%
INDIAN RIVER COUNTY, FL	\$7,878.77	0.00%	100.13%
KANE COUNTY, IL	\$7,872.48	0.00%	100.13%
EL PASO COUNTY, CO	\$7,850.00	0.00%	100.13%
MANATEE COUNTY, FL	\$7,209.00	0.00%	100.13%
COBB COUNTY, GA	\$6,714.35	0.00%	100.14%
GUADALUPE COUNTY, TX	\$6,500.00	0.00%	100.14%
ONEIDA COUNTY, NY	\$6,270.00	0.00%	100.14%
BLAINE COUNTY, ID	\$5,375.00	0.00%	100.14%
BOWIE COUNTY, TX	\$5,000.00	0.00%	100.14%
PRINCE WILLIAM COUNTY, VA	\$4,762.00	0.00%	100.14%
PROVIDENCE COUNTY, RI	\$4,543.00	0.00%	100.14%
EAST BATON ROUGE COUNTY, LA	\$4,500.00	0.00%	100.14%
ST JOSEPH COUNTY, IN	\$4,389.00	0.00%	100.15%
DEKALB COUNTY, GA	\$4,366.00	0.00%	100.15%
COCHISE COUNTY, AZ	\$3,950.00	0.00%	100.15%
KINGS COUNTY, NY	\$3,500.00	0.00%	100.15%
KNOX COUNTY, TN	\$3,500.00	0.00%	100.15%
JACKSON COUNTY, OR	\$3,260.70	0.00%	100.15%
SAINT LAWRENCE COUNTY, NY	\$3,000.00	0.00%	100.15%
OSBORNE COUNTY, KS	\$3,000.00	0.00%	100.15%
WALLER COUNTY, TX	\$2,800.00	0.00%	100.15%
FRANKLIN COUNTY, OH	\$2,670.00	0.00%	100.15%
MCCLAIN COUNTY, OK	\$2,618.50	0.00%	100.15%
CHARLESTON COUNTY, SC	\$2,590.00	0.00%	100.15%
FLUVANNA COUNTY, VA	\$2,525.00	0.00%	100.15%
GALVESTON COUNTY, TX	\$2,510.86	0.00%	100.16%
FLATHEAD COUNTY, MT	\$2,376.00	0.00%	100.16%
JOHNSON COUNTY, IA	\$2,230.96	0.00%	100.16%
PLYMOUTH COUNTY, MA	\$2,108.51	0.00%	100.16%
POLK COUNTY, FL	\$2,100.00	0.00%	100.16%
PASCO COUNTY, FL	\$2,085.00	0.00%	100.16%
FLORENCE COUNTY, SC	\$2,014.02	0.00%	100.16%
BRAZORIA COUNTY, TX	\$2,000.00	0.00%	100.16%
WASHINGTON COUNTY, VT	\$1,895.00	0.00%	100.16%
TIPPECANOE COUNTY, IN	\$1,895.00	0.00%	100.16%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
DARE COUNTY, NC	\$1,860.00	0.00%	100.16%
NASH COUNTY, NC	\$1,614.46	0.00%	100.16%
EAU CLAIRE COUNTY, WI	\$1,425.00	0.00%	100.16%
LAKE COUNTY, FL	\$1,424.62	0.00%	100.16%
ANDROSCOGGIN COUNTY, ME	\$1,320.70	0.00%	100.16%
SAN MATEO COUNTY, CA	\$1,320.00	0.00%	100.16%
HOWARD COUNTY, MD	\$1,296.00	0.00%	100.16%
HAMILTON COUNTY, IN	\$1,260.16	0.00%	100.16%
EAGLE COUNTY, CO	\$1,125.00	0.00%	100.16%
PULASKI COUNTY, AR	\$1,094.43	0.00%	100.16%
STARK COUNTY, OH	\$1,067.36	0.00%	100.16%
HERKIMER COUNTY, NY	\$950.00	0.00%	100.16%
SUWANNEE COUNTY, FL	\$920.00	0.00%	100.16%
ORLEANS COUNTY, LA	\$916.80	0.00%	100.16%
CLINTON COUNTY, NY	\$883.00	0.00%	100.16%
FAULKNER COUNTY, AR	\$856.00	0.00%	100.16%
BRAZOS COUNTY, TX	\$548.50	0.00%	100.17%
CLEVELAND COUNTY, OK	\$450.00	0.00%	100.17%
SPOKANE COUNTY, WA	\$426.00	0.00%	100.17%
LAKE COUNTY, IL	\$424.45	0.00%	100.17%
DAVISS COUNTY, KY	\$377.40	0.00%	100.17%
GLOUCESTER COUNTY, NJ	\$369.00	0.00%	100.17%
CHESTERFIELD COUNTY, VA	\$352.80	0.00%	100.17%
YAVAPAI COUNTY, AZ	\$298.50	0.00%	100.17%
SARATOGA COUNTY, NY	\$284.00	0.00%	100.17%
GENESEE COUNTY, MI	\$250.00	0.00%	100.17%
STEELE COUNTY, MN	\$248.40	0.00%	100.17%
BOLIVAR COUNTY, MS	\$244.47	0.00%	100.17%
BERKS COUNTY, PA	\$212.00	0.00%	100.17%
MULTNOMAH COUNTY, OR	\$206.99	0.00%	100.17%
BUCKS COUNTY, PA	\$132.00	0.00%	100.17%
SHELBY COUNTY, IA	\$68.00	0.00%	100.17%
HENDERSON COUNTY, KY	\$0.00	0.00%	100.17%
WORCESTER COUNTY, MA	\$0.00	0.00%	100.17%
CLARKE COUNTY, GA	\$0.00	0.00%	100.17%
PULASKI COUNTY, KY	-\$359.24	0.00%	100.17%
SUMNER COUNTY, TN	-\$7,865.00	0.00%	100.16%
SAINT CLAIR COUNTY, AL	-\$74,279.00	-0.02%	100.15%
DANE COUNTY, WI	-\$75,527.47	-0.02%	100.13%
WAKE COUNTY, NC	-\$172,220.38	-0.04%	100.08%
ANOKA COUNTY, MN	-\$340,484.40	-0.08%	100.00%
Total	\$403,867,807.56	100.00%	

EXHIBIT A-5.
CITY OF DALLAS MARKET AREA
OTHER SERVICES

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
DALLAS COUNTY, TX	\$398,280,334.48	58.27%	58.27%
TARRANT COUNTY, TX	\$27,039,308.39	3.96%	62.22%
DENTON COUNTY, TX	\$14,748,884.62	2.16%	64.38%
ELLIS COUNTY, TX	\$7,140,235.44	1.04%	65.43%
COLLIN COUNTY, TX	\$6,194,322.30	0.91%	66.33%
JOHNSON COUNTY, TX	\$1,558,200.16	0.23%	66.56%
KAUFMAN COUNTY, TX	\$1,370,565.16	0.20%	66.76%
ROCKWALL COUNTY, TX	\$1,317,925.80	0.19%	66.95%
HUNT COUNTY, TX	\$295,111.77	0.04%	67.00%
WISE COUNTY, TX	\$126,303.08	0.02%	67.01%
PARKER COUNTY, TX	\$90,789.32	0.01%	67.03%
SOMERVELL COUNTY, TX	\$4,414.75	0.00%	67.03%
HARRIS COUNTY, TX	\$74,438,488.62	10.89%	77.92%
BOWIE COUNTY, TX	\$39,360,631.23	5.76%	83.68%
ARLINGTON COUNTY, VA	\$11,620,073.44	1.70%	85.38%
HOWARD COUNTY, IN	\$11,031,837.00	1.61%	86.99%
FULTON COUNTY, GA	\$7,762,865.76	1.14%	88.13%
GRAYSON COUNTY, TX	\$5,265,976.57	0.77%	88.90%
MCLENNAN COUNTY, TX	\$4,936,721.68	0.72%	89.62%
BEXAR COUNTY, TX	\$4,750,500.09	0.69%	90.31%
COOK COUNTY, IL	\$4,605,131.42	0.67%	90.99%
LUBBOCK COUNTY, TX	\$4,411,242.17	0.65%	91.63%
LA SALLE COUNTY, IL	\$3,793,107.60	0.55%	92.19%
CUYAHOGA COUNTY, OH	\$3,787,709.42	0.55%	92.74%
JEFFERSON COUNTY, NY	\$3,772,451.38	0.55%	93.29%
MARICOPA COUNTY, AZ	\$3,071,752.95	0.45%	93.74%
TANGIPAHOA COUNTY, LA	\$2,525,506.49	0.37%	94.11%
MADISON COUNTY, AL	\$2,104,337.00	0.31%	94.42%
SAN DIEGO COUNTY, CA	\$2,050,917.17	0.30%	94.72%
SAINT LOUIS CITY COUNTY, MO	\$2,006,884.98	0.29%	95.01%
ORANGE COUNTY, CA	\$1,953,194.20	0.29%	95.30%
CAMDEN COUNTY, NJ	\$1,944,419.59	0.28%	95.58%
FAIRFAX COUNTY, VA	\$1,836,770.17	0.27%	95.85%
PLACER COUNTY, CA	\$1,833,868.21	0.27%	96.12%
LOS ANGELES COUNTY, CA	\$1,753,987.91	0.26%	96.38%
ALAMEDA COUNTY, CA	\$1,606,896.38	0.24%	96.61%
WILLIAMSON COUNTY, TX	\$1,489,475.00	0.22%	96.83%
ARAPAHOE COUNTY, CO	\$1,239,969.94	0.18%	97.01%
DUPAGE COUNTY, IL	\$1,192,703.67	0.17%	97.19%
BALTIMORE COUNTY, MD	\$1,001,217.74	0.15%	97.33%
WARREN COUNTY, NY	\$895,669.26	0.13%	97.46%
SMITH COUNTY, TX	\$882,923.44	0.13%	97.59%
SEMINOLE COUNTY, FL	\$878,818.86	0.13%	97.72%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
SALT LAKE COUNTY, UT	\$787,374.22	0.12%	97.84%
LAKE COUNTY, IL	\$763,781.00	0.11%	97.95%
JOHNSON COUNTY, KS	\$752,566.65	0.11%	98.06%
GWINNETT COUNTY, GA	\$736,742.77	0.11%	98.17%
SANTA CLARA COUNTY, CA	\$734,726.59	0.11%	98.27%
TRAVIS COUNTY, TX	\$734,327.54	0.11%	98.38%
KERN COUNTY, CA	\$733,400.00	0.11%	98.49%
HAMILTON COUNTY, IN	\$685,300.00	0.10%	98.59%
WALKER COUNTY, TX	\$645,195.68	0.09%	98.68%
TULSA COUNTY, OK	\$614,871.89	0.09%	98.77%
SAINT LOUIS COUNTY, MO	\$583,326.39	0.09%	98.86%
ONONDAGA COUNTY, NY	\$568,637.73	0.08%	98.94%
OAKLAND COUNTY, MI	\$435,481.80	0.06%	99.01%
GREGG COUNTY, TX	\$428,938.00	0.06%	99.07%
RACINE COUNTY, WI	\$420,465.00	0.06%	99.13%
FAIRFIELD COUNTY, CT	\$398,500.00	0.06%	99.19%
CHEROKEE COUNTY, TX	\$389,000.00	0.06%	99.25%
RAMSEY COUNTY, MN	\$387,353.62	0.06%	99.30%
MIAMI DADE COUNTY, FL	\$383,689.59	0.06%	99.36%
SACRAMENTO COUNTY, CA	\$360,494.77	0.05%	99.41%
MULTNOMAH COUNTY, OR	\$306,270.00	0.04%	99.46%
HILLSBOROUGH COUNTY, FL	\$297,091.38	0.04%	99.50%
CANADA	\$281,935.01	0.04%	99.54%
PHILADELPHIA COUNTY, PA	\$273,427.44	0.04%	99.58%
WASHTENAW COUNTY, MI	\$258,804.33	0.04%	99.62%
HAMILTON COUNTY, TN	\$244,091.82	0.04%	99.65%
SUMMIT COUNTY, OH	\$237,806.00	0.03%	99.69%
SEDGWICK COUNTY, KS	\$227,601.47	0.03%	99.72%
HAYS COUNTY, TX	\$198,208.34	0.03%	99.75%
CALUMET COUNTY, WI	\$192,458.00	0.03%	99.78%
JEFFERSON COUNTY, KY	\$183,369.49	0.03%	99.81%
FRESNO COUNTY, CA	\$175,029.00	0.03%	99.83%
HARTFORD COUNTY, CT	\$168,211.53	0.02%	99.86%
GREENE COUNTY, MO	\$157,101.00	0.02%	99.88%
WASHINGTON COUNTY, MN	\$154,896.83	0.02%	99.90%
CALVERT COUNTY, MD	\$146,234.32	0.02%	99.92%
IREDELL COUNTY, NC	\$140,600.00	0.02%	99.94%
LAWRENCE COUNTY, PA	\$122,550.00	0.02%	99.96%
SAN MATEO COUNTY, CA	\$117,602.30	0.02%	99.98%
RILEY COUNTY, KS	\$114,913.55	0.02%	100.00%
ALLEGHENY COUNTY, PA	\$104,710.00	0.02%	100.01%
BASTROP COUNTY, TX	\$100,940.00	0.01%	100.03%
RICHMOND CITY COUNTY, VA	\$100,000.00	0.01%	100.04%
DENVER COUNTY, CO	\$96,779.90	0.01%	100.05%
CONTRA COSTA COUNTY, CA	\$95,526.03	0.01%	100.07%
MONTGOMERY COUNTY, PA	\$90,707.00	0.01%	100.08%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
CAMERON COUNTY, TX	\$90,000.00	0.01%	100.10%
MONTGOMERY COUNTY, TX	\$84,000.00	0.01%	100.11%
HENNEPIN COUNTY, MN	\$83,255.00	0.01%	100.12%
LUCAS COUNTY, OH	\$82,379.28	0.01%	100.13%
LOUDOUN COUNTY, VA	\$82,288.35	0.01%	100.14%
DISTRICT OF COLUMBIA COUNTY, DC	\$81,455.00	0.01%	100.16%
ROCKINGHAM COUNTY, NH	\$79,469.25	0.01%	100.17%
CLARK COUNTY, NV	\$76,283.53	0.01%	100.18%
DURHAM COUNTY, NC	\$71,236.71	0.01%	100.19%
CANADIAN COUNTY, OK	\$67,824.55	0.01%	100.20%
LAFAYETTE COUNTY, LA	\$66,886.94	0.01%	100.21%
DOUGLAS COUNTY, NE	\$65,690.45	0.01%	100.22%
SPOKANE COUNTY, WA	\$62,250.00	0.01%	100.23%
KENNEBEC COUNTY, ME	\$59,718.53	0.01%	100.24%
BRAZOS COUNTY, TX	\$59,071.60	0.01%	100.24%
ROBERTSON COUNTY, TX	\$58,932.43	0.01%	100.25%
HAMILTON COUNTY, OH	\$56,940.24	0.01%	100.26%
PASSAIC COUNTY, NJ	\$55,903.00	0.01%	100.27%
JACKSON COUNTY, MO	\$55,610.00	0.01%	100.28%
BELL COUNTY, TX	\$53,200.00	0.01%	100.29%
ORANGE COUNTY, FL	\$52,900.00	0.01%	100.29%
DOUGLAS COUNTY, CO	\$52,900.00	0.01%	100.30%
LEON COUNTY, FL	\$50,975.00	0.01%	100.31%
LARIMER COUNTY, CO	\$50,820.00	0.01%	100.32%
OCEAN COUNTY, NJ	\$50,665.05	0.01%	100.32%
KINGS COUNTY, NY	\$50,440.31	0.01%	100.33%
WELD COUNTY, CO	\$46,600.00	0.01%	100.34%
BLAINE COUNTY, ID	\$46,567.76	0.01%	100.34%
BLACK HAWK COUNTY, IA	\$45,950.00	0.01%	100.35%
ESSEX COUNTY, MA	\$45,948.17	0.01%	100.36%
LINN COUNTY, IA	\$45,450.00	0.01%	100.36%
NASSAU COUNTY, NY	\$45,437.12	0.01%	100.37%
NEW HANOVER COUNTY, NC	\$44,877.00	0.01%	100.38%
HILLSBOROUGH COUNTY, NH	\$42,900.00	0.01%	100.38%
STARK COUNTY, OH	\$42,285.00	0.01%	100.39%
DAVIDSON COUNTY, TN	\$41,200.00	0.01%	100.40%
ANOKA COUNTY, MN	\$40,509.04	0.01%	100.40%
MECKLENBURG COUNTY, NC	\$39,356.88	0.01%	100.41%
MONTGOMERY COUNTY, OH	\$37,341.04	0.01%	100.41%
CLEVELAND COUNTY, OK	\$36,270.00	0.01%	100.42%
KING COUNTY, WA	\$35,748.00	0.01%	100.42%
BERGEN COUNTY, NJ	\$35,417.64	0.01%	100.43%
ALAMANCE COUNTY, NC	\$34,674.00	0.01%	100.43%
CRAIGHEAD COUNTY, AR	\$34,500.00	0.01%	100.44%
JACKSON COUNTY, OR	\$33,609.10	0.00%	100.44%
PIMA COUNTY, AZ	\$32,549.96	0.00%	100.45%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
BROWARD COUNTY, FL	\$32,357.04	0.00%	100.45%
FANNIN COUNTY, TX	\$31,300.00	0.00%	100.46%
WAKE COUNTY, NC	\$31,248.75	0.00%	100.46%
MONROE COUNTY, NY	\$30,870.00	0.00%	100.47%
VICTORIA COUNTY, TX	\$29,197.00	0.00%	100.47%
MARIN COUNTY, CA	\$28,150.00	0.00%	100.48%
UK	\$27,657.00	0.00%	100.48%
STRAFFORD COUNTY, NH	\$27,589.83	0.00%	100.48%
FRANKLIN COUNTY, MA	\$27,098.59	0.00%	100.49%
FORSYTH COUNTY, NC	\$25,568.00	0.00%	100.49%
GUATEMALA	\$25,000.00	0.00%	100.50%
HORRY COUNTY, SC	\$24,745.00	0.00%	100.50%
VOLUSIA COUNTY, FL	\$24,309.26	0.00%	100.50%
NEW YORK COUNTY, NY	\$24,299.44	0.00%	100.51%
PALM BEACH COUNTY, FL	\$23,867.50	0.00%	100.51%
WAYNE COUNTY, MI	\$22,225.00	0.00%	100.51%
HIDALGO COUNTY, TX	\$21,825.00	0.00%	100.52%
CLERMONT COUNTY, OH	\$20,270.00	0.00%	100.52%
ORANGE COUNTY, NC	\$19,559.42	0.00%	100.52%
NAVARRO COUNTY, TX	\$19,355.00	0.00%	100.52%
NEW HAVEN COUNTY, CT	\$19,022.65	0.00%	100.53%
MONTGOMERY COUNTY, MD	\$18,900.00	0.00%	100.53%
WALLER COUNTY, TX	\$17,920.00	0.00%	100.53%
MANATEE COUNTY, FL	\$17,365.00	0.00%	100.54%
SAN FRANCISCO COUNTY, CA	\$16,573.21	0.00%	100.54%
JEFFERSON COUNTY, CO	\$16,451.94	0.00%	100.54%
CUMBERLAND COUNTY, ME	\$15,871.92	0.00%	100.54%
ESCAMBIA COUNTY, FL	\$15,644.33	0.00%	100.54%
POLK COUNTY, IA	\$15,288.00	0.00%	100.55%
BARTHOLOMEW COUNTY, IN	\$15,150.26	0.00%	100.55%
MONTAGUE COUNTY, TX	\$14,729.78	0.00%	100.55%
KNOX COUNTY, TN	\$14,568.00	0.00%	100.55%
MIDDLESEX COUNTY, MA	\$14,292.40	0.00%	100.56%
PULASKI COUNTY, AR	\$13,100.00	0.00%	100.56%
KIMBLE COUNTY, TX	\$12,996.81	0.00%	100.56%
WASHINGTON COUNTY, OR	\$11,635.00	0.00%	100.56%
JONES COUNTY, MS	\$11,021.99	0.00%	100.56%
BREVARD COUNTY, FL	\$10,973.00	0.00%	100.56%
ATASCOSA COUNTY, TX	\$10,820.00	0.00%	100.57%
PUTNAM COUNTY, NY	\$10,795.84	0.00%	100.57%
ANDERSON COUNTY, TX	\$10,430.00	0.00%	100.57%
MONMOUTH COUNTY, NJ	\$9,314.60	0.00%	100.57%
NEVADA COUNTY, CA	\$9,300.00	0.00%	100.57%
RAINS COUNTY, TX	\$8,992.50	0.00%	100.57%
UTAH COUNTY, UT	\$8,976.00	0.00%	100.57%
SUMMIT COUNTY, UT	\$8,595.25	0.00%	100.58%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
WESTMORELAND COUNTY, PA	\$8,247.04	0.00%	100.58%
COMAL COUNTY, TX	\$8,000.00	0.00%	100.58%
GARLAND COUNTY, AR	\$8,000.00	0.00%	100.58%
COLUMBIANA COUNTY, OH	\$6,800.00	0.00%	100.58%
SARASOTA COUNTY, FL	\$6,694.23	0.00%	100.58%
BURNET COUNTY, TX	\$6,575.00	0.00%	100.58%
LIMESTONE COUNTY, TX	\$6,450.00	0.00%	100.58%
VANDEBURGH COUNTY, IN	\$6,371.90	0.00%	100.58%
FAYETTE COUNTY, KY	\$6,195.00	0.00%	100.58%
DELAWARE COUNTY, PA	\$6,000.00	0.00%	100.59%
BERNALILLO COUNTY, NM	\$5,489.00	0.00%	100.59%
RIVERSIDE COUNTY, CA	\$5,400.00	0.00%	100.59%
CHESTER COUNTY, PA	\$5,210.00	0.00%	100.59%
HAMILTON COUNTY, TX	\$4,998.00	0.00%	100.59%
ST JOSEPH COUNTY, IN	\$4,513.00	0.00%	100.59%
SPAIN	\$4,450.00	0.00%	100.59%
SANTA BARBARA COUNTY, CA	\$4,440.00	0.00%	100.59%
CURRY COUNTY, NM	\$4,249.00	0.00%	100.59%
NEW LONDON COUNTY, CT	\$4,234.00	0.00%	100.59%
ANDERSON COUNTY, KY	\$4,125.00	0.00%	100.59%
POTTER COUNTY, TX	\$3,971.55	0.00%	100.59%
WAYNE COUNTY, IN	\$3,867.08	0.00%	100.59%
ERIE COUNTY, NY	\$3,805.44	0.00%	100.59%
COWLITZ COUNTY, WA	\$3,800.00	0.00%	100.59%
KNOX COUNTY, IL	\$3,507.71	0.00%	100.60%
ROANOKE CITY COUNTY, VA	\$3,095.00	0.00%	100.60%
HAMPSHIRE COUNTY, MA	\$3,012.50	0.00%	100.60%
WORCESTER COUNTY, MA	\$3,000.00	0.00%	100.60%
BOULDER COUNTY, CO	\$3,000.00	0.00%	100.60%
LYCOMING COUNTY, PA	\$2,790.00	0.00%	100.60%
MORGAN COUNTY, GA	\$2,550.00	0.00%	100.60%
PORTAGE COUNTY, WI	\$2,485.00	0.00%	100.60%
LOWNDES COUNTY, GA	\$2,400.00	0.00%	100.60%
RANDALL COUNTY, TX	\$2,380.00	0.00%	100.60%
CLALLAM COUNTY, WA	\$2,346.00	0.00%	100.60%
COBB COUNTY, GA	\$1,995.00	0.00%	100.60%
KERSHAW COUNTY, SC	\$1,864.00	0.00%	100.60%
BRISTOL COUNTY, MA	\$1,815.00	0.00%	100.60%
SUFFOLK COUNTY, MA	\$1,700.00	0.00%	100.60%
MILWAUKEE COUNTY, WI	\$1,576.08	0.00%	100.60%
HOUSTON COUNTY, TX	\$1,550.00	0.00%	100.60%
FORT BEND COUNTY, TX	\$1,318.99	0.00%	100.60%
ALBANY COUNTY, NY	\$1,200.00	0.00%	100.60%
SOMERSET COUNTY, NJ	\$1,199.00	0.00%	100.60%
FRANKLIN COUNTY, OH	\$1,180.00	0.00%	100.60%
VENTURA COUNTY, CA	\$1,086.50	0.00%	100.60%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
SAN BERNARDINO COUNTY, CA	\$1,018.39	0.00%	100.60%
BANNOCK COUNTY, ID	\$991.30	0.00%	100.60%
JEFFERSON COUNTY, LA	\$921.19	0.00%	100.60%
PINELLAS COUNTY, FL	\$850.56	0.00%	100.60%
DUBUQUE COUNTY, IA	\$807.06	0.00%	100.60%
LANE COUNTY, OR	\$797.00	0.00%	100.60%
EL PASO COUNTY, TX	\$633.52	0.00%	100.60%
SAUK COUNTY, WI	\$539.40	0.00%	100.60%
VIRGINIA BEACH CITY COUNTY, VA	\$517.20	0.00%	100.60%
MADERA COUNTY, CA	\$486.50	0.00%	100.60%
SHELBY COUNTY, TN	\$486.50	0.00%	100.60%
RUTHERFORD COUNTY, TN	\$442.43	0.00%	100.60%
YELLOWSTONE COUNTY, MT	\$406.95	0.00%	100.60%
NACOGDOCHES COUNTY, TX	\$400.00	0.00%	100.60%
OKLAHOMA COUNTY, OK	\$350.00	0.00%	100.60%
BALTIMORE CITY COUNTY, MD	\$235.00	0.00%	100.60%
TAYLOR COUNTY, FL	\$196.00	0.00%	100.60%
FALLS CHURCH CITY COUNTY, VA	\$190.00	0.00%	100.60%
SHELBY COUNTY, TX	\$150.00	0.00%	100.60%
ALLEN COUNTY, IN	\$51.80	0.00%	100.60%
CAROLINE COUNTY, MD	\$31.48	0.00%	100.60%
BRAZORIA COUNTY, TX	\$0.00	0.00%	100.60%
ESSEX COUNTY, NJ	-\$3,530.73	0.00%	100.60%
HUDSON COUNTY, NJ	-\$245,154.95	-0.04%	100.57%
FREDERICK COUNTY, MD	-\$3,873,797.89	-0.57%	100.00%
Total	\$683,543,943.56		

EXHIBIT A-6.
CITY OF DALLAS MARKET AREA
GOODS & SUPPLIES

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
DALLAS COUNTY, TX	\$659,284,280.67	49.28%	49.28%
TARRANT COUNTY, TX	\$89,456,010.96	6.69%	55.97%
DENTON COUNTY, TX	\$66,871,920.23	5.00%	60.97%
COLLIN COUNTY, TX	\$56,576,624.45	4.23%	65.20%
JOHNSON COUNTY, TX	\$38,480,381.71	2.88%	68.07%
ELLIS COUNTY, TX	\$3,291,522.34	0.25%	68.32%
ROCKWALL COUNTY, TX	\$2,097,369.11	0.16%	68.48%
HUNT COUNTY, TX	\$1,945,480.99	0.15%	68.62%
KAUFMAN COUNTY, TX	\$1,092,925.59	0.08%	68.70%
PARKER COUNTY, TX	\$948,937.37	0.07%	68.77%
HOOD COUNTY, TX	\$185,389.62	0.01%	68.79%
WISE COUNTY, TX	\$37,747.77	0.00%	68.79%
TRAVIS COUNTY, TX	\$51,655,933.92	3.86%	72.65%
LOS ANGELES COUNTY, CA	\$34,675,214.31	2.59%	75.24%
HARRIS COUNTY, TX	\$34,553,376.32	2.58%	77.83%
MORRIS COUNTY, NJ	\$32,673,378.75	2.44%	80.27%
HENNEPIN COUNTY, MN	\$10,917,820.46	0.82%	81.09%
LYCOMING COUNTY, PA	\$10,336,251.80	0.77%	81.86%
MECKLENBURG COUNTY, NC	\$9,952,125.64	0.74%	82.60%
FULTON COUNTY, GA	\$9,800,421.54	0.73%	83.33%
MCLENNAN COUNTY, TX	\$9,685,924.40	0.72%	84.06%
AUSTIN COUNTY, TX	\$9,605,911.42	0.72%	84.78%
MILWAUKEE COUNTY, WI	\$8,946,998.92	0.67%	85.45%
ROWAN COUNTY, NC	\$8,035,669.91	0.60%	86.05%
IREDELL COUNTY, NC	\$7,399,579.02	0.55%	86.60%
CHESTER COUNTY, PA	\$7,331,032.48	0.55%	87.15%
MARICOPA COUNTY, AZ	\$7,256,839.90	0.54%	87.69%
CLARK COUNTY, WA	\$6,843,966.91	0.51%	88.20%
FAYETTE COUNTY, KY	\$6,553,291.64	0.49%	88.69%
WASHOE COUNTY, NV	\$5,827,533.68	0.44%	89.13%
LUCAS COUNTY, OH	\$5,805,901.70	0.43%	89.56%
BEXAR COUNTY, TX	\$5,673,477.52	0.42%	89.98%
MONTGOMERY COUNTY, PA	\$5,030,331.69	0.38%	90.36%
SANTA CLARA COUNTY, CA	\$4,531,625.58	0.34%	90.70%
LARIMER COUNTY, CO	\$4,278,481.84	0.32%	91.02%
COOK COUNTY, IL	\$3,966,573.15	0.30%	91.32%
MACON COUNTY, IL	\$3,859,100.36	0.29%	91.60%
MONTGOMERY COUNTY, TX	\$3,794,292.22	0.28%	91.89%
KING COUNTY, WA	\$3,680,841.95	0.28%	92.16%
ELMORE COUNTY, AL	\$3,527,932.30	0.26%	92.43%
CADDO COUNTY, LA	\$3,520,626.50	0.26%	92.69%
SHELBY COUNTY, TN	\$3,429,058.08	0.26%	92.95%
BROWN COUNTY, WI	\$3,307,888.76	0.25%	93.19%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
CUYAHOGA COUNTY, OH	\$3,188,111.85	0.24%	93.43%
JEFFERSON COUNTY, TX	\$2,543,916.76	0.19%	93.62%
GUADALUPE COUNTY, TX	\$2,408,419.55	0.18%	93.80%
WILLIAMSON COUNTY, TX	\$2,233,463.11	0.17%	93.97%
SCOTT COUNTY, IA	\$2,221,020.11	0.17%	94.14%
SEDGWICK COUNTY, KS	\$2,136,306.05	0.16%	94.29%
FRANKLIN COUNTY, OH	\$2,037,070.88	0.15%	94.45%
SAN BERNARDINO COUNTY, CA	\$1,950,147.32	0.15%	94.59%
SAINT LOUIS COUNTY, MO	\$1,940,894.32	0.15%	94.74%
HILLSBOROUGH COUNTY, FL	\$1,674,072.77	0.13%	94.86%
BALTIMORE CITY COUNTY, MD	\$1,624,676.84	0.12%	94.98%
MIAMI DADE COUNTY, FL	\$1,543,641.98	0.12%	95.10%
KINGS COUNTY, NY	\$1,488,840.52	0.11%	95.21%
RICHLAND COUNTY, SC	\$1,446,791.00	0.11%	95.32%
COBB COUNTY, GA	\$1,414,972.47	0.11%	95.43%
EAST BATON ROUGE COUNTY, LA	\$1,398,910.65	0.10%	95.53%
CANADA	\$1,381,667.47	0.10%	95.63%
SAN DIEGO COUNTY, CA	\$1,367,739.42	0.10%	95.74%
WILLIAMSON COUNTY, TN	\$1,327,628.22	0.10%	95.83%
ALAMEDA COUNTY, CA	\$1,162,918.37	0.09%	95.92%
WILL COUNTY, IL	\$1,141,286.68	0.09%	96.01%
HARTFORD COUNTY, CT	\$1,059,905.05	0.08%	96.09%
DUBUQUE COUNTY, IA	\$1,019,602.12	0.08%	96.16%
BROWARD COUNTY, FL	\$988,057.99	0.07%	96.24%
HOPKINS COUNTY, TX	\$972,030.86	0.07%	96.31%
GALVESTON COUNTY, TX	\$906,183.97	0.07%	96.38%
DUVAL COUNTY, TX	\$903,037.50	0.07%	96.44%
TULSA COUNTY, OK	\$901,381.05	0.07%	96.51%
SUNFLOWER COUNTY, MS	\$864,933.79	0.06%	96.58%
TALBOT COUNTY, MD	\$852,141.00	0.06%	96.64%
ORANGE COUNTY, NY	\$799,532.21	0.06%	96.70%
MIDDLESEX COUNTY, MA	\$763,997.64	0.06%	96.76%
COMAL COUNTY, TX	\$730,560.27	0.05%	96.81%
MIDDLESEX COUNTY, NJ	\$721,290.05	0.05%	96.87%
HARDIN COUNTY, TX	\$719,760.20	0.05%	96.92%
SUFFOLK COUNTY, NY	\$700,785.96	0.05%	96.97%
WICHITA COUNTY, TX	\$699,676.60	0.05%	97.02%
BURLINGTON COUNTY, NJ	\$697,852.24	0.05%	97.08%
ADA COUNTY, ID	\$680,339.46	0.05%	97.13%
RAMSEY COUNTY, MN	\$677,619.37	0.05%	97.18%
NEW LONDON COUNTY, CT	\$648,014.58	0.05%	97.23%
YORK COUNTY, ME	\$636,998.10	0.05%	97.27%
HAYS COUNTY, TX	\$632,430.17	0.05%	97.32%
CASS COUNTY, ND	\$629,812.24	0.05%	97.37%
OTTAWA COUNTY, MI	\$612,760.31	0.05%	97.41%
DUPAGE COUNTY, IL	\$609,958.84	0.05%	97.46%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
OCEAN COUNTY, NJ	\$587,884.30	0.04%	97.50%
WAYNE COUNTY, MI	\$571,882.42	0.04%	97.55%
ORANGE COUNTY, CA	\$559,524.76	0.04%	97.59%
BURLESON COUNTY, TX	\$551,906.26	0.04%	97.63%
FAIRFAX COUNTY, VA	\$545,237.31	0.04%	97.67%
NEW HAVEN COUNTY, CT	\$536,964.30	0.04%	97.71%
CAPE GIRARDEAU COUNTY, MO	\$535,375.64	0.04%	97.75%
ORANGE COUNTY, FL	\$527,688.47	0.04%	97.79%
GWINNETT COUNTY, GA	\$525,107.19	0.04%	97.83%
CALVERT COUNTY, MD	\$523,016.53	0.04%	97.87%
CAMDEN COUNTY, NJ	\$506,582.75	0.04%	97.91%
ANDERSON COUNTY, TN	\$504,507.00	0.04%	97.94%
LAKE COUNTY, IL	\$494,559.52	0.04%	97.98%
DAKOTA COUNTY, MN	\$480,250.62	0.04%	98.02%
ALLEGHENY COUNTY, PA	\$476,877.99	0.04%	98.05%
GRAYS HARBOR COUNTY, WA	\$468,000.00	0.03%	98.09%
KANE COUNTY, IL	\$451,981.33	0.03%	98.12%
HARRISON COUNTY, MS	\$444,873.86	0.03%	98.15%
RIVERSIDE COUNTY, CA	\$429,286.39	0.03%	98.19%
SHAWNEE COUNTY, KS	\$427,262.61	0.03%	98.22%
WAKE COUNTY, NC	\$426,404.63	0.03%	98.25%
HORRY COUNTY, SC	\$406,028.25	0.03%	98.28%
BUCKS COUNTY, PA	\$402,978.00	0.03%	98.31%
PULASKI COUNTY, AR	\$401,431.88	0.03%	98.34%
JEFFERSON COUNTY, AL	\$390,196.14	0.03%	98.37%
RANKIN COUNTY, MS	\$388,769.95	0.03%	98.40%
CRAVEN COUNTY, NC	\$369,247.51	0.03%	98.43%
NASSAU COUNTY, NY	\$368,907.26	0.03%	98.45%
GRAYSON COUNTY, TX	\$361,619.31	0.03%	98.48%
NACOGDOCHES COUNTY, TX	\$359,790.00	0.03%	98.51%
BELL COUNTY, TX	\$359,168.95	0.03%	98.53%
NEW YORK COUNTY, NY	\$350,607.58	0.03%	98.56%
WINNEBAGO COUNTY, WI	\$350,000.00	0.03%	98.59%
BOONE COUNTY, MO	\$341,206.80	0.03%	98.61%
SUSSEX COUNTY, DE	\$319,560.50	0.02%	98.64%
FORT BEND COUNTY, TX	\$318,711.77	0.02%	98.66%
SONOMA COUNTY, CA	\$316,964.98	0.02%	98.68%
BALDWIN COUNTY, AL	\$315,830.25	0.02%	98.71%
PHILADELPHIA COUNTY, PA	\$304,097.53	0.02%	98.73%
YOLO COUNTY, CA	\$296,664.45	0.02%	98.75%
MAHASKA COUNTY, IA	\$291,981.95	0.02%	98.77%
LOUDOUN COUNTY, VA	\$286,978.73	0.02%	98.80%
OKLAHOMA COUNTY, OK	\$284,503.25	0.02%	98.82%
ECTOR COUNTY, TX	\$278,879.64	0.02%	98.84%
ANDERSON COUNTY, SC	\$277,961.83	0.02%	98.86%
EAST FELICIANA COUNTY, LA	\$277,630.00	0.02%	98.88%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
KALAMAZOO COUNTY, MI	\$267,711.14	0.02%	98.90%
SARPY COUNTY, NE	\$254,259.75	0.02%	98.92%
ERIE COUNTY, NY	\$253,166.85	0.02%	98.94%
BERGEN COUNTY, NJ	\$237,264.98	0.02%	98.95%
ONONDAGA COUNTY, NY	\$233,039.26	0.02%	98.97%
BRYAN COUNTY, OK	\$231,178.00	0.02%	98.99%
ANGELINA COUNTY, TX	\$223,864.14	0.02%	99.01%
WEBSTER COUNTY, MO	\$218,012.03	0.02%	99.02%
SEMINOLE COUNTY, FL	\$215,548.38	0.02%	99.04%
BOWIE COUNTY, TX	\$213,689.17	0.02%	99.05%
DELAWARE COUNTY, PA	\$201,144.40	0.02%	99.07%
UNION COUNTY, NJ	\$197,047.48	0.01%	99.08%
CLARK COUNTY, OH	\$190,814.00	0.01%	99.10%
MONROE COUNTY, NY	\$189,754.78	0.01%	99.11%
LUZERNE COUNTY, PA	\$188,556.80	0.01%	99.13%
HENDERSON COUNTY, TX	\$186,994.30	0.01%	99.14%
PENOBSCOT COUNTY, ME	\$185,897.79	0.01%	99.15%
RUTHERFORD COUNTY, TN	\$181,119.15	0.01%	99.17%
CLINTON COUNTY, NY	\$178,064.00	0.01%	99.18%
JEFFERSON COUNTY, KY	\$171,206.54	0.01%	99.19%
LEE COUNTY, TX	\$165,085.00	0.01%	99.21%
STARK COUNTY, OH	\$164,292.00	0.01%	99.22%
PALM BEACH COUNTY, FL	\$162,363.03	0.01%	99.23%
EASTLAND COUNTY, TX	\$157,864.00	0.01%	99.24%
ALBANY COUNTY, NY	\$154,081.81	0.01%	99.25%
TAYLOR COUNTY, TX	\$150,662.00	0.01%	99.27%
BENTON COUNTY, AR	\$149,064.76	0.01%	99.28%
JOHNSON COUNTY, KS	\$145,712.97	0.01%	99.29%
DEKALB COUNTY, GA	\$142,756.58	0.01%	99.30%
MERCER COUNTY, WV	\$140,713.48	0.01%	99.31%
SPOTSYLVANIA COUNTY, VA	\$140,182.59	0.01%	99.32%
TULARE COUNTY, CA	\$139,944.00	0.01%	99.33%
TALLADEGA COUNTY, AL	\$139,097.51	0.01%	99.34%
FAYETTE COUNTY, PA	\$137,746.00	0.01%	99.35%
LIBERTY COUNTY, TX	\$137,475.00	0.01%	99.36%
GREENE COUNTY, MO	\$136,799.80	0.01%	99.37%
BRAZOS COUNTY, TX	\$135,694.26	0.01%	99.38%
BOULDER COUNTY, CO	\$134,323.45	0.01%	99.39%
MARTIN COUNTY, FL	\$132,381.45	0.01%	99.40%
SAINT MARY COUNTY, LA	\$124,842.26	0.01%	99.41%
FAIRFIELD COUNTY, CT	\$124,277.85	0.01%	99.42%
JACKSON COUNTY, MO	\$123,749.59	0.01%	99.43%
BREVARD COUNTY, FL	\$123,637.65	0.01%	99.44%
SAINT LAWRENCE COUNTY, NY	\$118,921.00	0.01%	99.45%
CALHOUN COUNTY, AL	\$116,973.04	0.01%	99.46%
WESTMORELAND COUNTY, PA	\$111,967.23	0.01%	99.46%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
DOUGLAS COUNTY, NE	\$105,927.17	0.01%	99.47%
CALLAHAN COUNTY, TX	\$105,434.00	0.01%	99.48%
POLK COUNTY, FL	\$104,715.53	0.01%	99.49%
MORGAN COUNTY, AL	\$101,992.86	0.01%	99.50%
BERKS COUNTY, PA	\$101,121.70	0.01%	99.50%
LIMESTONE COUNTY, AL	\$100,906.31	0.01%	99.51%
LEON COUNTY, FL	\$100,652.74	0.01%	99.52%
HILLSDALE COUNTY, MI	\$99,797.16	0.01%	99.53%
LANCASTER COUNTY, PA	\$95,598.51	0.01%	99.53%
ORANGE COUNTY, NC	\$93,000.00	0.01%	99.54%
KENNEBEC COUNTY, ME	\$92,628.46	0.01%	99.55%
PASSAIC COUNTY, NJ	\$91,929.52	0.01%	99.55%
SAINT TAMMANY COUNTY, LA	\$91,226.43	0.01%	99.56%
SALT LAKE COUNTY, UT	\$91,015.56	0.01%	99.57%
DUVAL COUNTY, FL	\$90,215.11	0.01%	99.57%
MEDINA COUNTY, TX	\$86,576.00	0.01%	99.58%
SANTA BARBARA COUNTY, CA	\$86,459.40	0.01%	99.59%
ARAPAHOE COUNTY, CO	\$86,066.32	0.01%	99.59%
CLARK COUNTY, NV	\$85,851.91	0.01%	99.60%
CHITTENDEN COUNTY, VT	\$85,843.85	0.01%	99.61%
CHEROKEE COUNTY, TX	\$84,460.38	0.01%	99.61%
VAN ZANDT COUNTY, TX	\$83,289.29	0.01%	99.62%
PLYMOUTH COUNTY, MA	\$81,832.00	0.01%	99.62%
ROCKLAND COUNTY, NY	\$80,124.41	0.01%	99.63%
BOND COUNTY, IL	\$78,479.95	0.01%	99.64%
DENVER COUNTY, CO	\$75,788.04	0.01%	99.64%
WARREN COUNTY, NJ	\$74,465.13	0.01%	99.65%
EL PASO COUNTY, CO	\$73,663.55	0.01%	99.65%
HAMILTON COUNTY, OH	\$73,533.36	0.01%	99.66%
SAGINAW COUNTY, MI	\$72,526.76	0.01%	99.66%
MONTGOMERY COUNTY, MD	\$71,759.94	0.01%	99.67%
MARION COUNTY, FL	\$71,219.70	0.01%	99.67%
UTAH COUNTY, UT	\$70,512.96	0.01%	99.68%
JEFFERSON COUNTY, CO	\$69,538.00	0.01%	99.69%
BRAZORIA COUNTY, TX	\$69,131.07	0.01%	99.69%
BROOMFIELD COUNTY, CO	\$66,633.56	0.00%	99.70%
FRANKLIN COUNTY, NC	\$66,038.77	0.00%	99.70%
LANE COUNTY, OR	\$64,236.59	0.00%	99.71%
COLLIER COUNTY, FL	\$63,549.96	0.00%	99.71%
BRISTOL COUNTY, MA	\$62,485.78	0.00%	99.71%
GREGG COUNTY, TX	\$61,429.00	0.00%	99.72%
PROVIDENCE COUNTY, RI	\$60,593.70	0.00%	99.72%
MONMOUTH COUNTY, NJ	\$59,773.20	0.00%	99.73%
ARLINGTON COUNTY, VA	\$59,733.46	0.00%	99.73%
BERNALILLO COUNTY, NM	\$59,160.96	0.00%	99.74%
MARION COUNTY, IN	\$58,992.97	0.00%	99.74%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
HERNANDO COUNTY, FL	\$55,755.00	0.00%	99.75%
HUDSON COUNTY, NJ	\$54,337.86	0.00%	99.75%
HAMPTON CITY COUNTY, VA	\$53,107.20	0.00%	99.75%
SAINT JOHNS COUNTY, FL	\$51,671.29	0.00%	99.76%
MANATEE COUNTY, FL	\$51,388.62	0.00%	99.76%
POWESHIEK COUNTY, IA	\$50,218.04	0.00%	99.77%
DAVIDSON COUNTY, NC	\$48,956.03	0.00%	99.77%
KANAWHA COUNTY, WV	\$48,232.15	0.00%	99.77%
HOCKING COUNTY, OH	\$47,947.00	0.00%	99.78%
KERN COUNTY, CA	\$47,898.00	0.00%	99.78%
PIERCE COUNTY, WA	\$47,325.20	0.00%	99.78%
QUEENS COUNTY, NY	\$46,805.74	0.00%	99.79%
WAUKESHA COUNTY, WI	\$45,441.64	0.00%	99.79%
NORFOLK COUNTY, MA	\$45,261.25	0.00%	99.79%
SOMERSET COUNTY, NJ	\$45,227.84	0.00%	99.80%
KNOX COUNTY, TN	\$43,034.00	0.00%	99.80%
ESSEX COUNTY, NJ	\$41,989.18	0.00%	99.80%
WARREN COUNTY, PA	\$41,654.60	0.00%	99.81%
SUMMIT COUNTY, OH	\$40,833.00	0.00%	99.81%
ESSEX COUNTY, MA	\$39,375.25	0.00%	99.81%
SUFFOLK COUNTY, MA	\$39,363.07	0.00%	99.82%
SAINT CHARLES COUNTY, MO	\$39,305.00	0.00%	99.82%
ROCKINGHAM COUNTY, NH	\$39,044.15	0.00%	99.82%
CHEYENNE COUNTY, NE	\$37,657.29	0.00%	99.82%
ERIE COUNTY, PA	\$36,993.34	0.00%	99.83%
LANCASTER COUNTY, NE	\$36,955.98	0.00%	99.83%
SARATOGA COUNTY, NY	\$36,793.95	0.00%	99.83%
CHEROKEE COUNTY, IA	\$36,617.33	0.00%	99.83%
DANE COUNTY, WI	\$36,560.94	0.00%	99.84%
WOOD COUNTY, TX	\$36,085.67	0.00%	99.84%
VIRGINIA BEACH CITY COUNTY, VA	\$35,800.00	0.00%	99.84%
BUTLER COUNTY, AL	\$35,757.78	0.00%	99.85%
INDIAN RIVER COUNTY, FL	\$34,927.94	0.00%	99.85%
KENT COUNTY, DE	\$34,725.31	0.00%	99.85%
BLAIR COUNTY, PA	\$34,392.45	0.00%	99.85%
DAWSON COUNTY, GA	\$34,082.32	0.00%	99.86%
BALTIMORE COUNTY, MD	\$33,981.08	0.00%	99.86%
CUMBERLAND COUNTY, PA	\$33,399.00	0.00%	99.86%
ANDROSCOGGIN COUNTY, ME	\$33,347.75	0.00%	99.86%
WASHINGTON COUNTY, OR	\$32,812.04	0.00%	99.87%
PIMA COUNTY, AZ	\$32,660.10	0.00%	99.87%
NUECES COUNTY, TX	\$32,517.23	0.00%	99.87%
YORK COUNTY, PA	\$31,764.13	0.00%	99.87%
CRITTENDEN COUNTY, AR	\$31,374.75	0.00%	99.88%
UNION COUNTY, NC	\$30,706.32	0.00%	99.88%
CREEK COUNTY, OK	\$29,830.00	0.00%	99.88%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
COLUMBIA COUNTY, AR	\$29,554.00	0.00%	99.88%
MONTGOMERY COUNTY, NY	\$28,999.56	0.00%	99.88%
OZAUKEE COUNTY, WI	\$28,890.00	0.00%	99.89%
UNION COUNTY, GA	\$28,100.00	0.00%	99.89%
WATAUGA COUNTY, NC	\$27,446.00	0.00%	99.89%
SARASOTA COUNTY, FL	\$26,539.10	0.00%	99.89%
GRANT COUNTY, IN	\$25,976.46	0.00%	99.89%
CAMERON COUNTY, TX	\$25,415.25	0.00%	99.90%
SACRAMENTO COUNTY, CA	\$25,400.24	0.00%	99.90%
WASHINGTON COUNTY, TN	\$24,737.15	0.00%	99.90%
HARRISON COUNTY, IA	\$24,316.00	0.00%	99.90%
TANGIPAHOA COUNTY, LA	\$24,089.65	0.00%	99.90%
WAYNE COUNTY, OH	\$23,900.00	0.00%	99.91%
LEE COUNTY, FL	\$23,334.00	0.00%	99.91%
SMITH COUNTY, TX	\$23,227.66	0.00%	99.91%
GENESEE COUNTY, MI	\$22,629.55	0.00%	99.91%
MCHENRY COUNTY, IL	\$22,336.00	0.00%	99.91%
BAY COUNTY, MI	\$21,314.00	0.00%	99.91%
MORRISON COUNTY, MN	\$21,100.00	0.00%	99.92%
CHAUTAUQUA COUNTY, NY	\$21,000.00	0.00%	99.92%
CONTRA COSTA COUNTY, CA	\$20,178.62	0.00%	99.92%
CALDWELL COUNTY, TX	\$19,600.00	0.00%	99.92%
ONEIDA COUNTY, WI	\$19,585.90	0.00%	99.92%
NIAGARA COUNTY, NY	\$18,848.28	0.00%	99.92%
HALL COUNTY, NE	\$18,222.00	0.00%	99.92%
VENTURA COUNTY, CA	\$18,152.48	0.00%	99.93%
BOONE COUNTY, AR	\$18,097.00	0.00%	99.93%
STANISLAUS COUNTY, CA	\$17,897.00	0.00%	99.93%
CANYON COUNTY, ID	\$17,863.00	0.00%	99.93%
MERCER COUNTY, NJ	\$17,847.38	0.00%	99.93%
GLOUCESTER COUNTY, NJ	\$17,828.30	0.00%	99.93%
BRISTOL COUNTY, RI	\$17,121.76	0.00%	99.93%
CHISAGO COUNTY, MN	\$16,937.82	0.00%	99.94%
MONTEREY COUNTY, CA	\$16,924.84	0.00%	99.94%
EMMET COUNTY, MI	\$16,725.15	0.00%	99.94%
GREENVILLE COUNTY, SC	\$16,701.52	0.00%	99.94%
FRANKLIN COUNTY, MA	\$16,627.00	0.00%	99.94%
STEELE COUNTY, MN	\$16,359.82	0.00%	99.94%
LAFAYETTE COUNTY, LA	\$15,772.26	0.00%	99.94%
PINELLAS COUNTY, FL	\$15,746.60	0.00%	99.94%
SAN LUIS OBISPO COUNTY, CA	\$15,686.15	0.00%	99.94%
CASS COUNTY, MN	\$15,662.74	0.00%	99.95%
ALLEN COUNTY, OH	\$15,444.00	0.00%	99.95%
HILLSBOROUGH COUNTY, NH	\$15,377.34	0.00%	99.95%
POTTER COUNTY, TX	\$15,313.55	0.00%	99.95%
TITUS COUNTY, TX	\$14,836.20	0.00%	99.95%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
SALINE COUNTY, AR	\$14,820.00	0.00%	99.95%
ATHENS COUNTY, OH	\$14,639.21	0.00%	99.95%
WABASH COUNTY, IN	\$14,177.70	0.00%	99.95%
LINCOLN COUNTY, WI	\$14,144.70	0.00%	99.95%
CITRUS COUNTY, FL	\$13,850.00	0.00%	99.96%
UK	\$13,275.00	0.00%	99.96%
STEPHENS COUNTY, OK	\$13,145.00	0.00%	99.96%
ANNE ARUNDEL COUNTY, MD	\$12,752.00	0.00%	99.96%
HAMPDEN COUNTY, MA	\$12,564.96	0.00%	99.96%
HINDS COUNTY, MS	\$12,219.70	0.00%	99.96%
CARVER COUNTY, MN	\$11,882.80	0.00%	99.96%
EL PASO COUNTY, TX	\$11,661.56	0.00%	99.96%
DODGE COUNTY, MN	\$11,361.40	0.00%	99.96%
WORCESTER COUNTY, MA	\$11,337.88	0.00%	99.96%
YAVAPAI COUNTY, AZ	\$10,979.85	0.00%	99.97%
IOWA COUNTY, WI	\$10,781.28	0.00%	99.97%
CAMPBELL COUNTY, KY	\$10,394.00	0.00%	99.97%
SEBASTIAN COUNTY, AR	\$10,252.65	0.00%	99.97%
DOUGLAS COUNTY, CO	\$9,880.00	0.00%	99.97%
INGHAM COUNTY, MI	\$9,768.80	0.00%	99.97%
MARION COUNTY, OH	\$9,713.28	0.00%	99.97%
KENT COUNTY, MI	\$9,673.24	0.00%	99.97%
ESCAMBIA COUNTY, FL	\$9,411.78	0.00%	99.97%
CHARLESTON COUNTY, SC	\$9,398.66	0.00%	99.97%
NEW CASTLE COUNTY, DE	\$9,155.00	0.00%	99.97%
WEBER COUNTY, UT	\$8,970.00	0.00%	99.97%
LAMOILLE COUNTY, VT	\$8,890.00	0.00%	99.97%
FRANKLIN COUNTY, VA	\$8,634.30	0.00%	99.97%
GREENE COUNTY, AR	\$8,551.65	0.00%	99.98%
HOUSTON COUNTY, GA	\$8,540.00	0.00%	99.98%
WORCESTER COUNTY, MD	\$8,500.00	0.00%	99.98%
DOUGLAS COUNTY, GA	\$8,399.00	0.00%	99.98%
WASECA COUNTY, MN	\$8,385.00	0.00%	99.98%
PALO PINTO COUNTY, TX	\$8,160.00	0.00%	99.98%
PITT COUNTY, NC	\$8,052.49	0.00%	99.98%
MUSCATINE COUNTY, IA	\$7,984.00	0.00%	99.98%
ORLEANS COUNTY, VT	\$7,825.00	0.00%	99.98%
WASHINGTON COUNTY, PA	\$7,524.33	0.00%	99.98%
FAYETTE COUNTY, IN	\$7,500.00	0.00%	99.98%
JOHNSTON COUNTY, OK	\$7,381.87	0.00%	99.98%
COFFEE COUNTY, TN	\$7,351.83	0.00%	99.98%
ADAMS COUNTY, IL	\$7,168.00	0.00%	99.98%
CRAIGHEAD COUNTY, AR	\$7,062.70	0.00%	99.98%
JEFFERSON COUNTY, MO	\$6,956.00	0.00%	99.98%
CARROLL COUNTY, IA	\$6,564.00	0.00%	99.98%
MACOMB COUNTY, MI	\$6,500.00	0.00%	99.98%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
SANTA FE COUNTY, NM	\$6,495.00	0.00%	99.99%
MCLEAN COUNTY, IL	\$6,449.04	0.00%	99.99%
PULASKI COUNTY, KY	\$6,104.46	0.00%	99.99%
PLACER COUNTY, CA	\$6,008.84	0.00%	99.99%
FRESNO COUNTY, CA	\$5,688.20	0.00%	99.99%
CLERMONT COUNTY, OH	\$5,516.48	0.00%	99.99%
MANITOWOC COUNTY, WI	\$5,425.15	0.00%	99.99%
LUBBOCK COUNTY, TX	\$5,335.72	0.00%	99.99%
GRATIOT COUNTY, MI	\$5,280.00	0.00%	99.99%
TUSCALOOSA COUNTY, AL	\$5,250.13	0.00%	99.99%
ALBANY COUNTY, WY	\$5,111.70	0.00%	99.99%
MONTGOMERY COUNTY, OH	\$4,895.00	0.00%	99.99%
NEW HANOVER COUNTY, NC	\$4,750.00	0.00%	99.99%
BASTROP COUNTY, TX	\$4,712.98	0.00%	99.99%
RAVALLI COUNTY, MT	\$4,479.23	0.00%	99.99%
GRAVES COUNTY, KY	\$4,476.70	0.00%	99.99%
GRUNDY COUNTY, IL	\$4,430.76	0.00%	99.99%
JOHNSON COUNTY, AR	\$4,374.65	0.00%	99.99%
POLK COUNTY, WI	\$4,321.08	0.00%	99.99%
LAKE COUNTY, OH	\$4,318.55	0.00%	99.99%
SUSSEX COUNTY, NJ	\$3,700.00	0.00%	99.99%
HENRY COUNTY, IL	\$3,550.15	0.00%	99.99%
BARNWELL COUNTY, SC	\$3,299.50	0.00%	99.99%
SANTA CRUZ COUNTY, CA	\$3,297.85	0.00%	99.99%
NORTHAMPTON COUNTY, PA	\$3,200.00	0.00%	99.99%
CARROLL COUNTY, IL	\$3,192.20	0.00%	99.99%
CERRO GORDO COUNTY, IA	\$3,030.72	0.00%	99.99%
HURON COUNTY, OH	\$3,001.75	0.00%	99.99%
WARREN COUNTY, OH	\$2,962.70	0.00%	99.99%
BERKELEY COUNTY, SC	\$2,939.90	0.00%	99.99%
LIVINGSTON COUNTY, NY	\$2,920.00	0.00%	100.00%
ANOKA COUNTY, MN	\$2,899.58	0.00%	100.00%
ST JOSEPH COUNTY, IN	\$2,758.00	0.00%	100.00%
CHATHAM COUNTY, GA	\$2,728.62	0.00%	100.00%
HERKIMER COUNTY, NY	\$2,610.75	0.00%	100.00%
ALBEMARLE COUNTY, VA	\$2,495.00	0.00%	100.00%
KOSCIUSKO COUNTY, IN	\$2,167.26	0.00%	100.00%
RANDALL COUNTY, TX	\$2,152.88	0.00%	100.00%
CALUMET COUNTY, WI	\$1,970.00	0.00%	100.00%
SALINE COUNTY, KS	\$1,949.30	0.00%	100.00%
GUILFORD COUNTY, NC	\$1,944.00	0.00%	100.00%
NORFOLK CITY COUNTY, VA	\$1,910.00	0.00%	100.00%
WESTCHESTER COUNTY, NY	\$1,888.78	0.00%	100.00%
BEAVER COUNTY, PA	\$1,771.38	0.00%	100.00%
PUEBLO COUNTY, CO	\$1,733.34	0.00%	100.00%
MULTNOMAH COUNTY, OR	\$1,690.00	0.00%	100.00%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
FREDERICK COUNTY, MD	\$1,570.00	0.00%	100.00%
MIAMI COUNTY, OH	\$1,499.60	0.00%	100.00%
CENTRE COUNTY, PA	\$1,471.14	0.00%	100.00%
COLORADO COUNTY, TX	\$1,471.01	0.00%	100.00%
CATAWBA COUNTY, NC	\$1,448.14	0.00%	100.00%
BROOME COUNTY, NY	\$1,406.61	0.00%	100.00%
SUMTER COUNTY, SC	\$1,314.00	0.00%	100.00%
HIGHLANDS COUNTY, FL	\$1,225.00	0.00%	100.00%
JOSEPHINE COUNTY, OR	\$1,140.00	0.00%	100.00%
LICKING COUNTY, OH	\$1,115.00	0.00%	100.00%
CALCASIEU COUNTY, LA	\$1,108.00	0.00%	100.00%
MADISON COUNTY, AL	\$1,069.24	0.00%	100.00%
ADAMS COUNTY, CO	\$996.00	0.00%	100.00%
MCPHERSON COUNTY, KS	\$977.00	0.00%	100.00%
TIPTON COUNTY, TN	\$972.41	0.00%	100.00%
COWETA COUNTY, GA	\$932.34	0.00%	100.00%
HALE COUNTY, TX	\$909.94	0.00%	100.00%
TAYLOR COUNTY, FL	\$900.00	0.00%	100.00%
TOMPKINS COUNTY, NY	\$887.00	0.00%	100.00%
MOORE COUNTY, NC	\$815.25	0.00%	100.00%
MEDINA COUNTY, OH	\$785.42	0.00%	100.00%
SAN FRANCISCO COUNTY, CA	\$766.80	0.00%	100.00%
CLARK COUNTY, IN	\$764.00	0.00%	100.00%
IMPERIAL COUNTY, CA	\$704.09	0.00%	100.00%
MARIN COUNTY, CA	\$690.10	0.00%	100.00%
SAINT LOUIS CITY COUNTY, MO	\$690.00	0.00%	100.00%
SPOKANE COUNTY, WA	\$630.00	0.00%	100.00%
ALAMANCE COUNTY, NC	\$504.94	0.00%	100.00%
BEAUFORT COUNTY, SC	\$482.48	0.00%	100.00%
JEFFERSON COUNTY, WI	\$463.43	0.00%	100.00%
BUTLER COUNTY, PA	\$448.00	0.00%	100.00%
SANDOVAL COUNTY, NM	\$443.91	0.00%	100.00%
ROCK ISLAND COUNTY, IL	\$436.50	0.00%	100.00%
BARRON COUNTY, WI	\$392.00	0.00%	100.00%
ROCK COUNTY, WI	\$390.52	0.00%	100.00%
CROW WING COUNTY, MN	\$280.00	0.00%	100.00%
VERMILION COUNTY, IL	\$211.20	0.00%	100.00%
KENT COUNTY, RI	\$198.00	0.00%	100.00%
RICHLAND COUNTY, OH	\$168.60	0.00%	100.00%
KENDALL COUNTY, TX	\$165.20	0.00%	100.00%
TUSCARAWAS COUNTY, OH	\$164.00	0.00%	100.00%
CLAY COUNTY, MO	\$158.40	0.00%	100.00%
CLACKAMAS COUNTY, OR	\$152.33	0.00%	100.00%
CACHE COUNTY, UT	\$114.00	0.00%	100.00%
HAMBLÉN COUNTY, TN	\$68.89	0.00%	100.00%
ATLANTIC COUNTY, NJ	\$58.82	0.00%	100.00%

COUNTY-STATE	AMOUNT	PERCENT	CUMULATIVE PERCENTAGE
POLK COUNTY, IA	\$56.33	0.00%	100.00%
RED RIVER COUNTY, TX	\$42.65	0.00%	100.00%
SEWARD COUNTY, NE	\$42.60	0.00%	100.00%
GRAYSON COUNTY, KY	\$0.00	0.00%	100.00%
JUNIATA COUNTY, PA	\$0.00	0.00%	100.00%
SALEM COUNTY, VA	\$0.00	0.00%	100.00%
DE KALB COUNTY, AL	\$0.00	0.00%	100.00%
BAYLOR COUNTY, TX	\$0.00	0.00%	100.00%
PARK COUNTY, CO	\$0.00	0.00%	100.00%
WOODBURY COUNTY, IA	\$0.00	0.00%	100.00%
HAMILTON COUNTY, TX	\$0.00	0.00%	100.00%
WASHINGTON COUNTY, TX	\$0.00	0.00%	100.00%
SCOTT COUNTY, IN	\$0.00	0.00%	100.00%
WINONA COUNTY, MN	\$0.00	0.00%	100.00%
CARROLL COUNTY, GA	\$0.00	0.00%	100.00%
SAN MATEO COUNTY, CA	\$0.00	0.00%	100.00%
FRANKLIN COUNTY, TX	\$0.00	0.00%	100.00%
HIDALGO COUNTY, TX	-\$325.63	0.00%	100.00%
Total	\$1,337,779,172.41		

APPENDIX B. PRODUCT ANALYSIS

Availability and Disparity Study

City of Dallas, Texas



EXHIBIT B-1.
 PRODUCT ANALYSIS
 DISTRIBUTION OF DOLLARS BY NAICS CODE & DESCRIPTION
 ALL BUSINESS CATEGORIES

NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
237110	Water and Sewer Line and Related Structures Construction	\$482,787,349.40	10.66%	10.66%
541330	Engineering Services	\$305,023,050.91	6.73%	17.39%
236220	Commercial and Institutional Building Construction	\$291,458,520.28	6.44%	23.83%
237310	Highway, Street, and Bridge Construction	\$213,458,600.98	4.71%	28.54%
238990	All Other Specialty Trade Contractors	\$161,548,644.80	3.57%	32.11%
238210	Electrical Contractors and Other Wiring Installation Contractors	\$114,621,918.34	2.53%	34.64%
237120	Oil and Gas Pipeline and Related Structures Construction	\$107,131,330.87	2.37%	37.01%
423830	Industrial Machinery and Equipment Merchant Wholesalers	\$101,510,045.72	2.24%	39.25%
236210	Industrial Building Construction	\$88,613,947.63	1.96%	41.20%
238110	Poured Concrete Foundation and Structure Contractors	\$88,491,654.36	1.95%	43.16%
541511	Custom Computer Programming Services	\$71,436,282.01	1.58%	44.73%
561311	Employment Placement Agencies	\$69,212,027.14	1.53%	46.26%
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers	\$66,368,532.48	1.47%	47.73%
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	\$65,879,782.45	1.45%	49.18%
541611	Administrative Management and General Management Consulting Services	\$63,726,701.47	1.41%	50.59%
441110	New Car Dealers	\$60,989,465.41	1.35%	51.94%
441000	Motor vehicle and parts dealers	\$55,721,920.69	1.23%	53.17%
561730	Landscaping Services	\$53,823,120.02	1.19%	54.35%
236115	New Single-Family Housing Construction (except For-Sale Builders)	\$53,457,453.91	1.18%	55.53%
561612	Security Guards and Patrol Services	\$51,220,940.42	1.13%	56.67%
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	\$47,483,341.88	1.05%	57.71%
811198	All Other Automotive Repair and Maintenance	\$46,345,871.93	1.02%	58.74%
444120	Paint and Wallpaper Stores	\$45,741,727.43	1.01%	59.75%
561990	All Other Support Services	\$45,042,091.60	0.99%	60.74%
325180	Other Basic Inorganic Chemical Manufacturing	\$43,943,275.13	0.97%	61.71%
327320	Ready-Mix Concrete Manufacturing	\$42,556,305.00	0.94%	62.65%
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	\$38,685,253.89	0.85%	63.51%
561499	All Other Business Support Services	\$35,000,543.01	0.77%	64.28%
541219	Other Accounting Services	\$34,981,965.67	0.77%	65.05%
561720	Janitorial Services	\$34,176,649.17	0.75%	65.81%
333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	\$32,000,406.28	0.71%	66.51%
541512	Computer Systems Design Services	\$30,385,598.23	0.67%	67.18%
333249	Other Industrial Machinery Manufacturing	\$28,807,871.20	0.64%	67.82%

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NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers	\$28,473,757.94	0.63%	68.45%
423510	Metal Service Centers and Other Metal Merchant Wholesalers	\$27,706,923.71	0.61%	69.06%
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	\$26,834,711.29	0.59%	69.65%
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	\$26,772,719.98	0.59%	70.24%
238910	Site Preparation Contractors	\$26,456,159.04	0.58%	70.83%
238220	Plumbing, Heating, and Air-Conditioning Contractors	\$25,821,258.96	0.57%	71.40%
423840	Industrial Supplies Merchant Wholesalers	\$25,280,333.89	0.56%	71.95%
424690	Other Chemical and Allied Products Merchant Wholesalers	\$23,551,831.31	0.52%	72.47%
541618	Other Management Consulting Services	\$22,395,825.00	0.49%	72.97%
333914	Measuring, Dispensing, and Other Pumping Equipment Manufacturing	\$22,377,039.18	0.49%	73.46%
327410	Lime Manufacturing	\$22,065,847.37	0.49%	73.95%
541310	Architectural Services	\$21,463,962.11	0.47%	74.42%
999990	Unknown	\$20,417,969.71	0.45%	74.88%
488490	Other Support Activities for Road Transportation	\$20,201,624.51	0.45%	75.32%
561110	Office Administrative Services	\$20,148,636.22	0.44%	75.77%
423440	Other Commercial Equipment Merchant Wholesalers	\$19,157,475.70	0.42%	76.19%
423990	Other Miscellaneous Durable Goods Merchant Wholesalers	\$19,147,078.28	0.42%	76.61%
441120	Used Car Dealers	\$16,947,598.75	0.37%	76.99%
238160	Roofing Contractors	\$16,630,160.59	0.37%	77.35%
334514	Totalizing Fluid Meter and Counting Device Manufacturing	\$15,849,967.66	0.35%	77.70%
237990	Other Heavy and Civil Engineering Construction	\$15,681,883.75	0.35%	78.05%
238330	Flooring Contractors	\$15,664,862.40	0.35%	78.40%
532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing	\$15,449,322.06	0.34%	78.74%
333318	Other Commercial and Service Industry Machinery Manufacturing	\$15,287,908.39	0.34%	79.07%
541690	Other Scientific and Technical Consulting Services	\$15,210,218.28	0.34%	79.41%
423110	Automobile and Other Motor Vehicle Merchant Wholesalers	\$15,182,540.98	0.34%	79.75%
423390	Other Construction Material Merchant Wholesalers	\$14,751,738.30	0.33%	80.07%
541613	Marketing Consulting Services	\$13,509,395.95	0.30%	80.37%
511210	Software Publishers	\$13,328,780.96	0.29%	80.66%
484110	General Freight Trucking, Local	\$13,023,082.64	0.29%	80.95%
339940	Office Supplies (except Paper) Manufacturing	\$12,993,537.16	0.29%	81.24%
562998	All Other Miscellaneous Waste Management Services	\$12,779,751.55	0.28%	81.52%
488119	Other Airport Operations	\$12,707,342.00	0.28%	81.80%
423850	Service Establishment Equipment and Supplies Merchant Wholesalers	\$12,113,038.51	0.27%	82.07%
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers	\$11,847,115.24	0.26%	82.33%
221111	Hydroelectric Power Generation	\$11,616,608.44	0.26%	82.59%

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NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing	\$11,582,518.99	0.26%	82.84%
324121	Asphalt Paving Mixture and Block Manufacturing	\$11,309,642.27	0.25%	83.09%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	\$11,187,145.32	0.25%	83.34%
524114	Direct Health and Medical Insurance Carriers	\$11,036,618.00	0.24%	83.58%
221310	Water Supply and Irrigation Systems	\$10,992,940.98	0.24%	83.82%
517919	All Other Telecommunications	\$10,573,031.05	0.23%	84.06%
812930	Parking Lots and Garages	\$10,571,186.36	0.23%	84.29%
424920	Book, Periodical, and Newspaper Merchant Wholesalers	\$10,531,118.69	0.23%	84.52%
327390	Other Concrete Product Manufacturing	\$10,506,821.72	0.23%	84.76%
423690	Other Electronic Parts and Equipment Merchant Wholesalers	\$9,959,926.87	0.22%	84.98%
518210	Data Processing, Hosting, and Related Services	\$9,909,207.61	0.22%	85.19%
562910	Remediation Services	\$9,791,174.13	0.22%	85.41%
541320	Landscape Architectural Services	\$9,594,657.75	0.21%	85.62%
561611	Investigation Services	\$9,594,179.38	0.21%	85.83%
713990	All Other Amusement and Recreation Industries	\$9,409,715.85	0.21%	86.04%
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance	\$9,274,397.21	0.20%	86.25%
811118	Other Automotive Mechanical and Electrical Repair and Maintenance	\$9,180,053.81	0.20%	86.45%
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	\$8,823,624.81	0.19%	86.64%
336999	All Other Transportation Equipment Manufacturing	\$8,738,354.50	0.19%	86.84%
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	\$8,560,420.74	0.19%	87.03%
423490	Other Professional Equipment and Supplies Merchant Wholesalers	\$8,503,215.28	0.19%	87.21%
541620	Environmental Consulting Services	\$8,420,428.94	0.19%	87.40%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	\$8,391,454.41	0.19%	87.59%
326199	All Other Plastics Product Manufacturing	\$8,177,116.15	0.18%	87.77%
453998	All Other Miscellaneous Store Retailers (except Tobacco Stores)	\$7,959,045.05	0.18%	87.94%
238140	Masonry Contractors	\$7,919,488.48	0.17%	88.12%
454110	Electronic Shopping and Mail-Order Houses	\$7,911,290.47	0.17%	88.29%
332312	Fabricated Structural Metal Manufacturing	\$7,739,127.77	0.17%	88.46%
238290	Other Building Equipment Contractors	\$7,683,041.73	0.17%	88.63%
611430	Professional and Management Development Training	\$7,676,469.32	0.17%	88.80%
484220	Specialized Freight (except Used Goods) Trucking, Local	\$7,637,039.03	0.17%	88.97%
236118	Residential Remodelers	\$7,625,233.11	0.17%	89.14%
541990	All Other Professional, Scientific, and Technical Services	\$7,245,328.69	0.16%	89.30%
332313	Plate Work Manufacturing	\$7,218,806.99	0.16%	89.46%
212312	Crushed and Broken Limestone Mining and Quarrying	\$7,064,540.90	0.16%	89.61%
541810	Advertising Agencies	\$6,919,080.70	0.15%	89.77%
335999	All Other Miscellaneous Electrical Equipment and Component Manufacturing	\$6,823,101.48	0.15%	89.92%

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NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
236116	New Multifamily Housing Construction (except For-Sale Builders)	\$6,656,575.88	0.15%	90.06%
561621	Security Systems Services (except Locksmiths)	\$6,420,376.85	0.14%	90.21%
331110	Iron and Steel Mills and Ferroalloy Manufacturing	\$6,290,587.50	0.14%	90.34%
332994	Small Arms, Ordnance, and Ordnance Accessories Manufacturing	\$6,290,405.77	0.14%	90.48%
517911	Telecommunications Resellers	\$6,289,263.95	0.14%	90.62%
339113	Surgical Appliance and Supplies Manufacturing	\$6,225,987.62	0.14%	90.76%
325120	Industrial Gas Manufacturing	\$6,036,629.35	0.13%	90.89%
238120	Structural Steel and Precast Concrete Contractors	\$5,924,378.00	0.13%	91.02%
238310	Drywall and Insulation Contractors	\$5,850,423.44	0.13%	91.15%
334513	Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables	\$5,630,973.15	0.12%	91.28%
624190	Other Individual and Family Services	\$5,390,439.89	0.12%	91.40%
335314	Relay and Industrial Control Manufacturing	\$5,360,957.27	0.12%	91.51%
238320	Painting and Wall Covering Contractors	\$5,291,054.89	0.12%	91.63%
811490	Other Personal and Household Goods Repair and Maintenance	\$5,290,697.95	0.12%	91.75%
333923	Overhead Traveling Crane, Hoist, and Monorail System Manufacturing	\$5,222,374.38	0.12%	91.86%
813990	Other Similar Organizations (except Business, Professional, Labor, and Political Organizations)	\$5,222,073.55	0.12%	91.98%
562991	Septic Tank and Related Services	\$5,177,661.51	0.11%	92.09%
713110	Amusement and Theme Parks	\$5,174,728.93	0.11%	92.21%
484210	Used Household and Office Goods Moving	\$5,123,998.28	0.11%	92.32%
334290	Other Communications Equipment Manufacturing	\$5,118,416.28	0.11%	92.43%
621111	Offices of Physicians (except Mental Health Specialists)	\$5,065,415.00	0.11%	92.55%
532289	All Other Consumer Goods Rental	\$5,005,415.46	0.11%	92.66%
315210	Cut and Sew Apparel Contractors	\$4,965,389.04	0.11%	92.77%
541380	Testing Laboratories	\$4,946,796.12	0.11%	92.88%
811111	General Automotive Repair	\$4,666,048.39	0.10%	92.98%
524298	All Other Insurance Related Activities	\$4,662,218.72	0.10%	93.08%
323111	Commercial Printing (except Screen and Books)	\$4,642,653.82	0.10%	93.18%
561920	Convention and Trade Show Organizers	\$4,625,346.17	0.10%	93.29%
334112	Computer Storage Device Manufacturing	\$4,312,620.14	0.10%	93.38%
212321	Construction Sand and Gravel Mining	\$4,142,237.94	0.09%	93.47%
238130	Framing Contractors	\$4,005,701.43	0.09%	93.56%
551112	Offices of Other Holding Companies	\$3,994,082.42	0.09%	93.65%
424320	Men's and Boys' Clothing and Furnishings Merchant Wholesalers	\$3,799,632.72	0.08%	93.73%
333132	Oil and Gas Field Machinery and Equipment Manufacturing	\$3,798,900.81	0.08%	93.82%
325199	All Other Basic Organic Chemical Manufacturing	\$3,787,847.56	0.08%	93.90%
611699	All Other Miscellaneous Schools and Instruction	\$3,784,348.56	0.08%	93.98%
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers	\$3,781,541.54	0.08%	94.07%
453210	Office Supplies and Stationery Stores	\$3,770,407.66	0.08%	94.15%
621910	Ambulance Services	\$3,770,144.00	0.08%	94.23%

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NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	\$3,730,371.82	0.08%	94.32%
541110	Offices of Lawyers	\$3,699,045.56	0.08%	94.40%
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	\$3,527,932.30	0.08%	94.48%
531210	Offices of Real Estate Agents and Brokers	\$3,521,810.24	0.08%	94.55%
484121	General Freight Trucking, Long-Distance, Truckload	\$3,438,077.54	0.08%	94.63%
562112	Hazardous Waste Collection	\$3,425,238.26	0.08%	94.71%
337127	Institutional Furniture Manufacturing	\$3,369,736.34	0.07%	94.78%
541715	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	\$3,333,208.31	0.07%	94.85%
423710	Hardware Merchant Wholesalers	\$3,268,177.07	0.07%	94.93%
237210	Land Subdivision	\$3,219,729.91	0.07%	95.00%
323113	Commercial Screen Printing	\$3,097,115.10	0.07%	95.06%
334512	Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use	\$3,075,533.05	0.07%	95.13%
541820	Public Relations Agencies	\$3,001,570.65	0.07%	95.20%
811219	Other Electronic and Precision Equipment Repair and Maintenance	\$2,832,820.82	0.06%	95.26%
335312	Motor and Generator Manufacturing	\$2,799,566.77	0.06%	95.32%
519120	Libraries and Archives	\$2,784,220.54	0.06%	95.38%
541612	Human Resources Consulting Services	\$2,779,373.84	0.06%	95.45%
339112	Surgical and Medical Instrument Manufacturing	\$2,778,507.50	0.06%	95.51%
485999	All Other Transit and Ground Passenger Transportation	\$2,777,689.13	0.06%	95.57%
524210	Insurance Agencies and Brokerages	\$2,775,319.14	0.06%	95.63%
332710	Machine Shops	\$2,682,884.15	0.06%	95.69%
531312	Nonresidential Property Managers	\$2,671,898.61	0.06%	95.75%
424120	Stationery and Office Supplies Merchant Wholesalers	\$2,661,937.25	0.06%	95.81%
562211	Hazardous Waste Treatment and Disposal	\$2,651,032.62	0.06%	95.87%
337214	Office Furniture (except Wood) Manufacturing	\$2,595,113.99	0.06%	95.92%
611710	Educational Support Services	\$2,572,361.67	0.06%	95.98%
333999	All Other Miscellaneous General Purpose Machinery Manufacturing	\$2,524,983.32	0.06%	96.04%
517312	Wireless Telecommunications Carriers (except Satellite)	\$2,489,025.10	0.05%	96.09%
339950	Sign Manufacturing	\$2,449,338.24	0.05%	96.14%
711310	Promoters of Performing Arts, Sports, and Similar Events with Facilities	\$2,439,433.41	0.05%	96.20%
624230	Emergency and Other Relief Services	\$2,427,508.76	0.05%	96.25%
238150	Glass and Glazing Contractors	\$2,318,374.00	0.05%	96.30%
334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	\$2,277,520.50	0.05%	96.35%
523910	Miscellaneous Intermediation	\$2,212,276.68	0.05%	96.40%
333120	Construction Machinery Manufacturing	\$2,137,264.40	0.05%	96.45%
711510	Independent Artists, Writers, and Performers	\$2,112,644.76	0.05%	96.50%
423210	Furniture Merchant Wholesalers	\$2,069,438.00	0.05%	96.54%
444110	Home Centers	\$2,058,882.88	0.05%	96.59%
423310	Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers	\$2,032,570.23	0.04%	96.63%

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NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
326122	Plastics Pipe and Pipe Fitting Manufacturing	\$2,020,457.33	0.04%	96.68%
523930	Investment Advice	\$2,018,837.08	0.04%	96.72%
333921	Elevator and Moving Stairway Manufacturing	\$2,014,657.27	0.04%	96.77%
532111	Passenger Car Rental	\$2,013,622.49	0.04%	96.81%
424130	Industrial and Personal Service Paper Merchant Wholesalers	\$1,965,785.90	0.04%	96.85%
561790	Other Services to Buildings and Dwellings	\$1,954,101.52	0.04%	96.90%
488510	Freight Transportation Arrangement	\$1,945,684.33	0.04%	96.94%
441228	Motorcycle, ATV, and All Other Motor Vehicle Dealers	\$1,944,092.74	0.04%	96.98%
442110	Furniture Stores	\$1,938,857.79	0.04%	97.03%
444210	Outdoor Power Equipment Stores	\$1,865,866.52	0.04%	97.07%
332323	Ornamental and Architectural Metal Work Manufacturing	\$1,832,151.50	0.04%	97.11%
238190	Other Foundation, Structure, and Building Exterior Contractors	\$1,821,049.70	0.04%	97.15%
541370	Surveying and Mapping (except Geophysical) Services	\$1,816,399.27	0.04%	97.19%
492110	Couriers and Express Delivery Services	\$1,805,854.49	0.04%	97.23%
488999	All Other Support Activities for Transportation	\$1,785,375.00	0.04%	97.27%
339999	All Other Miscellaneous Manufacturing	\$1,780,765.90	0.04%	97.31%
443142	Electronics Stores	\$1,775,197.60	0.04%	97.35%
525910	Open-End Investment Funds	\$1,770,126.30	0.04%	97.38%
451110	Sporting Goods Stores	\$1,749,131.88	0.04%	97.42%
541211	Offices of Certified Public Accountants	\$1,746,225.05	0.04%	97.46%
711110	Theater Companies and Dinner Theaters	\$1,734,331.75	0.04%	97.50%
335122	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing	\$1,709,016.55	0.04%	97.54%
488410	Motor Vehicle Towing	\$1,675,821.13	0.04%	97.57%
424910	Farm Supplies Merchant Wholesalers	\$1,640,618.20	0.04%	97.61%
423730	Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers	\$1,613,118.18	0.04%	97.65%
441310	Automotive Parts and Accessories Stores	\$1,575,843.87	0.03%	97.68%
324122	Asphalt Shingle and Coating Materials Manufacturing	\$1,550,651.05	0.03%	97.72%
237130	Power and Communication Line and Related Structures Construction	\$1,550,206.36	0.03%	97.75%
452311	Warehouse Clubs and Supercenters	\$1,500,078.50	0.03%	97.78%
811212	Computer and Office Machine Repair and Maintenance	\$1,483,593.59	0.03%	97.82%
541720	Research and Development in the Social Sciences and Humanities	\$1,474,237.65	0.03%	97.85%
813910	Business Associations	\$1,445,150.16	0.03%	97.88%
444130	Hardware Stores	\$1,432,938.78	0.03%	97.91%
531120	Lessors of Nonresidential Buildings (except Miniwarehouses)	\$1,431,393.86	0.03%	97.94%
442210	Floor Covering Stores	\$1,408,277.80	0.03%	97.97%
519190	All Other Information Services	\$1,391,028.53	0.03%	98.00%
541214	Payroll Services	\$1,378,360.39	0.03%	98.04%
221118	Other Electric Power Generation	\$1,375,734.93	0.03%	98.07%
813920	Professional Organizations	\$1,345,685.62	0.03%	98.10%
811121	Automotive Body, Paint, and Interior Repair and Maintenance	\$1,338,912.81	0.03%	98.13%
511130	Book Publishers	\$1,334,087.32	0.03%	98.15%

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812332	Industrial Launderers	\$1,333,393.04	0.03%	98.18%
523920	Portfolio Management	\$1,294,192.00	0.03%	98.21%
332321	Metal Window and Door Manufacturing	\$1,288,372.15	0.03%	98.24%
561312	Executive Search Services	\$1,274,141.75	0.03%	98.27%
213112	Support Activities for Oil and Gas Operations	\$1,251,028.20	0.03%	98.30%
541910	Marketing Research and Public Opinion Polling	\$1,231,965.20	0.03%	98.32%
493110	General Warehousing and Storage	\$1,228,069.74	0.03%	98.35%
325412	Pharmaceutical Preparation Manufacturing	\$1,227,739.09	0.03%	98.38%
444190	Other Building Material Dealers	\$1,205,410.94	0.03%	98.40%
481111	Scheduled Passenger Air Transportation	\$1,202,964.55	0.03%	98.43%
811420	Reupholstery and Furniture Repair	\$1,190,693.81	0.03%	98.46%
325312	Phosphatic Fertilizer Manufacturing	\$1,185,463.31	0.03%	98.48%
334111	Electronic Computer Manufacturing	\$1,152,501.40	0.03%	98.51%
446120	Cosmetics, Beauty Supplies, and Perfume Stores	\$1,126,113.00	0.02%	98.53%
722410	Drinking Places (Alcoholic Beverages)	\$1,120,431.48	0.02%	98.56%
334516	Analytical Laboratory Instrument Manufacturing	\$1,090,618.46	0.02%	98.58%
722511	Full-Service Restaurants	\$1,054,852.19	0.02%	98.61%
561710	Exterminating and Pest Control Services	\$1,035,932.37	0.02%	98.63%
423220	Home Furnishing Merchant Wholesalers	\$1,026,309.85	0.02%	98.65%
111421	Nursery and Tree Production	\$1,024,539.69	0.02%	98.67%
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers	\$1,020,148.47	0.02%	98.70%
332913	Plumbing Fixture Fitting and Trim Manufacturing	\$1,019,602.12	0.02%	98.72%
624410	Child Day Care Services	\$1,005,585.63	0.02%	98.74%
562219	Other Nonhazardous Waste Treatment and Disposal	\$993,011.38	0.02%	98.76%
562111	Solid Waste Collection	\$992,674.29	0.02%	98.79%
621610	Home Health Care Services	\$977,677.00	0.02%	98.81%
322220	Paper Bag and Coated and Treated Paper Manufacturing	\$972,858.65	0.02%	98.83%
424930	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers	\$971,900.85	0.02%	98.85%
517311	Wired Telecommunications Carriers	\$969,355.79	0.02%	98.87%
333996	Fluid Power Pump and Motor Manufacturing	\$934,671.90	0.02%	98.89%
511199	All Other Publishers	\$932,592.19	0.02%	98.91%
115112	Soil Preparation, Planting, and Cultivating	\$932,281.40	0.02%	98.93%
333111	Farm Machinery and Equipment Manufacturing	\$903,514.31	0.02%	98.95%
211120	Crude Petroleum Extraction	\$903,037.50	0.02%	98.97%
221320	Sewage Treatment Facilities	\$895,669.26	0.02%	98.99%
332992	Small Arms Ammunition Manufacturing	\$874,993.87	0.02%	99.01%
488190	Other Support Activities for Air Transportation	\$862,064.81	0.02%	99.03%
325612	Polish and Other Sanitation Good Manufacturing	\$854,461.28	0.02%	99.05%
423860	Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers	\$838,851.12	0.02%	99.07%
332311	Prefabricated Metal Building and Component Manufacturing	\$833,387.60	0.02%	99.09%
334519	Other Measuring and Controlling Device Manufacturing	\$810,841.18	0.02%	99.10%
332812	Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers	\$802,139.39	0.02%	99.12%
515111	Radio Networks	\$771,093.76	0.02%	99.14%

APPENDIX B: PRODUCT ANALYSIS

NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
445110	Supermarkets and Other Grocery (except Convenience) Stores	\$768,951.50	0.02%	99.16%
541430	Graphic Design Services	\$763,907.13	0.02%	99.17%
333991	Power-Driven Handtool Manufacturing	\$759,028.91	0.02%	99.19%
812990	All Other Personal Services	\$711,127.52	0.02%	99.21%
531320	Offices of Real Estate Appraisers	\$698,940.00	0.02%	99.22%
512110	Motion Picture and Video Production	\$696,564.10	0.02%	99.24%
339910	Jewelry and Silverware Manufacturing	\$690,394.74	0.02%	99.25%
541513	Computer Facilities Management Services	\$665,611.30	0.01%	99.27%
238340	Tile and Terrazzo Contractors	\$661,445.00	0.01%	99.28%
922140	Correctional Institutions	\$645,195.68	0.01%	99.30%
326113	Unlaminated Plastics Film and Sheet (except Packaging) Manufacturing	\$636,706.77	0.01%	99.31%
453310	Used Merchandise Stores	\$618,989.29	0.01%	99.32%
488210	Support Activities for Rail Transportation	\$613,977.49	0.01%	99.34%
561622	Locksmiths	\$608,885.45	0.01%	99.35%
531130	Lessors of Miniwarehouses and Self-Storage Units	\$603,529.68	0.01%	99.36%
327332	Concrete Pipe Manufacturing	\$600,000.00	0.01%	99.38%
334118	Computer Terminal and Other Computer Peripheral Equipment Manufacturing	\$595,245.06	0.01%	99.39%
722320	Caterers	\$574,894.21	0.01%	99.40%
325414	Biological Product (except Diagnostic) Manufacturing	\$573,820.25	0.01%	99.42%
337124	Metal Household Furniture Manufacturing	\$569,570.53	0.01%	99.43%
512120	Motion Picture and Video Distribution	\$565,408.07	0.01%	99.44%
332119	Metal Crown, Closure, and Other Metal Stamping (except Automotive)	\$554,910.80	0.01%	99.45%
485113	Bus and Other Motor Vehicle Transit Systems	\$550,526.96	0.01%	99.46%
315220	Men's and Boys' Cut and Sew Apparel Manufacturing	\$527,072.92	0.01%	99.48%
515210	Cable and Other Subscription Programming	\$524,085.39	0.01%	99.49%
336112	Light Truck and Utility Vehicle Manufacturing	\$519,177.60	0.01%	99.50%
562119	Other Waste Collection	\$514,441.54	0.01%	99.51%
711130	Musical Groups and Artists	\$509,227.98	0.01%	99.52%
561421	Telephone Answering Services	\$507,449.00	0.01%	99.53%
532120	Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing	\$506,148.45	0.01%	99.54%
312113	Ice Manufacturing	\$503,123.65	0.01%	99.56%
327120	Clay Building Material and Refractories Manufacturing	\$493,710.69	0.01%	99.57%
332999	All Other Miscellaneous Fabricated Metal Product Manufacturing	\$492,985.82	0.01%	99.58%
333912	Air and Gas Compressor Manufacturing	\$484,838.83	0.01%	99.59%
444220	Nursery, Garden Center, and Farm Supply Stores	\$470,235.91	0.01%	99.60%
331221	Rolled Steel Shape Manufacturing	\$467,471.00	0.01%	99.61%
452319	All Other General Merchandise Stores	\$463,525.20	0.01%	99.62%
424490	Other Grocery and Related Products Merchant Wholesalers	\$457,413.60	0.01%	99.63%
541930	Translation and Interpretation Services	\$457,297.52	0.01%	99.64%
722513	Limited-Service Restaurants	\$453,938.60	0.01%	99.65%
331511	Iron Foundries	\$433,625.45	0.01%	99.66%
335129	Other Lighting Equipment Manufacturing	\$433,314.82	0.01%	99.67%

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NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
333316	Photographic and Photocopying Equipment Manufacturing	\$421,644.98	0.01%	99.68%
333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	\$393,853.30	0.01%	99.69%
511120	Periodical Publishers	\$391,644.04	0.01%	99.69%
541890	Other Services Related to Advertising	\$377,879.57	0.01%	99.70%
512131	Motion Picture Theaters (except Drive-Ins)	\$373,023.68	0.01%	99.71%
448190	Other Clothing Stores	\$367,634.42	0.01%	99.72%
541350	Building Inspection Services	\$366,554.04	0.01%	99.73%
451120	Hobby, Toy, and Game Stores	\$365,919.18	0.01%	99.74%
562212	Solid Waste Landfill	\$359,515.78	0.01%	99.74%
322121	Paper (except Newsprint) Mills	\$350,000.00	0.01%	99.75%
325314	Fertilizer (Mixing Only) Manufacturing	\$344,017.09	0.01%	99.76%
623990	Other Residential Care Facilities	\$335,211.74	0.01%	99.77%
523999	Miscellaneous Financial Investment Activities	\$317,075.00	0.01%	99.77%
711320	Promoters of Performing Arts, Sports, and Similar Events without Facilities	\$311,578.49	0.01%	99.78%
453910	Pet and Pet Supplies Stores	\$311,029.00	0.01%	99.79%
711190	Other Performing Arts Companies	\$308,148.67	0.01%	99.79%
448210	Shoe Stores	\$303,136.30	0.01%	99.80%
522291	Consumer Lending	\$301,690.48	0.01%	99.81%
327991	Cut Stone and Stone Product Manufacturing	\$295,950.00	0.01%	99.81%
336390	Other Motor Vehicle Parts Manufacturing	\$291,233.00	0.01%	99.82%
333922	Conveyor and Conveying Equipment Manufacturing	\$288,413.77	0.01%	99.83%
541870	Advertising Material Distribution Services	\$288,355.00	0.01%	99.83%
541860	Direct Mail Advertising	\$284,293.30	0.01%	99.84%
541614	Process, Physical Distribution, and Logistics Consulting Services	\$283,799.75	0.01%	99.85%
423420	Office Equipment Merchant Wholesalers	\$276,717.53	0.01%	99.85%
332911	Industrial Valve Manufacturing	\$275,228.10	0.01%	99.86%
611420	Computer Training	\$269,160.04	0.01%	99.86%
541850	Outdoor Advertising	\$268,264.40	0.01%	99.87%
423930	Recyclable Material Merchant Wholesalers	\$267,768.78	0.01%	99.88%
314910	Textile Bag and Canvas Mills	\$259,580.65	0.01%	99.88%
541410	Interior Design Services	\$253,781.10	0.01%	99.89%
321918	Other Millwork (including Flooring)	\$247,221.66	0.01%	99.89%
327212	Other Pressed and Blown Glass and Glassware Manufacturing	\$232,343.05	0.01%	99.90%
811411	Home and Garden Equipment Repair and Maintenance	\$231,650.00	0.01%	99.90%
621330	Offices of Mental Health Practitioners (except Physicians)	\$228,571.12	0.01%	99.91%
562920	Materials Recovery Facilities	\$228,519.00	0.01%	99.91%
337215	Showcase, Partition, Shelving, and Locker Manufacturing	\$227,578.16	0.01%	99.92%
424950	Paint, Varnish, and Supplies Merchant Wholesalers	\$227,068.07	0.01%	99.92%
333413	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing	\$224,643.21	0.00%	99.93%
451211	Book Stores	\$220,709.95	0.00%	99.93%
335991	Carbon and Graphite Product Manufacturing	\$211,698.03	0.00%	99.94%
336120	Heavy Duty Truck Manufacturing	\$209,672.00	0.00%	99.94%

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NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
611410	Business and Secretarial Schools	\$209,670.50	0.00%	99.95%
452210	Department Stores	\$205,715.85	0.00%	99.95%
531311	Residential Property Managers	\$204,305.87	0.00%	99.96%
423940	Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers	\$202,692.80	0.00%	99.96%
621511	Medical Laboratories	\$199,645.15	0.00%	99.96%
212322	Industrial Sand Mining	\$199,641.60	0.00%	99.97%
441222	Boat Dealers	\$199,252.77	0.00%	99.97%
621999	All Other Miscellaneous Ambulatory Health Care Services	\$196,790.36	0.00%	99.98%
493120	Refrigerated Warehousing and Storage	\$195,448.76	0.00%	99.98%
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing	\$195,000.00	0.00%	99.99%
332322	Sheet Metal Work Manufacturing	\$191,716.73	0.00%	99.99%
515112	Radio Stations	\$190,718.74	0.00%	99.99%
238170	Siding Contractors	\$189,724.92	0.00%	100.00%
321912	Cut Stock, Resawing Lumber, and Planing	\$189,373.00	0.00%	100.00%
624310	Vocational Rehabilitation Services	\$176,382.03	0.00%	100.01%
624210	Community Food Services	\$162,665.88	0.00%	100.01%
541922	Commercial Photography	\$162,326.56	0.00%	100.01%
621991	Blood and Organ Banks	\$155,456.25	0.00%	100.02%
424410	General Line Grocery Merchant Wholesalers	\$152,675.00	0.00%	100.02%
423330	Roofing, Siding, and Insulation Material Merchant Wholesalers	\$151,365.93	0.00%	100.02%
712110	Museums	\$149,172.05	0.00%	100.03%
512230	Music Publishers	\$147,572.66	0.00%	100.03%
523120	Securities Brokerage	\$146,234.32	0.00%	100.03%
314999	All Other Miscellaneous Textile Product Mills	\$144,549.25	0.00%	100.04%
541519	Other Computer Related Services	\$144,455.76	0.00%	100.04%
481219	Other Nonscheduled Air Transportation	\$143,940.77	0.00%	100.04%
621420	Outpatient Mental Health and Substance Abuse Centers	\$143,138.66	0.00%	100.05%
541420	Industrial Design Services	\$142,930.00	0.00%	100.05%
424110	Printing and Writing Paper Merchant Wholesalers	\$141,765.00	0.00%	100.05%
311942	Spice and Extract Manufacturing	\$141,748.04	0.00%	100.06%
712190	Nature Parks and Other Similar Institutions	\$139,944.00	0.00%	100.06%
332215	Metal Kitchen Cookware, Utensil, Cutlery, and Flatware (except Precious) Manufacturing	\$139,896.30	0.00%	100.06%
312111	Soft Drink Manufacturing	\$137,387.54	0.00%	100.07%
711410	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	\$137,110.06	0.00%	100.07%
339920	Sporting and Athletic Goods Manufacturing	\$136,950.00	0.00%	100.07%
325510	Paint and Coating Manufacturing	\$134,868.20	0.00%	100.07%
332420	Metal Tank (Heavy Gauge) Manufacturing	\$133,703.33	0.00%	100.08%
446130	Optical Goods Stores	\$133,041.14	0.00%	100.08%
611519	Other Technical and Trade Schools	\$129,638.00	0.00%	100.08%
712130	Zoos and Botanical Gardens	\$129,577.79	0.00%	100.09%
611691	Exam Preparation and Tutoring	\$128,757.10	0.00%	100.09%
337211	Wood Office Furniture Manufacturing	\$127,895.00	0.00%	100.09%
811213	Communication Equipment Repair and Maintenance	\$125,593.18	0.00%	100.09%

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NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
713910	Golf Courses and Country Clubs	\$122,232.94	0.00%	100.10%
446191	Food (Health) Supplement Stores	\$120,000.00	0.00%	100.10%
111998	All Other Miscellaneous Crop Farming	\$116,595.00	0.00%	100.10%
326220	Rubber and Plastics Hoses and Belting Manufacturing	\$114,058.81	0.00%	100.10%
485320	Limousine Service	\$112,855.22	0.00%	100.11%
321991	Manufactured Home (Mobile Home) Manufacturing	\$112,783.80	0.00%	100.11%
713950	Bowling Centers	\$111,967.23	0.00%	100.11%
453110	Florists	\$111,484.02	0.00%	100.11%
424610	Plastics Materials and Basic Forms and Shapes Merchant Wholesalers	\$109,908.04	0.00%	100.12%
423410	Photographic Equipment and Supplies Merchant Wholesalers	\$109,725.50	0.00%	100.12%
624221	Temporary Shelters	\$107,208.82	0.00%	100.12%
326111	Plastics Bag and Pouch Manufacturing	\$106,957.54	0.00%	100.12%
327110	Pottery, Ceramics, and Plumbing Fixture Manufacturing	\$104,804.48	0.00%	100.13%
334419	Other Electronic Component Manufacturing	\$104,325.38	0.00%	100.13%
337212	Custom Architectural Woodwork and Millwork Manufacturing	\$104,290.34	0.00%	100.13%
339991	Gasket, Packing, and Sealing Device Manufacturing	\$99,570.00	0.00%	100.13%
324199	All Other Petroleum and Coal Products Manufacturing	\$99,047.42	0.00%	100.14%
493190	Other Warehousing and Storage	\$98,080.65	0.00%	100.14%
325211	Plastics Material and Resin Manufacturing	\$94,903.78	0.00%	100.14%
524126	Direct Property and Casualty Insurance Carriers	\$92,513.18	0.00%	100.14%
334310	Audio and Video Equipment Manufacturing	\$92,313.00	0.00%	100.14%
713940	Fitness and Recreational Sports Centers	\$91,639.62	0.00%	100.15%
314110	Carpet and Rug Mills	\$90,808.06	0.00%	100.15%
321999	All Other Miscellaneous Wood Product Manufacturing	\$88,121.63	0.00%	100.15%
332510	Hardware Manufacturing	\$87,965.18	0.00%	100.15%
522292	Real Estate Credit	\$87,827.50	0.00%	100.15%
531390	Other Activities Related to Real Estate	\$87,824.14	0.00%	100.16%
711219	Other Spectator Sports	\$83,805.71	0.00%	100.16%
331492	Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum)	\$82,784.18	0.00%	100.16%
334210	Telephone Apparatus Manufacturing	\$80,978.00	0.00%	100.16%
315240	Women's, Girls', and Infants' Cut and Sew Apparel Manufacturing	\$79,012.24	0.00%	100.16%
812113	Nail Salons	\$77,825.06	0.00%	100.16%
424330	Women's, Children's, and Infants' Clothing and Accessories Merchant Wholesalers	\$77,021.00	0.00%	100.17%
332996	Fabricated Pipe and Pipe Fitting Manufacturing	\$76,367.15	0.00%	100.17%
327331	Concrete Block and Brick Manufacturing	\$75,019.00	0.00%	100.17%
334510	Electromedical and Electrotherapeutic Apparatus Manufacturing	\$75,000.00	0.00%	100.17%
333314	Optical Instrument and Lens Manufacturing	\$74,787.27	0.00%	100.17%
213111	Drilling Oil and Gas Wells	\$74,674.80	0.00%	100.17%
322230	Stationery Product Manufacturing	\$72,000.00	0.00%	100.18%
315280	Other Cut and Sew Apparel Manufacturing	\$68,083.97	0.00%	100.18%
622210	Psychiatric and Substance Abuse Hospitals	\$67,809.14	0.00%	100.18%
448150	Clothing Accessories Stores	\$67,232.10	0.00%	100.18%

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NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
611610	Fine Arts Schools	\$67,157.17	0.00%	100.18%
326299	All Other Rubber Product Manufacturing	\$66,976.00	0.00%	100.18%
335110	Electric Lamp Bulb and Part Manufacturing	\$66,660.87	0.00%	100.19%
813319	Other Social Advocacy Organizations	\$66,554.96	0.00%	100.19%
314120	Curtain and Linen Mills	\$64,924.50	0.00%	100.19%
453220	Gift, Novelty, and Souvenir Stores	\$63,757.39	0.00%	100.19%
812320	Drycleaning and Laundry Services (except Coin-Operated)	\$63,636.26	0.00%	100.19%
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	\$63,495.54	0.00%	100.19%
541940	Veterinary Services	\$63,459.30	0.00%	100.19%
721110	Hotels (except Casino Hotels) and Motels	\$62,254.98	0.00%	100.20%
334413	Semiconductor and Related Device Manufacturing	\$61,778.07	0.00%	100.20%
522320	Financial Transactions Processing, Reserve, and Clearinghouse Activities	\$59,603.81	0.00%	100.20%
115210	Support Activities for Animal Production	\$59,439.10	0.00%	100.20%
532411	Commercial Air, Rail, and Water Transportation Equipment Rental and Leasing	\$59,292.40	0.00%	100.20%
335310	Electrical equipment manufacturing	\$58,544.75	0.00%	100.20%
561510	Travel Agencies	\$57,133.57	0.00%	100.20%
511191	Greeting Card Publishers	\$56,900.00	0.00%	100.20%
541199	All Other Legal Services	\$55,974.01	0.00%	100.21%
541921	Photography Studios, Portrait	\$55,765.26	0.00%	100.21%
811113	Automotive Transmission Repair	\$55,310.00	0.00%	100.21%
339993	Fastener, Button, Needle, and Pin Manufacturing	\$54,280.00	0.00%	100.21%
336211	Motor Vehicle Body Manufacturing	\$53,919.81	0.00%	100.21%
611620	Sports and Recreation Instruction	\$53,104.32	0.00%	100.21%
811192	Car Washes	\$52,451.99	0.00%	100.21%
485119	Other Urban Transit Systems	\$51,586.54	0.00%	100.21%
313240	Knit Fabric Mills	\$49,910.00	0.00%	100.21%
447190	Other Gasoline Stations	\$47,898.00	0.00%	100.22%
325992	Photographic Film, Paper, Plate, and Chemical Manufacturing	\$47,500.00	0.00%	100.22%
511110	Newspaper Publishers	\$47,443.82	0.00%	100.22%
533110	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	\$47,141.59	0.00%	100.22%
443141	Household Appliance Stores	\$46,824.83	0.00%	100.22%
238390	Other Building Finishing Contractors	\$45,211.20	0.00%	100.22%
532210	Consumer Electronics and Appliances Rental	\$44,285.00	0.00%	100.22%
331513	Steel Foundries (except Investment)	\$43,057.64	0.00%	100.22%
515120	Television Broadcasting	\$43,000.00	0.00%	100.22%
611310	Colleges, Universities, and Professional Schools	\$41,119.06	0.00%	100.22%
238350	Finish Carpentry Contractors	\$39,350.00	0.00%	100.23%
722310	Food Service Contractors	\$37,381.00	0.00%	100.23%
423620	Household Appliances, Electric Housewares, and Consumer Electronics Merchant Wholesalers	\$37,034.31	0.00%	100.23%
519110	News Syndicates	\$37,016.32	0.00%	100.23%
711120	Dance Companies	\$35,980.00	0.00%	100.23%
336992	Military Armored Vehicle, Tank, and Tank Component Manufacturing	\$35,980.00	0.00%	100.23%

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NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
453920	Art Dealers	\$35,800.00	0.00%	100.23%
454390	Other Direct Selling Establishments	\$34,200.00	0.00%	100.23%
325320	Pesticide and Other Agricultural Chemical Manufacturing	\$34,043.13	0.00%	100.23%
812910	Pet Care (except Veterinary) Services	\$32,842.02	0.00%	100.23%
541213	Tax Preparation Services	\$32,815.00	0.00%	100.23%
519130	Internet Publishing and Broadcasting and Web Search Portals	\$32,784.85	0.00%	100.23%
522220	Sales Financing	\$31,661.27	0.00%	100.24%
423740	Refrigeration Equipment and Supplies Merchant Wholesalers	\$31,500.00	0.00%	100.24%
811430	Footwear and Leather Goods Repair	\$29,470.78	0.00%	100.24%
337125	Household Furniture (except Wood and Metal) Manufacturing	\$29,197.00	0.00%	100.24%
115310	Support Activities for Forestry	\$29,107.50	0.00%	100.24%
326150	Urethane and Other Foam Product (except Polystyrene) Manufacturing	\$28,000.00	0.00%	100.24%
313210	Broadwoven Fabric Mills	\$27,622.36	0.00%	100.24%
442291	Window Treatment Stores	\$26,989.65	0.00%	100.24%
424430	Dairy Product (except Dried or Canned) Merchant Wholesalers	\$26,734.80	0.00%	100.24%
485510	Charter Bus Industry	\$26,420.04	0.00%	100.24%
713120	Amusement Arcades	\$25,693.55	0.00%	100.24%
621498	All Other Outpatient Care Centers	\$25,670.00	0.00%	100.24%
331222	Steel Wire Drawing	\$25,467.50	0.00%	100.24%
316998	All Other Leather Good and Allied Product Manufacturing	\$24,089.65	0.00%	100.24%
922160	Fire Protection	\$23,398.13	0.00%	100.24%
812310	Coin-Operated Laundries and Drycleaners	\$23,382.26	0.00%	100.24%
313110	Fiber, Yarn, and Thread Mills	\$22,648.00	0.00%	100.24%
332919	Other Metal Valve and Pipe Fitting Manufacturing	\$22,504.72	0.00%	100.24%
511140	Directory and Mailing List Publishers	\$22,351.82	0.00%	100.25%
311999	All Other Miscellaneous Food Manufacturing	\$21,499.40	0.00%	100.25%
812112	Beauty Salons	\$20,290.00	0.00%	100.25%
621399	Offices of All Other Miscellaneous Health Practitioners	\$20,245.43	0.00%	100.25%
813110	Religious Organizations	\$20,205.64	0.00%	100.25%
112990	All Other Animal Production	\$19,950.00	0.00%	100.25%
423130	Tire and Tube Merchant Wholesalers	\$19,824.00	0.00%	100.25%
322219	Other Paperboard Container Manufacturing	\$19,810.00	0.00%	100.25%
487110	Scenic and Sightseeing Transportation, Land	\$19,783.00	0.00%	100.25%
236117	New Housing For-Sale Builders	\$19,355.00	0.00%	100.25%
333611	Turbine and Turbine Generator Set Units Manufacturing	\$19,106.50	0.00%	100.25%
446199	All Other Health and Personal Care Stores	\$18,240.00	0.00%	100.25%
532420	Office Machinery and Equipment Rental and Leasing	\$18,140.70	0.00%	100.25%
311919	Other Snack Food Manufacturing	\$17,760.00	0.00%	100.25%
811211	Consumer Electronics Repair and Maintenance	\$17,759.00	0.00%	100.25%
448140	Family Clothing Stores	\$17,164.50	0.00%	100.25%
611630	Language Schools	\$17,057.00	0.00%	100.25%
561320	Temporary Help Services	\$16,900.00	0.00%	100.25%

APPENDIX B: PRODUCT ANALYSIS

NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
522130	Credit Unions	\$16,681.60	0.00%	100.25%
333240	Industrial machinery manufacturing	\$16,121.00	0.00%	100.25%
331524	Aluminum Foundries (except Die-Casting)	\$15,612.15	0.00%	100.25%
711211	Sports Teams and Clubs	\$15,444.00	0.00%	100.25%
327211	Flat Glass Manufacturing	\$15,380.00	0.00%	100.25%
336991	Motorcycle, Bicycle, and Parts Manufacturing	\$15,375.00	0.00%	100.25%
336612	Boat Building	\$15,238.00	0.00%	100.26%
322299	All Other Converted Paper Product Manufacturing	\$14,820.00	0.00%	100.26%
813312	Environment, Conservation and Wildlife Organizations	\$14,757.66	0.00%	100.26%
423920	Toy and Hobby Goods and Supplies Merchant Wholesalers	\$14,729.78	0.00%	100.26%
424310	Piece Goods, Notions, and Other Dry Goods Merchant Wholesalers	\$14,687.37	0.00%	100.26%
811412	Appliance Repair and Maintenance	\$14,539.44	0.00%	100.26%
325991	Custom Compounding of Purchased Resins	\$14,128.11	0.00%	100.26%
337110	Wood Kitchen Cabinet and Countertop Manufacturing	\$13,886.00	0.00%	100.26%
221210	Natural Gas Distribution	\$13,591.00	0.00%	100.26%
512132	Drive-In Motion Picture Theaters	\$12,965.52	0.00%	100.26%
812921	Photofinishing Laboratories (except One-Hour)	\$12,961.07	0.00%	100.26%
611512	Flight Training	\$12,629.22	0.00%	100.26%
532281	Formal Wear and Costume Rental	\$12,500.00	0.00%	100.26%
337122	Nonupholstered Wood Household Furniture Manufacturing	\$12,288.91	0.00%	100.26%
321992	Prefabricated Wood Building Manufacturing	\$12,044.00	0.00%	100.26%
512240	Sound Recording Studios	\$11,916.00	0.00%	100.26%
332912	Fluid Power Valve and Hose Fitting Manufacturing	\$11,695.80	0.00%	100.26%
333515	Cutting Tool and Machine Tool Accessory Manufacturing	\$11,581.93	0.00%	100.26%
339930	Doll, Toy, and Game Manufacturing	\$11,375.72	0.00%	100.26%
316210	Footwear Manufacturing	\$11,146.35	0.00%	100.26%
451140	Musical Instrument and Supplies Stores	\$10,865.00	0.00%	100.26%
335911	Storage Battery Manufacturing	\$10,668.67	0.00%	100.26%
326191	Plastics Plumbing Fixture Manufacturing	\$10,425.00	0.00%	100.26%
621112	Offices of Physicians, Mental Health Specialists	\$9,998.85	0.00%	100.26%
541840	Media Representatives	\$9,725.00	0.00%	100.26%
611110	Elementary and Secondary Schools	\$9,409.14	0.00%	100.26%
332993	Ammunition (except Small Arms) Manufacturing	\$8,886.45	0.00%	100.26%
722514	Cafeterias, Grill Buffets, and Buffets	\$8,620.00	0.00%	100.26%
561492	Court Reporting and Stenotype Services	\$8,278.75	0.00%	100.26%
326000	Plastics and rubber products manufacturing	\$7,926.92	0.00%	100.26%
561491	Repossession Services	\$7,812.05	0.00%	100.26%
331529	Other Nonferrous Metal Foundries (except Die-Casting)	\$7,336.80	0.00%	100.26%
448120	Women's Clothing Stores	\$7,219.50	0.00%	100.26%
485111	Mixed Mode Transit Systems	\$7,000.00	0.00%	100.26%
321920	Wood Container and Pallet Manufacturing	\$6,898.90	0.00%	100.26%
333997	Scale and Balance Manufacturing	\$6,743.00	0.00%	100.26%
336411	Aircraft Manufacturing	\$6,385.00	0.00%	100.26%
337210	Office furniture and fixtures manufacturing	\$6,100.98	0.00%	100.26%
812331	Linen Supply	\$5,986.00	0.00%	100.26%
711212	Racetracks	\$5,973.15	0.00%	100.26%

APPENDIX B: PRODUCT ANALYSIS

NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
323120	Support Activities for Printing	\$5,958.92	0.00%	100.26%
445120	Convenience Stores	\$5,857.60	0.00%	100.26%
111422	Floriculture Production	\$5,668.84	0.00%	100.26%
333519	Rolling Mill and Other Metalworking Machinery Manufacturing	\$5,412.50	0.00%	100.26%
311830	Tortilla Manufacturing	\$5,297.90	0.00%	100.26%
623110	Nursing Care Facilities (Skilled Nursing Facilities)	\$5,272.38	0.00%	100.26%
441210	Recreational Vehicle Dealers	\$4,998.00	0.00%	100.26%
448110	Men's Clothing Stores	\$4,919.12	0.00%	100.27%
315190	Other Apparel Knitting Mills	\$4,860.00	0.00%	100.27%
333992	Welding and Soldering Equipment Manufacturing	\$4,660.00	0.00%	100.27%
335311	Power, Distribution, and Specialty Transformer Manufacturing	\$4,652.79	0.00%	100.27%
532283	Home Health Equipment Rental	\$4,594.92	0.00%	100.27%
315990	Apparel Accessories and Other Apparel Manufacturing	\$4,393.98	0.00%	100.27%
424470	Meat and Meat Product Merchant Wholesalers	\$4,373.25	0.00%	100.27%
444100	Building material and supplies dealers	\$3,866.55	0.00%	100.27%
332216	Saw Blade and Handtool Manufacturing	\$3,822.00	0.00%	100.27%
425120	Wholesale Trade Agents and Brokers	\$3,711.40	0.00%	100.27%
332439	Other Metal Container Manufacturing	\$3,694.00	0.00%	100.27%
112519	Other Aquaculture	\$3,409.70	0.00%	100.27%
624110	Child and Youth Services	\$3,012.50	0.00%	100.27%
541490	Other Specialized Design Services	\$2,760.00	0.00%	100.27%
331318	Other Aluminum Rolling, Drawing, and Extruding	\$2,679.50	0.00%	100.27%
335300	Electrical equipment manufacturing	\$2,675.00	0.00%	100.27%
561520	Tour Operators	\$2,550.00	0.00%	100.27%
336212	Truck Trailer Manufacturing	\$2,460.00	0.00%	100.27%
442299	All Other Home Furnishings Stores	\$2,309.40	0.00%	100.27%
445299	All Other Specialty Food Stores	\$2,267.10	0.00%	100.27%
335912	Primary Battery Manufacturing	\$2,093.10	0.00%	100.27%
333244	Printing Machinery and Equipment Manufacturing	\$2,084.06	0.00%	100.27%
525920	Trusts, Estates, and Agency Accounts	\$2,060.51	0.00%	100.27%
327420	Gypsum Product Manufacturing	\$2,014.02	0.00%	100.27%
333517	Machine Tool Manufacturing	\$2,007.01	0.00%	100.27%
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing	\$1,986.00	0.00%	100.27%
339110	Medical equipment and supplies manufacturing	\$1,981.60	0.00%	100.27%
561422	Telemarketing Bureaus and Other Contact Centers	\$1,975.00	0.00%	100.27%
488320	Marine Cargo Handling	\$1,905.60	0.00%	100.27%
561439	Other Business Service Centers (including Copy Shops)	\$1,850.00	0.00%	100.27%
339000	Miscellaneous manufacturing	\$1,846.64	0.00%	100.27%
441320	Tire Dealers	\$1,800.00	0.00%	100.27%
541340	Drafting Services	\$1,655.72	0.00%	100.27%
721211	RV (Recreational Vehicle) Parks and Campgrounds	\$1,528.90	0.00%	100.27%
611513	Apprenticeship Training	\$1,440.00	0.00%	100.27%
334613	Blank Magnetic and Optical Recording Media Manufacturing	\$1,424.62	0.00%	100.27%
623900	Other residential care facilities	\$1,340.00	0.00%	100.27%
522390	Other Activities Related to Credit Intermediation	\$1,084.00	0.00%	100.27%

APPENDIX B: PRODUCT ANALYSIS

NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
524292	Third Party Administration of Insurance and Pension Funds	\$1,067.36	0.00%	100.27%
445291	Baked Goods Stores	\$1,056.86	0.00%	100.27%
333112	Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing	\$1,019.12	0.00%	100.27%
331315	Aluminum Sheet, Plate, and Foil Manufacturing	\$977.00	0.00%	100.27%
492210	Local Messengers and Local Delivery	\$900.00	0.00%	100.27%
327113	Porcelain Electrical Supply Manufacturing	\$682.51	0.00%	100.27%
325520	Adhesive Manufacturing	\$629.80	0.00%	100.27%
811191	Automotive Oil Change and Lubrication Shops	\$588.70	0.00%	100.27%
522110	Commercial Banking	\$549.20	0.00%	100.27%
523110	Investment Banking and Securities Dealing	\$520.00	0.00%	100.27%
813930	Labor Unions and Similar Labor Organizations	\$499.00	0.00%	100.27%
922110	Courts	\$486.50	0.00%	100.27%
445310	Beer, Wine, and Liquor Stores	\$476.00	0.00%	100.27%
333618	Other Engine Equipment Manufacturing	\$388.80	0.00%	100.27%
621320	Offices of Optometrists	\$387.75	0.00%	100.27%
811112	Automotive Exhaust System Repair	\$374.10	0.00%	100.27%
922130	Legal Counsel and Prosecution	\$309.95	0.00%	100.27%
561450	Credit Bureaus	\$300.00	0.00%	100.27%
333920	Material handling equipment manufacturing	\$225.00	0.00%	100.27%
445230	Fruit and Vegetable Markets	\$198.55	0.00%	100.27%
561410	Document Preparation Services	\$133.50	0.00%	100.27%
922120	Police Protection	\$109.50	0.00%	100.27%
561440	Collection Agencies	\$105.00	0.00%	100.27%
541191	Title Abstract and Settlement Offices	\$59.09	0.00%	100.27%
453991	Tobacco Stores	\$0.00	0.00%	100.27%
332111	Iron and Steel Forging	\$0.00	0.00%	100.27%
337920	Blind and Shade Manufacturing	\$0.00	0.00%	100.27%
325620	Toilet Preparation Manufacturing	\$0.00	0.00%	100.27%
314994	Rope, Cordage, Twine, Tire Cord, and Tire Fabric Mills	\$0.00	0.00%	100.27%
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	\$0.00	0.00%	100.27%
236110	Residential building construction	\$0.00	0.00%	100.27%
722510	Restaurants and other eating places	-\$39.86	0.00%	100.27%
811110	Automotive mechanical and electrical repair	-\$99.00	0.00%	100.27%
484100	General freight trucking	-\$254.56	0.00%	100.27%
424300	Apparel and piece goods merchant wholesalers	-\$3,988.83	0.00%	100.27%
332618	Other Fabricated Wire Product Manufacturing	-\$5,000.00	0.00%	100.27%
532410	Heavy machinery rental and leasing	-\$7,995.03	0.00%	100.27%
623220	Residential Mental Health and Substance Abuse Facilities	-\$8,180.00	0.00%	100.27%
448310	Jewelry Stores	-\$15,328.52	0.00%	100.27%
237100	Utility system construction	-\$21,872.80	0.00%	100.27%
621110	Offices of physicians	-\$26,000.02	0.00%	100.27%
541610	Management consulting services	-\$28,907.72	0.00%	100.26%
621510	Medical and diagnostic laboratories	-\$36,113.09	0.00%	100.26%
327310	Cement Manufacturing	-\$37,065.00	0.00%	100.26%
524100	Insurance carriers	-\$95,483.30	0.00%	100.26%
541510	Computer systems design and related services	-\$131,160.74	0.00%	100.26%

NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
482111	Line-Haul Railroads	-\$198,255.00	0.00%	100.25%
813410	Civic and Social Organizations	-\$236,277.01	-0.01%	100.25%
424480	Fresh Fruit and Vegetable Merchant Wholesalers	-\$521,555.20	-0.01%	100.24%
561210	Facilities Support Services	-\$1,850,000.00	-0.04%	100.20%
531110	Lessors of Residential Buildings and Dwellings	-\$3,844,310.60	-0.08%	100.11%
Total		\$4,529,194,200.72	100.00%	

EXHIBIT B-2.
 PRODUCT ANALYSIS
 DISTRIBUTION OF DOLLARS BY NAICS CODE & DESCRIPTION
 ARCHITECTURE & ENGINEERING

NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
541330	Engineering Services	\$305,023,050.91	90.17%	90.17%
541310	Architectural Services	\$21,463,962.11	6.34%	96.51%
541320	Landscape Architectural Services	\$9,594,657.75	2.84%	99.35%
541370	Surveying and Mapping (except Geophysical) Services	\$1,816,399.27	0.54%	99.89%
541350	Building Inspection Services	\$366,554.04	0.11%	99.99%
999990	Unknown	\$17,045.35	0.01%	100.00%
541340	Drafting Services	\$1,528.90	0.00%	100.00%
Total		\$338,283,198.33	100.00%	

EXHIBIT B-3.
 PRODUCT ANALYSIS
 DISTRIBUTION OF DOLLARS BY NAICS CODE & DESCRIPTION
 CONSTRUCTION

NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
237110	Water and Sewer Line and Related Structures Construction	\$482,787,349.40	27.34%	27.34%
236220	Commercial and Institutional Building Construction	\$291,458,520.28	16.51%	43.85%
237310	Highway, Street, and Bridge Construction	\$213,458,600.98	12.09%	55.94%
238990	All Other Specialty Trade Contractors	\$161,548,644.80	9.15%	65.09%
238210	Electrical Contractors and Other Wiring Installation Contractors	\$114,621,918.34	6.49%	71.58%
237120	Oil and Gas Pipeline and Related Structures Construction	\$107,131,330.87	6.07%	77.65%
236210	Industrial Building Construction	\$88,613,947.63	5.02%	82.66%
238110	Poured Concrete Foundation and Structure Contractors	\$88,491,654.36	5.01%	87.68%
236115	New Single-Family Housing Construction (except For-Sale Builders)	\$53,457,453.91	3.03%	90.70%
238910	Site Preparation Contractors	\$26,456,159.04	1.50%	92.20%
238220	Plumbing, Heating, and Air-Conditioning Contractors	\$25,821,258.96	1.46%	93.66%
238160	Roofing Contractors	\$16,630,160.59	0.94%	94.61%
237990	Other Heavy and Civil Engineering Construction	\$15,681,883.75	0.89%	95.49%
238330	Flooring Contractors	\$15,664,862.40	0.89%	96.38%
238140	Masonry Contractors	\$7,919,488.48	0.45%	96.83%
238290	Other Building Equipment Contractors	\$7,683,041.73	0.44%	97.26%
236118	Residential Remodelers	\$7,625,233.11	0.43%	97.70%
236116	New Multifamily Housing Construction (except For-Sale Builders)	\$6,656,575.88	0.38%	98.07%
238120	Structural Steel and Precast Concrete Contractors	\$5,924,378.00	0.34%	98.41%
238310	Drywall and Insulation Contractors	\$5,850,423.44	0.33%	98.74%
238320	Painting and Wall Covering Contractors	\$5,291,054.89	0.30%	99.04%
238130	Framing Contractors	\$4,005,701.43	0.23%	99.27%
237210	Land Subdivision	\$3,219,729.91	0.18%	99.45%
999990	Unknown	\$3,105,526.00	0.18%	99.63%
238150	Glass and Glazing Contractors	\$2,318,374.00	0.13%	99.76%
238190	Other Foundation, Structure, and Building Exterior Contractors	\$1,821,049.70	0.10%	99.86%
237130	Power and Communication Line and Related Structures Construction	\$1,550,206.36	0.09%	99.95%
238340	Tile and Terrazzo Contractors	\$661,445.00	0.04%	99.99%
238170	Siding Contractors	\$189,373.00	0.01%	100.00%
238390	Other Building Finishing Contractors	\$44,285.00	0.00%	100.00%
238350	Finish Carpentry Contractors	\$37,381.00	0.00%	100.00%
236117	New Housing For-Sale Builders	\$19,106.50	0.00%	100.00%
236110	Residential building construction	-\$39.86	0.00%	100.00%
237100	Utility system construction	-\$26,000.02	0.00%	100.00%
Total		\$1,765,720,078.86	100.00%	

EXHIBIT B-4.
 PRODUCT ANALYSIS
 DISTRIBUTION OF DOLLARS BY NAICS CODE & DESCRIPTION
 PROFESSIONAL SERVICES

NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
541511	Custom Computer Programming Services	\$71,436,282.01	17.69%	17.69%
541611	Administrative Management and General Management Consulting Services	\$63,726,701.47	15.78%	33.47%
541219	Other Accounting Services	\$34,981,965.67	8.66%	42.13%
541512	Computer Systems Design Services	\$30,385,598.23	7.52%	49.65%
541618	Other Management Consulting Services	\$22,395,825.00	5.55%	55.20%
532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing	\$15,449,322.06	3.83%	59.02%
541690	Other Scientific and Technical Consulting Services	\$15,210,218.28	3.77%	62.79%
541613	Marketing Consulting Services	\$13,509,395.95	3.35%	66.13%
524114	Direct Health and Medical Insurance Carriers	\$11,036,618.00	2.73%	68.87%
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	\$8,560,420.74	2.12%	70.99%
541620	Environmental Consulting Services	\$8,420,428.94	2.08%	73.07%
611430	Professional and Management Development Training	\$7,676,469.32	1.90%	74.97%
541990	All Other Professional, Scientific, and Technical Services	\$7,245,328.69	1.79%	76.77%
541810	Advertising Agencies	\$6,919,080.70	1.71%	78.48%
624190	Other Individual and Family Services	\$5,390,439.89	1.33%	79.81%
621111	Offices of Physicians (except Mental Health Specialists)	\$5,065,415.00	1.25%	81.07%
532289	All Other Consumer Goods Rental	\$5,005,415.46	1.24%	82.31%
541380	Testing Laboratories	\$4,946,796.12	1.22%	83.53%
524298	All Other Insurance Related Activities	\$4,662,218.72	1.15%	84.69%
551112	Offices of Other Holding Companies	\$3,994,082.42	0.99%	85.68%
611699	All Other Miscellaneous Schools and Instruction	\$3,784,348.56	0.94%	86.61%
621910	Ambulance Services	\$3,770,144.00	0.93%	87.55%
541110	Offices of Lawyers	\$3,699,045.56	0.92%	88.46%
531210	Offices of Real Estate Agents and Brokers	\$3,521,810.24	0.87%	89.33%
541715	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	\$3,333,208.31	0.83%	90.16%
541820	Public Relations Agencies	\$3,001,570.65	0.74%	90.90%
541612	Human Resources Consulting Services	\$2,779,373.84	0.69%	91.59%
524210	Insurance Agencies and Brokerages	\$2,775,319.14	0.69%	92.28%
531312	Nonresidential Property Managers	\$2,671,898.61	0.66%	92.94%
611710	Educational Support Services	\$2,572,361.67	0.64%	93.58%
624230	Emergency and Other Relief Services	\$2,427,508.76	0.60%	94.18%
523910	Miscellaneous Intermediation	\$2,212,276.68	0.55%	94.73%
523930	Investment Advice	\$2,018,837.08	0.50%	95.23%
532111	Passenger Car Rental	\$2,013,622.49	0.50%	95.72%
525910	Open-End Investment Funds	\$1,770,126.30	0.44%	96.16%
541211	Offices of Certified Public Accountants	\$1,746,225.05	0.43%	96.59%
541720	Research and Development in the Social Sciences and Humanities	\$1,474,237.65	0.37%	96.96%
531120	Lessors of Nonresidential Buildings (except Miniwarehouses)	\$1,431,393.86	0.35%	97.31%

APPENDIX B: PRODUCT ANALYSIS

NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
541214	Payroll Services	\$1,378,360.39	0.34%	97.66%
523920	Portfolio Management	\$1,294,192.00	0.32%	97.98%
541910	Marketing Research and Public Opinion Polling	\$1,231,965.20	0.31%	98.28%
624410	Child Day Care Services	\$1,005,585.63	0.25%	98.53%
621610	Home Health Care Services	\$977,677.00	0.24%	98.77%
541430	Graphic Design Services	\$763,907.13	0.19%	98.96%
531320	Offices of Real Estate Appraisers	\$698,940.00	0.17%	99.13%
541513	Computer Facilities Management Services	\$665,611.30	0.16%	99.30%
531130	Lessors of Miniwarehouses and Self-Storage Units	\$603,529.68	0.15%	99.45%
532120	Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing	\$506,148.45	0.13%	99.57%
541930	Translation and Interpretation Services	\$457,297.52	0.11%	99.69%
541890	Other Services Related to Advertising	\$377,879.57	0.09%	99.78%
623990	Other Residential Care Facilities	\$335,211.74	0.08%	99.86%
523999	Miscellaneous Financial Investment Activities	\$311,578.49	0.08%	99.94%
522291	Consumer Lending	\$295,950.00	0.07%	100.01%
541870	Advertising Material Distribution Services	\$284,293.30	0.07%	100.08%
541860	Direct Mail Advertising	\$283,799.75	0.07%	100.15%
541614	Process, Physical Distribution, and Logistics Consulting Services	\$276,717.53	0.07%	100.22%
611420	Computer Training	\$268,264.40	0.07%	100.29%
541850	Outdoor Advertising	\$267,768.78	0.07%	100.36%
541410	Interior Design Services	\$247,221.66	0.06%	100.42%
621330	Offices of Mental Health Practitioners (except Physicians)	\$228,519.00	0.06%	100.47%
611410	Business and Secretarial Schools	\$205,715.85	0.05%	100.52%
531311	Residential Property Managers	\$202,692.80	0.05%	100.58%
621511	Medical Laboratories	\$199,641.60	0.05%	100.62%
621999	All Other Miscellaneous Ambulatory Health Care Services	\$195,448.76	0.05%	100.67%
624310	Vocational Rehabilitation Services	\$162,665.88	0.04%	100.71%
624210	Community Food Services	\$162,326.56	0.04%	100.75%
541922	Commercial Photography	\$155,456.25	0.04%	100.79%
621991	Blood and Organ Banks	\$152,675.00	0.04%	100.83%
523120	Securities Brokerage	\$144,549.25	0.04%	100.87%
541519	Other Computer Related Services	\$143,940.77	0.04%	100.90%
621420	Outpatient Mental Health and Substance Abuse Centers	\$142,930.00	0.04%	100.94%
541420	Industrial Design Services	\$141,765.00	0.04%	100.97%
611519	Other Technical and Trade Schools	\$129,577.79	0.03%	101.00%
611691	Exam Preparation and Tutoring	\$127,895.00	0.03%	101.04%
624221	Temporary Shelters	\$106,957.54	0.03%	101.06%
999990	Unknown	\$106,000.00	0.03%	101.09%
524126	Direct Property and Casualty Insurance Carriers	\$92,313.00	0.02%	101.11%
522292	Real Estate Credit	\$87,824.14	0.02%	101.13%
531390	Other Activities Related to Real Estate	\$83,805.71	0.02%	101.15%
622210	Psychiatric and Substance Abuse Hospitals	\$67,232.10	0.02%	101.17%
611610	Fine Arts Schools	\$66,976.00	0.02%	101.19%
541940	Veterinary Services	\$62,254.98	0.02%	101.20%
522320	Financial Transactions Processing, Reserve, and Clearinghouse Activities	\$59,439.10	0.01%	101.22%

APPENDIX B: PRODUCT ANALYSIS

NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
532411	Commercial Air, Rail, and Water Transportation Equipment Rental and Leasing	\$58,544.75	0.01%	101.23%
541199	All Other Legal Services	\$55,765.26	0.01%	101.25%
541921	Photography Studios, Portrait	\$55,310.00	0.01%	101.26%
611620	Sports and Recreation Instruction	\$52,451.99	0.01%	101.27%
533110	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	\$46,824.83	0.01%	101.28%
532210	Consumer Electronics and Appliances Rental	\$43,057.64	0.01%	101.29%
611310	Colleges, Universities, and Professional Schools	\$39,350.00	0.01%	101.30%
541213	Tax Preparation Services	\$32,784.85	0.01%	101.31%
522220	Sales Financing	\$31,500.00	0.01%	101.32%
621498	All Other Outpatient Care Centers	\$25,467.50	0.01%	101.33%
621399	Offices of All Other Miscellaneous Health Practitioners	\$20,205.64	0.01%	101.33%
532420	Office Machinery and Equipment Rental and Leasing	\$17,760.00	0.00%	101.34%
611630	Language Schools	\$16,900.00	0.00%	101.34%
522130	Credit Unions	\$16,121.00	0.00%	101.34%
611512	Flight Training	\$12,500.00	0.00%	101.35%
532281	Formal Wear and Costume Rental	\$12,288.91	0.00%	101.35%
621112	Offices of Physicians, Mental Health Specialists	\$9,725.00	0.00%	101.35%
541840	Media Representatives	\$9,409.14	0.00%	101.35%
611110	Elementary and Secondary Schools	\$8,886.45	0.00%	101.36%
623110	Nursing Care Facilities (Skilled Nursing Facilities)	\$4,998.00	0.00%	101.36%
532283	Home Health Equipment Rental	\$4,393.98	0.00%	101.36%
624110	Child and Youth Services	\$2,760.00	0.00%	101.36%
541490	Other Specialized Design Services	\$2,679.50	0.00%	101.36%
525920	Trusts, Estates, and Agency Accounts	\$2,014.02	0.00%	101.36%
611513	Apprenticeship Training	\$1,424.62	0.00%	101.36%
623900	Other residential care facilities	\$1,084.00	0.00%	101.36%
522390	Other Activities Related to Credit Intermediation	\$1,067.36	0.00%	101.36%
524292	Third Party Administration of Insurance and Pension Funds	\$1,056.86	0.00%	101.36%
522110	Commercial Banking	\$520.00	0.00%	101.36%
523110	Investment Banking and Securities Dealing	\$499.00	0.00%	101.36%
621320	Offices of Optometrists	\$374.10	0.00%	101.36%
541191	Title Abstract and Settlement Offices	\$0.00	0.00%	101.36%
532410	Heavy machinery rental and leasing	-\$8,180.00	0.00%	101.36%
623220	Residential Mental Health and Substance Abuse Facilities	-\$15,328.52	0.00%	101.36%
621110	Offices of physicians	-\$28,907.72	-0.01%	101.35%
541610	Management consulting services	-\$36,113.09	-0.01%	101.34%
621510	Medical and diagnostic laboratories	-\$37,065.00	-0.01%	101.33%
524100	Insurance carriers	-\$131,160.74	-0.03%	101.30%
541510	Computer systems design and related services	-\$198,255.00	-0.05%	101.25%
531110	Lessors of Residential Buildings and Dwellings	-\$5,046,739.49	-1.25%	100.00%
Total		\$403,867,807.56	100.00%	200.00%

EXHIBIT B-5.
 PRODUCT ANALYSIS
 DISTRIBUTION OF DOLLARS BY NAICS CODE & DESCRIPTION
 OTHER SERVICES

NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
561311	Employment Placement Agencies	\$69,212,027.14	10.13%	10.13%
561730	Landscaping Services	\$53,823,120.02	7.87%	18.00%
561612	Security Guards and Patrol Services	\$51,220,940.42	7.49%	25.49%
811198	All Other Automotive Repair and Maintenance	\$46,345,871.93	6.78%	32.27%
561990	All Other Support Services	\$45,042,091.60	6.59%	38.86%
561499	All Other Business Support Services	\$35,000,543.01	5.12%	43.98%
561720	Janitorial Services	\$34,176,649.17	5.00%	48.98%
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	\$26,834,711.29	3.93%	52.91%
488490	Other Support Activities for Road Transportation	\$20,417,969.71	2.99%	55.90%
561110	Office Administrative Services	\$20,201,624.51	2.96%	58.85%
511210	Software Publishers	\$13,328,780.96	1.95%	60.80%
484110	General Freight Trucking, Local	\$13,023,082.64	1.91%	62.71%
562998	All Other Miscellaneous Waste Management Services	\$12,779,751.55	1.87%	64.58%
488119	Other Airport Operations	\$12,707,342.00	1.86%	66.44%
221111	Hydroelectric Power Generation	\$11,616,608.44	1.70%	68.13%
221310	Water Supply and Irrigation Systems	\$10,992,940.98	1.61%	69.74%
517919	All Other Telecommunications	\$10,573,031.05	1.55%	71.29%
812930	Parking Lots and Garages	\$10,571,186.36	1.55%	72.84%
518210	Data Processing, Hosting, and Related Services	\$9,909,207.61	1.45%	74.29%
562910	Remediation Services	\$9,791,174.13	1.43%	75.72%
561611	Investigation Services	\$9,594,179.38	1.40%	77.12%
713990	All Other Amusement and Recreation Industries	\$9,409,715.85	1.38%	78.50%
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance	\$9,274,397.21	1.36%	79.86%
811118	Other Automotive Mechanical and Electrical Repair and Maintenance	\$9,180,053.81	1.34%	81.20%
484220	Specialized Freight (except Used Goods) Trucking, Local	\$7,637,039.03	1.12%	82.32%
561621	Security Systems Services (except Locksmiths)	\$6,420,376.85	0.94%	83.25%
517911	Telecommunications Resellers	\$6,289,263.95	0.92%	84.18%
811490	Other Personal and Household Goods Repair and Maintenance	\$5,290,697.95	0.77%	84.95%
813990	Other Similar Organizations (except Business, Professional, Labor, and Political Organizations)	\$5,222,073.55	0.76%	85.71%
562991	Septic Tank and Related Services	\$5,177,661.51	0.76%	86.47%
713110	Amusement and Theme Parks	\$5,174,728.93	0.76%	87.23%
484210	Used Household and Office Goods Moving	\$5,123,998.28	0.75%	87.98%
811111	General Automotive Repair	\$4,666,048.39	0.68%	88.66%
561920	Convention and Trade Show Organizers	\$4,625,346.17	0.68%	89.34%
484121	General Freight Trucking, Long-Distance, Truckload	\$3,438,077.54	0.50%	89.84%
562112	Hazardous Waste Collection	\$3,425,238.26	0.50%	90.34%
811219	Other Electronic and Precision Equipment Repair and Maintenance	\$2,832,820.82	0.41%	90.76%
519120	Libraries and Archives	\$2,784,220.54	0.41%	91.16%

APPENDIX B: PRODUCT ANALYSIS

NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
485999	All Other Transit and Ground Passenger Transportation	\$2,777,689.13	0.41%	91.57%
562211	Hazardous Waste Treatment and Disposal	\$2,651,032.62	0.39%	91.96%
517312	Wireless Telecommunications Carriers (except Satellite)	\$2,489,025.10	0.36%	92.32%
711310	Promoters of Performing Arts, Sports, and Similar Events with Facilities	\$2,439,433.41	0.36%	92.68%
711510	Independent Artists, Writers, and Performers	\$2,112,644.76	0.31%	92.99%
561790	Other Services to Buildings and Dwellings	\$1,954,101.52	0.29%	93.27%
488510	Freight Transportation Arrangement	\$1,945,684.33	0.28%	93.56%
492110	Couriers and Express Delivery Services	\$1,805,854.49	0.26%	93.82%
488999	All Other Support Activities for Transportation	\$1,785,375.00	0.26%	94.08%
711110	Theater Companies and Dinner Theaters	\$1,734,331.75	0.25%	94.34%
488410	Motor Vehicle Towing	\$1,675,821.13	0.25%	94.58%
811212	Computer and Office Machine Repair and Maintenance	\$1,483,593.59	0.22%	94.80%
813910	Business Associations	\$1,445,150.16	0.21%	95.01%
519190	All Other Information Services	\$1,391,028.53	0.20%	95.21%
221118	Other Electric Power Generation	\$1,375,734.93	0.20%	95.41%
813920	Professional Organizations	\$1,345,685.62	0.20%	95.61%
811121	Automotive Body, Paint, and Interior Repair and Maintenance	\$1,338,912.81	0.20%	95.81%
511130	Book Publishers	\$1,334,087.32	0.20%	96.00%
812332	Industrial Launderers	\$1,333,393.04	0.20%	96.20%
561312	Executive Search Services	\$1,274,141.75	0.19%	96.38%
493110	General Warehousing and Storage	\$1,228,069.74	0.18%	96.56%
481111	Scheduled Passenger Air Transportation	\$1,202,964.55	0.18%	96.74%
811420	Reupholstery and Furniture Repair	\$1,190,693.81	0.17%	96.91%
722410	Drinking Places (Alcoholic Beverages)	\$1,120,431.48	0.16%	97.08%
999990	Unknown	\$1,066,041.94	0.16%	97.23%
722511	Full-Service Restaurants	\$1,054,852.19	0.15%	97.39%
561710	Exterminating and Pest Control Services	\$1,035,932.37	0.15%	97.54%
111421	Nursery and Tree Production	\$1,024,539.69	0.15%	97.69%
562219	Other Nonhazardous Waste Treatment and Disposal	\$993,011.38	0.15%	97.83%
562111	Solid Waste Collection	\$992,674.29	0.15%	97.98%
517311	Wired Telecommunications Carriers	\$969,355.79	0.14%	98.12%
511199	All Other Publishers	\$932,592.19	0.14%	98.26%
115112	Soil Preparation, Planting, and Cultivating	\$932,281.40	0.14%	98.39%
221320	Sewage Treatment Facilities	\$895,669.26	0.13%	98.53%
488190	Other Support Activities for Air Transportation	\$862,064.81	0.13%	98.65%
515111	Radio Networks	\$771,093.76	0.11%	98.76%
812990	All Other Personal Services	\$711,127.52	0.10%	98.87%
512110	Motion Picture and Video Production	\$696,564.10	0.10%	98.97%
922140	Correctional Institutions	\$645,195.68	0.09%	99.06%
488210	Support Activities for Rail Transportation	\$613,977.49	0.09%	99.15%
561622	Locksmiths	\$608,885.45	0.09%	99.24%
722320	Caterers	\$574,894.21	0.08%	99.33%
512120	Motion Picture and Video Distribution	\$565,408.07	0.08%	99.41%
485113	Bus and Other Motor Vehicle Transit Systems	\$550,526.96	0.08%	99.49%
515210	Cable and Other Subscription Programming	\$524,085.39	0.08%	99.57%
562119	Other Waste Collection	\$514,441.54	0.08%	99.64%
711130	Musical Groups and Artists	\$509,227.98	0.07%	99.72%

APPENDIX B: PRODUCT ANALYSIS

NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
561421	Telephone Answering Services	\$507,449.00	0.07%	99.79%
722513	Limited-Service Restaurants	\$453,938.60	0.07%	99.86%
511120	Periodical Publishers	\$391,644.04	0.06%	99.92%
512131	Motion Picture Theaters (except Drive-Ins)	\$373,023.68	0.05%	99.97%
562212	Solid Waste Landfill	\$359,515.78	0.05%	100.02%
711320	Promoters of Performing Arts, Sports, and Similar Events without Facilities	\$311,029.00	0.05%	100.07%
711190	Other Performing Arts Companies	\$303,136.30	0.04%	100.11%
811411	Home and Garden Equipment Repair and Maintenance	\$228,571.12	0.03%	100.15%
562920	Materials Recovery Facilities	\$227,578.16	0.03%	100.18%
493120	Refrigerated Warehousing and Storage	\$195,000.00	0.03%	100.21%
515112	Radio Stations	\$189,724.92	0.03%	100.24%
712110	Museums	\$147,572.66	0.02%	100.26%
512230	Music Publishers	\$146,234.32	0.02%	100.28%
481219	Other Nonscheduled Air Transportation	\$143,138.66	0.02%	100.30%
712190	Nature Parks and Other Similar Institutions	\$139,896.30	0.02%	100.32%
711410	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	\$136,950.00	0.02%	100.34%
712130	Zoos and Botanical Gardens	\$128,757.10	0.02%	100.36%
811213	Communication Equipment Repair and Maintenance	\$122,232.94	0.02%	100.38%
713910	Golf Courses and Country Clubs	\$120,000.00	0.02%	100.39%
111998	All Other Miscellaneous Crop Farming	\$114,058.81	0.02%	100.41%
485320	Limousine Service	\$112,783.80	0.02%	100.43%
713950	Bowling Centers	\$111,484.02	0.02%	100.44%
493190	Other Warehousing and Storage	\$94,903.78	0.01%	100.46%
713940	Fitness and Recreational Sports Centers	\$90,808.06	0.01%	100.47%
711219	Other Spectator Sports	\$82,784.18	0.01%	100.48%
812113	Nail Salons	\$77,021.00	0.01%	100.49%
813319	Other Social Advocacy Organizations	\$64,924.50	0.01%	100.50%
812320	Drycleaning and Laundry Services (except Coin-Operated)	\$63,495.54	0.01%	100.51%
721110	Hotels (except Casino Hotels) and Motels	\$61,778.07	0.01%	100.52%
115210	Support Activities for Animal Production	\$59,292.40	0.01%	100.53%
561510	Travel Agencies	\$56,900.00	0.01%	100.54%
511191	Greeting Card Publishers	\$55,974.01	0.01%	100.55%
811113	Automotive Transmission Repair	\$54,280.00	0.01%	100.56%
811192	Car Washes	\$51,586.54	0.01%	100.56%
485119	Other Urban Transit Systems	\$49,910.00	0.01%	100.57%
511110	Newspaper Publishers	\$47,141.59	0.01%	100.58%
515120	Television Broadcasting	\$41,119.06	0.01%	100.58%
722310	Food Service Contractors	\$37,034.31	0.01%	100.59%
519110	News Syndicates	\$35,980.00	0.01%	100.59%
711120	Dance Companies	\$35,980.00	0.01%	100.60%
812910	Pet Care (except Veterinary) Services	\$32,815.00	0.00%	100.60%
519130	Internet Publishing and Broadcasting and Web Search Portals	\$31,661.27	0.00%	100.61%
811430	Footwear and Leather Goods Repair	\$29,197.00	0.00%	100.61%
115310	Support Activities for Forestry	\$28,000.00	0.00%	100.62%
485510	Charter Bus Industry	\$25,693.55	0.00%	100.62%

APPENDIX B: PRODUCT ANALYSIS

NAICS CODE	NAICS DESCRIPTION	CONTRACT DOLLARS	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
713120	Amusement Arcades	\$25,670.00	0.00%	100.62%
922160	Fire Protection	\$23,382.26	0.00%	100.63%
812310	Coin-Operated Laundries and Drycleaners	\$22,648.00	0.00%	100.63%
511140	Directory and Mailing List Publishers	\$21,499.40	0.00%	100.63%
812112	Beauty Salons	\$20,245.43	0.00%	100.64%
813110	Religious Organizations	\$19,950.00	0.00%	100.64%
112990	All Other Animal Production	\$19,824.00	0.00%	100.64%
487110	Scenic and Sightseeing Transportation, Land	\$19,355.00	0.00%	100.65%
811211	Consumer Electronics Repair and Maintenance	\$17,164.50	0.00%	100.65%
561320	Temporary Help Services	\$16,681.60	0.00%	100.65%
711211	Sports Teams and Clubs	\$15,380.00	0.00%	100.65%
813312	Environment, Conservation and Wildlife Organizations	\$14,729.78	0.00%	100.66%
811412	Appliance Repair and Maintenance	\$14,128.11	0.00%	100.66%
221210	Natural Gas Distribution	\$12,965.52	0.00%	100.66%
512132	Drive-In Motion Picture Theaters	\$12,961.07	0.00%	100.66%
812921	Photofinishing Laboratories (except One-Hour)	\$12,629.22	0.00%	100.66%
512240	Sound Recording Studios	\$11,695.80	0.00%	100.66%
722514	Cafeterias, Grill Buffets, and Buffets	\$8,278.75	0.00%	100.67%
561492	Court Reporting and Stenotype Services	\$7,926.92	0.00%	100.67%
561491	Repossession Services	\$7,336.80	0.00%	100.67%
485111	Mixed Mode Transit Systems	\$6,898.90	0.00%	100.67%
812331	Linen Supply	\$5,973.15	0.00%	100.67%
711212	Racetracks	\$5,958.92	0.00%	100.67%
111422	Floriculture Production	\$5,412.50	0.00%	100.67%
112519	Other Aquaculture	\$3,012.50	0.00%	100.67%
561520	Tour Operators	\$2,460.00	0.00%	100.67%
561422	Telemarketing Bureaus and Other Contact Centers	\$1,905.60	0.00%	100.67%
488320	Marine Cargo Handling	\$1,850.00	0.00%	100.67%
561439	Other Business Service Centers (including Copy Shops)	\$1,846.64	0.00%	100.67%
721211	RV (Recreational Vehicle) Parks and Campgrounds	\$1,440.00	0.00%	100.67%
492210	Local Messengers and Local Delivery	\$682.51	0.00%	100.67%
811191	Automotive Oil Change and Lubrication Shops	\$549.20	0.00%	100.67%
813930	Labor Unions and Similar Labor Organizations	\$486.50	0.00%	100.67%
922110	Courts	\$476.00	0.00%	100.67%
811112	Automotive Exhaust System Repair	\$309.95	0.00%	100.67%
922130	Legal Counsel and Prosecution	\$300.00	0.00%	100.67%
561450	Credit Bureaus	\$225.00	0.00%	100.67%
561410	Document Preparation Services	\$109.50	0.00%	100.67%
922120	Police Protection	\$105.00	0.00%	100.67%
561440	Collection Agencies	\$59.09	0.00%	100.67%
722510	Restaurants and other eating places	-\$99.00	0.00%	100.67%
811110	Automotive mechanical and electrical repair	-\$254.56	0.00%	100.67%
484100	General freight trucking	-\$3,988.83	0.00%	100.67%
482111	Line-Haul Railroads	-\$236,277.01	-0.03%	100.64%
813410	Civic and Social Organizations	-\$521,555.20	-0.08%	100.56%
561210	Facilities Support Services	-\$3,844,310.60	-0.56%	100.00%
Total		\$683,543,943.56	100.00%	

EXHIBIT B-5.
 PRODUCT ANALYSIS
 DISTRIBUTION OF DOLLARS BY NAICS CODE & DESCRIPTION
 GOODS & SUPPLIES

NAICS CODE	NAICS DESCRIPTION	AMOUNT	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
423830	Industrial Machinery and Equipment Merchant Wholesalers	\$101,510,045.72	7.59%	7.59%
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers	\$66,368,532.48	4.96%	12.55%
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	\$65,879,782.45	4.92%	17.47%
441110	New Car Dealers	\$60,989,465.41	4.56%	22.03%
441000	Motor vehicle and parts dealers	\$55,721,920.69	4.17%	26.20%
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	\$47,483,341.88	3.55%	29.75%
444120	Paint and Wallpaper Stores	\$45,741,727.43	3.42%	33.17%
325180	Other Basic Inorganic Chemical Manufacturing	\$43,943,275.13	3.28%	36.45%
327320	Ready-Mix Concrete Manufacturing	\$42,556,305.00	3.18%	39.63%
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	\$38,685,253.89	2.89%	42.52%
333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	\$32,000,406.28	2.39%	44.92%
333249	Other Industrial Machinery Manufacturing	\$28,807,871.20	2.15%	47.07%
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers	\$28,473,757.94	2.13%	49.20%
423510	Metal Service Centers and Other Metal Merchant Wholesalers	\$27,706,923.71	2.07%	51.27%
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	\$26,772,719.98	2.00%	53.27%
423840	Industrial Supplies Merchant Wholesalers	\$25,280,333.89	1.89%	55.16%
424690	Other Chemical and Allied Products Merchant Wholesalers	\$23,551,831.31	1.76%	56.92%
333914	Measuring, Dispensing, and Other Pumping Equipment Manufacturing	\$22,377,039.18	1.67%	58.59%
327410	Lime Manufacturing	\$22,065,847.37	1.65%	60.24%
423440	Other Commercial Equipment Merchant Wholesalers	\$19,157,475.70	1.43%	61.67%
423990	Other Miscellaneous Durable Goods Merchant Wholesalers	\$19,147,078.28	1.43%	63.11%
441120	Used Car Dealers	\$16,947,598.75	1.27%	64.37%
999990	Unknown	\$16,171,097.93	1.21%	65.58%
334514	Totalizing Fluid Meter and Counting Device Manufacturing	\$15,849,967.66	1.18%	66.77%
333318	Other Commercial and Service Industry Machinery Manufacturing	\$15,287,908.39	1.14%	67.91%
423110	Automobile and Other Motor Vehicle Merchant Wholesalers	\$15,182,540.98	1.13%	69.04%
423390	Other Construction Material Merchant Wholesalers	\$14,751,738.30	1.10%	70.15%

APPENDIX B: PRODUCT ANALYSIS

NAICS CODE	NAICS DESCRIPTION	AMOUNT	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
339940	Office Supplies (except Paper) Manufacturing	\$12,993,537.16	0.97%	71.12%
423850	Service Establishment Equipment and Supplies Merchant Wholesalers	\$12,113,038.51	0.91%	72.02%
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers	\$11,847,115.24	0.89%	72.91%
325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing	\$11,582,518.99	0.87%	73.78%
324121	Asphalt Paving Mixture and Block Manufacturing	\$11,309,642.27	0.85%	74.62%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	\$11,187,145.32	0.84%	75.46%
424920	Book, Periodical, and Newspaper Merchant Wholesalers	\$10,531,118.69	0.79%	76.24%
327390	Other Concrete Product Manufacturing	\$10,506,821.72	0.79%	77.03%
423690	Other Electronic Parts and Equipment Merchant Wholesalers	\$9,959,926.87	0.74%	77.77%
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	\$8,823,624.81	0.66%	78.43%
336999	All Other Transportation Equipment Manufacturing	\$8,738,354.50	0.65%	79.09%
423490	Other Professional Equipment and Supplies Merchant Wholesalers	\$8,503,215.28	0.64%	79.72%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	\$8,391,454.41	0.63%	80.35%
326199	All Other Plastics Product Manufacturing	\$8,177,116.15	0.61%	80.96%
453998	All Other Miscellaneous Store Retailers (except Tobacco Stores)	\$7,959,045.05	0.59%	81.56%
454110	Electronic Shopping and Mail-Order Houses	\$7,911,290.47	0.59%	82.15%
332312	Fabricated Structural Metal Manufacturing	\$7,739,127.77	0.58%	82.73%
332313	Plate Work Manufacturing	\$7,218,806.99	0.54%	83.27%
212312	Crushed and Broken Limestone Mining and Quarrying	\$7,064,540.90	0.53%	83.79%
335999	All Other Miscellaneous Electrical Equipment and Component Manufacturing	\$6,823,101.48	0.51%	84.30%
331110	Iron and Steel Mills and Ferroalloy Manufacturing	\$6,290,587.50	0.47%	84.77%
332994	Small Arms, Ordnance, and Ordnance Accessories Manufacturing	\$6,290,405.77	0.47%	85.24%
339113	Surgical Appliance and Supplies Manufacturing	\$6,225,987.62	0.47%	85.71%
325120	Industrial Gas Manufacturing	\$6,036,629.35	0.45%	86.16%
334513	Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables	\$5,630,973.15	0.42%	86.58%
335314	Relay and Industrial Control Manufacturing	\$5,360,957.27	0.40%	86.98%
333923	Overhead Traveling Crane, Hoist, and Monorail System Manufacturing	\$5,222,374.38	0.39%	87.37%
334290	Other Communications Equipment Manufacturing	\$5,118,416.28	0.38%	87.76%
315210	Cut and Sew Apparel Contractors	\$4,965,389.04	0.37%	88.13%
323111	Commercial Printing (except Screen and Books)	\$4,642,653.82	0.35%	88.47%
334112	Computer Storage Device Manufacturing	\$4,312,620.14	0.32%	88.80%
212321	Construction Sand and Gravel Mining	\$4,142,237.94	0.31%	89.11%
424320	Men's and Boys' Clothing and Furnishings Merchant Wholesalers	\$3,799,632.72	0.28%	89.39%

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NAICS CODE	NAICS DESCRIPTION	AMOUNT	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
333132	Oil and Gas Field Machinery and Equipment Manufacturing	\$3,798,900.81	0.28%	89.67%
325199	All Other Basic Organic Chemical Manufacturing	\$3,787,847.56	0.28%	89.96%
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers	\$3,781,541.54	0.28%	90.24%
453210	Office Supplies and Stationery Stores	\$3,770,407.66	0.28%	90.52%
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	\$3,730,371.82	0.28%	90.80%
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	\$3,527,932.30	0.26%	91.06%
337127	Institutional Furniture Manufacturing	\$3,369,736.34	0.25%	91.32%
423710	Hardware Merchant Wholesalers	\$3,268,177.07	0.24%	91.56%
323113	Commercial Screen Printing	\$3,097,115.10	0.23%	91.79%
334512	Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use	\$3,075,533.05	0.23%	92.02%
335312	Motor and Generator Manufacturing	\$2,799,566.77	0.21%	92.23%
339112	Surgical and Medical Instrument Manufacturing	\$2,778,507.50	0.21%	92.44%
332710	Machine Shops	\$2,682,884.15	0.20%	92.64%
424120	Stationery and Office Supplies Merchant Wholesalers	\$2,661,937.25	0.20%	92.84%
337214	Office Furniture (except Wood) Manufacturing	\$2,595,113.99	0.19%	93.03%
333999	All Other Miscellaneous General Purpose Machinery Manufacturing	\$2,524,983.32	0.19%	93.22%
339950	Sign Manufacturing	\$2,449,338.24	0.18%	93.40%
334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	\$2,277,520.50	0.17%	93.57%
333120	Construction Machinery Manufacturing	\$2,137,264.40	0.16%	93.73%
423210	Furniture Merchant Wholesalers	\$2,069,438.00	0.15%	93.89%
444110	Home Centers	\$2,058,882.88	0.15%	94.04%
423310	Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers	\$2,032,570.23	0.15%	94.19%
326122	Plastics Pipe and Pipe Fitting Manufacturing	\$2,020,457.33	0.15%	94.34%
333921	Elevator and Moving Stairway Manufacturing	\$2,014,657.27	0.15%	94.50%
424130	Industrial and Personal Service Paper Merchant Wholesalers	\$1,965,785.90	0.15%	94.64%
441228	Motorcycle, ATV, and All Other Motor Vehicle Dealers	\$1,944,092.74	0.15%	94.79%
442110	Furniture Stores	\$1,938,857.79	0.14%	94.93%
444210	Outdoor Power Equipment Stores	\$1,865,866.52	0.14%	95.07%
332323	Ornamental and Architectural Metal Work Manufacturing	\$1,832,151.50	0.14%	95.21%
339999	All Other Miscellaneous Manufacturing	\$1,780,765.90	0.13%	95.34%
443142	Electronics Stores	\$1,775,197.60	0.13%	95.47%
451110	Sporting Goods Stores	\$1,749,131.88	0.13%	95.61%
335122	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing	\$1,709,016.55	0.13%	95.73%
424910	Farm Supplies Merchant Wholesalers	\$1,640,618.20	0.12%	95.86%
423730	Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers	\$1,613,118.18	0.12%	95.98%

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NAICS CODE	NAICS DESCRIPTION	AMOUNT	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
441310	Automotive Parts and Accessories Stores	\$1,575,843.87	0.12%	96.09%
324122	Asphalt Shingle and Coating Materials Manufacturing	\$1,550,651.05	0.12%	96.21%
452311	Warehouse Clubs and Supercenters	\$1,500,078.50	0.11%	96.32%
444130	Hardware Stores	\$1,432,938.78	0.11%	96.43%
442210	Floor Covering Stores	\$1,408,277.80	0.11%	96.53%
332321	Metal Window and Door Manufacturing	\$1,288,372.15	0.10%	96.63%
213112	Support Activities for Oil and Gas Operations	\$1,251,028.20	0.09%	96.72%
325412	Pharmaceutical Preparation Manufacturing	\$1,227,739.09	0.09%	96.82%
444190	Other Building Material Dealers	\$1,205,410.94	0.09%	96.91%
325312	Phosphatic Fertilizer Manufacturing	\$1,185,463.31	0.09%	97.00%
334111	Electronic Computer Manufacturing	\$1,152,501.40	0.09%	97.08%
446120	Cosmetics, Beauty Supplies, and Perfume Stores	\$1,126,113.00	0.08%	97.17%
334516	Analytical Laboratory Instrument Manufacturing	\$1,090,618.46	0.08%	97.25%
423220	Home Furnishing Merchant Wholesalers	\$1,026,309.85	0.08%	97.32%
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers	\$1,020,148.47	0.08%	97.40%
332913	Plumbing Fixture Fitting and Trim Manufacturing	\$1,019,602.12	0.08%	97.48%
322220	Paper Bag and Coated and Treated Paper Manufacturing	\$972,858.65	0.07%	97.55%
424930	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers	\$971,900.85	0.07%	97.62%
333996	Fluid Power Pump and Motor Manufacturing	\$934,671.90	0.07%	97.69%
333111	Farm Machinery and Equipment Manufacturing	\$903,514.31	0.07%	97.76%
211120	Crude Petroleum Extraction	\$903,037.50	0.07%	97.83%
332992	Small Arms Ammunition Manufacturing	\$874,993.87	0.07%	97.89%
325612	Polish and Other Sanitation Good Manufacturing	\$854,461.28	0.06%	97.96%
423860	Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers	\$838,851.12	0.06%	98.02%
332311	Prefabricated Metal Building and Component Manufacturing	\$833,387.60	0.06%	98.08%
334519	Other Measuring and Controlling Device Manufacturing	\$810,841.18	0.06%	98.14%
332812	Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers	\$802,139.39	0.06%	98.20%
445110	Supermarkets and Other Grocery (except Convenience) Stores	\$768,951.50	0.06%	98.26%
333991	Power-Driven Handtool Manufacturing	\$759,028.91	0.06%	98.32%
339910	Jewelry and Silverware Manufacturing	\$690,394.74	0.05%	98.37%
326113	Unlaminated Plastics Film and Sheet (except Packaging) Manufacturing	\$636,706.77	0.05%	98.41%
453310	Used Merchandise Stores	\$618,989.29	0.05%	98.46%
327332	Concrete Pipe Manufacturing	\$600,000.00	0.04%	98.51%
334118	Computer Terminal and Other Computer Peripheral Equipment Manufacturing	\$595,245.06	0.04%	98.55%
325414	Biological Product (except Diagnostic) Manufacturing	\$573,820.25	0.04%	98.59%
337124	Metal Household Furniture Manufacturing	\$569,570.53	0.04%	98.64%
332119	Metal Crown, Closure, and Other Metal Stamping (except Automotive)	\$554,910.80	0.04%	98.68%

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NAICS CODE	NAICS DESCRIPTION	AMOUNT	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
315220	Men's and Boys' Cut and Sew Apparel Manufacturing	\$527,072.92	0.04%	98.72%
336112	Light Truck and Utility Vehicle Manufacturing	\$519,177.60	0.04%	98.76%
312113	Ice Manufacturing	\$503,123.65	0.04%	98.79%
327120	Clay Building Material and Refractories Manufacturing	\$493,710.69	0.04%	98.83%
332999	All Other Miscellaneous Fabricated Metal Product Manufacturing	\$492,985.82	0.04%	98.87%
333912	Air and Gas Compressor Manufacturing	\$484,838.83	0.04%	98.90%
444220	Nursery, Garden Center, and Farm Supply Stores	\$470,235.91	0.04%	98.94%
331221	Rolled Steel Shape Manufacturing	\$467,471.00	0.03%	98.97%
452319	All Other General Merchandise Stores	\$463,525.20	0.03%	99.01%
424490	Other Grocery and Related Products Merchant Wholesalers	\$457,413.60	0.03%	99.04%
331511	Iron Foundries	\$433,625.45	0.03%	99.07%
335129	Other Lighting Equipment Manufacturing	\$433,314.82	0.03%	99.11%
333316	Photographic and Photocopying Equipment Manufacturing	\$421,644.98	0.03%	99.14%
333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	\$393,853.30	0.03%	99.17%
448190	Other Clothing Stores	\$367,634.42	0.03%	99.20%
451120	Hobby, Toy, and Game Stores	\$365,919.18	0.03%	99.22%
322121	Paper (except Newsprint) Mills	\$350,000.00	0.03%	99.25%
325314	Fertilizer (Mixing Only) Manufacturing	\$344,017.09	0.03%	99.27%
453910	Pet and Pet Supplies Stores	\$308,148.67	0.02%	99.30%
448210	Shoe Stores	\$301,690.48	0.02%	99.32%
327991	Cut Stone and Stone Product Manufacturing	\$291,233.00	0.02%	99.34%
336390	Other Motor Vehicle Parts Manufacturing	\$288,413.77	0.02%	99.36%
333922	Conveyor and Conveying Equipment Manufacturing	\$288,355.00	0.02%	99.39%
423420	Office Equipment Merchant Wholesalers	\$275,228.10	0.02%	99.41%
332911	Industrial Valve Manufacturing	\$269,160.04	0.02%	99.43%
423930	Recyclable Material Merchant Wholesalers	\$259,580.65	0.02%	99.45%
314910	Textile Bag and Canvas Mills	\$253,781.10	0.02%	99.46%
321918	Other Millwork (including Flooring)	\$232,343.05	0.02%	99.48%
327212	Other Pressed and Blown Glass and Glassware Manufacturing	\$231,650.00	0.02%	99.50%
337215	Showcase, Partition, Shelving, and Locker Manufacturing	\$227,068.07	0.02%	99.52%
424950	Paint, Varnish, and Supplies Merchant Wholesalers	\$224,643.21	0.02%	99.53%
333413	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing	\$220,709.95	0.02%	99.55%
451211	Book Stores	\$211,698.03	0.02%	99.56%
335991	Carbon and Graphite Product Manufacturing	\$209,672.00	0.02%	99.58%
336120	Heavy Duty Truck Manufacturing	\$209,670.50	0.02%	99.60%
452210	Department Stores	\$204,305.87	0.02%	99.61%
423940	Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers	\$199,645.15	0.01%	99.63%
212322	Industrial Sand Mining	\$199,252.77	0.01%	99.64%

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NAICS CODE	NAICS DESCRIPTION	AMOUNT	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
441222	Boat Dealers	\$196,790.36	0.01%	99.66%
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing	\$191,716.73	0.01%	99.67%
332322	Sheet Metal Work Manufacturing	\$190,718.74	0.01%	99.68%
321912	Cut Stock, Resawing Lumber, and Planing	\$176,382.03	0.01%	99.70%
424410	General Line Grocery Merchant Wholesalers	\$151,365.93	0.01%	99.71%
423330	Roofing, Siding, and Insulation Material Merchant Wholesalers	\$149,172.05	0.01%	99.72%
314999	All Other Miscellaneous Textile Product Mills	\$144,455.76	0.01%	99.73%
424110	Printing and Writing Paper Merchant Wholesalers	\$141,748.04	0.01%	99.74%
311942	Spice and Extract Manufacturing	\$139,944.00	0.01%	99.75%
332215	Metal Kitchen Cookware, Utensil, Cutlery, and Flatware (except Precious) Manufacturing	\$137,387.54	0.01%	99.76%
312111	Soft Drink Manufacturing	\$137,110.06	0.01%	99.77%
339920	Sporting and Athletic Goods Manufacturing	\$134,868.20	0.01%	99.78%
325510	Paint and Coating Manufacturing	\$133,703.33	0.01%	99.79%
332420	Metal Tank (Heavy Gauge) Manufacturing	\$133,041.14	0.01%	99.80%
446130	Optical Goods Stores	\$129,638.00	0.01%	99.81%
337211	Wood Office Furniture Manufacturing	\$125,593.18	0.01%	99.82%
446191	Food (Health) Supplement Stores	\$116,595.00	0.01%	99.83%
326220	Rubber and Plastics Hoses and Belting Manufacturing	\$112,855.22	0.01%	99.84%
321991	Manufactured Home (Mobile Home) Manufacturing	\$111,967.23	0.01%	99.85%
453110	Florists	\$109,908.04	0.01%	99.86%
424610	Plastics Materials and Basic Forms and Shapes Merchant Wholesalers	\$109,725.50	0.01%	99.86%
423410	Photographic Equipment and Supplies Merchant Wholesalers	\$107,208.82	0.01%	99.87%
326111	Plastics Bag and Pouch Manufacturing	\$104,804.48	0.01%	99.88%
327110	Pottery, Ceramics, and Plumbing Fixture Manufacturing	\$104,325.38	0.01%	99.89%
334419	Other Electronic Component Manufacturing	\$104,290.34	0.01%	99.90%
337212	Custom Architectural Woodwork and Millwork Manufacturing	\$99,570.00	0.01%	99.90%
339991	Gasket, Packing, and Sealing Device Manufacturing	\$99,047.42	0.01%	99.91%
324199	All Other Petroleum and Coal Products Manufacturing	\$98,080.65	0.01%	99.92%
325211	Plastics Material and Resin Manufacturing	\$92,513.18	0.01%	99.92%
334310	Audio and Video Equipment Manufacturing	\$91,639.62	0.01%	99.93%
314110	Carpet and Rug Mills	\$88,121.63	0.01%	99.94%
321999	All Other Miscellaneous Wood Product Manufacturing	\$87,965.18	0.01%	99.94%
332510	Hardware Manufacturing	\$87,827.50	0.01%	99.95%
331492	Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum)	\$80,978.00	0.01%	99.96%
334210	Telephone Apparatus Manufacturing	\$79,012.24	0.01%	99.96%
315240	Women's, Girls', and Infants' Cut and Sew Apparel Manufacturing	\$77,825.06	0.01%	99.97%

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NAICS CODE	NAICS DESCRIPTION	AMOUNT	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
424330	Women's, Children's, and Infants' Clothing and Accessories Merchant Wholesalers	\$76,367.15	0.01%	99.97%
332996	Fabricated Pipe and Pipe Fitting Manufacturing	\$75,019.00	0.01%	99.98%
327331	Concrete Block and Brick Manufacturing	\$75,000.00	0.01%	99.99%
334510	Electromedical and Electrotherapeutic Apparatus Manufacturing	\$74,787.27	0.01%	99.99%
333314	Optical Instrument and Lens Manufacturing	\$74,674.80	0.01%	100.00%
213111	Drilling Oil and Gas Wells	\$72,000.00	0.01%	100.00%
322230	Stationery Product Manufacturing	\$68,083.97	0.01%	100.01%
315280	Other Cut and Sew Apparel Manufacturing	\$67,809.14	0.01%	100.01%
448150	Clothing Accessories Stores	\$67,157.17	0.01%	100.02%
326299	All Other Rubber Product Manufacturing	\$66,660.87	0.00%	100.02%
335110	Electric Lamp Bulb and Part Manufacturing	\$66,554.96	0.00%	100.03%
314120	Curtain and Linen Mills	\$63,757.39	0.00%	100.03%
453220	Gift, Novelty, and Souvenir Stores	\$63,636.26	0.00%	100.04%
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	\$63,459.30	0.00%	100.04%
334413	Semiconductor and Related Device Manufacturing	\$59,603.81	0.00%	100.05%
335310	Electrical equipment manufacturing	\$57,133.57	0.00%	100.05%
339993	Fastener, Button, Needle, and Pin Manufacturing	\$53,919.81	0.00%	100.05%
336211	Motor Vehicle Body Manufacturing	\$53,104.32	0.00%	100.06%
313240	Knit Fabric Mills	\$47,898.00	0.00%	100.06%
447190	Other Gasoline Stations	\$47,500.00	0.00%	100.07%
325992	Photographic Film, Paper, Plate, and Chemical Manufacturing	\$47,443.82	0.00%	100.07%
443141	Household Appliance Stores	\$45,211.20	0.00%	100.07%
331513	Steel Foundries (except Investment)	\$43,000.00	0.00%	100.08%
423620	Household Appliances, Electric Housewares, and Consumer Electronics Merchant Wholesalers	\$37,016.32	0.00%	100.08%
336992	Military Armored Vehicle, Tank, and Tank Component Manufacturing	\$35,800.00	0.00%	100.08%
453920	Art Dealers	\$34,200.00	0.00%	100.08%
454390	Other Direct Selling Establishments	\$34,043.13	0.00%	100.09%
325320	Pesticide and Other Agricultural Chemical Manufacturing	\$32,842.02	0.00%	100.09%
423740	Refrigeration Equipment and Supplies Merchant Wholesalers	\$29,470.78	0.00%	100.09%
337125	Household Furniture (except Wood and Metal) Manufacturing	\$29,107.50	0.00%	100.09%
326150	Urethane and Other Foam Product (except Polystyrene) Manufacturing	\$27,622.36	0.00%	100.09%
313210	Broadwoven Fabric Mills	\$26,989.65	0.00%	100.10%
442291	Window Treatment Stores	\$26,734.80	0.00%	100.10%
424430	Dairy Product (except Dried or Canned) Merchant Wholesalers	\$26,420.04	0.00%	100.10%
331222	Steel Wire Drawing	\$24,089.65	0.00%	100.10%
316998	All Other Leather Good and Allied Product Manufacturing	\$23,398.13	0.00%	100.10%
313110	Fiber, Yarn, and Thread Mills	\$22,504.72	0.00%	100.11%
332919	Other Metal Valve and Pipe Fitting Manufacturing	\$22,351.82	0.00%	100.11%

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311999	All Other Miscellaneous Food Manufacturing	\$20,290.00	0.00%	100.11%
423130	Tire and Tube Merchant Wholesalers	\$19,810.00	0.00%	100.11%
322219	Other Paperboard Container Manufacturing	\$19,783.00	0.00%	100.11%
333611	Turbine and Turbine Generator Set Units Manufacturing	\$18,240.00	0.00%	100.11%
446199	All Other Health and Personal Care Stores	\$18,140.70	0.00%	100.12%
311919	Other Snack Food Manufacturing	\$17,759.00	0.00%	100.12%
448140	Family Clothing Stores	\$17,057.00	0.00%	100.12%
333240	Industrial machinery manufacturing	\$15,612.15	0.00%	100.12%
331524	Aluminum Foundries (except Die-Casting)	\$15,444.00	0.00%	100.12%
327211	Flat Glass Manufacturing	\$15,375.00	0.00%	100.12%
336991	Motorcycle, Bicycle, and Parts Manufacturing	\$15,238.00	0.00%	100.12%
336612	Boat Building	\$14,820.00	0.00%	100.12%
322299	All Other Converted Paper Product Manufacturing	\$14,757.66	0.00%	100.12%
423920	Toy and Hobby Goods and Supplies Merchant Wholesalers	\$14,687.37	0.00%	100.13%
424310	Piece Goods, Notions, and Other Dry Goods Merchant Wholesalers	\$14,539.44	0.00%	100.13%
325991	Custom Compounding of Purchased Resins	\$13,886.00	0.00%	100.13%
337110	Wood Kitchen Cabinet and Countertop Manufacturing	\$13,591.00	0.00%	100.13%
337122	Nonupholstered Wood Household Furniture Manufacturing	\$12,044.00	0.00%	100.13%
321992	Prefabricated Wood Building Manufacturing	\$11,916.00	0.00%	100.13%
332912	Fluid Power Valve and Hose Fitting Manufacturing	\$11,581.93	0.00%	100.13%
333515	Cutting Tool and Machine Tool Accessory Manufacturing	\$11,375.72	0.00%	100.13%
339930	Doll, Toy, and Game Manufacturing	\$11,146.35	0.00%	100.13%
316210	Footwear Manufacturing	\$10,865.00	0.00%	100.13%
451140	Musical Instrument and Supplies Stores	\$10,668.67	0.00%	100.13%
335911	Storage Battery Manufacturing	\$10,425.00	0.00%	100.14%
326191	Plastics Plumbing Fixture Manufacturing	\$9,998.85	0.00%	100.14%
332993	Ammunition (except Small Arms) Manufacturing	\$8,620.00	0.00%	100.14%
326000	Plastics and rubber products manufacturing	\$7,812.05	0.00%	100.14%
331529	Other Nonferrous Metal Foundries (except Die-Casting)	\$7,219.50	0.00%	100.14%
448120	Women's Clothing Stores	\$7,000.00	0.00%	100.14%
321920	Wood Container and Pallet Manufacturing	\$6,743.00	0.00%	100.14%
333997	Scale and Balance Manufacturing	\$6,385.00	0.00%	100.14%
336411	Aircraft Manufacturing	\$6,100.98	0.00%	100.14%
337210	Office furniture and fixtures manufacturing	\$5,986.00	0.00%	100.14%
323120	Support Activities for Printing	\$5,857.60	0.00%	100.14%
445120	Convenience Stores	\$5,668.84	0.00%	100.14%
333519	Rolling Mill and Other Metalworking Machinery Manufacturing	\$5,297.90	0.00%	100.14%
311830	Tortilla Manufacturing	\$5,272.38	0.00%	100.14%
441210	Recreational Vehicle Dealers	\$4,919.12	0.00%	100.14%
448110	Men's Clothing Stores	\$4,860.00	0.00%	100.14%
315190	Other Apparel Knitting Mills	\$4,660.00	0.00%	100.14%
333992	Welding and Soldering Equipment Manufacturing	\$4,652.79	0.00%	100.14%

APPENDIX B: PRODUCT ANALYSIS

NAICS CODE	NAICS DESCRIPTION	AMOUNT	PERCENT OF CONTRACT DOLLARS	CUMULATIVE PERCENTAGE
335311	Power, Distribution, and Specialty Transformer Manufacturing	\$4,594.92	0.00%	100.14%
315990	Apparel Accessories and Other Apparel Manufacturing	\$4,373.25	0.00%	100.14%
424470	Meat and Meat Product Merchant Wholesalers	\$3,866.55	0.00%	100.14%
444100	Building material and supplies dealers	\$3,822.00	0.00%	100.14%
332216	Saw Blade and Handtool Manufacturing	\$3,711.40	0.00%	100.14%
425120	Wholesale Trade Agents and Brokers	\$3,694.00	0.00%	100.15%
332439	Other Metal Container Manufacturing	\$3,409.70	0.00%	100.15%
331318	Other Aluminum Rolling, Drawing, and Extruding	\$2,675.00	0.00%	100.15%
335300	Electrical equipment manufacturing	\$2,550.00	0.00%	100.15%
336212	Truck Trailer Manufacturing	\$2,309.40	0.00%	100.15%
442299	All Other Home Furnishings Stores	\$2,267.10	0.00%	100.15%
445299	All Other Specialty Food Stores	\$2,093.10	0.00%	100.15%
335912	Primary Battery Manufacturing	\$2,084.06	0.00%	100.15%
333244	Printing Machinery and Equipment Manufacturing	\$2,060.51	0.00%	100.15%
327420	Gypsum Product Manufacturing	\$2,007.01	0.00%	100.15%
333517	Machine Tool Manufacturing	\$1,986.00	0.00%	100.15%
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing	\$1,981.60	0.00%	100.15%
339110	Medical equipment and supplies manufacturing	\$1,975.00	0.00%	100.15%
339000	Miscellaneous manufacturing	\$1,800.00	0.00%	100.15%
441320	Tire Dealers	\$1,655.72	0.00%	100.15%
334613	Blank Magnetic and Optical Recording Media Manufacturing	\$1,340.00	0.00%	100.15%
445291	Baked Goods Stores	\$1,019.12	0.00%	100.15%
333112	Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing	\$977.00	0.00%	100.15%
331315	Aluminum Sheet, Plate, and Foil Manufacturing	\$900.00	0.00%	100.15%
327113	Porcelain Electrical Supply Manufacturing	\$629.80	0.00%	100.15%
325520	Adhesive Manufacturing	\$588.70	0.00%	100.15%
445310	Beer, Wine, and Liquor Stores	\$388.80	0.00%	100.15%
333618	Other Engine Equipment Manufacturing	\$387.75	0.00%	100.15%
333920	Material handling equipment manufacturing	\$198.55	0.00%	100.15%
445230	Fruit and Vegetable Markets	\$133.50	0.00%	100.15%
337920	Blind and Shade Manufacturing	\$0.00	0.00%	100.15%
453991	Tobacco Stores	\$0.00	0.00%	100.15%
314994	Rope, Cordage, Twine, Tire Cord, and Tire Fabric Mills	\$0.00	0.00%	100.15%
332111	Iron and Steel Forging	\$0.00	0.00%	100.15%
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	\$0.00	0.00%	100.15%
325620	Toilet Preparation Manufacturing	\$0.00	0.00%	100.15%
424300	Apparel and piece goods merchant wholesalers	-\$5,000.00	0.00%	100.15%
332618	Other Fabricated Wire Product Manufacturing	-\$7,995.03	0.00%	100.15%
448310	Jewelry Stores	-\$21,872.80	0.00%	100.15%
327310	Cement Manufacturing	-\$95,483.30	-0.01%	100.14%
424480	Fresh Fruit and Vegetable Merchant Wholesalers	-\$1,850,000.00	-0.14%	100.00%
Total		\$1,337,779,172.41	100.00%	

APPENDIX C. UTILIZATION ANALYSIS

Availability and Disparity Study

City of Dallas, Texas



FIGURE C-1.
SUMMARY OF DOLLARS, TOTAL CONTRACTS (AWARDED) BY PROCUREMENT CATEGORY, OVERALL MARKET AREA

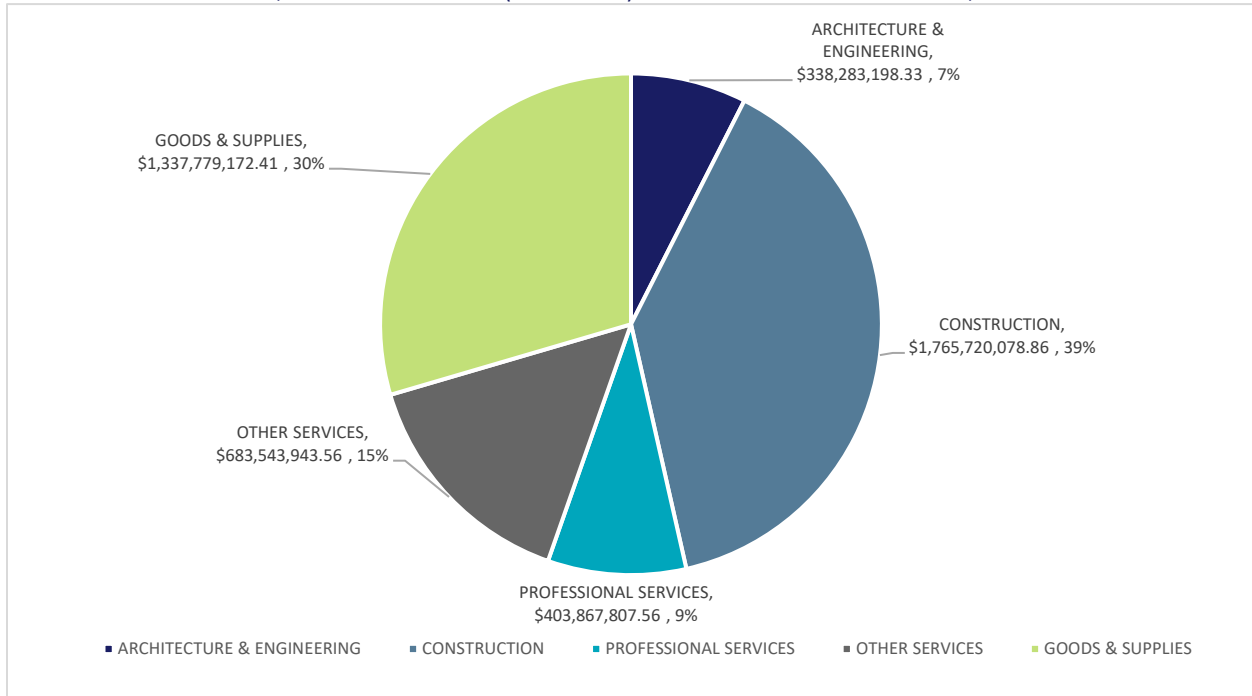


EXHIBIT C-1.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
(INSIDE 13-COUNTY MARKET AREA),
ALL PROCUREMENT CATEGORIES

BUSINESS OWNERSHIP CLASSIFICATION	DOLLAR AMOUNT	PERCENT
African American Male	\$138,449,587.58	4.05%
African American Female	\$10,833,876.88	0.32%
AFRICAN AMERICAN FIRMS	\$149,283,464.46	4.36%
Asian American Male	\$70,489,274.89	2.06%
Asian American Female	\$37,425,327.03	1.09%
ASIAN AMERICAN FIRMS	\$107,914,601.92	3.15%
Hispanic American Male	\$330,643,876.97	9.67%
Hispanic American Female	\$111,766,753.77	3.27%
HISPANIC AMERICAN FIRMS	\$442,410,630.74	12.93%
Native American Male	\$19,322,543.40	0.56%
Native American Female	\$473,211.84	0.01%
NATIVE AMERICAN FIRMS	\$19,795,755.24	0.58%
TOTAL MINORITY FIRMS	\$719,404,452.36	21.03%
NONMINORITY FEMALE FIRMS	\$295,787,757.84	8.65%
TOTAL WBE FIRMS	\$456,286,927.36	13.34%
TOTAL M/WBE FIRMS	\$1,015,192,210.20	29.68%
NON-M/WBE FIRMS	\$2,405,399,074.65	70.32%
TOTAL	\$3,420,591,284.85	100.00%

EXHIBIT C-2.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
(INSIDE 13-COUNTY MARKET AREA),
ARCHITECTURE & ENGINEERING

BUSINESS OWNERSHIP CLASSIFICATION	ARCHITECTURE & ENGINEERING	
	DOLLARS AWARDED	PERCENT OF DOLLARS
African American Male	\$22,385,045.16	7.05%
African American Female	\$1,207,457.31	0.38%
AFRICAN AMERICAN FIRMS	\$23,592,502.47	7.43%
Asian American Male	\$28,279,054.88	8.91%
Asian American Female	\$875,284.11	0.28%
ASIAN AMERICAN FIRMS	\$29,154,338.99	9.19%
Hispanic American Male	\$18,987,230.67	5.98%
Hispanic American Female	\$12,186,991.99	3.84%
HISPANIC AMERICAN FIRMS	\$31,174,222.66	9.82%
Native American Male	\$648,431.76	0.20%
Native American Female	\$80,420.40	0.03%
NATIVE AMERICAN FIRMS	\$728,852.16	0.23%
TOTAL MINORITY FIRMS	\$84,649,916.28	26.67%
NONMINORITY FEMALE FIRMS	\$18,375,063.25	5.79%
TOTAL WBE FIRMS	\$32,725,217.06	10.31%
TOTAL M/WBE FIRMS	\$103,024,979.53	32.46%
NON-M/WBE FIRMS	\$214,359,579.15	67.54%
TOTAL	\$317,384,558.68	100.00%

EXHIBIT C-3.
 UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
 (INSIDE 13-COUNTY MARKET AREA),
CONSTRUCTION

BUSINESS OWNERSHIP CLASSIFICATION	CONSTRUCTION	
	DOLLARS AWARDED	PERCENT OF DOLLARS
African American Male	\$72,052,578.97	4.85%
African American Female	\$1,429,564.50	0.10%
AFRICAN AMERICAN FIRMS	\$73,482,143.47	4.94%
Asian American Male	\$13,479,347.81	0.91%
Asian American Female	\$0.00	0.00%
ASIAN AMERICAN FIRMS	\$13,479,347.81	0.91%
Hispanic American Male	\$223,177,504.28	15.02%
Hispanic American Female	\$3,691,668.28	0.25%
HISPANIC AMERICAN FIRMS	\$226,869,172.56	15.26%
Native American Male	\$18,397,063.23	1.24%
Native American Female	\$19,107.00	0.00%
NATIVE AMERICAN FIRMS	\$18,416,170.23	1.24%
TOTAL MINORITY FIRMS	\$332,246,834.07	22.35%
NONMINORITY FEMALE FIRMS	\$82,988,103.63	5.58%
TOTAL WBE FIRMS	\$88,128,443.41	5.93%
TOTAL M/WBE FIRMS	\$415,234,937.70	27.94%
NON-M/WBE FIRMS	\$1,071,057,754.35	72.06%
TOTAL	\$1,486,292,692.05	100.00%

EXHIBIT C-4.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
(INSIDE 13-COUNTY MARKET AREA),
PROFESSIONAL SERVICES

BUSINESS OWNERSHIP CLASSIFICATION	PROFESSIONAL SERVICES	
	DOLLARS AWARDED	PERCENT OF DOLLARS
African American Male	\$16,159,713.62	6.78%
African American Female	\$2,671,592.72	1.12%
AFRICAN AMERICAN FIRMS	\$18,831,306.34	7.90%
Asian American Male	\$496,080.92	0.21%
Asian American Female	\$16,049,092.38	6.73%
ASIAN AMERICAN FIRMS	\$16,545,173.30	6.94%
Hispanic American Male	\$5,413,810.45	2.27%
Hispanic American Female	\$4,184,074.84	1.75%
HISPANIC AMERICAN FIRMS	\$9,597,885.29	4.02%
Native American Male	\$2,776.23	0.00%
Native American Female	\$0.00	0.00%
NATIVE AMERICAN FIRMS	\$2,776.23	0.00%
TOTAL MINORITY FIRMS	\$44,977,141.16	18.86%
NONMINORITY FEMALE FIRMS	\$28,320,451.97	11.88%
TOTAL WBE FIRMS	\$51,225,211.91	21.48%
TOTAL M/WBE FIRMS	\$73,297,593.13	30.74%
NON-M/WBE FIRMS	\$165,181,454.91	69.26%
TOTAL	\$238,479,048.04	100.00%

EXHIBIT C-5.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
(INSIDE 13-COUNTY MARKET AREA),
OTHER SERVICES

BUSINESS OWNERSHIP CLASSIFICATION	OTHER SERVICES	
	DOLLARS AWARDED	PERCENT OF DOLLARS
African American Male	\$25,081,266.16	5.47%
African American Female	\$2,434,810.01	0.53%
AFRICAN AMERICAN FIRMS	\$27,516,076.17	6.01%
Asian American Male	\$26,198,839.36	5.72%
Asian American Female	\$6,084,131.10	1.33%
ASIAN AMERICAN FIRMS	\$32,282,970.46	7.05%
Hispanic American Male	\$47,218,433.37	10.31%
Hispanic American Female	\$40,471,775.48	8.83%
HISPANIC AMERICAN FIRMS	\$87,690,208.85	19.14%
Native American Male	\$274,272.18	0.06%
Native American Female	\$0.00	0.00%
NATIVE AMERICAN FIRMS	\$274,272.18	0.06%
TOTAL MINORITY FIRMS	\$147,763,527.66	32.25%
NONMINORITY FEMALE FIRMS	\$31,111,893.67	6.79%
TOTAL WBE FIRMS	\$80,102,610.26	17.48%
TOTAL M/WBE FIRMS	\$178,875,421.33	39.04%
NON-M/WBE FIRMS	\$279,290,973.94	60.96%
TOTAL	\$458,166,395.27	100.00%

EXHIBIT C-6.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
(INSIDE 13-COUNTY MARKET AREA),
GOODS & SUPPLIES

BUSINESS OWNERSHIP CLASSIFICATION	GOODS & SUPPLIES	
	DOLLARS AWARDED	PERCENT OF DOLLARS
African American Male	\$2,770,983.67	0.30%
African American Female	\$3,090,452.34	0.34%
AFRICAN AMERICAN FIRMS	\$5,861,436.01	0.64%
Asian American Male	\$2,035,951.92	0.22%
Asian American Female	\$14,416,819.44	1.57%
ASIAN AMERICAN FIRMS	\$16,452,771.36	1.79%
Hispanic American Male	\$35,846,898.20	3.90%
Hispanic American Female	\$51,232,243.18	5.57%
HISPANIC AMERICAN FIRMS	\$87,079,141.38	9.46%
Native American Male	\$0.00	0.00%
Native American Female	\$373,684.44	0.04%
NATIVE AMERICAN FIRMS	\$373,684.44	0.04%
TOTAL MINORITY FIRMS	\$109,767,033.19	11.93%
NONMINORITY FEMALE FIRMS	\$134,992,245.32	14.67%
TOTAL WBE FIRMS	\$204,105,444.72	22.18%
TOTAL M/WBE FIRMS	\$244,759,278.51	26.60%
NON-M/WBE FIRMS	\$675,509,312.30	73.40%
TOTAL	\$920,268,590.81	100.00%

Source: MGT developed a Master Prime File based on the City of Dallas' system between October 1, 2013 through September 30, 2018.

EXHIBIT C-7.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
(INSIDE 13-COUNTY MARKET AREA)
ARCHITECTURE & ENGINEERING
FISCAL YEARS 2014-2018

BUSINESS OWNERSHIP CLASSIFICATION	FY14	FY15	FY16	FY17	FY18	TOTAL
	(ALL YEARS)					
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Male	\$3,580,207.38	\$6,877,623.15	\$4,716,479.16	\$5,904,207.07	\$1,306,528.40	\$22,385,045.16
African American Female	\$730,943.38	\$174,756.63	\$225,789.30	\$18,998.00	\$56,970.00	\$1,207,457.31
AFRICAN AMERICAN FIRMS	\$4,311,150.76	\$7,052,379.78	\$4,942,268.46	\$5,923,205.07	\$1,363,498.40	\$23,592,502.47
Asian American Male	\$8,456,179.91	\$4,304,169.99	\$5,384,775.08	\$4,722,529.01	\$5,411,400.89	\$28,279,054.88
Asian American Female	\$859,821.98	-\$23,570.66	\$24,684.00	-\$651.21	\$15,000.00	\$875,284.11
ASIAN AMERICAN FIRMS	\$9,316,001.89	\$4,280,599.33	\$5,409,459.08	\$4,721,877.80	\$5,426,400.89	\$29,154,338.99
Hispanic American Male	\$4,400,298.85	\$8,070,856.67	\$3,495,738.35	\$1,968,359.95	\$1,051,976.85	\$18,987,230.67
Hispanic American Female	\$5,539,411.14	\$3,220,188.61	\$1,789,700.94	\$853,386.44	\$784,304.86	\$12,186,991.99
HISPANIC AMERICAN FIRMS	\$9,939,709.99	\$11,291,045.28	\$5,285,439.29	\$2,821,746.39	\$1,836,281.71	\$31,174,222.66
Native American Male	\$268,079.26	\$136,602.50	\$170,810.00	\$40,680.00	\$32,260.00	\$648,431.76
Native American Female	\$0.00	\$10,400.00	\$0.00	\$70,020.40	\$0.00	\$80,420.40
NATIVE AMERICAN FIRMS	\$268,079.26	\$147,002.50	\$170,810.00	\$110,700.40	\$32,260.00	\$728,852.16
NONMINORITY FEMALE	\$2,789,483.19	\$5,295,929.28	\$2,785,746.90	\$4,712,939.17	\$2,790,964.71	\$18,375,063.25
TOTAL M/WBE FIRMS	\$26,624,425.09	\$28,066,956.17	\$18,593,723.73	\$18,290,468.83	\$11,449,405.71	\$103,024,979.53
NON-M/WBE FIRMS	\$70,903,159.33	\$40,221,830.75	\$43,422,232.08	\$32,672,576.94	\$27,139,780.05	\$214,359,579.15
TOTAL	\$97,527,584.42	\$68,288,786.92	\$62,015,955.81	\$50,963,045.77	\$38,589,185.76	\$317,384,558.68
BUSINESS OWNERSHIP CLASSIFICATION	FY14	FY15	FY16	FY17	FY18	TOTAL
	(ALL YEARS)					
	(%)	(%)	(%)	(%)	(%)	(%)
African American Male	3.67%	10.07%	7.61%	11.59%	3.39%	7.05%
African American Female	0.75%	0.26%	0.36%	0.04%	0.15%	0.38%
AFRICAN AMERICAN FIRMS	4.42%	10.33%	7.97%	11.62%	3.53%	7.43%
Asian American Male	8.67%	6.30%	8.68%	9.27%	14.02%	8.91%
Asian American Female	0.88%	-0.03%	0.04%	0.00%	0.04%	0.28%
ASIAN AMERICAN FIRMS	9.55%	6.27%	8.72%	9.27%	14.06%	9.19%
Hispanic American Male	4.51%	11.82%	5.64%	3.86%	2.73%	5.98%
Hispanic American Female	5.68%	4.72%	2.89%	1.67%	2.03%	3.84%
HISPANIC AMERICAN FIRMS	10.19%	16.53%	8.52%	5.54%	4.76%	9.82%
Native American Male	0.27%	0.20%	0.28%	0.08%	0.08%	0.20%
Native American Female	0.00%	0.02%	0.00%	0.14%	0.00%	0.03%
NATIVE AMERICAN FIRMS	0.27%	0.22%	0.28%	0.22%	0.08%	0.23%
TOTAL M/WBE FIRMS	2.86%	7.76%	4.49%	9.25%	7.23%	5.79%
NON-M/WBE FIRMS	27.30%	41.10%	29.98%	35.89%	29.67%	32.46%

EXHIBIT C-8.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
(INSIDE 13-COUNTY MARKET AREA)
CONSTRUCTION
FISCAL YEARS 2014 – 2018

BUSINESS OWNERSHIP CLASSIFICATION	FY14	FY15	FY16	FY17	FY18	TOTAL
	(ALL YEARS)					
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Male	\$16,657,477.68	\$13,418,622.73	\$13,068,576.04	\$16,418,984.56	\$12,488,917.96	\$72,052,578.97
African American Female	\$0.00	\$527,030.00	\$680,886.00	\$220,223.50	\$1,425.00	\$1,429,564.50
AFRICAN AMERICAN FIRMS	\$16,657,477.68	\$13,945,652.73	\$13,749,462.04	\$16,639,208.06	\$12,490,342.96	\$73,482,143.47
Asian American Male	\$4,535,814.53	\$5,248,641.59	\$1,580,539.29	\$933,618.51	\$1,180,733.89	\$13,479,347.81
Asian American Female	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ASIAN AMERICAN FIRMS	\$4,535,814.53	\$5,248,641.59	\$1,580,539.29	\$933,618.51	\$1,180,733.89	\$13,479,347.81
Hispanic American Male	\$19,654,719.87	\$69,689,108.97	\$17,384,948.12	\$50,563,400.43	\$65,885,326.89	\$223,177,504.28
Hispanic American Female	\$352,212.60	\$736,761.38	\$912,454.97	\$424,892.19	\$1,265,347.14	\$3,691,668.28
HISPANIC AMERICAN FIRMS	\$20,006,932.47	\$70,425,870.35	\$18,297,403.09	\$50,988,292.62	\$67,150,674.03	\$226,869,172.56
Native American Male	\$29,691.00	\$6,040,052.50	\$1,038,663.09	\$7,388,558.62	\$3,900,098.02	\$18,397,063.23
Native American Female	\$0.00	\$19,107.00	\$0.00	\$0.00	\$0.00	\$19,107.00
NATIVE AMERICAN FIRMS	\$29,691.00	\$6,059,159.50	\$1,038,663.09	\$7,388,558.62	\$3,900,098.02	\$18,416,170.23
NONMINORITY FEMALE	\$16,382,686.10	\$21,416,434.61	\$16,954,728.81	\$21,291,645.28	\$6,942,608.83	\$82,988,103.63
TOTAL M/WBE FIRMS	\$57,612,601.78	\$117,095,758.78	\$51,620,796.32	\$97,241,323.09	\$91,664,457.73	\$415,234,937.70
NON-M/WBE FIRMS	\$181,316,122.11	\$175,049,253.80	\$174,457,303.72	\$213,681,293.89	\$326,553,780.83	\$1,071,057,754.35
TOTAL	\$238,928,723.89	\$292,145,012.58	\$226,078,100.04	\$310,922,616.98	\$418,218,238.56	\$1,486,292,692.05
BUSINESS OWNERSHIP CLASSIFICATION	FY14	FY15	FY16	FY17	FY18	TOTAL
	(ALL YEARS)					
	(%)	(%)	(%)	(%)	(%)	(%)
African American Male	6.97%	4.59%	5.78%	5.28%	2.99%	4.85%
African American Female	0.00%	0.18%	0.30%	0.07%	0.00%	0.10%
AFRICAN AMERICAN FIRMS	6.97%	4.77%	6.08%	5.35%	2.99%	4.94%
Asian American Male	1.90%	1.80%	0.70%	0.30%	0.28%	0.91%
Asian American Female	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ASIAN AMERICAN FIRMS	1.90%	1.80%	0.70%	0.30%	0.28%	0.91%
Hispanic American Male	8.23%	23.85%	7.69%	16.26%	15.75%	15.02%
Hispanic American Female	0.15%	0.25%	0.40%	0.14%	0.30%	0.25%
HISPANIC AMERICAN FIRMS	8.37%	24.11%	8.09%	16.40%	16.06%	15.26%
Native American Male	0.01%	2.07%	0.46%	2.38%	0.93%	1.24%
Native American Female	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%
NATIVE AMERICAN FIRMS	0.01%	2.07%	0.46%	2.38%	0.93%	1.24%
TOTAL M/WBE FIRMS	6.86%	7.33%	7.50%	6.85%	1.66%	5.58%
NON-M/WBE FIRMS	24.11%	40.08%	22.83%	31.28%	21.92%	27.94%

EXHIBIT C-9.
 UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
 (INSIDE 13-COUNTY MARKET AREA)
PROFESSIONAL SERVICES
 FISCAL YEARS 2014 – 2018

BUSINESS OWNERSHIP CLASSIFICATION	FY14	FY15	FY16	FY17	FY18	TOTAL
	(ALL YEARS)					
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Male	\$1,722,839.69	\$2,157,075.00	\$1,269,216.01	\$130,472.06	\$10,880,110.86	\$16,159,713.62
African American Female	\$146,521.27	\$616,520.41	\$745,756.04	\$137,028.00	\$1,025,767.00	\$2,671,592.72
AFRICAN AMERICAN FIRMS	\$1,869,360.96	\$2,773,595.41	\$2,014,972.05	\$267,500.06	\$11,905,877.86	\$18,831,306.34
Asian American Male	\$65,834.26	\$27,500.00	\$227,760.06	\$162,986.60	\$12,000.00	\$496,080.92
Asian American Female	\$340,315.61	\$1,960,636.99	\$3,796,159.70	\$3,673,372.17	\$6,278,607.91	\$16,049,092.38
ASIAN AMERICAN FIRMS	\$406,149.87	\$1,988,136.99	\$4,023,919.76	\$3,836,358.77	\$6,290,607.91	\$16,545,173.30
Hispanic American Male	\$732,102.75	\$2,453,815.09	\$446,441.41	\$195,156.32	\$1,586,294.88	\$5,413,810.45
Hispanic American Female	\$462,634.50	\$487,022.21	\$740,325.13	\$2,016,184.00	\$477,909.00	\$4,184,074.84
HISPANIC AMERICAN FIRMS	\$1,194,737.25	\$2,940,837.30	\$1,186,766.54	\$2,211,340.32	\$2,064,203.88	\$9,597,885.29
Native American Male	\$2,676.79	\$99.44	\$0.00	\$0.00	\$0.00	\$2,776.23
Native American Female	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NATIVE AMERICAN FIRMS	\$2,676.79	\$99.44	\$0.00	\$0.00	\$0.00	\$2,776.23
NONMINORITY FEMALE	\$1,892,977.66	\$3,679,582.92	\$7,225,786.00	\$4,833,340.53	\$10,688,764.86	\$28,320,451.97
TOTAL M/WBE FIRMS	\$5,365,902.53	\$11,382,252.06	\$14,451,444.35	\$11,148,539.68	\$30,949,454.51	\$73,297,593.13
NON-M/WBE FIRMS	\$32,689,349.88	\$32,190,782.92	\$39,647,928.15	\$29,831,674.72	\$30,821,719.24	\$165,181,454.91
TOTAL	\$38,055,252.41	\$43,573,034.98	\$54,099,372.50	\$40,980,214.40	\$61,771,173.75	\$238,479,048.04
BUSINESS OWNERSHIP CLASSIFICATION	FY14	FY15	FY16	FY17	FY18	TOTAL
	(ALL YEARS)					
	(%)	(%)	(%)	(%)	(%)	(%)
African American Male	4.53%	4.95%	2.35%	0.32%	17.61%	6.78%
African American Female	0.39%	1.41%	1.38%	0.33%	1.66%	1.12%
AFRICAN AMERICAN FIRMS	4.91%	6.37%	3.72%	0.65%	19.27%	7.90%
Asian American Male	0.17%	0.06%	0.42%	0.40%	0.02%	0.21%
Asian American Female	0.89%	4.50%	7.02%	8.96%	10.16%	6.73%
ASIAN AMERICAN FIRMS	1.07%	4.56%	7.44%	9.36%	10.18%	6.94%
Hispanic American Male	1.92%	5.63%	0.83%	0.48%	2.57%	2.27%
Hispanic American Female	1.22%	1.12%	1.37%	4.92%	0.77%	1.75%
HISPANIC AMERICAN FIRMS	3.14%	6.75%	2.19%	5.40%	3.34%	4.02%
Native American Male	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
Native American Female	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NATIVE AMERICAN FIRMS	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL M/WBE FIRMS	4.97%	8.44%	13.36%	11.79%	17.30%	11.88%
NON-M/WBE FIRMS	14.10%	26.12%	26.71%	27.20%	50.10%	30.74%

EXHIBIT C-10.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
(INSIDE 13-COUNTY MARKET AREA)
OTHER SERVICES
FISCAL YEARS 2014 – 2018

BUSINESS OWNERSHIP CLASSIFICATION	FY14	FY15	FY16	FY17	FY18	TOTAL
	(ALL YEARS)					
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Male	\$3,051,684.24	\$2,358,625.16	\$2,633,070.16	\$10,231,995.53	\$6,805,891.07	\$25,081,266.16
African American Female	\$267,524.79	\$1,067,904.57	\$89,045.81	\$766,148.59	\$244,186.25	\$2,434,810.01
AFRICAN AMERICAN FIRMS	\$3,319,209.03	\$3,426,529.73	\$2,722,115.97	\$10,998,144.12	\$7,050,077.32	\$27,516,076.17
Asian American Male	\$1,551,096.23	\$1,835,823.17	\$7,626,740.52	\$7,492,438.19	\$7,692,741.25	\$26,198,839.36
Asian American Female	\$122,264.70	\$3,549,535.69	\$348,171.00	\$1,964,188.70	\$99,971.01	\$6,084,131.10
ASIAN AMERICAN FIRMS	\$1,673,360.93	\$5,385,358.86	\$7,974,911.52	\$9,456,626.89	\$7,792,712.26	\$32,282,970.46
Hispanic American Male	\$6,117,465.15	\$16,141,040.12	\$8,262,685.99	\$7,838,628.13	\$8,858,613.98	\$47,218,433.37
Hispanic American Female	\$5,554,419.09	\$5,954,213.42	\$8,995,907.40	\$10,673,902.47	\$9,293,333.10	\$40,471,775.48
HISPANIC AMERICAN FIRMS	\$11,671,884.24	\$22,095,253.54	\$17,258,593.39	\$18,512,530.60	\$18,151,947.08	\$87,690,208.85
Native American Male	\$108,302.69	\$124,183.81	\$29,591.37	\$12,194.31	\$0.00	\$274,272.18
Native American Female	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NATIVE AMERICAN FIRMS	\$108,302.69	\$124,183.81	\$29,591.37	\$12,194.31	\$0.00	\$274,272.18
NONMINORITY FEMALE	\$3,682,617.57	\$6,452,397.14	\$6,693,046.75	\$9,401,888.71	\$4,881,943.50	\$31,111,893.67
TOTAL M/WBE FIRMS	\$20,455,374.46	\$37,483,723.08	\$34,678,259.00	\$48,381,384.63	\$37,876,680.16	\$178,875,421.33
NON-M/WBE FIRMS	\$37,985,083.64	\$37,482,508.59	\$63,299,577.53	\$61,464,884.10	\$79,058,920.08	\$279,290,973.94
TOTAL	\$58,440,458.10	\$74,966,231.67	\$97,977,836.53	\$109,846,268.73	\$116,935,600.24	\$458,166,395.27

BUSINESS OWNERSHIP CLASSIFICATION	FY14	FY15	FY16	FY17	FY18	TOTAL
	(ALL YEARS)					
	(%)	(%)	(%)	(%)	(%)	(%)
African American Male	5.22%	3.15%	2.69%	9.31%	5.82%	5.47%
African American Female	0.46%	1.42%	0.09%	0.70%	0.21%	0.53%
AFRICAN AMERICAN FIRMS	5.68%	4.57%	2.78%	10.01%	6.03%	6.01%
Asian American Male	2.65%	2.45%	7.78%	6.82%	6.58%	5.72%
Asian American Female	0.21%	4.73%	0.36%	1.79%	0.09%	1.33%
ASIAN AMERICAN FIRMS	2.86%	7.18%	8.14%	8.61%	6.66%	7.05%
Hispanic American Male	10.47%	21.53%	8.43%	7.14%	7.58%	10.31%
Hispanic American Female	9.50%	7.94%	9.18%	9.72%	7.95%	8.83%
HISPANIC AMERICAN FIRMS	19.97%	29.47%	17.61%	16.85%	15.52%	19.14%
Native American Male	0.19%	0.17%	0.03%	0.01%	0.00%	0.06%
Native American Female	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NATIVE AMERICAN FIRMS	0.19%	0.17%	0.03%	0.01%	0.00%	0.06%
TOTAL M/WBE FIRMS	6.30%	8.61%	6.83%	8.56%	4.17%	6.79%
NON-M/WBE FIRMS	35.00%	50.00%	35.39%	44.04%	32.39%	39.04%

EXHIBIT C-11.
UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION,
(INSIDE 13-COUNTY MARKET AREA)
GOODS & SUPPLIES
FISCAL YEARS 2014-2018

BUSINESS OWNERSHIP CLASSIFICATION	FY14	FY15	FY16	FY17	FY18	TOTAL
	(ALL YEARS)					
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Male	\$484,498.05	\$348,261.95	\$402,991.57	\$985,358.23	\$549,873.87	\$2,770,983.67
African American Female	\$830,683.45	\$727,122.94	\$772,757.88	\$521,221.85	\$238,666.22	\$3,090,452.34
AFRICAN AMERICAN FIRMS	\$1,315,181.50	\$1,075,384.89	\$1,175,749.45	\$1,506,580.08	\$788,540.09	\$5,861,436.01
Asian American Male	\$453,563.21	\$575,739.98	\$492,560.94	\$237,535.32	\$276,552.47	\$2,035,951.92
Asian American Female	\$1,140,378.72	\$1,623,727.64	\$2,575,497.77	\$4,562,573.20	\$4,514,642.11	\$14,416,819.44
ASIAN AMERICAN FIRMS	\$1,593,941.93	\$2,199,467.62	\$3,068,058.71	\$4,800,108.52	\$4,791,194.58	\$16,452,771.36
Hispanic American Male	\$708,800.93	\$14,117,579.21	\$1,603,959.61	\$959,655.20	\$18,456,903.25	\$35,846,898.20
Hispanic American Female	\$15,208,209.56	\$13,519,188.47	\$2,554,542.08	\$17,291,193.68	\$2,659,109.39	\$51,232,243.18
HISPANIC AMERICAN FIRMS	\$15,917,010.49	\$27,636,767.68	\$4,158,501.69	\$18,250,848.88	\$21,116,012.64	\$87,079,141.38
Native American Male	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Native American Female	\$86,519.94	\$116,257.91	\$79,063.94	\$46,170.65	\$45,672.00	\$373,684.44
NATIVE AMERICAN FIRMS	\$86,519.94	\$116,257.91	\$79,063.94	\$46,170.65	\$45,672.00	\$373,684.44
NONMINORITY FEMALE	\$26,236,196.66	\$31,495,119.86	\$35,303,661.96	\$20,604,532.24	\$21,352,734.60	\$134,992,245.32
TOTAL M/WBE FIRMS	\$45,148,850.52	\$62,522,997.96	\$43,785,035.75	\$45,208,240.37	\$48,094,153.91	\$244,759,278.51
NON-M/WBE FIRMS	\$115,485,482.63	\$168,128,673.05	\$128,164,148.56	\$107,899,299.14	\$155,831,708.92	\$675,509,312.30
TOTAL	\$160,634,333.15	\$230,651,671.01	\$171,949,184.31	\$153,107,539.51	\$203,925,862.83	\$920,268,590.81
BUSINESS OWNERSHIP CLASSIFICATION	FY14	FY15	FY16	FY17	FY18	TOTAL
	(ALL YEARS)					
	(%)	(%)	(%)	(%)	(%)	(%)
African American Male	0.30%	0.15%	0.23%	0.64%	0.27%	0.30%
African American Female	0.52%	0.32%	0.45%	0.34%	0.12%	0.34%
AFRICAN AMERICAN FIRMS	0.82%	0.47%	0.68%	0.98%	0.39%	0.64%
Asian American Male	0.28%	0.25%	0.29%	0.16%	0.14%	0.22%
Asian American Female	0.71%	0.70%	1.50%	2.98%	2.21%	1.57%
ASIAN AMERICAN FIRMS	0.99%	0.95%	1.78%	3.14%	2.35%	1.79%
Hispanic American Male	0.44%	6.12%	0.93%	0.63%	9.05%	3.90%
Hispanic American Female	9.47%	5.86%	1.49%	11.29%	1.30%	5.57%
HISPANIC AMERICAN FIRMS	9.91%	11.98%	2.42%	11.92%	10.35%	9.46%
Native American Male	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Native American Female	0.05%	0.05%	0.05%	0.03%	0.02%	0.04%
NATIVE AMERICAN FIRMS	0.05%	0.05%	0.05%	0.03%	0.02%	0.04%
TOTAL M/WBE FIRMS	16.33%	13.65%	20.53%	13.46%	10.47%	14.67%
NON-M/WBE FIRMS	28.11%	27.11%	25.46%	29.53%	23.58%	26.60%

APPENDIX D. AVAILABILITY ANALYSES

Availability and Disparity Study

City of Dallas, Texas



EXHIBIT D-1.
ESTIMATION OF AVAILABLE FIRMS,
ALL PROCUREMENT CATEGORIES

BUSINESS OWNERSHIP CLASSIFICATION	% OF AVAILABLE FIRMS
African American Male Firms	3.84%
African American Female Firms	1.88%
AFRICAN AMERICAN FIRMS	5.72%
Asian American Male Firms	3.13%
Asian American Female Firms	1.79%
ASIAN AMERICAN FIRMS	4.92%
Hispanic American Male Firms	8.00%
Hispanic American Female Firms	3.81%
HISPANIC AMERICAN FIRMS	11.81%
Native American Male Firms	0.48%
Native American Female Firms	0.39%
NATIVE AMERICAN FIRMS	0.87%
TOTAL MBE FIRMS	23.32%
NONMINORITY FEMALE FIRMS	15.61%
TOTAL WBE FIRMS	23.47%
TOTAL M/WBE FIRMS	38.93%
NON-M/WBE FIRMS	61.07%
TOTAL	100.00%

EXHIBIT D-2.
ESTIMATION OF AVAILABLE FIRMS,
ARCHITECTURE & ENGINEERING

BUSINESS OWNERSHIP CLASSIFICATION	% OF AVAILABLE FIRMS
African American Male Firms	4.59%
African American Female Firms	1.45%
AFRICAN AMERICAN FIRMS	6.04%
Asian American Male Firms	3.88%
Asian American Female Firms	2.10%
ASIAN AMERICAN FIRMS	5.98%
Hispanic American Male Firms	8.94%
Hispanic American Female Firms	2.77%
HISPANIC AMERICAN FIRMS	11.71%
Native American Male Firms	0.37%
Native American Female Firms	0.34%
NATIVE AMERICAN FIRMS	0.71%
TOTAL MBE FIRMS	24.44%
NONMINORITY FEMALE FIRMS	12.42%
TOTAL WBE FIRMS	19.08%
TOTAL M/WBE FIRMS	36.86%
NON-M/WBE FIRMS	63.13%
TOTAL	100.00%

EXHIBIT D-3.
ESTIMATION OF AVAILABLE FIRMS,
CONSTRUCTION

BUSINESS OWNERSHIP CLASSIFICATION	% OF AVAILABLE FIRMS
African American Male Firms	2.39%
African American Female Firms	1.06%
AFRICAN AMERICAN FIRMS	3.45%
Asian American Male Firms	1.24%
Asian American Female Firms	0.53%
ASIAN AMERICAN FIRMS	1.77%
Hispanic American Male Firms	10.80%
Hispanic American Female Firms	5.75%
HISPANIC AMERICAN FIRMS	16.54%
Native American Male Firms	0.89%
Native American Female Firms	0.26%
NATIVE AMERICAN FIRMS	1.15%
TOTAL MBE FIRMS	22.92%
NONMINORITY FEMALE FIRMS	15.39%
TOTAL WBE FIRMS	22.99%
TOTAL M/WBE FIRMS	38.30%
NON-M/WBE FIRMS	61.69%
TOTAL	100.00%

EXHIBIT D-4.
ESTIMATION OF AVAILABLE FIRMS,
PROFESSIONAL SERVICES

BUSINESS OWNERSHIP CLASSIFICATION	% OF AVAILABLE FIRMS
African American Male Firms	9.91%
African American Female Firms	6.14%
AFRICAN AMERICAN FIRMS	16.05%
Asian American Male Firms	2.18%
Asian American Female Firms	6.14%
ASIAN AMERICAN FIRMS	8.32%
Hispanic American Male Firms	3.27%
Hispanic American Female Firms	1.77%
HISPANIC AMERICAN FIRMS	5.05%
Native American Male Firms	0.00%
Native American Female Firms	0.00%
NATIVE AMERICAN FIRMS	0.00%
TOTAL MBE FIRMS	29.41%
NONMINORITY FEMALE FIRMS	21.50%
TOTAL WBE FIRMS	35.55%
TOTAL M/WBE FIRMS	50.92%
NON-M/WBE FIRMS	49.09%
TOTAL	100.00%

EXHIBIT D-5.
ESTIMATION OF AVAILABLE FIRMS,
OTHER SERVICES

BUSINESS OWNERSHIP CLASSIFICATION	% OF AVAILABLE FIRMS
African American Male Firms	7.02%
African American Female Firms	1.97%
AFRICAN AMERICAN FIRMS	8.99%
Asian American Male Firms	3.09%
Asian American Female Firms	0.28%
ASIAN AMERICAN FIRMS	3.37%
Hispanic American Male Firms	5.48%
Hispanic American Female Firms	2.39%
HISPANIC AMERICAN FIRMS	7.87%
Native American Male Firms	0.42%
Native American Female Firms	0.70%
NATIVE AMERICAN FIRMS	1.12%
TOTAL MBE FIRMS	21.36%
NONMINORITY FEMALE FIRMS	10.83%
TOTAL WBE FIRMS	16.17%
TOTAL M/WBE FIRMS	32.18%
NON-M/WBE FIRMS	67.81%
TOTAL	100.00%

EXHIBIT D-6.
ESTIMATION OF AVAILABLE FIRMS,
GOODS & SUPPLIES

BUSINESS OWNERSHIP CLASSIFICATION	% OF AVAILABLE FIRMS
African American Male Firms	2.81%
African American Female Firms	2.25%
AFRICAN AMERICAN FIRMS	5.06%
Asian American Male Firms	6.18%
Asian American Female Firms	3.37%
ASIAN AMERICAN FIRMS	9.55%
Hispanic American Male Firms	5.62%
Hispanic American Female Firms	2.25%
HISPANIC AMERICAN FIRMS	7.86%
Native American Male Firms	0.00%
Native American Female Firms	0.56%
NATIVE AMERICAN FIRMS	0.56%
TOTAL MBE FIRMS	23.03%
NONMINORITY FEMALE FIRMS	17.97%
TOTAL WBE FIRMS	26.39%
TOTAL M/WBE FIRMS	41.00%
NON-M/WBE FIRMS	59.00%
TOTAL	100.00%

APPENDIX E. DISPARITY ANALYSIS

Availability and Disparity Study

City of Dallas, Texas



EXHIBIT E-1.
DISPARITY INDICES AND SIGNIFICANCE TESTING,
ALL PROCUREMENT CATEGORIES

Ethnic/Gender Classification	Utilization	Availability	Disparity Index	Disparity Impact	Statistical Significance	Disparity Conclusion
African American Male	4.05%	3.84%	105.35	Overutilization	No	No Disparity
African American Female	0.32%	1.88%	16.84	Underutilization	Yes	Disparity
AFRICAN AMERICAN	4.36%	5.72%	76.26	Underutilization	Yes	Disparity
Asian American Male	2.06%	3.13%	65.82	Underutilization	Yes	Disparity
Asian American Female	1.09%	1.79%	61.26	Underutilization	Yes	Disparity
ASIAN AMERICAN	3.15%	4.92%	64.17	Underutilization	Yes	Disparity
Hispanic American Male	9.67%	8.00%	120.80	Overutilization	Yes	No Disparity
Hispanic American Female	3.27%	3.81%	85.86	Underutilization	No	Disparity
HISPANIC AMERICAN	12.93%	11.81%	109.53	Overutilization	No	No Disparity
Native American Male	0.56%	0.48%	118.16	Overutilization	No	No Disparity
Native American Female	0.01%	0.39%	3.52	Underutilization	Yes	Disparity
NATIVE AMERICAN	0.58%	0.87%	66.45	Underutilization	No	Disparity
TOTAL MBE	21.03%	23.32%	90.19	Underutilization	Yes	Disparity
NONMINORITY FEMALE	8.65%	15.61%	55.41	Underutilization	Yes	Disparity
TOTAL WBE	13.34%	23.47%	56.83	Underutilization	Yes	Disparity
TOTAL M/WBE	29.68%	38.93%	76.25	Underutilization	Yes	Disparity
NON-M/WBE	70.32%	61.07%	115.14	Overutilization	Yes	No Disparity

EXHIBIT E-2.
DISPARITY INDICES AND SIGNIFICANCE TESTING,
ARCHITECTURE & ENGINEERING

Ethnic/Gender Classification	Utilization	Availability	Disparity Index	Disparity Impact	Statistical Significance	Disparity Conclusion
African American Male	7.05%	4.59%	153.55	Overutilization	Yes	No Disparity
African American Female	0.38%	1.45%	26.25	Underutilization	Yes	Disparity
AFRICAN AMERICAN	7.43%	6.04%	123.02	Overutilization	Yes	No Disparity
Asian American Male	8.91%	3.88%	229.39	Overutilization	Yes	No Disparity
Asian American Female	0.28%	2.10%	13.16	Underutilization	Yes	Disparity
ASIAN AMERICAN	9.19%	5.98%	153.61	Overutilization	Yes	No Disparity
Hispanic American Male	5.98%	8.94%	66.94	Underutilization	Yes	Disparity
Hispanic American Female	3.84%	2.77%	138.43	Overutilization	Yes	No Disparity
HISPANIC AMERICAN	9.82%	11.71%	83.87	Underutilization	Yes	Disparity
Native American Male	0.20%	0.37%	55.20	Underutilization	No	Disparity
Native American Female	0.03%	0.34%	7.48	Underutilization	Yes	Disparity
NATIVE AMERICAN	0.23%	0.71%	32.39	Underutilization	Yes	Disparity
TOTAL MBE	26.67%	24.44%	109.12	Overutilization	Yes	No Disparity
NONMINORITY FEMALE	5.79%	12.42%	46.60	Underutilization	Yes	Disparity
TOTAL WBE	10.31%	19.08%	54.03	Underutilization	Yes	Disparity
TOTAL M/WBE	32.46%	36.87%	88.05	Underutilization	Yes	Disparity
NON-M/WBE	67.54%	63.13%	106.98	Overutilization	Yes	No Disparity

EXHIBIT E-3.
DISPARITY INDICES AND SIGNIFICANCE TESTING,
CONSTRUCTION

Ethnic/Gender Classification	Utilization	Availability	Disparity Index	Disparity Impact	Statistical Significance	Disparity Conclusion
African American Male	4.85%	2.39%	202.65	Overutilization	Yes	No Disparity
African American Female	0.10%	1.06%	9.09	Underutilization	Yes	Disparity
AFRICAN AMERICAN	4.94%	3.45%	143.27	Overutilization	Yes	No Disparity
Asian American Male	0.91%	1.24%	73.23	Underutilization		Disparity
Asian American Female	0.00%	0.53%	0.00	Underutilization	Yes	Disparity
ASIAN AMERICAN	0.91%	1.77%	51.30	Underutilization	Yes	Disparity
Hispanic American Male	15.02%	10.80%	139.07	Overutilization	Yes	No Disparity
Hispanic American Female	0.25%	5.75%	4.32	Underutilization	Yes	Disparity
HISPANIC AMERICAN	15.26%	16.54%	92.26	Underutilization		Disparity
Native American Male	1.24%	0.89%	139.21	Overutilization		No Disparity
Native American Female	0.00%	0.26%	0.49	Underutilization	Yes	Disparity
NATIVE AMERICAN	1.24%	1.15%	107.39	Overutilization		No Disparity
TOTAL MBE	22.35%	22.92%	97.54	Underutilization		Disparity
NONMINORITY FEMALE	5.58%	15.39%	36.28	Underutilization	Yes	Disparity
TOTAL WBE	5.93%	22.99%	25.79	Underutilization	Yes	Disparity
TOTAL M/WBE	27.94%	38.31%	72.93	Underutilization	Yes	Disparity
NON-M/WBE	72.06%	61.69%	116.81	Overutilization	Yes	No Disparity

EXHIBIT E-4.
DISPARITY INDICES AND SIGNIFICANCE TESTING,
PROFESSIONAL SERVICES

Ethnic/Gender Classification	Utilization	Availability	Disparity Index	Disparity Impact	Statistical Significance	Disparity Conclusion
African American Male	6.78%	9.91%	68.38	Underutilization	Yes	Disparity
African American Female	1.12%	6.14%	18.26	Underutilization	Yes	Disparity
AFRICAN AMERICAN	7.90%	16.05%	49.21	Underutilization	Yes	Disparity
Asian American Male	0.21%	2.18%	9.53	Underutilization	Yes	Disparity
Asian American Female	6.73%	6.14%	109.67	Overutilization	No	No Disparity
ASIAN AMERICAN	6.94%	8.32%	83.40	Underutilization	No	Disparity
Hispanic American Male	2.27%	3.27%	69.37	Underutilization	Yes	Disparity
Hispanic American Female	1.75%	1.77%	98.97	Underutilization	No	Disparity
HISPANIC AMERICAN	4.02%	5.05%	79.77	Underutilization	No	Disparity
Native American Male	0.00%	0.00%	-	n/a	n/a	n/a
Native American Female	0.00%	0.00%	-	n/a	n/a	n/a
NATIVE AMERICAN	0.00%	0.00%	-	n/a	n/a	n/a
TOTAL MBE	18.86%	29.41%	64.13	Underutilization	Yes	Disparity
NONMINORITY FEMALE	11.88%	21.50%	55.23	Underutilization	Yes	Disparity
TOTAL WBE	21.48%	35.55%	60.43	Underutilization	Yes	Disparity
TOTAL M/WBE	30.74%	50.91%	60.37	Underutilization	Yes	Disparity
NON-M/WBE	69.26%	49.09%	141.10	Overutilization	Yes	No Disparity

EXHIBIT E-5.
DISPARITY INDICES AND SIGNIFICANCE TESTING,
OTHER SERVICES

Ethnic/Gender Classification	Utilization	Availability	Disparity Index	Disparity Impact	Statistical Significance	Disparity Conclusion
African American Male	5.47%	7.02%	77.94	Underutilization	Yes	Disparity
African American Female	0.53%	1.97%	27.00	Underutilization	Yes	Disparity
AFRICAN AMERICAN	6.01%	8.99%	66.79	Underutilization	Yes	Disparity
Asian American Male	5.72%	3.09%	184.92	Overutilization	Yes	No Disparity
Asian American Female	1.33%	0.28%	474.48	Overutilization	Yes	No Disparity
ASIAN AMERICAN	7.05%	3.37%	208.96	Overutilization	Yes	No Disparity
Hispanic American Male	10.31%	5.48%	187.98	Overutilization	Yes	No Disparity
Hispanic American Female	8.83%	2.39%	369.56	Overutilization	Yes	No Disparity
HISPANIC AMERICAN	19.14%	7.87%	243.11	Overutilization	Yes	No Disparity
Native American Male	0.06%	0.42%	14.18	Underutilization	Yes	Disparity
Native American Female	0.00%	0.70%	0.00	Underutilization	Yes	Disparity
NATIVE AMERICAN	0.06%	1.12%	5.33	Underutilization	Yes	Disparity
TOTAL MBE	32.25%	21.36%	150.98	Overutilization	Yes	No Disparity
NONMINORITY FEMALE	6.79%	10.83%	62.72	Underutilization	Yes	Disparity
TOTAL WBE	17.48%	16.17%	108.14	Overutilization	No	No Disparity
TOTAL M/WBE	39.04%	32.19%	121.29	Overutilization	Yes	No Disparity
NON-M/WBE	60.96%	67.81%	89.89	Underutilization	Yes	Disparity

EXHIBIT E-6.
DISPARITY INDICES AND SIGNIFICANCE TESTING,
GOODS & SUPPLIES

Ethnic/Gender Classification	Utilization	Availability	Disparity Index	Disparity Impact	Statistical Significance	Disparity Conclusion
African American Male	0.30%	2.81%	10.72	Underutilization	Yes	Disparity
African American Female	0.34%	2.25%	14.95	Underutilization	Yes	Disparity
AFRICAN AMERICAN	0.64%	5.06%	12.60	Underutilization	Yes	Disparity
Asian American Male	0.22%	6.18%	3.58	Underutilization	Yes	Disparity
Asian American Female	1.57%	3.37%	46.48	Underutilization	Yes	Disparity
ASIAN AMERICAN	1.79%	9.55%	18.72	Underutilization	Yes	Disparity
Hispanic American Male	3.90%	5.62%	69.33	Underutilization	Yes	Disparity
Hispanic American Female	5.57%	2.25%	247.79	Overutilization	Yes	No Disparity
HISPANIC AMERICAN	9.46%	7.86%	120.31	Overutilization	Yes	No Disparity
Native American Male	0.00%	0.00%	-	n/a	n/a	n/a
Native American Female	0.04%	0.56%	7.23	Underutilization	Yes	Disparity
NATIVE AMERICAN	0.04%	0.56%	7.23	Underutilization	Yes	Disparity
TOTAL MBE	11.93%	23.03%	51.79	Underutilization	Yes	Disparity
NONMINORITY FEMALE	14.67%	17.97%	81.63	Underutilization	Yes	Disparity
TOTAL WBE	22.18%	26.39%	84.03	Underutilization	Yes	Disparity
TOTAL M/WBE	26.60%	41.00%	64.87	Underutilization	Yes	Disparity
NON-M/WBE	73.40%	59.00%	124.42	Overutilization	Yes	No Disparity

APPENDIX F. PUBLIC USE MICRODATA
REGRESSION ANALYSES

Availability and Disparity Study

City of Dallas, Texas



F.I LOGISTIC REGRESSION OUTPUT

The most informative index with regard to the influence of the independent variables on the likelihood of being self-employed is found in the third column (Exp (B)) in **Exhibits F-1 to F-5**. From the inverse of this value, we can interpret a likelihood value of its effect on self-employment. For example, the Exp (B) for an African American is 0.471 from **Exhibit F-1**, the inverse of this is 2.12. This means that a nonminority male is 2.12 times more likely to be self-employed than an African American. Columns A and B are reported as a matter of convention to give the reader another indicator of both the magnitude of the variable's effect and the direction of the effect. The greater the negative B value the more it depresses the likelihood of being self-employed, and vice versa for a positive B value. It is noteworthy that theoretically "race-neutral" variables (e.g., marital status) tend to impact the likelihood of self-employment positively and that the race/ethnicity/gender variables, in general, tend to have a negative effect on self-employment.

VARIABLES

Race, ethnicity, and gender indicator variables:

- African American
- Asian American
- Hispanic American
- Native American
- Sex: Nonminority woman or not

Other indicator variables:

- Marital Status: Married or not
- Age
- Age²: age squared. Used to acknowledge the positive, curvilinear relationship between each year of age and self-employment
- Disability: Individuals self-reported health-related disabilities
- Tenure: Owns their own home
- Value: Household property value
- Mortgage: Monthly total mortgage payments
- Unearn: Unearned income, such as interests and dividends
- Resdinc: Household income less individuals' personal income
- P65: Number of individuals over the age of 65 living in the household
- P18: Number of children under the age of 18 living in the household
- Some College: Some college education
- College Graduate: College degree
- More than College: Professional or graduate degree

EXHIBIT F-1.
RESULTS OF LOGISTIC REGRESSION,
OVERALL

City of Dallas, TX MSA			
	B	Sig.	Exp (B)
African American	-0.752	0.000	0.471
Hispanic American	-0.319	0.000	0.727
Asian American	-0.299	0.000	0.741
Native American	-0.269	0.019	0.764
Sex (1=Female)	-0.545	0.000	0.580
Marital Status (1=Married)	0.145	0.000	1.155
Age	0.049	0.000	1.050
Age ²	0.000	0.006	1.000
Speaks English Well (1=Yes)	0.196	0.000	1.216
Disability (1=Yes)	-0.052	0.253	0.950
Tenure (1=Yes)	0.240	0.000	1.271
Value	0.000	0.000	1.000
Mortgage	0.000	0.000	1.000
Unearn	0.000	0.000	1.000
Resdinc	0.000	0.587	1.000
P65	0.022	0.361	1.022
P18	0.132	0.000	1.141
Some College (1=Yes)	0.448	0.000	1.566
College Graduate (1=Yes)	0.450	0.000	1.568
More than College (1=Yes)	0.118	0.000	1.126
Number of Observations	119597		
Chi-squared statistic (df=20)	4235.803		
Log Likelihood	-70445.946		

Source: PUMS data from 2014-2018 American Community Survey (Dallas, TX MSA) and MGT, calculations using SPSS Statistics software.

Note: **BOLD** statistically significant at $p < .05$.

Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.

EXHIBIT F-2.
RESULTS OF LOGISTIC REGRESSION,
CONSTRUCTION

City of Dallas, TX MSA			
	B	Sig.	Exp (B)
African American	-0.640	0.000	0.527
Hispanic American	-0.296	0.000	0.744
Asian American	-0.545	0.002	0.580
Native American	-0.759	0.020	0.468
Sex (1=Female)	-1.064	0.000	0.345
Marital Status (1=Married)	0.061	0.317	1.063
Age	0.088	0.000	1.092
Age ²	-0.001	0.000	0.999
Speaks English Well (1=Yes)	0.329	0.000	1.389
Disability (1=Yes)	-0.091	0.423	0.913
Tenure (1=Yes)	0.331	0.000	1.392
Value	0.000	0.013	1.000
Mortgage	0.000	0.239	1.000
Unearn	0.000	0.208	1.000
Resdinc	0.000	0.485	1.000
P65	-0.097	0.148	0.908
P18	0.189	0.001	1.208
Some College (1=Yes)	0.162	0.094	1.176
College Graduate (1=Yes)	0.405	0.007	1.499
More than College (1=Yes)	0.091	0.118	1.096
Number of Observations	12277		
Chi-squared statistic (df=20)	608.636		
Log Likelihood	-10597.47		

Source: PUMS data from 2014-2018 American Community Survey (Dallas, TX MSA) and MGT, calculations using SPSS Statistics software.

Note: **BOLD** statistically significant at $p < .05$.

Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.

EXHIBIT F-3.
RESULTS OF LOGISTIC REGRESSION,
PROFESSIONAL SERVICES

City of Dallas, TX MSA			
	B	Sig.	Exp (B)
African American	-1.046	0.000	0.351
Hispanic American	-0.892	0.000	0.410
Asian American	-0.438	0.000	0.645
Native American	-0.644	0.018	0.525
Sex (1=Female)	-1.096	0.000	0.334
Marital Status (1=Married)	-0.008	0.891	0.992
Age	0.069	0.000	1.072
Age ²	0.000	0.115	1.000
Speaks English Well (1=Yes)	0.032	0.706	1.033
Disability (1=Yes)	-0.152	0.175	0.859
Tenure (1=Yes)	0.284	0.000	1.328
Value	0.000	0.000	1.000
Mortgage	0.000	0.000	1.000
Unearn	0.000	0.552	1.000
Resdinc	0.000	0.056	1.000
P65	0.099	0.063	1.105
P18	0.123	0.027	1.131
Some College (1=Yes)	-0.254	0.553	0.776
College Graduate (1=Yes)	-0.761	0.203	0.467
More than College (1=Yes)	-0.953	0.000	0.385
Number of Observations	24344		
Chi-squared statistic (df=20)	2127.786		
Log Likelihood	-13214.8		

Source: PUMS data from 2014-2018 American Community Survey (Dallas, TX MSA) and MGT, calculations using SPSS Statistics software.

Note: **BOLD** statistically significant at p < .05.

Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.

EXHIBIT F-4.
RESULTS OF LOGISTIC REGRESSION,
OTHER SERVICES

City of Dallas, TX MSA			
	B	Sig.	Exp (B)
African American	-0.392	0.000	0.676
Hispanic American	-0.158	0.005	0.854
Asian American	-0.083	0.214	0.920
Native American	0.293	0.072	1.340
Sex (1=Female)	-0.060	0.185	0.941
Marital Status (1=Married)	0.086	0.030	1.090
Age	0.075	0.000	1.078
Age ²	-0.001	0.000	0.999
Speaks English Well (1=Yes)	0.220	0.000	1.246
Disability (1=Yes)	0.048	0.497	1.050
Tenure (1=Yes)	0.153	0.001	1.165
Value	0.000	0.000	1.000
Mortgage	0.000	0.162	1.000
Unearn	0.000	0.100	1.000
Resdinc	0.000	0.055	1.000
P65	0.055	0.159	1.057
P18	0.128	0.001	1.137
Some College (1=Yes)	0.483	0.000	1.621
College Graduate (1=Yes)	0.660	0.000	1.934
More than College (1=Yes)	0.364	0.000	1.439
Number of Observations	48790		
Chi-squared statistic (df=20)	877.762		
Log Likelihood	-27467.7		

Source: PUMS data from 2014-2018 American Community Survey (Dallas, TX MSA) and MGT, calculations using SPSS Statistics software.

Note: **BOLD** statistically significant at $p < .05$.

Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.

EXHIBIT F-5.
RESULTS OF LOGISTIC REGRESSION,
GOODS & SUPPLIES

City of Dallas, TX MSA			
	B	Sig.	Exp (B)
African American	-0.888	0.000	0.412
Hispanic American	-0.717	0.000	0.488
Asian American	-0.308	0.002	0.735
Native American	-0.504	0.062	0.604
Sex (1=Female)	-0.266	0.000	0.766
Marital Status (1=Married)	0.311	0.000	1.365
Age	0.001	0.913	1.001
Age ²	0.000	0.004	1.000
Speaks English Well (1=Yes)	0.295	0.000	1.343
Disability (1=Yes)	-0.046	0.616	0.955
Tenure (1=Yes)	0.280	0.000	1.323
Value	0.000	0.000	1.000
Mortgage	0.000	0.000	1.000
Unearn	0.000	0.088	1.000
Resdinc	0.000	0.012	1.000
P65	-0.019	0.701	0.981
P18	0.042	0.404	1.043
Some College (1=Yes)	-0.070	0.716	0.933
College Graduate (1=Yes)	-0.234	0.373	0.791
More than College (1=Yes)	-0.039	0.501	0.962
Number of Observations	29881		
Chi-squared statistic (df=20)	1267.594		
Log Likelihood	-16249.8		

Source: PUMS data from 2014-2018 American Community Survey (Dallas, TX MSA) and MGT, calculations using SPSS Statistics software.

Note: **BOLD** statistically significant at p < .05.

Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.

F.2 RESULTS OF LINEAR REGRESSION, EXPLANATION OF RESULTS AND VARIABLES

The most informative index with regard to the influence of the independent variables on the earnings of a self-employed individual is found in the first column (Unstandardized B) in **Exhibits F-6 to F-10**. Each number in this column represents a percent change in earnings. For example, the corresponding number for an African American is -.486, from **Exhibit F-6**, meaning that an African American will earn 48.6 percent less than a nonminority male. The other three columns are reported in order to give the reader another indicator of both the magnitude of the variable's effect and the direction of the effect. The 'Std. Error' column reports the standard deviation in the sampling distribution. The 'Standardized B' column shows the standard deviation change in the dependent variable from one standard deviation increase in the independent variable. The 'Sig.' column simply reports the level and strength of a variable's significance.

VARIABLES

Race, ethnicity and gender indicator variables:

- African American
- Asian American
- Hispanic American
- Native American
- Nonminority Woman

Other indicator variables:

- Marital Status: Married or not
- Disability: Individuals self-reported health-related disabilities.
- Age
- Age²: age squared. Used to acknowledge the positive, curvilinear relationship between each year of age and self-employment.
- Speaks English Well: Person's ability to speak English if not a native speaker.
- Some College: Some college education
- College Graduate: College degree
- More than College: Professional or graduate degree

EXHIBIT F-6.
RESULTS OF LINEAR REGRESSION,
OVERALL

City of Dallas, TX MSA					
	Unstandardized		Standardized		Sig.
	B	Std. Error	B	t	
African American	-0.486	0.039	-0.112	-12.340	0.000
Hispanic American	-0.576	0.030	-0.220	-19.191	0.000
Asian American	-0.330	0.038	-0.090	-8.719	0.000
Native American	-0.293	0.101	-0.025	-2.895	0.004
Nonminority Women (1=Female)	-0.415	0.025	-0.157	-16.899	0.000
Marital Status (1=Married)	0.235	0.021	0.102	11.311	0.000
Disability (1=Yes)	-0.255	0.039	-0.058	-6.516	0.000
Age	0.055	0.005	0.671	11.901	0.000
Age ²	-0.001	0.000	-0.631	-11.199	0.000
Speaks English Well (1=Yes)	0.027	0.027	0.011	0.984	0.325
Some College (1=Yes)	-0.501	0.052	-0.087	-9.542	0.000
College Graduate (1=Yes)	-0.407	0.077	-0.046	-5.278	0.000
More than College (1=Yes)	-0.405	0.023	-0.154	-17.417	0.000
Constant	9.698	0.111		87.699	0.000

Source: PUMS data from 2014-2018 American Community Survey (Dallas, TX MSA) and MGT, calculations using SPSS Statistics software.

Note: **BOLD** statistically significant at p < .05.

EXHIBIT F-7.
RESULTS OF LINEAR REGRESSION,
CONSTRUCTION

City of Dallas, TX MSA					
	Unstandardized		Standardized		Sig.
	B	Std. Error	B	t	
African American	-0.529	0.111	-0.098	-4.745	0.000
Hispanic American	-0.477	0.051	-0.252	-9.291	0.000
Asian American	-0.203	0.131	-0.032	-1.550	0.121
Native American	-0.632	0.260	-0.049	-2.433	0.015
Nonminority Women (1=Female)	-0.257	0.094	-0.057	-2.741	0.006
Marital Status (1=Married)	0.225	0.043	0.108	5.207	0.000
Disability (1=Yes)	-0.216	0.083	-0.053	-2.597	0.009
Age	0.041	0.010	0.550	4.210	0.000
Age ²	0.000	0.000	-0.468	-3.598	0.000
Speaks English Well (1=Yes)	0.128	0.052	0.062	2.486	0.013
Some College (1=Yes)	-0.301	0.072	-0.091	-4.180	0.000
College Graduate (1=Yes)	-0.297	0.109	-0.056	-2.727	0.006
More than College (1=Yes)	-0.194	0.044	-0.094	-4.457	0.000
Constant	9.730	0.229		42.551	0.000

Source: PUMS data from 2014-2018 American Community Survey (Dallas, TX MSA) and MGT, calculations using SPSS Statistics software.

Note: **BOLD** statistically significant at p < .05.

EXHIBIT F-8.
RESULTS OF LINEAR REGRESSION,
PROFESSIONAL SERVICES

City of Dallas, TX MSA					
	Unstandardized		Standardized		Sig.
	B	Std. Error	B	t	
African American	-0.619	0.092	-0.137	-6.760	0.000
Hispanic American	-0.584	0.093	-0.138	-6.249	0.000
Asian American	-0.015	0.087	-0.004	-0.168	0.866
Native American	-0.064	0.243	-0.005	-0.265	0.791
Nonminority Women (1=Female)	-0.563	0.053	-0.218	-10.631	0.000
Marital Status (1=Married)	0.183	0.051	0.072	3.595	0.000
Disability (1=Yes)	-0.258	0.099	-0.052	-2.608	0.009
Age	0.104	0.012	1.187	8.799	0.000
Age ²	-0.001	0.000	-1.197	-8.861	0.000
Speaks English Well (1=Yes)	-0.103	0.073	-0.034	-1.416	0.157
Some College (1=Yes)	-0.339	0.407	-0.016	-0.833	0.405
College Graduate (1=Yes)	-1.104	0.576	-0.037	-1.918	0.055
More than College (1=Yes)	-0.586	0.120	-0.095	-4.904	0.000
Constant	9.065	0.297		30.518	0.000

Source: PUMS data from 2014-2018 American Community Survey (Dallas, TX MSA) and MGT, calculations using SPSS Statistics software.

Note: **BOLD** statistically significant at p < .05.

EXHIBIT F-9.
RESULTS OF LINEAR REGRESSION,
OTHER SERVICES

City of Dallas, TX MSA					
	Unstandardized		Standardized		Sig.
	B	Std. Error	B	t	
African American	-0.434	0.052	-0.129	-8.305	0.000
Hispanic American	-0.550	0.044	-0.241	-12.466	0.000
Asian American	-0.377	0.053	-0.126	-7.109	0.000
Native American	-0.225	0.131	-0.025	-1.713	0.087
Nonminority Women (1=Female)	-0.421	0.037	-0.185	-11.441	0.000
Marital Status (1=Married)	0.204	0.030	0.102	6.743	0.000
Disability (1=Yes)	-0.231	0.057	-0.060	-4.038	0.000
Age	0.049	0.007	0.650	6.994	0.000
Age ²	0.000	0.000	-0.619	-6.670	0.000
Speaks English Well (1=Yes)	0.039	0.039	0.018	1.006	0.315
Some College (1=Yes)	-0.408	0.076	-0.082	-5.379	0.000
College Graduate (1=Yes)	-0.236	0.107	-0.032	-2.206	0.027
More than College (1=Yes)	-0.270	0.032	-0.124	-8.413	0.000
Constant	9.679	0.163		59.377	0.000

Source: PUMS data from 2014-2018 American Community Survey (Dallas, TX MSA) and MGT, calculations using SPSS Statistics software.

Note: **BOLD** statistically significant at p < .05.

EXHIBIT F-10.
RESULTS OF LINEAR REGRESSION,
GOODS & SUPPLIES

City of Dallas, TX MSA					
	Unstandardized		Standardized		Sig.
	B	Std. Error	B	t	
African American	-0.360	0.095	-0.073	-3.773	0.000
Hispanic American	-0.341	0.076	-0.106	-4.466	0.000
Asian American	-0.426	0.089	-0.112	-4.802	0.000
Native American	-0.330	0.246	-0.025	-1.338	0.181
Nonminority Women (1=Female)	-0.333	0.047	-0.142	-7.119	0.000
Marital Status (1=Married)	0.247	0.045	0.106	5.464	0.000
Disability (1=Yes)	-0.179	0.080	-0.044	-2.237	0.025
Age	0.044	0.010	0.573	4.608	0.000
Age ²	0.000	0.000	-0.577	-4.635	0.000
Speaks English Well (1=Yes)	0.000	0.068	0.000	-0.002	0.998
Some College (1=Yes)	-0.565	0.171	-0.064	-3.302	0.001
College Graduate (1=Yes)	-0.093	0.238	-0.007	-0.390	0.696
More than College (1=Yes)	-0.302	0.050	-0.115	-6.018	0.000
Constant	9.937	0.235		42.281	0.000

Source: PUMS data from 2014-2018 American Community Survey (Dallas, TX MSA) and MGT, calculations using SPSS Statistics software.

Note: **BOLD** statistically significant at p < .05.

APPENDIX G. BUSINESS SURVEY
INSTRUMENT

Availability and Disparity Study

City of Dallas, Texas



G.I BUSINESS SURVEY INSTRUMENT

Dallas - Survey of Vendors (3-29-20)

Introduction

The City of Dallas has retained MGT Consulting Group to conduct a Disparity Study. Your responses to this research survey will be aggregated for the overall analysis and used only for the disparity study. Individual information is kept confidential.

The survey should be completed by the company's Owner, CEO, President, Vice President or other decision-making authority with in-depth knowledge of the company. If you are not one of these individuals, please forward the email you received to the most appropriate company representative. Questions in this survey relate to company ownership, contracting, and experience/interest in doing business with the City of Dallas.

Your firm has been randomly selected to participate in a survey of businesses to evaluate how the City buys goods and services, the subcontracting practices of prime contractors/vendors who do business with the City, and the anecdotal evidence about doing business or attempting to do business collected from a broad cross section of all interested businesses between October 1, 2013 and September 30, 2018.

The results of the study will provide the basis, if warranted, for recommendations to improve the City's current procurement programs.

This is a great opportunity for you to provide feedback regarding your experience doing business with or attempting to do business with the City. The survey will only take a few minutes of your time to complete.

Thank you for your participation!

Q1. What is your title?*

- Owner
- CEO/President
- Manager/Financial Officer
- Other (What is your official title?:

_____*

Q2. Please provide your name just in case we have any further questions.*

Q3. What is your company's primary line of business?*

() Construction (for example: general construction, excavating, mechanical, carpentry, site work, electrical, etc.) (GO TO Q4)

() Architectural and Engineering Services (for example: Architecture, civil engineering, environmental engineering, etc.) (GO TO Q5)

() Professional Services (for example: accounting, legal services, construction management, IT consulting, consultant, etc.) (GO TO Q6)

() General Services (for example: maintenance services, janitorial, security, auto repair, etc.) (GO TO Q7)

() Goods (for example: furniture, computers, books, etc.) (GO TO Q8)

() Other (GO TO Q9)

Q4. Please specify construction type.*

Q5. Please specify architecture and engineering services type.*

Q6. Please specify professional services type*

Q7. Please specify general services type.*

Q8. Please specify goods type.*

Q9. Please specify other type.*

Q10. Is at least 51 percent of your company owned, managed, and controlled by a woman or women? *

- Yes
- No
- Don't know

Q11. Is your company at least 51 percent owned, managed, and controlled by a person or people of one of the following racial or ethnic group(s)?*

- African American
- Asian American or Pacific Islander
- Caucasian/White
- Hispanic American or Latino
- Native American/American Indian
- Don't know
- Other - (Please specify the race or ethnicity of the owner(s)/manager(s): _____)*

Q12. What is the highest level of education completed by the primary owner of your company?*

- Some high school
- High school graduate
- Trade or technical education
- Associate Degree (AA, AS, etc.)
- Bachelor's Degree (BA, BS, etc.)
- Graduate or Professional Degree (MA, PhD, JD, etc)
- Don't know

Q13. How long ago was your company established? *

- Less than 1 year
- 1 to 3 years
- 4 to 10 years
- 11 to 20 years
- 21 to 30 years
- More than 30 years
- Don't Know

Q14. How many combined years of experience do you or the primary owner(s) of your firm have in your primary line of business?*

- 0 – 5 years
- 6 – 10 years
- 11 – 15 years
- 16 – 20 years
- More than 20 years
- Don't know

Q15. What was the average number of employees on your company's payroll, including full-time and part-time staff between October 1, 2013 and September 30, 2018?*

- 0-10 employees
- 11-20 employees
- 21-30 employees
- 31-40 employees
- 41+ employees
- Don't know

Q16. Which of the following categories best approximates your company's gross revenues for calendar year 2018?*

- Up to \$50,000
- \$50,001 to \$100,000
- \$100,001 to \$300,000
- \$300,001 to \$500,000
- \$500,001 to \$1 million
- \$1,000,001 to \$3 million
- \$3,000,001 to \$5 million
- \$5,000,001 to \$10 million
- Over \$10 million
- Don't Know

Q17. What percentage of these gross revenues was earned from the City, the private sector, and other public government sector projects? *

_____ a. City of Dallas

_____ b. Private Sector

_____ c. Non-City Public Sector

(Must total to 100%)

Q18. Does your company hold any of the following certifications? Please answer all statements from A to E to avoid an error message.*

	Yes	No	I don't know
A. Minority Business Enterprise (MBE)	()	()	()
B. Woman Business Enterprise (WBE)	()	()	()
C. Disadvantaged Business Enterprise (DBE)	()	()	()
D. Small Business Enterprise (SBE)	()	()	()
E. Other (please specify below in Q19):	()	()	()

Q19. Please specify (from Q18E above)

Q20. Does your company bid/quote/propose primarily as a prime contractor/consultant or vendor, subcontractor/supplier, or both?*

() Prime contractor/consultant or Vendor (CONTINUE TO Q21)

() Subcontractor/subconsultant or Supplier (GO TO Q36)

() Both (Important: this option requires you to complete both PRIME and SUBCONTRACTOR sections to get a complete picture of your contracting experiences. (CONTINUE TO Q21)

() Don't Know (GO TO Q55)

PRIME CONTRACTOR EXPERIENCE

Q21. In general, which of the following ranges best approximates your company's largest prime contract awarded between October 1, 2013 and September 30, 2018?*

- None
- Up to \$50,000
- \$50,001 to \$100,000
- \$100,001 to \$200,000
- \$200,001 to \$300,000
- \$300,001 to \$400,000
- \$400,001 to \$500,000
- \$500,001 to \$1 million
- Over \$1 million
- Don't know

Q22. In your experience, have any of the following been a barrier to attempting to do work or working on the City's projects as a prime contractor/vendor?*

	Yes	No	Don't know
A. Prequalification requirements	()	()	()
B. Bid bond requirements	()	()	()
C. Performance/payment bond requirements	()	()	()
D. Cost of bidding/proposing	()	()	()
E. Financing	()	()	()
F. Insurance (general liability, professional liability, etc.)	()	()	()
G. Price of supplies/materials	()	()	()
H. Proposal/bid specifications	()	()	()
I. Short or limited time given to prepare bid package or quote	()	()	()
J. Lack of experience	()	()	()
K. Contract too large	()	()	()
L. Selection process/evaluation criteria	()	()	()
M. Unnecessary restrictive contract specifications	()	()	()
N. Slow payment or non-payment	()	()	()
O. Competing with large companies	()	()	()
P. Changes in the scope of work (after work began)	()	()	()
Q. Identifying MWBE firms	()	()	()

Q23. As a prime contractor/vendor, are you required to have bonding?*

- Yes (CONTINUE TO Q24)
- No (GO TO Q26)
- Don't know (GO TO Q26)

24. What is your current aggregate bonding capacity?*

- Below \$100,000
- \$100,001 to \$250,000
- \$250,001 to \$500,000
- \$500,001 to \$1 million
- \$1 million to \$1.5 million
- \$1.5 million to \$3 million
- \$3 million to \$5 million
- Over \$5 million
- Don't know

Q25. What is your current single limit bonding capacity?*

- Below \$100,000
- \$100,001 to \$250,000
- \$250,001 to \$500,000
- \$500,001 to \$1 million
- \$1 million to \$1.5 million
- \$1.5 million to \$3 million
- \$3 million to \$5 million
- Over \$5 million
- Don't know

Q26. Has your company applied for a commercial (business) bank loan or line of credit between October 1, 2013 and September 30, 2018?*

- Yes (CONTINUE TO Q27)
- No (GO TO Q30)
- Don't know (GO TO Q30)

Q27. Were you or your company approved or denied for a commercial (business) bank loan or line of credit?*

- Approved (CONTINUE TO Q28)
- Denied (GO TO Q29)
- Don't know (GO TO Q30)

Q28. What was the highest amount of commercial bank loan your company received?*

- Up to \$50,000
- \$50,001 to \$100,000
- \$100,001 to \$300,000
- \$300,001 to \$500,000
- \$500,001 to \$1 million
- \$1,000,001 to \$3 million
- \$3,000,001 to \$5 million
- \$5,000,001 to \$10 million
- Over \$10 million
- Don't Know (GO TO Q30)

Q29. Which of the following do you believe was the PRIMARY reason for your being denied a loan or line of credit?*

- Insufficient Documentation
- Insufficient Business History
- Confusion about the Process
- Race or Ethnicity of Owner
- Gender of Owner
- Don't Know
- Other (please specify): _____

Q30. As a prime contractor/vendor, did you experience discriminatory behavior by the City when attempting to work or while working on a project between 2013 and 2018?*

- Yes (CONTINUE TO Q31)
- No (GO TO Q55)
- Not Applicable (GO TO Q55)
- Don't know (GO TO Q55)

Q31. How did you become aware of the discrimination against your company?*

- Verbal comment
 - Written statement/documents
 - Action taken against the company
 - Don't know
 - Other action (Please specify how you became aware of the discrimination against your company.:
-

Q32. Which of the following do you consider the PRIMARY reason for your company being discriminated against?*

- Owner's race or ethnicity
 - Owner's gender
 - Both race and gender
 - Don't know
 - Other reason (Please specify the reason you believe your company was discriminated against.:
-

Q33. When did the discrimination first occur? (Select all that apply.)*

- During the bidding process
- During contract negotiations
- After contract award
- Don't know

Q34. Did you file a complaint?*

Yes

No

Don't know

Q35. Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by the City or their prime contractor/vendor?*

Yes - Please contact Andres Bernal at MGT, abernal@mgtconsulting.com, (850) 386-3191 to provide this detail.

No

(ON Q20, IF YOU ANSWERED "PRIME CONTRACTOR" GO TO Q55)

(ON Q20, IF YOU ANSWERED "SUBCONTRACTOR" CONTINUE TO Q36)

(ON Q20, IF YOU ANSWERED "BOTH" CONTINUE TO Q36)

(ON Q20, IF YOU ANSWERED "DON'T KNOW" GO TO Q55)

SUBCONTRACTOR EXPERIENCES

Q36. In general, which of the following ranges best approximates your company’s largest subcontract awarded between October 1, 2013 and September 30, 2018?*

- () None (IF YOU ANSWERED “BOTH” TO Q20 AND CHECK THIS OPTION, CONTINUE TO Q55)
- () Up to \$50,000
- () \$50,001 to \$100,000
- () \$100,001 to \$200,000
- () \$200,001 to \$300,000
- () \$300,001 to \$400,000
- () \$400,001 to \$500,000
- () \$500,001 to \$1 million
- () Over \$1 million
- () Don’t know

Q37. In your experience, have any of the following been a barrier when attempting to do work or while working as a subcontractor with primes for the City?*

	Yes	No	Don't know
A. Performance/payment bond requirements	()	()	()
B. Cost of bidding/proposing	()	()	()
C. Financing	()	()	()
D. Insurance (general liability, professional liability, etc.)	()	()	()
E. Price of supplies/materials	()	()	()
F. Short or limited time given to prepare bid package or quote	()	()	()
G. Lack of experience	()	()	()
H. Lack of personnel	()	()	()
I. Contract too large	()	()	()
J. Slow payment or non-payment	()	()	()
K. Competing with large companies	()	()	()
L. Solicitation of subcontractor bids after contract award (i.e. bid shopping)	()	()	()
M. Awarded scope of work reduced or eliminated	()	()	()
N. Operating at or near capacity	()	()	()

Q38. Between October 1, 2013 and September 30, 2018, has your company ever submitted a bid, quote or proposal with a prime contractor or vendor for a project with the City, were informed that you were the lowest bidder/selected firm, and then found out that another subcontractor was actually doing the work?*

- Yes
- No
- Don't know

Q39. As a subcontractor/vendor, do prime contractors on City projects require your company to have a bond for your type of work?*

- Yes (CONTINUE TO Q40)
- No (GO TO Q42)
- Don't know (GO TO Q42)

Q40. What is your current aggregate bonding capacity?*

- Below \$100,000
- \$100,001 to \$250,000
- \$250,001 to \$500,000
- \$500,001 to \$1 million
- \$1 million to \$1.5 million
- \$1.5 million to \$3 million
- \$3 million to \$5 million
- Over \$5 million
- Don't know

Q41. What is your current single limit bonding capacity? *

- Below \$100,000
- \$100,001 to \$250,000
- \$250,001 to \$500,000
- \$500,001 to \$1 million
- \$1 million to \$1.5 million
- \$1.5 million to \$3 million
- \$3 million to \$5 million

Over \$5 million

Don't know

Q42. As a subcontractor, did your company experience discriminatory behavior between October 1, 2013 and September 30, 2018 from a prime contractor/vendor working or bidding/proposing on a City project? *

Yes (CONTINUE TO Q43)

No (GO TO Q48)

Not applicable (GO TO Q48)

Don't know (GO TO Q48)

Q43. How did you become aware of the discrimination against your company?*

Verbal comment

Written statement/documents

Action taken against the company

Don't know

Other action (Please specify how you became aware of the discrimination against your company):

_____*

Q44. Which of the following do you consider the PRIMARY reason for your company being discriminated against? *

Owner's race or ethnicity

Owner's gender

Both race and gender

Don't know

Other reason (Please specify the reason you believe your company was discriminated against):

_____*

Q45. When did the discrimination first occur? (Select all that apply.)*

During the bidding process

During contract negotiations

After contract award

Don't know

Q46. Did you file a complaint?*

- Yes
- No
- Don't know

Q47. Are you willing to speak directly to MGT to provide more detail of the alleged discrimination you have experienced by the City or their prime contractor/vendor?*

- Yes - (Please contact Andres Bernal at MGT, abernal@mgtconsulting.com, (850) 386-3191.
- No

Q48. Have you experienced or observed a situation in which a prime contractor/vendor includes minority or woman subcontractors on a bid or proposal to satisfy the “good faith effort” requirements, and then drops the company as a subcontractor after winning the award for no legitimate reason?*

	Yes	No	Don't know
City project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-City project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q49. Continuing on the subject of prime contractors/consultants or vendors, while doing business or attempting to do business as a subcontractor, have you experienced any of the following as a form of discrimination?*

	Yes	No	Don't know
A. Harassment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Unequal or unfair treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Bid shopping or bid manipulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Double standards in performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Denial of opportunity to bid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. Unfair denial of contract award	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G. Unfair termination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. Unequal price quotes from suppliers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q50. How often do prime contractors/vendors who use your company as a subcontractor on public sector projects with M/WBE goals solicit your company on projects (private or public) without M/WBE goals?*

- Very often
- Sometimes
- Seldom
- Never
- Not applicable
- Don't know

Q51. Has your company applied for a commercial (business) bank loan or line of credit between October 1, 2013 and September 30, 2018*

- Yes (CONTINUE TO Q52)
- No (GO TO Q55)
- Don't know (GOTO Q55)

Q52. Were you or your company approved or denied for a commercial (business) bank loan or line of credit? *

- Approved (CONTINUE TO Q53)
- Denied (GOTO Q54)
- Don't know (GOTO Q55)

Q53. What was the highest amount of a commercial bank loan your company received?*

- Up to \$50,000
- \$50,001 to \$100,000
- \$100,001 to \$300,000
- \$300,001 to \$500,000
- \$500,001 to \$1 million
- \$1,000,001 to \$3 million
- \$3,000,001 to \$5 million
- \$5,000,001 to \$10 million
- Over \$10 million
- Don't Know (GO TO Q55)

Q54. Which of the following do you believe was the primary reason for your being denied a loan or line of credit?*

Insufficient Documentation

Insufficient Business History

Confusion about the Process

Race or Ethnicity of Owner

Gender of Owner

Don't Know

Other (Please specify the reason you believe you were denied a loan or line of credit.:

_____ *

ALL RESPONDENTS - PRIVATE SECTOR

Q55. Please indicate whether you agree, disagree, or neither agree nor disagree with the following:

There is an informal network of prime contractors/vendors and subcontractors that has excluded my company from doing business in the private sector.*

- Agree
- Neither Agree nor Disagree
- Disagree
- Don't know

Q56. Have you or your company experienced discriminatory behavior when attempting to do work or working in the private sector between 2013 and 2018?*

- Yes (CONTINUE TO Q57)
- No (GO TO Q61)
- Do not work in the private sector (GO TO Q61)
- Don't know (GO TO Q61)

Q57. How did you become aware of the discrimination against your company?*

- Verbal comment
- Written statement/documents
- Action taken against the company
- Don't know
- Other action (Please specify how you became aware of discrimination against your company):

_____*

Q58. Which of the following do you consider the primary reason for your company being discriminated against?*

- Owner's race or ethnicity
- Owner's gender
- Both race and gender
- Don't know
- Other reason (Please specify the reason you believe your company was discriminated against.:

_____*

Q59. When did the discrimination first occur? (Select all that apply.)*

- During the bidding process
- During contract negotiations
- After contract award
- Don't know

Q60. Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced in the private sector?*

- Yes - (Please contact Andres Bernal at MGT, abernal@mgtamer.com, (850) 386-3191.
- No

Q61. That completes the survey. On behalf of the City of Dallas, thank you for your participation.

If you have any questions or would like more information about the disparity study, please contact Andres Bernal at (850)386-3191.

Click "submit my answers" and then "SUBMIT" below to submit your answers.*

- Submit my answers as final

Thank You

APPENDIX H. DEMOGRAPHICS OF
BUSINESS SURVEY RESPONDENTS

Availability and Disparity Study

City of Dallas, Texas



H.I SURVEY OF VENDORS DEMOGRAPHICS

FIGURE H-1.
CITY OF DALLAS
BUSINESS SURVEY DEMOGRAPHICS
NUMBER OF RESPONDENTS

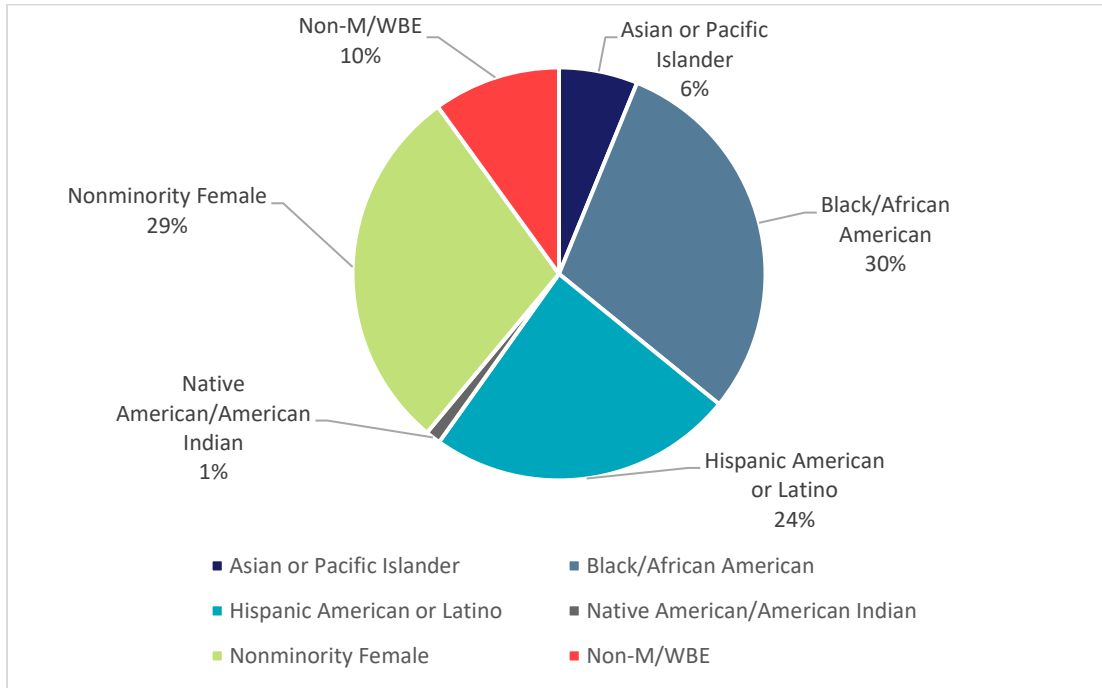
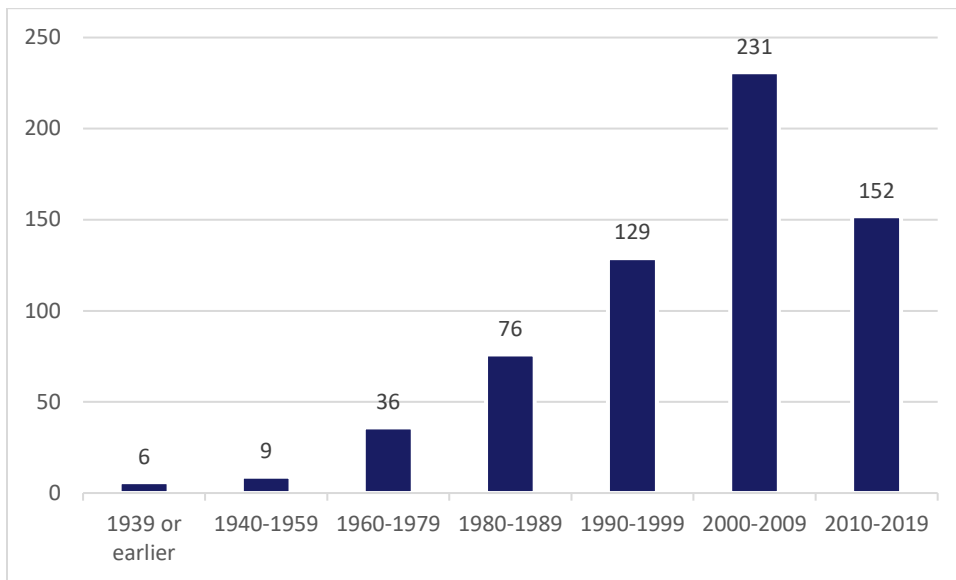
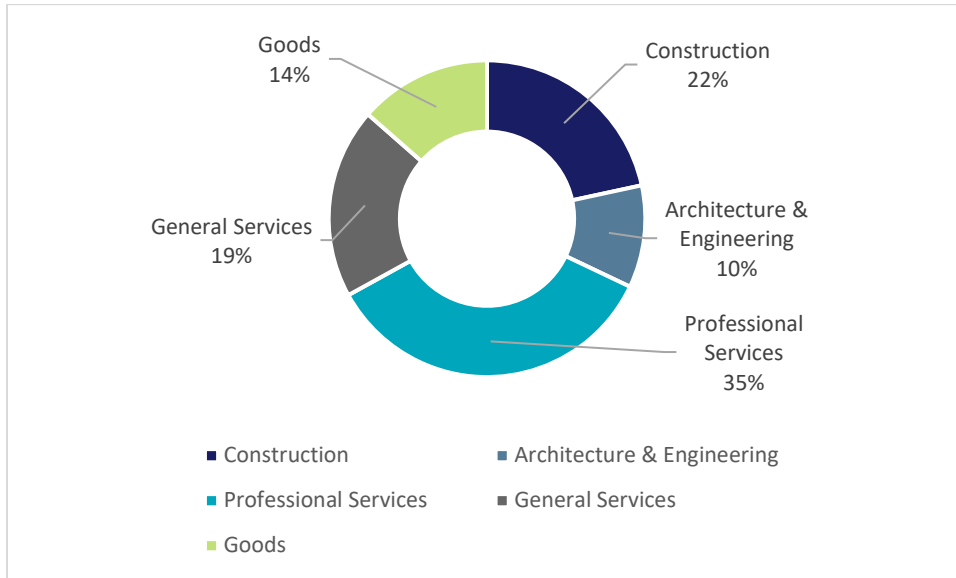
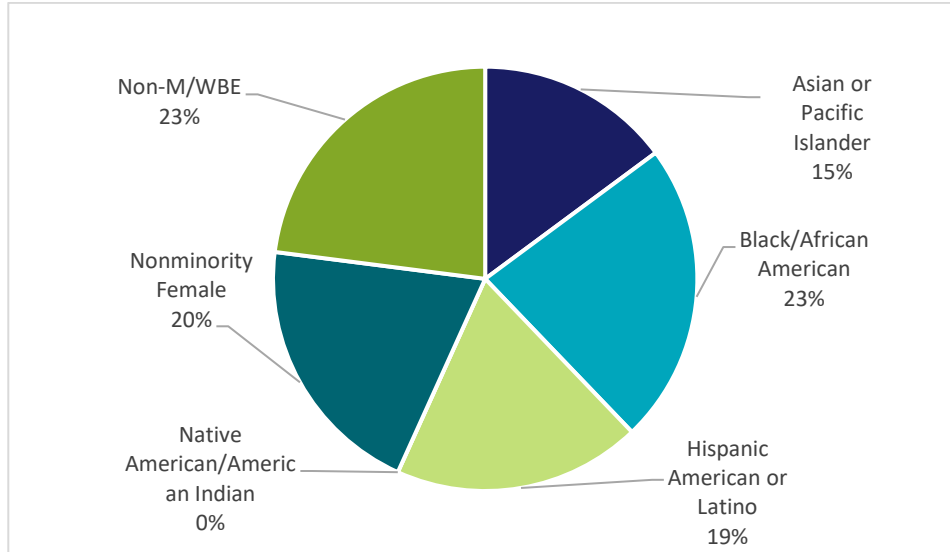


FIGURE H-2.
CITY OF DALLAS
BUSINESS SURVEY DEMOGRAPHICS
BUSINESS INDUSTRY



H.2 IN-DEPTH FIRM INTERVIEW DEMOGRAPHICS

FIGURE H-3.
CITY OF DALLAS
IN-DEPTH INTERVIEW DEMOGRAPHICS



APPENDIX I. IN-DEPTH INTERVIEW
GUIDE

Availability and Disparity Study

City of Dallas, Texas



I.1 IN-DEPTH INTERVIEW GUIDE

READ: Hello. My name is _____, we are working with the City of Dallas to interview businesses interested and willing to do business with the City, or prime vendors contracted by the City for its disparity study. Your company was randomly selected to participate in an in-depth interview. The purpose of this interview is to gather information on your experiences, perceptions, and points of view on doing business or attempting to do business with the City of Dallas, its prime contractors/vendors, and the private sector.

Is this _____&&_____ (Company's name)? IF COMPANY NAME VERIFIED, CONTINUE.

Are you the owner or an authorized decision maker in your company? [IF NO] May I speak with that person? [IF NO, SCHEDULE CALL-BACK]?

IF TRANSFERRED TO ANOTHER PARTY (CFO, MANAGER, ETC): READ INTRO AGAIN then ask Are you able to answer questions concerning business practices of this company? IF YES, CONTINUE.

Thank you for agreeing to participate. Your input is very important to outcome of the disparity study. Your responses to this interview will be aggregated for the overall analysis and used only for this research study. Individual information or identifying characteristics about your company will not be published. Your responses and comments should focus on the period between October 1, 2013 and September 30, 2018.

If you have any questions regarding the survey, I will be happy to provide you contact information at the end of the survey.

By participating in this interview, you acknowledge that:

- 1. The qualitative input you will provide is given freely and represents an accurate reflection of your experiences doing business or attempting to do business with the City or its primes.***
- 2. You have not been coerced or received any remuneration for your comments.***
- 3. You understand that your name nor firm's name will be published in the report.***
- 4. That your participation in this interview has no direct benefits to your firm or MGT.***

The reference to "primes" in this interview refers to firms that have received contracts, bid on, or submitted proposals directly to the City.

Q1. Please **specify** your company's primary line of business? *(Try to get a good feel for what they do.)*

1. **Construction Services** *(general contracting, construction management, carpentry, site work, electrical, etc.) Specify* _____
2. **Architecture & Engineering** *(civil engineering, environmental engineering, mechanical engineering, etc.) Specify* _____
3. **Professional Services** *(accounting, legal services, IT consulting, consulting, etc.)_Specify_* _____
4. **Other Services** *(janitorial services, auto repair, maintenance services, etc.) Specify* _____
5. **Goods & Supplies** *(vehicles, office supplies, furniture, equipment, etc.) Specify* _____
6. **Other:** *Specify* _____

Q2. How many combined years of experience do you or the primary owner(s) of your firm have in your primary line of business?

- | | |
|-------------------------------------|---|
| <input type="radio"/> 0 – 5 years | 1 |
| <input type="radio"/> 6 – 10 years | 2 |
| <input type="radio"/> 11 – 15 years | 3 |
| <input type="radio"/> 16 – 20 years | 4 |
| <input type="radio"/> 20+ years | 5 |

Q3. Between **October 1, 2013** and **September 30, 2018**, what was the average number of employees on your company's payroll, including full-time and part-time staff?

- | | |
|-------------------------------|---|
| <input type="radio"/> 0 - 10 | 1 |
| <input type="radio"/> 11 - 20 | 2 |
| <input type="radio"/> 21 - 30 | 3 |
| <input type="radio"/> 31 - 40 | 4 |
| <input type="radio"/> 41+ | 5 |

Q4. Is **more than 50 percent** of your company woman-owned and controlled?

- Yes 1
- No 2
- Don't Know 3

Q5. Is **more than 50 percent** of the company owned and controlled by one of the following racial or ethnic groups? *[Get as much detail as possible.]*

- Anglo/Caucasian/White 1
- African American 2
- Asian American 3
- Hispanic American 4
- Native American 5
- Don't Know 6
- Other 7 *Specify:* _____

Q6. In what year was your business established or purchased by the most recent owner(s)?

Q7. What is the highest level of education completed by the primary owner of your company? [REQUIRE ANSWER]

- Some high school 1
- High school graduate 2
- Trade or technical education 3
- Some college 4
- College degree 5
- Post graduate degree 6
- Don't know 7

Q8. Does your company bid/quote/propose primarily as a prime contractor/consultant or vendor? Subcontractor? OR both?

- Prime Contractor/Consultant or Vendor 1
- Subcontractor or subconsultant 2
- Both 3
- None of the above 4

Q9. Have you ever submitted a bid, quote, or proposal with the City or a prime on a City contract?

- Yes 1
- No 2
- Don't Know 3

Q9a. Have you won a contract with the City as a prime or subcontractor?

- Yes 1
- No 2
- Don't Know 3

Q9b. *If response is "no":* What bid, or proposal requirement was a barrier to successfully winning the bid or proposal?

Q10. Have you ever protested a bid, proposal, or contract awarded by the City?

- Yes 1
- No 2
- Don't Know 3

Q10a. *If response is "yes":* Please provide as much detail as possible on why and the results.

Q11. Which of the following categories best approximates your company's gross revenues for calendar years **2013 – 2018 combined**?

- Up to \$50,000? 1
- \$50,001 to \$100,000? 2
- \$100,001 to \$300,000? 3
- \$300,001 to \$500,000? 4
- \$500,001 to \$1 million? 5
- \$1,000,001 to \$3 million? 6
- \$3,000,001 to \$5 million? 7
- \$5,000,001 to \$10 million? 8
- Over \$10 million? 9
- Don't Know 10

Q12. What percentage of these gross revenues was earned from the City, the private sector, and other public government sector projects? **(Must total 100%)**

City of Dallas:	%
Private Sector:	%
Non-City/County Public Government Sector:	%
Total:	%

Q13. Does your company hold any of the following certifications? **(Check all that apply.)**

	Yes (1)	No (2)	Don't Know (3)
a. Minority Business Enterprise (MBE)			
b. Woman Business Enterprise (WBE)			
c. Small Business Enterprise (SBE)			
d. Disadvantaged Business Enterprise (DBE)			
e. Don't Know			
f. None			
g. Other: <i>Specify</i>			

IF INTERVIEWEE IS A PRIME: **(Based on Q8)**

Q14. Between **October 1, 2013** and **September 30, 2018**, indicate a range of the number of times you have been awarded a contract or purchase order with the City as a prime contractor/consultant or vendor?

- None 1
- 1-10 times 2
- 11-25 times 3
- 26-50 times 4
- 51-100 times 5
- Over 100 times 6
- Don't Know 7

Q15. As an MWBE prime, do you believe you are receiving fair treatment once you are awarded the contract/purchase order and performing at the approved worksite? **(IF APPLICABLE)**

- Yes 1
- No 2
- Don't Know 3

Q16. As a prime contractor/consultant or vendor did you experience discriminatory behavior by the City staff when attempting to do work or working on their projects between **October 1, 2013** and **September 30, 2018**?

- Yes 1
- No 2
- Don't Know 3

Q16a. **If the response is "yes":** Please explain how you believe you were discriminated against and why? (Ask if they have documented evidence to support their response)

Q16b. Did you file a complaint? If so, what was the result?

Q16c. **If response to Q15b is "no":** Why didn't you file a complaint?

Q17. In your experience, have any of the following been a barrier to attempting to do work or working on any of the City’s projects as a **prime contractor/consultant or vendor**:

	Yes	No	Don't Know	Not Applicable
a. Prequalification requirements				
b. Bid bond requirement				
c. Performance/payment bond requirement				
d. Cost of bidding/proposing				
e. Financing				
f. Insurance (general liability, professional liability, etc.)				
g. Price of supplies/materials				
h. Proposal/Bid specifications				
i. Short or limited time given to prepare bid package or quote				
j. Limited knowledge of purchasing contracting policies and procedures				
k. Lack of experience				
l. Lack of personnel				
m. Contract too large				
n. Selection process/evaluation criteria				
o. Unnecessary restrictive contract specifications				
p. Slow payment or nonpayment				
q. Competing with large companies				
r. Changes in the scope of work (after work began)				
s. Meeting HUB-certified requirements or good faith effort requirements				
t. Ease of identifying PEP firms to partner with on the City's projects				

Q17u. Please explain why the items you selected are barriers and which agency presents the barrier.

IF INTERVIEWEE IS A SUBCONTRACTOR: (Based on Q8)

Q18. Between **October 1, 2013** and **September 30, 2018**, indicate a range of the number of times you have been awarded a subcontract with primes on City projects or contracts.

- None
- 1-10 times
- 11-25 times
- 26-50 times
- 51-100 times
- Over 100 times
- Don't Know

Q19. As an MWBE subcontractor, do you believe you are receiving fair treatment once you are awarded a subcontract and are performing your scope of work?

- Yes 1
- No 2
- Don't Know 3

Q19a. *If response is "no":* Why do you believe you were treated unfairly?

Q20. How often do prime contractors/consultants or vendors contract with your firm to satisfy the City's MWBE requirements then not utilize your services once the contract has been awarded?

- Very Often 1
- Sometimes 2
- Seldom 3
- Never 4
- Don't know 5

Q20a. *If response is "very often" or "sometimes":* At what point did you realize that the prime was awarded the project and your firm was not included?

Q21. Between **October 1, 2013** and **September 30, 2018**, have you ever submitted a bid with a prime contractor for a project with the City to satisfy the “good faith effort” requirements, were informed that you were the successful subcontractor, and then found out that another subcontractor was doing the work?

- Yes 1
- No 2
- Don't Know 3

Q21a. *If response is yes:* Please provide details of what happened.

Q22. As a subcontractor, did you experience discriminatory behavior between **October 1, 2013** and **September 30, 2018** from a prime contractor/consultant or vendor when attempting to do work or while working on City projects?

- Yes 1
- No 2
- Don't Know 3

Q22a. *If response is “yes”:* Please explain how you believe you were discriminated against and why? (Ask if they have documented evidence to support their response)

Q22b. Did you file a complaint? If so, what was the result?

Q22c. *If response to Q21b is “no”:* Why didn't you file a complaint?

Q23. In your experience, have any of the following been a barrier to attempting to work or working on projects as a subcontractor with primes on any City project:

	Yes	No	Don't Know	Not Applicable
a. Performance/payment bond requirement				
b. Cost of bidding/proposing				
c. Financing				
d. Insurance (general liability, professional liability, etc.)				
e. Price of supplies/materials				
f. Short or limited time given to prepare bid estimate or quote				
g. Lack of experience				
h. Lack of personnel				
i. Contract too large				
j. Slow payment or nonpayment				
k. Competing with large companies				
l. Solicitation of subcontractor bids after contract award (i.e. bid shopping)				
m. Awarded scope of work changed, reduced, or eliminated				

Q23n. Please explain why you think the items you selected are barriers and which agency created the barrier.

Q24. Do you believe there is an informal network of prime contractors or vendors that has excluded your company from doing business in the private sector?

- Yes 1
- No 2

Q24a. If the response is “yes”: Please explain why you think that informal network exists. (Ask them to provide details on what they experienced or observed. Ask if they have documented evidence to support their response.)

Q25. How often do prime contractors/consultants or vendors who contract with your firm as a subcontractor on public-sector projects with MWBE goals solicit your firm on projects (private or public) without MWBE goals? (*public-sector: government agencies*)

- Very Often 1
- Sometimes 2
- Seldom 3
- Never 4
- Don't know 5

Q26. As a subcontractor, did you experience discriminatory behavior when attempting to do work or working in the private sector between **October 1, 2013** and **September 30, 2018** from a prime contractor/consultant or vendor?

- Yes 1
- No 2
- Don't Know 3

Q26a. *If the response is "yes":* Please explain how you believe you were discriminated against and why?

ALL INTERVIEWEES

Q27. Have you experienced access to capital as being an impediment to securing contracts with the City or subcontracts on City projects?

- Yes 1
- No 2

Q27a. *If the response is "yes":* Please describe how access to capital is an impediment?

Q28. Have you experienced bonding as being an impediment to securing contracts with the City or subcontracts on City projects?

- Yes 1
- No 2

Q28a. *If the response is "yes":* Please describe how bonding is an impediment?

Q29. Do you have any recommendations on how the City can improve the tracking and utilization of MWBE-firms on City projects and purchases?

- Q30.** In your opinion, what are the biggest obstacles faced by MWBE businesses in securing contracts with the City or prime contractors/vendors contracted with the City? *Please specify each obstacle.*
- Q31.** How do you find out about bid, proposal, or quote opportunities with the City?
- Q32.** Is there anything that we have not covered that you feel will be helpful to this study?

APPENDIX J. LIST OF STAKEHOLDERS

Availability and Disparity Study

City of Dallas, Texas



J.I LIST OF STAKEHOLDERS, AREA TRADE ASSOCIATIONS, AND BUSINESS ORGANIZATIONS

The list below of stakeholders, area trade associations and business organizations was used to conduct community outreach, stakeholder interviews, and focus groups.

AGC

Alliance of Technology and Women- Dallas

American Fire Sprinkler Association - Dallas-Fort Worth Chapter

American Indian Chamber of Commerce of Texas

American Society of Civil Engineers – Dallas

American Society of Mechanical Engineers - North Texas

Arlington Black Chamber

ASEC

Associated Builders and Contractors, Inc. (TEXO Association)

Association of Information Technology Professionals- Dallas Chapter

Black Contractors Association - Dallas/Fort Worth

Collin County Black Chamber of Commerce

Dallas Association for Financial Professionals

Dallas Black Chamber of Commerce

Dallas Business Association

Dallas Fort Worth African Chamber of Commerce

Dallas Fort Worth Alliance of Technology and Women

Dallas Fort Worth Minority Supplier Development Council

Dallas Hispanic Chamber of Commerce

Fort Worth Business Assistance Center

Fort Worth Hispanic Chamber of Commerce

Fort Worth Metropolitan Black Chamber of Commerce

Government Contracting Small Business Development Center

Greater Dallas Asian American Chamber of Commerce

Greater Dallas Hispanic Chamber of Commerce

Greater Dallas Korean American Chamber of Commerce

Hispanic Contractors Association – Regional

Institute of Electrical and Electronics Engineers (IEEE) - Dallas Engineers' Network Group

Insurance Women of Dallas Inc.

John C. Ford Program

Minority Business Development Agency

Multi-Ethnic Education and Economic Development

National American Minority Contractors Association (NAMC)

National Association of Women Business Owners – Dallas/Ft. Worth

National Association of Women in Construction - Dallas

National Society of Black Engineers – Dallas/Ft. Worth

Native American Business Association

North Central Texas Regional Certification Agency
North Texas Small Business Development Center
NTTA Business Diversity Advisory Council (Ambassadors)
Regional Asian American Contractors Association
Regional Black Contractors Association
Regional Hispanic Contractors Association
SE Dallas Hispanic Chamber
Tarrant County Asian American Chamber of Commerce
Texas Society of Professional Engineers - Dallas
Urban Inner Tribal Center
US Pan Asian Chamber of Commerce
US-Mexico Chamber
UTA Cross Timbers Procurement Vendor
Window on State Government
Women in Technology- Dallas
Women in Transportation Systems (WTS) Women's Business Council – Southwest

APPENDIX K. WORKFORCE ANALYSIS

Availability and Disparity Study

City of Dallas, Texas



K.I CITY'S PRIME CONTRACTOR WORKFORCE BY JOB CATEGORY BY BUSINESS CATEGORY

FIGURE K-1.
CITY OF DALLAS PRIME CONTRACTOR WORKFORCE
JOB CATEGORY BY BUSINESS CATEGORY
WHITE MEN

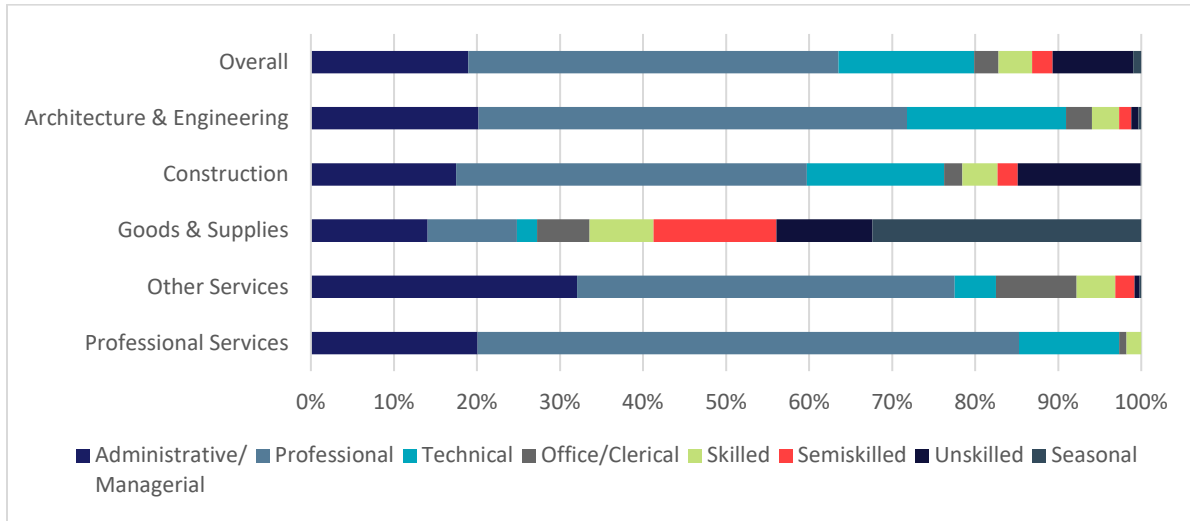


FIGURE K-2.
CITY OF DALLAS PRIME CONTRACTOR WORKFORCE
JOB CATEGORY BY BUSINESS CATEGORY
WHITE WOMEN

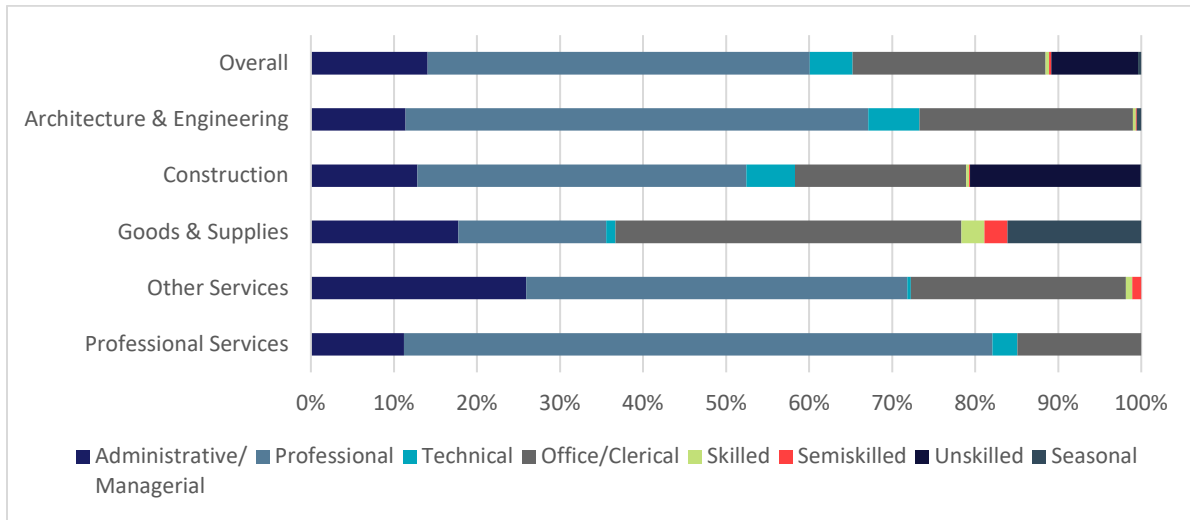


FIGURE K-3.
CITY OF DALLAS PRIME CONTRACTOR WORKFORCE
JOB CATEGORY BY BUSINESS CATEGORY
BLACK MEN

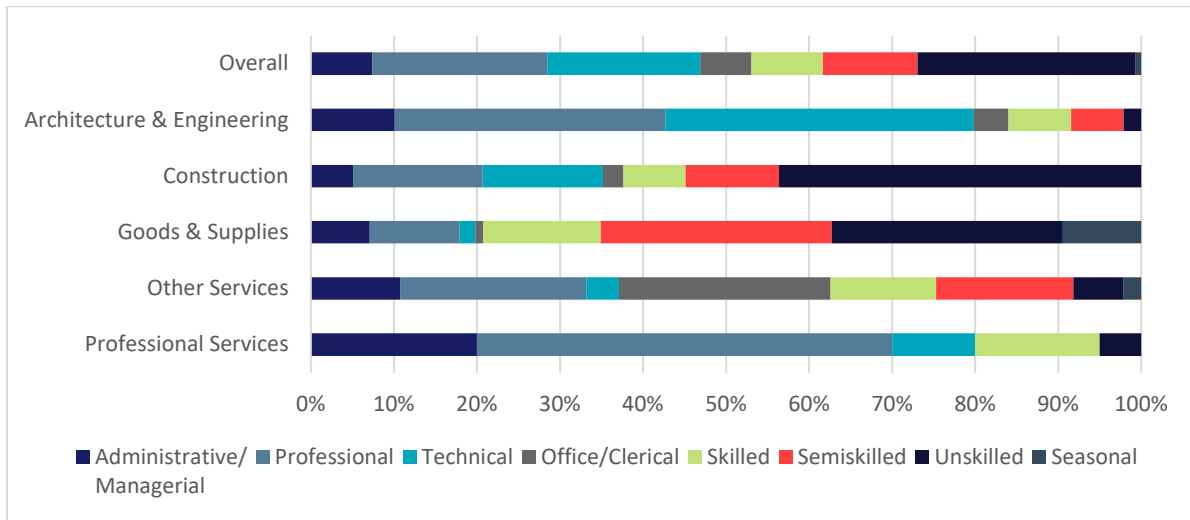


FIGURE K-4.
CITY OF DALLAS PRIME CONTRACTOR WORKFORCE
JOB CATEGORY BY BUSINESS CATEGORY
BLACK WOMEN

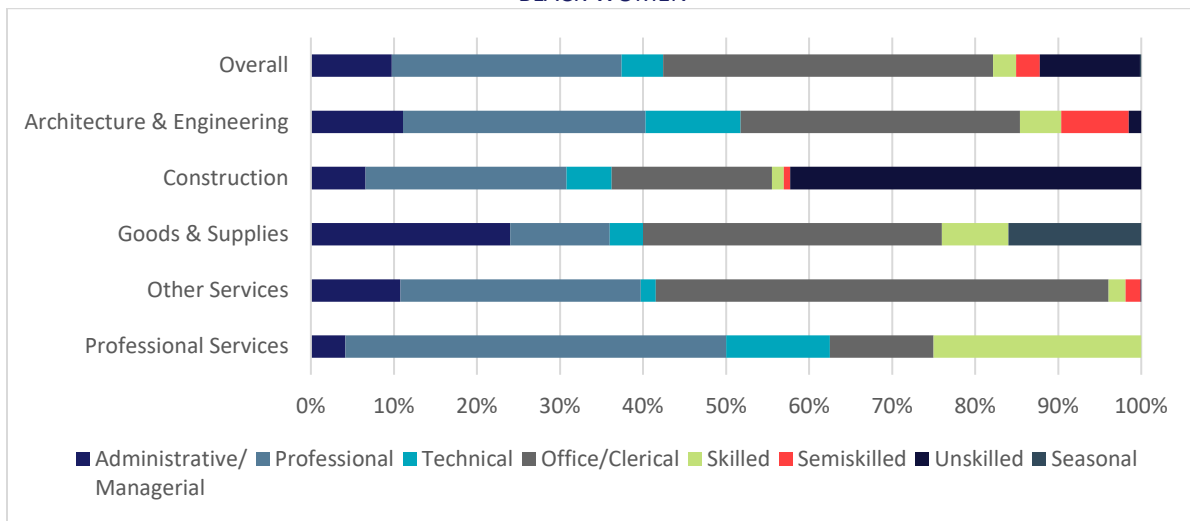


FIGURE K-5.
CITY OF DALLAS PRIME CONTRACTOR WORKFORCE
JOB CATEGORY BY BUSINESS CATEGORY
HISPANIC MEN

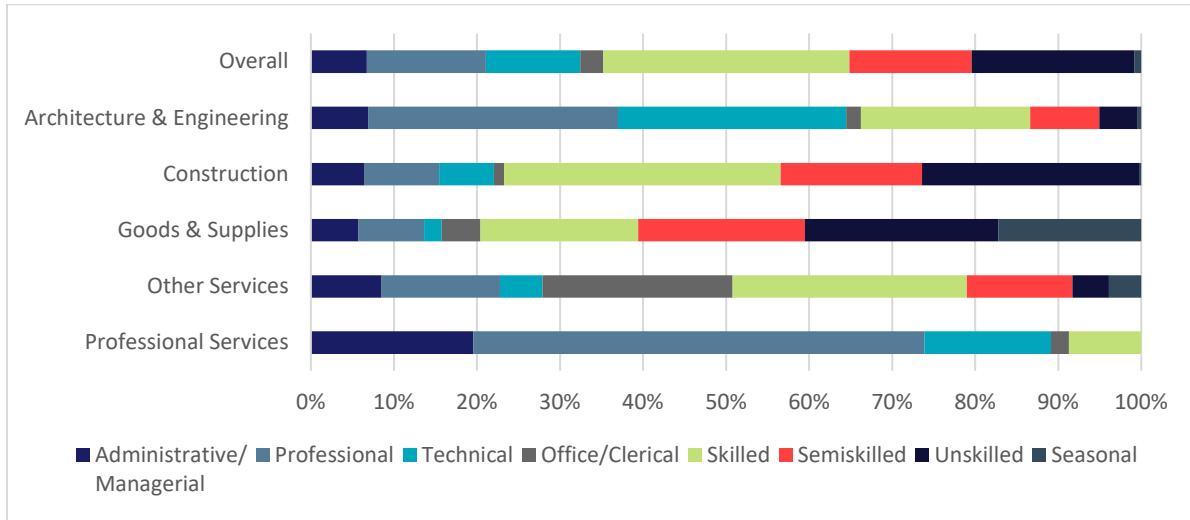


FIGURE K-6.
CITY OF DALLAS PRIME CONTRACTOR WORKFORCE
JOB CATEGORY BY BUSINESS CATEGORY
HISPANIC WOMEN

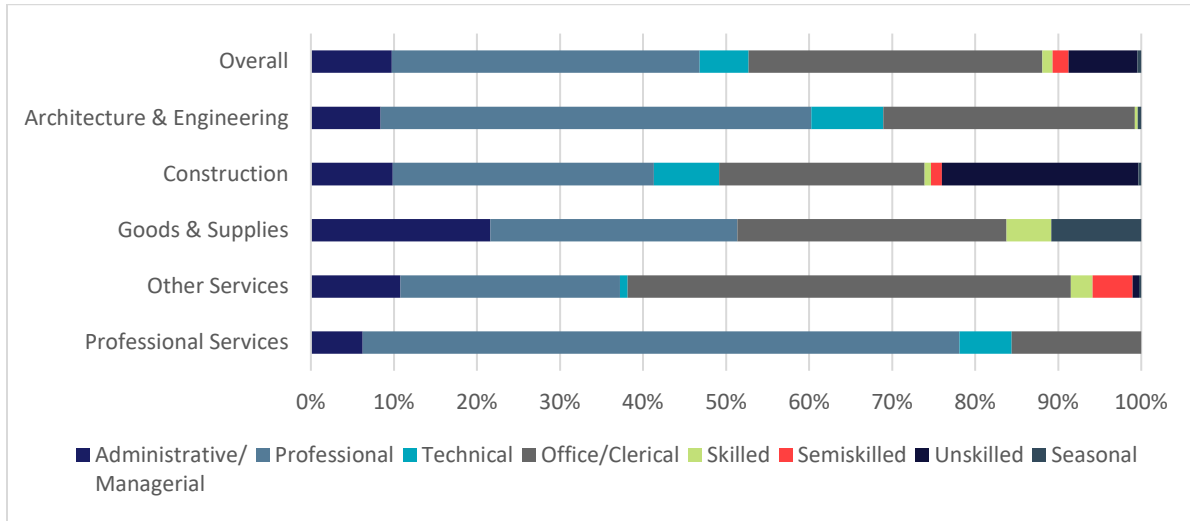


FIGURE K-7.
CITY OF DALLAS PRIME CONTRACTOR WORKFORCE
JOB CATEGORY BY BUSINESS CATEGORY
OTHER MEN

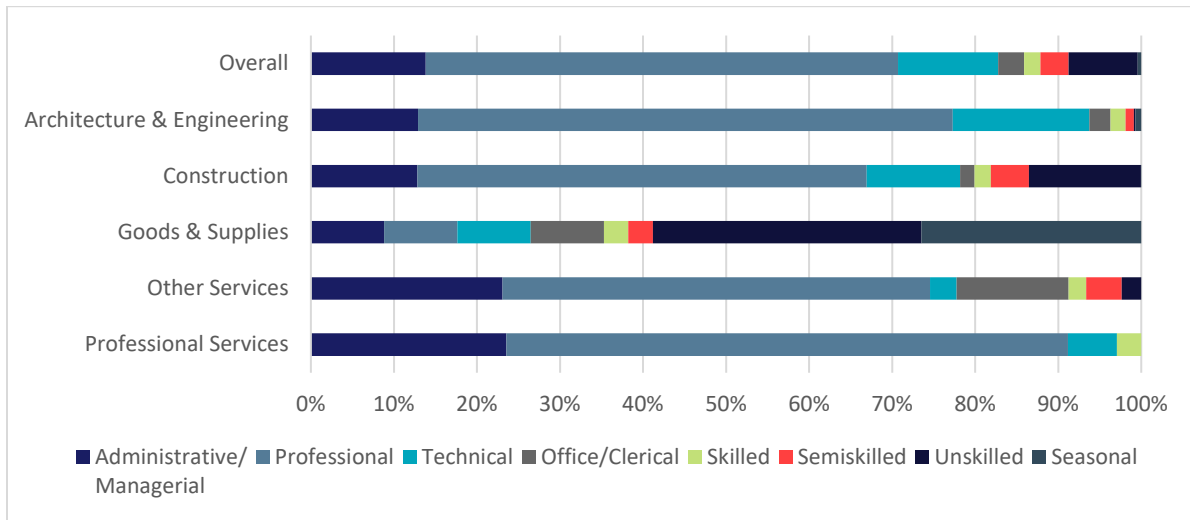
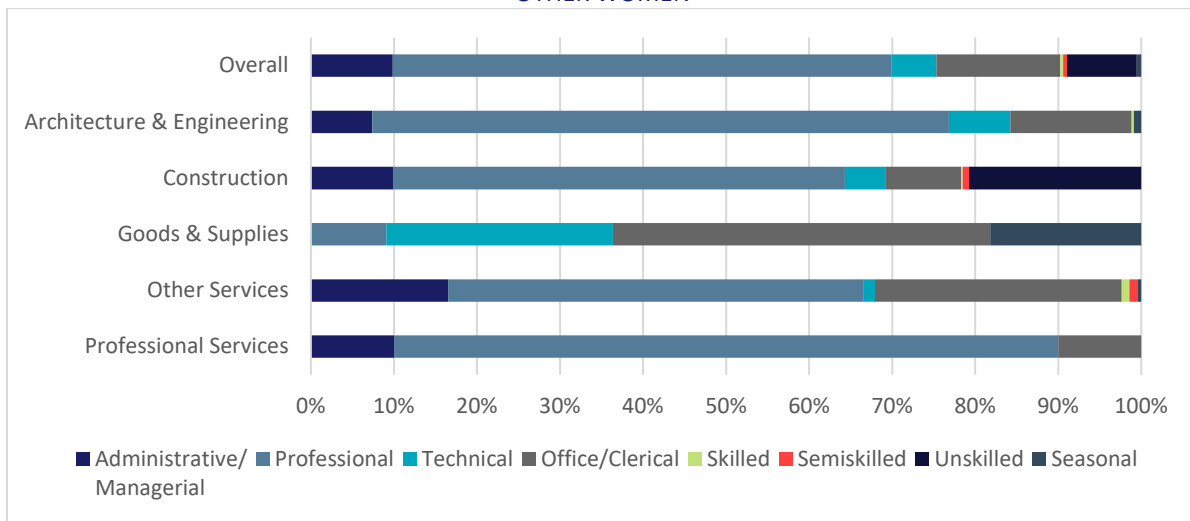


FIGURE K-8.
CITY OF DALLAS PRIME CONTRACTOR WORKFORCE
JOB CATEGORY BY BUSINESS CATEGORY
OTHER WOMEN



K.2 CITY'S PRIME CONTRACTOR WORKFORCE ETHNIC & GENDER COMPOSITION BY BUSINESS CATEGORY BY JOB CATEGORY

FIGURE K-9.
CITY OF DALLAS PRIME CONTRACTOR WORKFORCE
ETHNIC & GENDER COMPOSITION BY BUSINESS CATEGORY
ADMINISTRATIVE/MANAGERIAL

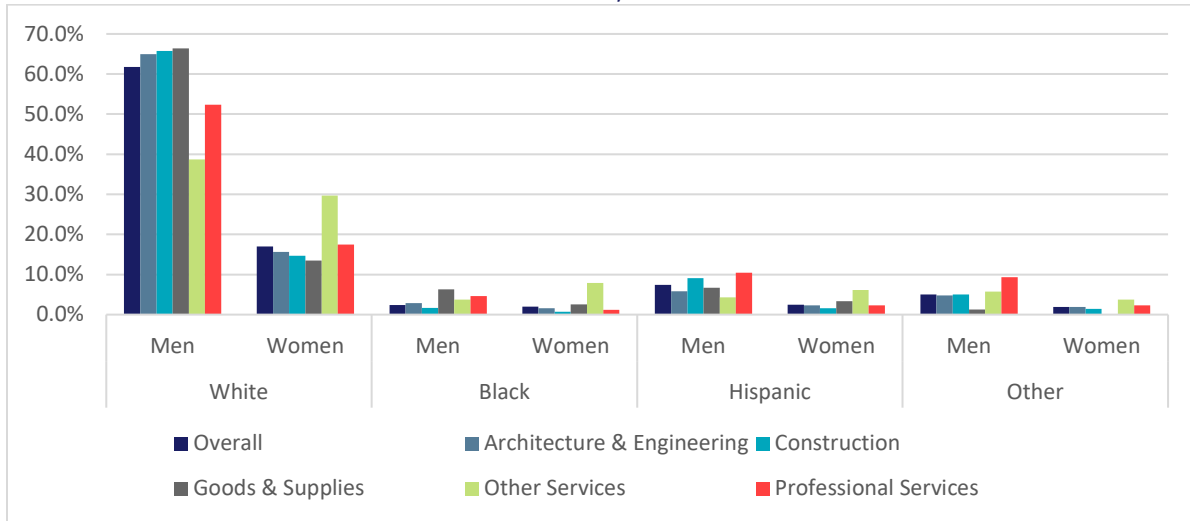


FIGURE K-10.
CITY OF DALLAS PRIME CONTRACTOR WORKFORCE
ETHNIC & GENDER COMPOSITION BY BUSINESS CATEGORY
PROFESSIONAL

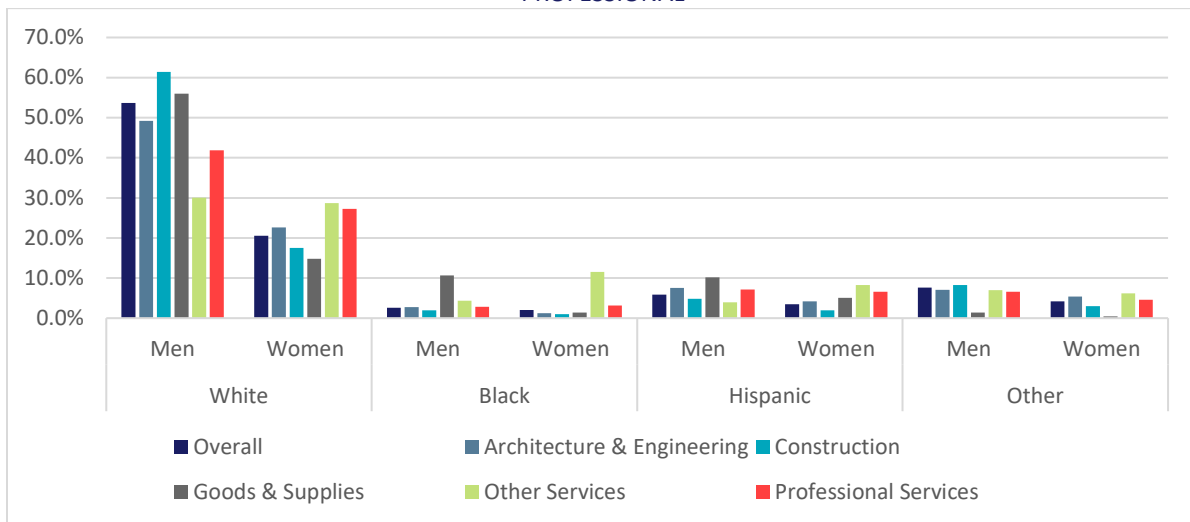


FIGURE K-11.
CITY OF DALLAS PRIME CONTRACTOR WORKFORCE
ETHNIC & GENDER COMPOSITION BY BUSINESS CATEGORY
TECHNICAL

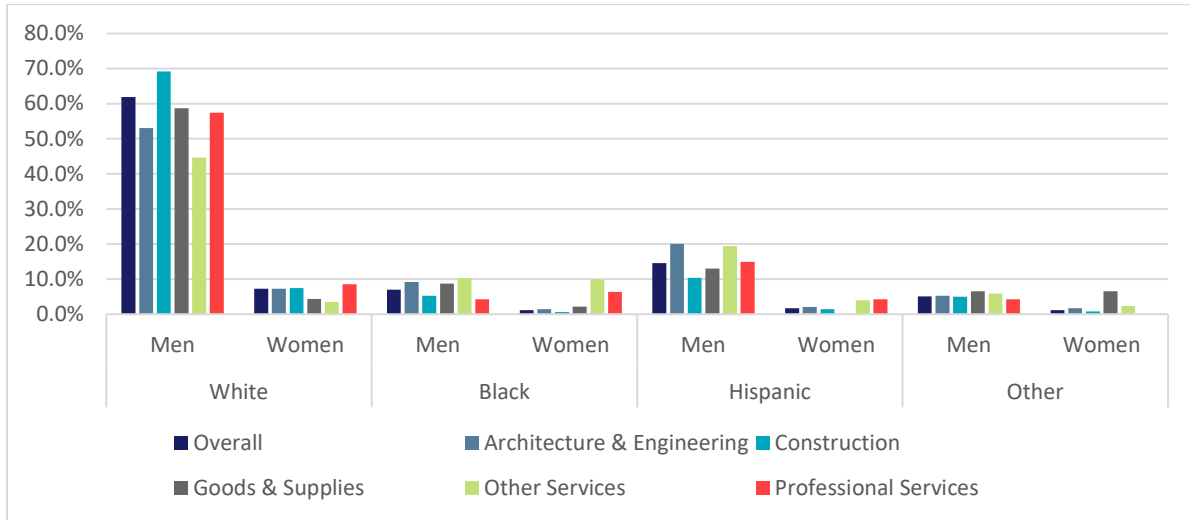


FIGURE K-12.
CITY OF DALLAS PRIME CONTRACTOR WORKFORCE
ETHNIC & GENDER COMPOSITION BY BUSINESS CATEGORY
OFFICE/CLERICAL

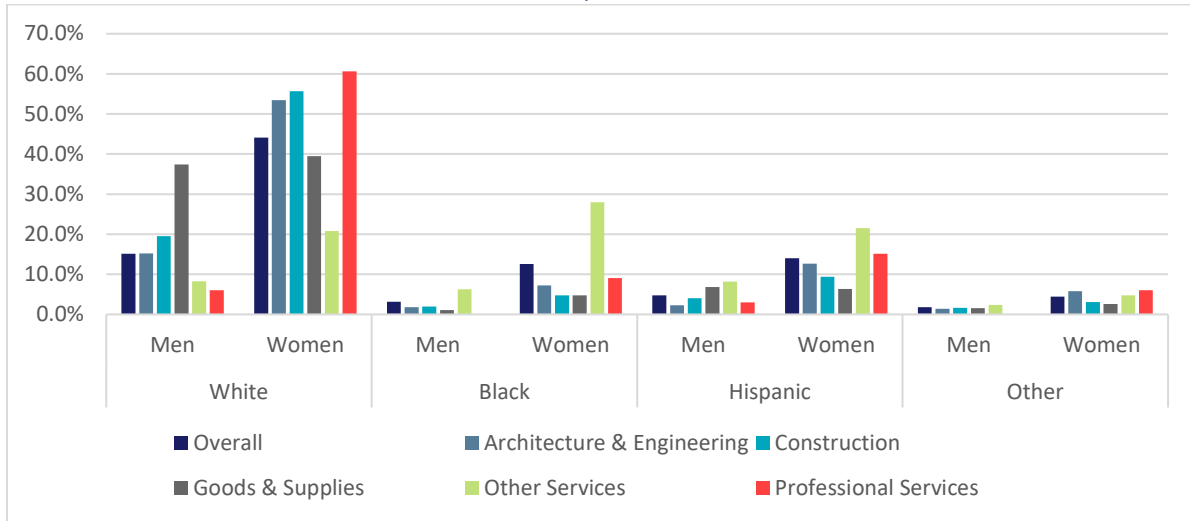


FIGURE K-13.
CITY OF DALLAS PRIME CONTRACTOR WORKFORCE
ETHNIC & GENDER COMPOSITION BY BUSINESS CATEGORY
SKILLED

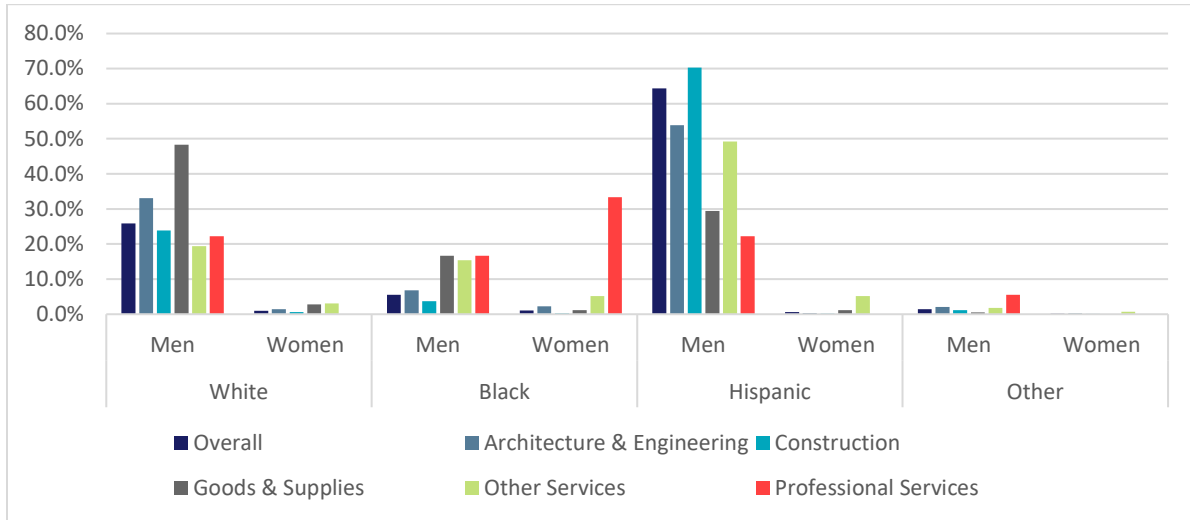


FIGURE K-14.
CITY OF DALLAS PRIME CONTRACTOR WORKFORCE
ETHNIC & GENDER COMPOSITION BY BUSINESS CATEGORY
SEMISKILLED

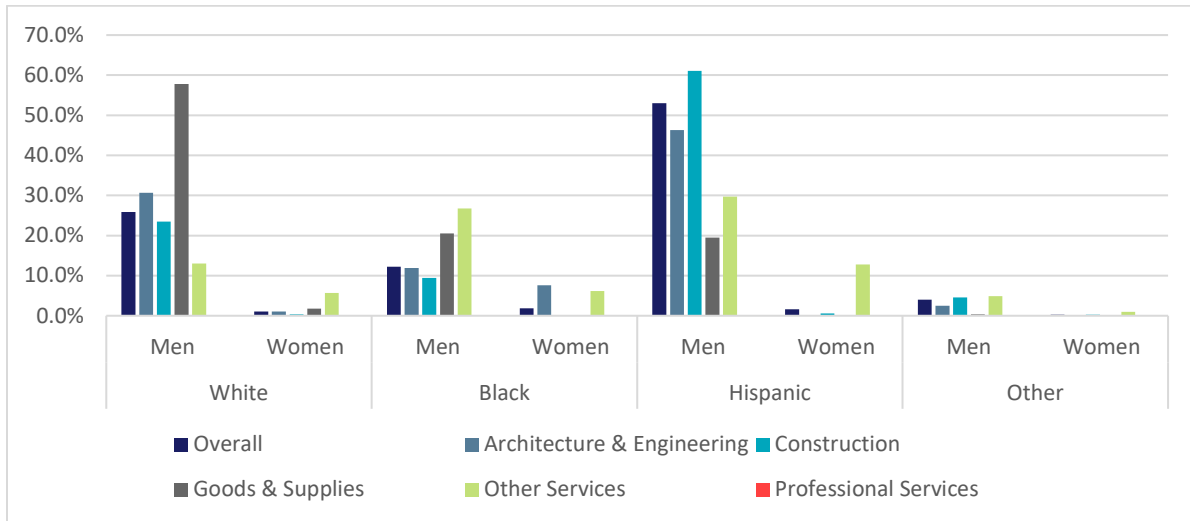


FIGURE K-15.
CITY OF DALLAS PRIME CONTRACTOR WORKFORCE
ETHNIC & GENDER COMPOSITION BY BUSINESS CATEGORY
UNSKILLED

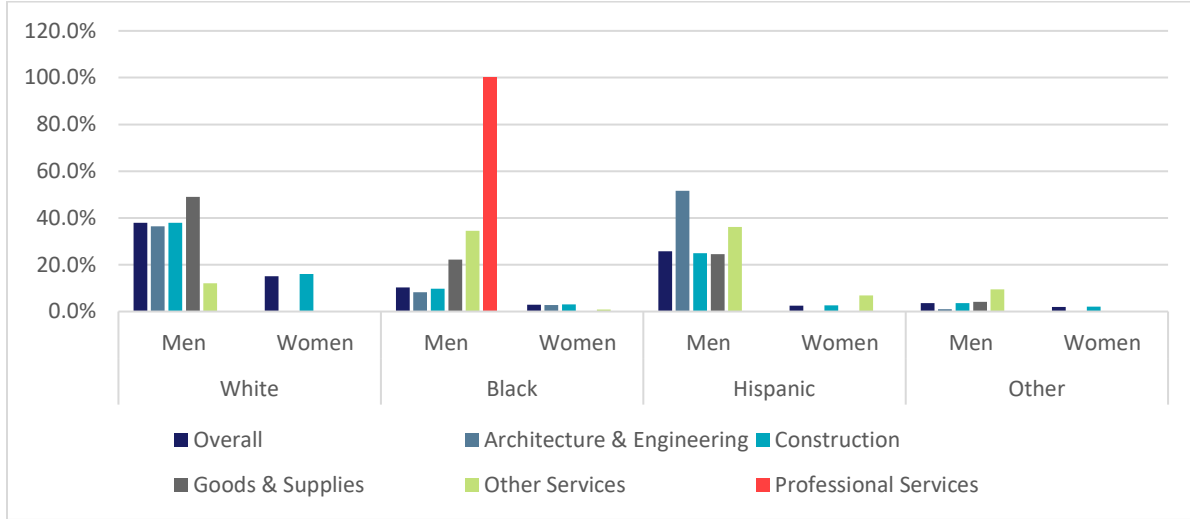


FIGURE K-16.
CITY OF DALLAS PRIME CONTRACTOR WORKFORCE
ETHNIC & GENDER COMPOSITION BY BUSINESS CATEGORY
SEASONAL

