

Minority- and Women-owned Business Enterprise (M/WBE) Program Disparity Study



San Antonio Water System

Final Report
October 26, 2015



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FINAL REPORT

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CHAPTER 1: INTRODUCTION

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CHAPTER SECTIONS

1. Background
2. Overview of Study Approach
3. Report Organization

MGT of America, Inc. is pleased to submit the **Minority- and Women-owned Business Enterprise (M/WBE) Program Disparity Study** to the **San Antonio Water System (SAWS)**. The MGT team that conducted the M/WBE Program Disparity Study for SAWS is the most experienced team in the disparity study business. Because of this experience, our team members know how to navigate the challenges, obstacles, and volatility, which can easily derail the most well-planned and executed study. The result is that

the SAWS M/WBE Program Disparity Study delivers on our commitment to provide a study that is accurate, valid, reliable, and legally defensible.

The team of experts that dedicated their time, attention, and expertise to this study include:

- ◆ Fred Seamon, Ph.D., Executive Vice President, MGT of America, Inc.
- ◆ Reggie Smith, Vice President and Project Director, MGT of America, Inc.
- ◆ J. Vincent Eagan, Ph.D., J.D., Technical Advisor, MGT of America, Inc.
- ◆ Vernetta Mitchell, Senior Consultant, MGT of America, Inc.
- ◆ Hope Smith, MBA, Senior Consultant, MGT of America, Inc.
- ◆ Mario Trevino, CEO, Innovative Strategies, MGT Subconsultant.
- ◆ Annaliese Oppenheim, CEO, Oppenheim Research, MGT Subconsultant.

I. BACKGROUND

In September 2013, the San Antonio Water System (SAWS) contracted with MGT of America, Inc., (MGT) to conduct an M/WBE Program Disparity Study (Disparity Study). This study is an update to the 2009 San Antonio Regional Business Disparity Causation Analysis Study, in which SAWS participated as a member of a consortium with other San Antonio public agencies. The 2009 disparity study reviewed procurement activity from 2002 through 2006. Since 2009, SAWS has collected board-award data on its M/WBE contract awards at the prime and subcontractor levels. In 2011, SAWS implemented the B2Gnow software application (also called the Subcontractor Payment & Utilization Reporting [S.P.U.R.] System) to capture actual payments made to prime contractors and their subcontractors. The current study reviewed procurement activity from January 1, 2011 through December 31, 2013. The purpose of the current study is to:

- ◆ Determine whether SAWS, either in the past or currently, engages in discriminatory practices in the solicitation and award of contracts in construction (heavy civil/utility), engineering, other professional services, and procurement, to minority- and women-owned business enterprises (M/WBEs).
- ◆ Determine if a legally justified need exists for the continuance of an M/WBE program in accordance with the guidelines set forth by the Supreme Court and relevant subsequent cases.

- ◆ Provide recommendations regarding suggested modifications to SAWS' S/M/WBE program, including the consideration of race- and gender-based programs based on the study's findings.

2. OVERVIEW OF STUDY APPROACH

MGT followed a carefully designed work plan that allowed study team members to fully analyze availability and utilization with regard to the utilization of M/WBEs in the procurement practices of SAWS for the study period of January 1, 2011 through December 31, 2013. The Disparity Study analyzed the contract categories, defined in **Chapter 3, Market Area and Utilization Analyses**, of:

- ◆ Heavy Civil/Utility Construction
- ◆ Engineering
- ◆ Other Professional Services
- ◆ Procurement

The Disparity Study analyzed contracting opportunities in these business categories in order to identify with particularity whether a statistical disparity exists from which the existence of past or present public or private discrimination may be inferred in the relevant market area. In conducting the SAWS' study, MGT used the following research questions to guide the methodologies. These research questions are embedded in relevant chapters throughout this report.

- ◆ Is there factual predicate evidence to support a race- and gender-conscious M/WBE program for SAWS?
- ◆ How does case law inform the research methodology in a particular region for a particular client?
- ◆ Are there disparities between the availability and utilization of M/WBEs? If there are disparities, what are the most relevant causal factors that contribute directly or indirectly to the disparities between the availability and utilization of M/WBEs?
- ◆ If there is statistical evidence of disparity, what is the cause of the disparity? Is there other evidence that supports and/or explains why there is disparity?
- ◆ Does SAWS passively engage in practices that result in disparities?
- ◆ Are there statistically significant disparities in the utilization of M/WBEs by prime contractors on projects where there are no M/WBE goals?
- ◆ Is there qualitative/anecdotal evidence of disparate treatment of M/WBE subcontractors by prime contractors?

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

- ◆ Establish data parameters and finalize the work plan.
- ◆ Review the legal framework for disparity studies.
- ◆ Review policies, procedures, and programs.
- ◆ Conduct market area and utilization analysis.
- ◆ Determine the availability of qualified firms.
- ◆ Analyze the utilization and availability of firms for disparity, if any.
- ◆ Analyze the utilization for firms in the private marketplace.
- ◆ Examine the effects of race, ethnicity, and gender on business formation.

- ◆ Conduct a survey of business owners.
- ◆ Collect and analyze anecdotal information.
- ◆ Prepare and present draft and final reports for the study.

3. REPORT ORGANIZATION

In addition to this introductory chapter, this report consists of:

- | | |
|-------------------|---|
| CHAPTER 2 | Presents a review of the legal framework for disparity studies. It includes an overview of controlling legal precedents that impact remedial procurement programs inclusive of Fifth Circuit decisions. |
| CHAPTER 3 | Presents the methodology used to determine the SAWS relevant market area and statistical analysis of vendor utilization by SAWS for procurement of contracting activities. |
| CHAPTER 4 | Provides a discussion of the availability of firms and the levels of disparity for vendors as well as a review of the multivariate analysis for SAWS. |
| CHAPTER 5 | Presents an analysis of anecdotal data collected from the survey of business owners, personal interviews, and public hearings. |
| CHAPTER 6 | Provides an analysis of the presence of disparity, if any, in the private sector and its effect on the ability of firms to win procurement contracts from SAWS. |
| CHAPTER 7 | A summary of the findings and recommendations based upon the analyses presented in the previous chapters. |
| APPENDICES | Additional analyses and documents used to conduct the study. |

MGT recommends reading the report in its entirety to understand the basis for the findings and conclusions presented in **Chapter 7, Findings and Recommendations**.

CHAPTER 2: LEGAL FRAMEWORK

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CHAPTER SECTIONS

1. Introduction
2. Standards of Review for Race-Specific and Gender-Specific Programs
3. To Withstand Strict Scrutiny, an M/WBE Program Must Be Based on Thorough Evidence Showing a Compelling Governmental Interest
4. Sufficiently Strong Evidence of Significant Statistical Disparities between Qualified Minorities Available and Minorities Utilized Will Satisfy Strict Scrutiny and Justify a Narrowly Tailored M/WBE Program
5. The Governmental Entity or Agency Enacting an M/WBE Program Must Be Shown to Have Actively or Passively Perpetuated the Discrimination
6. To Withstand Strict Scrutiny, an M/WBE Program Must Be Narrowly Tailored To Remedy Identified Discrimination
7. Small Business Procurement Preferences
8. Conclusion

I. INTRODUCTION

This chapter provides legal background for the study. The focus of the review is on relevant decisions from the U.S. Supreme Court and the Fifth Circuit Court of Appeals, which includes the San Antonio area. This chapter is the standard MGT chapter for the Fifth Circuit on this legal material, reviewed for recent cases. The material that follows does not constitute legal advice to San Antonio Water System (SAWS) on minority- and women-owned business enterprise (M/WBE) programs, affirmative action, or any other matter. Instead, it provides a context for the statistical and anecdotal analyses that appears in subsequent chapters of this report.

The Supreme Court decision in *City of Richmond v. J.A. Croson Company*¹ and later cases have established and applied the constitutional standards for an affirmative action program. This chapter identifies and analyzes those decisions, summarizing how courts evaluate the constitutionality of race-specific and gender-specific programs. Decisions of the Fifth Circuit, which includes the San Antonio area, offer the most directly binding authority, but where those decisions leave issues unsettled, the review considers decisions from other circuits.

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

- ♦ A remedial race-conscious program is subject to strict judicial scrutiny under the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution.
- Strict scrutiny has two basic components: a compelling governmental interest in the program and narrow tailoring of the program.
- To survive the strict scrutiny standard, a remedial race-conscious program must be based on a compelling governmental interest.

¹ 488 U.S. 469 (1989).

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

2. STANDARDS OF REVIEW FOR RACE-SPECIFIC AND GENDER-SPECIFIC PROGRAMS

RACE-SPECIFIC PROGRAMS: THE CROSON DECISION

Croson established the framework for testing the validity of programs based on racial discrimination. In 1983, the Richmond City Council (Virginia) adopted a Minority Business Utilization Plan (the Plan) following a public hearing in which seven citizens testified about historical societal discrimination. In adopting the Plan, the City Council also relied on a study indicating “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.”²

The evidence before the Council also established that a variety of state and local contractor associations had little or no minority business membership. The Council relied on statements by a Council member whose opinion was that “the general conduct of the construction industry in this area, the state, and around the nation, is one in which race discrimination and exclusion on the basis of race is widespread.”³ There was, however, no direct evidence of race discrimination on the part of the city in its contracting activities, and no evidence that the city’s prime contractors had discriminated against minority-owned subcontractors.⁴

² Id. at 479-80.

³ Id. at 480.

⁴ Id.

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

J.A. Croson Company, a non-MBE mechanical plumbing and heating contractor, filed a lawsuit against the city of Richmond (Virginia) alleging that the Plan was unconstitutional, because it violated the Equal Protection Clause of the Fourteenth Amendment. After a considerable record of litigation and appeals, the Fourth Circuit struck down the Richmond Plan and the Supreme Court affirmed this decision.⁵ The Supreme Court determined that strict scrutiny was the appropriate standard of judicial review for MBE programs, so a race-conscious program must be based on a compelling governmental interest and be narrowly tailored to achieve its objectives. This standard requires a firm evidentiary basis for concluding that the underutilization of minorities is a product of past discrimination.⁶

GENDER-SPECIFIC PROGRAMS

The Supreme Court has not addressed the specific issue of a gender-based classification in the context of a woman-owned business enterprise (WBE) program. *Croson* was limited to the review of an MBE program. In evaluating gender-based classifications, the Court has used what some call “intermediate scrutiny,” a less stringent standard of review than the “strict scrutiny” applied to race-based classifications. Intermediate scrutiny requires classifying persons on the basis of gender “must carry the burden of showing an exceedingly persuasive justification for the classification.”⁷ The classification meets this burden “only by showing at least that the classification serves important governmental objectives and that the discriminatory means employed are substantially related to the achievement of those objectives.”⁸

Several federal courts have applied intermediate scrutiny to WBE programs and yet have found the programs to be unconstitutional.⁹ Nevertheless, in *Coral Construction v. King County*, the Ninth Circuit upheld a WBE program under the intermediate scrutiny standard.¹⁰ Even using intermediate scrutiny, the court in *Coral Construction* noted some degree of discrimination must be demonstrated in a particular industry before a gender-specific remedy may be instituted in that industry. As the court stated, “The mere recitation of a benign, compensatory purpose will not automatically shield a gender-specific

⁵ Id. at 511.

⁶ Id. at 493.

⁷ *Mississippi University for Women v. Hogan*, 458 U.S. 718, 724 (1982) (quoting *Kirchberg v. Feenstra*, 450 U.S. 455, 461 (1981)); see also *United States v. Virginia*, 518 U.S. 515, 531 (1996), *Nguyen v. U.S.*, 533 U.S. 53, 60 (2001).

⁸ *Mississippi University for Women*, *supra*, at 724 (quoting *Wengler v. Druggists Mutual Insurance Company*, 446 U.S. 142, 150 (1980)); see also *Virginia*, *supra*, at 533, *Nguyen*, *supra*, at 60.

⁹ See, e.g., *AUC v. Baltimore*, 83 F.Supp.2d 613 (D. Md. 2000); *Engineering Contractors Association of South Florida, Inc. v. Dade County*, 122 F.3d 895 (11th Cir. 1997); *Builders Association of Greater Chicago v. County of Cook*, 256 F.3d 642 (7th Cir. 2001). The Fifth Circuit did not address the application of intermediate scrutiny to WBE participation in *Scott v. City of Jackson*, 199 F.3d 206, 215 n.9 (5th Cir. 1999).

¹⁰ *Coral Construction v. King County*, 941 F.2d 910 (9th Cir. 1991), cert. denied, 502 U.S. 1033 (1992).

program from constitutional scrutiny.”¹¹ Indeed, one court has questioned the concept that it might be easier to establish a WBE program than it is to establish an MBE program.¹²

More recently, the Tenth Circuit, on the second appeal in *Concrete Works of Colorado v. City and County of Denver (Concrete Works IV)*,¹³ approved the constitutionality of a WBE program based on evidence comparable to supporting an MBE program which the court also upheld in the same decision. Unlike *Coral Construction*, however, *Concrete Works IV* offered no independent guidance on the level of evidence required to support a WBE program.

AN OVERVIEW OF THE APPLICABLE CASE LAW

Croson did not find a compelling justification for a complete MBE program, and more recent decisions of the Fifth Circuit have not had to address the question squarely. *Croson* found the city of Richmond’s evidence to be inadequate as a matter of law. Nevertheless, more recent cases in other federal circuits have addressed applications of the law which were not considered in *Croson*. Thus, it becomes necessary to look to the decisions of other federal circuits to predict the level of evidence that might be required to establish an affirmative action program.

The discussion in this review will also attend closely to the most relevant decisions in the area of government contracting. Justice O’Connor, distinguishing her majority opinion on affirmative action in law school admissions from her opinions in government contracting cases, wrote:

*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 decisionmaker for the use of race in that particular context.*¹⁴

Further, some caution must be exercised in relying upon opinions of the federal district courts, which make both findings of fact and holdings of law. As to holdings of law, the district courts are ultimately subject to rulings by their circuit courts. As to matters of fact, their decisions depend heavily on the precise record before them, in these cases frequently including matters such as evaluations of the credibility and expertise of witnesses. Such findings are not binding precedents outside their districts, even if they may indicate the kind of evidence and arguments that might succeed elsewhere.

Finally, the ways in which municipalities participate in national disadvantaged business enterprise (DBE) programs is a specialized issue distinct from supporting municipal programs, even if the same kinds of evidence and same levels of review apply. In *Adarand Constructors, Inc. v. Peña*,¹⁵ the Supreme Court did decide that federal DBE programs should be examined by the same strict scrutiny standard as *Croson* mandated for state and local programs. Nevertheless, cases considering national DBE programs have many important distinctions from cases considering municipal programs, particularly when it comes to

¹¹ Id. at 932.

¹² *Builders Association of Greater Chicago*, 256 F.3d at 644. See also *Western State Paving v. Washington DOT*, 407 F.3d 983, 991, n.6 (9th Cir. 2005) (rejecting need for separate analysis of WBE program under intermediate scrutiny).

¹³ 321 F.3d 950 (10th Cir. 2003).

¹⁴ *Grutter v. Bollinger*, 539 U.S. 306, 327 (2003).

¹⁵ *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995).

finding a compelling governmental interest.¹⁶ The national DBE cases have somewhat more relevance in assessing whether particular features of a local program are narrowly tailored, as discussed in **Section 6** below.¹⁷

Thus, the majority of this review will be based on decisions of the federal circuit courts applying *Croson* to city or county programs designed to increase participation by M/WBEs in government contracting, which is not a large body of case law. While other cases are useful as to particular points, only a handful of circuit court cases have reviewed strictly local M/WBE programs and given clear, specific, and binding guidance about the adequacy of a complete factual record including thorough, local disparity studies with at least some statistical analysis. Further, in one of the three directly applicable circuit court cases, the Third Circuit evaded the issue of compelling justification after lengthy discussion, holding the Philadelphia M/WBE program was unconstitutional because it was not narrowly tailored.¹⁸

Ultimately, only two circuit court decisions since *Croson* have passed definitively on thorough, strictly local disparity studies: *Engineering Contractors Association of South Florida, Inc.*,¹⁹ and *Concrete Works IV*.²⁰ In *Engineering Contractors*, the Eleventh Circuit ultimately upheld the district court finding that Dade County's disparity studies were not adequate to support an M/WBE program, at least in the face of rebuttal evidence.²¹ By contrast, in *Concrete Works IV*, the Tenth Circuit, after holding the district court had used an improper standard for weighing the evidence, went on to evaluate the evidence and determine it was adequate as a matter of law to establish a compelling justification for Denver's program. The Supreme Court refused to hear the appeal in *Concrete Works IV*,²² although the refusal in itself has no precedential effect. The dissent to that denial, written by Justice Scalia with the Chief Justice joining, argues these cases may mark a split in approach among the circuits, which will need to be reconciled.

3. TO WITHSTAND STRICT SCRUTINY, AN M/WBE PROGRAM MUST BE BASED ON THOROUGH EVIDENCE SHOWING A COMPELLING GOVERNMENTAL INTEREST

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

¹⁶ See, e.g., *Adarand v. Slater*, 228 F.3d 1147 (10th Cir. 2000), cert. granted in part sub nom. *Adarand Constructors, Inc. v. Mineta*, 532 U.S. 941 (2001); cert. dismissed as improvidently granted, 534 U.S. 103 (2001); *Sherbrooke Turf v. Minnesota Department of Transportation*, 345 F.3d 963 (8th Cir. 2003).

¹⁷ Recently the Ninth Circuit ruled in *Western States Paving v. Washington DOT* that specific evidence of discrimination was necessary at a state level in order for the implementation of race-conscious goals to be narrowly tailored. *Western State Paving v. Washington DOT*, 407 F.3d 983 (9th Cir. 2005). In *Northern Contracting v. Illinois DOT*, the district court, while not striking down the program, also required the Illinois DOT to develop local evidence of discrimination sufficient to justify the imposition of race-conscious goals. In this sense, for these cases narrow tailoring still requires factual predicate information to support race-conscious program elements in a DBE program. *Northern Contracting v. Illinois DOT*, No. 00 4515 (ND IL 2004).

¹⁸ *Contractors Association of Eastern Pennsylvania v. City of Philadelphia*, 91 F.3d 586, 605 (3rd Cir. 1996).

¹⁹ 122 F.3d 895.

²⁰ 321 F.3d 950.

²¹ Compare *Cone Corporation v. Hillsborough County*, 908 F.2d 908 (11th Cir. 1990), an earlier decision of the Eleventh Circuit 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.

²² *Concrete Works v. City and County of Denver*, Scalia, J. dissenting, 124 S.Ct. 556, 557-60 (2003).

a more real world education experience.²³ More recently, in *Petit v. Chicago*, the Seventh Circuit relied on *Grutter v. Bollinger* in stating urban police departments had “an even more compelling need for diversity” than universities and upheld the Chicago program “under the *Grutter* standards.”²⁴

The recent holding that other compelling interests may support affirmative action does not yet appear to have any application to public contracting.²⁵ The Fifth Circuit in *Scott v. City of Jackson* did not consider any other compelling interests for the DBE program outside of remedying discrimination.²⁶

Croson identified two necessary factors for establishing racial discrimination sufficiently to demonstrate a compelling governmental interest in establishing an M/WBE program. First, there needs to be identified discrimination in the relevant market.²⁷ Second, “the governmental actor enacting the set-aside program must have somehow perpetuated the discrimination to be remedied by the program,”²⁸ either actively or at least passively with “the infusion of tax dollars into a discriminatory industry.”²⁹

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

POST-ENACTMENT EVIDENCE

The Supreme Court in *Croson* found pre-enactment evidence of discrimination insufficient to justify the program. The defendant in *Croson* did not seek to defend its program based on post-enactment evidence. However, following *Croson*, a number of circuits did defend the use of post-enactment evidence to support the establishment of a local public affirmative action program.³⁰ Some cases required both pre-enactment and post-enactment evidence.³¹

The Supreme Court case of *Shaw v. Hunt*³² raised anew the issue of post-enactment evidence in defending local public sector affirmative action programs. *Shaw* involved the use of racial factors in drawing voting districts in North Carolina. In *Shaw*, the Supreme Court rejected the use of reports providing evidence of discrimination in North Carolina, because the reports were not developed before the voting districts were designed. Thus, the critical issue was whether the legislative body believed discrimination had existed before the districts were drafted.³³ Following the *Shaw* decision, two districts courts rejected the use of

²³ *Hunter v. Regents of University of California*, 190 F.3d 1061 (9th Cir. 1999).

²⁴ *Petit v. Chicago*, 352 F.3d 1111 (7th Cir. 2003).

²⁵ *Grutter v. Bollinger*, 539 U.S. 306 (2003). For an argument that other bases could serve as a compelling interest in public contracting, see Michael K. Fridkin, “The Permissibility of Non-Remedial Justifications for Racial Preferences in Public Contracting,” 24 *N. Ill. U. L. Rev.* 509 (Summer 2004).

²⁶ *Scott v. City of Jackson*, 199 F.3d 206 (5th Cir. 1999).

²⁷ *Croson*, 488 U.S. at 492, 509-10.

²⁸ *Coral Construction*, 941 F.2d at 918.

²⁹ *Id.* at 922.

³⁰ See, e.g., *Engineering Contractors v. Dade County*, 122 F.3d 895 (11th Cir. 1997); *Contractors Association v. Philadelphia*, 6 F.3d 990, 1009 n. 18 (3rd Cir. 1993); *Concrete Works v. City and County of Denver*, 36 F.3d 1513 (10th Cir. 1994).

³¹ See, e.g., *Coral Construction v. King County*, 941 F.2d 910, 920 (9th Cir. 1991).

³² *Shaw v. Hunt*, 517 U.S. 899 (1996).

³³ *Id.* at 910.

post-enactment evidence in the evaluation of the compelling interest for local minority business programs.³⁴

STALENESS OF DATA AND TIME PERIOD OF STUDY

A few cases have addressed the issue of how much and how current data must be to satisfy strict scrutiny and how much data must be reviewed to satisfy strict scrutiny. There is no clear guidance from the district courts about how many years should be studied, although there have been cautionary language in cases about relying on small samples of data.³⁵ With regard to the age of data the recent federal appeals court decision of *Rothe* ruled relying on disparity studies that presented data as recent as 2003 was not stale with regard to reenacting a federal program in 2006. Whereas agencies should rely on the most current available data, other circuit courts had “relied on studies containing data more than five years old when conducting compelling interest analyses.”³⁶

AGENCY EVIDENCE

An agency contemplating an M/WBE program should have evidence expressly and specifically linked to the agency itself. The Fifth Circuit criticized the city of Jackson for commissioning a disparity study, but not adopting the findings of the study.³⁷ A district court in New Jersey struck down a set-aside involving New Jersey casino licenses based on the factual predicate study for the State of New Jersey M/WBE program, which did not cover the casino industry.³⁸

RACIAL CLASSIFICATIONS SUBJECT TO STRICT SCRUTINY

In *Scott v. Jackson* the city argued its disadvantaged business program was not a racial classification subject to strict scrutiny because (1) it was based upon disadvantage, not race, and (2) it was a goals program and not a quota. The Fifth Circuit disagreed with the claim that the Jackson program was not a racial classification, because the city used the federal Section 8(d), which grants a rebuttable presumption of social and economic disadvantage to firms owned by minorities.³⁹ Such a presumption is subject to strict scrutiny. The Fifth Circuit also noted strict scrutiny applied not simply when race conscious measures were required, but also when such measures were authorized or encouraged.⁴⁰

OUTREACH PROGRAMS AND STRICT SCRUTINY

There has been some difference amongst the circuit courts as to whether strict scrutiny applies to outreach programs. In *Safeco v. City of White House*, the Sixth Circuit stated “[o]utreach efforts may or may not require strict scrutiny”⁴¹ However, the Eleventh Circuit in *Virdi v. DeKalb County School District* in the course of discussing a school district MWBE program stated, “strict scrutiny applies to all racial

³⁴ *AUC v. Baltimore*, 83 F.Supp.2d 613, 620-22 (D.Md. 2000); *West Tenn. ABC v. Memphis City Schools*, 64 F.Supp.2d 714, 718-21 (W.D. Tenn. 1999). See also *Rothe v. US DOD*, 262 F.3d 1306 (Fed Cir 2001) (district court improperly relied on post-authorization evidence). Nevertheless, post-enactment evidence may be relevant to assessment the narrow tailoring prong of strict scrutiny.

³⁵ See, e.g., *AGC v. Columbus*, 936 F.Supp 1363, 1393 (SD Ohio 1996) (rev’d on other grounds).

³⁶ *Rothe*, at 25 (citing district court discussion of staleness in *Western States Paving and Sherbrooke Turf*).

³⁷ *Scott v. City of Jackson*, 199 F.3d 206, 218 (5th Cir. 1999).

³⁸ *Assn for Fairness in Business v. New Jersey*, 82 F.Supp. 2d 353, 361 (D NJ 2000).

³⁹ *Scott v. City of Jackson*, 199 F.3d 206, 216-17 (5th 1999).

⁴⁰ *Id.* at 215 (quoting *Bras v. California Public Utilities Commission*, 59 F.3d 869, 875 (9th Cir. 1995)).

⁴¹ *Safeco Ins. Co. of America v. City of White House*, 191 F.3d 675, 692 (6th Cir. 1999) (citing *Allen v. Alabama State Bd. Of Education*, 164 F.3d 1347 (11th Cir.1999)).

classifications, not just those creating binding racial preferences.”⁴² The Fifth Circuit also made clear in *Scott v. Jackson* that both goals and quotas grant a preference-based on race.⁴³

Nevertheless, in a ruling on summary judgment in *HCA v. Houston Metro* the Fifth Circuit did appear to draw a distinction between an “outreach program ... [for which] all that is required of the contractors is that they contact DBEs and give them an opportunity to bid as subcontractors on the project,” and a “coercive quota.”⁴⁴ The plaintiff had argued that the Houston Metro DBE program was a “coercive quota” and not a goals program because there were serious repercussions for prime contractors if the DBE goals were not satisfied. The Fifth Circuit vacated the district court ruling on the interpretation of Houston Metro’s program as a coercive quota disguised as a goals program (albeit supported by a disparity study criticized by the district court), rather than an outreach program. The implication being there is a difference in material fact between an outreach program supported by a disparity study and a coercive quota based on the same disparity study. Both an outreach program and a coercive quota are subject to strict scrutiny and require a factual predicate, but they do differ with regard to narrow tailoring.

4. SUFFICIENTLY STRONG EVIDENCE OF SIGNIFICANT STATISTICAL DISPARITIES BETWEEN QUALIFIED MINORITIES AVAILABLE AND MINORITIES UTILIZED WILL SATISFY STRICT SCRUTINY AND JUSTIFY A NARROWLY TAILORED M/WBE PROGRAM

The Supreme Court in *Croson* stated “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.”⁴⁵ But the statistics must go well beyond comparing the rate of minority presence in the general population to the rate of prime construction contracts awarded to MBEs. The Court in *Croson* objected to such a comparison, indicating that the proper statistical evaluation would compare the percentage of qualified MBEs in the relevant market with the percentage of total municipal construction dollars awarded to them.⁴⁶

To meet this more precise requirement, courts have accepted the use of a disparity index.⁴⁷ The Supreme Court in *Croson* recognized statistical measures of disparity that compared the number of qualified and available M/WBEs with the rate of municipal construction dollars actually awarded to M/WBEs in order to demonstrate discrimination in a local construction industry.⁴⁸ The Fifth Circuit noted “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.”⁴⁹ At the same time, the Fifth Circuit denied it was attempting to “craft a precise mathematical formula to assess the quantum of evidence that rises to the *Croson* ‘strong basis in evidence’ benchmark.”⁵⁰

⁴² *Virdi v. DeKalb County School District*, 135 Fed. Appx. 262, 267 (11th Cir 2005).

⁴³ *Scott v. Jackson*, 199 F. 3d 206, 215 (5th Cir 1999).

⁴⁴ *Houston Contractors Assn v. Houston Metro*, 1999 U.S. App. LEXIS 15100 (5th Cir 1999).

⁴⁵ *Croson*, 488 U.S. at 501, quoting *Hazelwood School Division v. United States*, 433 U.S. 299, 307-308 (1977).

⁴⁶ *Id.* at 501.

⁴⁷ See, e.g., *Engineering Contractors Association of South Florida, Inc.*, 122 F.3d at 914; *Concrete Works IV*, 321 F.3d at 964-69.

⁴⁸ *Croson*, 488 U.S. at 503-504.

⁴⁹ *Scott v. City of Jackson*, 199 F.3d 206, 218 (5th Cir. 1999).

⁵⁰ *Id.* at 218, fn. 11.

DETERMINING AVAILABILITY

To perform proper disparity analysis, the government must determine “availability”—the number of qualified minority contractors willing and able to perform a particular service for the municipality. In *Croson*, the Court stated, “Where there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality’s prime contractors, an inference of discriminatory exclusion could arise.”⁵¹

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.⁵² Following *Croson*’s statements on availability, lower courts have considered how legislative bodies may determine the precise scope of the injury sought to be remedied by an MBE program. Nevertheless, the federal courts have not provided clear guidance on the best data sources or techniques for measuring M/WBE availability.

In *Scott v. City of Jackson* the Fifth Circuit criticized the city of Jackson for relying on 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.”⁵³

Different forms of data used to measure availability give rise to particular controversies. Census data have the benefit of being accessible, comprehensive, and objective in measuring availability. In *Contractors Association of Eastern Pennsylvania, Inc.*, the Third Circuit, while noting some of the limitations of census data, acknowledged that such data could be of some value in disparity studies. In that case, the city of Philadelphia’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 these data with data from the Census Bureau on the number of construction firms in the Philadelphia Standard Metropolitan Statistical Area.⁵⁴ Despite the district court’s reservations about mixing data sources, the Third Circuit appeared to have been prepared to accept such data had it ruled on the showing of a compelling interest.

At least one commentator has suggested using bidder data to measure M/WBE availability,⁵⁵ but *Croson* does not require the use of bidder data to determine availability. In *Concrete Works*, in the context of plaintiffs’ complaint that the city of Denver had not used such information, the Tenth Circuit noted bid information also has its limits. Firms that bid may not be qualified or able, and firms that do not bid may be qualified and able, to undertake agency contracts.⁵⁶

RACIAL CLASSIFICATIONS

In determining availability, choosing the appropriate racial groups to consider becomes an important threshold interest.⁵⁷ In *Croson*, the Supreme Court criticized the city of Richmond’s inclusion of “Spanish-

⁵¹ *Croson*, 488 U.S. at 509 (emphasis added).

⁵² *Id.*, 488 U.S. at 498.

⁵³ *Scott v. City of Jackson*, 199 F.3d 206, 218 (5th Cir. 1999).

⁵⁴ *Contractors Association of Eastern Pennsylvania, Inc.*, 91 F.3d at 604.

⁵⁵ G. LaNoe, “Who Counts? Determining the Availability of Minority Businesses for Contracting After *Croson*,” 21 *Harvard Journal of Law and Public Policy* 793, 833 (1998).

⁵⁶ *Concrete Works II*, 36 F.3d at 89-90; *Concrete Works IV*, 321 F.3d at 983-84.

⁵⁷ Racial groups, as the term is used herein, include both racial and ethnic categories.

speaking, Oriental, Indian, Eskimo, or Aleut persons” in its affirmative action program.⁵⁸ 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.”⁵⁹ To evaluate availability properly, data must be gathered for each racial group in the marketplace. The Federal Circuit has also required evidence as to the inclusion of particular groups be kept reasonably current.⁶⁰

RELEVANT MARKET AREA

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

The Supreme Court has not yet established how the relevant market area should be defined, but some circuit courts have done so, including the Tenth Circuit in *Concrete Works II*, the first appeal in the city of Denver litigation.⁶¹ *Concrete Works of Colorado*, a non-M/WBE construction company, argued that *Crososn* precluded consideration of discrimination evidence from the six-county Denver Metropolitan Statistical Area (MSA), so Denver should use data only from within the city and county of Denver. The Tenth Circuit, interpreting *Crososn*, concluded, “The relevant area in which to measure discrimination . . . is the local construction market, but that is not necessarily confined by jurisdictional boundaries.”⁶² The court further stated, “It 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.”⁶³

The Tenth Circuit ruled since more than 80 percent of Denver Department of Public Works construction and design contracts were awarded to firms located within the Denver MSA, the appropriate market area should be the Denver MSA, not the city and county of Denver alone.⁶⁴ Accordingly, data from the Denver MSA were “adequately particularized for strict scrutiny purposes.”⁶⁵

FIRM QUALIFICATIONS

Another availability consideration is whether M/WBE firms are qualified to perform the required services. In *Crososn*, the Supreme Court noted 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.”⁶⁶ The Court, however, did not define the test for determining whether a firm is qualified.

⁵⁸ *Id.*, 488 U.S. at 506.

⁵⁹ *Id.*

⁶⁰ *Rothe Development Corporation v. United States Department of Defense*, 262 F.3d 1306, 1323 (Fed. Cir. 2001).

⁶¹ *Concrete Works IV*, 36 F.3d at 1520.

⁶² *Id.*

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ *Crososn*, 488 U.S. at 501, quoting *Hazelwood School District v. United States*, 433 U.S. 299, 308, n.13 (1977).

Considering firm qualifications is important not only to assess whether M/WBEs in the relevant market area can provide the goods and services required, but also to ensure proper comparison between the number of qualified M/WBEs and the total number of similarly qualified contractors in the marketplace.⁶⁷ In short, proper comparisons ensure the required integrity and specificity of the statistical analysis. For instance, the Fifth Circuit has specifically ruled that the government must examine prime contractors and subcontractors separately when the M/WBE program is aimed primarily at one or the other.⁶⁸

WILLINGNESS

Croson requires an “available” firm must be not only qualified, but also willing to provide the required services. In this context, it can be difficult to determine whether a business is willing. Courts have approved including businesses in the availability pool that may not be on the government’s certification list. In *Concrete Works II*, Denver’s availability analysis indicated while most MBEs and WBEs had never participated in city contracts, “almost all firms contacted indicated that they were interested in municipal work.”⁶⁹ In *Contractors Association of Eastern Pennsylvania, Inc.*, the Third Circuit explained, “In the absence of some reason to believe otherwise, one can normally assume that participants in a market with the ability to undertake gainful work will be ‘willing’ to undertake it.”⁷⁰ 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 African American firms may be discouraged from applying, and the low numbers [of African American firms seeking to prequalify for City-funded contracts] may tend to corroborate the existence of discrimination rather than belie it.*⁷¹

Even so, the strongest possible disparity study would also present information about the willingness of M/WBEs to perform the required services.

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.

The Eleventh Circuit accepted a series of arguments that firm size has a strong impact on “ability” to enter contracts, that M/WBE firms tend to be smaller, and that this smaller size, not discrimination, explains the resulting disparity.⁷² This emphasis of factoring in business capacity was reinforced in a recent case, *Rothe Development Corp v. Department of Defense*, in front of the Federal Circuit involving the Federal 1207 small, disadvantaged business (SDB) program. The *Rothe* decision criticized elements of factual predicate studies used to support the 1207 program, which did not factor the size and capacity of firms in evaluating disparity.⁷³

⁶⁷ See *Hazelwood School District*, 433 U.S. at 308; *Contractors Association*, 91 F.3d at 603.

⁶⁸ *W.H. Scott Construction Co. v. City of Jackson*, 199 F.3d 206, 218 (5th Cir. 1999).

⁶⁹ *Concrete Works II*, 36 F.3d at 1529.

⁷⁰ *Contractors Association of Eastern Pennsylvania, Inc.*, 91 F.3d at 603.

⁷¹ *Id.* at 603-04.

⁷² *Engineering Contractors of South Florida, Inc.* at 917-18, 924.

⁷³ *Rothe Development Corp v. Department of Defense*, 2008-1017 (Fed Cir 2008), at 34.

By contrast, the Tenth Circuit in *Concrete Works II* and *IV* recognized the shortcomings of this treatment of firm size.⁷⁴ In *Concrete Works IV* the court noted the small size of such firms can itself be a result of discrimination.⁷⁵ The Tenth Circuit acknowledged the city of Denver’s argument that a small construction firm’s precise capacity can be highly elastic.⁷⁶ Under this view, the relevance of firm size may be somewhat diminished. Further, the Eleventh Circuit was dealing with a statute, which itself limited remedies to M/WBEs that were smaller firms by definition.⁷⁷

STATISTICAL EVIDENCE OF DISCRIMINATION IN DISPARITY STUDIES

While courts have indicated 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.⁷⁸

The Eighth Circuit has stated “numbers must be *statistically significant* before one can properly conclude that any apparent racial disparity results from some factor other than random chance.”⁷⁹ 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.⁸⁰ 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.⁸¹ According to the Eleventh Circuit, no circuit 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.”⁸²

In support of the use of standard deviation analyses to test the statistical significance of disparity indices, the Eleventh Circuit observed “social 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 other factor than chance.”⁸³ 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.⁸⁴ The Third and Fifth Circuits have

⁷⁴ *Concrete Works II*, 36 F.3d at 1528-29; *Concrete Works IV*, 321 F.3d at 980-92.

⁷⁵ *Concrete Works IV*, 321 F.3d at 980-84.

⁷⁶ *Id.* at 981

⁷⁷ *Engineering Contractors Association of South Florida, Inc.*, 122 F.3d at 917.

⁷⁸ *Contractors Association of Eastern Pennsylvania, Inc.*, 91 F.3d at 599-601.

⁷⁹ *Kohlbeck v. Omaha*, 447 F.3d 552, 557 (8th Cir. 2006) (quoting *Aiken v. Memphis*, 37 F.3d 1155 (6th Cir. 1994)).

⁸⁰ *Engineering Contractors Association of South Florida, Inc.*, 122 F.3d at 914.

⁸¹ *Id.* at 914 (citing 29 C.F.R. § 1607.4D concerning the disparate impact guidelines and threshold used in employment cases).

⁸² *Engineering Contractors Association of South Florida, Inc.*, 122 F.3d at 914 (referencing the first appeal in *Contractors Association of Eastern 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).

⁸³ *Engineering Contractors Association of South Florida, Inc.*, 122 F.3d at 914 (citing *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)).

⁸⁴ *Engineering Contractors*, at 922.

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.⁸⁵

ANECDOTAL EVIDENCE OF DISCRIMINATION IN DISPARITY STUDIES

Most disparity studies present anecdotal evidence along with statistical data. The Supreme Court in *Croson* discussed the relevance of anecdotal evidence and explained, “Evidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government’s determination that broader remedial relief is justified.”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 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, “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 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 complained in varying degrees of specificity about discrimination within the local construction industry. The *Coral Construction* court stated the M/WBE affidavits “reflected a broad spectrum of the contracting community” and the affidavits “certainly suggested that ongoing discrimination may be occurring in much of the King County business community.”⁹⁰

In *Associated General Contractors of California, Inc. v. Coalition for Economic Equity (AGCC II)*, the Ninth Circuit discussed the specificity of anecdotal evidence required by *Croson*.⁹¹ Seeking a preliminary injunction, the contractors contended the evidence presented by the city of San Francisco lacked the specificity required both by an earlier appeal in that case⁹² and by *Croson*. 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.”⁹³

The court also ruled the city was under no burden to identify specific practices or policies that were discriminatory.⁹⁴ Reiterating the city’s perspective, the court stated the city “must simply demonstrate

⁸⁵ *Contractors Association of Eastern Pennsylvania, Inc.*, 91 F.3d at 599 (3rd Cir.); *W.H. Scott Construction Company*, 199 F.3d at 218 (5th Cir. 1999).

⁸⁶ *Croson*, 488 U.S. at 509.

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

⁸⁸ *Id.* See also *Associated General Contractors of California v. Coalition for Economic Equity*, 950 F.2d at 1414.

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

⁹⁰ *Id.* at 917-18.

⁹¹ *AGCC II*, 950 F.2d at 1414.

⁹² *AGCC I*, 813 F.2d 922.

⁹³ *AGCC II*, 950 F.2d. at 1416. This evidence came from 10 public hearings and “numerous written submissions from the public.”

⁹⁴ *Id.* at 1410.

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 had relied upon in support of its decision that affirmative action is necessary.”⁹⁵

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 anecdotal evidence collected by a municipality did not have to be verified. The court stated:

*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.*⁹⁶

5. THE GOVERNMENTAL ENTITY OR AGENCY ENACTING AN M/WBE PROGRAM MUST BE SHOWN TO HAVE ACTIVELY OR PASSIVELY PERPETUATED THE DISCRIMINATION

In *Croson*, the Supreme Court stated, “It is beyond dispute that any public entity, state or federal, has a compelling interest in assuring that *public* dollars, drawn from the tax contributions of all citizens, do not serve to finance the evil of *private* prejudice.”⁹⁷ *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.”⁹⁸ The government agency’s active or passive participation in discriminatory practices in the marketplace may show the compelling interest. Defining passive participation, *Croson* stated, “Thus, if the city could show that it had essentially become a “passive participant” in a system of racial exclusion practiced by elements of the local construction industry, we think it clear that the city could take affirmative steps to dismantle such a system.”⁹⁹

The Tenth Circuit decision in *Adarand* concluded that evidence of private sector discrimination provided a compelling interest for a DBE program.¹⁰⁰ Later cases have reaffirmed that the government has a compelling interest in avoiding the financing of private discrimination with public dollars.¹⁰¹

Relying on this language in *Croson*, a number of local agencies have increased their emphasis on evidence of discrimination in the private sector. This strategy has not always succeeded. Evidence of private sector discrimination presented in litigation was found inadequate in the Philadelphia and Dade County cases.¹⁰²

⁹⁵ Id. at 1416.

⁹⁶ *Concrete Works IV*, 321 F.3d at 989.

⁹⁷ *Coral Construction*, 941 F.2d at 922 (citing *Croson*, 488 U.S. at 492) (emphasis added).

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

⁹⁹ *Croson*, 488 U.S. at 492.

¹⁰⁰ *Adarand v. Slater*, 228 F.3d 1147 (10th Cir. 2000).

¹⁰¹ *Associated General Contractors of Ohio, Inc. v. Drabik*, 214 F.3d 730, 734-35 (6th Cir. 2000). See also *Concrete Works II*, 36 F.3d at 1529; *Coral Construction*, 941 F.2d at 916; *AGC v. New Haven*, 791 F.Supp. 941, 947 (D. Conn. 1992).

¹⁰² *Contractors Association of Eastern Pennsylvania, Inc.*, 91 F.3d at 602; *Engineering Contractors Association of South Florida, Inc.*, 122 F.3d at 914.

The Third Circuit stated, in discussing low MBE participation in a local contractors association in the city of Philadelphia, “racial discrimination can justify a race-based remedy only if the city has somehow participated in or supported that discrimination.”¹⁰³ Nevertheless, recently in *Concrete Works IV*, the Tenth Circuit upheld the relevance of data from the private marketplace to establish a factual predicate for M/WBE programs.¹⁰⁴ That is, courts mainly seek to ensure M/WBE programs are based on findings of active or passive discrimination in the government contracting marketplace, and not simply attempts to remedy general societal discrimination.

Courts also seek to find a causal connection between a statistical disparity and actual underlying discrimination. In *Engineering Contractors*, one component of the factual predicate was a study comparing entry rates into the construction business for M/WBEs and non-M/WBEs.¹⁰⁵ The analysis provided statistically significant evidence that minorities and women entered the construction business at rates lower than would be expected, given their numerical presence in the population and human and financial capital variables. The study argued those disparities persisting after the application of appropriate statistical controls were most likely the result of current and past discrimination. Even so, the Eleventh Circuit criticized this study for reliance on general census data and for the lack of particularized evidence of active or passive discrimination by Dade County, holding that the district court was entitled to find the evidence did not show compelling justification for an M/WBE program.¹⁰⁶

The Seventh Circuit has perhaps set a higher bar for connecting private discrimination with government action. The trial court in the Cook County case extensively considered evidence that prime contractors simply did not solicit M/WBEs as subcontractors and considered carefully whether this evidence on solicitation served as sufficient evidence of discrimination, or whether instead it was necessary to provide further evidence that there was discrimination in hiring M/WBE subcontractors.¹⁰⁷ The Seventh Circuit held this evidence was largely irrelevant.¹⁰⁸ Beyond being anecdotal and partial, evidence that contractors failed to solicit M/WBEs on Cook County contracts was not the same as evidence that M/WBEs were denied the opportunity to bid.¹⁰⁹ Furthermore, such activities on the part of contractors did not necessarily implicate the county as even a passive participant in such discrimination as might exist because there was no evidence the county knew about it.¹¹⁰

Interestingly, some courts have been willing to see capital market discrimination as part of the required nexus between private and public contracting discrimination, even if capital market discrimination could arguably be seen as simply part of broader societal discrimination. In *Adarand v. Slater*, the Tenth Circuit favorably cited evidence of capital market discrimination as relevant in establishing the factual predicate for the federal DBE program.¹¹¹ The same court, in *Concrete Works IV*, found barriers to business formation were relevant insofar as this evidence demonstrated that M/WBEs were “precluded from the

¹⁰³ *Contractors Association of Eastern Pennsylvania, Inc.*, 91 F.3d at 602; see also *Webster*, 51 F. Supp. 2d 1354.

¹⁰⁴ *Concrete Works IV*, 321 F.3d at 69.

¹⁰⁵ *Engineering Contractors Association of South Florida, Inc.*, 122 F.3d at 921-22.

¹⁰⁶ *Id.* at 922.

¹⁰⁷ *Builders Association of Chicago v. Cook County*, 123 F.Supp. 1087 (ND IL 2000).

¹⁰⁸ *Builders Association of Greater Chicago*, 256 F.3d at 645.

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ *Adarand v. Slater*, 228 F.3d at 1169-70 (10th Cir. 2000).

outset from competing for public construction contracts.”¹¹² Along related lines, the court also found a regression analysis of census data to be relevant evidence showing barriers to M/WBE formation.¹¹³ A recent district court case upheld the state of North Carolina MWBE program in road construction based largely on similar private sector evidence supplemented by evidence from databases covering private sector commercial construction.¹¹⁴

Courts have come to different conclusions about the effects of M/WBE programs on the private sector evidence itself. For instance, is M/WBE participation in public sector projects higher than on private sector projects simply because the M/WBE program increases M/WBE participation in the public sector, or is such a pattern evidence of private sector discrimination? The Seventh Circuit raised the former concern in the Cook County litigation.¹¹⁵ *Concrete Works IV*, on the other hand, expressly cited as evidence of discrimination that M/WBE contractors used for business with the city of Denver were not used by the same prime contractors for private sector contracts.¹¹⁶

Finally, is evidence of a decline in M/WBE utilization following a change in or termination of an M/WBE program relevant and persuasive evidence of discrimination? The Eighth Circuit in *Sherbrooke Turf Inc. v. Minnesota Department of Transportation* and the Tenth Circuit in *Concrete Works IV* did find such a decline in M/WBE utilization was evidence that prime contractors were not willing to use M/WBEs in the absence of legal requirements.¹¹⁷ Other lower courts have arrived at similar conclusions.¹¹⁸

6. TO WITHSTAND STRICT SCRUTINY, AN M/WBE PROGRAM MUST BE NARROWLY TAILORED TO REMEDY IDENTIFIED DISCRIMINATION

The discussion of compelling interest in the court cases has been extensive, but narrow tailoring may be the more critical issue. Many courts have held that even if a compelling interest for the M/WBE program can be found, the program has not been narrowly tailored.¹¹⁹ Moreover, *Concrete Works IV*,¹²⁰ a case which did find a compelling interest for a local M/WBE program, did not consider the issue of narrow tailoring. Instead, the Tenth Circuit held that the plaintiffs had waived any challenge to the original district court ruling¹²¹ that the program was narrowly tailored.

Nevertheless, the federal courts have found the DBE program established pursuant to federal regulations (49 CFR, Part 26), issued under the Transportation Equity Act (TEA-21) (1998), has been narrowly tailored

¹¹² *Concrete Works IV*, 321 F.2d at 977. The district court had 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*).

¹¹³ *Id.* at 977.

¹¹⁴ *H.B. Rowe v. North Carolina DOT*, No. 5:03-CV-278-BO(3) (ED NC 2008). The court, however, was very brief in discussing what factors in the study accounted for its ruling.

¹¹⁵ *Builders Association of Greater Chicago*, 256 F.3d at 645.

¹¹⁶ *Concrete Works IV*, 321 F.3d at 984-85.

¹¹⁷ *Concrete Works IV*, 321 F.3d at 985; *Sherbrooke Turf*, 345 F.3d at 973.

¹¹⁸ See, e.g., *Northern Contracting v. Illinois DOT*, No. 00 4515 (ND IL 2004).

¹¹⁹ *Contractors Association of Eastern Pennsylvania, Inc.*, 91 F.3d at 605; *Engineering Contractors Association of South Florida, Inc.*, 122 F.3d at 926-929; *Verdi v. DeKalb County School District*, 135 Fed. Appx 262, 2005 WL 38942 (11th Cir. 2005).

¹²⁰ *Concrete Works IV*, 321 F.3d at 992-93.

¹²¹ *Concrete Works v. City and County of Denver*, 823 F.Supp. 821 (D. Colo. 1993).

to serve a compelling interest.¹²² The federal courts had previously ruled that there was a factual predicate for the federal department of transportation (DOT) DBE program, but in its earlier versions the program was not narrowly tailored.¹²³ The more recent rulings provide some guidance as to what program configurations the courts will judge to be narrowly tailored. Following Supreme Court precedent, the circuit courts have identified the following elements of narrow tailoring: the efficacy of alternative remedies, the flexibility and duration of the race-conscious remedy, the relationship of the numerical goals to the relevant labor market, and the impact of the remedy on third parties.¹²⁴

RACE-NEUTRAL ALTERNATIVES

Concerning race-neutral alternatives, the Supreme Court in *Croson* concluded that a governmental entity must demonstrate it has evaluated the use of race-neutral means to increase minority business participation in contracting or purchasing activities. In upholding the narrow tailoring of federal DBE regulations, the Eighth Circuit noted those regulations “place strong emphasis on the use of race-neutral means to increase minority business participation in government contracting.”¹²⁵ The Tenth Circuit had noted the DBE regulations provided “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.”¹²⁶ Those measures included “helping overcome bonding and financing obstacles, providing technical assistance, [and] establishing programs to assist start-up firms.”¹²⁷

Strict scrutiny does not mandate that every race-neutral measure be considered and found wanting. The Eighth Circuit also affirmed 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.”¹²⁸

FLEXIBILITY AND DURATION OF THE REMEDY

The federal courts have also found “the revised DBE program has substantial flexibility.”¹²⁹

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

¹²² *Adarand v. Slater*, 228 F.3d 1147; *Sherbrooke Turf*, 345 F.3d 963; *Western States Paving v. Washington DOT*, 407 F.3d 983 (9th Cir. 2005).

¹²³ In 1998, in *Sherbrooke I*, the Minnesota district court had ruled that while there was a compelling interest for the DBE program, the program was not narrowly tailored. In 1996, before the new DBE regulations, the district court in Colorado, upon remand from the 1995 U.S. Supreme Court, had made a similar ruling in *Adarand v. Peña*.

¹²⁴ See, e.g., *Sherbrooke Turf*, at 971 (citing *U.S. v. Paradise*, 480 U.S. 149, 171 (1987)). *Scott v. Jackson* declined to address narrow tailoring. A district court case in the Fifth Circuit involving an MBE program did find the program failed the narrow tailoring test in part because the remedy was not narrowly tailored to address the form of discrimination identified. *Bilbo Freight v. Morales*, No. H-93-3808 (SD Texas 1994).

¹²⁵ *Sherbrooke Turf*, at 972 (citing *Adarand*, 515 U.S. at 237-38).

¹²⁶ *Adarand v. Slater*, 228 F.3d. at 1179.

¹²⁷ *Id.*

¹²⁸ *Sherbrooke Turf*, at 972 (citing *Grutter*, 123 S.Ct. at 2344-45). See also *Coral Construction*, 941 F.2d at 923; *AGCC II*, 950 F.2d at 1417.

¹²⁹ *Sherbrooke Turf*, at 972.

*small businesses falling beneath an earnings threshold, and any individual whose net worth exceeds \$750,000 cannot qualify as economically disadvantaged.*¹³⁰

DBE and M/WBE programs achieve flexibility by using waivers and variable project goals to avoid merely setting a quota. *Croscon* favorably mentioned the contract-by-contract waivers in the federal DOT DBE program.¹³¹ Virtually all successful MBE programs have this waiver feature in their enabling legislation. As for project goals, the approved DBE provisions 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 impressed the courts, which have upheld the constitutionality of the revised DOT DBE program.¹³²

With respect to program duration, in *Adarand v. Peña*, the Supreme Court wrote a program should be “appropriately limited such that it will not last longer than the discriminatory effects it is designed to eliminate.”¹³³ The Eighth Circuit also noted the limits in the DBE program, stating “the DBE program contains built-in durational limits,” in that a state “may terminate its DBE program if it meets its annual overall goal through race-neutral means for two consecutive years.”¹³⁴ The federal courts have found durational limits in the fact that “TEA-21 is subject to periodic congressional reauthorization. Periodic legislative debate assures all citizens that the deviation from the norm of equal treatment of all racial and ethnic groups is a temporary matter, a measure taken in the service of the goal of equality itself.”¹³⁵

Other appellate courts have noted possible mechanisms for limiting program duration: required termination if goals have been met¹³⁶ and decertification of MBEs who achieve certain levels of success, or mandatory review of MBE certification at regular, relatively brief periods.¹³⁷ Governments thus have some duty to ensure they update their evidence of discrimination regularly enough to review the need for their programs and to revise programs by narrowly tailoring them to fit the fresh evidence.¹³⁸ Whether all of these provisions are necessary in every case remains an open question.

RELATIONSHIP OF GOALS TO AVAILABILITY

Narrow tailoring under the *Croscon* standard requires remedial goals be in line with measured availability. Merely setting percentages without a carefully selected basis in statistical studies, as the city of Richmond did in *Croscon* itself, has played a strong part in decisions finding other programs unconstitutional.¹³⁹

By contrast, the Eighth, Ninth, and Tenth Circuits have approved the goal-setting process for the DOT DBE program, as revised in 1999.¹⁴⁰ The approved DOT DBE regulations require goals be based on one of several methods for measuring DBE availability.¹⁴¹ The Eighth Circuit noted the “DOT has tied the goals for

¹³⁰ *Id.* at 972 (citing 49 C.F.R. § 26.67(b)).

¹³¹ *Croscon*, 488 U.S. at 489. *Coral Construction*, 941 F.2d at 925.

¹³² *Id.*

¹³³ *Id.*, 515 U.S. at 238 (internal quotations and citations omitted).

¹³⁴ *Sherbrooke Turf*, at 972 (citing 49 C.F.R. § 26.51(f)(3)).

¹³⁵ *Id.* (citing *Grutter*, 123 S.Ct. at 2346).

¹³⁶ *Sherbrooke*, 354 F.3d at 972.

¹³⁷ *Adarand v. Slater*, 228 F.3d at 1179, 1180.

¹³⁸ *Rothe*, 262 F.3d at 1324 (commenting on the possible staleness of information after 7, 12, and 17 years).

¹³⁹ See, e.g., *Builders Association of Greater Chicago*, 256 F.3d at 647; *Kohlbeck v. Omaha*, 447 F.3d at 556.

¹⁴⁰ *Adarand v. Slater*, 228 F.3d at 1182; *Sherbrooke Turf*, 345 F.3d at 972. *Western States*, 407 F.3d at 995.

¹⁴¹ 49 CFR, Section 26, Part 45.

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.”¹⁴² The Eighth Circuit acknowledged that goal setting was not exact 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.*¹⁴³

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

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 revised 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 TEA21 creates a rebuttable presumption that members of certain racial minorities fall within that class, the 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.*¹⁴⁵

Waivers and good faith compliance are also tools to serve this purpose of reducing the burden on third parties.¹⁴⁶ The DOT DBE regulations have also sought to reduce the program burden on non-DBEs by avoiding DBE concentration in certain specialty areas.¹⁴⁷ These features have gained the approval of the only circuit court to have discussed them at length as measures of lowering impact on third parties.¹⁴⁸

OVERINCLUSION

Narrow tailoring also involves limiting the number and type of beneficiaries of the program. As noted above, there has to be evidence of discrimination to justify a group-based remedy, and over-inclusion of

¹⁴² *Sherbrooke Turf*, at 972 (citing 49 C.F.R. § 26.45(c)-(d) (Steps 1 and 2)).

¹⁴³ *Id.* at 972 (citing *Croson*, 488 U.S. at 507).

¹⁴⁴ *Id.* at 973, 974.

¹⁴⁵ See *Grutter*, 123 S.Ct. at 2345-46; *Gratz v. Bollinger*, 539 U.S. 244, 156 L. Ed. 2d 257, 123 S.Ct. 2411, 2429 (2003).

¹⁴⁶ 49 CFR, Section 26, Part 53.

¹⁴⁷ 49 CFR, Section 26, Part 33.

¹⁴⁸ *Adarand v. Slater*, 228 F.3d at 1182.

uninjured individuals or groups can endanger the entire program.¹⁴⁹ Federal DBE programs have succeeded in part because regulations covering DBE certification do not provide blanket protection to minorities.¹⁵⁰

Critically, the MBE program must be limited in its geographical scope to the boundaries of the enacting government's marketplace. The Supreme Court indicated in *Croson* that a local agency has the power to address discrimination only within its own marketplace. One fault of the Richmond MBE program was minority firms were certified from around the United States.¹⁵¹

In *Coral Construction*, the Ninth Circuit concluded the King County MBE program failed this part of the narrow tailoring test, because the definition of MBEs eligible to benefit from the program was overbroad. The definition included MBEs had no prior contact with King County if the MBE could demonstrate that discrimination occurred "in the particular geographic areas in which it operates."¹⁵² This MBE definition suggested the program was designed to eradicate discrimination not only in King County but also in the particular area in which a nonlocal MBE conducted business. In essence, King County's program focused on the eradication of society-wide 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."¹⁵³

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 affirmative action program, the business must have been discriminated against in the jurisdiction of the established program.¹⁵⁴ As a threshold matter, before a business can claim to have suffered discrimination, it must have attempted to do business with the governmental entity.¹⁵⁵ 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."¹⁵⁶

To summarize, according to the Ninth Circuit, the presumptive rule requires the enacting governmental agency establish that systemic discrimination exists within its jurisdiction and that the MBE is, or has attempted to become, an active participant in the agency's marketplace.¹⁵⁷ Because King County's definition of an MBE permitted participation by those with no prior contact with King County, its program was overbroad. By useful contrast, *Concrete Works II* held that the more extensive but still local designation of the entire Denver MSA constituted the marketplace to which the programs could apply.¹⁵⁸

¹⁴⁹ See, e.g., *Builders Association of Greater Chicago*, 256 F.3d at 647.

¹⁵⁰ *Sherbrooke Turf*, 345 F.3d 963, 972-73.

¹⁵¹ *Croson*, 488 U.S. at 508.

¹⁵² *Id.*

¹⁵³ *Id.*

¹⁵⁴ *Id.*

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

¹⁵⁷ *Id.*

¹⁵⁸ *Concrete Works II*, 36 F.3d at 1520.

7. 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.¹⁵⁹ The SWPC was created to channel war contracts to small business. In 1947, Congress passed the Armed Forces Procurement Act, declaring, “It is the policy of Congress that a fair proportion of the purchases and contracts under this chapter be placed with small business concerns.”¹⁶⁰ Continuing this policy, the 1958 Small Business Act requires that government agencies award a “fair proportion” of procurement contracts to small business concerns.¹⁶¹ The regulations are designed to implement this general policy.¹⁶²

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

*...to make studies and recommendations to the appropriate Federal agencies to insure that a fair proportion of the total purchases and contracts for property and services for the Government be placed with small-business enterprises, to insure that a fair proportion of Government contracts for research and development be placed with small-business concerns, to insure that a fair proportion of the total sales of Government property be made to small-business concerns, and to insure a fair and equitable share materials, supplies, and equipment to small-business concerns.*¹⁶³

Every acquisition of goods and services anticipated to be between \$2,500 and \$100,000 is set aside exclusively for small business unless the contracting officer has a reasonable expectation of fewer than two bids by small businesses.¹⁶⁴

There has been only one constitutional challenge to the long-standing federal SBE programs. In *J.H. Rutter Rex Manufacturing v. United States*,¹⁶⁵ a federal vendor unsuccessfully challenged the Army’s small business set-aside as in violation of the due process clause of the Fifth Amendment to the U.S. Constitution, as well as the Administrative Procedures Act and the Armed Forces Procurement Act.¹⁶⁶ The court held that classifying businesses as small was not a “suspect classification” subject to strict scrutiny. Instead, the court ruled:

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

¹⁵⁹ See, generally, Thomas J. Hasty III, “Minority Business Enterprise Development and the Small Business Administration’s 8(a) Program: Past, Present, and (Is There a) Future?” *Military Law Review* 145 (Summer 1994): 1-112.

¹⁶⁰ 10 U.S.C. § 2301 (1976).

¹⁶¹ 15 USC 631(a).

¹⁶² See 32 C.F.R. §§ 1-701.1 to 1-707.7.

¹⁶³ 15 U.S.C. § 637(b)(11).

¹⁶⁴ *Federal Acquisition Regulations* 19.502-2.

¹⁶⁵ 706 F.2d 702 (5th Cir. 1983), cert. denied, 464 U.S. 1008 (1983).

¹⁶⁶ Administrative Procedures Act, 5 U.S.C. §§ 552(a)(1)(E) (1976) and the “fair proportion” language of the Armed Forces Procurement Act, 10 U.S.C. § 2301 et seq. (1976), and the Small Business Act, 15 U.S.C. § 631 et seq. (1976).

*legislative purpose of promoting small businesses in order to contribute to the security and economic health of this Nation.*¹⁶⁷

A large number of state and local governments have maintained small business preference programs for many years.¹⁶⁸ No district court cases were found overturning a state and local small business reference program. One reason for the low level of litigation in this area is there is no significant organizational opposition to SBE programs. There are no reported cases of Associated General Construction (AGC) litigation against local SBE programs. And the legal foundations have typically sued M/WBE programs have actually promoted SBE procurement preference programs as a race-neutral substitute for M/WBE programs.

There has been one state court case in which an SBE program was struck down as unconstitutional. The Cincinnati SBE program called for maximum practical M/WBE participation and required bidders to use good faith effort requirements to contract with M/WBEs up to government-specified M/WBE availability. Failure to satisfy good faith effort requirements triggered an investigation of efforts to provide opportunities for M/WBE subcontractors. In *Cleveland Construction v. Cincinnati*,¹⁶⁹ the state court ruled the Cincinnati SBE program had race and gender preferences, was subject to strict scrutiny, and had deprived the plaintiff of constitutionally protected property interest without due process of law. The city acknowledged it had not offered evidence to satisfy strict scrutiny because it felt it had been operating a race-neutral program.

8. CONCLUSION

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

While the Supreme Court has yet to return to this exact area of law to sort out some of the conflicts, the circuit courts have settled on the core standards. Though there are differences among the circuits in the level of deference granted to the finder of fact, these differences do not appear to be profound. The differences in the individual outcomes have been overwhelming in the level of evidence, mostly concerning the rigor with which disparity studies have been conducted and then used as the foundation for narrowly tailored remedies. Ultimately, MBE and WBE programs can withstand challenges if local governments comply with the requirements outlined by the courts.

¹⁶⁷ *J. H. Rutter Rex Manufacturing*, at 706 F.2d at 730 (emphasis added). See also *Dandridge v. Williams*, 397 U.S. 471 (1970).

¹⁶⁸ For example, Florida started a small business preference program in 1985 (FL St Sec. 287); Minnesota, in 1979 (Mn Stat 137.31); New Jersey, in 1993 (N.J.S.A 52:32-17).

¹⁶⁹ *Cleveland Construction v. Cincinnati*, Case No. A0402638 (Ct Comm Pleas, Hamilton County, Ohio 2005).

CHAPTER 3: MARKET AREA AND UTILIZATION ANALYSES

CHAPTER 3: MARKET AREA AND UTILIZATION ANALYSES

CHAPTER SECTIONS

1. Introduction
2. Chapter Definitions
3. Data Collection and Management
4. Market Area Analysis
5. Utilization Analyses
6. Summary

1. INTRODUCTION

This chapter presents the results of MGT of America's (MGT) market area and utilization analyses of firms used on San Antonio Water System (SAWS) prime contracts and subcontracts for engineering, heavy civil/utility construction, other professional services, and procurement between January 1, 2011 and December 31, 2013. The following section, **Section 2, Chapter Definitions**, presents the definitions to key terms that are used in this chapter.

2. CHAPTER DEFINITIONS

To understand the analyses presented in this study, it is important to define and understand the following definitions.

BUSINESS OWNERSHIP CLASSIFICATION¹

- ♦ **M/WBE Firms.** In this study, businesses classifications 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, Hispanic Americans, Asian Americans, Native Americans, and 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.
 - **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.
 - **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.
 - **Native Americans:** U.S. citizens or lawfully admitted permanent residents who originate from any of the original peoples of North America and who maintain cultural identification through tribal affiliation or community recognition.
 - **Nonminority Woman (Female):** U.S. citizens or lawfully admitted permanent residents who are non-Hispanic white woman. Minority women were included in their respective minority category.

¹ Business ownership classification was based on the race, ethnicity, and gender classification of the owner during the study period.

- Minority women- and male-owned firms were classified and assigned to their corresponding minority groups. For example, a Hispanic American woman- 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.

MARKET AREA METHODOLOGY

In order to establish the appropriate geographic boundaries for the study’s analyses, an overall market area was established. The geographic units (such as boroughs or states) are based on the following considerations: 1) the courts have accepted the use of standard geographic units in conducting equal employment opportunity and disparity studies; 2) geographic units are externally determined, so there are no subjective determinations; and 3) U.S. Census and other federal agencies routinely collect data by geographic unit. The following presents the methodology used to determine the overall market area and relevant market area.

- ◆ **Overall Market Area.** To determine the market area and to establish the extent, to which SAWS utilized firms, MGT staff reviewed the geographic location by updating the firms’ county using MGT’s Zone Improvement Plan (ZIP) Code Database, which maintains all United State counties, of each firm conducting business with SAWS during the study period. MGT staff matched the ZIP codes to the firm location in order to assign county boundaries. Once all U.S. county and states were assigned where dollars were expended, the overall market area was reviewed. The overall market area presents the total dollars expended for each contract category and thus the total dollars expended with all identified firms (firms located inside and outside the State of Texas, and thus firms located inside and outside the San Antonio MSA). The overall market area results by contract category are presented in **Section 3, Market Area Analyses** of this chapter, as well as in **Appendix A, Table A-1** for the prime level and **Appendix A, Table A-2** for the sub level.
- ◆ **Relevant Market Area.** Once the overall market was established, the relevant market area was determined. The firm’s geographic location that received the most dollars, all of which totaled at least 75 percent² of the overall market area, were identified. The use of the “75 percent rule” for market area determination is generally accepted in antitrust cases. In another relevant case, the court accepted less than 100 percent of data when it was reasonable to assume that the missing data would not significantly change the results of the analysis³. Subsequently, the dollars expended were summarized by county according to the location of each firm that provided engineering, heavy civil/utility construction, other professional services, and procurement to SAWS. Corresponding market area analyses showing the dollars expended by county at the prime level for each contract category are presented in **Appendix A, Table A-2** through **Table A-5**. Corresponding market area analyses showing the dollars

SAN ANTONIO MSA

- Atascosa County, Texas
- Bandera County, Texas
- Bexar County, Texas
- Comal County, Texas
- Guadalupe County, Texas
- Kendall County, Texas
- Medina County, Texas
- Wilson County, Texas

² MGT uses the “75 percent rule” to determine the relevant market area. This rule is generally accepted in antitrust cases. In another relevant case, *James C. Jones v. New York County Human Resources Administration*, 528 F.2d 696 (.2d Cir. 1976), the court accepted less than 100 percent of the data when it was reasonable to assume that the missing data would not significantly change the results of the analysis.

³ *James C. Jones v. New York County Human Resources Administration*, 528 F.2d 696 (.2d Cir. 1976).

expended by county at the sub level for each contract category are presented in [Appendix A, Table A-7](#) through [Table A-10](#).

Based on the market area analyses conducted for each contract category, MGT and SAWS staff agreed that the defined relevant market area would include those counties in the San Antonio Metropolitan Statistical Area (MSA). Hence, the analyses presented in this report, such as utilization, availability, anecdotal, and disparity were based on the San Antonio MSA. The market area analyses are presented in [Section 3, Market Area Analyses](#) of this chapter, as well as [Appendix A, Corresponding Market Area and Utilization Analyses](#).

- ◆ **Utilization.** Firms located within the eight county San Antonio MSA. The utilization analyses also assessed the effectiveness of initiatives in promoting the inclusion of M/WBEs in SAWS contracting and procurement activities. The effectiveness of the program initiatives is further examined and discussed in [Chapter 7, Findings and Recommendations](#).
- ◆ **Study Period.** MGT analyzed engineering, heavy civil/utility construction, other professional services, and procurement expended between January 1, 2011 and December 31, 2013.
- ◆ **Contract Categories.** MGT analyzed engineering, heavy civil/utility construction, other professional services, and procurement between January 1, 2011 and December 31, 2013. During the study period, SAWS awarded the Brackish Groundwater Desalination project, as well as the Sanitation Sewer Overflows (SSO) Reduction program. The dollars associated with the Brackish Groundwater Desalination project were counted in heavy civil/utility construction and dollars associated with the SSO Reduction program were counted in engineering. [Appendix A, Figure 1](#) and [Figure 2](#) present a summary of the dollars expenditures for both projects at the prime level during the study period.
 - Certain purchases were excluded from the analyses results presented in this study. Examples include:
 - * Transactions outside of the study period.
 - * Transactions associated to firms located outside the U.S.
 - * Administrative items such as utility payments, leases for real estate, or insurance.
 - * Salary and fringe benefits, training, parking, or conference fees.
 - * Transactions associated to nonprofit organizations and governmental agencies.

3. DATA COLLECTION AND MANAGEMENT

MGT conducted data assessment interviews with key SAWS staff knowledgeable about the prime contract, subcontract, and vendor data in order to identify the most appropriate data sources to use for the study. Based on the data assessment interviews and follow-up discussions with SAWS staff, it was agreed that SAWS Subcontractor Payment & Utilization Reporting System (S.P.U.R.S) maintained the most comprehensive sets of data on prime and sub procurement and contracting activity, thus electronic data on contracting and payment transactions at the prime and sub level were extracted from S.P.U.R.S. In terms of SAWS vendor data, electronic data was from SAWS web-based Vendor Registration and Notification (VRN) service data management system (SAWS vendor registration data).

Next, MGT staff compiled and reconciled the sets of data and developed a master set of prime contract and subcontract data, which hereafter is referred to as the Master Contract Database. MGT staff submitted the contents of the Master Contract Database to SAWS staff for review and feedback. In terms of SAWS vendor registration data, MGT compiled and reconciled the dataset with the Small Business

Administration database, and the South Central Texas Regional Certification Agency (SCTRCA) directory, which hereafter is referred to as the Master Availability Database. MGT staff submitted the contents of the Master Availability Database to SAWS staff for review and feedback. MGT staff incorporated SAWS staff feedback and finalized both databases, the Master Contract Database and Master Availability Database.

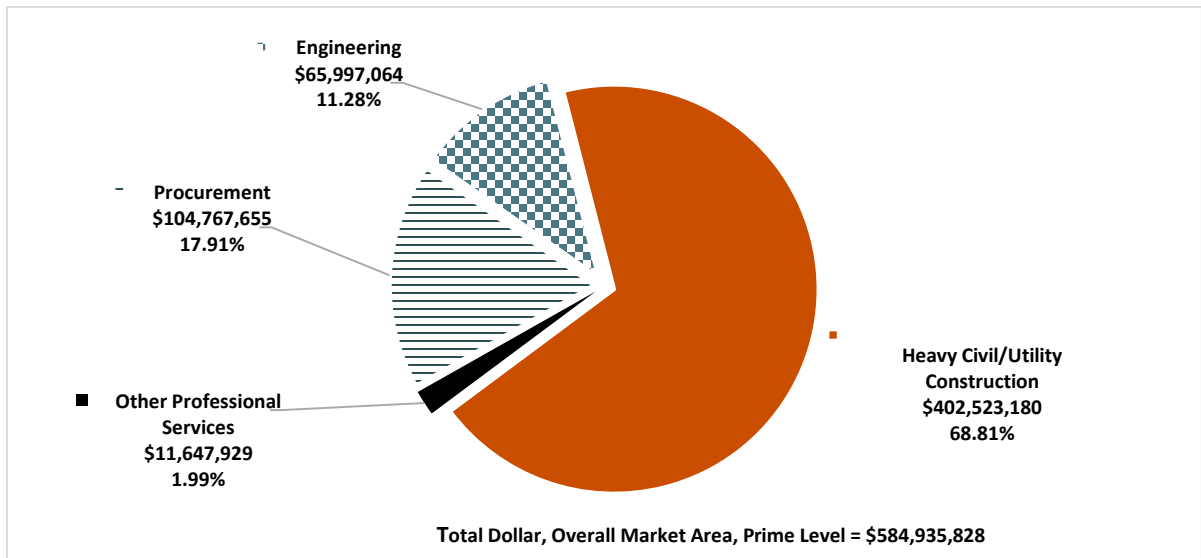
4. MARKET AREA ANALYSIS

In order to establish the appropriate geographic boundaries for the statistical analysis, market areas were determined. As described in **Section 2, Chapter Definitions**, first, the overall market area was determined and then the relevant market area was established. The following analysis presents results on the relevant market area analyses. The corresponding detailed market area analyses are presented in **Appendix A** to this report.

MARKET AREA ANALYSES AT THE PRIME LEVEL

Figure 3-A shows that \$584.9 million were spent with firms located within the overall market area⁴ between January 1, 2011 and December 31, 2013 at the prime level. The darker slice shows that 68.8 percent of the dollars spent at the prime level were in heavy civil/utility construction, 17.9 percent in procurement, 11.3 percent in engineering, and close to 2 percent in other professional services.

FIGURE 3-A
OVERALL MARKET AREA ANALYSIS AT THE PRIME LEVEL BY CONTRACT CATEGORY



Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013. The totals may not equal the sum of components due to rounding.

Table 3-1 shows that firms located within the relevant market area, which is the San Antonio MSA, accounted for close to 81 percent of all contract categories combined at the prime level. Firms located within the San Antonio MSA accounted for close to 97 percent of engineering, 85.1 percent of heavy

⁴ The overall market area represents the total spend to which SAWS expended dollars or utilized firms, thus the overall market shows the spend with all firms (located inside and outside the State of Texas and thus located inside and outside the San Antonio MSA). Refer to **Section 2, Chapter Definitions**, Overall Market Area for more information.

civil/utility construction, 66 percent of other professional services, and 56.7 percent of procurement dollars. The corresponding market area analyses showing the percent of dollars spent to firms located inside and outside the state of Texas are presented in **Appendix A, Table A-1. Table 3-1** shows that \$584.9 million was paid to firms at the prime level within the overall market area, which \$473.7 million (close to 81%) was paid to firms located within the relevant market area. Corresponding market area analyses showing the dollars expended by county at the prime level for each contract category are presented in **Appendix A, Table A-2 through Table A-5.**

TABLE 3-1
MARKET AREA ANALYSIS AT THE PRIME LEVEL BY LOCATION OF FIRMS (SAN ANTONIO MSA)
AND CONTRACT CATEGORY

LOCATION OF FIRMS	DOLLARS PAID	PERCENT OF DOLLARS	CUMULATIVE PERCENT ¹
ENGINEERING			
Inside San Antonio MSA	\$63,992,953	96.96%	96.96%
Outside San Antonio MSA	\$2,004,111	3.04%	100.00%
ENGINEERING, TOTAL	\$65,997,064	100.00%	
HEAVY CIVIL/UTILITY CONSTRUCTION			
Inside San Antonio MSA	\$342,674,150	85.13%	85.13%
Outside San Antonio MSA	\$59,849,030	14.87%	100.00%
HEAVY CIVIL/UTILITY CONSTRUCTION, TOTAL	\$402,523,180	100.00%	
OTHER PROFESSIONAL SERVICES			
Inside San Antonio MSA	\$7,692,429	66.04%	66.04%
Outside San Antonio MSA	\$3,955,500	33.96%	100.00%
OTHER PROFESSIONAL SERVICES, TOTAL	\$11,647,929	100.00%	
PROCUREMENT			
Inside San Antonio MSA	\$59,383,255	56.68%	56.68%
Outside San Antonio MSA	\$45,384,400	43.32%	100.00%
PROCUREMENT, TOTAL	\$104,767,655	100.00%	
ALL CONTRACT CATEGORIES			
Inside San Antonio MSA	\$473,742,787	80.99%	80.99%
Outside San Antonio MSA	\$111,193,041	19.01%	100.00%
ALL CONTRACT CATEGORIES, TOTAL	\$584,935,828		

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

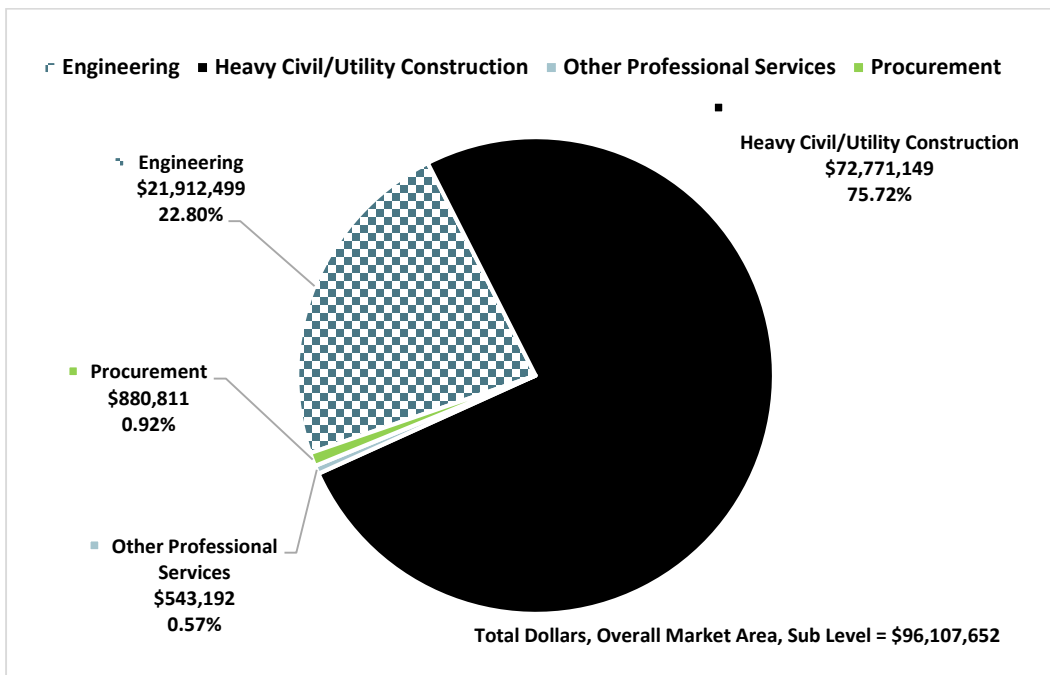
¹Cumulative percent of total dollars.

Note: The total dollars presented in this table represent the overall market area at the prime level. The totals may not equal the sum of components due to rounding.

MARKET AREA ANALYSES AT THE SUB LEVEL

Figure 3-B shows that \$96.1 million were spent with firms located within the overall market area between January 1, 2011 and December 31, 2013 at the sub level. The darker slice shows that 75.7 percent of the dollars spent at the sub level were in heavy civil/utility construction, 22.8 percent in engineering, 0.9 percent in procurement, and 0.6 percent in other professional services.

FIGURE 3-B
OVERALL MARKET AREA ANALYSIS AT THE SUB LEVEL BY CONTRACT CATEGORY



Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013. The totals may not equal the sum of components due to rounding.

Table 3-2 shows that firms located within the relevant market area accounted for 67.8 percent of all contract categories combined at the sub level. Firms located within the San Antonio MSA accounted for close to 84.8 percent of engineering, 62.8 percent of heavy civil/utility construction, 100 percent of other professional services, and 47.4 percent of procurement dollars. The corresponding market area analyses showing the percent of dollars spent with firms located inside and outside the state of Texas are presented in **Appendix A, Table A-6**. **Table 3-2** shows that \$96.1 million was paid to firms at the sub level within the overall market area, of which \$65.2 million (67.8%) was paid to firms located within the relevant market area. Corresponding market area analyses showing the dollars expended by county at the sub level for each contract category are presented in **Appendix A, Table A-7** through **Table A-10**.

TABLE 3-2
MARKET AREA ANALYSIS AT THE SUB LEVEL BY LOCATION OF FIRMS (SAN ANTONIO MSA)
AND CONTRACT CATEGORY

LOCATION OF FIRMS	DOLLARS PAID	PERCENT OF DOLLARS	CUMULATIVE PERCENT ¹
ENGINEERING			
Inside San Antonio MSA	\$18,580,158	84.79%	84.79%
Outside San Antonio MSA	\$3,332,341	15.21%	100.00%
ENGINEERING, TOTAL	\$21,912,499	100.00%	
HEAVY CIVIL/UTILITY CONSTRUCTION			
Inside San Antonio MSA	\$45,662,346	62.75%	62.75%
Outside San Antonio MSA	\$27,108,803	37.25%	100.00%
HEAVY CIVIL/UTILITY CONSTRUCTION, TOTAL	\$72,771,149	100.00%	
OTHER PROFESSIONAL SERVICES			
Inside San Antonio MSA	\$543,192	100.00%	100.00%
Outside San Antonio MSA	\$0	0.00%	100.00%
OTHER PROFESSIONAL SERVICES, TOTAL	\$543,192	100.00%	
PROCUREMENT			
Inside San Antonio MSA	\$417,271	47.37%	47.37%
Outside San Antonio MSA	\$463,540	52.63%	100.00%
PROCUREMENT, TOTAL	\$880,811	100.00%	
ALL CONTRACT CATEGORIES			
Inside San Antonio MSA	\$65,202,968	67.84%	67.84%
Outside San Antonio MSA	\$30,904,684	32.16%	100.00%
ALL CONTRACT CATEGORIES, TOTAL	\$96,107,652	100.00%	

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

¹Cumulative percent of total dollars.

Note: The total dollars presented in this table represent the overall market area at the sub level. The totals may not equal the sum of components due to rounding.

5. UTILIZATION ANALYSES

As mentioned in the **Section 1, Chapter Definitions**, the utilization analyses are based on the relevant market area, which was determined to be the San Antonio MSA. The subsequent results presents MGT's utilization analyses of firms on engineering, heavy civil/utility construction, other professional services, and procurement at the prime and sub levels during the study period.

UTILIZATION ANALYSES AT THE PRIME LEVEL

Table 3-3 shows that the utilization of minority firms, as a whole, was 8.7 percent in all contract categories combined at the prime level. In terms of M/WBE firms, as a whole, the utilization was 10.3 percent. Among M/WBE firms, utilization was higher with Hispanic American-owned firms (6.6%) followed by nonminority female-owned firms (1.6%) and Asian American-owned firms (1.1%). The corresponding analyses showing the utilization of firms by business ownership classification and year are presented in **Appendix A, Table A-11**.

TABLE 3-3
 UTILIZATION ANALYSIS AT THE PRIME LEVEL BY BUSINESS OWNERSHIP CLASSIFICATION,
 ALL CONTRACT CATEGORIES

BUSINESS OWNERSHIP CLASSIFICATION	ALL CONTRACT CATEGORIES	
	DOLLARS PAID	PERCENT OF DOLLARS
African American Female	\$0	0.00%
African American Male	\$3,558,791	0.75%
AFRICAN AMERICAN FIRMS	\$3,558,791	0.75%
Asian American Female	\$111,820	0.02%
Asian American Male	\$5,089,146	1.07%
ASIAN AMERICAN FIRMS	\$5,200,966	1.10%
Hispanic American Female	\$1,743,353	0.37%
Hispanic American Male	\$29,512,923	6.23%
HISPANIC AMERICAN FIRMS	\$31,256,276	6.60%
Native American Female	\$116,123	0.02%
Native American Male	\$1,142,696	0.24%
NATIVE AMERICAN FIRMS	\$1,258,819	0.27%
TOTAL MINORITY FIRMS	\$41,274,852	8.71%
NONMINORITY FEMALE FIRMS	\$7,683,097	1.62%
TOTAL M/WBE FIRMS	\$48,957,949	10.33%
NON-M/WBE FIRMS	\$424,784,838	89.67%
TOTAL FIRMS	\$473,742,787	100.00%

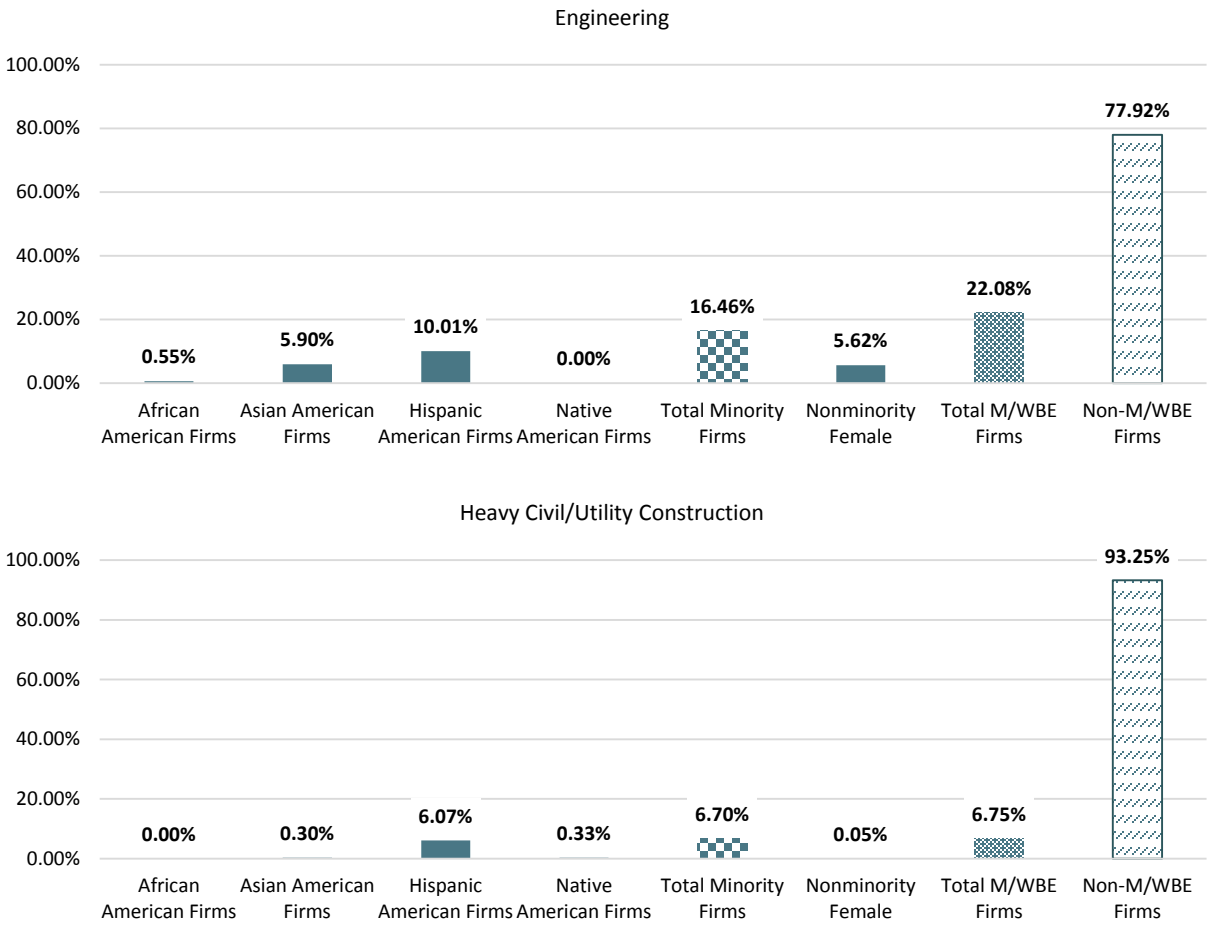
Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization results by business ownership classification and year are presented in [Appendix A, Table A-11](#). The totals may not equal the sum of components due to rounding.

The next series of figures show the summary results of MGT’s utilization analyses on engineering, heavy civil/construction, other professional services, and procurement at the prime level. The corresponding detailed analyses showing the utilization of firms by business ownership classification and year for each contract category at the prime level are presented in [Appendix A, Table A-12](#) through [Table A-19](#).

[Figure 3-C](#) shows that the utilization of minority firms, as a whole, was 16.5 percent in engineering and was 6.7 percent in heavy civil/utility construction at the prime level. In terms of M/WBE firms, as a whole, the utilization was 22.1 percent in engineering and 6.8 percent in heavy civil/utility construction at the prime level. The corresponding detailed analyses showing the utilization of firms by business ownership classification and year in engineering and heavy civil/utility construction at the prime level are presented in [Appendix A, Table A-12](#) through [Table A-15](#).

FIGURE 3-C
 UTILIZATION ANALYSIS AT THE PRIME LEVEL BY BUSINESS OWNERSHIP CLASSIFICATION,
 ENGINEERING AND HEAVY CIVIL/UTILITY CONSTRUCTION

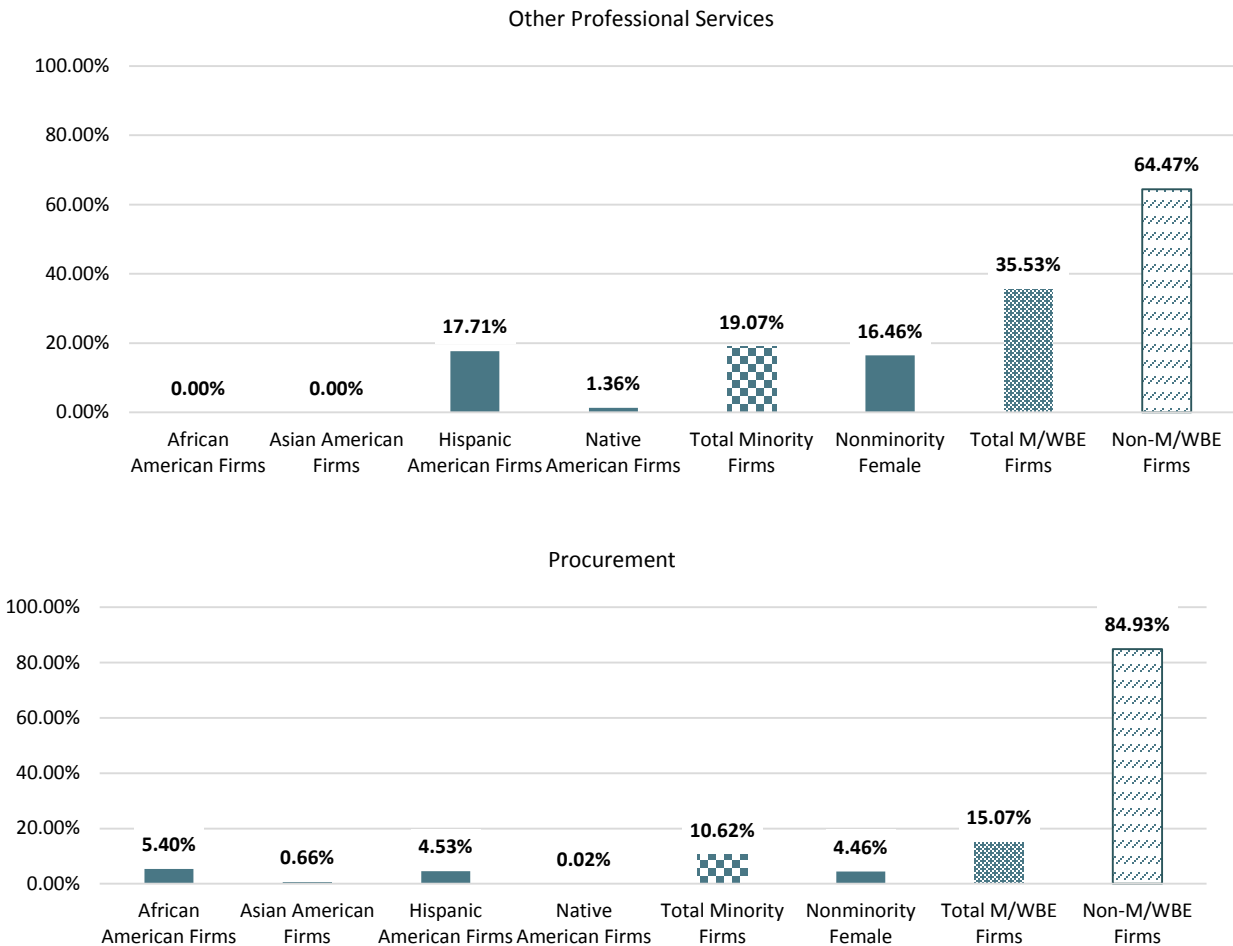


Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization results by business ownership classification and year are presented in [Appendix A, Table A-12](#) through [Table A-15](#). The totals may not equal the sum of components due to rounding.

Figure 3-D shows that the utilization of minority firms, as a whole, was 19.1 percent in other professional services and was 10.6 percent in procurement at the prime level. In terms of M/WBE firms, as a whole, the utilization was 35.5 percent in other professional services and 15.1 percent in procurement at the prime level. The corresponding detailed analyses showing the utilization of firms by business ownership classification and year in other professional services and procurement at the prime level are presented in [Appendix A, Table A-16](#) through [Table A-19](#).

FIGURE 3-D
 UTILIZATION ANALYSIS AT THE PRIME LEVEL BY BUSINESS OWNERSHIP CLASSIFICATION,
 OTHER PROFESSIONAL SERVICES AND PROCUREMENT



Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization results by business ownership classification and year are presented in [Appendix A, Table A-16](#) through [Table A-19](#). The totals may not equal the sum of components due to rounding.

UTILIZATION ANALYSES AT THE SUB LEVEL

Table 3-4 shows that the utilization of minority firms, as a whole, was 34.6 percent in all contract categories combined at the sub level. In terms of M/WBE firms, as a whole, the utilization was 67.6 percent. Among M/WBE firms, utilization was higher with nonminority female-owned firms (33%) followed by Hispanic American-owned firms (27.7%) and Asian American-owned firms (4.5%). The corresponding analyses showing the utilization of firms by business ownership classification and year at the sub level are presented in [Appendix A, Table A-20](#).

TABLE 3-4
UTILIZATION ANALYSIS AT THE SUB LEVEL BY BUSINESS OWNERSHIP CLASSIFICATION, ALL CONTRACT CATEGORIES

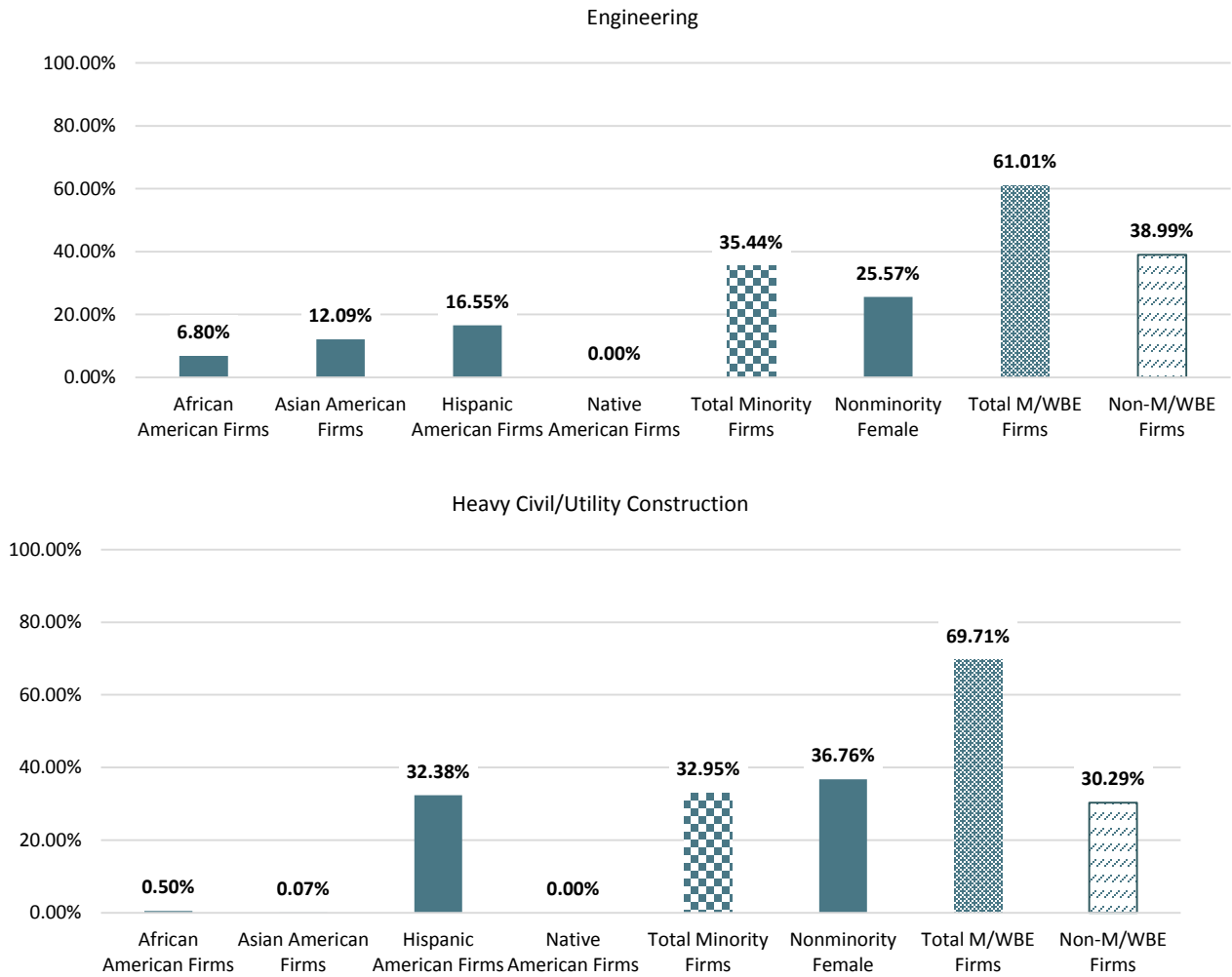
BUSINESS OWNERSHIP CLASSIFICATION	ALL CONTRACT CATEGORIES	
	DOLLARS PAID	PERCENT OF DOLLARS
African American Female	\$13,172	0.02%
African American Male	\$1,543,602	2.37%
AFRICAN AMERICAN FIRMS	\$1,556,774	2.39%
Asian American Female	\$305,041	0.47%
Asian American Male	\$2,602,964	3.99%
ASIAN AMERICAN FIRMS	\$2,908,005	4.46%
Hispanic American Female	\$879,813	1.35%
Hispanic American Male	\$17,180,466	26.35%
HISPANIC AMERICAN FIRMS	\$18,060,278	27.70%
Native American Female	\$0	0.00%
Native American Male	\$0	0.00%
NATIVE AMERICAN FIRMS	\$0	0.00%
TOTAL MINORITY FIRMS	\$22,525,058	34.55%
NONMINORITY FEMALE FIRMS	\$21,537,402	33.03%
TOTAL M/WBE FIRMS	\$44,062,460	67.58%
NON-M/WBE FIRMS	\$21,140,507	32.42%
TOTAL FIRMS	\$65,202,968	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013. Note: The corresponding utilization results by business ownership classification and year are presented in [Appendix A, Table A-20](#). The totals may not equal the sum of components due to rounding.

The next series of figures show the summary results of MGT’s utilization analyses on engineering, heavy civil/construction, other professional services, and procurement at the sub level. The corresponding detailed analyses showing the utilization of firms by business ownership classification and year for each contract category at the sub level are presented in [Appendix A, Table A-21](#) through [Table A-28](#).

[Figure 3-E](#) shows that the utilization of minority firms, as a whole, was 35.4 percent in engineering and was close to 33 percent in heavy civil/utility construction at the sub level. In terms of M/WBE firms, as a whole, the utilization was 61 percent in engineering and close to 70 percent in heavy civil/utility construction at the sub level. The corresponding detailed analyses showing the utilization of firms by business ownership classification and year in engineering and heavy civil/utility construction at the sub level are presented in [Appendix A, Table A-21](#) through [Table A-24](#).

FIGURE 3-E
 UTILIZATION ANALYSIS AT THE SUB LEVEL BY BUSINESS OWNERSHIP CLASSIFICATION,
 ENGINEERING AND HEAVY CIVIL/UTILITY CONSTRUCTION

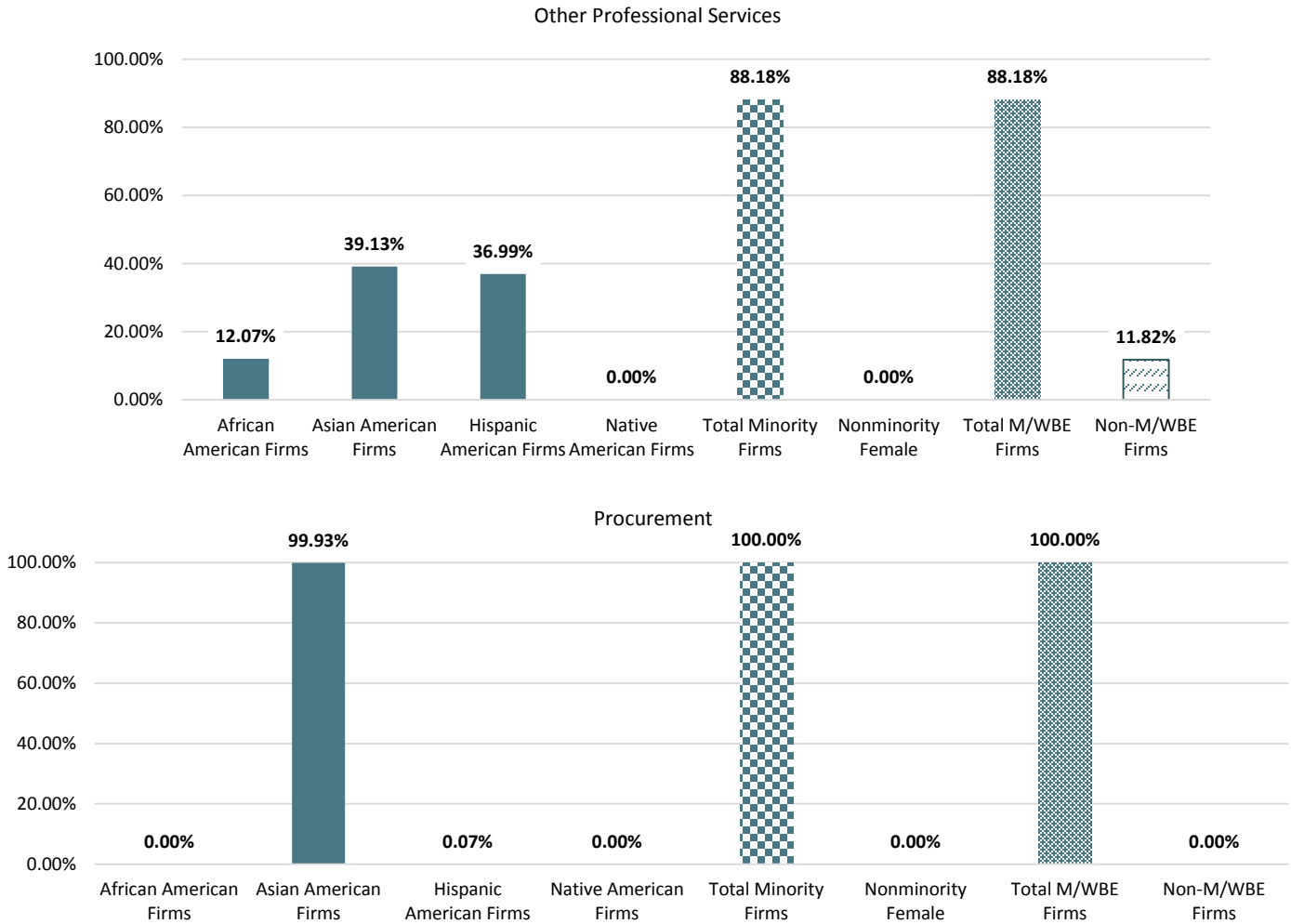


Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization results by business ownership classification and year are presented in [Appendix A, Table A-21](#) through [Table A-24](#). The totals may not equal the sum of components due to rounding.

Figure 3-F shows that the utilization of minority firms and M/WBE firms, as a whole, was 88.2 percent in other professional services and 100 percent in procurement at the sub level. The corresponding detailed analyses showing the utilization of firms by business ownership classification and year in other professional services and procurement at the prime level are presented in [Appendix A, Table A-25](#) through [Table A-28](#).

FIGURE 3-F
 UTILIZATION ANALYSIS AT THE SUB LEVEL BY BUSINESS OWNERSHIP CLASSIFICATION,
 OTHER PROFESSIONAL SERVICES AND PROCUREMENT



Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

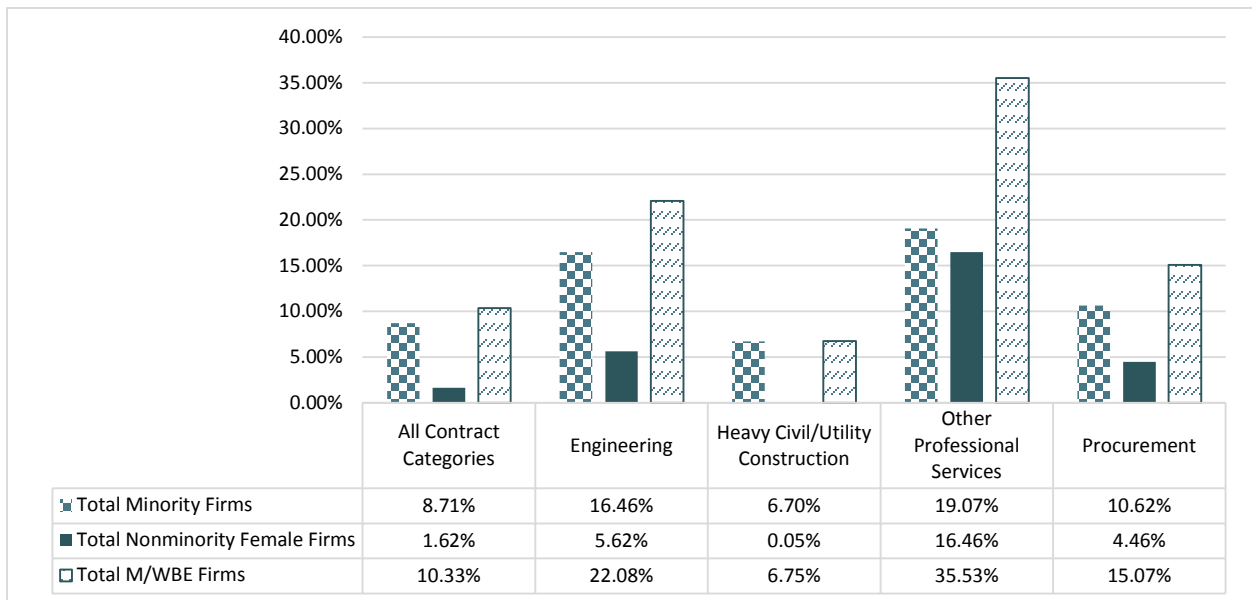
Note: The corresponding utilization results by business ownership classification and year are presented in [Appendix A, Table A-25](#) through [Table A-28](#). The totals may not equal the sum of components due to rounding.

6. SUMMARY

This chapter presented the results of MGT’s analyses on the market area and utilization of firms used on SAWS prime contracts and subcontracts for engineering, heavy civil/utility construction, other professional services, and procurement between January 1, 2011, and December 31, 2013. As a result of the market area analyses and agreement between MGT and SAWS, the San Antonio MSA was identified as the relevant market area.

Figure 3-G shows the summary of M/WBE utilization at the prime level by contract category. Overall, all contract categories combined, M/WBE firms received 10.3 percent of dollars at the prime level. The utilization of minority firms at the prime level was higher in other professional services (19.1%) followed by engineering (16.5%) and procurement (10.6%).

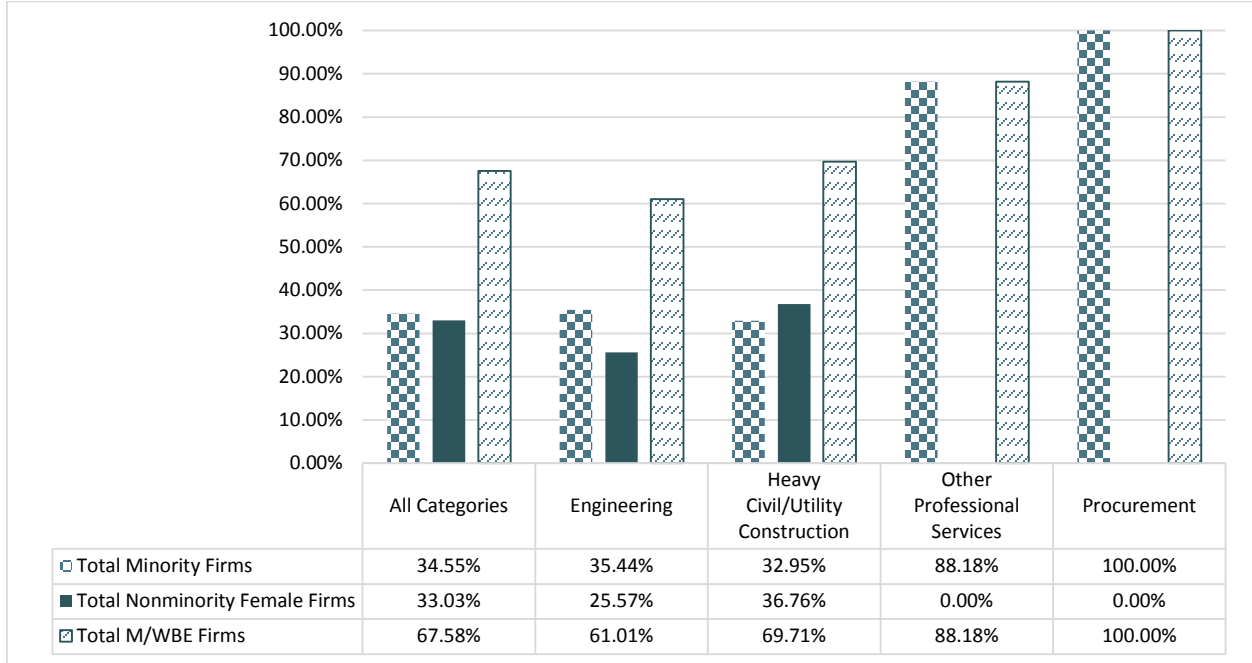
FIGURE 3-G
SUMMARY OF M/WBE UTILIZATION ANALYSES AT THE PRIME LEVEL BY CONTRACT CATEGORY



Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013. The totals may not equal the sum of components due to rounding.

Figure 3-H shows the summary of M/WBE utilization at the sub level by contract category. Overall, all contract categories combined, M/WBE firms received 67.6 percent of dollars at the sub level.

FIGURE 3-H
SUMMARY OF M/WBE UTILIZATION ANALYSES AT THE SUB LEVEL BY CONTRACT CATEGORY



Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013. The totals may not equal the sum of components due to rounding.

CHAPTER 4: AVAILABILITY AND DISPARITY ANALYSES

CHAPTER 4: AVAILABILITY AND DISPARITY ANALYSES

CHAPTER SECTIONS

1. Introduction
2. Chapter Definitions
3. Availability Estimates Analyses
4. Disparity Analyses and Statistical Significance
5. Summary

I. INTRODUCTION

This chapter presents the results of MGT of America's (MGT) analyses on the availability and disparity on San Antonio Water System (SAWS) engineering, heavy civil/utility construction, other professional services and procurement projects between January 1, 2011 and December 31, 2013. In this chapter, MGT will answer, at least in part, the following research question: Are there disparities between the availability and utilization of minority- and women-owned business enterprises (M/WBEs) in engineering, heavy civil/utility construction, other professional services, and procurement?

To understand the analyses presented in this chapter, it is important to provide definitions to key terms discussed in this chapter. The following section presents these definitions.

2. CHAPTER DEFINITIONS

Availability Analysis Methodology. There is no single approach to estimating the availability of firms that has been adopted by the post-*Croson* case law. As a whole, the case law has emphasized firms being qualified, ready, willing, and able to pursue work with an agency. Therefore, MGT staff analyzed the availability of firms using the following data sources: utilized firms, SAWS vendor registration data, the Small Business Administration (SBA) database, and the South Central Texas Regional Certification Agency (SCTRCA) directory. Using these data sources, the availability estimates were refined to firms providing services and goods typically procured by SAWS and that were located within the San Antonio Metropolitan Statistical Area (MSA) ¹. The following explains how each data source was used to measure the estimates of available firms:

- ◆ **Prime Level Availability Estimates.** The prime availability estimates were based on firms utilized as primes in their respective business categories, as well as firms not utilized as primes but identified in SAWS vendor registration data and SBA data as providing comparable services contracted and procured by SAWS at the prime level. There is case law where studies estimating availability based on vendor data have been upheld in federal court.²
- ◆ **Sub Level Availability Estimates³.** The sub availability estimates were based on firms utilized as subs and primes in their respective business categories, as well as firms not utilized as primes or

¹ As mentioned in [Chapter 3](#), the utilization and availability calculations were based on the location of the firms, as well as the business ownership classification during the of the study period.

² *H.B. Rowe v. North Carolina DOT*, 589 F.Supp.2d 587 (ED NC 2008).

³ As mentioned in [Chapter 3](#), availability estimates and thus disparity analyses were not calculated for subs on other professional services and procurements projects as the total dollars expended during the study period were less than \$550,000 and \$900,000, respectively.

subs but identified in SAWS vendor registration data, SBA data, and the SCTRCA directory as providing comparable services contracted and procured by SAWS at the sub level.

- ◆ **Disparity Analysis Methodology.** Disparity, in this context, is the analysis of the differences between the utilization of minorities- and women-owned firms and the availability of those firms. As a result, MGT calculated disparity indices to examine whether minority- and women-owned firms received a proportional share of dollars based on the availability of minorities- and women-owned firms located in the study’s relevant market area, which is the San Antonio MSA. The following explains MGT’s disparity methodology in more detail.

The use of disparity indices for such calculations is supported by several post-*Croson* cases, most notably *Contractors Association of Eastern Pennsylvania v. City of Philadelphia*.⁴ Although a variety of similar indices could be utilized, MGT’s standard for choosing a particular index methodology is that it must yield a value that is easily calculable, understandable in its interpretation, and universally comparable such that a disparity in utilization within minorities- and women-owned firms can be assessed with reference to the utilization of nonminority- and women-owned firms.

DISPARITY INDEX FORMULA

Disparity Index =
 $\%U_{m_i p_i} \div \%A_{m_i p_i} \times 100$

$U_{m_i p_i}$ = utilization of minorities- and women-owned firms_i for procurement_i

$A_{m_i p_i}$ = availability of minorities- and women-owned firms_i for procurement_i

Due to the mathematical properties involved in the disparity index calculations, 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). Generally, firms are considered underutilized if the disparity indices are less than 100, and overutilized if the indices are above 100.

Since there is no standardized measurement to evaluate the levels of underutilization or overutilization within a procurement context, MGT’s methodology to measure disparity, if disparity is found, is based on the Equal Employment Opportunity Commission’s (EEOC) “80 percent rule.”⁵ In the employment discrimination framework, an employment disparity ratio 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).⁶ Therefore, firms are considered substantially underutilized (substantial disparity) if the disparity indices is 80 or less.

- ◆ **Standard Deviation Tests.** 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 minorities- 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: greater the number of standard deviations, the lower the probability the result is a random one. The accepted standard used by the Courts is two standard deviations. That is, if there is a result of fewer than

⁴*Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia*, 91 F 3d at 603.

⁵ Equal Employment Opportunity Commission, *Uniform Guidelines on Employee Selection Procedures*.

⁶ 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.

two standard deviations, then one can assume that the results are nonsignificant, or that no disparity exists.

In connection with the use of statistical significance in the disparity study context the National Cooperative Highway Research Program Report 644⁷ report note that:

STANDARD DEVIATION FORMULA

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

t = the t-statistic

u = the ratio of minorities- and women-owned firms dollars to total dollars

a = the ratio of M/W/DBE firms to all firms

c_i = the dollar amount.

- ♦ “. . . 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.” National Cooperative Highway Research Program (NCHRP) Report 644, at 49.
- ♦ “In discrimination cases, the courts have usually required p-values of 5% or less to establish statistical significance in a two-sided case.” NCHRP Report 644, at 50.

The use of t-test for disparity ratios was approved by the Fourth Circuit in *H.B. Rowe v. Tippett*, 615 F.3d 233, 243 (4th Cir 2010).

⁷ National Academy of Sciences, NCHRP Report 644 *Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program*.

3. AVAILABILITY ESTIMATES ANALYSES

AVAILABILITY ESTIMATES AT THE PRIME LEVEL

Table 4-1 presents the availability estimates results by business ownership classification for engineering at the prime level. As a whole, minority-owned and M/WBE-owned firms accounted for 34.3 percent (36 firms) and 46.7 percent (49 firms), respectively, of available engineering firms at the prime level. Among M/WBE-owned firms, the number and percentage of available firms was higher with Hispanic American-owned firms (25 firms, 23.8%) followed by nonminority female-owned firms (13 firms, 12.4%) and Asian American-owned firms (ten firms, 9.5%).

TABLE 4-1
AVAILABILITY ESTIMATES OF FIRMS, ENGINEERING
PRIME CONSULTANT LEVEL

BUSINESS OWNERSHIP CLASSIFICATION	# OF AVAILABLE FIRMS	% OF AVAILABLE FIRMS
African American Firms	1	0.95%
Asian American Firms	10	9.52%
Hispanic American Firms	25	23.81%
Native American Firms	0	0.00%
TOTAL MINORITY FIRMS	36	34.29%
Nonminority Female Firms	13	12.38%
TOTAL M/WBE FIRMS	49	46.67%
Non-M/WBE Firms	56	53.33%
TOTAL FIRMS	105	100.00%

Source: Availability estimates based on the Master Availability database developed for this study and refined to firms identified in SAWS vendor registration data and SBA data that provide engineering services (at the prime level). The totals may not equal the sum of components due to rounding.

Table 4-2 presents the availability estimates results by business ownership classification for heavy civil/utility construction at the prime level. As a whole, minority-owned and M/WBE-owned firms accounted for 33.8 percent (26 firms) and 41.6 percent (32 firms), respectively, of available heavy civil/utility construction firms at the prime level. Among M/WBE-owned firms, the number and percentage of available firms was higher with Hispanic American-owned firms (24 firms, 31.2%) followed by nonminority female-owned firms (six firms, 7.8%) and Asian American- (one firm, 1.3%) and Native American-owned firms (one firm, 1.3%).

TABLE 4-2
 AVAILABILITY ESTIMATES OF FIRMS, HEAVY CIVIL/UTILITY CONSTRUCTION
 PRIME CONTRACTOR LEVEL

BUSINESS OWNERSHIP CLASSIFICATION	# OF AVAILABLE FIRMS	% OF AVAILABLE FIRMS
African American Firms	0	0.00%
Asian American Firms	1	1.30%
Hispanic American Firms	24	31.17%
Native American Firms	1	1.30%
TOTAL MINORITY FIRMS	26	33.77%
Nonminority Female Firms	6	7.79%
TOTAL M/WBE FIRMS	32	41.56%
Non-M/WBE Firms	45	58.44%
TOTAL FIRMS	77	100.00%

Source: Availability estimates based on the Master Availability database developed for this study and refined to firms identified in SAWS vendor registration data and SBA data that provide heavy civil/utility construction services (at the prime level). The totals may not equal the sum of components due to rounding.

Table 4-3 presents the availability estimates results by business ownership classification for other professional services at the prime level. As a whole, minority-owned and M/WBE-owned firms accounted for 50 percent (165 firms) and 69.7 percent (230 firms), respectively, of available other professional services firms at the prime level. Among M/WBE-owned firms, the number and percentage of available firms was higher with Hispanic American-owned firms (95 firms, 28.8%) followed by nonminority female-owned firms (65 firms, 19.7%) and African American-owned firms (51 firms, 15.5%).

TABLE 4-3
 AVAILABILITY ESTIMATES OF FIRMS, OTHER PROFESSIONAL SERVICES
 PRIME CONSULTANT LEVEL

BUSINESS OWNERSHIP CLASSIFICATION	# OF AVAILABLE FIRMS	% OF AVAILABLE FIRMS
African American Firms	51	15.45%
Asian American Firms	14	4.24%
Hispanic American Firms	95	28.79%
Native American Firms	5	1.52%
TOTAL MINORITY FIRMS	165	50.00%
Nonminority Female Firms	65	19.70%
TOTAL M/WBE FIRMS	230	69.70%
Non-M/WBE Firms	100	30.30%
TOTAL FIRMS	330	100.00%

Source: Availability estimates based on the Master Availability database developed for this study and refined to firms identified in SAWS vendor registration data and SBA data that provide other professional services (at the prime level). The totals may not equal the sum of components due to rounding.

Table 4-4 presents the availability estimates results by business ownership classification for procurement at the prime level. As a whole, minority-owned firms accounted for 38.7 percent (262 firms) and M/WBE-owned firms accounted for 50.8 percent (344 firms) of available firms in procurement at the prime level. Among M/WBE firms, the percentage of available firms was higher with Hispanic American-owned firms (202 firms, 29.8%) followed by nonminority female-owned firms (82 firms, 12.1%).

TABLE 4-4
AVAILABILITY ESTIMATES ANALYSIS OF FIRMS, PROCUREMENT
PRIME CONSULTANT LEVEL

BUSINESS OWNERSHIP CLASSIFICATION	# OF AVAILABLE FIRMS	% OF AVAILABLE FIRMS
African American Firms	44	6.50%
Asian American Firms	11	1.62%
Hispanic American Firms	202	29.84%
Native American Firms	5	0.74%
TOTAL MINORITY FIRMS	262	38.70%
Nonminority Female Firms	82	12.11%
TOTAL M/WBE FIRMS	344	50.81%
Non-M/WBE Firms	333	49.19%
TOTAL FIRMS	677	100.00%

Source: Availability estimates based on the Master Availability database developed for this study and refined to firms identified in SAWS vendor registration data and SBA data that provide procurement (at the prime level). The totals may not equal the sum of components due to rounding.

AVAILABILITY ESTIMATES AT THE SUB LEVEL

Table 4-5 presents the availability estimates results by business ownership classification for engineering at the sub level. Minority and M/WBE firms accounted for 43.2 percent (111 firms) and 55.3 percent (142 firms) of available engineering firms at the sub level, respectively. Among M/WBE firms, the percent of available firms was higher with Hispanic American-owned firms (87 firms, 33.9%) followed by nonminority female-owned firms (31 firms, 12.1%).

TABLE 4-5
AVAILABILITY ESTIMATES OF FIRMS, ENGINEERING
SUBCONSULTANT LEVEL

BUSINESS OWNERSHIP CLASSIFICATION	# OF AVAILABLE FIRMS	% OF AVAILABLE FIRMS
African American Firms	6	2.33%
Asian American Firms	18	7.00%
Hispanic American Firms	87	33.85%
Native American Firms	0	0.00%
TOTAL MINORITY FIRMS	111	43.19%
Nonminority Female Firms	31	12.06%
TOTAL M/WBE FIRMS	142	55.25%
Non-M/WBE Firms	115	44.75%
TOTAL FIRMS	257	100.00%

Source: Availability estimates based on the Master Availability database developed for this study and refined to firms that provide engineering services (at the prime and sub levels) identified in SAWS vendor registration data, SBA data, and SCTRCA directory. The totals may not equal the sum of components due to rounding.

Table 4-6 presents the availability estimates results by business ownership classification for heavy civil/utility construction at the sub level. Minority and M/WBE firms accounted for 51.4 percent (304 firms) and 61.8 percent (365 firms), respectively, of available engineering firms at the sub level. Among M/WBE firms, the percentage of available firms was higher with Hispanic American-owned firms (271

firms, 45.9%) followed by nonminority female-owned firms (61 firms, 10.3%) and African American-owned firms (21 firms, 3.6%).

TABLE 4-6
 AVAILABILITY ESTIMATES OF FIRMS, HEAVY CIVIL/UTILITY CONSTRUCTION
 SUBCONTRACTOR LEVEL

BUSINESS OWNERSHIP CLASSIFICATION	# OF AVAILABLE FIRMS	% OF AVAILABLE FIRMS
African American Firms	21	3.55%
Asian American Firms	6	1.02%
Hispanic American Firms	271	45.85%
Native American Firms	6	1.02%
TOTAL MINORITY FIRMS	304	51.44%
Nonminority Female Firms	61	10.32%
TOTAL M/WBE FIRMS	365	61.76%
Non-M/WBE Firms	226	38.24%
TOTAL FIRMS	591	100.00%

Source: Availability estimates based on the Master Availability database developed for this study and refined to firms that provide heavy civil/utility construction services (at the prime and sub levels) identified in SAWS vendor registration data, SBA data, and SCTRCA directory. The totals may not equal the sum of components due to rounding.

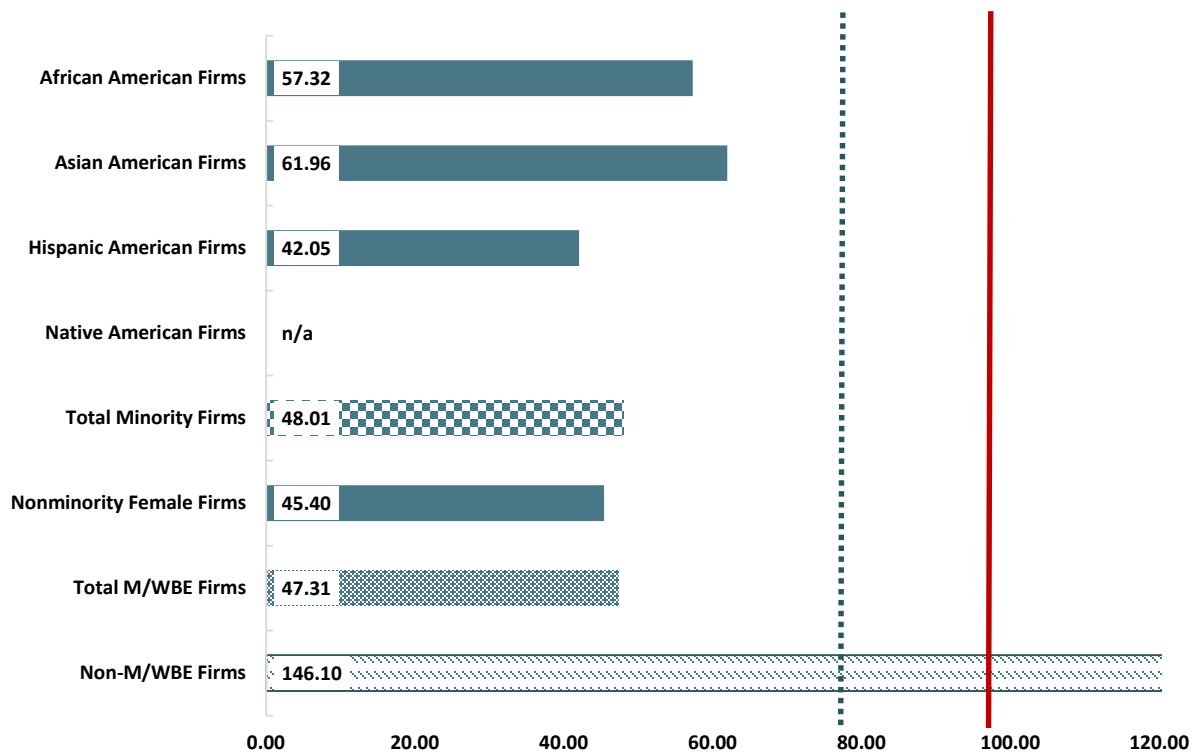
4. DISPARITY ANALYSES AND STATISTICAL SIGNIFICANCE

The next series of figures present the disparity indices summary results for engineering (prime and sub levels), heavy civil/utility construction (prime and sub levels), other professional services (prime level), and procurement (prime level). The disparity indices results, as defined in [Section 2, Chapter Definitions](#), are calculated based on the utilization percentages, as presented in [Chapter 3, Market Area and Utilization](#), and availability estimates, as presented in [Section 3, Availability Analyses](#) of this chapter.

DISPARITY ANALYSES AND STATISTICAL SIGNIFICANCE AT THE PRIME LEVEL

Figure 4-A presents a summary of the disparity indices results for engineering at the prime consultant level. Overall, minority firms (disparity index 48) and M/WBE firms (disparity index 47.3) were substantially underutilized. Among M/WBE firms, all utilized M/WBE groups were substantially underutilized. The corresponding results on disparity indices by year and business ownership classification are presented in [Appendix B, Table B-1](#).

FIGURE 4-A
DISPARITY INDICES OF FIRMS, ENGINEERING
PRIME CONSULTANT LEVEL



Source: MGT developed a Master Contracting and Availability Database for the study.

Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.

The index is based on the actual percentage value and not the rounded utilization and availability estimates percentage values presented. The disparity indices have been rounded.

n/a denotes that the analyses cannot be applied in this case due to the mathematical constraint of division by zero.

A dotted line is drawn at 80.00. A disparity index below 80.00 indicates a substantial level of disparity.

A solid red line is drawn at 100.00. A disparity index greater than 100.00 indicates overutilization.

Note: The corresponding disparity results on disparity results by year and business classification are presented in [Appendix B, Table B-1](#). The totals may not equal the sum of components due to rounding.

Table 4-7 presents a summary of the percent of dollars, available firm estimates, and disparity indices results along with the t-test results or test for statistical significance for minority- and nonminority female-owned firms in engineering at the prime consultant level. The t-test results indicate that the findings of substantial underutilization for minority-owned firms, as a whole, as well as nonminority female-owned and M/WBE firms, as a whole. In each of these cases, the t-tests provide another statistical measure accepted by the courts regarding how far the disparity ratio is from parity.

TABLE 4-7
DISPARITY INDICES AND T-TEST RESULTS FOR MINORITY- AND FEMALE-OWNED FIRMS,
ENGINEERING, PRIME CONSULTANT LEVEL

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE	DISPARITY INDEX	STATISTICAL SIGNIFICANCE
		(%)		
African American Firms	0.55%	0.95%	57.32	n/ss
Asian American Firms	5.90%	9.52%	61.96	¥¥
Hispanic American Firms	10.01%	23.81%	42.05	¥¥
Native American Firms	0.00%	0.00%	n/a	Not Applicable
TOTAL MINORITY FIRMS	16.46%	34.29%	48.01	¥¥
Nonminority Female Firms	5.62%	12.38%	45.40	¥¥
Total M/WBE Firms	22.08%	46.67%	47.31	¥¥

Source: MGT developed a Master Contracting and Availability Database for the study.

Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00. The index is based on the actual percentage value and not the rounded utilization and availability estimates Percentage values presented. The disparity indices have been rounded.

n/a and Not Applicable denotes that the analyses cannot be applied in this case due to the mathematical constraint of division by zero.

¥¥ denotes the ratio of utilization to availability is statistically significant at a 0.05 level.

n/ss denotes the ratio of utilization to availability is not statistically significant.

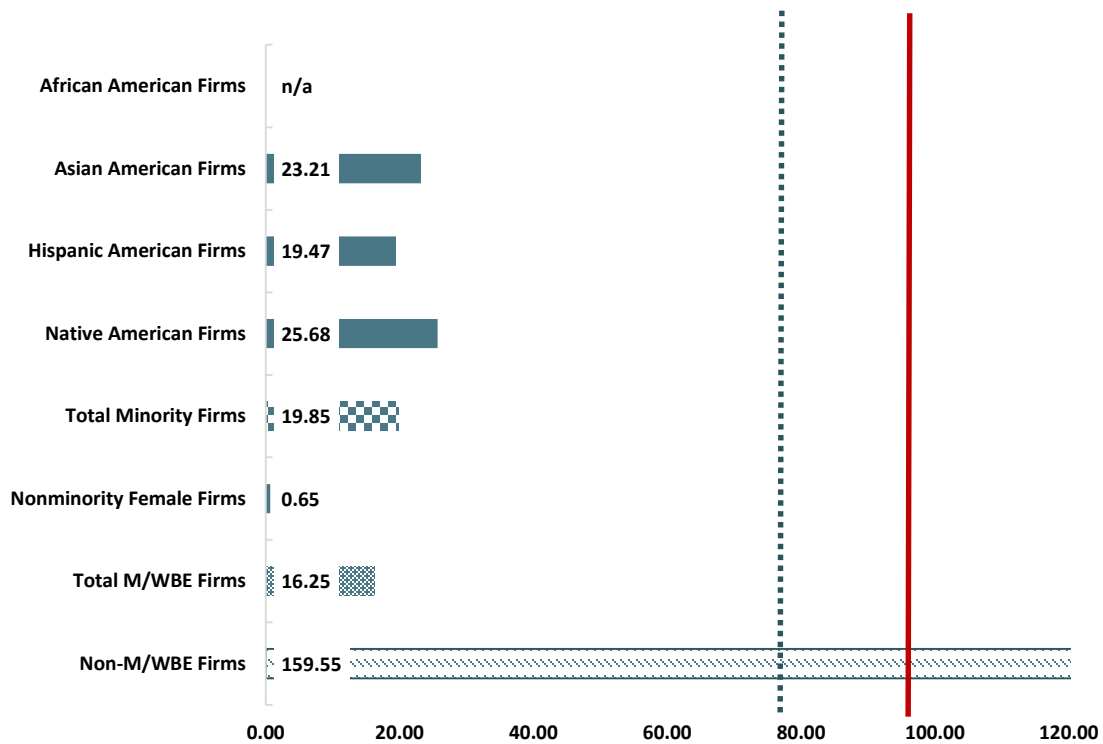
Not Applicable denotes the analyses cannot be applied in this case due to the mathematical constraint of division by zero.

-- indicate where results are based on fewer than five observations.

Note: The totals may not equal the sum of components due to rounding.

Figure 4-B presents a summary of the disparity indices results for heavy civil/utility construction at the prime consultant level. Overall, minority firms (disparity index 19.9) and M/WBE firms (disparity index 16.3) were substantially underutilized. Among M/WBE firms, all utilized M/WBE groups were substantially underutilized. The corresponding results on disparity indices by year and business ownership classification are presented in **Appendix B, Table B-2**.

FIGURE 4-B
DISPARITY INDICES OF FIRMS, HEAVY CIVIL/UTILITY CONSTRUCTION
PRIME CONTRACTOR LEVEL



Source: MGT developed a Master Contracting and Availability Database for the study.
 Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.
 The index is based on the actual percentage value and not the rounded utilization and availability estimates percentage values presented. The disparity indices have been rounded.
 n/a denotes that the analyses cannot be applied in this case due to the mathematical constraint of division by zero.
 A dotted line is drawn at 80.00. A disparity index below 80.00 indicates a substantial level of disparity.
 A solid red line is drawn at 100.00. A disparity index greater than 100.00 indicates overutilization.
 Note: The corresponding disparity results on disparity results by year and business classification are presented in [Appendix B, Table B-2](#). The totals may not equal the sum of components due to rounding.

Table 4-8 presents a summary of the disparity indices results along with the t-test results or test for statistical significance for heavy civil/utility construction at the prime contractor level. The t-test results indicate that the findings of substantial underutilization for minority-owned firms, as a whole, as well as nonminority female-owned and M/WBE firms, as a whole. In each of these cases, the t-tests provide another statistical measure accepted by the courts regarding how far the disparity ratio is from parity.

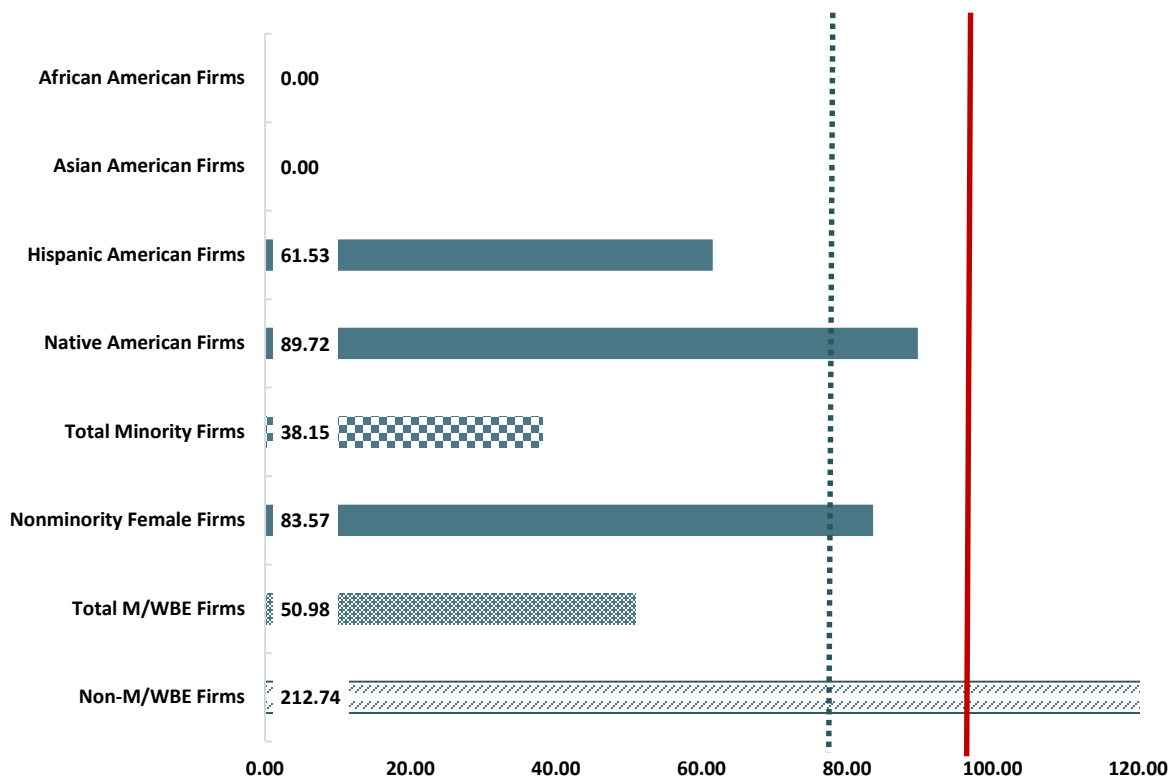
TABLE 4-8
DISPARITY INDICES AND T-TEST RESULTS FOR MINORITY- AND FEMALE-OWNED FIRMS,
HEAVY CIVIL/UTILITY CONSTRUCTION
PRIME CONTRACTOR LEVEL

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE	DISPARITY INDEX	STATISTICAL SIGNIFICANCE	
		(%)			
African American Firms	0.00%	0.00%	n/a	Not Applicable	--
Asian American Firms	0.30%	1.30%	23.21	¥¥	--
Hispanic American Firms	6.07%	31.17%	19.47	¥¥	
Native American Firms	0.33%	1.30%	25.68	¥¥	--
TOTAL MINORITY FIRMS	6.70%	33.77%	19.85	¥¥	
Nonminority Female Firms	0.05%	7.79%	0.65	¥¥	
Total M/WBE Firms	6.75%	41.56%	16.25	¥¥	

Source: MGT developed a Master Contracting and Availability Database for the study.
 Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00. The index is based on the actual percentage value and not the rounded utilization and availability estimates Percentage values presented. The disparity indices have been rounded.
 n/a and Not Applicable denotes that the analyses cannot be applied in this case due to the mathematical constraint of division by zero.
 ¥¥ denotes the ratio of utilization to availability is statistically significant at a 0.05 level.
 n/ss denotes the ratio of utilization to availability is not statistically significant.
 Not Applicable denotes the analyses cannot be applied in this case due to the mathematical constraint of division by zero.
 -- indicate where results are based on fewer than five observations.
 Note: The totals may not equal the sum of components due to rounding.

Figure 4-C presents a summary of the disparity indices results for other professional services at the prime consultant level. Overall, minority firms (disparity index 38.2) and M/WBE firms (disparity index close to 51.0) were substantially underutilized. Among M/WBE firms, all utilized M/WBE groups were either underutilized or substantially underutilized. The corresponding results on disparity indices by year and business ownership classification are presented in Appendix B, Table B-3.

FIGURE 4-C
DISPARITY INDICES OF FIRMS, OTHER PROFESSIONAL SERVICES
PRIME CONSULTANT LEVEL



Source: MGT developed a Master Contracting and Availability Database for the study.
 Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.
 The index is based on the actual percentage value and not the rounded utilization and availability estimates percentage values presented. The disparity indices have been rounded.
 n/a denotes that the analyses cannot be applied in this case due to the mathematical constraint of division by zero.
 A dotted line is drawn at 80.00. A disparity index below 80.00 indicates a substantial level of disparity.
 A solid red line is drawn at 100.00. A disparity index greater than 100.00 indicates overutilization.
 Note: The corresponding disparity results on disparity results by year and business classification are presented in [Appendix B, Table B-3](#). The totals may not equal the sum of components due to rounding.

Table 4-9 presents a summary of the disparity indices results along with the t-test results or test for statistical significance for other professional services at the prime consultant level. The t-test results indicate that the findings of substantial underutilization for minority-, nonminority female-owned and M/WBE firms, as a whole, were statistically significant. In each of these cases, the t-tests provide another statistical measure accepted by the courts regarding how far the disparity ratio is from parity.

TABLE 4-9
DISPARITY INDICES AND T-TEST RESULTS FOR MINORITY- AND FEMALE-OWNED FIRMS,
OTHER PROFESSIONAL SERVICES
PRIME CONSULTANT LEVEL

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE	DISPARITY INDEX	STATISTICAL SIGNIFICANCE
		(%)		
African American Firms	0.00%	15.45%	0.00	¥¥
Asian American Firms	0.00%	4.24%	0.00	¥¥
Hispanic American Firms	17.71%	28.79%	61.53	¥¥
Native American Firms	1.36%	1.52%	89.72	n/ss
TOTAL MINORITY FIRMS	19.07%	50.00%	38.15	¥¥
Nonminority Female Firms	16.46%	19.70%	83.57	¥¥
Total M/WBE Firms	35.53%	69.70%	50.98	¥¥

Source: MGT developed a Master Contracting and Availability Database for the study. Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00. The index is based on the actual percentage value and not the rounded utilization and availability estimates Percentage values presented. The disparity indices have been rounded.

n/a and Not Applicable denotes that the analyses cannot be applied in this case due to the mathematical constraint of division by zero.

¥¥ denotes the ratio of utilization to availability is statistically significant at a 0.05 level.

n/ss denotes the ratio of utilization to availability is not statistically significant.

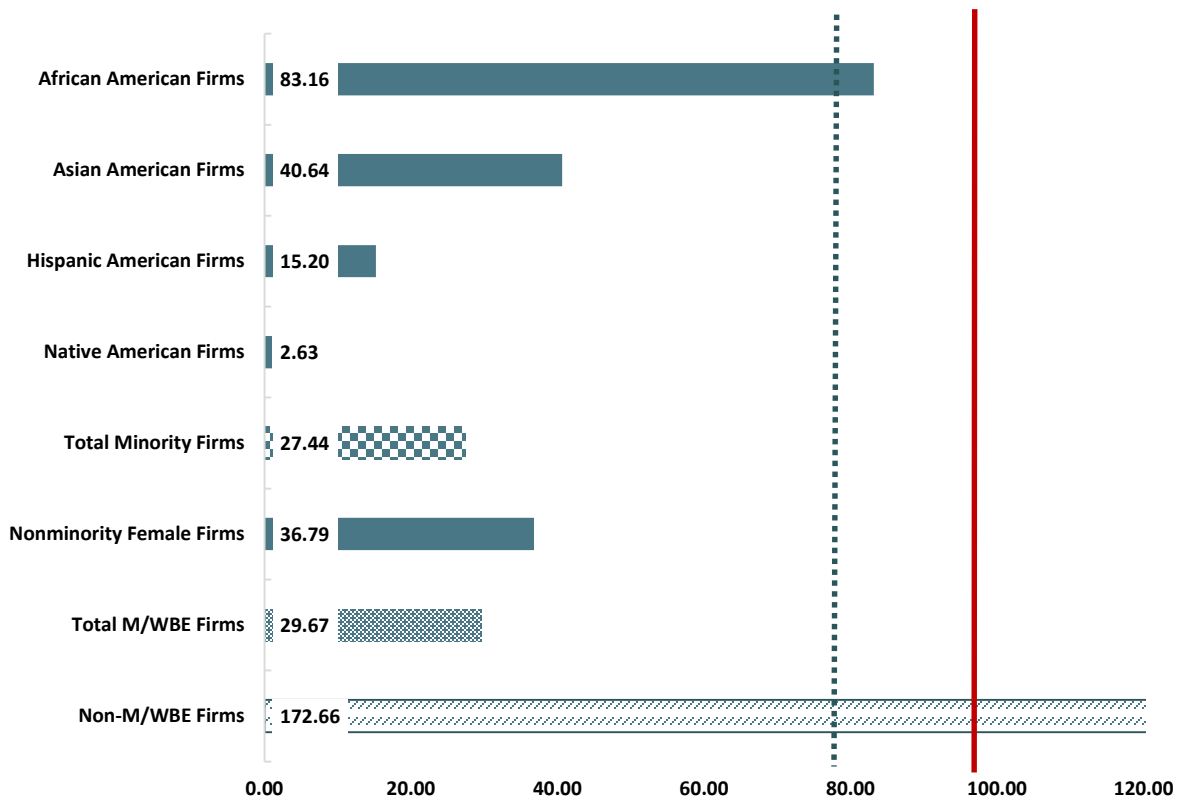
Not Applicable denotes the analyses cannot be applied in this case due to the mathematical constraint of division by zero.

-- indicate where results are based on fewer than five observations.

Note: The totals may not equal the sum of components due to rounding.

Figure 4-D presents a summary of the disparity indices results for procurement at the prime consultant level. Overall, minority firms (disparity index 27.4) and M/WBE firms (disparity index 29.7) were substantially underutilized. Among M/WBE firms, all utilized M/WBE groups were either underutilized or substantially underutilized. The corresponding results on disparity indices by year and business ownership classification are presented in **Appendix B, Table B-4**.

FIGURE 4-D
DISPARITY INDICES OF FIRMS, PROCUREMENT
PRIME CONSULTANT LEVEL



Source: MGT developed a Master Contracting and Availability Database for the study.
 Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.
 The index is based on the actual percentage value and not the rounded utilization and availability estimates percentage values presented. The disparity indices have been rounded.
 n/a denotes that the analyses cannot be applied in this case due to the mathematical constraint of division by zero.
 A dotted line is drawn at 80.00. A disparity index below 80.00 indicates a substantial level of disparity.
 A solid red line is drawn at 100.00. A disparity index greater than 100.00 indicates overutilization.
 Note: The corresponding disparity results on disparity results by year and business classification are presented in [Appendix B, Table B-4](#). The totals may not equal the sum of components due to rounding.

Table 4-10 presents a summary of the disparity indices results along with the t-test results or test for statistical significance for procurement at the prime consultant level. The t-test results indicate that the findings of substantial underutilization for minority-, nonminority female-owned and M/WBE firms, as a whole, were statistically significant. In each of these cases, the t-tests provide another statistical measure accepted by the courts regarding how far the disparity ratio is from parity.

TABLE 4-10
DISPARITY INDICES AND T-TEST RESULTS FOR MINORITY- AND FEMALE-OWNED FIRMS,
PROCUREMENT
PRIME CONSULTANT LEVEL

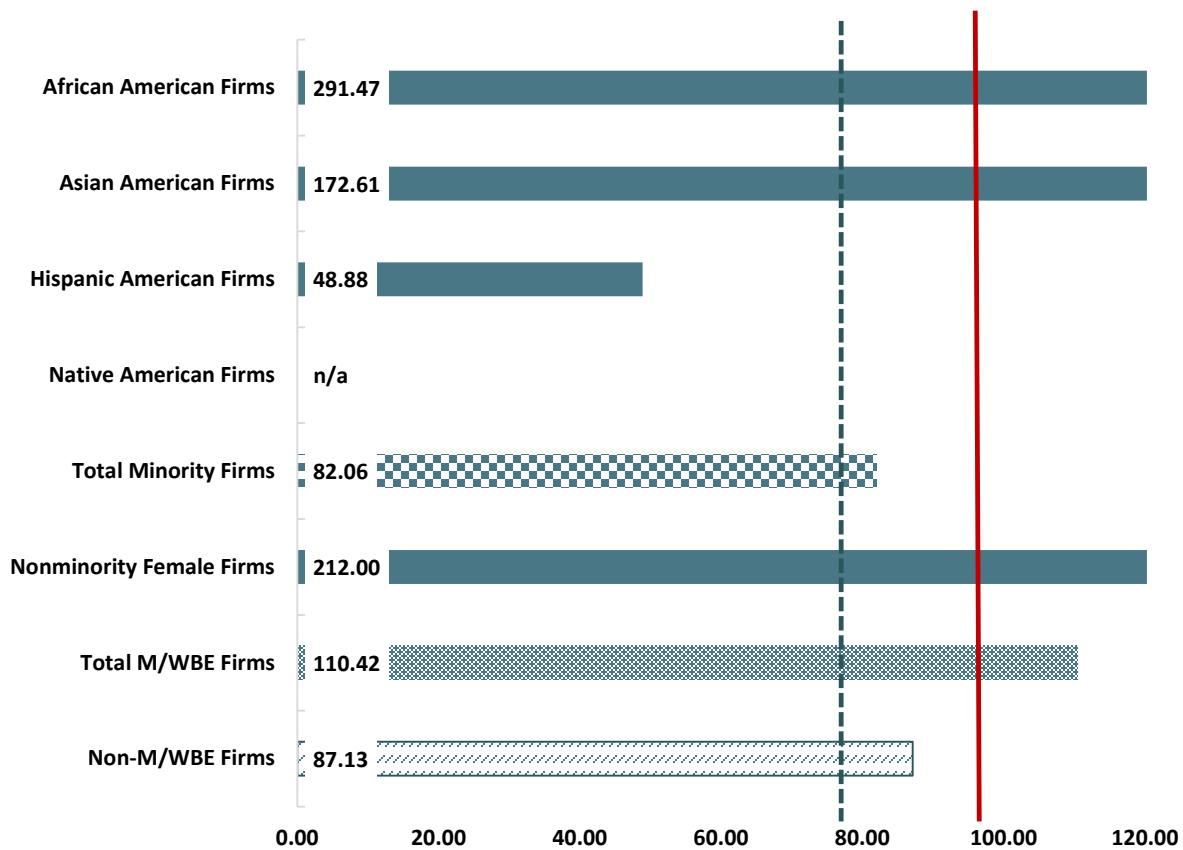
BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE	DISPARITY INDEX	STATISTICAL SIGNIFICANCE
		(%)		
African American Firms	5.40%	6.50%	83.16	n/ss
Asian American Firms	0.66%	1.62%	40.64	¥¥
Hispanic American Firms	4.53%	29.84%	15.20	¥¥
Native American Firms	0.02%	0.74%	2.63	¥¥
TOTAL MINORITY FIRMS	10.62%	38.70%	27.44	¥¥
Nonminority Female Firms	4.46%	12.11%	36.79	¥¥
Total M/WBE Firms	15.07%	50.81%	29.67	¥¥

Source: MGT developed a Master Contracting and Availability Database for the study.
 Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.
 The index is based on the actual percentage value and not the rounded utilization and availability estimates
 Percentage values presented. The disparity indices have been rounded.
 n/a and Not Applicable denotes that the analyses cannot be applied in this case due to the mathematical constraint of
 division by zero.
 ¥¥ denotes the ratio of utilization to availability is statistically significant at a 0.05 level.
 n/ss denotes the ratio of utilization to availability is not statistically significant.
 Not Applicable denotes the analyses cannot be applied in this case due to the mathematical constraint of division by zero.
 -- indicate where results are based on fewer than five observations.
 Note: The totals may not equal the sum of components due to rounding.

DISPARITY ANALYSES AND STATISTICAL SIGNIFICANCE AT THE SUB LEVEL

Figure 4-E presents a summary of the disparity indices results for engineering at the subconsultant level. Overall, minority firms (disparity index 82.1) were underutilized. Conversely, M/WBE firms (disparity index 110.4) were overutilized. Among M/WBE firms, all utilized M/WBE groups were overutilized with the exception of Hispanic American-owned firms (disparity index 48.9), which were substantially underutilized. The corresponding results on disparity indices by year and business ownership classification are presented in Appendix B, Table B-5.

FIGURE 4-E
DISPARITY INDICES OF FIRMS, ENGINEERING
SUBCONSULTANT LEVEL



Source: MGT developed a Master Contracting and Availability Database for the study.
 Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.
 The index is based on the actual percentage value and not the rounded utilization and availability estimates percentage values presented. The disparity indices have been rounded.
 n/a denotes that the analyses cannot be applied in this case due to the mathematical constraint of division by zero.
 A dotted line is drawn at 80.00. A disparity index below 80.00 indicates a substantial level of disparity.
 A solid red line is drawn at 100.00. A disparity index greater than 100.00 indicates overutilization.
 Note: The corresponding disparity results on disparity results by year and business classification are presented in [Appendix B, Table B-5](#). The totals may not equal the sum of components due to rounding.

Table 4-11 presents a summary of the disparity indices results along with the t-test results or test for statistical significance for minority- and nonminority female-owned firms in engineering at the subconsultant level. The t-test results indicate that the findings of underutilization for minority-owned firms, as well as the overutilization of nonminority female-owned firms and M/WBE firms, as a whole, were statistically significant. In each of these cases, the t-tests provide another statistical measure accepted by the courts regarding how far the disparity ratio is from parity.

TABLE 4-11
DISPARITY INDICES AND T-TEST RESULTS FOR MINORITY- AND FEMALE-OWNED FIRMS,
ENGINEERING
SUBCONSULTANT LEVEL

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE	DISPARITY INDEX	STATISTICAL SIGNIFICANCE
		(%)		
African American Firms	6.80%	2.33%	291.47	¥¥
Asian American Firms	12.09%	7.00%	172.61	¥¥
Hispanic American Firms	16.55%	33.85%	48.88	¥¥
Native American Firms	0.00%	0.00%	n/a	Not Applicable - -
TOTAL MINORITY FIRMS	35.44%	43.19%	82.06	¥¥
Nonminority Female Firms	25.57%	12.06%	212.00	¥¥
Total M/WBE Firms	61.01%	55.25%	110.42	¥¥

Source: MGT developed a Master Contracting and Availability Database for the study.

Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.

The index is based on the actual percentage value and not the rounded utilization and availability estimates

Percentage values presented. The disparity indices have been rounded.

n/a and Not Applicable denotes that the analyses cannot be applied in this case due to the mathematical constraint of division by zero.

¥¥ denotes the ratio of utilization to availability is statistically significant at a 0.05 level.

n/ss denotes the ratio of utilization to availability is not statistically significant.

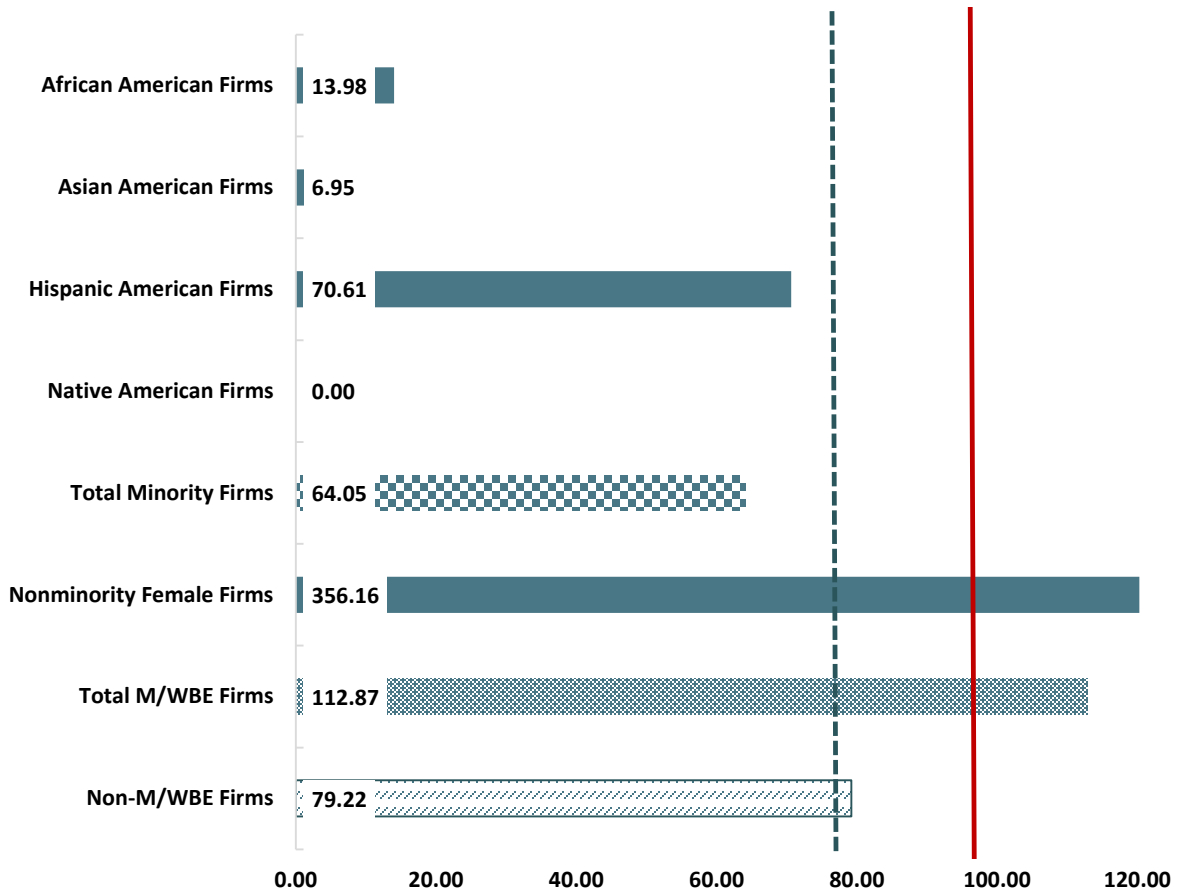
Not Applicable denotes the analyses cannot be applied in this case due to the mathematical constraint of division by zero.

- - indicate where results are based on fewer than five observations.

Note: The totals may not equal the sum of components due to rounding.

Figure 4-F presents a summary of the disparity indices results for heavy civil/utility construction at the subcontractor level. Overall, minority firms (disparity index 64.1) were substantially underutilized. Among minority firms, all MBE groups were substantially underutilized. Conversely, M/WBE firms (disparity index 112.9) were overutilized. Nonminority female-owned firms (disparity index 356.2) were overutilized. The corresponding results on disparity indices by year and business ownership classification are presented in **Appendix B**.

FIGURE 4-F
DISPARITY INDICES OF FIRMS, HEAVY CIVIL/UTILITY CONSTRUCTION
SUBCONTRACTOR LEVEL



Source: MGT developed a Master Contracting and Availability Database for the study. Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00. The index is based on the actual percentage value and not the rounded utilization and availability estimates percentage values presented. The disparity indices have been rounded.

n/a denotes that the analyses cannot be applied in this case due to the mathematical constraint of division by zero.

A dotted line is drawn at 80.00. A disparity index below 80.00 indicates a substantial level of disparity.

A solid red line is drawn at 100.00. A disparity index greater than 100.00 indicates overutilization.

Note: The corresponding disparity results on disparity results by year and business classification are presented in **Appendix B, Table B-6**. The totals may not equal the sum of components due to rounding.

Table 4-12 presents a summary of the disparity indices results along with the t-test results or test for statistical significance for minority- and nonminority female-owned firms in heavy civil/utility construction at the sub level. The t-test results indicate that the findings of substantial underutilization for minority-owned firms, as a whole, as well as the overutilization of nonminority female-owned firms and M/WBE

firms, as a whole, were statistically significant. In each of these cases, the t-tests provide another statistical measure accepted by the courts regarding how far the disparity ratio is from parity.

TABLE 4-12
DISPARITY INDICES AND T-TEST RESULTS FOR MINORITY- AND FEMALE-OWNED FIRMS,
HEAVY CIVIL/UTILITY CONSTRUCTION
SUBCONTRACTOR LEVEL

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE	DISPARITY INDEX	STATISTICAL SIGNIFICANCE
		(%)		
African American Firms	0.50%	3.55%	13.98	¥¥
Asian American Firms	0.07%	1.02%	6.95	¥¥
Hispanic American Firms	32.38%	45.85%	70.61	¥¥
Native American Firms	0.00%	1.02%	0.00	¥¥
TOTAL MINORITY FIRMS	32.95%	51.44%	64.05	¥¥
Nonminority Female Firms	36.76%	10.32%	356.16	¥¥
Total M/WBE Firms	69.71%	61.76%	112.87	¥¥

Source: MGT developed a Master Contracting and Availability Database for the study.

Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.

The index is based on the actual percentage value and not the rounded utilization and availability estimates

Percentage values presented. The disparity indices have been rounded.

n/a and Not Applicable denotes that the analyses cannot be applied in this case due to the mathematical constraint of division by zero.

¥¥ denotes the ratio of utilization to availability is statistically significant at a 0.05 level.

n/ss denotes the ratio of utilization to availability is not statistically significant.

Not Applicable denotes the analyses cannot be applied in this case due to the mathematical constraint of division by zero.

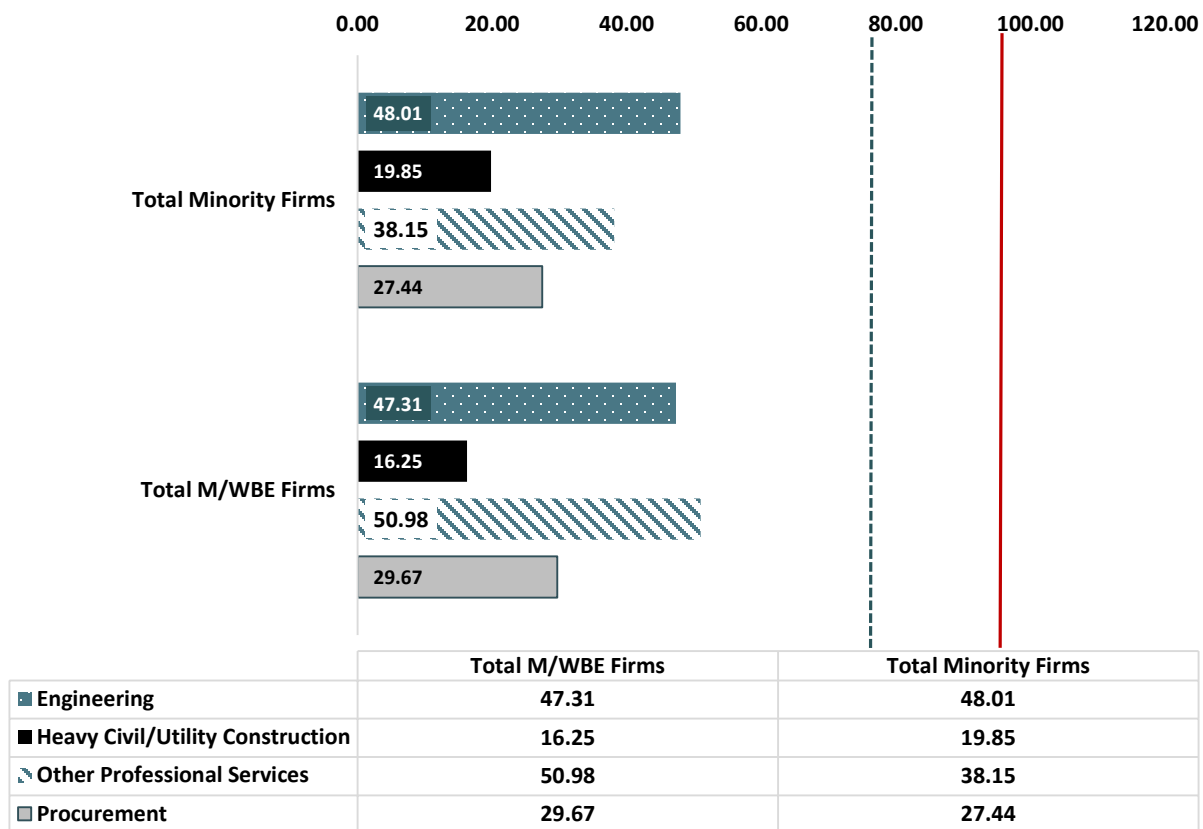
-- indicate where results are based on fewer than five observations.

Note: The totals may not equal the sum of components due to rounding.

5. SUMMARY

Figure 4-G presents the summary disparity indices results for overall minority and M/WBE groups at the prime level. There were disparities between the utilization and availability of minority and M/WBE firms, as a whole, in engineering, heavy civil/utility construction, other professional services, and procurement during January 1, 2011 to December 31, 2013. With the exception of other professional services and procurement, all M/WBE groups were substantially underutilized. In terms of other professional services, all M/WBE groups were substantially underutilized with the exception of Native American-owned firms (disparity index 89.7) and nonminority female-owned firms (disparity index 83.6), which were underutilized at the prime level. In procurement, all M/WBE groups were substantially underutilized with the exception of African American-owned firms (disparity index 83.2), which were underutilized. The t-test results or test for statistical significance indicate that the findings of underutilization of minority and M/WBE firms, as a whole, was statistically significant in all contract categories.

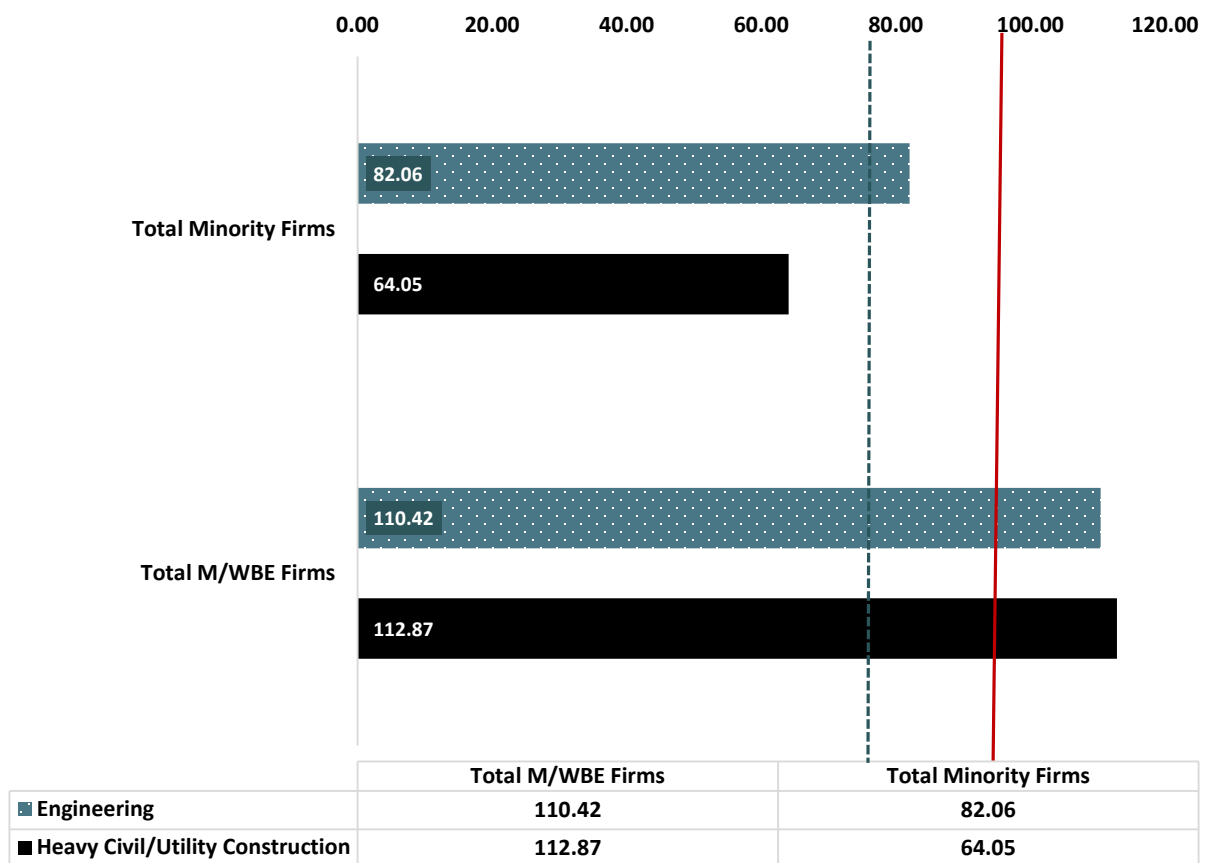
FIGURE 4-G
DISPARITY INDICES SUMMARY OF MINORITY AND M/WBE GROUPS BY CONTRACT CATEGORY
PRIME CONTRACTOR/CONSULTANT LEVEL



Source: MGT developed a Master Contracting and Availability Database for the study.
 Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.
 The index is based on the actual percentage value and not the rounded utilization and availability estimates percentage values presented. The disparity indices have been rounded.
 A dotted line is drawn at 80.00. A disparity index below 80.00 indicates a substantial level of disparity.
 A solid red line is drawn at 100.00. A disparity index greater than 100.00 indicates overutilization.

Figure 4-H presents the summary disparity indices results for overall minority and M/WBE groups at the sub level. Conversely when compared to the prime level, as a whole, there was overutilization between the utilization and availability of M/WBE firms in engineering and heavy civil/utility construction. In terms of minority firms, as a whole, there were disparities between the utilization and availability of minority firms. The t-test results or test for statistical significance indicate that the findings of underutilization of minority-owned firms, as a whole, was statistically significant in engineering and heavy civil/utility construction. The t-test results or test for statistical significance indicate that the findings of overutilization of M/WBE firms, as a whole, was statistically significant in engineering and heavy civil/utility construction.

FIGURE 4-H
DISPARITY INDICES SUMMARY OF MINORITY AND M/WBE GROUPS BY CONTRACT CATEGORY
SUBCONTRACTOR/SUBCONSULTANT LEVEL



Source: MGT developed a Master Contracting and Availability Database for the study.
 Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.
 The index is based on the actual percentage value and not the rounded utilization and availability estimates percentage values presented. The disparity indices have been rounded.
 A dotted line is drawn at 80.00. A disparity index below 80.00 indicates a substantial level of disparity.
 A solid red line is drawn at 100.00. A disparity index greater than 100.00 indicates overutilization.

CHAPTER 5: ANECDOTAL ANALYSES

CHAPTER 5: ANECDOTAL ANALYSES

CHAPTER SECTIONS

1. Introduction
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3. Demographics
4. Barriers to Doing Business with the San Antonio Water System
5. Prime Contractor Practices
6. Access to Capital
7. Disparate Treatment and Discrimination
8. Other Noteworthy Comments
9. Suggested Remedies from Anecdotal Participants
10. Conclusion

I. INTRODUCTION

The following chapter presents MGT of America, Inc.'s (MGT) approach to collecting qualitative (anecdotal) data, the methods employed and the quantitative and qualitative results of the data collected.

To ensure the validity and integrity of anecdotal data collection, construction and construction-related professional service firms were randomly selected from the master vendor database discussed in **Chapter 3, Market Area and Utilization Analyses**. From the sample pulled, M/WBEs and non-M/WBEs were contacted to participate in surveys or personal interviews. An open invitation was distributed to area firms to participate in three scheduled public hearings. A breakdown of participants is discussed within this chapter.

Anecdotal research is a widely accepted research methodology that is based upon observations, interviews, data collected during focus groups, survey responses and other anecdotal data collection methods. The collection and analysis of anecdotal data is used in conjunction with other research tools to provide context, and to help explain findings based on quantitative data analysis. Unlike conclusions derived from other types of analysis in this

report, the conclusions derived from anecdotal analysis do not rely solely on quantitative data. Anecdotal analysis also 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.

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*). Specifically, 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 or not 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 of anecdotal testimony is contained in **Chapter 2, Legal Framework**.

MGT's experience in conducting disparity studies has shown that utilizing multiple methods of anecdotal data collection provide more comprehensive information than methodologies using a single-pronged approach. For this reason, MGT used a combination of surveys, public hearings, and personal interviews to collect anecdotal information and to identify issues that were common to businesses in the market area between the calendar years of 2011 and 2013. In conjunction with the quantitative data, MGT drew inferences from these data as to the prevalence of obstacles perceived as limiting the participation of M/WBEs, and other firms in SAWS' procurement transactions.

Personal interviews and public hearing responses were edited for grammar. Otherwise responses were unfiltered or unedited. However, it should be cautioned that the comments collected from the survey of vendors, public hearings, and personal interviews 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 in the report.

SURVEY OF VENDORS

The survey of business owners gathered information on business ownership, work performed and/or bid with SAWS, work bid and/or performed in the private sector, and barriers, perceived or real, that prevented firms from doing business with SAWS during the study period. During the months of August through September 2014, businesses listed in the master vendor database were randomly selected and surveyed to solicit information about their firms and with SAWS. MGT attempted to collect data in proportion to the distribution of M/WBEs and non-M/WBEs in the relevant market area. Oppenheim Research, a Florida-based woman-owned research firm, administered a controlled survey and called firms using the **Appendix D - Survey of Vendors Instrument**, which resulted in 418 completed surveys with owners and representatives. Throughout this chapter several tables and figures detail selected survey results. Refer to **Appendix E - Survey of Vendors Results** for the complete survey of vendor results and explanation of the percentage calculations.

Disparity study surveys are commonly plagued by sample size limitations, especially in the case of attempting to gather a representative sample from minority business populations where low minority numbers pose problems. For example, Native American-owned businesses in most municipalities are insufficient in number to permit a valid and representative sample. This problem is compounded when analyses are stratified further by business type. Insufficient sample sizes can pose problems for the statistical confidence of the results. 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.

PUBLIC HEARINGS

MGT facilitated two public hearings with M/WBE and non-M/WBE firms with the assistance of MGT's subconsultant Innovative Strategies, a San Antonio based minority-owned firm. One hearing was held at the Mission Branch Library, 3134 Roosevelt Avenue on August 15, 2014. The second hearing was held at the SAWS Customer Center Building, 2800 U.S. Highway 281 North on August 22, 2014. Firms, M/WBEs and non-M/WBEs, included those who have done business with, or those interested in doing business with SAWS and its primes, were invited to attend. The public hearings were advertised using **Appendix I - Public Hearing Notice** through e-mail to firms in the SAWS web-based Vendor Registration and Notification (VRN) service data management system (SAWS vendor registration data). The public hearings were transcribed by Gracie O'Rourke Court Reporters, a San Antonio-based court reporting service.

PERSONAL INTERVIEWS

The personal interviews—which are structured settings where an interviewer uses an interview guide to solicit input from a participant—provided more latitude for additional information gathering on issues that are unique to the respondents’ experiences. Interviews were conducted with M/WBEs and non-M/WBEs. The personal interviews gathered information regarding:

- ♦ The firm’s primary line of business.
- ♦ Ethnicity.
- ♦ Education/training background of the owner.
- ♦ Business history.
- ♦ Firm size.
- ♦ Gross revenues during selected calendar and/or fiscal years.
- ♦ Information about the firms’ experiences in attempting to do, and conducting business with the SAWS, both directly as a prime and/or as a subcontractor.

The Personal Interview Guide (**Appendix H**) included questions designed to establish a profile for each business. Additionally, we asked questions related to experiences with SAWS’ M/WBE program and instances of disparate treatment and/or discrimination experienced or perceived by the firm while attempting to do or conducting business with SAWS. Innovative Strategies conducted the interviews. The interviewers 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. At the conclusion of the interviews, each participant was asked to sign an affidavit attesting that their responses were given freely and were true and accurate reflections of their experience with SAWS.

Interviews were conducted during August 2014 through September 2014 with M/WBE and non-M/WBE firms with a cross-section of the business community in SAWS’ jurisdiction. To obtain interviewees, firms not selected for other anecdotal activities were randomly selected from SAWS’ master vendor database then e-mailed, telephoned, or faxed confirmation letters after agreeing to be interviewed. The interviews were conducted either at the firm owner’s office, or at a location designated by the firm’s owner.

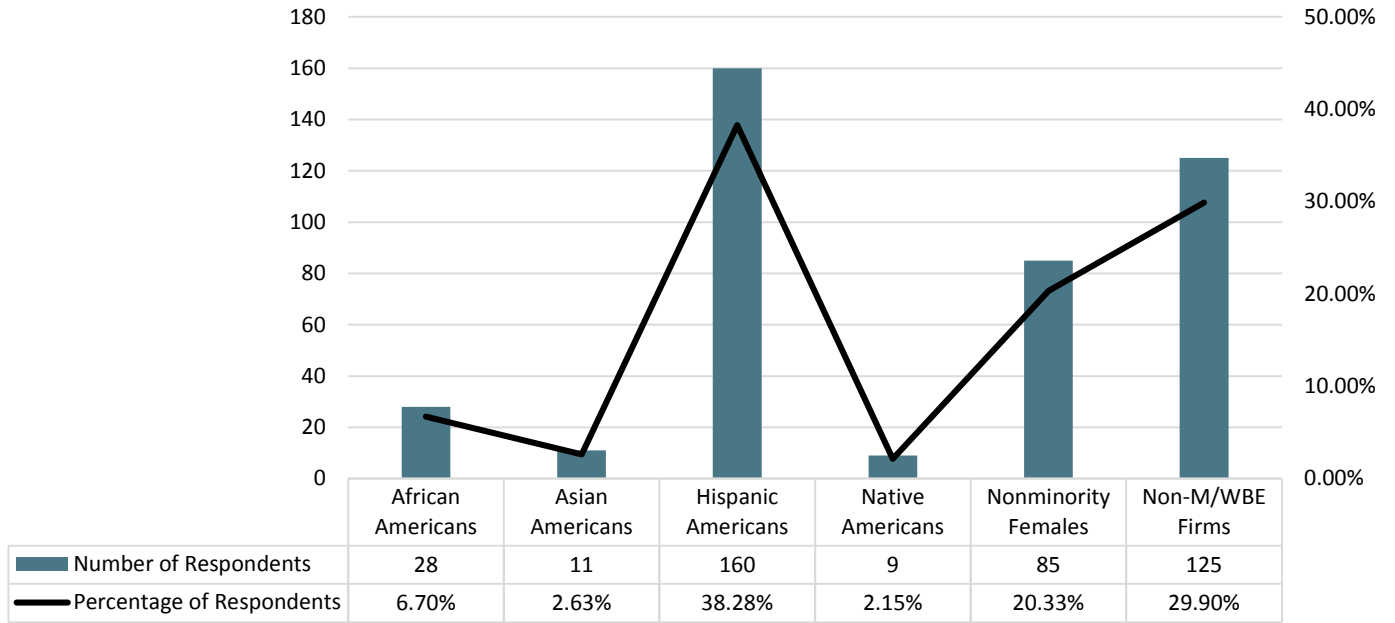
3. DEMOGRAPHICS

The demographic characteristics of participants in the collection of anecdotal information are described in the sections below.

SURVEY OF VENDORS’ DEMOGRAPHICS

The Survey of Vendors provided additional anecdotal data collections. **Figure 5-A** provides the race, ethnicity, and gender of the respondents who participated in the survey.

FIGURE 5-A
SURVEY OF VENDORS' DEMOGRAPHICS

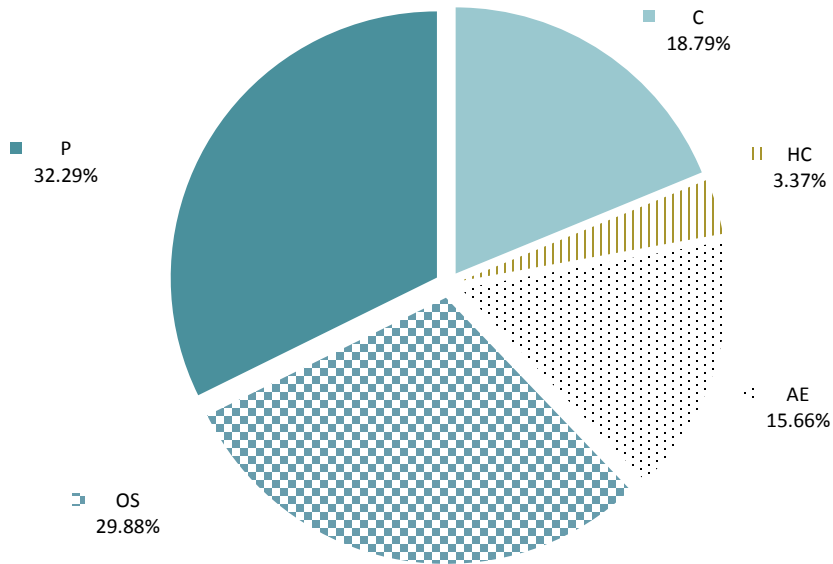


Source: Responses from San Antonio Water System survey of vendors. Survey of vendors was conducted by Oppenheim Research, 2014.

Figure 5-B categorizes the distribution of respondents based on their types of services. The primary type of business industries include general construction (C), heavy civil/utility construction (HC), architecture and engineering¹ (AE), other professional services (OS), and procurement (P). The “Other” industry categories means that the primary line of business is not associated with the primary line of business outlined in the survey.

¹ Respondents were asked to specify their company’s primary line of business. The options were: Heavy Civil/Utility Construction, Architecture and Engineering, Other Professional Services, Procurement (refer to [Appendix D, Survey of Vendors’ Instrument](#)), thus the survey of vendors’ analyses was based on these primary line of businesses.

FIGURE 5-B
SURVEY OF VENDORS DEMOGRAPHICS, BUSINESS INDUSTRY



Source: Responses from San Antonio Water System survey of vendors. Survey of vendors was conducted by Oppenheim Research, 2014.

Several survey questions were asked to determine the capacity of participating firms. **Tables 5-1, 5-2, and 5-3** detail the size of the firms, the largest contracts, and largest subcontracts awarded during the study period. **Table 5-1** shows that 55.7 percent of the firms surveyed have 0-10 employees, excluding the owner, which means a majority of firms were small businesses. Small business status may have implications for the type and size of projects firms are willing to pursue.

TABLE 5-1
SURVEY OF VENDORS DEMOGRAPHICS
NUMBER OF EMPLOYEES

BUSINESS OWNERSHIP CLASSIFICATION	0-10 EMPLOYEES	11-20 EMPLOYEES	21-30 EMPLOYEES	31-40 EMPLOYEES	41+ EMPLOYEES
African Americans	5.26%	0.72%	0.48%	0.00%	0.24%
Asian Americans	1.44%	0.24%	0.24%	0.00%	0.72%
Hispanic Americans	23.44%	6.94%	3.11%	1.44%	3.11%
Native Americans	1.67%	0.00%	0.00%	0.24%	0.24%
Nonminority Females	13.40%	2.39%	0.96%	0.24%	3.55%
Non-M/WBE Firms	10.53%	4.78%	3.59%	2.15%	8.85%
Total	55.74%	15.07%	8.37%	4.07%	16.51%

Source: Responses from San Antonio Water System survey of vendors. Survey of vendors was conducted by Oppenheim Research, 2014.

Table 5-2 details the responses from firms that performed work at the prime level on the largest contract awarded during the study period. For M/WBEs, the largest contracts are in the “Up to \$50,000” range. The largest contracts for non-M/WBEs were in the “Greater than \$1 million” dollar range.

TABLE 5-2
SURVEY OF VENDORS DEMOGRAPHICS
LARGEST CONTRACT AWARDED, PRIME LEVEL

BUSINESS OWNERSHIP CLASSIFICATION	UP TO \$50,000	\$50,001 - \$100,000	\$100,001 - \$200,000	\$200,001 - \$300,000	\$300,001 - \$400,000	\$400,001 - \$500,000	\$500,001 - \$1 MILLION	> \$1 MILLION
African Americans	2.39%	0.24%	0.24%	1.20%	0.24%	0.24%	0.48%	0.24%
Asian Americans	0.00%	0.72%	0.00%	0.00%	0.00%	0.24%	0.00%	0.96%
Hispanic Americans	8.37%	4.07%	2.39%	2.39%	1.44%	1.20%	2.87%	6.22%
Native Americans	0.72%	0.48%	0.48%	0.00%	0.00%	0.00%	0.24%	0.00%
Nonminority Females	4.55%	2.15%	1.44%	0.72%	0.00%	0.72%	1.44%	2.39%
Non-M/WBE Firms	2.39%	3.35%	1.20%	1.44%	0.96%	0.72%	1.44%	9.33%
Total	18.42%	11.00%	5.74%	5.74%	2.63%	3.11%	6.46%	19.14%

Source: Responses from San Antonio Water System survey of vendors. Survey of vendors was conducted by Oppenheim Research, 2014.

Table 5-3 details the responses from firms that performed work at the sub level on the largest contract awarded during the study period. For M/WBEs, the largest subcontracts were in the “Up to \$50,000” range. Non-M/WBEs participants responded their largest subcontracts were in the “\$50,001 - \$100,000” range followed by subcontracts in the “Greater than the \$1 million dollar range.”

TABLE 5-3
SURVEY OF VENDORS DEMOGRAPHICS
LARGEST CONTRACT AWARDED, SUB LEVEL

BUSINESS OWNERSHIP CLASSIFICATION	UP TO \$50,000	\$50,001 - \$100,000	\$100,001 - \$200,000	\$200,001 - \$300,000	\$300,001 - \$400,000	\$400,001 - \$500,000	\$500,001 - \$1 MILLION	> \$1 MILLION
African Americans	2.15%	0.00%	0.48%	0.00%	0.00%	0.00%	0.48%	0.24%
Asian Americans	0.48%	0.24%	0.24%	0.24%	0.00%	0.00%	0.00%	0.24%
Hispanic Americans	7.89%	4.31%	2.63%	2.39%	1.20%	1.91%	2.15%	2.63%
Native Americans	0.48%	0.00%	0.00%	0.24%	0.00%	0.00%	0.24%	0.00%
Nonminority Females	3.35%	1.91%	0.96%	0.48%	0.00%	0.48%	0.96%	1.67%
Non-M/WBE Firms	2.87%	4.07%	1.91%	1.20%	0.48%	0.48%	1.20%	3.59%
Total	17.22%	10.53%	6.22%	4.55%	1.67%	2.87%	5.02%	8.37%

Source: Responses from San Antonio Water System survey of vendors. Survey of vendors was conducted by Oppenheim Research, 2014.

PUBLIC HEARINGS DEMOGRAPHICS

Industries represented at the public hearings were construction, special trade contractors, suppliers, business and trade organizations, engineering, and architectural firms. There were 11 firms or individuals that attended the two hearings. The ethnic and gender classification of the attendees consisted of African Americans, Hispanic Americans, nonminority females, nonminority males, and privately-owned corporations. During the public hearings, one firm provided anecdotal testimony of their experiences doing business with SAWS and primes contracted with SAWS.

PERSONAL INTERVIEW DEMOGRAPHICS

The efforts of Innovative Strategies resulted in 25 firms that were interviewed. Of the 25 M/WBE and non-M/WBE firms that were interviewed, the ethnic and gender composition of the representatives included five African Americans, 11 Hispanic Americans, seven nonminority women, and two nonminority males.

4. BARRIERS TO DOING BUSINESS WITH SAN ANTONIO WATER SYSTEM

In the normal course of business, entrepreneurs may face certain barriers when establishing and operating a business enterprise. Several factors may also prevent a business from being selected for a contract or purchase order. In this section, MGT documents participant responses concerning barriers they faced in the procurement process and factors that frequently prevented them from winning contracts or purchase orders.

SURVEY OF VENDORS

Questions for the survey of vendors were designed to gather business owners' perceptions about the procurement process and their experiences when doing business or attempting to do business with the SAWS or prime contractors/consultants. An analysis of the responses showed that the majority of firms surveyed responded to questions about barriers to doing business with SAWS.

Among the 293 M/WBEs who responded to survey questions about barriers to doing business, the biggest concern for prime contractors was competing with larger firms (74 or 25.26% of M/WBEs). M/WBE subcontractors stated their biggest barrier working with primes on SAWS projects is competing with large companies (15 or 5.12% of M/WBEs).

It should be noted that 156 or 53.24 percent of M/WBE firms surveyed rated the ease of receiving notification of bid opportunities on SAWS project between extremely easy to easy. M/WBEs primarily received direct contact from SAWS of contract/procurement opportunities (106 or 36.18% of M/WBEs). Other notification methods included SAWS website (61 or 20.82%), private bidding subscription services (30 or 10.24%). Detailed results for all respondents and statistically significant differences in MBE and WBE responses to questions are located in [Appendix E, Survey of Vendors Results](#).

ANECDOTAL RESPONSES

The following section presents anecdotal comments participants provided from the personal interviews or public hearings when asked about their experiences in doing business or attempting to business with SAWS or its primes.

OBSTACLES IN THE PROCUREMENT PROCESS

- ♦ A Hispanic American firm stated SAWS' voting members always award contracts to the same firms and are not actively looking for new, small, local firms to take part in their contract opportunities. They strongly emphasized the underutilization of firms are located in the San Antonio area, and indicated they have not been previously awarded contracts with SAWS.
- ♦ A nonminority female stated large firms are not always actively looking for small and women-owned businesses to fulfill contract goals.
- ♦ An African American firm owner stated it is assumed that M/WBEs can only do specific types of work and are not able to complete large contracts like bigger firms can. He stated SAWS does not look at other factors such as a firm's work history when making selections.
- ♦ An African American firm owner stated the qualifications and types of work SAWS requests, and contracts being too large for smaller companies to effectively compete.
- ♦ A Hispanic American firm owner stated there are more opportunities given to male-owned businesses than women-owned.

- ♦ An African American firm owner stated insurance and liability requirements are not practical with the work scope of the contract.
- ♦ A Hispanic American firm owner indicated his firm no longer competes for SAWS' contracts, because he feels he is never given a fair chance since most of the work always goes to the same large firms that are outside of the San Antonio area. He no longer wastes his time or money.

SELECTION PROCESS

- ♦ A nonminority female firm owner stated SAWS' approach to awarding contracts is a barrier. She said they [SAWS] do not look at a firm's experience enough in the selection process and that there needs to be more objectivity.
- ♦ An African American male recommended creating consistency among raters during the selection process and training for all raters to further improve the process.
- ♦ A Hispanic American firm owner stated he was told that he did not receive a contract due to lack of experience working with SAWS, but feels he cannot gain the experience needed if he is never given an opportunity.
- ♦ An African American firm owner stated his proposal was rated less than another firm in the minority participation category during the selection process of a proposal he submitted. The other company's minority participation in their proposal was less than his firm's, which had 100 percent minority involvement. Due to the fact that he has previously seen race affect the selection process, he has chosen to not compete on certain opportunities.

5. PRIME CONTRACTOR PRACTICES

Anecdotal participants were asked to discuss their experiences working with or observing primes contracted by SAWS or in the private sector marketplace.

ANECDOTAL RESPONSES

- ♦ Of the interview respondents, 48 percent (12 respondents) stated there is an informal network of prime contractors or vendors that have excluded their company from doing business in the private sector and had an effect upon them winning contracts.
- ♦ A Hispanic American male indicated he was verbally awarded a significant subcontract on a SAWS project, but was not notified that his scope was significantly reduced after the prime finalized their contract with SAWS, nor was he notified the project had started. Upon further research, he learned his firm was used to meet the MBE goal, but he never did the work. SAWS stated they had no recourse to assist his firm, because the relationship was with the prime.

6. ACCESS TO CAPITAL

The following sections provide survey results and anecdotal comments concerning participants' experiences accessing financial capital during the study period.

SURVEY OF VENDORS RESPONSES

Survey respondents were asked if they applied for a commercial loan between 2011 and 2013 and whether they were approved or denied. If their loan was denied, a follow-up question asked what was

the basis of their denial. Of the 418 survey respondents, 94 firms (22.49% of total) applied for a commercial loan, 17.70 percent (74 respondents) were M/WBEs. Of the M/WBE respondents that applied for loans, 21 or 28.37 percent of applicants were denied loans.

ANECDOTAL RESPONSES

CAPITAL

- ♦ An African American firm owner stated his ability to do work depends on his firm’s line of credit.
- ♦ A Hispanic American firm owner stated slow payment from primes is a barrier to doing business.
- ♦ A Hispanic American firm owner stated with her limited capital and bonding capacity, it is difficult for her to take on larger jobs if they have only completed smaller contracts.

BONDING

- ♦ An African American firm owner stated that depending on the contract requirements, bonding was an impediment.
- ♦ A Hispanic American firm owner also responded that it depends on the way the bonding is required in the contract regarding whether it is an impediment.
- ♦ A nonminority female firm owner stated bonding is an impediment to doing business, because it requires a lot of capital.
- ♦ A Hispanic American firm owner stated bonding requirements do not always “fit the size of the contract.”

7. DISPARATE TREATMENT AND DISCRIMINATION

Participants in the survey and other anecdotal data gathering methods were asked if they experienced discriminatory or disparate behavior by SAWS, its primes, or in the private sector during the study period.

SURVEY OF VENDORS RESPONSES

Table 5-4 illustrates survey respondents’ experience of discriminatory behavior from SAWS, a prime contractor/consultant contracted by SAWS, or while conducting business in the private sector. The results of the survey shows that except for private sector responses, there were minimal responses to firms being discriminated against.

TABLE 5-4
SURVEY OF VENDORS DEMOGRAPHICS, DISCRIMINATION

	BY SAWS		BY PRIMES		PRIVATE SECTOR	
	%	NUMBER	%	NUMBER	%	NUMBER
M/WBE Primes	0.68%	2				
Non-M/WBE Primes	0.80%	1				
M/WBE (Subcontractor)			1.02%	3		
Non-M/WBE (Subcontractor)			0.80%	1		
All M/WBE Firms					8.53%	25
All non-M/WBE Firms					2.40%	3

Source: Responses from San Antonio Water System survey of vendors. Survey of vendors was conducted by Oppenheim Research, 2014.

With respect to disparate treatment, M/WBE subcontractor respondents reported:

- ♦ Seldom or never solicit firms on projects (private or public) without M/WBE goals – 49.82 percent or 146 respondents.
- ♦ An informal network precluded their firms from obtaining work in the private sector – 24.57 percent or 72 respondents.
- ♦ Selected to satisfy good faith efforts requirements and then dropped on SAWS projects – 5.80 percent or 17 respondents.
- ♦ Selected to satisfy good faith efforts requirements and then dropped on other public sector/private sector projects – 16.04 percent or 47 respondents.

These findings are consistent with the low minority and women business participation identified in **Chapter 6, Private Sector Analyses**.

ANECDOTAL RESPONSES

FACED DISCRIMINATION FROM PUBLIC SECTOR AGENCIES OR IN PRIVATE SECTOR

- ♦ Twenty percent (20%), or five of the 25 interview respondents indicated they experienced discrimination with other public sector agencies or the private sector in the San Antonio area.
- ♦ A Hispanic American firm owner stated he had been called a racist comment on a City of San Antonio project.
- ♦ A nonminority male stated he felt minority-owned firms are no longer the minority especially in the San Antonio area.
- ♦ A Hispanic American firm owner felt within the private sector, larger firms that have past relationships and connections in the business usually get all of the contracts. He stated there is an idea within the industry that minority firms only get businesses because of their race/ethnicity and not the work they produce.

8. OTHER NOTEWORTHY COMMENTS

As stated in **Section 2, Methodology**, it should be cautioned that the following comments are the perceptions and opinions of individuals.

- ♦ “I have established a personal relationship with some of the SAWS staff and I was encouraged to respond.”
- ♦ “The SAWS Small, Minority, Women Business Program Manager has reached out to my firm and supported my growth.”
- ♦ A Hispanic male recommended when voting members award contracts they announce who was awarded, their subcontractors, and how they met the M/WBE goals. He also suggested a rotation list of consultants for engineering and surveying projects versus single source contracting.

9. SUGGESTED REMEDIES FROM ANECDOTAL PARTICIPANTS

While collecting anecdotal data, participants provided their ideas and recommendations for improving the procurement process and increasing M/WBE participation. A few recurring ideas and/or recommendations provided by participants are:

1. Hold one-on-one meetings to allow SAWS to better understand the needs of various firms and the specific services they provide.
2. Add service/disabled veteran-owned firms to the outreach and goal programs.
3. Small business set-asides on larger projects.
4. Rotate recurring contracts.
5. Host a “Meet and Greet” for prime and subcontractors.
6. Promote smaller projects to small companies.
7. Include text message notifications of bid/proposal opportunities.
8. Local preference program with a component that awards evaluation points for contracting with local firms.
9. Incorporate M/WBE program compliance such as ensuring subsidiaries are meeting M/WBE goals.
10. Build a database for minority owned businesses with description of their services to help increase their exposure to prime contractors.

10. CONCLUSION

MGT collected anecdotal information from surveys, public hearings, and personal interviews with area firms. These activities resulted in 444 firms participating in the disparity study process.

Firms that provided anecdotal comments or participated in the survey generally agreed that SAWS’ selection process of awarding contracts is fair, however, to encourage competitiveness for M/WBE firms, SAWS should consider rotating contracts and allow non-SAWS experience into the evaluation process. Firms had more concerns with subcontractors working with primes on SAWS projects and in the public/private sector than with SAWS.

CHAPTER 6: PRIVATE SECTOR ANALYSES

CHAPTER 6: PRIVATE SECTOR ANALYSES

CHAPTER SECTIONS

1. Introduction
2. Private Sector Analysis Rationale and Methodology
3. Commercial Permits Utilization Analyses
4. Comparison of M/WBE Utilization on SAWS and Private Sector Projects
5. Analysis of Self-Employment in Propensity and Earnings
6. Self-Employment Rates and Earnings as an Analog of Business Formation and Maintenance
7. Research Questions, Statistical Models, and Methods
8. Results of the Self-Employment Analysis
9. Summary of Self-Employment Analysis Findings

I. INTRODUCTION

This chapter reports the analyses pertaining to minority- and woman-owned business enterprise (M/WBE) utilization and availability in the San Antonio private sector market. The analyses examined M/WBE utilization and availability in the private commercial construction industry to determine disparities in M/WBE utilization at both the prime contractor and subcontractor level. Once private sector utilization was established, MGT compared M/WBE and non-M/WBE utilization in the private sector to the utilization by San Antonio Water System (SAWS) for public sector construction procurement.

In **Section 6** of this chapter, the **Analysis of Self-Employment in Propensity and Earnings** analyze the dynamics of the marketplace to determine their impact on M/WBE competitiveness. This analysis examined the effects of race, ethnicity, and gender on business formation and earnings to test the hypothesis that M/WBEs are treated differently than nonminority-owned firms when attempting to create and conduct business in SAWS market area.

Section 2 describes our methodology for analyzing private sector utilization and availability of M/WBE and non-M/WBE firms in SAWS market area.

2. PRIVATE SECTOR ANALYSIS RATIONALE AND METHODOLOGY

In *City of Richmond v J.A. Croson (Croson)*, the Court established a “municipality has a compelling government interest in redressing not only discrimination committed by the municipality itself, but also discrimination committed by private parties within the municipality’s legislative jurisdiction, so long as the municipality in some way participated in the discrimination to be remedied by the program.”¹ This argument was reinforced by the Court of Appeals decision in *Adarand Construction, Inc. v Rodney Slater*, concluding there was a compelling interest for a government Disadvantaged Business Enterprise (DBE) program, based primarily on evidence of private sector discrimination.² According to this argument, discriminatory practices found in the private sector marketplace may be indicative of government’s

¹ *Croson*, 488 U.S. 46, 109 S.Ct. at 720-21, 744-45.

² *Adarand v. Slater*, 228 F.3d 1147 (10th Cir. 2000).

passive or, in some cases, active participation in local discrimination. To remedy such discrimination, *Croson* provided that government “can use its spending powers to remedy private discrimination, if it identifies discrimination with the particularity required by the Fourteenth Amendment.”³

The purpose of a private sector analysis is to evaluate the presence or absence of discrimination in the private sector marketplace, and to determine if there is evidence to support anecdotal comments from **Chapter 5, Anecdotal Analyses** regarding difficulties M/WBEs have in securing work on private sector projects without goals. Passive discrimination was examined in a disparity analysis of the utilization of M/WBE construction subcontractors by majority prime contractors on projects funded in SAWS construction market. A comparison of public sector M/WBE utilization with private sector utilization enables an assessment of the extent to which majority prime contractors have tended to hire M/WBE subcontractors only to satisfy public sector requirements. Thus, the following questions are addressed:

- ◆ Are there disparities in utilization of M/WBEs as prime contractors for commercial private sector construction projects relative to their availability in the Authority’s market area?
- ◆ Are there disparities in the utilization of M/WBEs in the marketplace as a whole?
- ◆ Are there disparities in utilization of M/WBEs as subcontractors for commercial private sector construction projects relative to their availability in the Authority’s market area?
- ◆ Are there disparities for women and minorities in the entry into and earnings from self-employment?

DATA COLLECTION AND MANAGEMENT

Our team was provided commercial construction permits data (such as building, electrical, plumbing)⁴ from the City of San Antonio Development Services Department for commercial construction projects permitted from January 1, 2011 and December 31, 2013. The value in examining permits is that it offers the most complete and up-to-date record of actual construction activity undertaken in these market areas.

The permit data was electronically transmitted to MGT staff in Microsoft Excel spreadsheet format. In order to isolate only commercial construction projects as the focus of analysis, public sector and residential building permit records were not included in the analyses. The data provided included the following but not limited to:

- | | |
|--------------------------|---------------------------|
| ◆ Permit Type Code | ◆ State |
| ◆ Permit Type Text | ◆ ZIP Code |
| ◆ Permit Number | ◆ Job Location |
| ◆ Project Description | ◆ Prime Indicator |
| ◆ Scope of Work Provided | ◆ Subcontractor Indicator |
| ◆ Owner | ◆ Date Issues |
| ◆ Address | ◆ Permit Dollar Value |
| ◆ City | ◆ Construction Value |

³ See *Richmond v. Croson*, 488 U.S. 492 (1989).

⁴ Appropriate permits are required for any building, construction, alteration, or repair involving new or changed uses of property (other than ordinary repairs). Although in most instances, individual permits were issued for work on the same project, it was possible, in many cases, to identify subcontractors who were clearly providers of construction and other services to prime contractors, based on the type of work, since separate permits are required for building, electrical, heating, air conditioning, and plumbing.

Since the data included prime and subcontractor indicators, these indicators were used to categorize the work performed: prime contractor work level and subcontractor work level.

M/WBE AND CONTRACT CATEGORY CLASSIFICATIONS

In **Chapter 3, Market Area and Utilization Analyses**, the five M/WBE classifications described—African American, Hispanic American, Asian American, Native American, and nonminority women—were used as the basis of MGT’s private sector analysis of utilization. Since the permit data did not contain contractor race, ethnicity, and gender classifications, MGT was able to assign M/WBE classifications using various vendor lists that maintain the race, ethnicity, and gender classification of the business owner. This process allowed our team to further identify and assign M/WBE classifications. In order to obtain the greatest number of potential match combinations, a manual match also was conducted.

The findings presented in this chapter deal only with private sector construction for two reasons. The first is that permit data, by its nature, pertains only to construction activities, which tends to be most extensive and reliable. Secondly, the courts have historically scrutinized construction more than any other contract category, because in both the public and private sector, it tends to be the most financially lucrative, and has the greatest impact on a local economy. The data were classified according to two categories of construction contractor: prime contractors and subcontractors, based on the prime and sub indicators.

MARKET AREA

As mentioned in **Chapter 3, Market Area and Utilization Analyses**, the determined relevant market area is the San Antonio Metropolitan Statistical Area (MSA). Therefore, the market area includes the following Texas counties: Atascosa, Bandera, Bexar, Comal, Guadalupe, Kendall, Medina, and Wilson.

3. COMMERCIAL PERMITS UTILIZATION ANALYSES

This section presents results of the utilization analyses of M/WBE and non-M/WBE firms in the private sector commercial construction market.

COMMERCIAL CONSTRUCTION UTILIZATION, PRIME LEVEL

Table 6-1 and **Figure 6-A** show utilization results based on the representative sample of all identified private commercial permits at the prime level issued from January 1, 2011 through December 31, 2013. The utilization of minority firms, as a whole, was 2.5 percent. The utilization of M/WBE firms, as a whole, was 3.1 percent. Among M/WBE firms, the utilization was higher with Hispanic American-owned firms (2.5%).

TABLE 6-1
UTILIZATION ANALYSIS AT THE PRIME LEVEL BY BUSINESS OWNERSHIP CLASSIFICATION
COMMERCIAL PERMITS

BUSINESS OWNERSHIP CLASSIFICATION	CONSTRUCTION VALUE (\$)	% OF CONSTRUCTION VALUE
African American Firms	\$0	0.00%
Asian American Firms	\$0	0.00%
Hispanic American Firms	\$75,078,080	2.50%
Native American Firms	\$0	0.00%
Total Minority Firms	\$75,078,080	2.50%
Nonminority Female Firms	\$17,821,787	0.59%
Total M/WBE Firms	\$92,899,867	3.10%
Non-M/WBE Firms	\$2,906,020,712	96.90%
Total Firms	\$2,998,920,579	100.00%

Source: Commercial permits data provide by the City of San Antonio Development Services Department, January 1, 2011, through December 31, 2013.

COMMERCIAL CONSTRUCTION UTILIZATION, SUB LEVEL

Table 6-2 and Figure 6-B show utilization results based on the representative sample of all identified private commercial permits at the sub level issued from January 1, 2011 through December 31, 2013. The utilization of minority firms, as a whole, was 1.2 percent. The utilization of M/WBE firms, as a whole, was 1.96 percent. Among M/WBE firms, the utilization was higher with Hispanic American-owned firms (1.2%).

TABLE 6-2
UTILIZATION ANALYSIS AT THE SUB LEVEL BY BUSINESS OWNERSHIP CLASSIFICATION
COMMERCIAL PERMITS

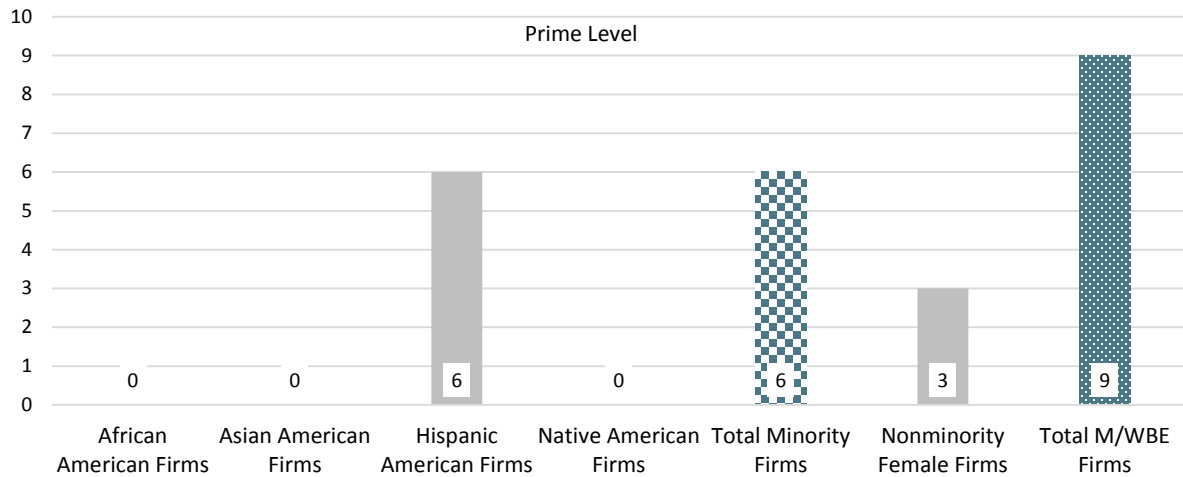
BUSINESS OWNERSHIP CLASSIFICATION	CONSTRUCTION VALUE (\$)	% OF CONSTRUCTION VALUE
African American Firms	\$0	0.00%
Asian American Firms	\$0	0.00%
Hispanic American Firms	\$26,900,554	1.23%
Native American Firms	\$0	0.00%
Total Minority Firms	\$26,900,554	1.23%
Nonminority Female Firms	\$16,077,815	0.74%
Total M/WBE Firms	\$42,978,369	1.96%
Non-M/WBE Firms	\$2,144,300,841	98.04%
Total Firms	\$2,187,279,209	100.00%

Source: Commercial permits data provide by the City of San Antonio Development Services Department, January 1, 2011, through December 31, 2013.

MGT also compared the commercial permits data set with firms utilized by SAWS during the study period. The goal of this analysis is to examine public sector and private sector contracting patterns for construction. MGT compared the firms utilized in SAWS heavy civil/construction projects to the listing of commercial permits issued to contractors inside of the San Antonio MSA. This comparison assists in answering the general question, "To what extent do utilized firms that appear in SAWS heavy civil/construction projects also appear in the commercial permitting data?"

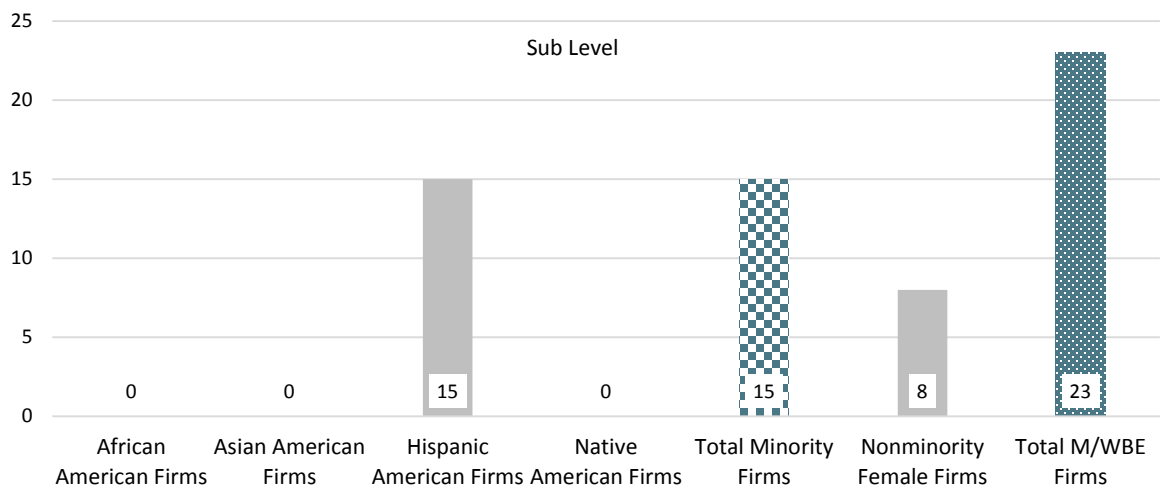
When the permitting patterns and SAWS data were cross-referenced by vendor, **Figure 6-A** shows nine M/WBE firms utilized at the prime level on SAWS projects were issued commercial permits. **Figure 6-B** shows 23 M/WBE firms utilized at the sub level on SAWS projects were issued commercial permits.

FIGURE 6-A
COMPARISON OF SAWS HEAVY CIVIL/CONSTRUCTION FIRMS TO COMMERCIAL PERMITS DATA
NUMBER OF FIRMS (M/WBE FIRMS) AT THE PRIME LEVEL



Source: Commercial permits data provide by the City of San Antonio Development Services Department, January 1, 2011, through December 31, 2013.

FIGURE 6-B
COMPARISON OF SAWS HEAVY CIVIL/CONSTRUCTION FIRMS TO COMMERCIAL PERMITS DATA
NUMBER OF FIRMS (M/WBE FIRMS) AT THE SUB LEVEL



Source: Commercial permits data provide by the City of San Antonio Development Services Department, January 1, 2011, through December 31, 2013.

4. COMPARISON OF M/WBE UTILIZATION ON SAWS AND PRIVATE SECTOR PROJECTS

There are differences in utilization of M/WBE firms at the prime contractor and subcontractor levels between SAWS and private commercial construction projects. Approximately 3.1 percent of the private commercial construction permit dollars at the prime level went to M/WBE firms, compared to 6.8 percent on SAWS heavy civil/utility construction projects. At the sub level, the utilization of M/WBE firms was lower on private commercial construction projects at close to two percent, compared to 69.7 percent on SAWS heavy civil/utility construction projects. When comparing M/WBE utilization between SAWS and commercial permits, SAWS exceeded the utilization of M/WBE firms.

5. ANALYSIS OF SELF-EMPLOYMENT IN PROPENSITY AND EARNINGS

The following presents results on the availability of minority, nonminority women, and nonminority male firms in five categories of private sector business activity in San Antonio, Texas. The goal of this investigation is to examine the effects of race and gender, along with other individual economic and demographic characteristics, on individuals' participation in the private sector as self-employed business operators, and on their earnings as a result of their participation. Ultimately, the results from the self-employment participation and earnings record of nonminority male business owners analyses results are compared to determine if a disparity in self-employment rates and earnings exists, and if it is attributable to racial or gender discrimination in the marketplace. Data for this research are provided by the Public Use Microdata Samples (PUMS) data derived from the 2012 American Community Survey, to which we apply appropriate regression statistics to draw conclusions. **Table 6-3** presents a general picture of self-employment rates by race, median earnings, and sample sizes (N's) in San Antonio, Texas, calculated from the five percent PUMS census sample.

The next section will discuss the research basis for this examination to lay the groundwork for a description of the models and methodologies to be employed. This will be followed by a presentation of results regarding minority status effects on self-employment rates, self-employment earnings, and attributions of these differences to discrimination, per se.

TABLE 6-3
PERCENTAGE SELF-EMPLOYED, 2012 EARNINGS BY
BUSINESS OWNERSHIP CLASSIFICATION

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF THE POPULATION SELF-EMPLOYED	2012 SAMPLE CENSUS (N)	2012 MEDIAN EARNINGS
Non-M/WBE Firms	20.09%	459	\$65,000.00
African American Firms	7.27%	76	\$30,000.00
Hispanic American Firms	9.61%	435	\$25,000.00
Asian Americans Firms	13.59%	73	\$35,000.00
Native Americans Firms	20.34%	12	\$51,000.00
Nonminority Female Firms	8.47%	136	\$50,000.00
TOTAL	11.84%	1,191	\$40,000.00

Source: PUMS data from 2012 American Community Survey (San Antonio, Texas) and MGT of America, Inc., calculations using SPSS Statistics software.

6. SELF-EMPLOYMENT RATES AND EARNINGS AS AN ANALOG OF BUSINESS FORMATION AND MAINTENANCE

Research in economics consistently supports the finding of group differences by race and gender in rates of business formation (see *Journal of Econometrics*, Vol. 61, Issue 1, devoted entirely to the econometrics of labor market discrimination and segregation). For a disparity study, however, the fundamental question is “How much of this difference is due to factors that would appear, at least superficially, to be related to group differences other than race, ethnicity, or gender, and how much can be attributed to discrimination effects related to one’s race, ethnic, gender affiliation?” We know, for instance, most minority groups have a lower median age than do non-Hispanic whites (ACS PUMS, 2012). We also know, in general, the likelihood of being self-employed increases with age (ACS PUMS, 2012). When social scientists speak of nonracial group differences, they are referring to such things as general differences in religious beliefs as these might influence group attitudes toward contraception, and, in turn, both birthrates and median age. A disparity study, therefore, seeks to examine these other important demographic and economic variables in conjunction with race and ethnicity, as they influence group rates of business formation, to determine if we can assert that discrimination against minorities is sufficiently present to warrant consideration of public sector legal remedies such as affirmative action and minority set-aside contracting.

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. Whereas, early disparity studies tended to focus on gross racial disparities, merely documenting these is insufficient for inferring discrimination effects per se without “partialling out”⁵ effects due to nondiscriminatory factors. Moreover, to the extent discrimination exists, it is likely to inhibit both the formation of minority business enterprises and their profits and growth. Consequently, earlier disparity study methodology and analysis have failed to account for the effects of discrimination on minority self-employment in at least two ways: (1) a failure to account adequately for the effects of discriminatory barriers minorities face “up front” in attempting to form businesses; and (2) a failure to isolate and methodologically explain discrimination effects once minority businesses are formed.

The next section addresses these shortcomings, utilizing PUMS data derived from the 2012 U.S. Census to answer research questions about the effects of discrimination on self-employment and self-employment earnings using multiple regression statistics.

7. RESEARCH QUESTIONS, STATISTICAL MODELS, AND METHODS

Two general research questions were posed in the initial analysis:

1. Are racial, ethnic, and gender minority groups less likely than nonminority males to be self-employed?
2. Does race, ethnicity, and/or gender have an impact on individuals’ earnings?

A third question, to be addressed later:

3. How much does race, ethnicity, and gender discrimination influence the probability of being self-employed?—draws conclusions based on findings the first two questions.

⁵ Partial out or “partialling out” refers to giving a variable a fixed value while considering the relationship between two related variables.

To answer the first two questions, we employed two multivariate regression techniques, respectively: logistic regression and linear regression. To understand the appropriate application of these regression techniques, it is helpful to explore in greater detail the questions we are trying to answer. The dependent variables in the first two questions—that is, the phenomena to be explained by influences such as age, race, gender, and disability status, for example (the independent or “explanatory” variables)—are, respectively: the probability of self-employment status (a binary, categorical variable based on two possible values: 0 = not self-employed/1 = self-employed) and 2009 earnings from self-employment (a continuous variable). In our analysis, the choice of regression approach was based on the scale of the dependent variable (in first question, a categorical scale with only two possible values, and in the second question, a continuous scale with many possible values). Because binary logistic regression is capable of performing an analysis in which the dependent variable is categorical, it was employed for the analysis of the first question.⁶ To analyze the second question, in which the dependent variable is continuous, we used simple linear regression.

DERIVING THE LOGISTIC REGRESSION MODEL FROM THE SIMPLE LINEAR MODEL

The logistic regression model can be derived with reference to the simple linear regression model expressed mathematically as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \dots + \varepsilon$$

Where:

- Y = a continuous variable (e.g., 2012 earnings from self-employment)
- β_0 = the constant, representing the value of Y when $X_i = 0$
- β_i = coefficient representing the magnitude of X_i 's effect on Y
- X_i = the independent variables, such as age, human capital (e.g., level of education), availability of capital, race/ethnicity/gender, etc.
- ε = the error term, representing the variance in Y unexplained by X_i

This equation may be summarized as:

$$E(Y) = \mu = \sum_{k=1}^K \beta_k x_k$$

in which Y is the dependent variable and μ represents the expected values of Y as a result of the effects of β , the explanatory variables. When we study a random distribution of Y using the linear model, we specify its expected values as a linear combination of K unknown parameters and the covariates or explanatory variables. When this model is applied to data in the analysis, we are able to find the statistical link between the dependent variable and the explanatory or independent variables.

Suppose we introduce a new term, η , into the linear model such as:

$$\eta = \mu = \sum_{k=1}^K \beta_k x_k$$

⁶ Logistical regression, or logit, models generate predicted probabilities 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).

When the data are randomly distributed, the link between η and μ is linear, and a simple linear regression can be used. However, to answer the first question, the categorical dependent variable was binomially distributed. Therefore, the link between η and μ became $\eta = \log[\mu/(1-\mu)]$ and logistic regression was utilized to determine the relationship between the dependent variable and the explanatory variables, calculated as a probability value (e.g., the probability of being self-employed when one is African American). The logistic regression model is expressed mathematically as:

$$\log[\mu/1(1-\mu)] = \alpha + \beta_i X_n + \varepsilon$$

Where:

$(\mu/1-\mu)$ = the probability of being self-employed

α = constant value

β_i = coefficient corresponding to independent variables

X_n = selected individual characteristic variables, such as age, marital status, education, race, and gender

ε = error term, representing the variance in Y unexplained by X_i

This model can now be used to determine the relationship between a single categorical variable (0 = not self-employed/1 = self-employed) and a set of characteristics hypothesized to influence the probability of finding a 0 or 1 value for the categorical variable. The result of this analysis illustrates not only the extent to which a characteristic can increase or decrease the likelihood the categorical variable will be a 0 or a 1, but also whether the effect of the influencing characteristics is positive or negative in relation to being self-employed.

8. RESULTS OF THE SELF-EMPLOYMENT ANALYSIS

QUESTION 1: ARE RACIAL, ETHNIC, AND GENDER MINORITY GROUPS LESS LIKELY THAN NONMINORITY MALES TO BE SELF-EMPLOYED?

To derive a set of variables known to predict employment status (self-employed/not self-employed), we used the 5-Percent PUMS data files from Census 2012. Binary 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 to the following criteria:

- ◆ Resident of San Antonio, Texas Metropolitan Statistical Area (MSA).
- ◆ Self-employed in the following business industries⁷: construction, professional services, general services, architecture and engineering,⁸ or goods and supplies.
- ◆ Employed full-time (more than 35 hours a week).
- ◆ 18 years of age or older.

⁷ The business industry (such as architecture and engineering) is consistent with terminology presented in U.S. Census Bureau data.

⁸ Due to inadequate sample numbers for all races in the Architecture and Engineering PUMS 2012 data, this business industry was merged with Professional Services.

- ◆ Employed in the private sector.

Next, we derived the following variables 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.**

FINDINGS

Binary logistic regression analysis provided estimates of the relationship between the independent variables described above and the probability of being self-employed in the four types of business industries. **Table 6-4** presents the odds ratios by minority group, reporting the effect of race, ethnicity, and gender on the odds of being self-employed in 2012, holding all other variables constant. Full regression results for all the variables are presented in **Appendix J**.

TABLE 6-4
SELF-EMPLOYMENT "ODDS RATIOS" OF MINORITY GROUPS RELATIVE TO NONMINORITY MALES AFTER CONTROLLING FOR SELECTED DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

BUSINESS OWNERSHIP CLASSIFICATION	ALL INDUSTRIES	CONSTRUCTION	PROFESSIONAL SERVICES	GENERAL SERVICES	GOODS & SUPPLIES
African American Firms	0.446	1.063	0.146	0.645	0.451
Hispanic American Firms	0.592	0.879	0.228	0.701	0.766
Asian American Firms	0.773	0.143	0.579	1.094	1.622
Native American Firms	1.376	4.075	1.826	0.879	*
Nonminority Female Firms	0.402	0.375	0.244	0.668	0.497

Source: PUMS data from 2012 American Community Survey (San Antonio, Texas) and MGT of America, Inc., calculations using SPSS Statistics software.

Note: **Bold** indicates the estimated "odds ratio" for the group was statistically significant. The architecture and engineering business industry was excluded from this analysis because of the insufficient data.

* There were insufficient census numbers available for analysis.

The results reveal the following:

- ◆ In all industries, nonminority males were nearly two and a half times as likely to be self-employed as nonminority women.⁹
- ◆ In all industries, nonminority males were over twice as likely to be self-employed as African Americans.
- ◆ Nonminority males were nearly seven times as likely as Native Americans to be self-employed in the construction industry.
- ◆ Nonminority males were over six times as likely as African Americans in professional services.

QUESTION II: DOES RACE, GENDER, AND ETHNIC STATUS HAVE AN IMPACT ON INDIVIDUALS' EARNINGS?

To answer this question, we compared self-employed, minority, and women entrepreneurs' earnings to those of nonminority males in San Antonio, Texas, when the effect of other demographic and economic characteristics was controlled or "neutralized." That is, we were able to examine the earnings of self-employed individuals of similar education levels, ages, etc., to permit earnings comparisons by race, gender, and ethnicity.

To derive a set of variables known to predict earnings, the dependent variable, we used 2012 wages from employment for self-employed individuals, as reported in the 5-Percent PUMS data files. These included:

- ◆ **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.**

FINDINGS

Table 6-5 presents the results of the linear regression model estimating the effects of selected demographic and economic variables on self-employment earnings. Each number (i.e., coefficient) in the exhibit represents a percent change in earnings. For example, the corresponding number for African Americans in all industries is $-.596$, meaning an African American will earn 59.6 percent less than a nonminority male when the statistical effects of the other variables in the equation are "controlled for." Full regression results for all the variables are presented in **Appendix J**.

⁹ These "likelihood" characteristics were derived from **Table 6-3** by calculating the inverse of the reported odds ratios.

TABLE 6-5
EARNINGS ELASTICITIES OF MINORITY GROUPS RELATIVE TO NONMINORITY MALES AFTER
CONTROLLING FOR SELECTED DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

BUSINESS OWNERSHIP CLASSIFICATION	ALL INDUSTRIES	CONSTRUCTION	PROFESSIONAL SERVICES	GENERAL SERVICES	GOODS & SUPPLIES
African American Firms	-0.596	-0.464	-0.430	-0.561	-0.776
Hispanic American Firms	-0.704	-0.687	0.058	-0.672	-0.662
Asian American Firms	-0.402	0.342	-0.037	-0.482	-0.087
Native American Firms	-0.502	-0.738	-0.806	0.204	*
Nonminority Female Firms	-0.311	0.001	-0.138	-0.561	0.129

Source: PUMS data from 2012 American Community Survey (San Antonio, Texas) and MGT of America, Inc., calculations using SPSS Statistics software.

Note: **Bold** indicates the estimated “elasticities” for the group were statistically significant. The architecture and engineering business industry was excluded from this analysis because of insufficient data.

* There were insufficient census numbers available for analysis.

The results reveal the following:

- ◆ In the San Antonio, Texas MSA, all groups reported significantly lower earnings in all business type categories, except for Native Americans.
- ◆ In the construction industry, African Americans reported significantly lower earnings than nonminority males: 46.4 percent less.
- ◆ In general services, Hispanic Americans reported significantly lower earnings than nonminority males: 67.2 percent less.
- ◆ The most egregious effect on earnings elasticities was found in the construction industry for Hispanic Americans. In the construction industry, Hispanic Americans earned 68.7 percent less than nonminority males.

DISPARITIES IN RATE OF SELF-EMPLOYMENT: HOW MUCH CAN BE ATTRIBUTED TO DISCRIMINATION?

Results of the analyses of self-employment rates and 2012 self-employment earnings revealed general disparities between minority and nonminority self-employed individuals whose businesses were located in the San Antonio, Texas MSA.

Table 6-6 presents the results of these analyses. Column A reports observed employment rates for each race and gender group, calculated directly from the PUMS 2012 data. To obtain values in columns B and C, we calculated two predicted self-employment rates using the following equation:

$$\text{Pr ob}(y = 1) = \frac{e^{\sum_{k=1}^K \beta_k x_k}}{1 + e^{\sum_{k=1}^K \beta_k x_k}}$$

Where:

$\text{Pr ob}(y = 1)$ = represents the probability of being self-employed

β_k = coefficient corresponding to the independent variables used in the logistic regression analysis of self-employment probabilities

x_k = the mean values of these same variables

The first of these predicted self-employment rate calculations (column B) presents nonminority male self-employment rates as they would be if their characteristics (i.e., x_k , or mean values for the independent variables) were applied to minority market structures (represented for each race by their β_k or odds coefficient values). The second self-employment rate calculation (column C) presents minority self-employment rates as they would be if minorities were rewarded in a similar manner as nonminority males in the nonminority male market structure: that is, by multiplying the minority means (i.e., characteristics) by the estimated nonminority coefficients for both race and the other independent variables.

TABLE 6-6
OBSERVED AND PREDICTED SELF-EMPLOYMENT RATES

BUSINESS OWNERSHIP CLASSIFICATION	OBSERVED SELF-EMPLOYMENT RATES	NONMINORITY MALE CHARACTERISTICS AND MINORITY MARKET STRUCTURE	MINORITY CHARACTERISTICS AND NONMINORITY MALE MARKET STRUCTURE	DISPARITY RATIO (COLUMN A DIVIDED BY COLUMN C)	PORTION OF DIFFERENCE DUE TO DISCRIMINATION
	(A)	(B)	(C)	(D)	(E)
Overall					
Non-M/WBE Firms	0.2009	0.2009	0.2009	1.0000	
African American Firms	0.0727	0.1182	0.1769	0.4112	81.27%
Hispanic American Firms	0.0961	0.1511	0.1716	0.5603	72.01%
Asian American Firms	0.1359	0.1886	0.2163	0.6285	n/d
Native American Firms	0.2034	0.2925	0.1990	1.0219	n/d
Nonminority Female Firms	0.0847	0.1078	0.2194	0.3860	n/d
Construction					
Nonminority Males	0.2013	0.2013	0.2013	1.0000	
African American	0.1963	0.2421	0.2183	0.8990	n/d
Hispanic American	0.1490	0.2089	0.1810	0.8231	61.22%
Asian American	0.0345	0.0412	0.2319	0.1487	n/d
Native American	0.4167	0.5504	0.1842	2.2620	n/d
Nonminority Women	0.0828	0.1013	0.2134	0.3878	n/d
Professional Services					
Nonminority Males	0.2417	0.2417	0.2417	1.0000	
African American	0.0256	0.0591	0.2074	0.1233	84.15%
Hispanic American	0.0381	0.0894	0.2169	0.1759	87.82%
Asian American	0.1106	0.1992	0.2345	0.4715	94.49%
Native American	0.2308	0.4397	0.1933	1.1938	n/d
Nonminority Women	0.0617	0.0951	0.2530	0.2439	n/d
Other Services					
Nonminority Males	0.1989	0.1989	0.1989	1.0000	
African American	0.1005	0.1495	0.1783	0.5635	79.09%
Hispanic American	0.1178	0.1604	0.1870	0.6302	85.25%
Asian American	0.1852	0.2296	0.2301	0.8048	n/d
Native American	0.1739	0.1931	0.2771	0.6277	n/d
Nonminority Women	0.1356	0.1540	0.2314	0.5858	n/d
Goods & Supplies					
Nonminority Males	0.0985	0.0985	0.0985	1.0000	
African American	0.0288	0.0616	0.0635	0.4529	49.86%
Hispanic American	0.0523	0.1003	0.0827	0.6327	65.79%
Asian American	0.1406	0.1909	0.1224	1.1488	43.24%
Native American	0.0000	0.0000	0.0009	0.0000	n/d
Nonminority Women	0.0564	0.0675	0.1561	0.3614	69.94%

Source: PUMS data from 2012 American Community Survey (San Antonio, Texas) and MGT of America, Inc., calculations using SPSS Statistics software.

n/d: No discrimination was found.

Using these calculations, we were able to determine a percentage of the disparities in self-employment between minorities and nonminority males attributable to discrimination by dividing the observed self-employment rate for a particular minority group (column A) by the predicted self-employment rate as it would be if minority groups faced the same market structure as nonminority males (column C). Next, we calculated the difference between the predicted self-employment rate as it would be if minority groups faced the same market structure as nonminority males and the observed self-employment rate for the specified minority group, and divided this value by the difference between the observed self-employment rate for nonminority males and the self-employment rate for a particular minority group. In the absence

of discrimination, this number is zero, which means disparities in self-employment rates between minority groups and nonminority males can be attributed to differences in group characteristics not associated with discrimination. Conversely, as this value approaches 1.0, we are able to attribute disparities increasingly to discrimination in the marketplace.

FINDINGS

Examining the results reported in **Table 6-6**, we found the following:

- ◆ Overall, comparing self-employed nonminority males with self-employed African Americans, over 81 percent of the disparity in self-employment rates was attributable to race differences.
- ◆ Overall, comparing self-employed nonminority males with self-employed Hispanic Americans, over 72 percent of the disparity in self-employment rates was attributable to race differences.
- ◆ Comparing self-employed nonminority males with self-employed Hispanic Americans in the construction industry, over 61 percent of the disparity in self-employment rates was attributable to race differences.
- ◆ Comparing self-employed nonminority males with self-employed Hispanic Americans in the general services, over 85 percent of the disparity in self-employment rates was attributable to race differences.
- ◆ Comparing self-employed nonminority males with self-employed Asian Americans in the professional services, over 94 percent of the disparity in self-employment rates was attributable to race differences.

9. SUMMARY OF SELF-EMPLOYMENT ANALYSIS FINDINGS

In general, findings from the PUMS 2012 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 2012 than did self-employed nonminority males. 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 women. 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.¹⁰

¹⁰ **Appendix J** reports self-employment rates and earnings in greater detail by race, ethnicity, and gender business ownership classification and business type.

CHAPTER 7: FINDINGS AND RECOMMENDATIONS

CHAPTER 7: FINDINGS AND RECOMMENDATIONS

CHAPTER SECTIONS

1. Introduction
2. Findings
3. Commendations and Recommendations

I. INTRODUCTION

In 2013, MGT of America, Inc. (MGT), was retained to conduct a Disparity Study for San Antonio Water System (SAWS) to provide current data on SAWS programs. In this chapter, MGT provides findings for SAWS on minority, women, and disadvantaged business enterprise (M/WBE) utilization and availability.¹ This study consisted of fact-finding to analyze SAWS procurement trends and practices for the study period from January 1, 2011 through December 31, 2013; to evaluate

the impact of race- and gender-neutral remedial efforts; and to evaluate various options for future program development.

The results of this study and conclusions drawn are presented in detail in **Chapters 3** through **6** of this report.

2. FINDINGS

FINDING A: RECENT M/WBE POLICY

SAWS M/WBE prime utilization in the 2009 disparity study is presented in **Table 7-1** below.

TABLE 7-1
SUMMARY OF M/WBE UTILIZATION
BY BUSINESS OWNERSHIP CLASSIFICATION
JANUARY 1, 2002 THROUGH DECEMBER 31, 2006

BUSINESS CATEGORY	DOLLARS	PERCENT
Construction	\$35,536,735	20.23%
Engineering	\$10,863,293	27.00%
Professional Services	\$2,121,881	15.77%
General Services	\$15,153,310	33.78%

Source: MGT, San Antonio Regional Business Disparity Causation Analysis Study, 2009.

FINDING B: M/WBE PRIME UTILIZATION

The dollar value of M/WBE prime utilization on SAWS projects over the current study period (January 1, 2011 through December 31, 2013) within the relevant market was as follows:

- ♦ Across all contract categories, minority firms were paid \$41.27 million, 8.71 percent of all prime dollars. Nonminority female-owned firms were paid \$7.68 million, 1.62 percent of all prime dollars.

¹ M/WBEs includes minority- and women-owned firms includes certified and non-certified M/WBE firms.

- ◆ In heavy civil/utility construction, minority firms were paid \$22.96 million at the prime level, 6.70 percent of the total heavy civil/utility construction prime contract dollars; nonminority female-owned firms were paid \$173,189 at the prime level, 0.05 percent of the total construction prime contract dollars (Table 7-2). There was disparity for all M/WBE groups except African American-owned firms, for whom there was no construction prime availability. The t-test results indicate that the findings of substantial underutilization for Asian American-, Hispanic American, Native American-owned firms, and minority-owned and M/WBE firms, as a whole, were statistically significant.
- ◆ In engineering, minority firms were paid \$10.5 million at the prime level, 16.46 percent of the total engineering prime dollars; nonminority female-owned firms were paid \$3.59 million at the prime level, 5.62 percent of the total engineering prime contract dollars (Table 7-2). There was disparity for all M/WBE groups except Native American-owned firms, for whom there was no engineering prime availability. The t-test results indicate that the findings of substantial underutilization for Asian American-, Hispanic American, and minority-owned firms, as a whole, as well as nonminority female-owned and M/WBE firms, as a whole, were statistically significant.
- ◆ In other professional services, minority firms were paid \$1.46 million at the prime level, 19.07 percent of the total other professional services prime dollars; nonminority female-owned firms were paid \$1.26 at the prime level, 16.46 percent of the total other professional services prime dollars (Table 7-2). There was disparity for Hispanic Americans. There was no prime availability for African American- and Asian American-owned firms. Disparity for Native American- and nonminority female-owned firms was not substantial. The t-test results indicate that the findings of substantial underutilization for African American-, Asian American-, Hispanic American, and minority-owned firms, as a whole, as well as nonminority female-owned and M/WBE firms, as a whole, were statistically significant.
- ◆ In Procurement, MBEs were paid \$6.30 million on procurement prime contracts, 10.62 percent of the total procurement prime contract dollars; WBEs were paid \$2.64 million on procurement prime contracts, 4.46 percent of the total procurement prime contract dollars (Table 7-2). There was disparity for all M/WBE groups although African American-owned disparity was not substantial. The t-test results indicate that the findings of substantial underutilization for minority-owned and M/WBE firms, as a whole, were statistically significant.

TABLE 7-2
SUMMARY OF PRIME CONTRACTOR UTILIZATION
BY CONTRACT CATEGORY AND BUSINESS OWNERSHIP CLASSIFICATION

BUSINESS OWNERSHIP CLASSIFICATION	HEAVY CIVIL/UTILITY CONSTRUCTION	ENGINEERING	OTHER PROFESSIONAL SERVICES	PROCUREMENT
	(\$)	(\$)	(\$)	(\$)
Total Minority Firms	\$22,969,564	\$10,532,589	\$1,467,193	\$6,305,506
Total Nonminority Female Firms	\$173,189	\$3,597,234	\$1,266,263	\$2,646,411
Total M/WBE Firms	\$23,142,753	\$14,129,823	\$2,733,456	\$8,951,917
	(%)	(%)	(%)	(%)
Total Minority Firms	6.70%	16.46%	19.07%	10.62%
Total Nonminority Female Firms	0.05%	5.62%	16.46%	4.46%
Total M/WBE Firms	6.75%	22.08%	35.53%	15.07%

Source: Chapter 3, Market Area and Utilization Analyses.

FINDING C: M/WBE SUBCONTRACTOR UTILIZATION AND DISPARITY

The dollar value of M/WBE subcontractor utilization on SAWS projects over the current study period from January 1, 2011 through December 31, 2013 within the relevant market was as follows:

- ◆ Across all procurement categories, minority firms were paid \$22.52 million, 34.55 percent of all sub dollars. Nonminority female-owned firms were paid \$ 21.5 million, 33.03 percent of all sub dollars.
- ◆ In heavy civil/utility construction, minority firms were paid \$15.04 million at the sub level, 32.95 percent of the total heavy civil/utility construction subcontract dollars; nonminority female-owned firms were paid \$16.78 million at the sub level, 36.76 percent of the total construction subcontract dollars (**Table 7-3**). There was disparity for all MBE groups except Native American-owned firms, for whom there was no heavy civil/utility construction subcontracting availability. The t-test results indicate that the findings of substantial underutilization for Hispanic American-owned firms and minority-owned firms as a whole were statistically significant, as well as the overutilization of African American-, Asian American-, nonminority female-owned firms and M/WBE firms as a whole.
- ◆ In engineering, minority firms were paid \$6.58 million at the sub level, 35.44 percent of the total engineering subcontract dollars; nonminority female-owned firms were paid \$4.75 million at the sub level, 25.57 percent of the total engineering subcontract dollars (**Table 7-3**). There was disparity for Hispanic American-owned firms. The t-test results indicate that the findings of substantial underutilization for African American-, Asian American-, Native American- and minority-owned firms as a whole were statistically significant, as well as the overutilization of nonminority female-owned firms were statistically significant.
- ◆ In other professional services, minority firms were paid \$479,011 on other professional services subcontracts, 88.18 percent of the total other professional services subcontract dollars; nonminority female-owned firms were not utilized at the sub level (**Table 7-3**). No disparity or test for statistical significance (t-test results) was calculated for this category, because of the small amount of subcontract spending.
- ◆ In procurement, minority firms were paid \$417,271 on procurement subcontracts, 100 percent of the total procurement subcontract dollars; nonminority female-owned firms were not utilized at the sub level (**Table 7-3**). No disparity or test for statistical significance (t-test results) was calculated for this category, because of the small amount of subcontract spending.

TABLE 7-3
SUMMARY OF SUBCONTRACTOR UTILIZATION
BY CONTRACT CATEGORY AND BUSINESS OWNERSHIP CLASSIFICATION

BUSINESS OWNERSHIP CLASSIFICATION	HEAVY CIVIL/UTILITY CONSTRUCTION	ENGINEERING	OTHER PROFESSIONAL SERVICES	PROCUREMENT
	(\$)	(\$)	(\$)	(\$)
Total Minority Firms	\$15,043,769	\$6,585,006	\$479,011	\$417,271
Total Nonminority Female Firms	\$16,786,133	\$4,751,269	\$0	\$0
Total M/WBE Firms	\$31,829,902	\$11,336,275	\$479,011	\$417,271
	(%)	(%)	(%)	(%)
Total Minority Firms	32.95%	35.44%	88.18%	100.00%
Total Nonminority Female Firms	36.76%	25.57%	0.00%	0.00%
Total M/WBE Firms	69.71%	61.01%	88.18%	100.00%

Source: Chapter 3, Market Area and Utilization Analyses.

FINDING D: PRIVATE SECTOR COMMERCIAL CONSTRUCTION

As a whole, M/WBE utilization in private sector commercial construction in the San Antonio Metropolitan Statistical Area (MSA) was very low, as measured by data from building permits. From January 1, 2011 through December 31, 2013, minority prime contractors won 2.50 percent of prime permits and nonminority female-owned firms received 0.59 percent of permits. MBE subcontractors were issued 1.23 percent of all subcontracting permits and WBEs 0.74 percent of subcontracting permits.

FINDING E: DISPARITIES IN SELF-EMPLOYMENT AND REVENUE EARNINGS

Econometric analysis using data from 2012 American Community Survey U.S. Census Bureau data for the San Antonio area found statistically significant disparities for entry into self-employment: for African Americans, Hispanic Americans and nonminority women. There were statistically significant disparities in earnings from self-employment for Hispanic Americans, Asian Americans, and Nonminority Women.

FINDING F: ACCESS TO CAPITAL

An econometric analysis of data in the National Survey of Small Business Finance (NSSBF) found a statistically significant positive relationship between the probability of loan denial and African American ownership. These results are consistent with data in the local survey. About 10.0 percent of non-M/WBE loan applicants reported being denied commercial bank loans, as compared to 55.5 percent of African American applicants and 32.5 percent of Hispanic American applicants.

FINDING G: ANECDOTAL COMMENTS

Among the M/WBE firms who responded to survey questions about barriers to doing business, the biggest concern for prime contractors was competing with larger firms (74 or 25.26% of M/WBEs). M/WBE subcontractors stated their biggest barrier working with primes on SAWS projects is competing with large companies (15 or 5.12% of M/WBEs).

With respect to disparate treatment, M/WBE subcontractor respondents reported:

- ◆ Seldom or never solicit firms on projects (private or public) without M/WBE goals – 49.82 percent or 146 respondents.

- ◆ An informal network precluded their firms from obtaining work in the private sector – 24.57 percent or 72 respondents.
- ◆ Selected to satisfy good faith efforts requirements and then dropped on SAWS projects – 5.80 percent or 17 respondents.
- ◆ Selected to satisfy good faith efforts requirements and then dropped on other public sector/private sector projects – 16.04 percent or 47 respondents.

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: SUBCONTRACTOR PROJECT GOALS

In response to the primary research question, this study provides evidence to support a SAWS M/WBE program. This conclusion is based primarily on statistical disparities in current M/WBE utilization; evidence of discrimination in business formation and revenue earned from self-employment; very low M/WBE utilization in the commercial building permit evidence; the stark decline in M/WBE utilization with the termination of the City of San Antonio M/WBE program in 2011; credit disparities; and anecdotal evidence of disparate treatment. SAWS should tailor its M/WBE participation policy to remedy each of these specific disparities. The core theme should be that prime contractors should document their outreach efforts and the reasons why they may have rejected qualified M/WBEs and M/WBEs that were the low-bidding subcontractors.

RECOMMENDATION B: ASPIRATIONAL M/WBE GOALS

Aspirational M/WBE goals are proposed in **Table 7-4** below. These proposed aspirational goals are similar in design to the DBE goal setting process in that the goals are a weighted average of estimated M/WBE availability and utilization. These goals should be revisited, and possibly adjusted, on a regular basis before the next disparity study is undertaken. Such reassessments are particularly important given that available firms during the 2011-13 study period may have closed, left the MSA, or merged with non-M/WBEs.

Table 7-4 also presents aspirational subcontractor M/WBE goals for Construction and Engineering. These proposed project goals are expressed as a percentage of the total contract dollars, not as a percentage of subcontract dollars. **Table 7-4** does not present aspirational project goals for professional services and goods because of the low amount of subcontracting in those areas.

TABLE 7-4
PROPOSED ASPIRATIONAL OVERALL AND SUBCONTRACTOR M/WBE GOALS, 2015

CONTRACT CATEGORY	OVERALL MBE GOALS	OVERALL WBE GOALS	M/WBE SUBCONTRACTOR GOALS
Construction	9.4%	0.8%	9.1%
Engineering	18.2%	6.3%	17.4%
Other Professional Services	22.2%	16.8%	NA
Procurement	13.3%	5.2%	NA

Source: MGT developed proposed aspirational M/WBE goals.

COMMENDATION AND RECOMMENDATION C: VENDOR ROTATION

SAWS should consider more use of vendor rotation for procurement areas where such a policy does not conflict with state law and would serve to encourage M/WBE utilization.

COMMENDATION AND RECOMMENDATION D: DATA MANAGEMENT

SAWS should be commended for participating in the 2009 San Antonio Regional Disparity Study and in significant strides in tracking M/WBE utilization. In particular, SAWS should be commended for:

- ◆ Implementing the Subcontractor Payment & Utilization Reporting System (S.P.U.R.S) data management system that is powered by B2GNow. This system maintains and tracks the Board awarded projects (awards and payments) at the prime and sub level.
- ◆ Implementing the web-based Vendor Registration and Notification (VRN) service data management system. This is a bidder, consultant, and vendor web-based system.

Recommendations

- ◆ Continue to use both systems and to monitor both systems for accuracy. There might be opportunities to improve the process, particularly the VRN system since the information is entered by the vendor.
- ◆ Include the specific scope of services or code in S.P.U.R. System that the vendor is being awarded and/or paid to provide. This is in addition to the contract category and contract type. SAWS should consider penalties for failure to report payments in the S.P.U.R. System.
- ◆ Track additional information in VRN, specifically related to capacity, such as largest project (type and dollar value), number of employees, gross revenue, and information that will assist SAWS in reviewing capacity and capability.

COMMENDATION E: SMALL BUSINESS ENTERPRISE (SBE) PROGRAM

SAWS should be commended for encouraging SBE utilization. SBE programs have the advantage that they are generally not subject to constitutional challenge. Further ideas on SBE programs are discussed in **Appendix K, Selected Practices of Other M/WBE Programs.**

CONCLUSION

This study provides factual predicate evidence for continuing remedial efforts to include M/WBEs in SAWS procurement. This evidence is based on quantitative and qualitative data from public and private sources. While SAWS has made progress in M/WBE inclusion, any future efforts must be narrowly tailored to rectify the issues identified in this report.

APPENDIX A: CORRESPONDING ANALYSES: MARKET AREA AND UTILIZATION ANALYSES

APPENDIX A: CORRESPONDING ANALYSES: MARKET AREA AND UTILIZATION ANALYSES

Appendix A presents the corresponding analyses discussed in **Chapter 3**. The corresponding analyses present market area and utilization results. The corresponding results to analyses presented in the chapters are designated in the notes to the exhibits.

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MARKET AREA ANALYSES AT THE PRIME LEVEL

TABLE A-1
 MARKET AREA ANALYSIS AT THE PRIME LEVEL BY LOCATION OF FIRMS
 (STATE OF TEXAS) AND BUSINESS CATEGORY

LOCATION OF FIRMS	DOLLARS PAID	PERCENT OF DOLLARS	CUMULATIVE PERCENT ¹
ENGINEERING			
Inside State of Texas	\$65,997,064	100.00%	100.00%
Outside State of Texas	\$0	0.00%	100.00%
ENGINEERING, TOTAL	\$65,997,064	100.00%	
HEAVY CIVIL/UTILITY CONSTRUCTION			
Inside State of Texas	\$399,941,613	99.36%	99.36%
Outside State of Texas	\$2,581,567	0.64%	100.00%
HEAVY CIVIL/UTILITY CONSTRUCTION, TOTAL	\$402,523,180	100.00%	
OTHER PROFESSIONAL SERVICES			
Inside State of Texas	\$10,283,507	88.29%	88.29%
Outside State of Texas	\$1,364,422	11.71%	100.00%
OTHER PROFESSIONAL SERVICES, TOTAL	\$11,647,929	100.00%	
PROCUREMENT			
Inside State of Texas	\$80,960,290	77.28%	77.28%
Outside State of Texas	\$23,807,365	22.72%	100.00%
PROCUREMENT, TOTAL	\$104,767,655	100.00%	
ALL CONTRACT CATEGORIES			
Inside State of Texas	\$557,182,474	95.26%	95.26%
Outside State of Texas	\$27,753,354	4.74%	100.00%
ALL CONTRACT CATEGORIES, TOTAL	\$584,935,828	100.00%	

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

¹ Cumulative percent of total dollars.

Note: The total dollars presented in this table represent the overall market area at the prime level. The totals may not equal the sum of components due to rounding.

TABLE A-2
 MARKET AREA ANALYSIS AT THE PRIME LEVEL
 DOLLARS EXPENDED BY COUNTY, ENGINEERING

LOCATION OF FIRMS	DOLLARS PAID	PERCENT OF DOLLARS	CUMULATIVE PERCENT ¹
ENGINEERING			
Inside San Antonio MSA			
ATASCOSA COUNTY, TX	\$0	0.00%	0.00%
BANDERA COUNTY, TX	\$0	0.00%	0.00%
BEXAR COUNTY, TX	\$63,715,308	96.54%	96.54%
COMAL COUNTY, TX	\$277,645	0.42%	96.96%
GUADALUPE COUNTY, TX	\$0	0.00%	96.96%
KENDALL COUNTY, TX	\$0	0.00%	96.96%
MEDINA COUNTY, TX	\$0	0.00%	96.96%
WILSON COUNTY, TX	\$0	0.00%	96.96%
Inside San Antonio MSA, Total	<u>\$63,992,953</u>	<u>96.96%</u>	
Outside San Antonio MSA			
HARRIS COUNTY, TX	\$1,473,361	2.23%	99.20%
TRAVIS COUNTY, TX	\$279,073	0.42%	99.62%
DALLAS COUNTY, TX	\$251,677	0.38%	100.00%
Outside San Antonio MSA, Total	<u>\$2,004,111</u>	<u>3.04%</u>	
ENGINEERING, TOTAL	<u>\$65,997,064</u>	<u>100.00%</u>	

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

¹Cumulative percent of total dollars.

Note: The total dollars presented in this table represent the overall market area at the prime level. The totals may not equal the sum of components due to rounding.

TABLE A-3
 MARKET AREA ANALYSIS AT THE PRIME LEVEL
 DOLLARS EXPENDED BY COUNTY, HEAVY CIVIL/UTILITY CONSTRUCTION

LOCATION OF FIRMS	DOLLARS PAID	PERCENT OF DOLLARS	CUMULATIVE PERCENT ¹
HEAVY CIVIL/UTILITY CONSTRUCTION			
Inside San Antonio MSA			
ATASCOSA COUNTY, TX	\$0	0.00%	0.00%
BANDERA COUNTY, TX	\$0	0.00%	0.00%
BEXAR COUNTY, TX	\$320,443,249	79.61%	79.61%
COMAL COUNTY, TX	\$265,037	0.07%	79.67%
GUADALUPE COUNTY, TX	\$21,965,864	5.46%	85.13%
KENDALL COUNTY, TX	\$0	0.00%	85.13%
MEDINA COUNTY, TX	\$0	0.00%	85.13%
WILSON COUNTY, TX	\$0	0.00%	85.13%
Inside San Antonio MSA, Total	<u>\$342,674,150</u>	<u>85.13%</u>	
Outside San Antonio MSA			
HARRIS COUNTY, TX	\$20,200,489	5.02%	90.15%
TARRANT COUNTY, TX	\$13,498,306	3.35%	93.50%
DENTON COUNTY, TX	\$6,498,002	1.61%	95.12%
BURNET COUNTY, TX	\$5,212,278	1.29%	96.41%
WILLIAMSON COUNTY, TX	\$5,156,515	1.28%	97.69%
TRAVIS COUNTY, TX	\$4,445,319	1.10%	98.80%
DAKOTA COUNTY, MN	\$1,954,669	0.49%	99.28%
HAYS COUNTY, TX	\$939,058	0.23%	99.52%
BLANCO COUNTY, TX	\$857,052	0.21%	99.73%
JEFFERSON COUNTY, KY	\$522,460	0.13%	99.86%
BASTROP COUNTY, TX	\$300,811	0.07%	99.93%
KERR COUNTY, TX	\$119,678	0.03%	99.96%
COOK COUNTY, IL	\$104,438	0.03%	99.99%
DALLAS COUNTY, TX	\$39,955	0.01%	100.00%
Outside San Antonio MSA, Total	<u>\$59,849,030</u>	<u>14.87%</u>	
HEAVY CIVIL/UTILITY CONSTRUCTION, TOTAL	<u>\$402,523,180</u>	<u>100.00%</u>	

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

¹Cumulative percent of total dollars.

Note: The total dollars presented in this table represent the overall market area at the prime level. The totals may not equal the sum of components due to rounding.

TABLE A-4
 MARKET AREA ANALYSIS AT THE PRIME LEVEL
 DOLLARS EXPENDED BY COUNTY, PROFESSIONAL SERVICES

LOCATION OF FIRMS	DOLLARS PAID	PERCENT OF DOLLARS	CUMULATIVE PERCENT ¹
OTHER PROFESSIONAL SERVICES			
Inside San Antonio MSA			
ATASCOSA COUNTY, TX	\$0	0.00%	0.00%
BANDERA COUNTY, TX	\$0	0.00%	0.00%
BEXAR COUNTY, TX	\$7,691,079	66.03%	66.03%
COMAL COUNTY, TX	\$0	0.00%	66.03%
GUADALUPE COUNTY, TX	\$0	0.00%	66.03%
KENDALL COUNTY, TX	\$1,350	0.01%	66.04%
MEDINA COUNTY, TX	\$0	0.00%	66.04%
WILSON COUNTY, TX	\$0	0.00%	66.04%
Inside San Antonio MSA, Total	<u>\$7,692,429</u>	<u>66.04%</u>	
Outside San Antonio MSA			
TRAVIS COUNTY, TX	\$2,008,365	17.24%	83.28%
HARRIS COUNTY, TX	\$466,831	4.01%	87.29%
DISTRICT OF COLUMBIA, DC	\$415,969	3.57%	90.86%
CONTRA COSTA COUNTY, CA	\$332,066	2.85%	93.71%
FAIRFAX COUNTY, VA	\$300,000	2.58%	96.29%
DALLAS COUNTY, TX	\$105,882	0.91%	97.20%
MARICOPA COUNTY, AZ	\$100,673	0.86%	98.06%
LAKE COUNTY, IL	\$91,080	0.78%	98.84%
WALTON COUNTY, GA	\$64,000	0.55%	99.39%
MIDDLESEX COUNTY, NJ	\$30,000	0.26%	99.65%
BENTON COUNTY, AR	\$16,600	0.14%	99.79%
HIDALGO COUNTY, TX	\$10,000	0.09%	99.88%
MIAMI-DADE COUNTY, FL	\$8,100	0.07%	99.95%
BALTIMORE CITY COUNTY, MD	\$5,934	0.05%	100.00%
Outside San Antonio MSA, Total	<u>\$3,955,500</u>	<u>33.96%</u>	
OTHER PROFESSIONAL SERVICES, TOTAL	<u>\$11,647,929</u>	<u>100.00%</u>	

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

¹Cumulative percent of total dollars.

Note: The total dollars presented in this table represent the overall market area at the prime level. The totals may not equal the sum of components due to rounding.

TABLE A-5
 MARKET AREA ANALYSIS AT THE PRIME LEVEL
 DOLLARS EXPENDED BY COUNTY, OTHER PROFESSIONAL SERVICES

LOCATION OF FIRMS	DOLLARS PAID	PERCENT OF DOLLARS	CUMULATIVE PERCENT ¹
PROCUREMENT			
Inside San Antonio MSA			
ATASCOSA COUNTY, TX	\$8,088	0.01%	0.01%
BANDERA COUNTY, TX	\$0	0.00%	0.01%
BEXAR COUNTY, TX	\$56,817,916	54.23%	54.24%
COMAL COUNTY, TX	\$1,851,678	1.77%	56.01%
GUADALUPE COUNTY, TX	\$705,573	0.67%	56.68%
KENDALL COUNTY, TX	\$0	0.00%	56.68%
MEDINA COUNTY, TX	\$0	0.00%	56.68%
WILSON COUNTY, TX	\$0	0.00%	56.68%
Inside San Antonio MSA, Total	<u>\$59,383,255</u>	<u>56.68%</u>	
Outside San Antonio MSA			
AUSTIN COUNTY, TX	\$9,121,647	8.71%	65.39%
ORANGE COUNTY, CA	\$5,353,433	5.11%	70.50%
HARRIS COUNTY, TX	\$4,567,081	4.36%	74.86%
WAYNE COUNTY, MI	\$3,953,089	3.77%	78.63%
MACON COUNTY, IL	\$2,975,110	2.84%	81.47%
TARRANT COUNTY, TX	\$2,527,171	2.41%	83.88%
COOK COUNTY, IL	\$1,782,995	1.70%	85.58%
MILWAUKEE COUNTY, WI	\$1,740,137	1.66%	87.24%
TRAVIS COUNTY, TX	\$1,698,223	1.62%	88.87%
DUBUQUE COUNTY, IA	\$1,409,724	1.35%	90.21%
SAN DIEGO COUNTY, CA	\$1,124,386	1.07%	91.28%
ROCKWALL COUNTY, TX	\$1,083,623	1.03%	92.32%
GALVESTON COUNTY, TX	\$865,029	0.83%	93.14%
ALLEN COUNTY, IN	\$811,902	0.77%	93.92%
DALLAS COUNTY, TX	\$621,974	0.59%	94.51%
LAKE COUNTY, IL	\$436,457	0.42%	94.93%
HENNEPIN COUNTY, MN	\$424,007	0.40%	95.33%
DUPAGE COUNTY, IL	\$415,006	0.40%	95.73%
CAMERON COUNTY, TX	\$365,922	0.35%	96.08%
ALLEGHENY COUNTY, PA	\$356,945	0.34%	96.42%
LOS ANGELES COUNTY, CA	\$301,273	0.29%	96.71%
VIRGINIA BEACH CITY COUNTY, VA	\$260,072	0.25%	96.96%
ELMORE COUNTY, AL	\$251,633	0.24%	97.20%
DENVER COUNTY, CO	\$247,253	0.24%	97.43%
ALEXANDRIA CITY COUNTY, VA	\$242,303	0.23%	97.66%
JOHNSON COUNTY, TX	\$227,587	0.22%	97.88%
MORRIS COUNTY, NJ	\$209,389	0.20%	98.08%
ALAMEDA COUNTY, CA	\$195,965	0.19%	98.27%
MONTGOMERY COUNTY, TX	\$163,406	0.16%	98.42%
MADISON COUNTY, AL	\$122,900	0.12%	98.54%
MARICOPA COUNTY, AZ	\$107,436	0.10%	98.64%
ORANGE COUNTY, TX	\$91,802	0.09%	98.73%
FULTON COUNTY, GA	\$77,358	0.07%	98.80%
WILLIAMSON COUNTY, TX	\$76,987	0.07%	98.88%
JEFFERSON COUNTY, AL	\$71,056	0.07%	98.95%
COLLIN COUNTY, TX	\$68,199	0.07%	99.01%
SUFFOLK COUNTY, MA	\$57,874	0.06%	99.07%

CORRESPONDING ANALYSES: MARKET AREA AND UTILIZATION

LOCATION OF FIRMS	DOLLARS PAID	PERCENT OF DOLLARS	CUMULATIVE PERCENT ¹
PROCUREMENT			
SONOMA COUNTY, CA	\$51,689	0.05%	99.12%
PRINCE GEORGES COUNTY, MD	\$51,102	0.05%	99.16%
JEFFERSON COUNTY, KY	\$49,033	0.05%	99.21%
HILLSBOROUGH COUNTY, NH	\$48,762	0.05%	99.26%
PINELLAS COUNTY, FL	\$48,628	0.05%	99.30%
JEFFERSON COUNTY, TX	\$47,938	0.05%	99.35%
PRINCE WILLIAM COUNTY, VA	\$46,775	0.04%	99.39%
CONTRA COSTA COUNTY, CA	\$43,116	0.04%	99.44%
LITCHFIELD COUNTY, CT	\$41,530	0.04%	99.48%
NEW YORK COUNTY, NY	\$40,477	0.04%	99.51%
MIDDLESEX COUNTY, MA	\$35,600	0.03%	99.55%
YORK COUNTY, SC	\$35,412	0.03%	99.58%
MONROE COUNTY, NY	\$35,283	0.03%	99.62%
FAIRFIELD COUNTY, CT	\$35,097	0.03%	99.65%
SALT LAKE COUNTY, UT	\$35,010	0.03%	99.68%
PEND OREILLE COUNTY, WA	\$31,252	0.03%	99.71%
OCEAN COUNTY, NJ	\$28,171	0.03%	99.74%
BAY COUNTY, FL	\$25,795	0.02%	99.76%
GALLATIN COUNTY, MT	\$24,769	0.02%	99.79%
PIMA COUNTY, AZ	\$23,467	0.02%	99.81%
ROCKINGHAM COUNTY, NH	\$22,685	0.02%	99.83%
LUBBOCK COUNTY, TX	\$18,495	0.02%	99.85%
KENNEBEC COUNTY, ME	\$16,625	0.02%	99.87%
FAIRFAX COUNTY, VA	\$16,551	0.02%	99.88%
MONTGOMERY COUNTY, MD	\$14,979	0.01%	99.90%
SHASTA COUNTY, TX	\$13,800	0.01%	99.91%
ORANGE COUNTY, NY	\$12,593	0.01%	99.92%
NUECES COUNTY, TX	\$11,260	0.01%	99.93%
DAVIDSON COUNTY, TN	\$11,036	0.01%	99.94%
WAKE COUNTY, NC	\$9,994	0.01%	99.95%
PHILADELPHIA COUNTY, PA	\$8,837	0.01%	99.96%
DENTON COUNTY, TX	\$6,891	0.01%	99.97%
HARTFORD COUNTY, CT	\$6,600	0.01%	99.97%
SARASOTA COUNTY, FL	\$5,480	0.01%	99.98%
GWINETT COUNTY, GA	\$5,456	0.01%	99.98%
CANYON COUNTY, ID	\$4,520	0.00%	99.99%
KANE COUNTY, IL	\$4,487	0.00%	99.99%
MIDDLESEX COUNTY, NJ	\$3,412	0.00%	99.99%
CAMDEN COUNTY, NJ	\$2,445	0.00%	100.00%
DOUGLAS COUNTY, NE	\$1,653	0.00%	100.00%
WAUKESHA COUNTY, WI	\$951	0.00%	100.00%
CALCASIEU COUNTY, LA	\$390	0.00%	100.00%
Outside San Antonio MSA, Total	\$45,384,400	34.61%	
PROCUREMENT, TOTAL	\$104,767,655	100.00%	

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

¹ Cumulative percent of total dollars.

Note: The total dollars presented in this table represent the overall market area at the prime level. The totals may not equal the sum of components due to rounding.

MARKET AREA ANALYSES AT THE SUB LEVEL

TABLE A-6
 MARKET AREA ANALYSIS AT THE SUB LEVEL BY LOCATION OF FIRMS
 (STATE OF TEXAS) AND BUSINESS CATEGORY

LOCATION OF FIRMS	DOLLARS PAID	PERCENT OF DOLLARS	CUMULATIVE PERCENT ¹
ENGINEERING			
Inside State of Texas	\$21,686,383	98.97%	98.97%
Outside State of Texas	\$226,116	1.03%	100.00%
ENGINEERING, TOTAL	\$21,912,499	100.00%	
HEAVY CIVIL/UTILITY CONSTRUCTION			
Inside State of Texas	\$70,923,201	97.46%	97.46%
Outside State of Texas	\$1,847,948	2.54%	100.00%
HEAVY CIVIL/UTILITY CONSTRUCTION, TOTAL	\$72,771,149	100.00%	
OTHER PROFESSIONAL SERVICES			
Inside State of Texas	\$543,192	100.00%	100.00%
Outside State of Texas	\$0	0.00%	100.00%
OTHER PROFESSIONAL SERVICES, TOTAL	\$543,192	100.00%	
PROCUREMENT			
Inside State of Texas	\$880,811	100.00%	100.00%
Outside State of Texas	\$0	0.00%	100.00%
PROCUREMENT, TOTAL	\$880,811	100.00%	
ALL CONTRACT CATEGORIES			
Inside State of Texas	\$94,033,588	97.84%	97.84%
Outside State of Texas	\$2,074,064	2.16%	100.00%
ALL CONTRACT CATEGORIES, TOTAL	\$96,107,652	100.00%	

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

¹Cumulative percent of total dollars.

Note: The total dollars presented in this table represent the overall market area at the prime level. The totals may not equal the sum of components due to rounding.

TABLE A-7
 MARKET AREA ANALYSIS AT THE SUB LEVEL
 DOLLARS EXPENDED BY COUNTY, ENGINEERING

LOCATION OF FIRMS	DOLLARS PAID	PERCENT OF DOLLARS	CUMULATIVE PERCENT ¹
ENGINEERING			
Inside San Antonio MSA			
ATASCOSA COUNTY, TX	\$2,910	0.01%	0.01%
BANDERA COUNTY, TX	\$0	0.00%	0.01%
BEXAR COUNTY, TX	\$18,354,586	83.76%	83.78%
COMAL COUNTY, TX	\$172,469	0.79%	84.56%
GUADALUPE COUNTY, TX	\$0	0.00%	84.56%
KENDALL COUNTY, TX	\$47,888	0.22%	84.78%
MEDINA COUNTY, TX	\$358	0.00%	84.78%
WILSON COUNTY, TX	\$1,949	0.01%	84.79%
Inside San Antonio MSA, Total	<u>\$18,580,158</u>	<u>84.79%</u>	
Outside San Antonio MSA			
DALLAS COUNTY, TX	\$1,242,198	5.67%	90.46%
TRAVIS COUNTY, TX	\$889,111	4.06%	94.52%
HARRIS COUNTY, TX	\$563,237	2.57%	97.09%
EL PASO COUNTY, TX	\$245,827	1.12%	98.21%
WALTON COUNTY, GA	\$103,250	0.47%	98.68%
EL DORADO COUNTY, CA	\$68,946	0.31%	99.00%
HAYS COUNTY, TX	\$62,172	0.28%	99.28%
TARRANT COUNTY, TX	\$52,210	0.24%	99.52%
BLANCO COUNTY, TX	\$49,085	0.22%	99.74%
ARLINGTON COUNTY, VA	\$20,601	0.09%	99.84%
FULTON COUNTY, GA	\$19,446	0.09%	99.93%
HILLSBOROUGH COUNTY, FL	\$13,333	0.06%	99.99%
BASTROP COUNTY, TX	\$1,080	0.00%	99.99%
FREESTONE COUNTY, TX	\$1,005	0.00%	100.00%
HAMILTON COUNTY, OH	\$540	0.00%	100.00%
FORT BEND COUNTY, TX	\$300	0.00%	100.00%
Outside San Antonio MSA, Total	<u>\$3,332,341</u>	<u>15.21%</u>	
ENGINEERING, TOTAL	<u>\$21,912,499</u>	<u>100.00%</u>	

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

¹ Cumulative percent of total dollars.

Note: The total dollars presented in this table represent the overall market area at the prime level. The totals may not equal the sum of components due to rounding.

TABLE A-8
 MARKET AREA ANALYSIS AT THE SUB LEVEL
 DOLLARS EXPENDED BY COUNTY, HEAVY CIVIL/UTILITY CONSTRUCTION

LOCATION OF FIRMS	DOLLARS PAID	PERCENT OF DOLLARS	CUMULATIVE PERCENT ¹
HEAVY CIVIL/UTILITY CONSTRUCTION			
Inside San Antonio MSA			
ATASCOSA COUNTY, TX	\$1,760,915	2.42%	2.42%
BANDERA COUNTY, TX	\$0	0.00%	2.42%
BEXAR COUNTY, TX	\$38,153,442	52.43%	54.85%
COMAL COUNTY, TX	\$4,138,994	5.69%	60.54%
GUADALUPE COUNTY, TX	\$1,570,779	2.16%	62.70%
KENDALL COUNTY, TX	\$0	0.00%	62.70%
MEDINA COUNTY, TX	\$38,215	0.05%	62.75%
WILSON COUNTY, TX	\$0	0.00%	62.75%
Inside San Antonio MSA, Total	\$45,662,346	62.75%	
Outside San Antonio MSA			
HARRIS COUNTY, TX	\$6,963,364	9.57%	72.32%
DALLAS COUNTY, TX	\$6,044,387	8.31%	80.62%
HAYS COUNTY, TX	\$2,935,610	4.03%	84.66%
TRAVIS COUNTY, TX	\$2,553,285	3.51%	88.17%
WILLIAMSON COUNTY, TX	\$1,788,260	2.46%	90.62%
ELLIS COUNTY, TX	\$1,404,278	1.93%	92.55%
FORSYTH COUNTY, GA	\$1,042,830	1.43%	93.99%
BRAZORIA COUNTY, TX	\$865,279	1.19%	95.17%
NUECES COUNTY, TX	\$800,929	1.10%	96.28%
JOHNSON COUNTY, TX	\$510,482	0.70%	96.98%
TARRANT COUNTY, TX	\$449,118	0.62%	97.59%
LIBERTY COUNTY, TX	\$290,168	0.40%	97.99%
DAVIDSON COUNTY, TN	\$257,282	0.35%	98.35%
TYLER COUNTY, TX	\$251,799	0.35%	98.69%
ORANGE COUNTY, FL	\$228,436	0.31%	99.01%
CALHOUN COUNTY, TX	\$132,886	0.18%	99.19%
JEFFERSON COUNTY, LA	\$119,314	0.16%	99.35%
TOM GREEN COUNTY, TX	\$116,784	0.16%	99.51%
SEMINOLE COUNTY, FL	\$74,776	0.10%	99.62%
MEDINA COUNTY, OH	\$71,088	0.10%	99.71%
WEBB COUNTY, TX	\$66,669	0.09%	99.81%
FRIO COUNTY, TX	\$62,064	0.09%	99.89%
ALLEGHENY COUNTY, PA	\$28,980	0.04%	99.93%
KERR COUNTY, TX	\$25,495	0.04%	99.97%
PINELLAS COUNTY, FL	\$10,186	0.01%	99.98%
POLK COUNTY, IA	\$9,378	0.01%	99.99%
SAN DIEGO COUNTY, CA	\$5,679	0.01%	100.00%
Outside San Antonio MSA, Total	\$27,108,803	37.25%	
HEAVY CIVIL/UTILITY CONSTRUCTION, TOTAL	\$72,771,149	100.00%	

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

¹ Cumulative percent of total dollars.

Note: The total dollars presented in this table represent the overall market area at the prime level. The totals may not equal the sum of components due to rounding.

TABLE A-9
 MARKET AREA ANALYSIS AT THE SUB LEVEL
 DOLLARS EXPENDED BY COUNTY, OTHER PROFESSIONAL SERVICES

LOCATION OF FIRMS	DOLLARS PAID	PERCENT OF DOLLARS	CUMULATIVE PERCENT ¹
OTHER PROFESSIONAL SERVICES			
Inside San Antonio MSA			
ATASCOSA COUNTY, TX	\$0	0.00%	0.00%
BANDERA COUNTY, TX	\$0	0.00%	0.00%
BEXAR COUNTY, TX	\$543,192	100.00%	100.00%
COMAL COUNTY, TX	\$0	0.00%	100.00%
GUADALUPE COUNTY, TX	\$0	0.00%	100.00%
KENDALL COUNTY, TX	\$0	0.00%	100.00%
MEDINA COUNTY, TX	\$0	0.00%	100.00%
WILSON COUNTY, TX	\$0	0.00%	100.00%
Inside San Antonio MSA, Total	<u>\$543,192</u>	<u>100.00%</u>	
Outside San Antonio MSA			
NONE	\$0	0.00%	100.00%
Outside San Antonio MSA, Total	<u>\$0</u>	<u>0.00%</u>	
OTHER PROFESSIONAL SERVICES, TOTAL	<u>\$543,192</u>	<u>0.00%</u>	

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

¹Cumulative percent of total dollars.

Note: The total dollars presented in this table represent the overall market area at the prime level. The totals may not equal the sum of components due to rounding.

TABLE A-10
 MARKET AREA ANALYSIS AT THE SUB LEVEL
 DOLLARS EXPENDED BY COUNTY, PROCUREMENT

LOCATION OF FIRMS	DOLLARS PAID	PERCENT OF DOLLARS	CUMULATIVE PERCENT ¹
PROCUREMENT			
Inside San Antonio MSA			
ATASCOSA COUNTY, TX	\$0	0.00%	0.00%
BANDERA COUNTY, TX	\$0	0.00%	0.00%
BEXAR COUNTY, TX	\$417,271	47.37%	47.37%
COMAL COUNTY, TX	\$0	0.00%	47.37%
GUADALUPE COUNTY, TX	\$0	0.00%	47.37%
KENDALL COUNTY, TX	\$0	0.00%	47.37%
MEDINA COUNTY, TX	\$0	0.00%	47.37%
WILSON COUNTY, TX	\$0	0.00%	47.37%
Inside San Antonio MSA, Total	<u>\$417,271</u>	<u>47.37%</u>	
Outside San Antonio MSA			
TRAVIS COUNTY, TX	\$463,540	52.63%	100.00%
Outside San Antonio MSA, Total	<u>\$463,540</u>	<u>52.63%</u>	
PROCUREMENT, TOTAL	<u>\$880,811</u>	<u>100.00%</u>	

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

¹Cumulative percent of total dollars.

Note: The total dollars presented in this table represent the overall market area at the prime level. The totals may not equal the sum of components due to rounding.

UTILIZATION ANALYSES AT THE PRIME LEVEL

TABLE A-11
UTILIZATION ANALYSIS AT THE PRIME LEVEL BY BUSINESS OWNERSHIP
CLASSIFICATION AND YEAR, ALL CONTRACT CATEGORIES

BUSINESS OWNERSHIP CLASSIFICATION	2011 (\$)	2012 (\$)	2013 (\$)	TOTAL (\$)
African American Female	\$0	\$0	\$0	\$0
African American Male	\$596,598	\$1,554,177	\$1,408,016	\$3,558,791
AFRICAN AMERICAN FIRMS	\$596,598	\$1,554,177	\$1,408,016	\$3,558,791
Asian American Female	\$28,842	\$43,282	\$39,696	\$111,820
Asian American Male	\$2,001,281	\$1,821,585	\$1,266,280	\$5,089,146
ASIAN AMERICAN FIRMS	\$2,030,123	\$1,864,867	\$1,305,976	\$5,200,966
Hispanic American Female	\$392,590	\$749,792	\$600,971	\$1,743,353
Hispanic American Male	\$7,012,452	\$10,458,723	\$12,041,748	\$29,512,923
HISPANIC AMERICAN FIRMS	\$7,405,042	\$11,208,515	\$12,642,719	\$31,256,276
Native American Female	\$34,103	\$63,851	\$18,169	\$116,123
Native American Male	\$0	\$0	\$1,142,696	\$1,142,696
NATIVE AMERICAN FIRMS	\$34,103	\$63,851	\$1,160,865	\$1,258,819
TOTAL MINORITY FIRMS	\$10,065,866	\$14,691,410	\$16,517,576	\$41,274,852
NONMINORITY FEMALE FIRMS	\$2,426,551	\$2,816,941	\$2,439,605	\$7,683,097
TOTAL M/WBE FIRMS	\$12,492,417	\$17,508,351	\$18,957,181	\$48,957,949
NON-M/WBE FIRMS	\$114,804,496	\$140,514,450	\$169,465,892	\$424,784,838
TOTAL FIRMS	\$127,296,913	\$158,022,801	\$188,423,073	\$473,742,787
	(%)	(%)	(%)	(%)
African American Female	0.00%	0.00%	0.00%	0.00%
African American Male	0.47%	0.98%	0.75%	0.75%
AFRICAN AMERICAN FIRMS	0.47%	0.98%	0.75%	0.75%
Asian American Female	0.02%	0.03%	0.02%	0.02%
Asian American Male	1.57%	1.15%	0.67%	1.07%
ASIAN AMERICAN FIRMS	1.59%	1.18%	0.69%	1.10%
Hispanic American Female	0.31%	0.47%	0.32%	0.37%
Hispanic American Male	5.51%	6.62%	6.39%	6.23%
HISPANIC AMERICAN FIRMS	5.82%	7.09%	6.71%	6.60%
Native American Female	0.03%	0.04%	0.01%	0.02%
Native American Male	0.00%	0.00%	0.61%	0.24%
NATIVE AMERICAN FIRMS	0.03%	0.04%	0.62%	0.27%
TOTAL MINORITY FIRMS	7.91%	9.30%	8.77%	8.71%
NONMINORITY FEMALE FIRMS	1.91%	1.78%	1.29%	1.62%
TOTAL M/WBE FIRMS	9.81%	11.08%	10.06%	10.33%
NON-M/WBE FIRMS	90.19%	88.92%	89.94%	89.67%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

¹ Cumulative percent of total dollars.

Note: The corresponding utilization summary results by business ownership classification are presented in [Chapter 3, Table 3-3](#). The totals may not equal the sum of components due to rounding.

TABLE A-12
UTILIZATION ANALYSIS AT THE PRIME LEVEL BY BUSINESS OWNERSHIP
CLASSIFICATION, ENGINEERING

BUSINESS OWNERSHIP CLASSIFICATION	ENGINEERING	
	DOLLARS PAID	PERCENT OF DOLLARS
African American Female	\$0	0.00%
African American Male	\$349,321	0.55%
AFRICAN AMERICAN FIRMS	\$349,321	0.55%
Asian American Female	\$97,382	0.15%
Asian American Male	\$3,678,701	5.75%
ASIAN AMERICAN FIRMS	\$3,776,083	5.90%
Hispanic American Female	\$1,635,652	2.56%
Hispanic American Male	\$4,771,533	7.46%
HISPANIC AMERICAN FIRMS	\$6,407,185	10.01%
Native American Female	\$0	0.00%
Native American Male	\$0	0.00%
NATIVE AMERICAN FIRMS	\$0	0.00%
TOTAL MINORITY FIRMS	\$10,532,589	16.46%
NONMINORITY FEMALE	\$3,597,234	5.62%
TOTAL M/WBE FIRMS	\$14,129,823	22.08%
NON-M/WBE FIRMS	\$49,863,130	77.92%
TOTAL FIRMS	\$63,992,953	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in [Chapter 3, Figure 3-C](#). The totals may not equal the sum of components due to rounding.

TABLE A-13
UTILIZATION ANALYSIS AT THE PRIME LEVEL BY BUSINESS OWNERSHIP
CLASSIFICATION AND YEAR, ENGINEERING

BUSINESS OWNERSHIP CLASSIFICATION	2011	2012	2013	TOTAL
	(\$)	(\$)	(\$)	(\$)
African American Female	\$0	\$0	\$0	\$0
African American Male	\$120,683	\$89,512	\$139,126	\$349,321
AFRICAN AMERICAN FIRMS	\$120,683	\$89,512	\$139,126	\$349,321
Asian American Female	\$23,360	\$37,933	\$36,089	\$97,382
Asian American Male	\$1,309,897	\$1,517,717	\$851,087	\$3,678,701
ASIAN AMERICAN FIRMS	\$1,333,257	\$1,555,650	\$887,176	\$3,776,083
Hispanic American Female	\$381,259	\$720,405	\$533,988	\$1,635,652
Hispanic American Male	\$1,789,890	\$1,703,752	\$1,277,891	\$4,771,533
HISPANIC AMERICAN FIRMS	\$2,171,149	\$2,424,157	\$1,811,879	\$6,407,185
Native American Female	\$0	\$0	\$0	\$0
Native American Male	\$0	\$0	\$0	\$0
NATIVE AMERICAN FIRMS	\$0	\$0	\$0	\$0
TOTAL MINORITY FIRMS	\$3,625,089	\$4,069,319	\$2,838,181	\$10,532,589
NONMINORITY FEMALE FIRMS	\$1,396,496	\$1,199,342	\$1,001,396	\$3,597,234
TOTAL M/WBE FIRMS	\$5,021,585	\$5,268,661	\$3,839,577	\$14,129,823
NON-M/WBE FIRMS	\$12,194,214	\$16,537,554	\$21,131,362	\$49,863,130
TOTAL FIRMS	\$17,215,799	\$21,806,215	\$24,970,939	\$63,992,953
	(%)	(%)	(%)	(%)
African American Female	0.00%	0.00%	0.00%	0.00%
African American Male	0.70%	0.41%	0.56%	0.55%
AFRICAN AMERICAN FIRMS	0.70%	0.41%	0.56%	0.55%
Asian American Female	0.14%	0.17%	0.14%	0.15%
Asian American Male	7.61%	6.96%	3.41%	5.75%
ASIAN AMERICAN FIRMS	7.74%	7.13%	3.55%	5.90%
Hispanic American Female	2.21%	3.30%	2.14%	2.56%
Hispanic American Male	10.40%	7.81%	5.12%	7.46%
HISPANIC AMERICAN FIRMS	12.61%	11.12%	7.26%	10.01%
Native American Female	0.00%	0.00%	0.00%	0.00%
Native American Male	0.00%	0.00%	0.00%	0.00%
NATIVE AMERICAN FIRMS	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY FIRMS	21.06%	18.66%	11.37%	16.46%
NONMINORITY FEMALE FIRMS	8.11%	5.50%	4.01%	5.62%
TOTAL M/WBE FIRMS	29.17%	24.16%	15.38%	22.08%
NON-M/WBE FIRMS	70.83%	75.84%	84.62%	77.92%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in **Chapter 3, Figure 3-C**. The totals may not equal the sum of components due to rounding.

TABLE A-14
 UTILIZATION ANALYSIS AT THE PRIME LEVEL BY BUSINESS OWNERSHIP
 CLASSIFICATION, HEAVY CIVIL/UTILITY CONSTRUCTION

BUSINESS OWNERSHIP CLASSIFICATION	HEAVY CIVIL / UTILITY CONSTRUCTION	
	DOLLARS PAID	PERCENT OF DOLLARS
African American Female	\$0	0.00%
African American Male	\$0	0.00%
AFRICAN AMERICAN FIRMS	\$0	0.00%
Asian American Female	\$0	0.00%
Asian American Male	\$1,032,737	0.30%
ASIAN AMERICAN FIRMS	\$1,032,737	0.30%
Hispanic American Female	\$0	0.00%
Hispanic American Male	\$20,794,131	6.07%
HISPANIC AMERICAN FIRMS	\$20,794,131	6.07%
Native American Female	\$0	0.00%
Native American Male	\$1,142,696	0.33%
NATIVE AMERICAN FIRMS	\$1,142,696	0.33%
TOTAL MINORITY FIRMS	\$22,969,564	6.70%
NONMINORITY FEMALE FIRMS	\$173,189	0.05%
TOTAL M/WBE FIRMS	\$23,142,753	6.75%
NON-M/WBE FIRMS	\$319,531,397	93.25%
TOTAL FIRMS	\$342,674,150	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in [Chapter 3, Figure 3-C](#). The totals may not equal the sum of components due to rounding.

TABLE A-15
UTILIZATION ANALYSIS AT THE PRIME LEVEL BY BUSINESS OWNERSHIP
CLASSIFICATION AND YEAR, HEAVY CIVIL/UTILITY CONSTRUCTION

BUSINESS OWNERSHIP CLASSIFICATION	2011	2012	2013	TOTAL
	(\$)	(\$)	(\$)	(\$)
African American Female	\$0	\$0	\$0	\$0
African American Male	\$0	\$0	\$0	\$0
AFRICAN AMERICAN FIRMS	\$0	\$0	\$0	\$0
Asian American Female	\$0	\$0	\$0	\$0
Asian American Male	\$691,384	\$108,175	\$233,178	\$1,032,737
ASIAN AMERICAN FIRMS	\$691,384	\$108,175	\$233,178	\$1,032,737
Hispanic American Female	\$0	\$0	\$0	\$0
Hispanic American Male	\$4,478,509	\$7,439,722	\$8,875,900	\$20,794,131
HISPANIC AMERICAN FIRMS	\$4,478,509	\$7,439,722	\$8,875,900	\$20,794,131
Native American Female	\$0	\$0	\$0	\$0
Native American Male	\$0	\$0	\$1,142,696	\$1,142,696
NATIVE AMERICAN FIRMS	\$0	\$0	\$1,142,696	\$1,142,696
TOTAL MINORITY FIRMS	\$5,169,893	\$7,547,897	\$10,251,774	\$22,969,564
NONMINORITY FEMALE FIRMS	\$98,069	\$4,831	\$70,289	\$173,189
TOTAL M/WBE FIRMS	\$5,267,962	\$7,552,728	\$10,322,063	\$23,142,753
NON-M/WBE FIRMS	\$89,796,411	\$105,626,891	\$124,108,095	\$319,531,397
TOTAL FIRMS	\$95,064,373	\$113,179,619	\$134,430,158	\$342,674,150
	(%)	(%)	(%)	(%)
African American Female	0.00%	0.00%	0.00%	0.00%
African American Male	0.00%	0.00%	0.00%	0.00%
AFRICAN AMERICAN FIRMS	0.00%	0.00%	0.00%	0.00%
Asian American Female	0.00%	0.00%	0.00%	0.00%
Asian American Male	0.73%	0.10%	0.17%	0.30%
ASIAN AMERICAN FIRMS	0.73%	0.10%	0.17%	0.30%
Hispanic American Female	0.00%	0.00%	0.00%	0.00%
Hispanic American Male	4.71%	6.57%	6.60%	6.07%
HISPANIC AMERICAN FIRMS	4.71%	6.57%	6.60%	6.07%
Native American Female	0.00%	0.00%	0.00%	0.00%
Native American Male	0.00%	0.00%	0.85%	0.33%
NATIVE AMERICAN FIRMS	0.00%	0.00%	0.85%	0.33%
TOTAL MINORITY FIRMS	5.44%	6.67%	7.63%	6.70%
NONMINORITY FEMALE FIRMS	0.10%	0.00%	0.05%	0.05%
TOTAL M/WBE FIRMS	5.54%	6.67%	7.68%	6.75%
NON-M/WBE FIRMS	94.46%	93.33%	92.32%	93.25%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in Chapter 3, Figure 3-C. The totals may not equal the sum of components due to rounding.

TABLE A-16
UTILIZATION ANALYSIS AT THE PRIME LEVEL BY BUSINESS OWNERSHIP
CLASSIFICATION, OTHER PROFESSIONAL SERVICES

BUSINESS OWNERSHIP CLASSIFICATION	OTHER PROFESSIONAL SERVICES	
	DOLLARS PAID	PERCENT OF DOLLARS
African American Female	\$0	0.00%
African American Male	\$0	0.00%
AFRICAN AMERICAN FIRMS	\$0	0.00%
Asian American Female	\$0	0.00%
Asian American Male	\$0	0.00%
ASIAN AMERICAN FIRMS	\$0	0.00%
Hispanic American Female	\$28,184	0.37%
Hispanic American Male	\$1,334,434	17.35%
HISPANIC AMERICAN FIRMS	\$1,362,618	17.71%
Native American Female	\$104,575	1.36%
Native American Male	\$0	0.00%
NATIVE AMERICAN FIRMS	\$104,575	1.36%
TOTAL MINORITY FIRMS	\$1,467,193	19.07%
NONMINORITY FEMALE FIRMS	\$1,266,263	16.46%
TOTAL M/WBE FIRMS	\$2,733,456	35.53%
NON-M/WBE FIRMS	\$4,958,973	64.47%
TOTAL FIRMS	\$7,692,429	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in [Chapter 3, Figure 3-D](#). The totals may not equal the sum of components due to rounding.

TABLE A-17
 UTILIZATION ANALYSIS AT THE PRIME LEVEL BY BUSINESS OWNERSHIP
 CLASSIFICATION AND YEAR, OTHER PROFESSIONAL SERVICES

BUSINESS OWNERSHIP CLASSIFICATION	2011	2012	2013	TOTAL
	(\$)	(\$)	(\$)	(\$)
African American Female	\$0	\$0	\$0	\$0
African American Male	\$0	\$0	\$0	\$0
AFRICAN AMERICAN FIRMS	\$0	\$0	\$0	\$0
Asian American Female	\$0	\$0	\$0	\$0
Asian American Male	\$0	\$0	\$0	\$0
ASIAN AMERICAN FIRMS	\$0	\$0	\$0	\$0
Hispanic American Female	\$3,249	\$15,489	\$9,446	\$28,184
Hispanic American Male	\$445,154	\$568,342	\$320,938	\$1,334,434
HISPANIC AMERICAN FIRMS	\$448,403	\$583,831	\$330,384	\$1,362,618
Native American Female	\$34,103	\$63,851	\$6,621	\$104,575
Native American Male	\$0	\$0	\$0	\$0
NATIVE AMERICAN FIRMS	\$34,103	\$63,851	\$6,621	\$104,575
TOTAL MINORITY FIRMS	\$482,506	\$647,682	\$337,005	\$1,467,193
NONMINORITY FEMALE FIRMS	\$304,491	\$583,326	\$378,446	\$1,266,263
TOTAL M/WBE FIRMS	\$786,997	\$1,231,008	\$715,451	\$2,733,456
NON-M/WBE FIRMS	\$1,456,255	\$1,791,781	\$1,710,937	\$4,958,973
TOTAL FIRMS	\$2,243,252	\$3,022,789	\$2,426,388	\$7,692,429
	(%)	(%)	(%)	(%)
African American Female	0.00%	0.00%	0.00%	0.00%
African American Male	0.00%	0.00%	0.00%	0.00%
AFRICAN AMERICAN FIRMS	0.00%	0.00%	0.00%	0.00%
Asian American Female	0.00%	0.00%	0.00%	0.00%
Asian American Male	0.00%	0.00%	0.00%	0.00%
ASIAN AMERICAN FIRMS	0.00%	0.00%	0.00%	0.00%
Hispanic American Female	0.14%	0.51%	0.39%	0.37%
Hispanic American Male	19.84%	18.80%	13.23%	17.35%
HISPANIC AMERICAN FIRMS	19.99%	19.31%	13.62%	17.71%
Native American Female	1.52%	2.11%	0.27%	1.36%
Native American Male	0.00%	0.00%	0.00%	0.00%
NATIVE AMERICAN FIRMS	1.52%	2.11%	0.27%	1.36%
TOTAL MINORITY FIRMS	21.51%	21.43%	13.89%	19.07%
NONMINORITY FEMALE FIRMS	13.57%	19.30%	15.60%	16.46%
TOTAL M/WBE FIRMS	35.08%	40.72%	29.49%	35.53%
NON-M/WBE FIRMS	64.92%	59.28%	70.51%	64.47%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in [Chapter 3, Figure 3-D](#). The totals may not equal the sum of components due to rounding.

TABLE A-18
UTILIZATION ANALYSIS AT THE PRIME LEVEL BY BUSINESS OWNERSHIP
CLASSIFICATION, PROCUREMENT

BUSINESS OWNERSHIP CLASSIFICATION	PROCUREMENT	
	DOLLARS PAID	PERCENT OF DOLLARS
African American Female	\$0	0.00%
African American Male	\$3,209,470	5.40%
AFRICAN AMERICAN FIRMS	\$3,209,470	5.40%
Asian American Female	\$14,438	0.02%
Asian American Male	\$377,708	0.64%
ASIAN AMERICAN FIRMS	\$392,146	0.66%
Hispanic American Female	\$79,517	0.13%
Hispanic American Male	\$2,612,825	4.40%
HISPANIC AMERICAN FIRMS	\$2,692,342	4.53%
Native American Female	\$11,548	0.02%
Native American Male	\$0	0.00%
NATIVE AMERICAN FIRMS	\$11,548	0.02%
TOTAL MINORITY FIRMS	\$6,305,506	10.62%
NONMINORITY FEMALE FIRMS	\$2,646,411	4.46%
TOTAL M/WBE FIRMS	\$8,951,917	15.07%
NON-M/WBE FIRMS	\$50,431,338	84.93%
TOTAL FIRMS	\$59,383,255	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in [Chapter 3, Figure 3-D](#). The totals may not equal the sum of components due to rounding.

TABLE A-19
UTILIZATION ANALYSIS AT THE PRIME LEVEL BY BUSINESS OWNERSHIP
CLASSIFICATION AND YEAR, PROCUREMENT

BUSINESS OWNERSHIP CLASSIFICATION	2011 (\$)	2012 (\$)	2013 (\$)	TOTAL (\$)
African American Female	\$0	\$0	\$0	\$0
African American Male	\$475,915	\$1,464,665	\$1,268,890	\$3,209,470
AFRICAN AMERICAN FIRMS	\$475,915	\$1,464,665	\$1,268,890	\$3,209,470
Asian American Female	\$5,482	\$5,349	\$3,607	\$14,438
Asian American Male	\$0	\$195,693	\$182,015	\$377,708
ASIAN AMERICAN FIRMS	\$5,482	\$201,042	\$185,622	\$392,146
Hispanic American Female	\$8,082	\$13,898	\$57,537	\$79,517
Hispanic American Male	\$298,899	\$746,907	\$1,567,019	\$2,612,825
HISPANIC AMERICAN FIRMS	\$306,981	\$760,805	\$1,624,556	\$2,692,342
Native American Female	\$0	\$0	\$11,548	\$11,548
Native American Male	\$0	\$0	\$0	\$0
NATIVE AMERICAN FIRMS	\$0	\$0	\$11,548	\$11,548
TOTAL MINORITY FIRMS	\$788,378	\$2,426,512	\$3,090,616	\$6,305,506
NONMINORITY FEMALE FIRMS	\$627,495	\$1,029,442	\$989,474	\$2,646,411
TOTAL M/WBE FIRMS	\$1,415,873	\$3,455,954	\$4,080,090	\$8,951,917
NON-M/WBE FIRMS	\$11,357,616	\$16,558,224	\$22,515,498	\$50,431,338
TOTAL FIRMS	\$12,773,489	\$20,014,178	\$26,595,588	\$59,383,255
	(%)	(%)	(%)	(%)
African American Female	0.00%	0.00%	0.00%	0.00%
African American Male	3.73%	7.32%	4.77%	5.40%
AFRICAN AMERICAN FIRMS	3.73%	7.32%	4.77%	5.40%
Asian American Female	0.04%	0.03%	0.01%	0.02%
Asian American Male	0.00%	0.98%	0.68%	0.64%
ASIAN AMERICAN FIRMS	0.04%	1.00%	0.70%	0.66%
Hispanic American Female	0.06%	0.07%	0.22%	0.13%
Hispanic American Male	2.34%	3.73%	5.89%	4.40%
HISPANIC AMERICAN FIRMS	2.40%	3.80%	6.11%	4.53%
Native American Female	0.00%	0.00%	0.04%	0.02%
Native American Male	0.00%	0.00%	0.00%	0.00%
NATIVE AMERICAN FIRMS	0.00%	0.00%	0.04%	0.02%
TOTAL MINORITY FIRMS	6.17%	12.12%	11.62%	10.62%
NONMINORITY FEMALE FIRMS	4.91%	5.14%	3.72%	4.46%
TOTAL M/WBE FIRMS	11.08%	17.27%	15.34%	15.07%
NON-M/WBE FIRMS	88.92%	82.73%	84.66%	84.93%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in [Chapter 3, Figure 3-D](#). The totals may not equal the sum of components due to rounding.

UTILIZATION ANALYSES AT THE SUB LEVEL

TABLE A-20
UTILIZATION ANALYSIS AT THE SUB LEVEL BY BUSINESS OWNERSHIP
CLASSIFICATION AND YEAR, ALL CONTRACT CATEGORIES

BUSINESS OWNERSHIP CLASSIFICATION	2011 (\$)	2012 (\$)	2013 (\$)	TOTAL (\$)
African American Female	\$552	\$7,622	\$4,998	\$13,172
African American Male	\$584,848	\$474,320	\$484,434	\$1,543,602
AFRICAN AMERICAN FIRMS	\$585,400	\$481,943	\$489,432	\$1,556,774
Asian American Female	\$161,441	\$23,050	\$120,550	\$305,041
Asian American Male	\$477,543	\$959,848	\$1,165,573	\$2,602,964
ASIAN AMERICAN FIRMS	\$638,984	\$982,898	\$1,286,123	\$2,908,005
Hispanic American Female	\$423,624	\$265,991	\$190,197	\$879,813
Hispanic American Male	\$6,261,996	\$6,956,621	\$3,961,849	\$17,180,466
HISPANIC AMERICAN FIRMS	\$6,685,620	\$7,222,613	\$4,152,046	\$18,060,278
Native American Female	\$0	\$0	\$0	\$0
Native American Male	\$0	\$0	\$0	\$0
NATIVE AMERICAN FIRMS	\$0	\$0	\$0	\$0
TOTAL MINORITY FIRMS	\$7,910,003	\$8,687,454	\$5,927,601	\$22,525,058
NONMINORITY FEMALE FIRMS	\$8,698,891	\$5,550,231	\$7,288,280	\$21,537,402
TOTAL M/WBE FIRMS	\$16,608,895	\$14,237,685	\$13,215,881	\$44,062,460
NON-M/WBE FIRMS	\$8,452,195	\$5,252,752	\$7,435,560	\$21,140,507
TOTAL FIRMS	\$25,061,090	\$19,490,437	\$20,651,441	\$65,202,968
	(%)	(%)	(%)	(%)
African American Female	0.00%	0.04%	0.02%	0.02%
African American Male	2.33%	2.43%	2.35%	2.37%
AFRICAN AMERICAN FIRMS	2.34%	2.47%	2.37%	2.39%
Asian American Female	0.64%	0.12%	0.58%	0.47%
Asian American Male	1.91%	4.92%	5.64%	3.99%
ASIAN AMERICAN FIRMS	2.55%	5.04%	6.23%	4.46%
Hispanic American Female	1.69%	1.36%	0.92%	1.35%
Hispanic American Male	24.99%	35.69%	19.18%	26.35%
HISPANIC AMERICAN FIRMS	26.68%	37.06%	20.11%	27.70%
Native American Female	0.00%	0.00%	0.00%	0.00%
Native American Male	0.00%	0.00%	0.00%	0.00%
NATIVE AMERICAN FIRMS	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY FIRMS	31.56%	44.57%	28.70%	34.55%
NONMINORITY FEMALE FIRMS	34.71%	28.48%	35.29%	33.03%
TOTAL M/WBE FIRMS	66.27%	73.05%	63.99%	67.58%
NON-M/WBE FIRMS	33.73%	26.95%	36.01%	32.42%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in **Chapter 3, Table 3-4**. The totals may not equal the sum of components due to rounding.

TABLE A-21
UTILIZATION ANALYSIS AT THE SUB LEVEL BY BUSINESS OWNERSHIP
CLASSIFICATION, ENGINEERING

BUSINESS OWNERSHIP CLASSIFICATION	ENGINEERING	
	DOLLARS PAID	PERCENT OF DOLLARS
African American Female	\$0	0.00%
African American Male	\$1,264,319	6.80%
AFRICAN AMERICAN FIRMS	\$1,264,319	6.80%
Asian American Female	\$305,041	1.64%
Asian American Male	\$1,941,195	10.45%
ASIAN AMERICAN FIRMS	\$2,246,236	12.09%
Hispanic American Female	\$378,963	2.04%
Hispanic American Male	\$2,695,488	14.51%
HISPANIC AMERICAN FIRMS	\$3,074,451	16.55%
Native American Female	\$0	0.00%
Native American Male	\$0	0.00%
NATIVE AMERICAN FIRMS	\$0	0.00%
TOTAL MINORITY FIRMS	\$6,585,006	35.44%
NONMINORITY FEMALE FIRMS	\$4,751,269	25.57%
TOTAL M/WBE FIRMS	\$11,336,275	61.01%
NON-M/WBE FIRMS	<u>\$7,243,883</u>	<u>38.99%</u>
TOTAL FIRMS	\$18,580,158	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in [Chapter 3, Figure 3-E](#). The totals may not equal the sum of components due to rounding.

TABLE A-22
UTILIZATION ANALYSIS AT THE SUB LEVEL BY BUSINESS OWNERSHIP
CLASSIFICATION AND YEAR, ENGINEERING

BUSINESS OWNERSHIP CLASSIFICATION	2011 (\$)	2012 (\$)	2013 (\$)	TOTAL (\$)
African American Female	\$0	\$0	\$0	\$0
African American Male	\$389,754	\$464,075	\$410,490	\$1,264,319
AFRICAN AMERICAN FIRMS	\$389,754	\$464,075	\$410,490	\$1,264,319
Asian American Female	\$161,441	\$23,050	\$120,550	\$305,041
Asian American Male	\$424,901	\$706,718	\$809,576	\$1,941,195
ASIAN AMERICAN FIRMS	\$586,342	\$729,768	\$930,126	\$2,246,236
Hispanic American Female	\$176,676	\$154,700	\$47,587	\$378,963
Hispanic American Male	\$1,016,908	\$680,748	\$997,832	\$2,695,488
HISPANIC AMERICAN FIRMS	\$1,193,584	\$835,448	\$1,045,419	\$3,074,451
Native American Female	\$0	\$0	\$0	\$0
Native American Male	\$0	\$0	\$0	\$0
NATIVE AMERICAN FIRMS	\$0	\$0	\$0	\$0
TOTAL MINORITY FIRMS	\$2,169,680	\$2,029,291	\$2,386,035	\$6,585,006
NONMINORITY FEMALE FIRMS	\$1,384,325	\$1,790,965	\$1,575,979	\$4,751,269
TOTAL M/WBE FIRMS	\$3,554,005	\$3,820,256	\$3,962,014	\$11,336,275
NON-M/WBE FIRMS	\$1,131,766	\$2,236,460	\$3,875,657	\$7,243,883
TOTAL FIRMS	\$4,685,772	\$6,056,716	\$7,837,671	\$18,580,158
	(%)	(%)	(%)	(%)
African American Female	0.00%	0.00%	0.00%	0.00%
African American Male	8.32%	7.66%	5.24%	6.80%
AFRICAN AMERICAN FIRMS	8.32%	7.66%	5.24%	6.80%
Asian American Female	3.45%	0.38%	1.54%	1.64%
Asian American Male	9.07%	11.67%	10.33%	10.45%
ASIAN AMERICAN FIRMS	12.51%	12.05%	11.87%	12.09%
Hispanic American Female	3.77%	2.55%	0.61%	2.04%
Hispanic American Male	21.70%	11.24%	12.73%	14.51%
HISPANIC AMERICAN FIRMS	25.47%	13.79%	13.34%	16.55%
Native American Female	0.00%	0.00%	0.00%	0.00%
Native American Male	0.00%	0.00%	0.00%	0.00%
NATIVE AMERICAN FIRMS	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY FIRMS	46.30%	33.50%	30.44%	35.44%
NONMINORITY FEMALE FIRMS	29.54%	29.57%	20.11%	25.57%
TOTAL M/WBE FIRMS	75.85%	63.07%	50.55%	61.01%
NON-M/WBE FIRMS	24.15%	36.93%	49.45%	38.99%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in **Chapter 3, Figure 3-E**. The totals may not equal the sum of components due to rounding.

TABLE A-23
 UTILIZATION ANALYSIS AT THE SUB LEVEL BY BUSINESS OWNERSHIP
 CLASSIFICATION, HEAVY CIVIL/CONSTRUCTION

BUSINESS OWNERSHIP CLASSIFICATION	HEAVY CIVIL / UTILITY CONSTRUCTION	
	DOLLARS PAID	PERCENT OF DOLLARS
African American Female	\$13,172	0.03%
African American Male	\$213,710	0.47%
AFRICAN AMERICAN FIRMS	\$226,883	0.50%
Asian American Female	\$0	0.00%
Asian American Male	\$32,236	0.07%
ASIAN AMERICAN FIRMS	\$32,236	0.07%
Hispanic American Female	\$299,673	0.66%
Hispanic American Male	\$14,484,978	31.72%
HISPANIC AMERICAN FIRMS	\$14,784,651	32.38%
Native American Female	\$0	0.00%
Native American Male	\$0	0.00%
NATIVE AMERICAN FIRMS	\$0	0.00%
TOTAL MINORITY FIRMS	\$15,043,769	32.95%
NONMINORITY FEMALE FIRMS	\$16,786,133	36.76%
TOTAL M/WBE FIRMS	\$31,829,902	69.71%
NON-M/WBE FIRMS	\$13,832,444	30.29%
TOTAL FIRMS	\$45,662,346	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in [Chapter 3, Figure 3-E](#). The totals may not equal the sum of components due to rounding.

TABLE A-24
UTILIZATION ANALYSIS AT THE SUB LEVEL BY BUSINESS OWNERSHIP
CLASSIFICATION AND YEAR, HEAVY CIVIL/CONSTRUCTION

BUSINESS OWNERSHIP CLASSIFICATION	2011	2012	2013	TOTAL
	(\$)	(\$)	(\$)	(\$)
African American Female	\$552	\$7,622	\$4,998	\$13,172
African American Male	\$195,094	\$10,245	\$8,371	\$213,710
AFRICAN AMERICAN FIRMS	\$195,646	\$17,868	\$13,369	\$226,883
Asian American Female	\$0	\$0	\$0	\$0
Asian American Male	\$32,236	\$0	\$0	\$32,236
ASIAN AMERICAN FIRMS	\$32,236	\$0	\$0	\$32,236
Hispanic American Female	\$222,571	\$67,241	\$9,861	\$299,673
Hispanic American Male	\$5,245,088	\$6,275,873	\$2,964,017	\$14,484,978
HISPANIC AMERICAN FIRMS	\$5,467,659	\$6,343,114	\$2,973,878	\$14,784,651
Native American Female	\$0	\$0	\$0	\$0
Native American Male	\$0	\$0	\$0	\$0
NATIVE AMERICAN FIRMS	\$0	\$0	\$0	\$0
TOTAL MINORITY FIRMS	\$5,695,540	\$6,360,982	\$2,987,247	\$15,043,769
NONMINORITY FEMALE FIRMS	\$7,314,566	\$3,759,266	\$5,712,301	\$16,786,133
TOTAL M/WBE FIRMS	\$13,010,106	\$10,120,248	\$8,699,548	\$31,829,902
NON-M/WBE FIRMS	\$7,320,429	\$3,016,293	\$3,495,722	\$13,832,444
TOTAL FIRMS	\$20,330,535	\$13,136,541	\$12,195,270	\$45,662,346
	(%)	(%)	(%)	(%)
African American Female	0.00%	0.06%	0.04%	0.03%
African American Male	0.96%	0.08%	0.07%	0.47%
AFRICAN AMERICAN FIRMS	0.96%	0.14%	0.11%	0.50%
Asian American Female	0.00%	0.00%	0.00%	0.00%
Asian American Male	0.16%	0.00%	0.00%	0.07%
ASIAN AMERICAN FIRMS	0.16%	0.00%	0.00%	0.07%
Hispanic American Female	1.09%	0.51%	0.08%	0.66%
Hispanic American Male	25.80%	47.77%	24.30%	31.72%
HISPANIC AMERICAN FIRMS	26.89%	48.29%	24.39%	32.38%
Native American Female	0.00%	0.00%	0.00%	0.00%
Native American Male	0.00%	0.00%	0.00%	0.00%
NATIVE AMERICAN FIRMS	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY FIRMS	28.01%	48.42%	24.50%	32.95%
NONMINORITY FEMALE FIRMS	35.98%	28.62%	46.84%	36.76%
TOTAL M/WBE FIRMS	63.99%	77.04%	71.34%	69.71%
NON-M/WBE FIRMS	36.01%	22.96%	28.66%	30.29%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in **Chapter 3, Figure 3-E**. The totals may not equal the sum of components due to rounding.

TABLE A-25
UTILIZATION ANALYSIS AT THE SUB LEVEL BY BUSINESS OWNERSHIP
CLASSIFICATION, OTHER PROFESSIONAL SERVICES

BUSINESS OWNERSHIP CLASSIFICATION	OTHER PROFESSIONAL SERVICES	
	DOLLARS PAID	PERCENT OF DOLLARS
African American Female	\$0	0.00%
African American Male	\$65,573	12.07%
AFRICAN AMERICAN FIRMS	\$65,573	12.07%
Asian American Female	\$0	0.00%
Asian American Male	\$212,537	39.13%
ASIAN AMERICAN FIRMS	\$212,537	39.13%
Hispanic American Female	\$200,901	36.99%
Hispanic American Male	\$0	0.00%
HISPANIC AMERICAN FIRMS	\$200,901	36.99%
Native American Female	\$0	0.00%
Native American Male	\$0	0.00%
NATIVE AMERICAN FIRMS	\$0	0.00%
TOTAL MINORITY FIRMS	\$479,011	88.18%
NONMINORITY FEMALE FIRMS	\$0	0.00%
TOTAL M/WBE FIRMS	\$479,011	88.18%
NON-M/WBE FIRMS	\$64,181	11.82%
TOTAL FIRMS	\$543,192	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in [Chapter 3, Figure 3-F](#). The totals may not equal the sum of components due to rounding.

TABLE A-26
UTILIZATION ANALYSIS AT THE SUB LEVEL BY BUSINESS OWNERSHIP
CLASSIFICATION AND YEAR, OTHER PROFESSIONAL SERVICES

BUSINESS OWNERSHIP CLASSIFICATION	2011	2012	2013	TOTAL
	(\$)	(\$)	(\$)	(\$)
African American Female	\$0	\$0	\$0	\$0
African American Male	\$0	\$0	\$65,573	\$65,573
AFRICAN AMERICAN FIRMS	\$0	\$0	\$65,573	\$65,573
Asian American Female	\$0	\$0	\$0	\$0
Asian American Male	\$0	\$0	\$212,537	\$212,537
ASIAN AMERICAN FIRMS	\$0	\$0	\$212,537	\$212,537
Hispanic American Female	\$24,377	\$44,050	\$132,474	\$200,901
Hispanic American Male	\$0	\$0	\$0	\$0
HISPANIC AMERICAN FIRMS	\$24,377	\$44,050	\$132,474	\$200,901
Native American Female	\$0	\$0	\$0	\$0
Native American Male	\$0	\$0	\$0	\$0
NATIVE AMERICAN FIRMS	\$0	\$0	\$0	\$0
TOTAL MINORITY FIRMS	\$24,377	\$44,050	\$410,584	\$479,011
NONMINORITY FEMALE FIRMS	\$0	\$0	\$0	\$0
TOTAL M/WBE FIRMS	\$24,377	\$44,050	\$410,584	\$479,011
NON-M/WBE FIRMS	\$0	\$0	\$64,181	\$64,181
TOTAL FIRMS	\$24,377	\$44,050	\$474,765	\$543,192
	(%)	(%)	(%)	(%)
African American Female	0.00%	0.00%	0.00%	0.00%
African American Male	0.00%	0.00%	13.81%	12.07%
AFRICAN AMERICAN FIRMS	0.00%	0.00%	13.81%	12.07%
Asian American Female	0.00%	0.00%	0.00%	0.00%
Asian American Male	0.00%	0.00%	44.77%	39.13%
ASIAN AMERICAN FIRMS	0.00%	0.00%	44.77%	39.13%
Hispanic American Female	100.00%	100.00%	27.90%	36.99%
Hispanic American Male	0.00%	0.00%	0.00%	0.00%
HISPANIC AMERICAN FIRMS	100.00%	100.00%	27.90%	36.99%
Native American Female	0.00%	0.00%	0.00%	0.00%
Native American Male	0.00%	0.00%	0.00%	0.00%
NATIVE AMERICAN FIRMS	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY FIRMS	100.00%	100.00%	86.48%	88.18%
NONMINORITY FEMALE FIRMS	0.00%	0.00%	0.00%	0.00%
TOTAL M/WBE FIRMS	100.00%	100.00%	86.48%	88.18%
NON-M/WBE FIRMS	0.00%	0.00%	13.52%	11.82%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in **Chapter 3, Figure 3-F**. The totals may not equal the sum of components due to rounding.

TABLE A-27
UTILIZATION ANALYSIS AT THE SUB LEVEL BY BUSINESS OWNERSHIP
CLASSIFICATION, PROCUREMENT

BUSINESS OWNERSHIP CLASSIFICATION	PROCUREMENT	
	DOLLARS PAID	PERCENT OF DOLLARS
African American Female	\$0	0.00%
African American Male	\$0	0.00%
AFRICAN AMERICAN FIRMS	\$0	0.00%
Asian American Female	\$0	0.00%
Asian American Male	\$416,996	99.93%
ASIAN AMERICAN FIRMS	\$416,996	99.93%
Hispanic American Female	\$275	0.07%
Hispanic American Male	\$0	0.00%
HISPANIC AMERICAN FIRMS	\$275	0.07%
Native American Female	\$0	0.00%
Native American Male	\$0	0.00%
NATIVE AMERICAN FIRMS	\$0	0.00%
TOTAL MINORITY FIRMS	\$417,271	100.00%
NONMINORITY FEMALE FIRMS	\$0	0.00%
TOTAL M/WBE FIRMS	\$417,271	100.00%
NON-M/WBE FIRMS	\$0	0.00%
TOTAL FIRMS	\$417,271	100.00%

Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in [Chapter 3, Figure 3-F](#). The totals may not equal the sum of components due to rounding.

TABLE A-28
UTILIZATION ANALYSIS AT THE SUB LEVEL BY BUSINESS OWNERSHIP
CLASSIFICATION AND YEAR, PROCUREMENT

BUSINESS OWNERSHIP CLASSIFICATION	2011	2012	2013	TOTAL
	(\$)	(\$)	(\$)	(\$)
African American Female	\$0	\$0	\$0	\$0
African American Male	\$0	\$0	\$0	\$0
AFRICAN AMERICAN FIRMS	\$0	\$0	\$0	\$0
Asian American Female	\$0	\$0	\$0	\$0
Asian American Male	\$20,406	\$253,130	\$143,460	\$416,996
ASIAN AMERICAN FIRMS	\$20,406	\$253,130	\$143,460	\$416,996
Hispanic American Female	\$0	\$0	\$275	\$275
Hispanic American Male	\$0	\$0	\$0	\$0
HISPANIC AMERICAN FIRMS	\$0	\$0	\$275	\$275
Native American Female	\$0	\$0	\$0	\$0
Native American Male	\$0	\$0	\$0	\$0
NATIVE AMERICAN FIRMS	\$0	\$0	\$0	\$0
TOTAL MINORITY FIRMS	\$20,406	\$253,130	\$143,735	\$417,271
NONMINORITY FEMALE FIRMS	\$0	\$0	\$0	\$0
TOTAL M/WBE FIRMS	\$20,406	\$253,130	\$143,735	\$417,271
NON-M/WBE FIRMS	\$0	\$0	\$0	\$0
TOTAL FIRMS	\$20,406	\$253,130	\$143,735	\$417,271
	(%)	(%)	(%)	(%)
African American Female	0.00%	0.00%	0.00%	0.00%
African American Male	0.00%	0.00%	0.00%	0.00%
AFRICAN AMERICAN FIRMS	0.00%	0.00%	0.00%	0.00%
Asian American Female	0.00%	0.00%	0.00%	0.00%
Asian American Male	100.00%	100.00%	99.81%	99.93%
ASIAN AMERICAN FIRMS	100.00%	100.00%	99.81%	99.93%
Hispanic American Female	0.00%	0.00%	0.19%	0.07%
Hispanic American Male	0.00%	0.00%	0.00%	0.00%
HISPANIC AMERICAN FIRMS	0.00%	0.00%	0.19%	0.07%
Native American Female	0.00%	0.00%	0.00%	0.00%
Native American Male	0.00%	0.00%	0.00%	0.00%
NATIVE AMERICAN FIRMS	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY FIRMS	100.00%	100.00%	100.00%	100.00%
NONMINORITY FEMALE FIRMS	0.00%	0.00%	0.00%	0.00%
TOTAL M/WBE FIRMS	100.00%	100.00%	100.00%	100.00%
NON-M/WBE FIRMS	0.00%	0.00%	0.00%	0.00%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%

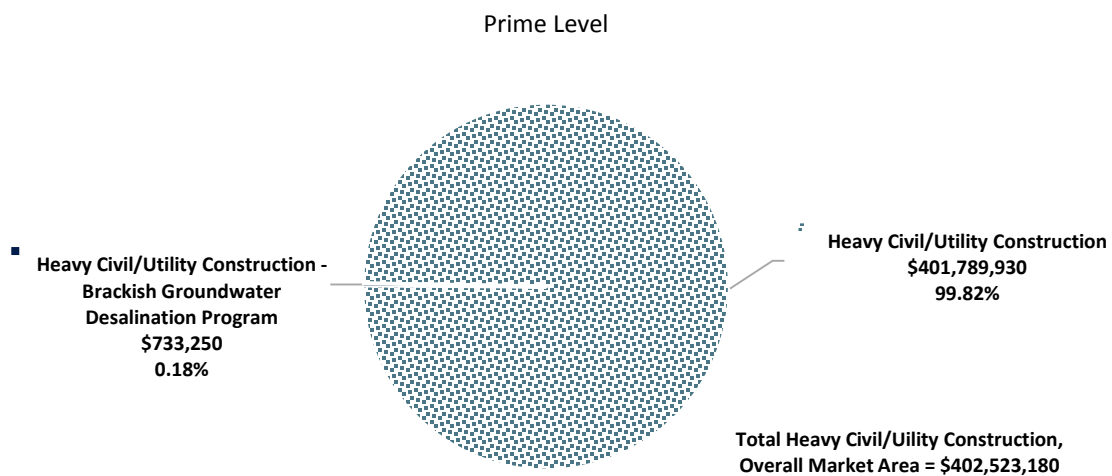
Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.

Note: The corresponding utilization summary results by business ownership classification are presented in **Chapter 3, Figure 3-F**. The totals may not equal the sum of components due to rounding.

BRACKISH GROUNDWATER DESALINATION PROJECT AND SANITATION SEWER OVERFLOWS (SSO) REDUCTION PROGRAM SUMMARY OF DOLLARS

Figure 1 and **Figure 2** present a summary of the dollars expenditures for both projects during the study period. At the time that the data was analyzed for this study, the Brackish Groundwater Desalination Project's contract value \$10.9 million, of which \$733,250 were paid at the prime level. Thus, **Figure 1** shows that of the \$402.5 million (payment dollars) analyzed in the overall market area for heavy civil/utility construction, close to 0.2 percent were paid to firms participating on the Brackish Groundwater Desalination Program projects.

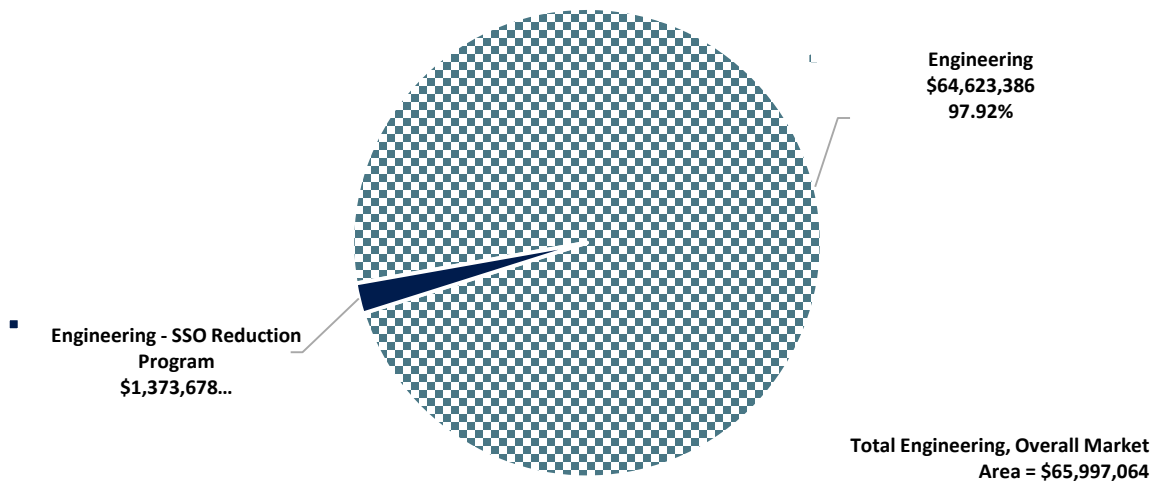
FIGURE 1
BRACKISH GROUNDWATER DESALINATION PROJECT
SUMMARY OF DOLLARS



Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013.
The totals may not equal the sum of components due to rounding.

The SSO Reduction Program’s contract value was \$6.4 million, of which \$1.4 million were paid at the prime level. Thus, **Figure 2** shows of the close to \$66 million (payment dollars) analyzed in the overall market area for Engineering, 2.1 percent were paid to firms participating on SSO Reduction Program projects.

FIGURE 2
SANITATION SEWER OVERFLOWS (SSO) REDUCTION PROGRAM
SUMMARY OF DOLLARS



Source: MGT developed a Master Contract database based on contract dollars awarded and expended by the San Antonio Water System between January 1, 2011 and December 31, 2013. The totals may not equal the sum of components due to rounding.

APPENDIX B: CORRESPONDING ANALYSES: DISPARITY ANALYSES

APPENDIX B: CORRESPONDING ANALYSES: DISPARITY ANALYSES

Appendix B presents the corresponding analyses discussed in **Chapter 4**. The corresponding analyses present disparity results. The corresponding results to analyses presented in the chapters are designated in the notes to the exhibits.

LIST OF TABLES

- B-1.** Disparity Indices of Firms by Year and Business Ownership Classification, Prime Consultant Level – Engineering
- B-2.** Disparity Indices of Firms by Year and Business Ownership Classification, Prime Contractor Level – Heavy Civil/Utility Construction
- B-3.** Disparity Indices of Firms by Year and Business Ownership Classification, Prime Consultant Level – Other Professional Services
- B-4.** Disparity Indices of Firms by Year and Business Ownership Classification, Prime Consultant Level – Procurement
- B-5.** Disparity Indices of Firms by Year and Business Ownership Classification, Subconsultant Level – Engineering
- B-6.** Disparity Indices of Firms by Year and Business Ownership Classification, Subcontractor Level – Heavy Civil/Utility Construction

DISPARITY ANALYSES AT THE PRIME LEVEL

EXHIBIT B-1
DISPARITY INDICES OF FIRMS, ENGINEERING
PRIME CONSULTANT LEVEL

YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE	DISPARITY INDEX	DISPARATE IMPACT OF UTILIZATION		
			(%)				
2011	African American Firms	0.70%	0.95%	73.61	Underutilization	*	--
	Asian American Firms	7.74%	9.52%	81.32	Underutilization		
	Hispanic American Firms	12.61%	23.81%	52.97	Underutilization	*	
	Native American Firms	0.00%	0.00%	-	n/a		--
	TOTAL MINORITY FIRMS	21.06%	34.29%	61.42	Underutilization	*	
	Nonminority Female Firms	8.11%	12.38%	65.52	Underutilization	*	
	Total M/WBE Firms	29.17%	46.67%	62.50	Underutilization	*	
	Non-M/WBE Firms	70.83%	53.33%	132.81	Overutilization		
2012	African American Firms	0.41%	0.95%	43.10	Underutilization	*	--
	Asian American Firms	7.13%	9.52%	74.91	Underutilization	*	
	Hispanic American Firms	11.12%	23.81%	46.69	Underutilization	*	
	Native American Firms	0.00%	0.00%	-	n/a		--
	TOTAL MINORITY FIRMS	18.66%	34.29%	54.43	Underutilization	*	
	Nonminority Female Firms	5.50%	12.38%	44.42	Underutilization	*	
	Total M/WBE Firms	24.16%	46.67%	51.77	Underutilization	*	
	Non-M/WBE Firms	75.84%	53.33%	142.20	Overutilization		
2013	African American Firms	0.56%	0.95%	58.50	Underutilization	*	--
	Asian American Firms	3.55%	9.52%	37.30	Underutilization	*	
	Hispanic American Firms	7.26%	23.81%	30.47	Underutilization	*	
	Native American Firms	0.00%	0.00%	-	n/a		--
	TOTAL MINORITY FIRMS	11.37%	34.29%	33.15	Underutilization	*	
	Nonminority Female Firms	4.01%	12.38%	32.39	Underutilization	*	
	Total M/WBE Firms	15.38%	46.67%	32.95	Underutilization	*	
	Non-M/WBE Firms	84.62%	53.33%	158.67	Overutilization		
TOTAL	African American Firms	0.55%	0.95%	57.32	Underutilization	*	--
	Asian American Firms	5.90%	9.52%	61.96	Underutilization	*	
	Hispanic American Firms	10.01%	23.81%	42.05	Underutilization	*	
	Native American Firms	0.00%	0.00%	-	n/a		--
	TOTAL MINORITY FIRMS	16.46%	34.29%	48.01	Underutilization	*	
	Nonminority Female Firms	5.62%	12.38%	45.40	Underutilization	*	
	Total M/WBE Firms	22.08%	46.67%	47.31	Underutilization	*	
	Non-M/WBE Firms	77.92%	53.33%	146.10	Overutilization		

Source: MGT developed a Master Contracting and Availability Database for the study.

Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.

Percent of dollars is taken from the utilization analysis.

Percent of available firms is taken from the availability estimates.

Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.

* indicate a substantial level of disparity, which is a disparity index below 80.00.

-- indicate where results are based on fewer than five observations.

The dash (-) and n/a denotes constraint of division by zero. This occurred because there was no identified availability estimates in this specific business category and M/WBE group.

Note: The corresponding disparity summary and t-test results by business ownership classification are presented in [Chapter 4](#), [Figure 4-A](#) and [Table 4-7](#), respectively.

TABLE B-2
DISPARITY INDICES OF FIRMS, HEAVY CIVIL/UTILITY CONSTRUCTION
PRIME CONTRACTOR LEVEL

YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE	DISPARITY INDEX	DISPARATE IMPACT OF UTILIZATION		
			(%)				
2011	African American Firms	0.00%	0.00%	-	n/a		--
	Asian American Firms	0.73%	1.30%	56.00	Underutilization	*	--
	Hispanic American Firms	4.71%	31.17%	15.11	Underutilization	*	
	Native American Firms	0.00%	1.30%	0.00	Underutilization	*	--
	TOTAL MINORITY FIRMS	5.44%	33.77%	16.11	Underutilization	*	
	Nonminority Female Firms	0.10%	7.79%	1.32	Underutilization	*	
	Total M/WBE Firms	5.54%	41.56%	13.33	Underutilization	*	
	Non-M/WBE Firms	94.46%	58.44%	161.63	Overutilization		
2012	African American Firms	0.00%	0.00%	-	n/a		--
	Asian American Firms	0.10%	1.30%	7.36	Underutilization	*	--
	Hispanic American Firms	6.57%	31.17%	21.09	Underutilization	*	
	Native American Firms	0.00%	1.30%	0.00	Underutilization	*	--
	TOTAL MINORITY FIRMS	6.67%	33.77%	19.75	Underutilization	*	
	Nonminority Female Firms	0.00%	7.79%	0.05	Underutilization	*	
	Total M/WBE Firms	6.67%	41.56%	16.06	Underutilization	*	
	Non-M/WBE Firms	93.33%	58.44%	159.69	Overutilization		
2013	African American Firms	0.00%	0.00%	-	n/a		--
	Asian American Firms	0.17%	1.30%	13.36	Underutilization	*	--
	Hispanic American Firms	6.60%	31.17%	21.18	Underutilization	*	
	Native American Firms	0.85%	1.30%	65.45	Underutilization	*	--
	TOTAL MINORITY FIRMS	7.63%	33.77%	22.58	Underutilization	*	
	Nonminority Female Firms	0.05%	7.79%	0.67	Underutilization	*	
	Total M/WBE Firms	7.68%	41.56%	18.48	Underutilization	*	
	Non-M/WBE Firms	92.32%	58.44%	157.97	Overutilization		
TOTAL	African American Firms	0.00%	0.00%	-	n/a		--
	Asian American Firms	0.30%	1.30%	23.21	Underutilization	*	--
	Hispanic American Firms	6.07%	31.17%	19.47	Underutilization	*	
	Native American Firms	0.33%	1.30%	25.68	Underutilization	*	--
	TOTAL MINORITY FIRMS	6.70%	33.77%	19.85	Underutilization	*	
	Nonminority Female Firms	0.05%	7.79%	0.65	Underutilization	*	
	Total M/WBE Firms	6.75%	41.56%	16.25	Underutilization	*	
	Non-M/WBE Firms	93.25%	58.44%	159.55	Overutilization		

Source: MGT developed a Master Contracting and Availability Database for the study.

Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.

Percent of dollars is taken from the utilization analysis.

Percent of available firms is taken from the availability estimates.

Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.

* indicate a substantial level of disparity, which is a disparity index below 80.00.

-- indicate where results are based on fewer than five observations.

The dash (-) and n/a denotes constraint of division by zero. This occurred because there was no identified availability estimates in this specific business category and M/WBE group.

Note: The corresponding disparity summary and t-test results by business ownership classification are presented in [Chapter 4, Figure 4-B](#) and [Table 4-8](#), respectively.

TABLE B-3
DISPARITY INDICES OF FIRMS, OTHER PROFESSIONAL SERVICES
PRIME CONSULTANT LEVEL

YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE	DISPARITY INDEX	DISPARATE IMPACT OF UTILIZATION	
			(%)			
2011	African American Firms	0.00%	15.45%	0.00	Underutilization	*
	Asian American Firms	0.00%	4.24%	0.00	Underutilization	*
	Hispanic American Firms	19.99%	28.79%	69.44	Underutilization	*
	Native American Firms	1.52%	1.52%	100.34	Overutilization	
	TOTAL MINORITY FIRMS	21.51%	50.00%	43.02	Underutilization	*
	Nonminority Female Firms	13.57%	19.70%	68.91	Underutilization	*
	Total M/WBE Firms	35.08%	69.70%	50.34	Underutilization	*
	Non-M/WBE Firms	64.92%	30.30%	214.23	Overutilization	
2012	African American Firms	0.00%	15.45%	0.00	Underutilization	*
	Asian American Firms	0.00%	4.24%	0.00	Underutilization	*
	Hispanic American Firms	19.31%	28.79%	67.09	Underutilization	*
	Native American Firms	2.11%	1.52%	139.41	Overutilization	
	TOTAL MINORITY FIRMS	21.43%	50.00%	42.85	Underutilization	*
	Nonminority Female Firms	19.30%	19.70%	97.97	Underutilization	
	Total M/WBE Firms	40.72%	69.70%	58.43	Underutilization	*
	Non-M/WBE Firms	59.28%	30.30%	195.61	Overutilization	
2013	African American Firms	0.00%	15.45%	0.00	Underutilization	*
	Asian American Firms	0.00%	4.24%	0.00	Underutilization	*
	Hispanic American Firms	13.62%	28.79%	47.30	Underutilization	*
	Native American Firms	0.27%	1.52%	18.01	Underutilization	*
	TOTAL MINORITY FIRMS	13.89%	50.00%	27.78	Underutilization	*
	Nonminority Female Firms	15.60%	19.70%	79.19	Underutilization	*
	Total M/WBE Firms	29.49%	69.70%	42.31	Underutilization	*
	Non-M/WBE Firms	70.51%	30.30%	232.70	Overutilization	
TOTAL	African American Firms	0.00%	15.45%	0.00	Underutilization	*
	Asian American Firms	0.00%	4.24%	0.00	Underutilization	*
	Hispanic American Firms	17.71%	28.79%	61.53	Underutilization	*
	Native American Firms	1.36%	1.52%	89.72	Underutilization	
	TOTAL MINORITY FIRMS	19.07%	50.00%	38.15	Underutilization	*
	Nonminority Female Firms	16.46%	19.70%	83.57	Underutilization	
	Total M/WBE Firms	35.53%	69.70%	50.98	Underutilization	*
	Non-M/WBE Firms	64.47%	30.30%	212.74	Overutilization	

Source: MGT developed a Master Contracting and Availability Database for the study.

Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.

Percent of dollars is taken from the utilization analysis.

Percent of available firms is taken from the availability estimates.

Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.

* indicate a substantial level of disparity, which is a disparity index below 80.00.

- - indicate where results are based on fewer than five observations.

The dash (-) and n/a denotes constraint of division by zero. This occurred because there was no identified availability estimates in this specific business category and M/WBE group.

Note: The corresponding disparity summary and t-test results by business ownership classification are presented in [Chapter 4, Figure 4-C](#) and [Table 4-9](#), respectively.

TABLE B-4
DISPARITY INDICES OF FIRMS, PROCUREMENT SERVICES
PRIME CONSULTANT LEVEL

YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE	DISPARITY INDEX	DISPARATE IMPACT OF UTILIZATION	
			(%)			
2011	African American Firms	3.73%	6.50%	57.33	Underutilization	*
	Asian American Firms	0.04%	1.62%	2.64	Underutilization	*
	Hispanic American Firms	2.40%	29.84%	8.05	Underutilization	*
	Native American Firms	0.00%	0.74%	0.00	Underutilization	*
	TOTAL MINORITY FIRMS	6.17%	38.70%	15.95	Underutilization	*
	Nonminority Female Firms	4.91%	12.11%	40.56	Underutilization	*
	Total M/WBE Firms	11.08%	50.81%	21.81	Underutilization	*
	Non-M/WBE Firms	88.92%	49.19%	180.77	Overutilization	
2012	African American Firms	7.32%	6.50%	112.60	Overutilization	
	Asian American Firms	1.00%	1.62%	61.82	Underutilization	*
	Hispanic American Firms	3.80%	29.84%	12.74	Underutilization	*
	Native American Firms	0.00%	0.74%	0.00	Underutilization	*
	TOTAL MINORITY FIRMS	12.12%	38.70%	31.33	Underutilization	*
	Nonminority Female Firms	5.14%	12.11%	42.47	Underutilization	*
	Total M/WBE Firms	17.27%	50.81%	33.98	Underutilization	*
	Non-M/WBE Firms	82.73%	49.19%	168.20	Overutilization	
2013	African American Firms	4.77%	6.50%	73.41	Underutilization	*
	Asian American Firms	0.70%	1.62%	42.96	Underutilization	*
	Hispanic American Firms	6.11%	29.84%	20.47	Underutilization	*
	Native American Firms	0.04%	0.74%	5.88	Underutilization	*
	TOTAL MINORITY FIRMS	11.62%	38.70%	30.03	Underutilization	*
	Nonminority Female Firms	3.72%	12.11%	30.72	Underutilization	*
	Total M/WBE Firms	15.34%	50.81%	30.19	Underutilization	*
	Non-M/WBE Firms	84.66%	49.19%	172.11	Overutilization	
TOTAL	African American Firms	5.40%	6.50%	83.16	Underutilization	*
	Asian American Firms	0.66%	1.62%	40.64	Underutilization	*
	Hispanic American Firms	4.53%	29.84%	15.20	Underutilization	*
	Native American Firms	0.02%	0.74%	2.63	Underutilization	*
	TOTAL MINORITY FIRMS	10.62%	38.70%	27.44	Underutilization	*
	Nonminority Female Firms	4.46%	12.11%	36.79	Underutilization	*
	Total M/WBE Firms	15.07%	50.81%	29.67	Underutilization	*
	Non-M/WBE Firms	84.93%	49.19%	172.66	Overutilization	

Source: MGT developed a Master Contracting and Availability Database for the study.

Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.

Percent of dollars is taken from the utilization analysis.

Percent of available firms is taken from the availability estimates.

Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.

* indicate a substantial level of disparity, which is a disparity index below 80.00.

- - indicate where results are based on fewer than five observations.

The dash (-) and n/a denotes constraint of division by zero. This occurred because there was no identified availability estimates in this specific business category and M/WBE group.

Note: The corresponding disparity summary and t-test results by business ownership classification are presented in [Chapter 4, Figure 4-D](#) and [Table 4-10](#), respectively.

DISPARITY ANALYSES AT THE SUB LEVEL

TABLE B-5
DISPARITY INDICES OF FIRMS, ENGINEERING
SUBCONSULTANT LEVEL

YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE	DISPARITY INDEX	DISPARATE IMPACT OF UTILIZATION	
			(%)			
2011	African American Firms	8.32%	2.33%	356.28	Overutilization	
	Asian American Firms	12.51%	7.00%	178.66	Overutilization	
	Hispanic American Firms	25.47%	33.85%	75.25	Underutilization	*
	Native American Firms	0.00%	0.00%	-	n/a	
	TOTAL MINORITY FIRMS	46.30%	43.19%	107.21	Overutilization	
	Nonminority Female Firms	29.54%	12.06%	244.92	Overutilization	
	Total M/WBE Firms	75.85%	55.25%	137.27	Overutilization	
	Non-M/WBE Firms	24.15%	44.75%	53.98	Underutilization	*
2012	African American Firms	7.66%	2.33%	328.20	Overutilization	
	Asian American Firms	12.05%	7.00%	172.03	Overutilization	
	Hispanic American Firms	13.79%	33.85%	40.75	Underutilization	*
	Native American Firms	0.00%	0.00%	-	n/a	
	TOTAL MINORITY FIRMS	33.50%	43.19%	77.57	Underutilization	*
	Nonminority Female Firms	29.57%	12.06%	245.14	Overutilization	
	Total M/WBE Firms	63.07%	55.25%	114.16	Overutilization	
	Non-M/WBE Firms	36.93%	44.75%	82.52	Underutilization	
2013	African American Firms	5.24%	2.33%	224.34	Overutilization	
	Asian American Firms	11.87%	7.00%	169.44	Overutilization	
	Hispanic American Firms	13.34%	33.85%	39.40	Underutilization	*
	Native American Firms	0.00%	0.00%	-	n/a	
	TOTAL MINORITY FIRMS	30.44%	43.19%	70.49	Underutilization	*
	Nonminority Female Firms	20.11%	12.06%	166.70	Overutilization	
	Total M/WBE Firms	50.55%	55.25%	91.49	Underutilization	
	Non-M/WBE Firms	49.45%	44.75%	110.51	Overutilization	
TOTAL	African American Firms	6.80%	2.33%	291.47	Overutilization	
	Asian American Firms	12.09%	7.00%	172.61	Overutilization	
	Hispanic American Firms	16.55%	33.85%	48.88	Underutilization	*
	Native American Firms	0.00%	0.00%	-	n/a	
	TOTAL MINORITY FIRMS	35.44%	43.19%	82.06	Underutilization	
	Nonminority Female Firms	25.57%	12.06%	212.00	Overutilization	
	Total M/WBE Firms	61.01%	55.25%	110.42	Overutilization	
	Non-M/WBE Firms	38.99%	44.75%	87.13	Underutilization	

Source: MGT developed a Master Contracting and Availability Database for the study.

Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.

Percent of dollars is taken from the utilization analysis.

Percent of available firms is taken from the availability estimates.

Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.

* indicate a substantial level of disparity, which is a disparity index below 80.00.

-- indicate where results are based on fewer than five observations.

The dash (-) and n/a denotes constraint of division by zero. This occurred because there was no identified availability estimates in this specific business category and M/WBE group.

Note: The corresponding disparity summary and t-test results by business ownership classification are presented in [Chapter 4, Figure 4-E](#) and [Table 4-11](#), respectively.

TABLE B-6
DISPARITY INDICES OF FIRMS, HEAVY CIVIL/UTILITY CONSTRUCTION
SUBCONTRACTOR LEVEL

YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE	DISPARITY INDEX	DISPARATE IMPACT OF UTILIZATION	
			(%)			
2011	African American Firms	0.96%	3.55%	27.08	Underutilization	*
	Asian American Firms	0.16%	1.02%	15.62	Underutilization	*
	Hispanic American Firms	26.89%	45.85%	58.65	Underutilization	*
	Native American Firms	0.00%	1.02%	0.00	Underutilization	*
	TOTAL MINORITY FIRMS	28.01%	51.44%	54.46	Underutilization	*
	Nonminority Female Firms	35.98%	10.32%	348.58	Overutilization	
	Total M/WBE Firms	63.99%	61.76%	103.62	Overutilization	
2012	Non-M/WBE Firms	36.01%	38.24%	94.16	Underutilization	
	African American Firms	0.14%	3.55%	3.83	Underutilization	*
	Asian American Firms	0.00%	1.02%	0.00	Underutilization	*
	Hispanic American Firms	48.29%	45.85%	105.30	Overutilization	
	Native American Firms	0.00%	1.02%	0.00	Underutilization	*
	TOTAL MINORITY FIRMS	48.42%	51.44%	94.14	Underutilization	
	Total M/WBE Firms	77.04%	61.76%	124.74	Overutilization	
2013	Non-M/WBE Firms	22.96%	38.24%	60.04	Underutilization	*
	African American Firms	0.11%	3.55%	3.09	Underutilization	*
	Asian American Firms	0.00%	1.02%	0.00	Underutilization	*
	Hispanic American Firms	24.39%	45.85%	53.18	Underutilization	*
	Native American Firms	0.00%	1.02%	0.00	Underutilization	*
	TOTAL MINORITY FIRMS	24.50%	51.44%	47.62	Underutilization	*
	Total M/WBE Firms	71.34%	61.76%	115.50	Overutilization	
TOTAL	Non-M/WBE Firms	28.66%	38.24%	74.96	Underutilization	*
	African American Firms	0.50%	3.55%	13.98	Underutilization	*
	Asian American Firms	0.07%	1.02%	6.95	Underutilization	*
	Hispanic American Firms	32.38%	45.85%	70.61	Underutilization	*
	Native American Firms	0.00%	1.02%	0.00	Underutilization	*
	TOTAL MINORITY FIRMS	32.95%	51.44%	64.05	Underutilization	*
	Total M/WBE Firms	69.71%	61.76%	112.87	Overutilization	
Non-M/WBE Firms	30.29%	38.24%	79.22	Underutilization	*	

Source: MGT developed a Master Contracting and Availability Database for the study.

Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.

Percent of dollars is taken from the utilization analysis.

Percent of available firms is taken from the availability estimates.

Disparity index is the ratio of the percentage of dollars to percentage of available firms multiplied by 100.00.

* indicate a substantial level of disparity, which is a disparity index below 80.00.

- - indicate where results are based on fewer than five observations.

The dash (-) and n/a denotes constraint of division by zero. This occurred because there was no identified availability estimates in this specific business category and M/WBE group.

Note: The corresponding disparity summary and t-test results by business ownership classification are presented in [Chapter 4, Figure 4-F](#) and [Table 4-12](#), respectively.

APPENDIX C: M/WBE PROGRAM DISPARITY STUDY SURVEY NOTIFICATION

APPENDIX C: M/WBE PROGRAM DISPARITY STUDY SURVEY NOTIFICATION



Memorandum

TO: San Antonio-area Small, Minority, and Woman-owned Businesses (SMWBs)

FROM: Marisol V. Robles, SAWS Small, Minority, and Woman-owned Business Program Manager

SUBJECT: Telephone Surveys conducted by Oppenheim Research for the SAWS Minority and Woman-owned Business Program Disparity Study

Date: July 25, 2014

NOTIFICATION OF TELEPHONE SURVEYS :

San Antonio Water System (SAWS) is currently conducting a Minority and Woman-owned Business Enterprise (M/WBE) Program Disparity Study to determine SAWS' utilization of M/WBEs in its contracting practices. This study is part of an ongoing effort by the Board of Trustees and SAWS staff to ensure proper minority representation in contracts of all types that are awarded by SAWS. The Disparity Study will identify any gaps between M/WBE business availability in the San Antonio area, and the percentages of M/WBE firms actually utilized by SAWS. MGT of America, Inc. is managing the Disparity Study for SAWS.

Oppenheim Research, a subcontractor to MGT of America, Inc. is conducting telephone interviews with firms who have registered as vendors in the SAWS Vendor Registration and Notification (VRN) system to determine if SAWS' vendors have experienced any obstacles in their efforts to compete for contracts.

If you are contacted by Oppenheim Research, please take a few minutes to participate in the survey. Your input is important to the community, as SAWS seeks to improve its efforts in reinvesting rate-payer dollars into Minority and Woman-owned Business Enterprises through contracting opportunities.

CONTACT INFORMATION:

For any questions or concerns related to the telephone surveys or the SAWS Minority and Woman-owned Business Enterprise Program Disparity Study, please contact Marisol V. Robles, SMWB Program Manager:

Marisol V. Robles
SMWB Program Manager
San Antonio Water System
210-233-3420 Telephone (direct)
210-233-4988 Facsimile
marisol.robles@saws.org



APPENDIX D: SURVEY OF VENDORS INSTRUMENT

APPENDIX D: SURVEY OF VENDORS INSTRUMENT

The **San Antonio Water System (SAWS)** has contracted MGT of America to conduct a disparity study. Your firm has been selected to participate in a survey of business owners to determine the current business climate and help evaluate the procurement of goods and services for SAWS, the subcontracting practices of prime contractors/vendors who do business with SAWS, and the anecdotal evidence collected from a broad cross section of all interested businesses.

The following survey will gather information on business ownership, work performed and/or bid with SAWS, bid and/or performed in the private sector, and barriers, perceived or real, that prevented your firm from doing business with SAWS between **January 1, 2011 and December 31, 2013**. The results of the study will provide the basis, if warranted, for recommendations to improve SAWS' 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 SAWS by agreeing to carefully complete this survey. The survey will only take a few minutes of your time to complete. **Your information is aggregated for the overall analysis and used only for the purposes of conducting this study. Individual information is kept confidential.**

ID # _____ (1-4)

Q.1 What is your title?

[REQUIRE ANSWER]

- (5)
- | | |
|---------------------------------|---|
| Owner | 1 |
| CEO/President | 2 |
| Manager/Financial Officer | 3 |
| Other | 4 |

[A - IF THE ANSWER TO QUESTION 1 IS NOT 4, THEN SKIP TO QUESTION 3]

Q.2 Please SPECIFY Other

[REQUIRE ANSWER]

_____ (6-305)

Q.3 May I have your name in case we have any further questions? REQUIRE ANSWER. Contact Name:
[REQUIRE ANSWER]

_____ (306-505)

Q.4 What is your company’s primary line of business? Is it:

Heavy Civil/Utility Construction (*water and sewer line construction, storm water construction, pump stations, excavating, excavation work, structural steel erection, demolition, etc.*)

Architecture and Engineering (*architecture, engineering, civil engineering, environmental engineering, mechanical engineering, etc.*):

Other Professional Services (*accounting, legal services, consulting, etc.*)

Procurement (*plumbing tools, air compressors, valves, etc.*)

Other: *Specify*

[REQUIRE ANSWER]

(506)

- (1).Heavy Civil/Utility Construction (water and sewer line construction, storm water construction, pump stations, excavating, excavation work, *structural steel erection, demolition, etc.*)..... 1
- (2)..... Architecture and Engineering (architecture, engineering, civil engineering, environmental engineering, mechanical engineering, etc.): 2
- (3).Other Professional Services (accounting, legal services, consulting, etc.) 3
- (4).Procurement (plumbing tools, air compressors, valves, etc.) 4
- (5).Other: Specify 5

[S - IF THE ANSWER IS 2, THEN SKIP TO QUESTION 6]

[S - IF THE ANSWER IS 3, THEN SKIP TO QUESTION 7]

[S - IF THE ANSWER IS 4, THEN SKIP TO QUESTION 8]

[S - IF THE ANSWER IS 5, THEN SKIP TO QUESTION 9]

[A - IF THE ANSWER TO QUESTION 4 IS NOT 1, THEN SKIP TO QUESTION 10]

Q.5 Please SPECIFY Heavy Civil/Utility Construction

[REQUIRE ANSWER]

_____ (507-806)

[A - IF THE ANSWER TO QUESTION 4 IS NOT 2, THEN SKIP TO QUESTION 10]

Q.6 Please SPECIFY Architecture and Engineering Type
[REQUIRE ANSWER]

_____ (807-1106)

[A - IF THE ANSWER TO QUESTION 4 IS NOT 3, THEN SKIP TO QUESTION 10]

Q.7 Please SPECIFY Other Professional Services
[REQUIRE ANSWER]

_____ (1107-1406)

[A - IF THE ANSWER TO QUESTION 4 IS NOT 4, THEN SKIP TO QUESTION 10]

Q.8 Please SPECIFY Procurement Type
[REQUIRE ANSWER]

_____ (1407-1706)

[A - IF THE ANSWER TO QUESTION 4 IS NOT 5, THEN SKIP TO QUESTION 10]

Q.9 Please SPECIFY Other Line of Work
[REQUIRE ANSWER]

_____ (1707-2006)

Q.10 Do you or one of your employees have a current contractor license?
[REQUIRE ANSWER]

(2007)

Yes 1

No 2

Don't Know 3

Q.11 Do you or one of your employees have a state architecture or engineering license?
[REQUIRE ANSWER]

(2008)
Yes 1
No 2
Don't Know 3

Q.12 Does your firm have a contract or anticipate receiving a contract for:
[REQUIRE ANSWER]

(2009)
Brackish Groundwater Desalination Project 1
Sanitary Sewer Overflow Services 2
Both 3
Neither 4

Q.13 Is **more than 50%** of your company owned and controlled by a woman or women?
[REQUIRE ANSWER]

(2010)
Yes 1
No 2
Don't Know 3

Q.14 Is **more than 50%** of the company owned and controlled by one of the following racial or ethnic groups:

[REQUIRE ANSWER]

(2011)
Anglo/Caucasian/White 1
Black/African American 2
American Indian/Alaskan Native 3
Asian 4
Hispanic or Latino 5
Native Hawaiian/Pacific Islander 6
Don't Know 7
Other 8

[A - IF THE ANSWER TO QUESTION 14 IS NOT 8, THEN SKIP TO QUESTION 16]

Q.15 Please SPECIFY Other Ethnicity

_____ (2012-2311)

[A - IF THE ANSWER TO QUESTION 15 IS NOT 8, THEN SKIP TO QUESTION 17]

Q.16 What is the highest level of education completed by the primary owner of your company?
 [REQUIRE ANSWER]

- (2312)
- 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

Q.17 What year was your company established?
 [REQUIRE ANSWER]

_____ (2313-2316)

Q.18 How many combined years of experience do you or the primary owner(s) of your firm have in the line of business?
 [REQUIRE ANSWER]

- (2317)
- 0-5 years 1
 - 6-10 years 2
 - 11-15 years 3
 - 16-20 years 4
 - 20+ years 5
 - Don't Know 6

Q.19 In the last three years, what was the average number of employees your company kept on the payroll, including full-time and part-time staff?
 [REQUIRE ANSWER]

- (2318)
- 0-10 1
 - 11-20 2
 - 21-30 3
 - 31-40 4
 - 41+ 5
 - Don't Know 6

Q.20 Which of the following categories best approximates your company’s gross revenues for calendar year 2013?

[REQUIRE ANSWER]

- (2319-2320)
- 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

Q.21 What percentage of these gross revenues was earned from San Antonio Water Systems, the private sector, and other public government projects?

(Must total 100%)

[REQUIRE ANSWER: 3] [ANSWERS MUST ADD TO 100]

- SAWS _____ (2321-2323)
- Private Sector _____ (2324-2326)
- Public Sector _____ (2327-2329)

Q.22 Does your company hold any of the following certifications from a recognized certification agency?

CHECK ALL THAT APPLY

[REQUIRE ANSWER]

	Yes	No	DK
Minority Business Enterprise (MBE)	1	2	3 (2330)
Small Business Enterprise (SBE)	1	2	3 (2331)
Woman Business Enterprise (WBE)	1	2	3 (2332)
Disadvantaged Business Enterprise (DBE)	1	2	3 (2333)
Hub Zone	1	2	3 (2334)
8A	1	2	3 (2335)
Other	1	2	3 (2336)

[A - IF THE ANSWER TO SUB-QUESTION 7 OF QUESTION 22 IS NOT 1, THEN SKIP TO QUESTION 24]

Q.23 Please SPECIFY Other

[REQUIRE ANSWER]

_____ (2337-2636)

Q.24 On a scale from 1 to 6 (1 being extremely easy and 6 being extremely difficult) how would you rate your ease of obtaining notification of business opportunities with San Antonio Water Systems?

[REQUIRE ANSWER]

(2637)

- 1 Extremely Easy 1
- 2 Somewhat Easy 2
- 3 Easy 3
- 4 Difficult 4
- 5 Somewhat Difficult 5
- 6 Extremely Difficult 6
- 7
- DK 8

Q.25 How do you obtain notification of San Antonio bid/ proposal opportunities?

CHECK ALL THAT APPLY

[REQUIRE ANSWER]

(2638-2645)

- SAWS website 1
- Contact from SAWS 2
- Private bidding subscription 3
- Other Primes/Subcontractors 4
- Trade or industry associations 5
- Local Newspapers with general circulation 6
- Don't Know 7
- Other 8

[EXCLUSIVE ANSWER: "Don't Know"]

[A - IF THE ANSWER TO QUESTION 25 IS NOT 8, THEN SKIP TO QUESTION 27]

Q.26 Please SPECIFY Other

[REQUIRE ANSWER]

_____ (2646-2945)

Q.27 Do you perform as a prime contractor, subcontractor, or both?
[REQUIRE ANSWER]

- (2946)
- Prime 1
- Sub 2
- Both 3

[S - IF THE ANSWER IS 2, THEN SKIP TO QUESTION 42]

Q.28 In general, which of the following dollar ranges best approximates your company’s largest **prime contract** awarded between **January 1, 2011 and December 31, 2013**?
[REQUIRE ANSWER]

- (2947-2948)
- None 1
- Up to \$50,000? 2
- \$50,001 to \$100,000? 3
- \$100,001 to \$200,000? 4
- \$200,001 to \$300,000? 5
- \$300,001 to \$400,000? 6
- \$400,001 to \$500,000? 7
- \$500,001 to \$1 million? 8
- Over \$1 million? 9
- Don’t Know 10

Q.29 Between **January 1, 2011 and December 31, 2013** how many times has your company **been awarded** a SAWS project as a prime contractor/vendor?
[REQUIRE ANSWER]

- (2949)
- 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

Q.30 Between **January 1, 2011 and December 31, 2013**, which the following dollar ranges approximates your company’s total volume of work with SAWS.

[REQUIRE ANSWER]

	(2950-2951)
None	1
Up to \$50,000?	2
\$50,001 to \$100,000?	3
\$100,001 to \$200,000?	4
\$200,001 to \$300,000?	5
\$300,001 to \$400,000?	6
\$400,001 to \$500,000?	7
\$500,001 to \$1 million?	8
\$1,000,001 to \$3 million?	9
\$3,000,001 to \$5 million?	10
Over \$5 million?	11
Don't Know	12

Q.31 In your experience, have any of the following been a barrier to obtaining work on San Antonio Water Systems projects as a **prime contractor/consultant**:

[REQUIRE ANSWER]

	Yes	No	DK
Prequalification requirements	1	2	3 (2952)
Bid bond requirement	1	2	3 (2953)
Performance/payment bond requirement	1	2	3 (2954)
Cost of bidding/proposing	1	2	3 (2955)
Financing	1	2	3 (2956)
Insurance (general liability, professional liability, etc.)	1	2	3 (2957)
Price of supplies/materials	1	2	3 (2958)
Proposal/Bid specifications	1	2	3 (2959)
Limited time given to prepare bid package or quote	1	2	3 (2960)
Limited knowledge of purchasing contracting policies and procedures	1	2	3 (2961)
Lack of experience	1	2	3 (2962)
Lack of personnel	1	2	3 (2963)
Contract too large	1	2	3 (2964)
Selection process	1	2	3 (2965)
Unnecessary restrictive contract specifications	1	2	3 (2966)
Slow payment or nonpayment	1	2	3 (2967)
Competing with large companies	1	2	3 (2968)

Q.32 When you were a prime contractor/vendor, what was the average amount of time that it typically took to receive payment for your services on SAWS funded projects?

[REQUIRE ANSWER]

(2969)

- Less than 30 days 1
- 31-60 days 2
- 61-90 days 3
- 91-120 days 4
- Over 120 days 5
- Not applicable 6
- Don't Know 7

Q.33 Between **January 1, 2011 and December 31, 2013**, have you ever submitted a bid or proposal for a SAWS contract, were informed that you were the lowest bidder, and then found out that another firm was actually doing the work?

[REQUIRE ANSWER]

(2970)

- Yes 1
- No 2
- Don't Know 3

Q.34 As a prime contractor/consultant are you required to have bonding?

[REQUIRE ANSWER]

(2971)

- Yes 1
- No 2
- Don't Know 3

[S - IF THE ANSWER IS 2-3, THEN SKIP TO QUESTION 37]

Q.35 What is your current aggregate bonding capacity?

[REQUIRE ANSWER]

(2972)

- Below \$100,000 1
- \$100,001 to \$250,000 2
- \$250,001 to \$500,000 3
- \$500,001 to \$1,000,000 4
- \$1,000,001 to \$1,500,000 5
- \$1,500,001 to \$3,000,000 6
- \$3,000,001 to \$5,000,000 7
- Over \$ 5 million 8
- Don't know 9

Q.36 What is your current single limit bonding capacity?
[REQUIRE ANSWER]

- (2973)
- Below \$100,000 1
- \$100,001 to \$250,000 2
- \$250,001 to \$500,000 3
- \$500,001 to \$1,000,000 4
- \$1,000,001 to \$1,500,000 5
- \$1,500,001 to \$3,000,000 6
- \$3,000,001 to \$5,000,000 7
- Over\$ 5 million 8
- Don't know 9

Q.37 As a prime contractor/consultant did you experience discriminatory behavior by SAWS when bidding or working on a project between 2011 and 2013?
[REQUIRE ANSWER]

- (2974)
- Yes 1
- No 2
- Not Applicable 3
- Don't Know 4

[S - IF THE ANSWER IS 2-4, THEN SKIP TO QUESTION 42]

Q.38 What was the most noticeable way you became aware of the discrimination against your company?

[REQUIRE ANSWER]

- (2975)
- Verbal Comment 1
- Written Statement 2
- Action taken against the company 3
- Don't Know 4

Q.39 Which of the following do you consider to be the primary reason for your company being discriminated against?

[REQUIRE ANSWER]

- (2976)
- Owner's race or ethnicity 1
- Owner's gender 2
- Both 3
- Don't Know 4

Q.40 When did the discrimination first occur?

[REQUIRE ANSWER]

(2977)

- During the bidding process 1
- After contract awarded 2
- Both 3
- Don't know 4

Q.41 Did you file a complaint?

[REQUIRE ANSWER]

(2978)

- Yes 1
- No 2
- Don't Know 3

[A - IF THE ANSWER TO QUESTION 27 IS 1, THEN SKIP TO QUESTION 57]

Q.42 In general, which of the following dollar ranges best approximates your company's largest subcontract between **January 1, 2011 and December 31, 2013**?

[REQUIRE ANSWER]

(2979-2980)

- None 1
- Up to \$50,000? 2
- \$50,001 to \$100,000? 3
- \$100,001 to \$200,000 4
- \$200,001 to \$300,000 5
- \$300,001 to \$400,000 6
- \$400,001 to \$500,000 7
- \$500,001 to \$1 million? 8
- Over \$1 million? 9
- Don't Know 10

Q.43 Between **January 1, 2011 and December 31, 2013**, how many times has your company **been awarded** a subcontract with a prime contractor for a project with the SAWS?

[REQUIRE ANSWER]

- (2981)
- 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

[S - IF THE ANSWER IS 1, THEN SKIP TO QUESTION 47]

Q.44 Between January 1, 2011 and December 31, 2013, which of the following dollar ranges approximates your company's total volume of work on a SAWS project.

[REQUIRE ANSWER]

- (2982-2983)
- None 1
 - Up to \$50,000? 2
 - \$50,001 to \$100,000? 3
 - \$100,001 to \$200,000? 4
 - \$200,001 to \$500,000? 5
 - \$500,001 to \$ 1million 6
 - \$1,000,001 to \$3 million 7
 - \$3,000,001 to \$5 million? 8
 - Over \$5 million? 9
 - Don't Know 10

Q.45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a sub contractor with primes on projects for SAWS?

[REQUIRE ANSWER]

	Yes	No	DK
Performance/payment bond requirement	1	2	3 (2984)
Cost of bidding/proposing	1	2	3 (2985)
Financing	1	2	3 (2986)
Insurance (general liability, professional liability, etc.)	1	2	3 (2987)
Price of supplies/materials	1	2	3 (2988)
Limited time given to prepare bid estimate or quote	1	2	3 (2989)
Lack of experience	1	2	3 (2990)
Lack of personnel	1	2	3 (2991)
Contracts too large	1	2	3 (2992)
Slow payment or nonpayment	1	2	3 (2993)
Competing with large companies	1	2	3 (2994)

Q.46 Between **January 1, 2011 and December 31, 2013**, in general when you were a subcontractor what was the average amount of time that it typically took to receive payment for your services from the prime contractor/vendor?

[REQUIRE ANSWER]

(2995)

- Less than 30 days 1
- 31-60 days 2
- 61-90 days 3
- 91-120 days 4
- Over 120 days 5
- Not applicable 6
- Don't Know 7

Q.47 Between **January 1, 2011 and December 31, 2013**, have you ever submitted a bid with a prime contractor for a project with SAWS, were informed that you were the lowest bidder, and then found out that another subcontractor was actually doing the work?

[REQUIRE ANSWER]

(2996)

- Yes 1
- No 2
- Don't Know 3

Q.48 As a subcontractor, are you required to have bonding for company's type of work?

[REQUIRE ANSWER]

(2997)

- Yes 1
- No 2
- Don't Know 3

[S - IF THE ANSWER IS 2-3, THEN SKIP TO QUESTION 52]

Q.49 What is your current aggregate bonding limit?
[REQUIRE ANSWER]

- (2998)
- Below \$100,000 1
- \$100,001 to \$250,000 2
- \$250,001 to \$500,000 3
- \$500,001 to \$1,000,000 4
- \$1,000,001 to \$1,500,000 5
- \$1,500,001 to \$3,000,000 6
- \$3,000,001 to \$5,000,000 7
- Over\$ 5 million 8
- Don't know 9

Q.50 What is your current single project bonding limit?
[REQUIRE ANSWER]

- (2999)
- Below \$100,000 1
- \$100,001 to \$250,000 2
- \$250,001 to \$500,000 3
- \$500,001 to \$1,000,000 4
- \$1,000,001 to \$1,500,000 5
- \$1,500,001 to \$3,000,000 6
- \$3,000,001 to \$5,000,000 7
- Over\$ 5 million 8
- Don't know 9

Q.51 As a subcontractor, do prime contractors on a SAWS project require you to have a bond for your type of work?

[REQUIRE ANSWER]

- (3000)
- Yes 1
- No 2
- Don't Know 3

Q.52 As a subcontractor did you experience discriminatory behavior between **January 1, 2011 and December 31, 2013** from a prime contractor/consultant working or bidding/proposing on a SAWS project?

[REQUIRE ANSWER]

(3001)

- Yes 1
- No 2
- Not Applicable 3
- Don't Know 4

[S - IF THE ANSWER IS 2-4, THEN SKIP TO QUESTION 57]

Q.53 What was the most noticeable way you became aware of the discrimination against your company?

[REQUIRE ANSWER]

(3002)

- Verbal Comment 1
- Written Statement 2
- Action taken against the company 3
- Don't Know 4

Q.54 Which of the following do you consider the primary reason for your company being discriminated against?

[REQUIRE ANSWER]

(3003)

- Owner's race or ethnicity 1
- Owner's gender 2
- Both 3
- Don't Know 4

Q.55 When did the discrimination first occur?

[REQUIRE ANSWER]

(3004)

- During the bidding process 1
- After contract awarded 2
- Both 3
- Don't Know 4

Q.56 Did you file a complaint?

[REQUIRE ANSWER]

(3005)

- Yes 1
- No 2
- Don't Know 3

Q.57 Have you experienced or observed a situation in which a prime contractor/consultants includes minority or woman subcontractors on a bid or proposal for a SAWS project to satisfy the "good faith effort" requirements, and then drops the company as a subcontractor after winning the award for no legitimate reason?

[REQUIRE ANSWER]

(3006)

- Yes 1
- No 2
- Don't Know 3

Q.58 Have you experienced or observed a situation in which a prime contractor/consultants includes minority or woman subcontractors on a bid or proposal for a **Non-SAWS** project to satisfy the "good faith effort" requirements, and then drops the company as a subcontractor after winning the award for no legitimate reason?

[REQUIRE ANSWER]

(3007)

- Yes 1
- No 2
- DK 3

Q.59 How often do prime contractors/vendors who use your firm as a subcontractor on public-sector projects with M/WBE goals solicit your firm on projects (private or public) without M/WBE goals?

[REQUIRE ANSWER]

(3008)

- Very Often 1
- Sometimes 2
- Seldom 3
- Never 4
- Not Applicable 5
- Don't know 6

Q.60 Still talking about San Antonio Water System and its **prime contractors/consultants**, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination?

[REQUIRE ANSWER]

	Yes	No	DK
Harassment	1	2	3 (3009)
Unequal or unfair treatment	1	2	3 (3010)
Bid shopping or bid manipulation	1	2	3 (3011)
Double standards in performance	1	2	3 (3012)
Denial of opportunity to bid	1	2	3 (3013)
Unfair denial of contract award	1	2	3 (3014)
Unfair termination	1	2	3 (3015)
Unequal price quotes from suppliers	1	2	3 (3016)

Q.61 For the following statement, please indicate whether you either agree or disagree:

There is an informal network of prime contractors / subcontractors that has excluded my company from doing business in the private sector.

[REQUIRE ANSWER]

- (3017)
- Strongly Agree 1
 - Somewhat Agree 2
 - Neither Agree Nor Disagree 3
 - Somewhat Disagree 4
 - Strongly Disagree 5
 - Don't know 6

Q.62 Has your company applied for a commercial (business) bank loan between **January 1, 2011 and December 31, 2013**?

[REQUIRE ANSWER]

- (3018)
- Yes 1
 - No 2
 - Don't know 3

[S - IF THE ANSWER IS 2-3, THEN SKIP TO QUESTION 66]

Q.63 Were you approved or denied for a commercial (business) bank loan?
[REQUIRE ANSWER]

- (3019)
- Approved 1
- Denied 2
- Don't Know 3

[S - IF THE ANSWER IS 1 OR 3, THEN SKIP TO QUESTION 66]

Q.64 Which of the following do you believe was the primary reason for your being denied a loan?
[REQUIRE ANSWER]

- (3020)
- Insufficient Documentation 1
- Insufficient Business History 2
- Confusion about the Process 3
- Race or Ethnicity of Owner 4
- Gender of Owner 5
- Don't Know 6
- Other 7

[A - IF THE ANSWER TO QUESTION 64 IS NOT 7, THEN SKIP TO QUESTION 66]

Q.65 Please SPECIFY Other

[REQUIRE ANSWER]

_____ (3021-3320)

Q.66 The following questions are related to work you have done or attempted to do in the **private sector** marketplace. Private sector is defined as non-government businesses or companies.

Have you experienced discriminatory behavior from the private sector between *October 1, 2007 and September 30, 2012*?

[REQUIRE ANSWER]

- (3321)
- Yes 1
- No 2
- Don't Know 3

[S - IF THE ANSWER IS 2-3, THEN SKIP TO QUESTION 69]

Q.67 What was the most noticeable way you became aware of the discrimination against your company?

[REQUIRE ANSWER]

(3322)

- Verbal comment 1
- Written statement 2
- Action taken against company 3
- Don't Know 4

Q.68 Which of the following do you consider the primary reason for your company being discriminated against?

[REQUIRE ANSWER]

(3323)

- Owner's race or ethnicity 1
- Owner's gender 2
- Both 3
- Don't know 4

Q.69 When did the discrimination first occur?

[REQUIRE ANSWER]

(3324)

- During the bidding process 1
- After contract award 2
- Both 3
- Dont Know 4

That completes the survey. On behalf of SAWS, thank you very much for sharing your time and thoughts in this important project.

If you would like more information on the Disparity Study, please contact Ms. Marisol Robles, San Antonio Water System, (210) 233-3420.

APPENDIX E: SURVEY OF VENDORS RESULTS

APPENDIX E: SURVEY OF VENDORS RESULTS

Table: Q1 What is your title? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q1 What is your title?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Owner	17	2	86	8	49	42	204
	8.33%	0.98%	42.16%	3.92%	24.02%	20.59%	100.00%
	60.71%	18.18%	53.75%	88.89%	57.65%	33.60%	48.80%
	4.07%	0.48%	20.57%	1.91%	11.72%	10.05%	48.80%
CEO/President	7	2	25	0	14	19	67
	10.45%	2.99%	37.31%	0.00%	20.90%	28.36%	100.00%
	25.00%	18.18%	15.63%	0.00%	16.47%	15.20%	16.03%
	1.67%	0.48%	5.98%	0.00%	3.35%	4.55%	16.03%
Manager/Financial Officer	4	7	34	1	14	49	109
	3.67%	6.42%	31.19%	0.92%	12.84%	44.95%	100.00%
	14.29%	63.64%	21.25%	11.11%	16.47%	39.20%	26.08%
	0.96%	1.67%	8.13%	0.24%	3.35%	11.72%	26.08%
Other, Please Specify	0	0	15	0	8	15	38
	0.00%	0.00%	39.47%	0.00%	21.05%	39.47%	100.00%
	0.00%	0.00%	9.38%	0.00%	9.41%	12.00%	9.09%
	0.00%	0.00%	3.59%	0.00%	1.91%	3.59%	9.09%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q4_Primary_Business_re_codedText * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q4_Primary_Business_re_codedText	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Architecture & Engineering	2	3	23	2	6	29	65
	3.08%	4.62%	35.38%	3.08%	9.23%	44.62%	100.00%
	7.14%	27.27%	14.38%	22.22%	7.06%	23.20%	15.55%
	0.48%	0.72%	5.50%	0.48%	1.44%	6.94%	15.55%
General Construction	4	1	43	1	14	15	78
	5.13%	1.28%	55.13%	1.28%	17.95%	19.23%	100.00%
	14.29%	9.09%	26.88%	11.11%	16.47%	12.00%	18.66%
	0.96%	0.24%	10.29%	0.24%	3.35%	3.59%	18.66%
Heavy Civil / Utility Co	1	0	6	0	3	4	14
	7.14%	0.00%	42.86%	0.00%	21.43%	28.57%	100.00%
	3.57%	0.00%	3.75%	0.00%	3.53%	3.20%	3.35%
	0.24%	0.00%	1.44%	0.00%	0.72%	0.96%	3.35%

Other	1	0	0	1	1	0	3
	33.33%	0.00%	0.00%	33.33%	33.33%	0.00%	100.00%
	3.57%	0.00%	0.00%	11.11%	1.18%	0.00%	0.72%
	0.24%	0.00%	0.00%	0.24%	0.24%	0.00%	0.72%
Other Professional Service	13	1	43	0	33	34	124
	10.48%	0.81%	34.68%	0.00%	26.61%	27.42%	100.00%
	46.43%	9.09%	26.88%	0.00%	38.82%	27.20%	29.67%
	3.11%	0.24%	10.29%	0.00%	7.89%	8.13%	29.67%
Procurement	7	6	45	5	28	43	134
	5.22%	4.48%	33.58%	3.73%	20.90%	32.09%	100.00%
	25.00%	54.55%	28.13%	55.56%	32.94%	34.40%	32.06%
	1.67%	1.44%	10.77%	1.20%	6.70%	10.29%	32.06%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q10 Do you or one of your employees have a current contractor license? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q10 Do you or one of your employees have a current contractor license?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	4	5	65	3	18	33	128
	3.13%	3.91%	50.78%	2.34%	14.06%	25.78%	100.00%
	14.29%	45.45%	40.63%	33.33%	21.18%	26.40%	30.62%
	0.96%	1.20%	15.55%	0.72%	4.31%	7.89%	30.62%
No	24	6	94	6	67	91	288
	8.33%	2.08%	32.64%	2.08%	23.26%	31.60%	100.00%
	85.71%	54.55%	58.75%	66.67%	78.82%	72.80%	68.90%
	5.74%	1.44%	22.49%	1.44%	16.03%	21.77%	68.90%
Don't Know	0	0	1	0	0	1	2
	0.00%	0.00%	50.00%	0.00%	0.00%	50.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.80%	0.48%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.24%	0.48%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q11 Do you or one of your employees have a state architecture or engineering license? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q11 Do you or one of your employees have a state architecture or engineering license?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	3	5	32	3	9	31	83
	3.61%	6.02%	38.55%	3.61%	10.84%	37.35%	100.00%
	10.71%	45.45%	20.00%	33.33%	10.59%	24.80%	19.86%
	0.72%	1.20%	7.66%	0.72%	2.15%	7.42%	19.86%
No	25	6	127	6	76	93	333
	7.51%	1.80%	38.14%	1.80%	22.82%	27.93%	100.00%
	89.29%	54.55%	79.38%	66.67%	89.41%	74.40%	79.67%
	5.98%	1.44%	30.38%	1.44%	18.18%	22.25%	79.67%
Don't Know	0	0	1	0	0	1	2
	0.00%	0.00%	50.00%	0.00%	0.00%	50.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.80%	0.48%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.24%	0.48%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q12 Does your firm have a contract or anticipate receiving a contract for: * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q12 Does your firm have a contract or anticipate receiving a contract for:	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Brackish Groundwater Desalination Project	3	1	2	0	0	3	9
	33.33%	11.11%	22.22%	0.00%	0.00%	33.33%	100.00%
	10.71%	9.09%	1.25%	0.00%	0.00%	2.40%	2.15%
	0.72%	0.24%	0.48%	0.00%	0.00%	0.72%	2.15%
Sanitary Sewer Overflow Services	0	0	3	1	0	2	6
	0.00%	0.00%	50.00%	16.67%	0.00%	33.33%	100.00%
	0.00%	0.00%	1.88%	11.11%	0.00%	1.60%	1.44%
	0.00%	0.00%	0.72%	0.24%	0.00%	0.48%	1.44%
Both	0	0	5	0	4	4	13
	0.00%	0.00%	38.46%	0.00%	30.77%	30.77%	100.00%
	0.00%	0.00%	3.13%	0.00%	4.71%	3.20%	3.11%
	0.00%	0.00%	1.20%	0.00%	0.96%	0.96%	3.11%
Neither	25	10	150	8	81	116	390
	6.41%	2.56%	38.46%	2.05%	20.77%	29.74%	100.00%
	89.29%	90.91%	93.75%	88.89%	95.29%	92.80%	93.30%
	5.98%	2.39%	35.89%	1.91%	19.38%	27.75%	93.30%

Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Race, Ethnicity, Gender Classification (Business Ownership Classification) * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Race, Ethnicity, Gender Classification (Business Ownership Classification)	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
African American Firms	28	0	0	0	0	0	28
	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.70%
	6.70%	0.00%	0.00%	0.00%	0.00%	0.00%	6.70%
Asian American Firms	0	11	0	0	0	0	11
	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	2.63%
	0.00%	2.63%	0.00%	0.00%	0.00%	0.00%	2.63%
Hispanic American Firms	0	0	160	0	0	0	160
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	38.28%
	0.00%	0.00%	38.28%	0.00%	0.00%	0.00%	38.28%
Native American Firms	0	0	0	9	0	0	9
	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	2.15%
	0.00%	0.00%	0.00%	2.15%	0.00%	0.00%	2.15%
Nonminority Female Firms	0	0	0	0	85	0	85
	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	20.33%
	0.00%	0.00%	0.00%	0.00%	20.33%	0.00%	20.33%
Non-M/WBE Firms	0	0	0	0	0	125	125
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	29.90%
	0.00%	0.00%	0.00%	0.00%	0.00%	29.90%	29.90%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q16 What is the highest level education completed by the primary owner of your company? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q16 What is the highest level education completed by the primary owner of your company?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Some High School	0	0	2	0	0	0	2
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	1.25%	0.00%	0.00%	0.00%	0.48%
	0.00%	0.00%	0.48%	0.00%	0.00%	0.00%	0.48%
High School Graduate	0	0	21	0	7	7	35
	0.00%	0.00%	60.00%	0.00%	20.00%	20.00%	100.00%
	0.00%	0.00%	13.13%	0.00%	8.24%	5.60%	8.37%
	0.00%	0.00%	5.02%	0.00%	1.67%	1.67%	8.37%
Trade or Technical Education	1	0	4	0	2	2	9
	11.11%	0.00%	44.44%	0.00%	22.22%	22.22%	100.00%
	3.57%	0.00%	2.50%	0.00%	2.35%	1.60%	2.15%
	0.24%	0.00%	0.96%	0.00%	0.48%	0.48%	2.15%
Some College	6	0	29	3	11	12	61
	9.84%	0.00%	47.54%	4.92%	18.03%	19.67%	100.00%
	21.43%	0.00%	18.13%	33.33%	12.94%	9.60%	14.59%
	1.44%	0.00%	6.94%	0.72%	2.63%	2.87%	14.59%
College Degree	11	5	74	2	51	66	209
	5.26%	2.39%	35.41%	0.96%	24.40%	31.58%	100.00%
	39.29%	45.45%	46.25%	22.22%	60.00%	52.80%	50.00%
	2.63%	1.20%	17.70%	0.48%	12.20%	15.79%	50.00%
Post Graduate Degree	10	5	28	4	12	35	94
	10.64%	5.32%	29.79%	4.26%	12.77%	37.23%	100.00%
	35.71%	45.45%	17.50%	44.44%	14.12%	28.00%	22.49%
	2.39%	1.20%	6.70%	0.96%	2.87%	8.37%	22.49%
Don't Know	0	1	2	0	2	3	8
	0.00%	12.50%	25.00%	0.00%	25.00%	37.50%	100.00%
	0.00%	9.09%	1.25%	0.00%	2.35%	2.40%	1.91%
	0.00%	0.24%	0.48%	0.00%	0.48%	0.72%	1.91%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q17 What year was your company established? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q17 What year was your company established?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Prior to 1960	0	0	1	0	2	10	13

	0.00%	0.00%	7.69%	0.00%	15.38%	76.92%	100.00%
	0.00%	0.00%	0.64%	0.00%	2.38%	8.33%	3.18%
	0.00%	0.00%	0.24%	0.00%	0.49%	2.44%	3.18%
1961 to 1980	1	0	9	1	12	16	39
	2.56%	0.00%	23.08%	2.56%	30.77%	41.03%	100.00%
	3.57%	0.00%	5.73%	11.11%	14.29%	13.33%	9.54%
	0.24%	0.00%	2.20%	0.24%	2.93%	3.91%	9.54%
1981 to 2000	4	5	56	1	37	62	165
	2.42%	3.03%	33.94%	0.61%	22.42%	37.58%	100.00%
	14.29%	45.45%	35.67%	11.11%	44.05%	51.67%	40.34%
	0.98%	1.22%	13.69%	0.24%	9.05%	15.16%	40.34%
2001 to 2007	11	6	56	7	16	18	114
	9.65%	5.26%	49.12%	6.14%	14.04%	15.79%	100.00%
	39.29%	54.55%	35.67%	77.78%	19.05%	15.00%	27.87%
	2.69%	1.47%	13.69%	1.71%	3.91%	4.40%	27.87%
2008 to 2014	12	0	35	0	17	14	78
	15.38%	0.00%	44.87%	0.00%	21.79%	17.95%	100.00%
	42.86%	0.00%	22.29%	0.00%	20.24%	11.67%	19.07%
	2.93%	0.00%	8.56%	0.00%	4.16%	3.42%	19.07%
Total	28	11	157	9	84	120	409
	6.85%	2.69%	38.39%	2.20%	20.54%	29.34%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.85%	2.69%	38.39%	2.20%	20.54%	29.34%	100.00%

Table: Q18 How many years of experience in your company's line of business does the primary owner(s) of your firm have in the line of business? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q18 How many years of experience in your company's line of business does the primary owner(s) of your firm have in the line of business?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
0-5 years	1	0	3	0	3	2	9
	11.11%	0.00%	33.33%	0.00%	33.33%	22.22%	100.00%
	3.57%	0.00%	1.88%	0.00%	3.53%	1.60%	2.15%
	0.24%	0.00%	0.72%	0.00%	0.72%	0.48%	2.15%
6-10 years	3	1	8	0	5	2	19
	15.79%	5.26%	42.11%	0.00%	26.32%	10.53%	100.00%
	10.71%	9.09%	5.00%	0.00%	5.88%	1.60%	4.55%
	0.72%	0.24%	1.91%	0.00%	1.20%	0.48%	4.55%
11-15 years	5	0	15	0	5	3	28
	17.86%	0.00%	53.57%	0.00%	17.86%	10.71%	100.00%
	17.86%	0.00%	9.38%	0.00%	5.88%	2.40%	6.70%

	1.20%	0.00%	3.59%	0.00%	1.20%	0.72%	6.70%
16-20 years	2	1	8	0	4	3	18
	11.11%	5.56%	44.44%	0.00%	22.22%	16.67%	100.00%
	7.14%	9.09%	5.00%	0.00%	4.71%	2.40%	4.31%
	0.48%	0.24%	1.91%	0.00%	0.96%	0.72%	4.31%
20+ years	17	9	125	9	68	114	342
	4.97%	2.63%	36.55%	2.63%	19.88%	33.33%	100.00%
	60.71%	81.82%	78.13%	100.00%	80.00%	91.20%	81.82%
	4.07%	2.15%	29.90%	2.15%	16.27%	27.27%	81.82%
Don't Know	0	0	1	0	0	1	2
	0.00%	0.00%	50.00%	0.00%	0.00%	50.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.80%	0.48%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.24%	0.48%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q19 In the last three years, what was the average number of employees your company kept on payroll, including full-time and part-time staff? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q19 In the last three years, what was the average number of employees your company kept on payroll, including full-time and part-time staff?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
0-10	22	6	98	7	56	44	233
	9.44%	2.58%	42.06%	3.00%	24.03%	18.88%	100.00%
	78.57%	54.55%	61.25%	77.78%	65.88%	35.20%	55.74%
	5.26%	1.44%	23.44%	1.67%	13.40%	10.53%	55.74%
11-20	3	1	29	0	10	20	63
	4.76%	1.59%	46.03%	0.00%	15.87%	31.75%	100.00%
	10.71%	9.09%	18.13%	0.00%	11.76%	16.00%	15.07%
	0.72%	0.24%	6.94%	0.00%	2.39%	4.78%	15.07%
21-30	2	1	13	0	4	15	35
	5.71%	2.86%	37.14%	0.00%	11.43%	42.86%	100.00%
	7.14%	9.09%	8.13%	0.00%	4.71%	12.00%	8.37%
	0.48%	0.24%	3.11%	0.00%	0.96%	3.59%	8.37%
31-40	0	0	6	1	1	9	17
	0.00%	0.00%	35.29%	5.88%	5.88%	52.94%	100.00%
	0.00%	0.00%	3.75%	11.11%	1.18%	7.20%	4.07%
	0.00%	0.00%	1.44%	0.24%	0.24%	2.15%	4.07%
41+	1	3	13	1	14	37	69

	1.45%	4.35%	18.84%	1.45%	20.29%	53.62%	100.00%
	3.57%	27.27%	8.13%	11.11%	16.47%	29.60%	16.51%
	0.24%	0.72%	3.11%	0.24%	3.35%	8.85%	16.51%
Don't Know	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q20 Which of the following categories best approximate your company's gross revenues for calendar year 2013? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q20 Which of the following categories best approximate your company's gross revenues for calendar year 2013?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Up to \$50,000?	9	0	15	2	2	4	32
	28.13%	0.00%	46.88%	6.25%	6.25%	12.50%	100.00%
	32.14%	0.00%	9.38%	22.22%	2.35%	3.20%	7.66%
	2.15%	0.00%	3.59%	0.48%	0.48%	0.96%	7.66%
\$50,001 to \$100,000?	2	0	13	2	6	1	24
	8.33%	0.00%	54.17%	8.33%	25.00%	4.17%	100.00%
	7.14%	0.00%	8.13%	22.22%	7.06%	0.80%	5.74%
	0.48%	0.00%	3.11%	0.48%	1.44%	0.24%	5.74%
\$100,001 to \$300,000?	7	1	25	1	10	12	56
	12.50%	1.79%	44.64%	1.79%	17.86%	21.43%	100.00%
	25.00%	9.09%	15.63%	11.11%	11.76%	9.60%	13.40%
	1.67%	0.24%	5.98%	0.24%	2.39%	2.87%	13.40%
\$300,001 to \$500,000?	3	1	20	1	12	15	52
	5.77%	1.92%	38.46%	1.92%	23.08%	28.85%	100.00%
	10.71%	9.09%	12.50%	11.11%	14.12%	12.00%	12.44%
	0.72%	0.24%	4.78%	0.24%	2.87%	3.59%	12.44%
\$500,001 to \$1 million?	4	3	26	1	14	13	61
	6.56%	4.92%	42.62%	1.64%	22.95%	21.31%	100.00%
	14.29%	27.27%	16.25%	11.11%	16.47%	10.40%	14.59%
	0.96%	0.72%	6.22%	0.24%	3.35%	3.11%	14.59%
\$1,000,001 to \$3 million?	2	0	26	1	17	20	66
	3.03%	0.00%	39.39%	1.52%	25.76%	30.30%	100.00%
	7.14%	0.00%	16.25%	11.11%	20.00%	16.00%	15.79%
	0.48%	0.00%	6.22%	0.24%	4.07%	4.78%	15.79%

\$3,000,001 to \$5 million?	0	1	15	1	5	9	31
	0.00%	3.23%	48.39%	3.23%	16.13%	29.03%	100.00%
	0.00%	9.09%	9.38%	11.11%	5.88%	7.20%	7.42%
	0.00%	0.24%	3.59%	0.24%	1.20%	2.15%	7.42%
\$5,000,001 to \$10 million?	1	2	1	0	5	13	22
	4.55%	9.09%	4.55%	0.00%	22.73%	59.09%	100.00%
	3.57%	18.18%	0.63%	0.00%	5.88%	10.40%	5.26%
	0.24%	0.48%	0.24%	0.00%	1.20%	3.11%	5.26%
Over \$10 million?	0	1	11	0	5	29	46
	0.00%	2.17%	23.91%	0.00%	10.87%	63.04%	100.00%
	0.00%	9.09%	6.88%	0.00%	5.88%	23.20%	11.00%
	0.00%	0.24%	2.63%	0.00%	1.20%	6.94%	11.00%
Don't Know	0	2	8	0	9	9	28
	0.00%	7.14%	28.57%	0.00%	32.14%	32.14%	100.00%
	0.00%	18.18%	5.00%	0.00%	10.59%	7.20%	6.70%
	0.00%	0.48%	1.91%	0.00%	2.15%	2.15%	6.70%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q21 What percentage of these gross revenues was earned from SAWS, the private sector, and other public government projects? SAWS * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q21 What percentage of these gross revenues was earned from SAWS, the private sector, and other public government projects? SAWS	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Up to 10%	27	10	153	9	83	114	396
	6.82%	2.53%	38.64%	2.27%	20.96%	28.79%	100.00%
	96.43%	90.91%	95.63%	100.00%	97.65%	91.20%	94.74%
	6.46%	2.39%	36.60%	2.15%	19.86%	27.27%	94.74%
11% to 20%	1	0	3	0	0	3	7
	14.29%	0.00%	42.86%	0.00%	0.00%	42.86%	100.00%
	3.57%	0.00%	1.88%	0.00%	0.00%	2.40%	1.67%
	0.24%	0.00%	0.72%	0.00%	0.00%	0.72%	1.67%
21% to 30%	0	0	2	0	1	1	4
	0.00%	0.00%	50.00%	0.00%	25.00%	25.00%	100.00%
	0.00%	0.00%	1.25%	0.00%	1.18%	0.80%	0.96%
	0.00%	0.00%	0.48%	0.00%	0.24%	0.24%	0.96%
31% to 40%	0	0	1	0	1	3	5
	0.00%	0.00%	20.00%	0.00%	20.00%	60.00%	100.00%

	0.00%	0.00%	0.63%	0.00%	1.18%	2.40%	1.20%
	0.00%	0.00%	0.24%	0.00%	0.24%	0.72%	1.20%
41% to 50%	0	1	0	0	0	2	3
	0.00%	33.33%	0.00%	0.00%	0.00%	66.67%	100.00%
	0.00%	9.09%	0.00%	0.00%	0.00%	1.60%	0.72%
	0.00%	0.24%	0.00%	0.00%	0.00%	0.48%	0.72%
71% to 80%	0	0	1	0	0	1	2
	0.00%	0.00%	50.00%	0.00%	0.00%	50.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.80%	0.48%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.24%	0.48%
81% to 100%	0	0	0	0	0	1	1
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.24%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q21 What percentage of these gross revenues was earned from SAWS, the private sector, and other public government projects? Private Sector * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q21 What percentage of these gross revenues was earned from SAWS, the private sector, and other public government projects? Private Sector	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Up to 10%	10	3	33	1	14	17	78
	12.82%	3.85%	42.31%	1.28%	17.95%	21.79%	100.00%
	35.71%	27.27%	20.63%	11.11%	16.47%	13.60%	18.66%
	2.39%	0.72%	7.89%	0.24%	3.35%	4.07%	18.66%
11% to 20%	1	1	20	1	4	8	35
	2.86%	2.86%	57.14%	2.86%	11.43%	22.86%	100.00%
	3.57%	9.09%	12.50%	11.11%	4.71%	6.40%	8.37%
	0.24%	0.24%	4.78%	0.24%	0.96%	1.91%	8.37%
21% to 30%	1	0	10	0	11	6	28
	3.57%	0.00%	35.71%	0.00%	39.29%	21.43%	100.00%
	3.57%	0.00%	6.25%	0.00%	12.94%	4.80%	6.70%
	0.24%	0.00%	2.39%	0.00%	2.63%	1.44%	6.70%
31% to 40%	0	1	7	0	4	11	23
	0.00%	4.35%	30.43%	0.00%	17.39%	47.83%	100.00%
	0.00%	9.09%	4.38%	0.00%	4.71%	8.80%	5.50%
	0.00%	0.24%	1.67%	0.00%	0.96%	2.63%	5.50%

41% to 50%	2	1	18	1	13	17	52
	3.85%	1.92%	34.62%	1.92%	25.00%	32.69%	100.00%
	7.14%	9.09%	11.25%	11.11%	15.29%	13.60%	12.44%
	0.48%	0.24%	4.31%	0.24%	3.11%	4.07%	12.44%
51% to 60%	0	2	2	1	3	5	13
	0.00%	15.38%	15.38%	7.69%	23.08%	38.46%	100.00%
	0.00%	18.18%	1.25%	11.11%	3.53%	4.00%	3.11%
	0.00%	0.48%	0.48%	0.24%	0.72%	1.20%	3.11%
61% to 70%	0	1	13	0	2	7	23
	0.00%	4.35%	56.52%	0.00%	8.70%	30.43%	100.00%
	0.00%	9.09%	8.13%	0.00%	2.35%	5.60%	5.50%
	0.00%	0.24%	3.11%	0.00%	0.48%	1.67%	5.50%
71% to 80%	0	0	7	1	2	14	24
	0.00%	0.00%	29.17%	4.17%	8.33%	58.33%	100.00%
	0.00%	0.00%	4.38%	11.11%	2.35%	11.20%	5.74%
	0.00%	0.00%	1.67%	0.24%	0.48%	3.35%	5.74%
81% to 100%	14	2	50	4	32	40	142
	9.86%	1.41%	35.21%	2.82%	22.54%	28.17%	100.00%
	50.00%	18.18%	31.25%	44.44%	37.65%	32.00%	33.97%
	3.35%	0.48%	11.96%	0.96%	7.66%	9.57%	33.97%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q21 What percentage of these gross revenues was earned from SAWS, the private sector, and other public government projects? Public Sector * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q21 What percentage of these gross revenues was earned from SAWS, the private sector, and other public government projects? Public Sector	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Up to 10%	14	1	48	4	27	39	133
	10.53%	0.75%	36.09%	3.01%	20.30%	29.32%	100.00%
	50.00%	9.09%	30.00%	44.44%	31.76%	31.20%	31.82%
	3.35%	0.24%	11.48%	0.96%	6.46%	9.33%	31.82%
11% to 20%	0	1	10	0	6	13	30
	0.00%	3.33%	33.33%	0.00%	20.00%	43.33%	100.00%
	0.00%	9.09%	6.25%	0.00%	7.06%	10.40%	7.18%
	0.00%	0.24%	2.39%	0.00%	1.44%	3.11%	7.18%
21% to 30%	0	1	11	2	3	15	32
	0.00%	3.13%	34.38%	6.25%	9.38%	46.88%	100.00%

	0.00%	9.09%	6.88%	22.22%	3.53%	12.00%	7.66%
	0.00%	0.24%	2.63%	0.48%	0.72%	3.59%	7.66%
31% to 40%	0	2	7	0	4	10	23
	0.00%	8.70%	30.43%	0.00%	17.39%	43.48%	100.00%
	0.00%	18.18%	4.38%	0.00%	4.71%	8.00%	5.50%
	0.00%	0.48%	1.67%	0.00%	0.96%	2.39%	5.50%
41% to 50%	2	3	18	1	15	17	56
	3.57%	5.36%	32.14%	1.79%	26.79%	30.36%	100.00%
	7.14%	27.27%	11.25%	11.11%	17.65%	13.60%	13.40%
	0.48%	0.72%	4.31%	0.24%	3.59%	4.07%	13.40%
51% to 60%	0	0	6	0	2	5	13
	0.00%	0.00%	46.15%	0.00%	15.38%	38.46%	100.00%
	0.00%	0.00%	3.75%	0.00%	2.35%	4.00%	3.11%
	0.00%	0.00%	1.44%	0.00%	0.48%	1.20%	3.11%
61% to 70%	1	0	9	0	7	5	22
	4.55%	0.00%	40.91%	0.00%	31.82%	22.73%	100.00%
	3.57%	0.00%	5.63%	0.00%	8.24%	4.00%	5.26%
	0.24%	0.00%	2.15%	0.00%	1.67%	1.20%	5.26%
71% to 80%	2	1	18	1	8	6	36
	5.56%	2.78%	50.00%	2.78%	22.22%	16.67%	100.00%
	7.14%	9.09%	11.25%	11.11%	9.41%	4.80%	8.61%
	0.48%	0.24%	4.31%	0.24%	1.91%	1.44%	8.61%
81% to 100%	9	2	33	1	13	15	73
	12.33%	2.74%	45.21%	1.37%	17.81%	20.55%	100.00%
	32.14%	18.18%	20.63%	11.11%	15.29%	12.00%	17.46%
	2.15%	0.48%	7.89%	0.24%	3.11%	3.59%	17.46%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q22 Does your company hold any of the following certifications from a recognized certification agency? Minority Business Enterprise (MBE) * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q22 Does your company hold any of the following certifications from a recognized certification agency? Minority Business Enterprise (MBE)	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	26	8	127	5	29	14	209
	12.44%	3.83%	60.77%	2.39%	13.88%	6.70%	100.00%
	92.86%	72.73%	79.38%	55.56%	34.12%	11.20%	50.00%
	6.22%	1.91%	30.38%	1.20%	6.94%	3.35%	50.00%

No	2	3	32	4	56	109	206
	0.97%	1.46%	15.53%	1.94%	27.18%	52.91%	100.00%
	7.14%	27.27%	20.00%	44.44%	65.88%	87.20%	49.28%
	0.48%	0.72%	7.66%	0.96%	13.40%	26.08%	49.28%
Don't Know	0	0	1	0	0	2	3
	0.00%	0.00%	33.33%	0.00%	0.00%	66.67%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	1.60%	0.72%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.48%	0.72%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q22 Does your company hold any of the following certifications from a recognized certification agency? Small Business Enterprise (SBE) * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q22 Does your company hold any of the following certifications from a recognized certification agency? Small Business Enterprise (SBE)	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	24	8	132	7	67	63	301
	7.97%	2.66%	43.85%	2.33%	22.26%	20.93%	100.00%
	85.71%	72.73%	82.50%	77.78%	78.82%	50.40%	72.01%
	5.74%	1.91%	31.58%	1.67%	16.03%	15.07%	72.01%
No	4	3	27	2	18	59	113
	3.54%	2.65%	23.89%	1.77%	15.93%	52.21%	100.00%
	14.29%	27.27%	16.88%	22.22%	21.18%	47.20%	27.03%
	0.96%	0.72%	6.46%	0.48%	4.31%	14.11%	27.03%
Don't Know	0	0	1	0	0	3	4
	0.00%	0.00%	25.00%	0.00%	0.00%	75.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	2.40%	0.96%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.72%	0.96%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q22 Does your company hold any of the following certifications from a recognized certification agency? Woman Business Enterprise (WBE) * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q22 Does your company hold any of the	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
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following certifications from a recognized certification agency? Woman Business Enterprise (WBE)	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	15	4	48	2	69	3	141
	10.64%	2.84%	34.04%	1.42%	48.94%	2.13%	100.00%
	53.57%	36.36%	30.00%	22.22%	81.18%	2.40%	33.73%
	3.59%	0.96%	11.48%	0.48%	16.51%	0.72%	33.73%
No	13	7	111	7	16	121	275
	4.73%	2.55%	40.36%	2.55%	5.82%	44.00%	100.00%
	46.43%	63.64%	69.38%	77.78%	18.82%	96.80%	65.79%
	3.11%	1.67%	26.56%	1.67%	3.83%	28.95%	65.79%
Don't Know	0	0	1	0	0	1	2
	0.00%	0.00%	50.00%	0.00%	0.00%	50.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.80%	0.48%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.24%	0.48%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q22 Does your company hold any of the following certifications from a recognized certification agency? Disadvantaged Business Enterprise (DBE) * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q22 Does your company hold any of the following certifications from a recognized certification agency? Disadvantaged Business Enterprise (DBE)	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	21	6	73	2	22	8	132
	15.91%	4.55%	55.30%	1.52%	16.67%	6.06%	100.00%
	75.00%	54.55%	45.63%	22.22%	25.88%	6.40%	31.58%
	5.02%	1.44%	17.46%	0.48%	5.26%	1.91%	31.58%
No	7	5	86	7	63	116	284
	2.46%	1.76%	30.28%	2.46%	22.18%	40.85%	100.00%
	25.00%	45.45%	53.75%	77.78%	74.12%	92.80%	67.94%
	1.67%	1.20%	20.57%	1.67%	15.07%	27.75%	67.94%
Don't Know	0	0	1	0	0	1	2
	0.00%	0.00%	50.00%	0.00%	0.00%	50.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.80%	0.48%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.24%	0.48%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
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Table: Q22 Does your company hold any of the following certifications from a recognized certification agency? HUBZone * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q22 Does your company hold any of the following certifications from a recognized certification agency? HUBZone	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	18	3	67	1	32	13	134
	13.43%	2.24%	50.00%	0.75%	23.88%	9.70%	100.00%
	64.29%	27.27%	41.88%	11.11%	37.65%	10.40%	32.06%
	4.31%	0.72%	16.03%	0.24%	7.66%	3.11%	32.06%
No	10	8	91	8	53	111	281
	3.56%	2.85%	32.38%	2.85%	18.86%	39.50%	100.00%
	35.71%	72.73%	56.88%	88.89%	62.35%	88.80%	67.22%
	2.39%	1.91%	21.77%	1.91%	12.68%	26.56%	67.22%
Don't Know	0	0	2	0	0	1	3
	0.00%	0.00%	66.67%	0.00%	0.00%	33.33%	100.00%
	0.00%	0.00%	1.25%	0.00%	0.00%	0.80%	0.72%
	0.00%	0.00%	0.48%	0.00%	0.00%	0.24%	0.72%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q22 Does your company hold any of the following certifications from a recognized certification agency? 8A * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q22 Does your company hold any of the following certifications from a recognized certification agency? 8A	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	8	3	30	0	8	2	51
	15.69%	5.88%	58.82%	0.00%	15.69%	3.92%	100.00%
	28.57%	27.27%	18.75%	0.00%	9.41%	1.60%	12.20%
	1.91%	0.72%	7.18%	0.00%	1.91%	0.48%	12.20%
No	20	8	126	9	77	122	362
	5.52%	2.21%	34.81%	2.49%	21.27%	33.70%	100.00%
	71.43%	72.73%	78.75%	100.00%	90.59%	97.60%	86.60%
	4.78%	1.91%	30.14%	2.15%	18.42%	29.19%	86.60%
Don't Know	0	0	4	0	0	1	5
	0.00%	0.00%	80.00%	0.00%	0.00%	20.00%	100.00%
	0.00%	0.00%	2.50%	0.00%	0.00%	0.80%	1.20%
	0.00%	0.00%	0.96%	0.00%	0.00%	0.24%	1.20%

Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q22 Does your company hold any of the following certifications from a recognized certification agency? Other * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q22 Does your company hold any of the following certifications from a recognized certification agency? Other	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	5	2	35	3	15	13	73
	6.85%	2.74%	47.95%	4.11%	20.55%	17.81%	100.00%
	17.86%	18.18%	21.88%	33.33%	17.65%	10.40%	17.46%
	1.20%	0.48%	8.37%	0.72%	3.59%	3.11%	17.46%
No	23	9	122	6	70	111	341
	6.74%	2.64%	35.78%	1.76%	20.53%	32.55%	100.00%
	82.14%	81.82%	76.25%	66.67%	82.35%	88.80%	81.58%
	5.50%	2.15%	29.19%	1.44%	16.75%	26.56%	81.58%
Don't Know	0	0	3	0	0	1	4
	0.00%	0.00%	75.00%	0.00%	0.00%	25.00%	100.00%
	0.00%	0.00%	1.88%	0.00%	0.00%	0.80%	0.96%
	0.00%	0.00%	0.72%	0.00%	0.00%	0.24%	0.96%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q23_RECODE * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q23_RECODE	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
.	23	9	127	8	71	116	354
	6.50%	2.54%	35.88%	2.26%	20.06%	32.77%	100.00%
	82.14%	81.82%	79.38%	88.89%	83.53%	92.80%	84.69%
	5.50%	2.15%	30.38%	1.91%	16.99%	27.75%	84.69%
American Subcontractor Association	0	0	0	0	1	0	1
	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	1.18%	0.00%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.24%	0.00%	0.24%
CEFPI	0	0	0	0	0	1	1
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%

	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.24%
Central South Texas Small Business Veteran Certification	0	0	0	0	0	0	1	1
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.24%
City of Houston	0	0	0	0	0	0	1	1
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.24%
DBE, HUB	0	0	0	0	0	1	0	1
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	1.18%	0.00%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.00%	0.24%
DOT	1	0	0	0	0	0	0	1
	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	3.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%
	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%
Disabled	0	0	1	0	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.00%	0.24%
ESBE	0	0	3	0	0	0	1	4
	0.00%	0.00%	75.00%	0.00%	0.00%	0.00%	25.00%	100.00%
	0.00%	0.00%	1.88%	0.00%	0.00%	0.00%	0.80%	0.96%
	0.00%	0.00%	0.72%	0.00%	0.00%	0.00%	0.24%	0.96%
ESBE, HABE	0	0	4	0	0	0	0	4
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	2.50%	0.00%	0.00%	0.00%	0.00%	0.96%
	0.00%	0.00%	0.96%	0.00%	0.00%	0.00%	0.00%	0.96%
GSA	0	0	1	0	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.00%	0.24%
HUB, HABE	0	0	1	0	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.00%	0.24%
Hispanic American Business Enterprise HABE	0	0	8	0	0	0	0	8
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%	1.91%

	0.00%	0.00%	1.91%	0.00%	0.00%	0.00%	1.91%
ISO	0	0	0	0	0	1	1
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.24%
SCTRCA	2	0	1	0	2	1	6
	33.33%	0.00%	16.67%	0.00%	33.33%	16.67%	100.00%
	7.14%	0.00%	0.63%	0.00%	2.35%	0.80%	1.44%
	0.48%	0.00%	0.24%	0.00%	0.48%	0.24%	1.44%
SWMB	0	1	0	0	0	0	1
	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	9.09%	0.00%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.24%	0.00%	0.00%	0.00%	0.00%	0.24%
Texas HUB	1	1	10	1	9	0	22
	4.55%	4.55%	45.45%	4.55%	40.91%	0.00%	100.00%
	3.57%	9.09%	6.25%	11.11%	10.59%	0.00%	5.26%
	0.24%	0.24%	2.39%	0.24%	2.15%	0.00%	5.26%
Texas HUB, WBENC	0	0	0	0	1	0	1
	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	1.18%	0.00%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.24%	0.00%	0.24%
Veteran Business Enterprise	1	0	4	0	0	3	8
	12.50%	0.00%	50.00%	0.00%	0.00%	37.50%	100.00%
	3.57%	0.00%	2.50%	0.00%	0.00%	2.40%	1.91%
	0.24%	0.00%	0.96%	0.00%	0.00%	0.72%	1.91%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q24 On a scale from 1 to 6 (1 being extremely easy and 6 being extremely difficult) how would you rate your ease of obtaining notification of business opportunities with San Antonio Water Systems? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q24 On a scale from 1 to 6 (1 being extremely easy and 6 being extremely difficult) how would you rate your ease of obtaining notification of business opportunities with San Antonio Water Systems?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Extremely Easy	4	2	34	2	14	40	96
	4.17%	2.08%	35.42%	2.08%	14.58%	41.67%	100.00%
	14.29%	18.18%	21.25%	22.22%	16.47%	32.00%	22.97%

	0.96%	0.48%	8.13%	0.48%	3.35%	9.57%	22.97%
Somewhat Easy	2	2	24	0	11	29	68
	2.94%	2.94%	35.29%	0.00%	16.18%	42.65%	100.00%
	7.14%	18.18%	15.00%	0.00%	12.94%	23.20%	16.27%
	0.48%	0.48%	5.74%	0.00%	2.63%	6.94%	16.27%
Easy	9	0	36	1	15	28	89
	10.11%	0.00%	40.45%	1.12%	16.85%	31.46%	100.00%
	32.14%	0.00%	22.50%	11.11%	17.65%	22.40%	21.29%
	2.15%	0.00%	8.61%	0.24%	3.59%	6.70%	21.29%
Difficult	5	2	12	1	11	8	39
	12.82%	5.13%	30.77%	2.56%	28.21%	20.51%	100.00%
	17.86%	18.18%	7.50%	11.11%	12.94%	6.40%	9.33%
	1.20%	0.48%	2.87%	0.24%	2.63%	1.91%	9.33%
Somewhat Difficult	3	2	20	2	11	8	46
	6.52%	4.35%	43.48%	4.35%	23.91%	17.39%	100.00%
	10.71%	18.18%	12.50%	22.22%	12.94%	6.40%	11.00%
	0.72%	0.48%	4.78%	0.48%	2.63%	1.91%	11.00%
Extremely Difficult	3	2	23	1	13	9	51
	5.88%	3.92%	45.10%	1.96%	25.49%	17.65%	100.00%
	10.71%	18.18%	14.38%	11.11%	15.29%	7.20%	12.20%
	0.72%	0.48%	5.50%	0.24%	3.11%	2.15%	12.20%
Don't Know	2	1	11	2	10	3	29
	6.90%	3.45%	37.93%	6.90%	34.48%	10.34%	100.00%
	7.14%	9.09%	6.88%	22.22%	11.76%	2.40%	6.94%
	0.48%	0.24%	2.63%	0.48%	2.39%	0.72%	6.94%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q25_a How do you obtain notification of bid/proposal opportunities? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q25_a How do you obtain notification of bid/proposal opportunities?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
SAWS website	9	3	34	2	13	40	101
	8.91%	2.97%	33.66%	1.98%	12.87%	39.60%	100.00%
	32.14%	27.27%	21.25%	22.22%	15.29%	32.00%	24.16%
	2.15%	0.72%	8.13%	0.48%	3.11%	9.57%	24.16%
Contact from SAWS	10	5	63	3	25	62	168
	5.95%	2.98%	37.50%	1.79%	14.88%	36.90%	100.00%

	35.71%	45.45%	39.38%	33.33%	29.41%	49.60%	40.19%
	2.39%	1.20%	15.07%	0.72%	5.98%	14.83%	40.19%
Private bidding subscription	3	1	13	0	13	3	33
	9.09%	3.03%	39.39%	0.00%	39.39%	9.09%	100.00%
	10.71%	9.09%	8.13%	0.00%	15.29%	2.40%	7.89%
	0.72%	0.24%	3.11%	0.00%	3.11%	0.72%	7.89%
Other Primes/Subcontractors	1	0	12	1	8	7	29
	3.45%	0.00%	41.38%	3.45%	27.59%	24.14%	100.00%
	3.57%	0.00%	7.50%	11.11%	9.41%	5.60%	6.94%
	0.24%	0.00%	2.87%	0.24%	1.91%	1.67%	6.94%
Trade or industry associations	0	0	3	0	1	0	4
	0.00%	0.00%	75.00%	0.00%	25.00%	0.00%	100.00%
	0.00%	0.00%	1.88%	0.00%	1.18%	0.00%	0.96%
	0.00%	0.00%	0.72%	0.00%	0.24%	0.00%	0.96%
Local newspapers with general circulation	1	1	2	0	1	1	6
	16.67%	16.67%	33.33%	0.00%	16.67%	16.67%	100.00%
	3.57%	9.09%	1.25%	0.00%	1.18%	0.80%	1.44%
	0.24%	0.24%	0.48%	0.00%	0.24%	0.24%	1.44%
Don't Know	2	1	18	3	11	7	42
	4.76%	2.38%	42.86%	7.14%	26.19%	16.67%	100.00%
	7.14%	9.09%	11.25%	33.33%	12.94%	5.60%	10.05%
	0.48%	0.24%	4.31%	0.72%	2.63%	1.67%	10.05%
Other	2	0	15	0	13	5	35
	5.71%	0.00%	42.86%	0.00%	37.14%	14.29%	100.00%
	7.14%	0.00%	9.38%	0.00%	15.29%	4.00%	8.37%
	0.48%	0.00%	3.59%	0.00%	3.11%	1.20%	8.37%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q25_b How do you obtain notification of bid/proposal opportunities? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q25_b How do you obtain notification of bid/proposal opportunities?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
SAWS website	3	1	12	2	6	7	31
	9.68%	3.23%	38.71%	6.45%	19.35%	22.58%	100.00%
	10.71%	9.09%	7.50%	22.22%	7.06%	5.60%	7.42%
	0.72%	0.24%	2.87%	0.48%	1.44%	1.67%	7.42%
Contact from SAWS	3	0	22	2	7	25	59

	5.08%	0.00%	37.29%	3.39%	11.86%	42.37%	100.00%
	10.71%	0.00%	13.75%	22.22%	8.24%	20.00%	14.11%
	0.72%	0.00%	5.26%	0.48%	1.67%	5.98%	14.11%
Private bidding subscription	1	5	11	1	5	6	29
	3.45%	17.24%	37.93%	3.45%	17.24%	20.69%	100.00%
	3.57%	45.45%	6.88%	11.11%	5.88%	4.80%	6.94%
	0.24%	1.20%	2.63%	0.24%	1.20%	1.44%	6.94%
Other Primes/Subcontractors	4	0	9	0	8	6	27
	14.81%	0.00%	33.33%	0.00%	29.63%	22.22%	100.00%
	14.29%	0.00%	5.63%	0.00%	9.41%	4.80%	6.46%
	0.96%	0.00%	2.15%	0.00%	1.91%	1.44%	6.46%
Trade or industry associations	1	0	4	0	4	1	10
	10.00%	0.00%	40.00%	0.00%	40.00%	10.00%	100.00%
	3.57%	0.00%	2.50%	0.00%	4.71%	0.80%	2.39%
	0.24%	0.00%	0.96%	0.00%	0.96%	0.24%	2.39%
Local newspapers with general circulation	2	0	3	0	2	1	8
	25.00%	0.00%	37.50%	0.00%	25.00%	12.50%	100.00%
	7.14%	0.00%	1.88%	0.00%	2.35%	0.80%	1.91%
	0.48%	0.00%	0.72%	0.00%	0.48%	0.24%	1.91%
Don't Know	0	0	1	0	1	0	2
	0.00%	0.00%	50.00%	0.00%	50.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	1.18%	0.00%	0.48%
	0.00%	0.00%	0.24%	0.00%	0.24%	0.00%	0.48%
Other	1	1	2	0	4	1	9
	11.11%	11.11%	22.22%	0.00%	44.44%	11.11%	100.00%
	3.57%	9.09%	1.25%	0.00%	4.71%	0.80%	2.15%
	0.24%	0.24%	0.48%	0.00%	0.96%	0.24%	2.15%
No Response	13	4	96	4	48	78	243
	5.35%	1.65%	39.51%	1.65%	19.75%	32.10%	100.00%
	46.43%	36.36%	60.00%	44.44%	56.47%	62.40%	58.13%
	3.11%	0.96%	22.97%	0.96%	11.48%	18.66%	58.13%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q25_c How do you obtain notification of bid/proposal opportunities? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q25_c How do you obtain notification of bid/proposal opportunities?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	

SAWS website	0	1	2	0	0	0	3
	0.00%	33.33%	66.67%	0.00%	0.00%	0.00%	100.00%
	0.00%	9.09%	1.25%	0.00%	0.00%	0.00%	0.72%
	0.00%	0.24%	0.48%	0.00%	0.00%	0.00%	0.72%
Contact from SAWS	0	1	1	0	1	0	3
	0.00%	33.33%	33.33%	0.00%	33.33%	0.00%	100.00%
	0.00%	9.09%	0.63%	0.00%	1.18%	0.00%	0.72%
	0.00%	0.24%	0.24%	0.00%	0.24%	0.00%	0.72%
Private bidding subscription	0	0	7	1	3	12	23
	0.00%	0.00%	30.43%	4.35%	13.04%	52.17%	100.00%
	0.00%	0.00%	4.38%	11.11%	3.53%	9.60%	5.50%
	0.00%	0.00%	1.67%	0.24%	0.72%	2.87%	5.50%
Other Primes/Subcontractors	4	1	12	2	4	7	30
	13.33%	3.33%	40.00%	6.67%	13.33%	23.33%	100.00%
	14.29%	9.09%	7.50%	22.22%	4.71%	5.60%	7.18%
	0.96%	0.24%	2.87%	0.48%	0.96%	1.67%	7.18%
Trade or industry associations	2	0	7	0	4	2	15
	13.33%	0.00%	46.67%	0.00%	26.67%	13.33%	100.00%
	7.14%	0.00%	4.38%	0.00%	4.71%	1.60%	3.59%
	0.48%	0.00%	1.67%	0.00%	0.96%	0.48%	3.59%
Local newspapers with general circulation	1	0	3	0	1	0	5
	20.00%	0.00%	60.00%	0.00%	20.00%	0.00%	100.00%
	3.57%	0.00%	1.88%	0.00%	1.18%	0.00%	1.20%
	0.24%	0.00%	0.72%	0.00%	0.24%	0.00%	1.20%
Don't Know	0	0	0	0	0	1	1
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.24%
Other	0	0	4	0	0	0	4
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	2.50%	0.00%	0.00%	0.00%	0.96%
	0.00%	0.00%	0.96%	0.00%	0.00%	0.00%	0.96%
No Response	21	8	124	6	72	103	334
	6.29%	2.40%	37.13%	1.80%	21.56%	30.84%	100.00%
	75.00%	72.73%	77.50%	66.67%	84.71%	82.40%	79.90%
	5.02%	1.91%	29.67%	1.44%	17.22%	24.64%	79.90%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q25_d How do you obtain notification of bid/proposal opportunities? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q25_d How do you obtain notification of bid/proposal opportunities?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
SAWS website	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
Other Primes/Subcontractors	0	0	5	0	1	9	15
	0.00%	0.00%	33.33%	0.00%	6.67%	60.00%	100.00%
	0.00%	0.00%	3.13%	0.00%	1.18%	7.20%	3.59%
	0.00%	0.00%	1.20%	0.00%	0.24%	2.15%	3.59%
Trade or industry associations	0	1	6	2	1	7	17
	0.00%	5.88%	35.29%	11.76%	5.88%	41.18%	100.00%
	0.00%	9.09%	3.75%	22.22%	1.18%	5.60%	4.07%
	0.00%	0.24%	1.44%	0.48%	0.24%	1.67%	4.07%
Local newspapers with general circulation	1	0	5	0	4	0	10
	10.00%	0.00%	50.00%	0.00%	40.00%	0.00%	100.00%
	3.57%	0.00%	3.13%	0.00%	4.71%	0.00%	2.39%
	0.24%	0.00%	1.20%	0.00%	0.96%	0.00%	2.39%
Other	3	0	4	0	0	2	9
	33.33%	0.00%	44.44%	0.00%	0.00%	22.22%	100.00%
	10.71%	0.00%	2.50%	0.00%	0.00%	1.60%	2.15%
	0.72%	0.00%	0.96%	0.00%	0.00%	0.48%	2.15%
No Response	24	10	139	7	79	107	366
	6.56%	2.73%	37.98%	1.91%	21.58%	29.23%	100.00%
	85.71%	90.91%	86.88%	77.78%	92.94%	85.60%	87.56%
	5.74%	2.39%	33.25%	1.67%	18.90%	25.60%	87.56%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q25_e How do you obtain notification of bid/proposal opportunities? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q25_e How do you obtain notification of bid/proposal opportunities?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Trade or industry associations	0	0	4	0	0	6	10
	0.00%	0.00%	40.00%	0.00%	0.00%	60.00%	100.00%

	0.00%	0.00%	2.50%	0.00%	0.00%	4.80%	2.39%
	0.00%	0.00%	0.96%	0.00%	0.00%	1.44%	2.39%
Local newspapers with general circulation	0	0	1	0	1	4	6
	0.00%	0.00%	16.67%	0.00%	16.67%	66.67%	100.00%
	0.00%	0.00%	0.63%	0.00%	1.18%	3.20%	1.44%
	0.00%	0.00%	0.24%	0.00%	0.24%	0.96%	1.44%
Other	1	1	1	0	2	0	5
	20.00%	20.00%	20.00%	0.00%	40.00%	0.00%	100.00%
	3.57%	9.09%	0.63%	0.00%	2.35%	0.00%	1.20%
	0.24%	0.24%	0.24%	0.00%	0.48%	0.00%	1.20%
No Response	27	10	154	9	82	115	397
	6.80%	2.52%	38.79%	2.27%	20.65%	28.97%	100.00%
	96.43%	90.91%	96.25%	100.00%	96.47%	92.00%	94.98%
	6.46%	2.39%	36.84%	2.15%	19.62%	27.51%	94.98%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q25_f How do you obtain notification of bid/proposal opportunities? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q25_f How do you obtain notification of bid/proposal opportunities?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Trade or industry associations	0	0	0	0	1	0	1
	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	1.18%	0.00%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.24%	0.00%	0.24%
Local newspapers with general circulation	0	0	2	0	0	5	7
	0.00%	0.00%	28.57%	0.00%	0.00%	71.43%	100.00%
	0.00%	0.00%	1.25%	0.00%	0.00%	4.00%	1.67%
	0.00%	0.00%	0.48%	0.00%	0.00%	1.20%	1.67%
Other	0	0	0	0	0	1	1
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.24%
No Response	28	11	158	9	84	119	409
	6.85%	2.69%	38.63%	2.20%	20.54%	29.10%	100.00%
	100.00%	100.00%	98.75%	100.00%	98.82%	95.20%	97.85%
	6.70%	2.63%	37.80%	2.15%	20.10%	28.47%	97.85%
Total	28	11	160	9	85	125	418

	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q25_g How do you obtain notification of bid/proposal opportunities? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q25_g How do you obtain notification of bid/proposal opportunities?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
No Response	28	11	158	9	84	119	409
	6.85%	2.69%	38.63%	2.20%	20.54%	29.10%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.85%	2.69%	38.63%	2.20%	20.54%	29.10%	100.00%
Total	28	11	158	9	84	119	409
	6.85%	2.69%	38.63%	2.20%	20.54%	29.10%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.85%	2.69%	38.63%	2.20%	20.54%	29.10%	100.00%

Table: Q25_h How do you obtain notification of bid/proposal opportunities? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q25_h How do you obtain notification of bid/proposal opportunities?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
No Response	28	11	158	9	84	119	409
	6.85%	2.69%	38.63%	2.20%	20.54%	29.10%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.85%	2.69%	38.63%	2.20%	20.54%	29.10%	100.00%
Total	28	11	158	9	84	119	409
	6.85%	2.69%	38.63%	2.20%	20.54%	29.10%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.85%	2.69%	38.63%	2.20%	20.54%	29.10%	100.00%

Table: Q26_RECODE * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q26_RECODE	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%

	23	11	143	9	73	119	378
	6.08%	2.91%	37.83%	2.38%	19.31%	31.48%	100.00%
	82.14%	100.00%	89.38%	100.00%	85.88%	95.20%	90.43%
	5.50%	2.63%	34.21%	2.15%	17.46%	28.47%	90.43%
Client referrals	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
500.00 to 1,000.00 dollars worth of advertising in the media. (Anything digital) to help promote.	0	0	0	0	1	0	1
	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	1.18%	0.00%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.24%	0.00%	0.24%
ACG	0	0	0	0	1	0	1
	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	1.18%	0.00%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.24%	0.00%	0.24%
Ad agency	0	0	0	0	0	1	1
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.24%
Auctions	0	0	0	0	0	1	1
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.24%
Bid subscription	1	0	0	0	0	2	3
	33.33%	0.00%	0.00%	0.00%	0.00%	66.67%	100.00%
	3.57%	0.00%	0.00%	0.00%	0.00%	1.60%	0.72%
	0.24%	0.00%	0.00%	0.00%	0.00%	0.48%	0.72%
Builders association	0	0	0	0	1	0	1
	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	1.18%	0.00%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.24%	0.00%	0.24%
Do not bid on projects	1	0	1	0	0	0	2
	50.00%	0.00%	50.00%	0.00%	0.00%	0.00%	100.00%
	3.57%	0.00%	0.63%	0.00%	0.00%	0.00%	0.48%
	0.24%	0.00%	0.24%	0.00%	0.00%	0.00%	0.48%
Email	1	0	5	0	7	2	15
	6.67%	0.00%	33.33%	0.00%	46.67%	13.33%	100.00%
	3.57%	0.00%	3.13%	0.00%	8.24%	1.60%	3.59%
	0.24%	0.00%	1.20%	0.00%	1.67%	0.48%	3.59%
HUB website	1	0	0	0	0	0	1

	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	3.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%
	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%
I do not get any information on the SAWS projects, but would like to.	0	0	0	0	1	0	1	
	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	
	0.00%	0.00%	0.00%	0.00%	1.18%	0.00%	0.24%	
	0.00%	0.00%	0.00%	0.00%	0.24%	0.00%	0.24%	
Information from city of San Antonio which may include information from SAWS. Also through the Veterans Association	0	0	1	0	0	0	1	
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%	
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%	
Internet	0	0	1	0	0	0	1	
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%	
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%	
Never received notifications or work from SAWS	0	0	0	0	1	0	1	
	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	
	0.00%	0.00%	0.00%	0.00%	1.18%	0.00%	0.24%	
	0.00%	0.00%	0.00%	0.00%	0.24%	0.00%	0.24%	
Private subscription	0	0	1	0	0	0	1	
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%	
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%	
Referrals from old clients	1	0	1	0	0	0	2	
	50.00%	0.00%	50.00%	0.00%	0.00%	0.00%	100.00%	
	3.57%	0.00%	0.63%	0.00%	0.00%	0.00%	0.48%	
	0.24%	0.00%	0.24%	0.00%	0.00%	0.00%	0.48%	
San Antonio Electric Bidding System	0	0	1	0	0	0	1	
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%	
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%	
San Antonio River Authority	0	0	1	0	0	0	1	
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%	
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%	
The Blue Book	0	0	1	0	0	0	1	
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%	
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%	
Word of mouth	0	0	1	0	0	0	1	
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	

	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
Would like to start receiving SAWS notifications	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q27 Do you perform as a prime contractor, subcontractor, or both? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q27 Do you perform as a prime contractor, subcontractor, or both?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Prime	9	4	41	3	37	49	143
	6.29%	2.80%	28.67%	2.10%	25.87%	34.27%	100.00%
	32.14%	36.36%	25.63%	33.33%	43.53%	39.20%	34.21%
	2.15%	0.96%	9.81%	0.72%	8.85%	11.72%	34.21%
Sub	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Both	14	5	90	6	26	46	187
	7.49%	2.67%	48.13%	3.21%	13.90%	24.60%	100.00%
	50.00%	45.45%	56.25%	66.67%	30.59%	36.80%	44.74%
	3.35%	1.20%	21.53%	1.44%	6.22%	11.00%	44.74%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q28 In general, which of the following dollar ranges best approximate your company's largest prime contract awarded between January 1, 2011 and December 31, 2013? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q28 In general, which of the following dollar ranges best approximate your company's largest prime contract awarded between January 1, 2011 and December 31, 2013?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
None	1	0	3	1	3	3	11
	9.09%	0.00%	27.27%	9.09%	27.27%	27.27%	100.00%

	3.57%	0.00%	1.88%	11.11%	3.53%	2.40%	2.63%
	0.24%	0.00%	0.72%	0.24%	0.72%	0.72%	2.63%
Up to \$50,000?	10	0	35	3	19	10	77
	12.99%	0.00%	45.45%	3.90%	24.68%	12.99%	100.00%
	35.71%	0.00%	21.88%	33.33%	22.35%	8.00%	18.42%
	2.39%	0.00%	8.37%	0.72%	4.55%	2.39%	18.42%
\$50,001 to \$100,000?	1	3	17	2	9	14	46
	2.17%	6.52%	36.96%	4.35%	19.57%	30.43%	100.00%
	3.57%	27.27%	10.63%	22.22%	10.59%	11.20%	11.00%
	0.24%	0.72%	4.07%	0.48%	2.15%	3.35%	11.00%
\$100,001 to \$200,000?	1	0	10	2	6	5	24
	4.17%	0.00%	41.67%	8.33%	25.00%	20.83%	100.00%
	3.57%	0.00%	6.25%	22.22%	7.06%	4.00%	5.74%
	0.24%	0.00%	2.39%	0.48%	1.44%	1.20%	5.74%
\$200,001 to \$300,000?	5	0	10	0	3	6	24
	20.83%	0.00%	41.67%	0.00%	12.50%	25.00%	100.00%
	17.86%	0.00%	6.25%	0.00%	3.53%	4.80%	5.74%
	1.20%	0.00%	2.39%	0.00%	0.72%	1.44%	5.74%
\$300,001 to \$400,000?	1	0	6	0	0	4	11
	9.09%	0.00%	54.55%	0.00%	0.00%	36.36%	100.00%
	3.57%	0.00%	3.75%	0.00%	0.00%	3.20%	2.63%
	0.24%	0.00%	1.44%	0.00%	0.00%	0.96%	2.63%
\$400,001 to \$500,000?	1	1	5	0	3	3	13
	7.69%	7.69%	38.46%	0.00%	23.08%	23.08%	100.00%
	3.57%	9.09%	3.13%	0.00%	3.53%	2.40%	3.11%
	0.24%	0.24%	1.20%	0.00%	0.72%	0.72%	3.11%
\$500,001 to \$1 million?	2	0	12	1	6	6	27
	7.41%	0.00%	44.44%	3.70%	22.22%	22.22%	100.00%
	7.14%	0.00%	7.50%	11.11%	7.06%	4.80%	6.46%
	0.48%	0.00%	2.87%	0.24%	1.44%	1.44%	6.46%
Over \$1 million?	1	4	26	0	10	39	80
	1.25%	5.00%	32.50%	0.00%	12.50%	48.75%	100.00%
	3.57%	36.36%	16.25%	0.00%	11.76%	31.20%	19.14%
	0.24%	0.96%	6.22%	0.00%	2.39%	9.33%	19.14%
Don't Know	0	1	7	0	4	5	17
	0.00%	5.88%	41.18%	0.00%	23.53%	29.41%	100.00%
	0.00%	9.09%	4.38%	0.00%	4.71%	4.00%	4.07%
	0.00%	0.24%	1.67%	0.00%	0.96%	1.20%	4.07%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%

	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q29 Between January 1, 2011 and December 31, 2013, how many times has your company been awarded a SAWS project as a prime contractor/vendor? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q29 Between January 1, 2011 and December 31, 2013, how many times has your company been awarded a SAWS project as a prime contractor/vendor?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
None	22	7	107	8	54	63	261
	8.43%	2.68%	41.00%	3.07%	20.69%	24.14%	100.00%
	78.57%	63.64%	66.88%	88.89%	63.53%	50.40%	62.44%
	5.26%	1.67%	25.60%	1.91%	12.92%	15.07%	62.44%
1-10 Times	0	1	24	1	7	27	60
	0.00%	1.67%	40.00%	1.67%	11.67%	45.00%	100.00%
	0.00%	9.09%	15.00%	11.11%	8.24%	21.60%	14.35%
	0.00%	0.24%	5.74%	0.24%	1.67%	6.46%	14.35%
11-25 Times	0	1	0	0	2	3	6
	0.00%	16.67%	0.00%	0.00%	33.33%	50.00%	100.00%
	0.00%	9.09%	0.00%	0.00%	2.35%	2.40%	1.44%
	0.00%	0.24%	0.00%	0.00%	0.48%	0.72%	1.44%
26-50 Times	0	0	0	0	0	2	2
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	1.60%	0.48%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.48%	0.48%
Over 100 Times	1	0	0	0	0	0	1
	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	3.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%
	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q30 Between January 1, 2011 and December 31, 2013, which the following dollar ranges approximates your company's total volume of work with SAWS. * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q30 Between January 1, 2011 and December 31, 2013, which the following dollar ranges approximates your company's total volume of work with SAWS.	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
None	21	6	104	8	51	57	247
	8.50%	2.43%	42.11%	3.24%	20.65%	23.08%	100.00%
	75.00%	54.55%	65.00%	88.89%	60.00%	45.60%	59.09%
	5.02%	1.44%	24.88%	1.91%	12.20%	13.64%	59.09%
Up to \$50,000?	1	1	11	0	4	5	22
	4.55%	4.55%	50.00%	0.00%	18.18%	22.73%	100.00%
	3.57%	9.09%	6.88%	0.00%	4.71%	4.00%	5.26%
	0.24%	0.24%	2.63%	0.00%	0.96%	1.20%	5.26%
\$50,001 to \$100,000?	0	0	5	0	2	6	13
	0.00%	0.00%	38.46%	0.00%	15.38%	46.15%	100.00%
	0.00%	0.00%	3.13%	0.00%	2.35%	4.80%	3.11%
	0.00%	0.00%	1.20%	0.00%	0.48%	1.44%	3.11%
\$100,001 to \$200,000?	0	1	4	1	0	4	10
	0.00%	10.00%	40.00%	10.00%	0.00%	40.00%	100.00%
	0.00%	9.09%	2.50%	11.11%	0.00%	3.20%	2.39%
	0.00%	0.24%	0.96%	0.24%	0.00%	0.96%	2.39%
\$200,001 to \$300,000?	0	0	2	0	2	3	7
	0.00%	0.00%	28.57%	0.00%	28.57%	42.86%	100.00%
	0.00%	0.00%	1.25%	0.00%	2.35%	2.40%	1.67%
	0.00%	0.00%	0.48%	0.00%	0.48%	0.72%	1.67%
\$300,001 to \$400,000?	0	0	1	0	0	1	2
	0.00%	0.00%	50.00%	0.00%	0.00%	50.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.80%	0.48%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.24%	0.48%
\$400,001 to \$500,000?	0	0	2	0	1	3	6
	0.00%	0.00%	33.33%	0.00%	16.67%	50.00%	100.00%
	0.00%	0.00%	1.25%	0.00%	1.18%	2.40%	1.44%
	0.00%	0.00%	0.48%	0.00%	0.24%	0.72%	1.44%
\$500,001 to \$1 million?	0	0	0	0	0	5	5
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	1.20%
	0.00%	0.00%	0.00%	0.00%	0.00%	1.20%	1.20%
\$1,000,001 to \$3 million?	1	0	0	0	1	2	4
	25.00%	0.00%	0.00%	0.00%	25.00%	50.00%	100.00%
	3.57%	0.00%	0.00%	0.00%	1.18%	1.60%	0.96%

	0.24%	0.00%	0.00%	0.00%	0.24%	0.48%	0.96%
\$3,000,001 to \$5 million?	0	0	0	0	0	3	3
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	2.40%	0.72%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.72%	0.72%
Over \$5 million?	0	0	0	0	0	2	2
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	1.60%	0.48%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.48%	0.48%
Don't Know	0	1	2	0	2	4	9
	0.00%	11.11%	22.22%	0.00%	22.22%	44.44%	100.00%
	0.00%	9.09%	1.25%	0.00%	2.35%	3.20%	2.15%
	0.00%	0.24%	0.48%	0.00%	0.48%	0.96%	2.15%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Prequalification Requirements? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Prequalification Requirements?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	7	1	12	2	2	10	34
	20.59%	2.94%	35.29%	5.88%	5.88%	29.41%	100.00%
	25.00%	9.09%	7.50%	22.22%	2.35%	8.00%	8.13%
	1.67%	0.24%	2.87%	0.48%	0.48%	2.39%	8.13%
No	13	8	114	7	59	82	283
	4.59%	2.83%	40.28%	2.47%	20.85%	28.98%	100.00%
	46.43%	72.73%	71.25%	77.78%	69.41%	65.60%	67.70%
	3.11%	1.91%	27.27%	1.67%	14.11%	19.62%	67.70%
Don't Know	3	0	5	0	2	3	13
	23.08%	0.00%	38.46%	0.00%	15.38%	23.08%	100.00%
	10.71%	0.00%	3.13%	0.00%	2.35%	2.40%	3.11%
	0.72%	0.00%	1.20%	0.00%	0.48%	0.72%	3.11%
No Response	5	2	29	0	22	30	88

	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Bid bond requirements? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Bid bond requirements?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	7	1	14	2	1	3	28
	25.00%	3.57%	50.00%	7.14%	3.57%	10.71%	100.00%
	25.00%	9.09%	8.75%	22.22%	1.18%	2.40%	6.70%
	1.67%	0.24%	3.35%	0.48%	0.24%	0.72%	6.70%
No	13	8	112	7	60	89	289
	4.50%	2.77%	38.75%	2.42%	20.76%	30.80%	100.00%
	46.43%	72.73%	70.00%	77.78%	70.59%	71.20%	69.14%
	3.11%	1.91%	26.79%	1.67%	14.35%	21.29%	69.14%
Don't Know	3	0	5	0	2	3	13
	23.08%	0.00%	38.46%	0.00%	15.38%	23.08%	100.00%
	10.71%	0.00%	3.13%	0.00%	2.35%	2.40%	3.11%
	0.72%	0.00%	1.20%	0.00%	0.48%	0.72%	3.11%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Performance/payment bond requirement? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
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following been a barrier to obtaining work on SAWS projects as a prime contractor/ consultant? Performance/payment bond requirement?	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	4	1	8	2	1	6	22
	18.18%	4.55%	36.36%	9.09%	4.55%	27.27%	100.00%
	14.29%	9.09%	5.00%	22.22%	1.18%	4.80%	5.26%
	0.96%	0.24%	1.91%	0.48%	0.24%	1.44%	5.26%
No	16	8	118	7	60	86	295
	5.42%	2.71%	40.00%	2.37%	20.34%	29.15%	100.00%
	57.14%	72.73%	73.75%	77.78%	70.59%	68.80%	70.57%
	3.83%	1.91%	28.23%	1.67%	14.35%	20.57%	70.57%
Don't Know	3	0	5	0	2	3	13
	23.08%	0.00%	38.46%	0.00%	15.38%	23.08%	100.00%
	10.71%	0.00%	3.13%	0.00%	2.35%	2.40%	3.11%
	0.72%	0.00%	1.20%	0.00%	0.48%	0.72%	3.11%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Cost of bidding/proposing? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/ consultant? Cost of bidding/proposing?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	4	1	6	1	1	5	18
	22.22%	5.56%	33.33%	5.56%	5.56%	27.78%	100.00%
	14.29%	9.09%	3.75%	11.11%	1.18%	4.00%	4.31%
	0.96%	0.24%	1.44%	0.24%	0.24%	1.20%	4.31%
No	16	8	120	8	60	87	299
	5.35%	2.68%	40.13%	2.68%	20.07%	29.10%	100.00%
	57.14%	72.73%	75.00%	88.89%	70.59%	69.60%	71.53%
	3.83%	1.91%	28.71%	1.91%	14.35%	20.81%	71.53%
Don't Know	3	0	5	0	2	3	13
	23.08%	0.00%	38.46%	0.00%	15.38%	23.08%	100.00%

	10.71%	0.00%	3.13%	0.00%	2.35%	2.40%	3.11%
	0.72%	0.00%	1.20%	0.00%	0.48%	0.72%	3.11%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Financing? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Financing?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	4	0	8	2	1	1	16
	25.00%	0.00%	50.00%	12.50%	6.25%	6.25%	100.00%
	14.29%	0.00%	5.00%	22.22%	1.18%	0.80%	3.83%
	0.96%	0.00%	1.91%	0.48%	0.24%	0.24%	3.83%
No	16	9	118	7	60	91	301
	5.32%	2.99%	39.20%	2.33%	19.93%	30.23%	100.00%
	57.14%	81.82%	73.75%	77.78%	70.59%	72.80%	72.01%
	3.83%	2.15%	28.23%	1.67%	14.35%	21.77%	72.01%
Don't Know	3	0	5	0	2	3	13
	23.08%	0.00%	38.46%	0.00%	15.38%	23.08%	100.00%
	10.71%	0.00%	3.13%	0.00%	2.35%	2.40%	3.11%
	0.72%	0.00%	1.20%	0.00%	0.48%	0.72%	3.11%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Insurance (general liability, professional liability, etc.)? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the	Race, Ethnicity, Gender Classification (Business Ownership Classification)					
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following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Insurance (general liability, professional liability, etc.)?	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	2	1	5	2	2	3	15
	13.33%	6.67%	33.33%	13.33%	13.33%	20.00%	100.00%
	7.14%	9.09%	3.13%	22.22%	2.35%	2.40%	3.59%
	0.48%	0.24%	1.20%	0.48%	0.48%	0.72%	3.59%
No	18	8	121	7	59	89	302
	5.96%	2.65%	40.07%	2.32%	19.54%	29.47%	100.00%
	64.29%	72.73%	75.63%	77.78%	69.41%	71.20%	72.25%
	4.31%	1.91%	28.95%	1.67%	14.11%	21.29%	72.25%
Don't Know	3	0	5	0	2	3	13
	23.08%	0.00%	38.46%	0.00%	15.38%	23.08%	100.00%
	10.71%	0.00%	3.13%	0.00%	2.35%	2.40%	3.11%
	0.72%	0.00%	1.20%	0.00%	0.48%	0.72%	3.11%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Price of supplies/materials * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Price of supplies/materials	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	1	1	7	1	1	2	13
	7.69%	7.69%	53.85%	7.69%	7.69%	15.38%	100.00%
	3.57%	9.09%	4.38%	11.11%	1.18%	1.60%	3.11%
	0.24%	0.24%	1.67%	0.24%	0.24%	0.48%	3.11%
No	19	8	119	8	60	90	304
	6.25%	2.63%	39.14%	2.63%	19.74%	29.61%	100.00%
	67.86%	72.73%	74.38%	88.89%	70.59%	72.00%	72.73%
	4.55%	1.91%	28.47%	1.91%	14.35%	21.53%	72.73%
Don't Know	3	0	5	0	2	3	13
	23.08%	0.00%	38.46%	0.00%	15.38%	23.08%	100.00%

	10.71%	0.00%	3.13%	0.00%	2.35%	2.40%	3.11%
	0.72%	0.00%	1.20%	0.00%	0.48%	0.72%	3.11%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Proposal/Bid specifications * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Proposal/Bid specifications	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	1	1	11	2	5	14	34
	2.94%	2.94%	32.35%	5.88%	14.71%	41.18%	100.00%
	3.57%	9.09%	6.88%	22.22%	5.88%	11.20%	8.13%
	0.24%	0.24%	2.63%	0.48%	1.20%	3.35%	8.13%
No	19	8	115	7	55	78	282
	6.74%	2.84%	40.78%	2.48%	19.50%	27.66%	100.00%
	67.86%	72.73%	71.88%	77.78%	64.71%	62.40%	67.46%
	4.55%	1.91%	27.51%	1.67%	13.16%	18.66%	67.46%
Don't Know	3	0	5	0	3	3	14
	21.43%	0.00%	35.71%	0.00%	21.43%	21.43%	100.00%
	10.71%	0.00%	3.13%	0.00%	3.53%	2.40%	3.35%
	0.72%	0.00%	1.20%	0.00%	0.72%	0.72%	3.35%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Limited time given to prepare bid package or quote * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the	Race, Ethnicity, Gender Classification (Business Ownership Classification)					
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following been a barrier to obtaining work on SAWS projects as a prime contractor/ consultant? Limited time given to prepare bid package or quote	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	3	3	17	2	4	15	44
	6.82%	6.82%	38.64%	4.55%	9.09%	34.09%	100.00%
	10.71%	27.27%	10.63%	22.22%	4.71%	12.00%	10.53%
	0.72%	0.72%	4.07%	0.48%	0.96%	3.59%	10.53%
No	17	6	109	7	57	77	273
	6.23%	2.20%	39.93%	2.56%	20.88%	28.21%	100.00%
	60.71%	54.55%	68.13%	77.78%	67.06%	61.60%	65.31%
	4.07%	1.44%	26.08%	1.67%	13.64%	18.42%	65.31%
Don't Know	3	0	5	0	2	3	13
	23.08%	0.00%	38.46%	0.00%	15.38%	23.08%	100.00%
	10.71%	0.00%	3.13%	0.00%	2.35%	2.40%	3.11%
	0.72%	0.00%	1.20%	0.00%	0.48%	0.72%	3.11%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Limited knowledge of purchasing contracting policies and procedures * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/ consultant? Limited knowledge of purchasing contracting policies and procedures	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	2	2	14	1	5	9	33
	6.06%	6.06%	42.42%	3.03%	15.15%	27.27%	100.00%
	7.14%	18.18%	8.75%	11.11%	5.88%	7.20%	7.89%
	0.48%	0.48%	3.35%	0.24%	1.20%	2.15%	7.89%
No	18	7	112	8	56	82	283
	6.36%	2.47%	39.58%	2.83%	19.79%	28.98%	100.00%
	64.29%	63.64%	70.00%	88.89%	65.88%	65.60%	67.70%
	4.31%	1.67%	26.79%	1.91%	13.40%	19.62%	67.70%
Don't Know	3	0	5	0	2	4	14

	21.43%	0.00%	35.71%	0.00%	14.29%	28.57%	100.00%
	10.71%	0.00%	3.13%	0.00%	2.35%	3.20%	3.35%
	0.72%	0.00%	1.20%	0.00%	0.48%	0.96%	3.35%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Lack of experience * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Lack of experience	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	1	3	7	0	0	4	15
	6.67%	20.00%	46.67%	0.00%	0.00%	26.67%	100.00%
	3.57%	27.27%	4.38%	0.00%	0.00%	3.20%	3.59%
	0.24%	0.72%	1.67%	0.00%	0.00%	0.96%	3.59%
No	19	6	119	9	62	88	303
	6.27%	1.98%	39.27%	2.97%	20.46%	29.04%	100.00%
	67.86%	54.55%	74.38%	100.00%	72.94%	70.40%	72.49%
	4.55%	1.44%	28.47%	2.15%	14.83%	21.05%	72.49%
Don't Know	3	0	5	0	1	3	12
	25.00%	0.00%	41.67%	0.00%	8.33%	25.00%	100.00%
	10.71%	0.00%	3.13%	0.00%	1.18%	2.40%	2.87%
	0.72%	0.00%	1.20%	0.00%	0.24%	0.72%	2.87%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Lack of personnel * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Lack of personnel	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	1	1	6	0	0	2	10
	10.00%	10.00%	60.00%	0.00%	0.00%	20.00%	100.00%
	3.57%	9.09%	3.75%	0.00%	0.00%	1.60%	2.39%
	0.24%	0.24%	1.44%	0.00%	0.00%	0.48%	2.39%
No	19	8	120	9	62	90	308
	6.17%	2.60%	38.96%	2.92%	20.13%	29.22%	100.00%
	67.86%	72.73%	75.00%	100.00%	72.94%	72.00%	73.68%
	4.55%	1.91%	28.71%	2.15%	14.83%	21.53%	73.68%
Don't Know	3	0	5	0	1	3	12
	25.00%	0.00%	41.67%	0.00%	8.33%	25.00%	100.00%
	10.71%	0.00%	3.13%	0.00%	1.18%	2.40%	2.87%
	0.72%	0.00%	1.20%	0.00%	0.24%	0.72%	2.87%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Contract too large * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Contract too large	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	5	1	13	2	2	7	30
	16.67%	3.33%	43.33%	6.67%	6.67%	23.33%	100.00%
	17.86%	9.09%	8.13%	22.22%	2.35%	5.60%	7.18%
	1.20%	0.24%	3.11%	0.48%	0.48%	1.67%	7.18%
No	15	8	113	7	60	85	288
	5.21%	2.78%	39.24%	2.43%	20.83%	29.51%	100.00%
	53.57%	72.73%	70.63%	77.78%	70.59%	68.00%	68.90%
	3.59%	1.91%	27.03%	1.67%	14.35%	20.33%	68.90%
Don't Know	3	0	5	0	1	3	12
	25.00%	0.00%	41.67%	0.00%	8.33%	25.00%	100.00%

	10.71%	0.00%	3.13%	0.00%	1.18%	2.40%	2.87%
	0.72%	0.00%	1.20%	0.00%	0.24%	0.72%	2.87%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Selection process * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Selection process	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	2	4	22	2	9	12	51
	3.92%	7.84%	43.14%	3.92%	17.65%	23.53%	100.00%
	7.14%	36.36%	13.75%	22.22%	10.59%	9.60%	12.20%
	0.48%	0.96%	5.26%	0.48%	2.15%	2.87%	12.20%
No	18	4	103	7	52	80	264
	6.82%	1.52%	39.02%	2.65%	19.70%	30.30%	100.00%
	64.29%	36.36%	64.38%	77.78%	61.18%	64.00%	63.16%
	4.31%	0.96%	24.64%	1.67%	12.44%	19.14%	63.16%
Don't Know	3	1	6	0	2	3	15
	20.00%	6.67%	40.00%	0.00%	13.33%	20.00%	100.00%
	10.71%	9.09%	3.75%	0.00%	2.35%	2.40%	3.59%
	0.72%	0.24%	1.44%	0.00%	0.48%	0.72%	3.59%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Unnecessary restrictive contract specifications * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the	Race, Ethnicity, Gender Classification (Business Ownership Classification)					
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following been a barrier to obtaining work on SAWS projects as a prime contractor/ consultant? Unnecessary restrictive contract specifications	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	2	3	13	2	3	9	32
	6.25%	9.38%	40.63%	6.25%	9.38%	28.13%	100.00%
	7.14%	27.27%	8.13%	22.22%	3.53%	7.20%	7.66%
	0.48%	0.72%	3.11%	0.48%	0.72%	2.15%	7.66%
No	18	6	113	7	58	83	285
	6.32%	2.11%	39.65%	2.46%	20.35%	29.12%	100.00%
	64.29%	54.55%	70.63%	77.78%	68.24%	66.40%	68.18%
	4.31%	1.44%	27.03%	1.67%	13.88%	19.86%	68.18%
Don't Know	3	0	5	0	2	3	13
	23.08%	0.00%	38.46%	0.00%	15.38%	23.08%	100.00%
	10.71%	0.00%	3.13%	0.00%	2.35%	2.40%	3.11%
	0.72%	0.00%	1.20%	0.00%	0.48%	0.72%	3.11%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Slow payment or nonpayment * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/ consultant? Slow payment or nonpayment	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	0	2	4	0	1	4	11
	0.00%	18.18%	36.36%	0.00%	9.09%	36.36%	100.00%
	0.00%	18.18%	2.50%	0.00%	1.18%	3.20%	2.63%
	0.00%	0.48%	0.96%	0.00%	0.24%	0.96%	2.63%
No	20	7	122	9	60	88	306
	6.54%	2.29%	39.87%	2.94%	19.61%	28.76%	100.00%
	71.43%	63.64%	76.25%	100.00%	70.59%	70.40%	73.21%
	4.78%	1.67%	29.19%	2.15%	14.35%	21.05%	73.21%
Don't Know	3	0	5	0	2	3	13
	23.08%	0.00%	38.46%	0.00%	15.38%	23.08%	100.00%

	10.71%	0.00%	3.13%	0.00%	2.35%	2.40%	3.11%
	0.72%	0.00%	1.20%	0.00%	0.48%	0.72%	3.11%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Competing with large companies * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Competing with large companies	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	7	6	43	5	13	17	91
	7.69%	6.59%	47.25%	5.49%	14.29%	18.68%	100.00%
	25.00%	54.55%	26.88%	55.56%	15.29%	13.60%	21.77%
	1.67%	1.44%	10.29%	1.20%	3.11%	4.07%	21.77%
No	13	3	83	4	49	75	227
	5.73%	1.32%	36.56%	1.76%	21.59%	33.04%	100.00%
	46.43%	27.27%	51.88%	44.44%	57.65%	60.00%	54.31%
	3.11%	0.72%	19.86%	0.96%	11.72%	17.94%	54.31%
Don't Know	3	0	5	0	1	3	12
	25.00%	0.00%	41.67%	0.00%	8.33%	25.00%	100.00%
	10.71%	0.00%	3.13%	0.00%	1.18%	2.40%	2.87%
	0.72%	0.00%	1.20%	0.00%	0.24%	0.72%	2.87%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q32 When you were a prime contractor/vendor, what was the average amount of time that it typically took to receive payment for your services on SAWS funded projects * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q32 When you were a prime	Race, Ethnicity, Gender Classification (Business Ownership Classification)					
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contractor/vendor, what was the average amount of time that it typically took to receive payment for your services on SAWS funded projects	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Less Than 30 Days	1	2	15	0	12	22	52
	1.92%	3.85%	28.85%	0.00%	23.08%	42.31%	100.00%
	3.57%	18.18%	9.38%	0.00%	14.12%	17.60%	12.44%
	0.24%	0.48%	3.59%	0.00%	2.87%	5.26%	12.44%
31-60 Days	1	2	17	1	4	18	43
	2.33%	4.65%	39.53%	2.33%	9.30%	41.86%	100.00%
	3.57%	18.18%	10.63%	11.11%	4.71%	14.40%	10.29%
	0.24%	0.48%	4.07%	0.24%	0.96%	4.31%	10.29%
61-90 Days	1	0	3	0	0	4	8
	12.50%	0.00%	37.50%	0.00%	0.00%	50.00%	100.00%
	3.57%	0.00%	1.88%	0.00%	0.00%	3.20%	1.91%
	0.24%	0.00%	0.72%	0.00%	0.00%	0.96%	1.91%
91-120 Days	0	0	2	0	0	2	4
	0.00%	0.00%	50.00%	0.00%	0.00%	50.00%	100.00%
	0.00%	0.00%	1.25%	0.00%	0.00%	1.60%	0.96%
	0.00%	0.00%	0.48%	0.00%	0.00%	0.48%	0.96%
Not Applicable	20	5	92	8	46	46	217
	9.22%	2.30%	42.40%	3.69%	21.20%	21.20%	100.00%
	71.43%	45.45%	57.50%	88.89%	54.12%	36.80%	51.91%
	4.78%	1.20%	22.01%	1.91%	11.00%	11.00%	51.91%
Don't Know	0	0	2	0	1	3	6
	0.00%	0.00%	33.33%	0.00%	16.67%	50.00%	100.00%
	0.00%	0.00%	1.25%	0.00%	1.18%	2.40%	1.44%
	0.00%	0.00%	0.48%	0.00%	0.24%	0.72%	1.44%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q33 Between January 1, 2011 and December 31, 2012, have you ever submitted a bid or quote for a SAWS contract, were informed that you were the lowest bidder, and then found out that another firm was actually doing the work? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q33 Between January 1, 2011 and December	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
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31, 2012, have you ever submitted a bid or quote for a SAWS contract, were informed that you were the lowest bidder, and then found out that another firm was actually doing the work?	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	1	0	3	0	1	3	8
	12.50%	0.00%	37.50%	0.00%	12.50%	37.50%	100.00%
	3.57%	0.00%	1.88%	0.00%	1.18%	2.40%	1.91%
	0.24%	0.00%	0.72%	0.00%	0.24%	0.72%	1.91%
No	22	9	125	9	62	92	319
	6.90%	2.82%	39.18%	2.82%	19.44%	28.84%	100.00%
	78.57%	81.82%	78.13%	100.00%	72.94%	73.60%	76.32%
	5.26%	2.15%	29.90%	2.15%	14.83%	22.01%	76.32%
Don't Know	0	0	3	0	0	0	3
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	1.88%	0.00%	0.00%	0.00%	0.72%
	0.00%	0.00%	0.72%	0.00%	0.00%	0.00%	0.72%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q34 As a prime contractor/consultant, are you required to have bonding? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q34 As a prime contractor/consultant, are you required to have bonding?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	6	3	57	3	11	28	108
	5.56%	2.78%	52.78%	2.78%	10.19%	25.93%	100.00%
	21.43%	27.27%	35.63%	33.33%	12.94%	22.40%	25.84%
	1.44%	0.72%	13.64%	0.72%	2.63%	6.70%	25.84%
No	17	6	72	6	52	67	220
	7.73%	2.73%	32.73%	2.73%	23.64%	30.45%	100.00%
	60.71%	54.55%	45.00%	66.67%	61.18%	53.60%	52.63%
	4.07%	1.44%	17.22%	1.44%	12.44%	16.03%	52.63%
Don't Know	0	0	2	0	0	0	2
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%

	0.00%	0.00%	1.25%	0.00%	0.00%	0.00%	0.48%
	0.00%	0.00%	0.48%	0.00%	0.00%	0.00%	0.48%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q35 What is your current aggregate bonding limit? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q35 What is your current aggregate bonding limit?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Below \$100,000	0	0	8	1	1	0	10
	0.00%	0.00%	80.00%	10.00%	10.00%	0.00%	100.00%
	0.00%	0.00%	5.00%	11.11%	1.18%	0.00%	2.39%
	0.00%	0.00%	1.91%	0.24%	0.24%	0.00%	2.39%
\$100,001 to \$250,000	0	0	4	0	2	0	6
	0.00%	0.00%	66.67%	0.00%	33.33%	0.00%	100.00%
	0.00%	0.00%	2.50%	0.00%	2.35%	0.00%	1.44%
	0.00%	0.00%	0.96%	0.00%	0.48%	0.00%	1.44%
\$250,001 to \$500,000	1	0	5	0	0	0	6
	16.67%	0.00%	83.33%	0.00%	0.00%	0.00%	100.00%
	3.57%	0.00%	3.13%	0.00%	0.00%	0.00%	1.44%
	0.24%	0.00%	1.20%	0.00%	0.00%	0.00%	1.44%
\$500,001 to \$1 million	1	0	8	0	2	6	17
	5.88%	0.00%	47.06%	0.00%	11.76%	35.29%	100.00%
	3.57%	0.00%	5.00%	0.00%	2.35%	4.80%	4.07%
	0.24%	0.00%	1.91%	0.00%	0.48%	1.44%	4.07%
\$1,000,001 to \$1.5 million	2	0	8	1	1	2	14
	14.29%	0.00%	57.14%	7.14%	7.14%	14.29%	100.00%
	7.14%	0.00%	5.00%	11.11%	1.18%	1.60%	3.35%
	0.48%	0.00%	1.91%	0.24%	0.24%	0.48%	3.35%
\$1,500,001 to \$3 million	0	0	9	1	2	3	15
	0.00%	0.00%	60.00%	6.67%	13.33%	20.00%	100.00%
	0.00%	0.00%	5.63%	11.11%	2.35%	2.40%	3.59%
	0.00%	0.00%	2.15%	0.24%	0.48%	0.72%	3.59%
\$3,00,001 to \$5 million	1	1	4	0	1	0	7
	14.29%	14.29%	57.14%	0.00%	14.29%	0.00%	100.00%

	3.57%	9.09%	2.50%	0.00%	1.18%	0.00%	1.67%
	0.24%	0.24%	0.96%	0.00%	0.24%	0.00%	1.67%
Over \$5 million	0	2	7	0	3	9	21
	0.00%	9.52%	33.33%	0.00%	14.29%	42.86%	100.00%
	0.00%	18.18%	4.38%	0.00%	3.53%	7.20%	5.02%
	0.00%	0.48%	1.67%	0.00%	0.72%	2.15%	5.02%
Don't Know	1	0	4	0	0	8	13
	7.69%	0.00%	30.77%	0.00%	0.00%	61.54%	100.00%
	3.57%	0.00%	2.50%	0.00%	0.00%	6.40%	3.11%
	0.24%	0.00%	0.96%	0.00%	0.00%	1.91%	3.11%
No Response	22	8	103	6	73	97	309
	7.12%	2.59%	33.33%	1.94%	23.62%	31.39%	100.00%
	78.57%	72.73%	64.38%	66.67%	85.88%	77.60%	73.92%
	5.26%	1.91%	24.64%	1.44%	17.46%	23.21%	73.92%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q36 What is your current single project bonding limit? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q36 What is your current single project bonding limit?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Below \$100,000	0	0	8	1	0	0	9
	0.00%	0.00%	88.89%	11.11%	0.00%	0.00%	100.00%
	0.00%	0.00%	5.00%	11.11%	0.00%	0.00%	2.15%
	0.00%	0.00%	1.91%	0.24%	0.00%	0.00%	2.15%
\$100,001 to \$250,000	0	0	5	0	2	0	7
	0.00%	0.00%	71.43%	0.00%	28.57%	0.00%	100.00%
	0.00%	0.00%	3.13%	0.00%	2.35%	0.00%	1.67%
	0.00%	0.00%	1.20%	0.00%	0.48%	0.00%	1.67%
\$250,001 to \$500,000	2	0	5	0	0	1	8
	25.00%	0.00%	62.50%	0.00%	0.00%	12.50%	100.00%
	7.14%	0.00%	3.13%	0.00%	0.00%	0.80%	1.91%
	0.48%	0.00%	1.20%	0.00%	0.00%	0.24%	1.91%
\$500,001 to \$1 million	1	0	6	0	2	4	13
	7.69%	0.00%	46.15%	0.00%	15.38%	30.77%	100.00%
	3.57%	0.00%	3.75%	0.00%	2.35%	3.20%	3.11%
	0.24%	0.00%	1.44%	0.00%	0.48%	0.96%	3.11%
\$1,000,001 to \$1.5 million	2	1	8	1	2	2	16
	12.50%	6.25%	50.00%	6.25%	12.50%	12.50%	100.00%

	7.14%	9.09%	5.00%	11.11%	2.35%	1.60%	3.83%
	0.48%	0.24%	1.91%	0.24%	0.48%	0.48%	3.83%
\$1,500,001 to \$3 million	0	0	8	1	3	4	16
	0.00%	0.00%	50.00%	6.25%	18.75%	25.00%	100.00%
	0.00%	0.00%	5.00%	11.11%	3.53%	3.20%	3.83%
	0.00%	0.00%	1.91%	0.24%	0.72%	0.96%	3.83%
\$3,00,001 to \$5 million	0	0	5	0	1	3	9
	0.00%	0.00%	55.56%	0.00%	11.11%	33.33%	100.00%
	0.00%	0.00%	3.13%	0.00%	1.18%	2.40%	2.15%
	0.00%	0.00%	1.20%	0.00%	0.24%	0.72%	2.15%
Over \$5 million	0	2	6	0	1	6	15
	0.00%	13.33%	40.00%	0.00%	6.67%	40.00%	100.00%
	0.00%	18.18%	3.75%	0.00%	1.18%	4.80%	3.59%
	0.00%	0.48%	1.44%	0.00%	0.24%	1.44%	3.59%
Don't Know	1	0	6	0	1	8	16
	6.25%	0.00%	37.50%	0.00%	6.25%	50.00%	100.00%
	3.57%	0.00%	3.75%	0.00%	1.18%	6.40%	3.83%
	0.24%	0.00%	1.44%	0.00%	0.24%	1.91%	3.83%
No Response	22	8	103	6	73	97	309
	7.12%	2.59%	33.33%	1.94%	23.62%	31.39%	100.00%
	78.57%	72.73%	64.38%	66.67%	85.88%	77.60%	73.92%
	5.26%	1.91%	24.64%	1.44%	17.46%	23.21%	73.92%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q37 As a prime contractor/consultant did you experience discriminatory behavior by SAWS when bidding or working on a project between 2011 and 2013 * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q37 As a prime contractor/consultant did you experience discriminatory behavior by SAWS when bidding or working on a project between 2011 and 2013	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	0	0	2	0	0	1	3
	0.00%	0.00%	66.67%	0.00%	0.00%	33.33%	100.00%
	0.00%	0.00%	1.25%	0.00%	0.00%	0.80%	0.72%
	0.00%	0.00%	0.48%	0.00%	0.00%	0.24%	0.72%
No	14	6	90	4	43	83	240
	5.83%	2.50%	37.50%	1.67%	17.92%	34.58%	100.00%
	50.00%	54.55%	56.25%	44.44%	50.59%	66.40%	57.42%
	3.35%	1.44%	21.53%	0.96%	10.29%	19.86%	57.42%

Not Applicable	9	3	39	5	20	11	87
	10.34%	3.45%	44.83%	5.75%	22.99%	12.64%	100.00%
	32.14%	27.27%	24.38%	55.56%	23.53%	8.80%	20.81%
	2.15%	0.72%	9.33%	1.20%	4.78%	2.63%	20.81%
No Response	5	2	29	0	22	30	88
	5.68%	2.27%	32.95%	0.00%	25.00%	34.09%	100.00%
	17.86%	18.18%	18.13%	0.00%	25.88%	24.00%	21.05%
	1.20%	0.48%	6.94%	0.00%	5.26%	7.18%	21.05%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q38 What was the most noticeable way you became aware of the discrimination against your company? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q38 What was the most noticeable way you became aware of the discrimination against your company?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Verbal Comment	0	0	2	0	0	0	2
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	1.25%	0.00%	0.00%	0.00%	0.48%
	0.00%	0.00%	0.48%	0.00%	0.00%	0.00%	0.48%
Written Statement	0	0	0	0	0	1	1
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.24%
No Response	28	11	158	9	85	124	415
	6.75%	2.65%	38.07%	2.17%	20.48%	29.88%	100.00%
	100.00%	100.00%	98.75%	100.00%	100.00%	99.20%	99.28%
	6.70%	2.63%	37.80%	2.15%	20.33%	29.67%	99.28%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q39 Which of the following do you consider the primary reason for your company being discriminated against? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q39 Which of the following do you consider the primary reason for your company being discriminated against?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Owner's Race or Ethnicity	0	0	1	0	0	0	1

	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
Both	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
Don't Know	0	0	0	0	0	1	1
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.24%
No Response	28	11	158	9	85	124	415
	6.75%	2.65%	38.07%	2.17%	20.48%	29.88%	100.00%
	100.00%	100.00%	98.75%	100.00%	100.00%	99.20%	99.28%
	6.70%	2.63%	37.80%	2.15%	20.33%	29.67%	99.28%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q40 When did the discrimination first occur? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q40 When did the discrimination first occur?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
During Bidding Process	0	0	1	0	0	1	2
	0.00%	0.00%	50.00%	0.00%	0.00%	50.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.80%	0.48%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.24%	0.48%
Both	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
No Response	28	11	158	9	85	124	415
	6.75%	2.65%	38.07%	2.17%	20.48%	29.88%	100.00%
	100.00%	100.00%	98.75%	100.00%	100.00%	99.20%	99.28%
	6.70%	2.63%	37.80%	2.15%	20.33%	29.67%	99.28%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q41 Did you file a complaint? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q41 Did you file a complaint?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
No	0	0	2	0	0	1	3
	0.00%	0.00%	66.67%	0.00%	0.00%	33.33%	100.00%
	0.00%	0.00%	1.25%	0.00%	0.00%	0.80%	0.72%
	0.00%	0.00%	0.48%	0.00%	0.00%	0.24%	0.72%
No Response	28	11	158	9	85	124	415
	6.75%	2.65%	38.07%	2.17%	20.48%	29.88%	100.00%
	100.00%	100.00%	98.75%	100.00%	100.00%	99.20%	99.28%
	6.70%	2.63%	37.80%	2.15%	20.33%	29.67%	99.28%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q42 In general, which of the following dollar ranges best approximates your company's largest subcontract awarded between January 1, 2011 and December 31, 2013? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q42 In general, which of the following dollar ranges best approximates your company's largest subcontract awarded between January 1, 2011 and December 31, 2013?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
None	5	1	8	2	3	3	22
	22.73%	4.55%	36.36%	9.09%	13.64%	13.64%	100.00%
	17.86%	9.09%	5.00%	22.22%	3.53%	2.40%	5.26%
	1.20%	0.24%	1.91%	0.48%	0.72%	0.72%	5.26%
Up to \$50,000?	9	2	33	2	14	12	72
	12.50%	2.78%	45.83%	2.78%	19.44%	16.67%	100.00%
	32.14%	18.18%	20.63%	22.22%	16.47%	9.60%	17.22%
	2.15%	0.48%	7.89%	0.48%	3.35%	2.87%	17.22%
\$50,001 to \$100,000?	0	1	18	0	8	17	44
	0.00%	2.27%	40.91%	0.00%	18.18%	38.64%	100.00%
	0.00%	9.09%	11.25%	0.00%	9.41%	13.60%	10.53%
	0.00%	0.24%	4.31%	0.00%	1.91%	4.07%	10.53%
\$100,001 to \$200,000?	2	1	11	0	4	8	26
	7.69%	3.85%	42.31%	0.00%	15.38%	30.77%	100.00%
	7.14%	9.09%	6.88%	0.00%	4.71%	6.40%	6.22%
	0.48%	0.24%	2.63%	0.00%	0.96%	1.91%	6.22%
\$200,001 to \$300,000?	0	1	10	1	2	5	19
	0.00%	5.26%	52.63%	5.26%	10.53%	26.32%	100.00%

	0.00%	9.09%	6.25%	11.11%	2.35%	4.00%	4.55%
	0.00%	0.24%	2.39%	0.24%	0.48%	1.20%	4.55%
\$300,001 to \$400,000?	0	0	5	0	0	2	7
	0.00%	0.00%	71.43%	0.00%	0.00%	28.57%	100.00%
	0.00%	0.00%	3.13%	0.00%	0.00%	1.60%	1.67%
	0.00%	0.00%	1.20%	0.00%	0.00%	0.48%	1.67%
\$400,001 to \$500,000?	0	0	8	0	2	2	12
	0.00%	0.00%	66.67%	0.00%	16.67%	16.67%	100.00%
	0.00%	0.00%	5.00%	0.00%	2.35%	1.60%	2.87%
	0.00%	0.00%	1.91%	0.00%	0.48%	0.48%	2.87%
\$500,001 to \$1 million?	2	0	9	1	4	5	21
	9.52%	0.00%	42.86%	4.76%	19.05%	23.81%	100.00%
	7.14%	0.00%	5.63%	11.11%	4.71%	4.00%	5.02%
	0.48%	0.00%	2.15%	0.24%	0.96%	1.20%	5.02%
Over \$1 million?	1	1	11	0	7	15	35
	2.86%	2.86%	31.43%	0.00%	20.00%	42.86%	100.00%
	3.57%	9.09%	6.88%	0.00%	8.24%	12.00%	8.37%
	0.24%	0.24%	2.63%	0.00%	1.67%	3.59%	8.37%
Don't Know	0	0	7	0	4	7	18
	0.00%	0.00%	38.89%	0.00%	22.22%	38.89%	100.00%
	0.00%	0.00%	4.38%	0.00%	4.71%	5.60%	4.31%
	0.00%	0.00%	1.67%	0.00%	0.96%	1.67%	4.31%
No Response	9	4	40	3	37	49	142
	6.34%	2.82%	28.17%	2.11%	26.06%	34.51%	100.00%
	32.14%	36.36%	25.00%	33.33%	43.53%	39.20%	33.97%
	2.15%	0.96%	9.57%	0.72%	8.85%	11.72%	33.97%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q43 Between January 1, 2011 and December 31, 2013, how many times has your company been awarded a subcontract with a prime contractor for a project with SAWS? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q43 Between January 1, 2011 and December 31, 2013, how many times has your company been awarded a subcontract with a prime contractor for a project with SAWS?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
None	16	4	95	6	38	42	201
	7.96%	1.99%	47.26%	2.99%	18.91%	20.90%	100.00%
	57.14%	36.36%	59.38%	66.67%	44.71%	33.60%	48.09%

	3.83%	0.96%	22.73%	1.44%	9.09%	10.05%	48.09%
1-10 times	3	3	25	0	6	30	67
	4.48%	4.48%	37.31%	0.00%	8.96%	44.78%	100.00%
	10.71%	27.27%	15.63%	0.00%	7.06%	24.00%	16.03%
	0.72%	0.72%	5.98%	0.00%	1.44%	7.18%	16.03%
11-25 times	0	0	0	0	1	3	4
	0.00%	0.00%	0.00%	0.00%	25.00%	75.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	1.18%	2.40%	0.96%
	0.00%	0.00%	0.00%	0.00%	0.24%	0.72%	0.96%
26-50 times	0	0	0	0	0	1	1
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.24%
Don't Know	0	0	0	0	3	0	3
	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	3.53%	0.00%	0.72%
	0.00%	0.00%	0.00%	0.00%	0.72%	0.00%	0.72%
No Response	9	4	40	3	37	49	142
	6.34%	2.82%	28.17%	2.11%	26.06%	34.51%	100.00%
	32.14%	36.36%	25.00%	33.33%	43.53%	39.20%	33.97%
	2.15%	0.96%	9.57%	0.72%	8.85%	11.72%	33.97%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q44 Between January 1, 2011 and December 31, 2013, which of the following dollar ranges approximates your company's total volume of work on a SAWS project? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q44 Between January 1, 2011 and December 31, 2013, which of the following dollar ranges approximates your company's total volume of work on a SAWS project?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
None	0	0	1	0	1	0	2
	0.00%	0.00%	50.00%	0.00%	50.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	1.18%	0.00%	0.48%
	0.00%	0.00%	0.24%	0.00%	0.24%	0.00%	0.48%
Up to \$50,000?	1	1	9	0	1	7	19
	5.26%	5.26%	47.37%	0.00%	5.26%	36.84%	100.00%
	3.57%	9.09%	5.63%	0.00%	1.18%	5.60%	4.55%
	0.24%	0.24%	2.15%	0.00%	0.24%	1.67%	4.55%
\$50,001 to \$100,000?	0	1	1	0	2	8	12

	0.00%	8.33%	8.33%	0.00%	16.67%	66.67%	100.00%
	0.00%	9.09%	0.63%	0.00%	2.35%	6.40%	2.87%
	0.00%	0.24%	0.24%	0.00%	0.48%	1.91%	2.87%
\$100,001 to \$200,000?	1	0	6	0	2	3	12
	8.33%	0.00%	50.00%	0.00%	16.67%	25.00%	100.00%
	3.57%	0.00%	3.75%	0.00%	2.35%	2.40%	2.87%
	0.24%	0.00%	1.44%	0.00%	0.48%	0.72%	2.87%
\$200,001 to \$500,000?	1	0	3	0	1	7	12
	8.33%	0.00%	25.00%	0.00%	8.33%	58.33%	100.00%
	3.57%	0.00%	1.88%	0.00%	1.18%	5.60%	2.87%
	0.24%	0.00%	0.72%	0.00%	0.24%	1.67%	2.87%
\$500,001 to \$1 million?	0	1	2	0	0	1	4
	0.00%	25.00%	50.00%	0.00%	0.00%	25.00%	100.00%
	0.00%	9.09%	1.25%	0.00%	0.00%	0.80%	0.96%
	0.00%	0.24%	0.48%	0.00%	0.00%	0.24%	0.96%
\$1,000,001 to \$3 million?	0	0	0	0	0	4	4
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	3.20%	0.96%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.96%	0.96%
Over \$5 million?	0	0	0	0	0	2	2
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	1.60%	0.48%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.48%	0.48%
Don't Know	0	0	3	0	3	3	9
	0.00%	0.00%	33.33%	0.00%	33.33%	33.33%	100.00%
	0.00%	0.00%	1.88%	0.00%	3.53%	2.40%	2.15%
	0.00%	0.00%	0.72%	0.00%	0.72%	0.72%	2.15%
No Response	25	8	135	9	75	90	342
	7.31%	2.34%	39.47%	2.63%	21.93%	26.32%	100.00%
	89.29%	72.73%	84.38%	100.00%	88.24%	72.00%	81.82%
	5.98%	1.91%	32.30%	2.15%	17.94%	21.53%	81.82%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

**Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Performance/payment bond requirement? *
Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].**

	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
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Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Performance/payment bond requirement?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	0	1	2	0	0	1	4
	0.00%	25.00%	50.00%	0.00%	0.00%	25.00%	100.00%
	0.00%	9.09%	1.25%	0.00%	0.00%	0.80%	0.96%
	0.00%	0.24%	0.48%	0.00%	0.00%	0.24%	0.96%
No	3	2	23	0	10	34	72
	4.17%	2.78%	31.94%	0.00%	13.89%	47.22%	100.00%
	10.71%	18.18%	14.38%	0.00%	11.76%	27.20%	17.22%
	0.72%	0.48%	5.50%	0.00%	2.39%	8.13%	17.22%
No Response	25	8	135	9	75	90	342
	7.31%	2.34%	39.47%	2.63%	21.93%	26.32%	100.00%
	89.29%	72.73%	84.38%	100.00%	88.24%	72.00%	81.82%
	5.98%	1.91%	32.30%	2.15%	17.94%	21.53%	81.82%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Cost of bidding/proposing? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Cost of bidding/proposing?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	0	0	2	0	0	2	4
	0.00%	0.00%	50.00%	0.00%	0.00%	50.00%	100.00%
	0.00%	0.00%	1.25%	0.00%	0.00%	1.60%	0.96%
	0.00%	0.00%	0.48%	0.00%	0.00%	0.48%	0.96%
No	3	3	23	0	10	33	72
	4.17%	4.17%	31.94%	0.00%	13.89%	45.83%	100.00%
	10.71%	27.27%	14.38%	0.00%	11.76%	26.40%	17.22%
	0.72%	0.72%	5.50%	0.00%	2.39%	7.89%	17.22%
No Response	25	8	135	9	75	90	342
	7.31%	2.34%	39.47%	2.63%	21.93%	26.32%	100.00%
	89.29%	72.73%	84.38%	100.00%	88.24%	72.00%	81.82%
	5.98%	1.91%	32.30%	2.15%	17.94%	21.53%	81.82%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Financing? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Financing?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	1	0	1	0	0	1	3
	33.33%	0.00%	33.33%	0.00%	0.00%	33.33%	100.00%
	3.57%	0.00%	0.63%	0.00%	0.00%	0.80%	0.72%
	0.24%	0.00%	0.24%	0.00%	0.00%	0.24%	0.72%
No	2	3	24	0	10	34	73
	2.74%	4.11%	32.88%	0.00%	13.70%	46.58%	100.00%
	7.14%	27.27%	15.00%	0.00%	11.76%	27.20%	17.46%
	0.48%	0.72%	5.74%	0.00%	2.39%	8.13%	17.46%
No Response	25	8	135	9	75	90	342
	7.31%	2.34%	39.47%	2.63%	21.93%	26.32%	100.00%
	89.29%	72.73%	84.38%	100.00%	88.24%	72.00%	81.82%
	5.98%	1.91%	32.30%	2.15%	17.94%	21.53%	81.82%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Insurance (general liability, professional liability, etc.)? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Insurance (general liability, professional liability, etc.)?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	0	0	0	0	0	1	1
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.24%
No	3	3	25	0	10	34	75
	4.00%	4.00%	33.33%	0.00%	13.33%	45.33%	100.00%
	10.71%	27.27%	15.63%	0.00%	11.76%	27.20%	17.94%
	0.72%	0.72%	5.98%	0.00%	2.39%	8.13%	17.94%

No Response	25	8	135	9	75	90	342
	7.31%	2.34%	39.47%	2.63%	21.93%	26.32%	100.00%
	89.29%	72.73%	84.38%	100.00%	88.24%	72.00%	81.82%
	5.98%	1.91%	32.30%	2.15%	17.94%	21.53%	81.82%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Price of supplies/materials * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Price of supplies/materials	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	1	0	0	0	0	1	2
	50.00%	0.00%	0.00%	0.00%	0.00%	50.00%	100.00%
	3.57%	0.00%	0.00%	0.00%	0.00%	0.80%	0.48%
	0.24%	0.00%	0.00%	0.00%	0.00%	0.24%	0.48%
No	2	3	25	0	10	34	74
	2.70%	4.05%	33.78%	0.00%	13.51%	45.95%	100.00%
	7.14%	27.27%	15.63%	0.00%	11.76%	27.20%	17.70%
	0.48%	0.72%	5.98%	0.00%	2.39%	8.13%	17.70%
No Response	25	8	135	9	75	90	342
	7.31%	2.34%	39.47%	2.63%	21.93%	26.32%	100.00%
	89.29%	72.73%	84.38%	100.00%	88.24%	72.00%	81.82%
	5.98%	1.91%	32.30%	2.15%	17.94%	21.53%	81.82%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Limited time given to prepare bid package or quote * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Limited time given to prepare bid package or quote	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	0	1	3	0	0	5	9
	0.00%	11.11%	33.33%	0.00%	0.00%	55.56%	100.00%

	0.00%	9.09%	1.88%	0.00%	0.00%	4.00%	2.15%
	0.00%	0.24%	0.72%	0.00%	0.00%	1.20%	2.15%
No	3	2	22	0	10	30	67
	4.48%	2.99%	32.84%	0.00%	14.93%	44.78%	100.00%
	10.71%	18.18%	13.75%	0.00%	11.76%	24.00%	16.03%
	0.72%	0.48%	5.26%	0.00%	2.39%	7.18%	16.03%
No Response	25	8	135	9	75	90	342
	7.31%	2.34%	39.47%	2.63%	21.93%	26.32%	100.00%
	89.29%	72.73%	84.38%	100.00%	88.24%	72.00%	81.82%
	5.98%	1.91%	32.30%	2.15%	17.94%	21.53%	81.82%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Lack of experience * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Lack of experience	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	0	1	1	0	0	1	3
	0.00%	33.33%	33.33%	0.00%	0.00%	33.33%	100.00%
	0.00%	9.09%	0.63%	0.00%	0.00%	0.80%	0.72%
	0.00%	0.24%	0.24%	0.00%	0.00%	0.24%	0.72%
No	3	2	24	0	10	34	73
	4.11%	2.74%	32.88%	0.00%	13.70%	46.58%	100.00%
	10.71%	18.18%	15.00%	0.00%	11.76%	27.20%	17.46%
	0.72%	0.48%	5.74%	0.00%	2.39%	8.13%	17.46%
No Response	25	8	135	9	75	90	342
	7.31%	2.34%	39.47%	2.63%	21.93%	26.32%	100.00%
	89.29%	72.73%	84.38%	100.00%	88.24%	72.00%	81.82%
	5.98%	1.91%	32.30%	2.15%	17.94%	21.53%	81.82%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Lack of personnel * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q45 In your experience, have any of the	Race, Ethnicity, Gender Classification (Business Ownership Classification)					
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following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Lack of personnel	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	0	1	1	0	0	1	3
	0.00%	33.33%	33.33%	0.00%	0.00%	33.33%	100.00%
	0.00%	9.09%	0.63%	0.00%	0.00%	0.80%	0.72%
	0.00%	0.24%	0.24%	0.00%	0.00%	0.24%	0.72%
No	3	2	24	0	10	34	73
	4.11%	2.74%	32.88%	0.00%	13.70%	46.58%	100.00%
	10.71%	18.18%	15.00%	0.00%	11.76%	27.20%	17.46%
	0.72%	0.48%	5.74%	0.00%	2.39%	8.13%	17.46%
No Response	25	8	135	9	75	90	342
	7.31%	2.34%	39.47%	2.63%	21.93%	26.32%	100.00%
	89.29%	72.73%	84.38%	100.00%	88.24%	72.00%	81.82%
	5.98%	1.91%	32.30%	2.15%	17.94%	21.53%	81.82%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Contracts too large * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Contracts too large	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	0	0	1	0	0	4	5
	0.00%	0.00%	20.00%	0.00%	0.00%	80.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	3.20%	1.20%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.96%	1.20%
No	3	3	24	0	10	31	71
	4.23%	4.23%	33.80%	0.00%	14.08%	43.66%	100.00%
	10.71%	27.27%	15.00%	0.00%	11.76%	24.80%	16.99%
	0.72%	0.72%	5.74%	0.00%	2.39%	7.42%	16.99%
No Response	25	8	135	9	75	90	342
	7.31%	2.34%	39.47%	2.63%	21.93%	26.32%	100.00%
	89.29%	72.73%	84.38%	100.00%	88.24%	72.00%	81.82%
	5.98%	1.91%	32.30%	2.15%	17.94%	21.53%	81.82%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
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Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Slow payment or nonpayment * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Slow payment or nonpayment	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	1	1	1	0	0	2	5
	20.00%	20.00%	20.00%	0.00%	0.00%	40.00%	100.00%
	3.57%	9.09%	0.63%	0.00%	0.00%	1.60%	1.20%
	0.24%	0.24%	0.24%	0.00%	0.00%	0.48%	1.20%
No	2	2	24	0	10	33	71
	2.82%	2.82%	33.80%	0.00%	14.08%	46.48%	100.00%
	7.14%	18.18%	15.00%	0.00%	11.76%	26.40%	16.99%
	0.48%	0.48%	5.74%	0.00%	2.39%	7.89%	16.99%
No Response	25	8	135	9	75	90	342
	7.31%	2.34%	39.47%	2.63%	21.93%	26.32%	100.00%
	89.29%	72.73%	84.38%	100.00%	88.24%	72.00%	81.82%
	5.98%	1.91%	32.30%	2.15%	17.94%	21.53%	81.82%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Competing with large companies * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Competing with large companies	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	2	2	8	0	3	5	20
	10.00%	10.00%	40.00%	0.00%	15.00%	25.00%	100.00%
	7.14%	18.18%	5.00%	0.00%	3.53%	4.00%	4.78%
	0.48%	0.48%	1.91%	0.00%	0.72%	1.20%	4.78%
No	1	1	17	0	7	30	56
	1.79%	1.79%	30.36%	0.00%	12.50%	53.57%	100.00%
	3.57%	9.09%	10.63%	0.00%	8.24%	24.00%	13.40%
	0.24%	0.24%	4.07%	0.00%	1.67%	7.18%	13.40%
No Response	25	8	135	9	75	90	342
	7.31%	2.34%	39.47%	2.63%	21.93%	26.32%	100.00%

	89.29%	72.73%	84.38%	100.00%	88.24%	72.00%	81.82%
	5.98%	1.91%	32.30%	2.15%	17.94%	21.53%	81.82%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q46 Between January 1, 2011 and December 31, 2013, in general when you were a subcontractor what was the average amount of time that it typically took to receive payment for your services from the prime contractor/vendor? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q46 Between January 1, 2011 and December 31, 2013, in general when you were a subcontractor what was the average amount of time that it typically took to receive payment for your services from the prime contractor/vendor?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Less Than 30 Days	1	0	5	0	5	9	20
	5.00%	0.00%	25.00%	0.00%	25.00%	45.00%	100.00%
	3.57%	0.00%	3.13%	0.00%	5.88%	7.20%	4.78%
	0.24%	0.00%	1.20%	0.00%	1.20%	2.15%	4.78%
31-60 Days	1	1	14	0	1	16	33
	3.03%	3.03%	42.42%	0.00%	3.03%	48.48%	100.00%
	3.57%	9.09%	8.75%	0.00%	1.18%	12.80%	7.89%
	0.24%	0.24%	3.35%	0.00%	0.24%	3.83%	7.89%
61-90 Days	0	1	1	0	1	7	10
	0.00%	10.00%	10.00%	0.00%	10.00%	70.00%	100.00%
	0.00%	9.09%	0.63%	0.00%	1.18%	5.60%	2.39%
	0.00%	0.24%	0.24%	0.00%	0.24%	1.67%	2.39%
91-120 Days	1	1	1	0	0	2	5
	20.00%	20.00%	20.00%	0.00%	0.00%	40.00%	100.00%
	3.57%	9.09%	0.63%	0.00%	0.00%	1.60%	1.20%
	0.24%	0.24%	0.24%	0.00%	0.00%	0.48%	1.20%
Over 120 Days	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
Not Applicable	0	0	1	0	1	0	2
	0.00%	0.00%	50.00%	0.00%	50.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	1.18%	0.00%	0.48%
	0.00%	0.00%	0.24%	0.00%	0.24%	0.00%	0.48%
Don't Know	0	0	2	0	2	1	5
	0.00%	0.00%	40.00%	0.00%	40.00%	20.00%	100.00%

	0.00%	0.00%	1.25%	0.00%	2.35%	0.80%	1.20%
	0.00%	0.00%	0.48%	0.00%	0.48%	0.24%	1.20%
No Response	25	8	135	9	75	90	342
	7.31%	2.34%	39.47%	2.63%	21.93%	26.32%	100.00%
	89.29%	72.73%	84.38%	100.00%	88.24%	72.00%	81.82%
	5.98%	1.91%	32.30%	2.15%	17.94%	21.53%	81.82%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q47 Between January 1, 2011 and December 31, 2013, have you ever submitted a bid with a prime contractor for a project with SAWS, were informed that you were the lowest bidder, and then found out that another subcontractor was actually doing the work? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q47 Between January 1, 2011 and December 31, 2013, have you ever submitted a bid with a prime contractor for a project with SAWS, were informed that you were the lowest bidder, and then found out that another subcontractor was actually doing the work?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	2	0	5	0	2	1	10
	20.00%	0.00%	50.00%	0.00%	20.00%	10.00%	100.00%
	7.14%	0.00%	3.13%	0.00%	2.35%	0.80%	2.39%
	0.48%	0.00%	1.20%	0.00%	0.48%	0.24%	2.39%
No	17	7	114	6	46	75	265
	6.42%	2.64%	43.02%	2.26%	17.36%	28.30%	100.00%
	60.71%	63.64%	71.25%	66.67%	54.12%	60.00%	63.40%
	4.07%	1.67%	27.27%	1.44%	11.00%	17.94%	63.40%
Don't Know	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
No Response	9	4	40	3	37	49	142
	6.34%	2.82%	28.17%	2.11%	26.06%	34.51%	100.00%
	32.14%	36.36%	25.00%	33.33%	43.53%	39.20%	33.97%
	2.15%	0.96%	9.57%	0.72%	8.85%	11.72%	33.97%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q48 As a subcontractor, are you required to have bonding for company's type of work? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q48 As a subcontractor, are you required to have bonding for company's type of work?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	2	4	47	2	13	11	79
	2.53%	5.06%	59.49%	2.53%	16.46%	13.92%	100.00%
	7.14%	36.36%	29.38%	22.22%	15.29%	8.80%	18.90%
	0.48%	0.96%	11.24%	0.48%	3.11%	2.63%	18.90%
No	17	3	72	4	35	65	196
	8.67%	1.53%	36.73%	2.04%	17.86%	33.16%	100.00%
	60.71%	27.27%	45.00%	44.44%	41.18%	52.00%	46.89%
	4.07%	0.72%	17.22%	0.96%	8.37%	15.55%	46.89%
Don't Know	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
No Response	9	4	40	3	37	49	142
	6.34%	2.82%	28.17%	2.11%	26.06%	34.51%	100.00%
	32.14%	36.36%	25.00%	33.33%	43.53%	39.20%	33.97%
	2.15%	0.96%	9.57%	0.72%	8.85%	11.72%	33.97%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q49 What is your current aggregate bonding limit? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q49 What is your current aggregate bonding limit?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Below \$100,000	0	0	5	0	0	0	5
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	3.13%	0.00%	0.00%	0.00%	1.20%
	0.00%	0.00%	1.20%	0.00%	0.00%	0.00%	1.20%
\$100,001 to \$250,000	0	0	6	0	1	0	7
	0.00%	0.00%	85.71%	0.00%	14.29%	0.00%	100.00%
	0.00%	0.00%	3.75%	0.00%	1.18%	0.00%	1.67%
	0.00%	0.00%	1.44%	0.00%	0.24%	0.00%	1.67%
\$250,001 to \$500,000	1	0	5	0	1	0	7
	14.29%	0.00%	71.43%	0.00%	14.29%	0.00%	100.00%

	3.57%	0.00%	3.13%	0.00%	1.18%	0.00%	1.67%
	0.24%	0.00%	1.20%	0.00%	0.24%	0.00%	1.67%
\$500,001 to \$1 million	0	0	8	0	4	7	19
	0.00%	0.00%	42.11%	0.00%	21.05%	36.84%	100.00%
	0.00%	0.00%	5.00%	0.00%	4.71%	5.60%	4.55%
	0.00%	0.00%	1.91%	0.00%	0.96%	1.67%	4.55%
\$1,000,001 to \$1.5 million	0	0	7	1	1	0	9
	0.00%	0.00%	77.78%	11.11%	11.11%	0.00%	100.00%
	0.00%	0.00%	4.38%	11.11%	1.18%	0.00%	2.15%
	0.00%	0.00%	1.67%	0.24%	0.24%	0.00%	2.15%
\$1,500,001 to \$3 million	0	0	6	1	3	0	10
	0.00%	0.00%	60.00%	10.00%	30.00%	0.00%	100.00%
	0.00%	0.00%	3.75%	11.11%	3.53%	0.00%	2.39%
	0.00%	0.00%	1.44%	0.24%	0.72%	0.00%	2.39%
\$3,00,001 to \$5 million	0	2	2	0	0	0	4
	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	18.18%	1.25%	0.00%	0.00%	0.00%	0.96%
	0.00%	0.48%	0.48%	0.00%	0.00%	0.00%	0.96%
Over \$5 million	0	1	5	0	2	0	8
	0.00%	12.50%	62.50%	0.00%	25.00%	0.00%	100.00%
	0.00%	9.09%	3.13%	0.00%	2.35%	0.00%	1.91%
	0.00%	0.24%	1.20%	0.00%	0.48%	0.00%	1.91%
Don't Know	1	1	3	0	1	4	10
	10.00%	10.00%	30.00%	0.00%	10.00%	40.00%	100.00%
	3.57%	9.09%	1.88%	0.00%	1.18%	3.20%	2.39%
	0.24%	0.24%	0.72%	0.00%	0.24%	0.96%	2.39%
No Response	26	7	113	7	72	114	339
	7.67%	2.06%	33.33%	2.06%	21.24%	33.63%	100.00%
	92.86%	63.64%	70.63%	77.78%	84.71%	91.20%	81.10%
	6.22%	1.67%	27.03%	1.67%	17.22%	27.27%	81.10%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q50 What is your current single project bonding limit? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q50 What is your current single project bonding limit?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Below \$100,000	0	0	6	0	0	0	6
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%

	0.00%	0.00%	3.75%	0.00%	0.00%	0.00%	1.44%
	0.00%	0.00%	1.44%	0.00%	0.00%	0.00%	1.44%
\$100,001 to \$250,000	0	1	6	0	2	0	9
	0.00%	11.11%	66.67%	0.00%	22.22%	0.00%	100.00%
	0.00%	9.09%	3.75%	0.00%	2.35%	0.00%	2.15%
	0.00%	0.24%	1.44%	0.00%	0.48%	0.00%	2.15%
\$250,001 to \$500,000	1	0	5	0	2	0	8
	12.50%	0.00%	62.50%	0.00%	25.00%	0.00%	100.00%
	3.57%	0.00%	3.13%	0.00%	2.35%	0.00%	1.91%
	0.24%	0.00%	1.20%	0.00%	0.48%	0.00%	1.91%
\$500,001 to \$1 million	0	0	10	0	2	6	18
	0.00%	0.00%	55.56%	0.00%	11.11%	33.33%	100.00%
	0.00%	0.00%	6.25%	0.00%	2.35%	4.80%	4.31%
	0.00%	0.00%	2.39%	0.00%	0.48%	1.44%	4.31%
\$1,000,001 to \$1.5 million	0	1	6	1	2	1	11
	0.00%	9.09%	54.55%	9.09%	18.18%	9.09%	100.00%
	0.00%	9.09%	3.75%	11.11%	2.35%	0.80%	2.63%
	0.00%	0.24%	1.44%	0.24%	0.48%	0.24%	2.63%
\$1,500,001 to \$3 million	0	0	3	1	2	0	6
	0.00%	0.00%	50.00%	16.67%	33.33%	0.00%	100.00%
	0.00%	0.00%	1.88%	11.11%	2.35%	0.00%	1.44%
	0.00%	0.00%	0.72%	0.24%	0.48%	0.00%	1.44%
\$3,00,001 to \$5 million	0	0	4	0	0	0	4
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	2.50%	0.00%	0.00%	0.00%	0.96%
	0.00%	0.00%	0.96%	0.00%	0.00%	0.00%	0.96%
Over \$5 million	0	1	4	0	2	0	7
	0.00%	14.29%	57.14%	0.00%	28.57%	0.00%	100.00%
	0.00%	9.09%	2.50%	0.00%	2.35%	0.00%	1.67%
	0.00%	0.24%	0.96%	0.00%	0.48%	0.00%	1.67%
Don't Know	1	1	3	0	1	4	10
	10.00%	10.00%	30.00%	0.00%	10.00%	40.00%	100.00%
	3.57%	9.09%	1.88%	0.00%	1.18%	3.20%	2.39%
	0.24%	0.24%	0.72%	0.00%	0.24%	0.96%	2.39%
No Response	26	7	113	7	72	114	339
	7.67%	2.06%	33.33%	2.06%	21.24%	33.63%	100.00%
	92.86%	63.64%	70.63%	77.78%	84.71%	91.20%	81.10%
	6.22%	1.67%	27.03%	1.67%	17.22%	27.27%	81.10%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
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Table: Q51 As a subcontractor, do prime contractors on a SAWS project require you to have a bond for your type of work? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q51 As a subcontractor, do prime contractors on a SAWS project require you to have a bond for your type of work?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	2	3	16	2	4	3	30
	6.67%	10.00%	53.33%	6.67%	13.33%	10.00%	100.00%
	7.14%	27.27%	10.00%	22.22%	4.71%	2.40%	7.18%
	0.48%	0.72%	3.83%	0.48%	0.96%	0.72%	7.18%
No	0	0	17	0	7	8	32
	0.00%	0.00%	53.13%	0.00%	21.88%	25.00%	100.00%
	0.00%	0.00%	10.63%	0.00%	8.24%	6.40%	7.66%
	0.00%	0.00%	4.07%	0.00%	1.67%	1.91%	7.66%
Don't Know	0	1	14	0	2	0	17
	0.00%	5.88%	82.35%	0.00%	11.76%	0.00%	100.00%
	0.00%	9.09%	8.75%	0.00%	2.35%	0.00%	4.07%
	0.00%	0.24%	3.35%	0.00%	0.48%	0.00%	4.07%
No Response	26	7	113	7	72	114	339
	7.67%	2.06%	33.33%	2.06%	21.24%	33.63%	100.00%
	92.86%	63.64%	70.63%	77.78%	84.71%	91.20%	81.10%
	6.22%	1.67%	27.03%	1.67%	17.22%	27.27%	81.10%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q52 As a subcontractor did you experience discriminatory behavior between January 1, 2011 and December 31, 2013 from a prime contractor/consultant working or bidding/proposing on a SAWS project? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q52 As a subcontractor did you experience discriminatory behavior between January 1, 2011 and December 31, 2013 from a prime contractor/consultant working or bidding/proposing on a SAWS project?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	1	0	2	0	0	1	4
	25.00%	0.00%	50.00%	0.00%	0.00%	25.00%	100.00%
	3.57%	0.00%	1.25%	0.00%	0.00%	0.80%	0.96%
	0.24%	0.00%	0.48%	0.00%	0.00%	0.24%	0.96%
No	8	7	84	4	34	68	205
	3.90%	3.41%	40.98%	1.95%	16.59%	33.17%	100.00%

	28.57%	63.64%	52.50%	44.44%	40.00%	54.40%	49.04%
	1.91%	1.67%	20.10%	0.96%	8.13%	16.27%	49.04%
Not Applicable	9	0	32	2	14	7	64
	14.06%	0.00%	50.00%	3.13%	21.88%	10.94%	100.00%
	32.14%	0.00%	20.00%	22.22%	16.47%	5.60%	15.31%
	2.15%	0.00%	7.66%	0.48%	3.35%	1.67%	15.31%
Don't Know	1	0	1	0	0	0	2
	50.00%	0.00%	50.00%	0.00%	0.00%	0.00%	100.00%
	3.57%	0.00%	0.63%	0.00%	0.00%	0.00%	0.48%
	0.24%	0.00%	0.24%	0.00%	0.00%	0.00%	0.48%
No Response	9	4	41	3	37	49	143
	6.29%	2.80%	28.67%	2.10%	25.87%	34.27%	100.00%
	32.14%	36.36%	25.63%	33.33%	43.53%	39.20%	34.21%
	2.15%	0.96%	9.81%	0.72%	8.85%	11.72%	34.21%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q53 What was the most noticeable way you became aware of the discrimination against your company? * Race, Ethnicity, Gender Classification (Business Ownership Classification)
 [count, row %, column %, total %].

Q53 What was the most noticeable way you became aware of the discrimination against your company?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Verbal Comment	0	0	2	0	0	1	3
	0.00%	0.00%	66.67%	0.00%	0.00%	33.33%	100.00%
	0.00%	0.00%	1.25%	0.00%	0.00%	0.80%	0.72%
	0.00%	0.00%	0.48%	0.00%	0.00%	0.24%	0.72%
Action Taken Against the Company	1	0	0	0	0	0	1
	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	3.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%
	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%
Don't Know	0	0	0	0	0	1	1
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.24%
No Response	27	11	158	9	85	123	413
	6.54%	2.66%	38.26%	2.18%	20.58%	29.78%	100.00%
	96.43%	100.00%	98.75%	100.00%	100.00%	98.40%	98.80%
	6.46%	2.63%	37.80%	2.15%	20.33%	29.43%	98.80%
Total	28	11	160	9	85	125	418

	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q54 Which of the following do you consider the primary reason for your company being discriminated against? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q54 Which of the following do you consider the primary reason for your company being discriminated against?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Owner's Race or Ethnicity	0	0	2	0	0	1	3
	0.00%	0.00%	66.67%	0.00%	0.00%	33.33%	100.00%
	0.00%	0.00%	1.25%	0.00%	0.00%	0.80%	0.72%
	0.00%	0.00%	0.48%	0.00%	0.00%	0.24%	0.72%
Owner's Gender	1	0	0	0	0	0	1
	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	3.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%
	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%
Both	0	0	0	0	0	1	1
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.24%
No Response	27	11	158	9	85	123	413
	6.54%	2.66%	38.26%	2.18%	20.58%	29.78%	100.00%
	96.43%	100.00%	98.75%	100.00%	100.00%	98.40%	98.80%
	6.46%	2.63%	37.80%	2.15%	20.33%	29.43%	98.80%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q55 When did the discrimination first occur? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q55 When did the discrimination first occur?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
After contract awarded	1	0	0	0	0	1	2
	50.00%	0.00%	0.00%	0.00%	0.00%	50.00%	100.00%
	3.57%	0.00%	0.00%	0.00%	0.00%	0.80%	0.48%
	0.24%	0.00%	0.00%	0.00%	0.00%	0.24%	0.48%
Both	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%

	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
Don't Know	0	0	1	0	0	1	2
	0.00%	0.00%	50.00%	0.00%	0.00%	50.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.80%	0.48%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.24%	0.48%
No Response	27	11	158	9	85	123	413
	6.54%	2.66%	38.26%	2.18%	20.58%	29.78%	100.00%
	96.43%	100.00%	98.75%	100.00%	100.00%	98.40%	98.80%
	6.46%	2.63%	37.80%	2.15%	20.33%	29.43%	98.80%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q56 Did you file a complaint? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q56 Did you file a complaint?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	1	0	0	0	0	0	1
	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	3.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%
	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%
No	0	0	2	0	0	2	4
	0.00%	0.00%	50.00%	0.00%	0.00%	50.00%	100.00%
	0.00%	0.00%	1.25%	0.00%	0.00%	1.60%	0.96%
	0.00%	0.00%	0.48%	0.00%	0.00%	0.48%	0.96%
No Response	27	11	158	9	85	123	413
	6.54%	2.66%	38.26%	2.18%	20.58%	29.78%	100.00%
	96.43%	100.00%	98.75%	100.00%	100.00%	98.40%	98.80%
	6.46%	2.63%	37.80%	2.15%	20.33%	29.43%	98.80%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q57 Have you experienced or observed a situation in which a prime contractors/consultants includes minority or woman subcontractors on a bid or proposal for a SAWS project to the good faith effort requirements, and then drops the company as a subcontractor * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Race, Ethnicity, Gender Classification (Business Ownership Classification)	
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Q57 Have you experienced or observed a situation in which a prime contractors/consultants includes minority or woman subcontractors on a bid or proposal for a SAWS project to the good faith effort requirements, and then drops the company as a subcontractor	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	3	1	11	1	1	2	19
	15.79%	5.26%	57.89%	5.26%	5.26%	10.53%	100.00%
	10.71%	9.09%	6.88%	11.11%	1.18%	1.60%	4.55%
	0.72%	0.24%	2.63%	0.24%	0.24%	0.48%	4.55%
No	25	10	147	8	84	123	397
	6.30%	2.52%	37.03%	2.02%	21.16%	30.98%	100.00%
	89.29%	90.91%	91.88%	88.89%	98.82%	98.40%	94.98%
	5.98%	2.39%	35.17%	1.91%	20.10%	29.43%	94.98%
Don't Know	0	0	2	0	0	0	2
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	1.25%	0.00%	0.00%	0.00%	0.48%
	0.00%	0.00%	0.48%	0.00%	0.00%	0.00%	0.48%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q58 Have you experienced or observed a situation in which a prime contractors/consultants includes minority or woman subcontractors on a bid or proposal for a non-SAWS project to the good faith effort requirements, and then drops the company as a subcontractor after winning the award for no legitimate reason? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q58 Have you experienced or observed a situation in which a prime contractors/consultants includes minority or woman subcontractors on a bid or proposal for a non-SAWS project to the good faith effort requirements, and then drops the company as a subcontractor after winning the award for no legitimate reason?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	9	3	30	2	3	14	61
	14.75%	4.92%	49.18%	3.28%	4.92%	22.95%	100.00%
	32.14%	27.27%	18.75%	22.22%	3.53%	11.20%	14.59%
	2.15%	0.72%	7.18%	0.48%	0.72%	3.35%	14.59%
No	19	8	128	7	82	111	355
	5.35%	2.25%	36.06%	1.97%	23.10%	31.27%	100.00%
	67.86%	72.73%	80.00%	77.78%	96.47%	88.80%	84.93%

	4.55%	1.91%	30.62%	1.67%	19.62%	26.56%	84.93%
Don't Know	0	0	2	0	0	0	2
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	1.25%	0.00%	0.00%	0.00%	0.48%
	0.00%	0.00%	0.48%	0.00%	0.00%	0.00%	0.48%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q59 How often do prime contractors/vendors who use your firm as a subcontractor on public-sector projects with M/WBE goals solicit your firm on projects (private or public) without M/WBE goals? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q59 How often do prime contractors/ vendors who use your firm as a subcontractor on public-sector projects with M/WBE goals solicit your firm on projects (private or public) without M/WBE goals?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Very Often	4	1	9	0	5	5	24
	16.67%	4.17%	37.50%	0.00%	20.83%	20.83%	100.00%
	14.29%	9.09%	5.63%	0.00%	5.88%	4.00%	5.74%
	0.96%	0.24%	2.15%	0.00%	1.20%	1.20%	5.74%
Sometimes	5	2	32	2	13	15	69
	7.25%	2.90%	46.38%	2.90%	18.84%	21.74%	100.00%
	17.86%	18.18%	20.00%	22.22%	15.29%	12.00%	16.51%
	1.20%	0.48%	7.66%	0.48%	3.11%	3.59%	16.51%
Seldom	4	1	30	1	16	16	68
	5.88%	1.47%	44.12%	1.47%	23.53%	23.53%	100.00%
	14.29%	9.09%	18.75%	11.11%	18.82%	12.80%	16.27%
	0.96%	0.24%	7.18%	0.24%	3.83%	3.83%	16.27%
Never	9	5	53	2	25	34	128
	7.03%	3.91%	41.41%	1.56%	19.53%	26.56%	100.00%
	32.14%	45.45%	33.13%	22.22%	29.41%	27.20%	30.62%
	2.15%	1.20%	12.68%	0.48%	5.98%	8.13%	30.62%
Not Applicable	5	2	28	2	22	49	108
	4.63%	1.85%	25.93%	1.85%	20.37%	45.37%	100.00%
	17.86%	18.18%	17.50%	22.22%	25.88%	39.20%	25.84%
	1.20%	0.48%	6.70%	0.48%	5.26%	11.72%	25.84%
Don't Know	1	0	8	2	4	6	21
	4.76%	0.00%	38.10%	9.52%	19.05%	28.57%	100.00%
	3.57%	0.00%	5.00%	22.22%	4.71%	4.80%	5.02%
	0.24%	0.00%	1.91%	0.48%	0.96%	1.44%	5.02%

Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Harassment. * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Harassment.	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	1	0	1	0	0	0	2
	50.00%	0.00%	50.00%	0.00%	0.00%	0.00%	100.00%
	3.57%	0.00%	0.63%	0.00%	0.00%	0.00%	0.48%
	0.24%	0.00%	0.24%	0.00%	0.00%	0.00%	0.48%
No	26	11	152	9	81	122	401
	6.48%	2.74%	37.91%	2.24%	20.20%	30.42%	100.00%
	92.86%	100.00%	95.00%	100.00%	95.29%	97.60%	95.93%
	6.22%	2.63%	36.36%	2.15%	19.38%	29.19%	95.93%
Don't Know	1	0	7	0	4	3	15
	6.67%	0.00%	46.67%	0.00%	26.67%	20.00%	100.00%
	3.57%	0.00%	4.38%	0.00%	4.71%	2.40%	3.59%
	0.24%	0.00%	1.67%	0.00%	0.96%	0.72%	3.59%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Unequal or unfair treatment. * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Unequal or unfair treatment.	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	1	0	6	0	3	2	12
	8.33%	0.00%	50.00%	0.00%	25.00%	16.67%	100.00%
	3.57%	0.00%	3.75%	0.00%	3.53%	1.60%	2.87%
	0.24%	0.00%	1.44%	0.00%	0.72%	0.48%	2.87%

No	26	11	147	9	78	120	391
	6.65%	2.81%	37.60%	2.30%	19.95%	30.69%	100.00%
	92.86%	100.00%	91.88%	100.00%	91.76%	96.00%	93.54%
	6.22%	2.63%	35.17%	2.15%	18.66%	28.71%	93.54%
Don't Know	1	0	7	0	4	3	15
	6.67%	0.00%	46.67%	0.00%	26.67%	20.00%	100.00%
	3.57%	0.00%	4.38%	0.00%	4.71%	2.40%	3.59%
	0.24%	0.00%	1.67%	0.00%	0.96%	0.72%	3.59%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Bid shopping or bid manipulation. * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Bid shopping or bid manipulation.	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	2	1	8	1	2	1	15
	13.33%	6.67%	53.33%	6.67%	13.33%	6.67%	100.00%
	7.14%	9.09%	5.00%	11.11%	2.35%	0.80%	3.59%
	0.48%	0.24%	1.91%	0.24%	0.48%	0.24%	3.59%
No	25	10	145	8	79	121	388
	6.44%	2.58%	37.37%	2.06%	20.36%	31.19%	100.00%
	89.29%	90.91%	90.63%	88.89%	92.94%	96.80%	92.82%
	5.98%	2.39%	34.69%	1.91%	18.90%	28.95%	92.82%
Don't Know	1	0	7	0	4	3	15
	6.67%	0.00%	46.67%	0.00%	26.67%	20.00%	100.00%
	3.57%	0.00%	4.38%	0.00%	4.71%	2.40%	3.59%
	0.24%	0.00%	1.67%	0.00%	0.96%	0.72%	3.59%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Double standards in performance. * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q60 Still talking about SAWS and its prime	Race, Ethnicity, Gender Classification (Business Ownership Classification)					
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contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Double standards in performance.	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	1	1	4	0	2	1	9
	11.11%	11.11%	44.44%	0.00%	22.22%	11.11%	100.00%
	3.57%	9.09%	2.50%	0.00%	2.35%	0.80%	2.15%
	0.24%	0.24%	0.96%	0.00%	0.48%	0.24%	2.15%
No	26	10	149	9	78	121	393
	6.62%	2.54%	37.91%	2.29%	19.85%	30.79%	100.00%
	92.86%	90.91%	93.13%	100.00%	91.76%	96.80%	94.02%
	6.22%	2.39%	35.65%	2.15%	18.66%	28.95%	94.02%
Don't Know	1	0	7	0	5	3	16
	6.25%	0.00%	43.75%	0.00%	31.25%	18.75%	100.00%
	3.57%	0.00%	4.38%	0.00%	5.88%	2.40%	3.83%
	0.24%	0.00%	1.67%	0.00%	1.20%	0.72%	3.83%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Denial of opportunity to bid. * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Denial of opportunity to bid.	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	1	1	6	0	1	4	13
	7.69%	7.69%	46.15%	0.00%	7.69%	30.77%	100.00%
	3.57%	9.09%	3.75%	0.00%	1.18%	3.20%	3.11%
	0.24%	0.24%	1.44%	0.00%	0.24%	0.96%	3.11%
No	26	10	146	9	80	118	389
	6.68%	2.57%	37.53%	2.31%	20.57%	30.33%	100.00%
	92.86%	90.91%	91.25%	100.00%	94.12%	94.40%	93.06%
	6.22%	2.39%	34.93%	2.15%	19.14%	28.23%	93.06%
Don't Know	1	0	8	0	4	3	16
	6.25%	0.00%	50.00%	0.00%	25.00%	18.75%	100.00%
	3.57%	0.00%	5.00%	0.00%	4.71%	2.40%	3.83%

	0.24%	0.00%	1.91%	0.00%	0.96%	0.72%	3.83%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Unfair denial of contract award. * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Unfair denial of contract award.	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	0	0	5	0	1	4	10
	0.00%	0.00%	50.00%	0.00%	10.00%	40.00%	100.00%
	0.00%	0.00%	3.13%	0.00%	1.18%	3.20%	2.39%
	0.00%	0.00%	1.20%	0.00%	0.24%	0.96%	2.39%
No	27	11	147	9	80	118	392
	6.89%	2.81%	37.50%	2.30%	20.41%	30.10%	100.00%
	96.43%	100.00%	91.88%	100.00%	94.12%	94.40%	93.78%
	6.46%	2.63%	35.17%	2.15%	19.14%	28.23%	93.78%
Don't Know	1	0	8	0	4	3	16
	6.25%	0.00%	50.00%	0.00%	25.00%	18.75%	100.00%
	3.57%	0.00%	5.00%	0.00%	4.71%	2.40%	3.83%
	0.24%	0.00%	1.91%	0.00%	0.96%	0.72%	3.83%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Unfair termination. * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Unfair termination.	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	0	1	1	0	1	1	4
	0.00%	25.00%	25.00%	0.00%	25.00%	25.00%	100.00%
	0.00%	9.09%	0.63%	0.00%	1.18%	0.80%	0.96%

	0.00%	0.24%	0.24%	0.00%	0.24%	0.24%	0.96%
No	27	10	151	9	80	121	398
	6.78%	2.51%	37.94%	2.26%	20.10%	30.40%	100.00%
	96.43%	90.91%	94.38%	100.00%	94.12%	96.80%	95.22%
	6.46%	2.39%	36.12%	2.15%	19.14%	28.95%	95.22%
Don't Know	1	0	8	0	4	3	16
	6.25%	0.00%	50.00%	0.00%	25.00%	18.75%	100.00%
	3.57%	0.00%	5.00%	0.00%	4.71%	2.40%	3.83%
	0.24%	0.00%	1.91%	0.00%	0.96%	0.72%	3.83%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Unequal price quotes from suppliers. * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Unequal price quotes from suppliers.	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Yes	1	1	3	0	1	1	7
	14.29%	14.29%	42.86%	0.00%	14.29%	14.29%	100.00%
	3.57%	9.09%	1.88%	0.00%	1.18%	0.80%	1.67%
	0.24%	0.24%	0.72%	0.00%	0.24%	0.24%	1.67%
No	26	10	149	9	80	121	395
	6.58%	2.53%	37.72%	2.28%	20.25%	30.63%	100.00%
	92.86%	90.91%	93.13%	100.00%	94.12%	96.80%	94.50%
	6.22%	2.39%	35.65%	2.15%	19.14%	28.95%	94.50%
Don't Know	1	0	8	0	4	3	16
	6.25%	0.00%	50.00%	0.00%	25.00%	18.75%	100.00%
	3.57%	0.00%	5.00%	0.00%	4.71%	2.40%	3.83%
	0.24%	0.00%	1.91%	0.00%	0.96%	0.72%	3.83%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q61 There is an informal network of prime contractors/subcontractors that has excluded my company from doing business in the private sector: * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q61 There is an informal network of prime contractors/subcontractors that has excluded my company from doing business in the private sector:	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Strongly Agree	6	1	18	2	9	4	40
	15.00%	2.50%	45.00%	5.00%	22.50%	10.00%	100.00%
	21.43%	9.09%	11.25%	22.22%	10.59%	3.20%	9.57%
	1.44%	0.24%	4.31%	0.48%	2.15%	0.96%	9.57%
Somewhat Agree	5	0	26	1	4	8	44
	11.36%	0.00%	59.09%	2.27%	9.09%	18.18%	100.00%
	17.86%	0.00%	16.25%	11.11%	4.71%	6.40%	10.53%
	1.20%	0.00%	6.22%	0.24%	0.96%	1.91%	10.53%
Neither Agree Nor Disagree	4	1	34	1	24	31	95
	4.21%	1.05%	35.79%	1.05%	25.26%	32.63%	100.00%
	14.29%	9.09%	21.25%	11.11%	28.24%	24.80%	22.73%
	0.96%	0.24%	8.13%	0.24%	5.74%	7.42%	22.73%
Somewhat Disagree	9	4	39	2	21	47	122
	7.38%	3.28%	31.97%	1.64%	17.21%	38.52%	100.00%
	32.14%	36.36%	24.38%	22.22%	24.71%	37.60%	29.19%
	2.15%	0.96%	9.33%	0.48%	5.02%	11.24%	29.19%
Strongly Disagree	4	5	42	3	25	35	114
	3.51%	4.39%	36.84%	2.63%	21.93%	30.70%	100.00%
	14.29%	45.45%	26.25%	33.33%	29.41%	28.00%	27.27%
	0.96%	1.20%	10.05%	0.72%	5.98%	8.37%	27.27%
Don't Know	0	0	1	0	2	0	3
	0.00%	0.00%	33.33%	0.00%	66.67%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	2.35%	0.00%	0.72%
	0.00%	0.00%	0.24%	0.00%	0.48%	0.00%	0.72%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q62 Has your company applied for a commercial (business) bank loan between January 1, 2011 and December 31, 2013? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q62 Has your company applied for a commercial (business) bank loan between January 1, 2011 and December 31, 2013?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	9	3	43	2	17	20	94
	9.57%	3.19%	45.74%	2.13%	18.09%	21.28%	100.00%
	32.14%	27.27%	26.88%	22.22%	20.00%	16.00%	22.49%

	2.15%	0.72%	10.29%	0.48%	4.07%	4.78%	22.49%
No	19	8	112	7	67	93	306
	6.21%	2.61%	36.60%	2.29%	21.90%	30.39%	100.00%
	67.86%	72.73%	70.00%	77.78%	78.82%	74.40%	73.21%
	4.55%	1.91%	26.79%	1.67%	16.03%	22.25%	73.21%
Don't Know	0	0	5	0	1	12	18
	0.00%	0.00%	27.78%	0.00%	5.56%	66.67%	100.00%
	0.00%	0.00%	3.13%	0.00%	1.18%	9.60%	4.31%
	0.00%	0.00%	1.20%	0.00%	0.24%	2.87%	4.31%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q63 Were you approved or denied for a commercial (business) bank loan? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q63 Were you approved or denied for a commercial (business) bank loan?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
Approved	4	3	29	1	16	19	72
	5.56%	4.17%	40.28%	1.39%	22.22%	26.39%	100.00%
	14.29%	27.27%	18.13%	11.11%	18.82%	15.20%	17.22%
	0.96%	0.72%	6.94%	0.24%	3.83%	4.55%	17.22%
Denied	5	0	14	1	1	2	23
	21.74%	0.00%	60.87%	4.35%	4.35%	8.70%	100.00%
	17.86%	0.00%	8.75%	11.11%	1.18%	1.60%	5.50%
	1.20%	0.00%	3.35%	0.24%	0.24%	0.48%	5.50%
No Response	19	8	117	7	68	104	323
	5.88%	2.48%	36.22%	2.17%	21.05%	32.20%	100.00%
	67.86%	72.73%	73.13%	77.78%	80.00%	83.20%	77.27%
	4.55%	1.91%	27.99%	1.67%	16.27%	24.88%	77.27%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q64 Which of the following do you believe was the primary reason for your being denied a loan? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q64 Which of the following do you believe was the primary reason for your being denied a loan?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	

Insufficient Documentation	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
Insufficient Business History	2	0	3	0	0	2	7
	28.57%	0.00%	42.86%	0.00%	0.00%	28.57%	100.00%
	7.14%	0.00%	1.88%	0.00%	0.00%	1.60%	1.67%
	0.48%	0.00%	0.72%	0.00%	0.00%	0.48%	1.67%
Confusion about the Process	1	0	0	0	0	0	1
	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	3.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%
	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%
Other, please specify	0	0	2	1	0	0	3
	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	100.00%
	0.00%	0.00%	1.25%	11.11%	0.00%	0.00%	0.72%
	0.00%	0.00%	0.48%	0.24%	0.00%	0.00%	0.72%
Don't Know	2	0	8	0	1	0	11
	18.18%	0.00%	72.73%	0.00%	9.09%	0.00%	100.00%
	7.14%	0.00%	5.00%	0.00%	1.18%	0.00%	2.63%
	0.48%	0.00%	1.91%	0.00%	0.24%	0.00%	2.63%
No Response	23	11	146	8	84	123	395
	5.82%	2.78%	36.96%	2.03%	21.27%	31.14%	100.00%
	82.14%	100.00%	91.25%	88.89%	98.82%	98.40%	94.50%
	5.50%	2.63%	34.93%	1.91%	20.10%	29.43%	94.50%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q65 Please specify, which of the following do you believe was the primary reason for your being denied a loan. Other, specify. * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q65 Please specify, which of the following do you believe was the primary reason for your being denied a loan. Other, specify.	Race, Ethnicity, Gender Classification (Business Ownership Classification)						Total
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	
.	26	11	153	9	84	125	408
	6.37%	2.70%	37.50%	2.21%	20.59%	30.64%	100.00%
	92.86%	100.00%	95.63%	100.00%	98.82%	100.00%	97.61%
	6.22%	2.63%	36.60%	2.15%	20.10%	29.90%	97.61%
Discriminatory lending practices.	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%

	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
Dollar amount of loan requested was over credit limit.	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
Don't know the reason	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
Financial stability	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
I was denied due to lack of equity and years in business	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
Insufficient credit history	1	0	1	0	0	0	2
	50.00%	0.00%	50.00%	0.00%	0.00%	0.00%	100.00%
	3.57%	0.00%	0.63%	0.00%	0.00%	0.00%	0.48%
	0.24%	0.00%	0.24%	0.00%	0.00%	0.00%	0.48%
Lack of understanding of industry.	0	0	0	0	1	0	1
	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	1.18%	0.00%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.24%	0.00%	0.24%
Not enough money	0	0	1	0	0	0	1
	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.24%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	0.24%
They said it was credit issue but I don't think so.	1	0	0	0	0	0	1
	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
	3.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%
	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q66 Have you experienced discriminatory behavior from the private sector between January 1, 2011 and December 31, 2013? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q66 Have you experienced discriminatory	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
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behavior from the private sector between January 1, 2011 and December 31, 2013?	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Yes	5	0	11	2	7	3	28
	17.86%	0.00%	39.29%	7.14%	25.00%	10.71%	100.00%
	17.86%	0.00%	6.88%	22.22%	8.24%	2.40%	6.70%
	1.20%	0.00%	2.63%	0.48%	1.67%	0.72%	6.70%
No	23	11	148	7	78	121	388
	5.93%	2.84%	38.14%	1.80%	20.10%	31.19%	100.00%
	82.14%	100.00%	92.50%	77.78%	91.76%	96.80%	92.82%
	5.50%	2.63%	35.41%	1.67%	18.66%	28.95%	92.82%
Don't Know	0	0	1	0	0	1	2
	0.00%	0.00%	50.00%	0.00%	0.00%	50.00%	100.00%
	0.00%	0.00%	0.63%	0.00%	0.00%	0.80%	0.48%
	0.00%	0.00%	0.24%	0.00%	0.00%	0.24%	0.48%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q67 What was the most noticeable way you became aware of the discrimination against your company? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q67 What was the most noticeable way you became aware of the discrimination against your company?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Verbal comment	2	0	5	2	3	1	13
	15.38%	0.00%	38.46%	15.38%	23.08%	7.69%	100.00%
	7.14%	0.00%	3.13%	22.22%	3.53%	0.80%	3.11%
	0.48%	0.00%	1.20%	0.48%	0.72%	0.24%	3.11%
Written statement	0	0	0	0	0	1	1
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.24%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.24%
Action taken against the company	2	0	4	1	3	1	11
	18.18%	0.00%	36.36%	9.09%	27.27%	9.09%	100.00%
	7.14%	0.00%	2.50%	11.11%	3.53%	0.80%	2.63%
	0.48%	0.00%	0.96%	0.24%	0.72%	0.24%	2.63%
Don't Know	1	0	2	0	1	0	4
	25.00%	0.00%	50.00%	0.00%	25.00%	0.00%	100.00%
	3.57%	0.00%	1.25%	0.00%	1.18%	0.00%	0.96%
	0.24%	0.00%	0.48%	0.00%	0.24%	0.00%	0.96%
No Response	23	11	149	6	78	122	389

	5.91%	2.83%	38.30%	1.54%	20.05%	31.36%	100.00%
	82.14%	100.00%	93.13%	66.67%	91.76%	97.60%	93.06%
	5.50%	2.63%	35.65%	1.44%	18.66%	29.19%	93.06%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q68 Which of the following do you consider the primary reason for your company being discriminated against? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Q68 Which of the following do you consider the primary reason for your company being discriminated against?	Race, Ethnicity, Gender Classification (Business Ownership Classification)						
	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
Owner's race or ethnicity	1	0	4	1	1	0	7
	14.29%	0.00%	57.14%	14.29%	14.29%	0.00%	100.00%
	3.57%	0.00%	2.50%	11.11%	1.18%	0.00%	1.67%
	0.24%	0.00%	0.96%	0.24%	0.24%	0.00%	1.67%
Owner's gender	0	0	0	0	3	1	4
	0.00%	0.00%	0.00%	0.00%	75.00%	25.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	3.53%	0.80%	0.96%
	0.00%	0.00%	0.00%	0.00%	0.72%	0.24%	0.96%
Both	3	0	4	0	2	0	9
	33.33%	0.00%	44.44%	0.00%	22.22%	0.00%	100.00%
	10.71%	0.00%	2.50%	0.00%	2.35%	0.00%	2.15%
	0.72%	0.00%	0.96%	0.00%	0.48%	0.00%	2.15%
Don't Know	1	0	3	2	1	2	9
	11.11%	0.00%	33.33%	22.22%	11.11%	22.22%	100.00%
	3.57%	0.00%	1.88%	22.22%	1.18%	1.60%	2.15%
	0.24%	0.00%	0.72%	0.48%	0.24%	0.48%	2.15%
No Response	23	11	149	6	78	122	389
	5.91%	2.83%	38.30%	1.54%	20.05%	31.36%	100.00%
	82.14%	100.00%	93.13%	66.67%	91.76%	97.60%	93.06%
	5.50%	2.63%	35.65%	1.44%	18.66%	29.19%	93.06%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q69 When did the discrimination first occur? * Race, Ethnicity, Gender Classification (Business Ownership Classification) [count, row %, column %, total %].

Race, Ethnicity, Gender Classification (Business Ownership Classification)	
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Q69 When did the discrimination first occur?	African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non-M/WBE Firms	Total
During Bidding Process	3	0	4	0	4	2	13
	23.08%	0.00%	30.77%	0.00%	30.77%	15.38%	100.00%
	10.71%	0.00%	2.50%	0.00%	4.71%	1.60%	3.11%
	0.72%	0.00%	0.96%	0.00%	0.96%	0.48%	3.11%
After Contract Award	0	0	2	1	1	1	5
	0.00%	0.00%	40.00%	20.00%	20.00%	20.00%	100.00%
	0.00%	0.00%	1.25%	11.11%	1.18%	0.80%	1.20%
	0.00%	0.00%	0.48%	0.24%	0.24%	0.24%	1.20%
Both	1	0	4	1	1	0	7
	14.29%	0.00%	57.14%	14.29%	14.29%	0.00%	100.00%
	3.57%	0.00%	2.50%	11.11%	1.18%	0.00%	1.67%
	0.24%	0.00%	0.96%	0.24%	0.24%	0.00%	1.67%
Don't Know	1	0	1	1	1	0	4
	25.00%	0.00%	25.00%	25.00%	25.00%	0.00%	100.00%
	3.57%	0.00%	0.63%	11.11%	1.18%	0.00%	0.96%
	0.24%	0.00%	0.24%	0.24%	0.24%	0.00%	0.96%
No Response	23	11	149	6	78	122	389
	5.91%	2.83%	38.30%	1.54%	20.05%	31.36%	100.00%
	82.14%	100.00%	93.13%	66.67%	91.76%	97.60%	93.06%
	5.50%	2.63%	35.65%	1.44%	18.66%	29.19%	93.06%
Total	28	11	160	9	85	125	418
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	6.70%	2.63%	38.28%	2.15%	20.33%	29.90%	100.00%

Table: Q1 What is your title? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q1 What is your title?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Owner	162	42	204
	79.41%	20.59%	100.00%
	55.29%	33.60%	48.80%
	38.76%	10.05%	48.80%
CEO/President	48	19	67
	71.64%	28.36%	100.00%
	16.38%	15.20%	16.03%
	11.48%	4.55%	16.03%
Manager/Financial Officer	60	49	109
	55.05%	44.95%	100.00%
	20.48%	39.20%	26.08%
	14.35%	11.72%	26.08%
Other, Please Specify	23	15	38
	60.53%	39.47%	100.00%
	7.85%	12.00%	9.09%
	5.50%	3.59%	9.09%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q4_Primary_Business_re_codedText * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q4_Primary_Business_re_codedText	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Architecture & Engineering	36	29	65
	55.38%	44.62%	100.00%
	12.29%	23.20%	15.55%
	8.61%	6.94%	15.55%
General Construction	63	15	78
	80.77%	19.23%	100.00%
	21.50%	12.00%	18.66%
	15.07%	3.59%	18.66%
Heavy Civil / Utility Co	10	4	14
	71.43%	28.57%	100.00%
	3.41%	3.20%	3.35%
	2.39%	0.96%	3.35%
Other	3	0	3
	100.00%	0.00%	100.00%
	1.02%	0.00%	0.72%
	0.72%	0.00%	0.72%
Other Professional Service	90	34	124
	72.58%	27.42%	100.00%
	30.72%	27.20%	29.67%
	21.53%	8.13%	29.67%
Procurement	91	43	134

	67.91%	32.09%	100.00%
	31.06%	34.40%	32.06%
	21.77%	10.29%	32.06%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q10 Do you or one of your employees have a current contractor license? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q10 Do you or one of your employees have a current contractor license?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	95	33	128
	74.22%	25.78%	100.00%
	32.42%	26.40%	30.62%
	22.73%	7.89%	30.62%
No	197	91	288
	68.40%	31.60%	100.00%
	67.24%	72.80%	68.90%
	47.13%	21.77%	68.90%
Don't Know	1	1	2
	50.00%	50.00%	100.00%
	0.34%	0.80%	0.48%
	0.24%	0.24%	0.48%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q11 Do you or one of your employees have a state architecture or engineering license? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q11 Do you or one of your employees have a state architecture or engineering license?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	52	31	83
	62.65%	37.35%	100.00%
	17.75%	24.80%	19.86%
	12.44%	7.42%	19.86%
No	240	93	333
	72.07%	27.93%	100.00%
	81.91%	74.40%	79.67%
	57.42%	22.25%	79.67%
Don't Know	1	1	2
	50.00%	50.00%	100.00%
	0.34%	0.80%	0.48%
	0.24%	0.24%	0.48%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q12 Does your firm have a contract or anticipate receiving a contract for: * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q12 Does your firm have a contract or anticipate receiving a contract for:	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Brackish Groundwater Desalination Project	6	3	9
	66.67%	33.33%	100.00%
	2.05%	2.40%	2.15%
	1.44%	0.72%	2.15%
Sanitary Sewer Overflow Services	4	2	6
	66.67%	33.33%	100.00%
	1.37%	1.60%	1.44%
	0.96%	0.48%	1.44%
Both	9	4	13
	69.23%	30.77%	100.00%
	3.07%	3.20%	3.11%
	2.15%	0.96%	3.11%
Neither	274	116	390
	70.26%	29.74%	100.00%
	93.52%	92.80%	93.30%
	65.55%	27.75%	93.30%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Race, Ethnicity, Gender Classification (Business Ownership Classification) * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Race, Ethnicity, Gender Classification (Business Ownership Classification)	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
African American Firms	28	0	28
	100.00%	0.00%	100.00%
	9.56%	0.00%	6.70%
	6.70%	0.00%	6.70%
Asian American Firms	11	0	11
	100.00%	0.00%	100.00%
	3.75%	0.00%	2.63%
	2.63%	0.00%	2.63%
Hispanic American Firms	160	0	160
	100.00%	0.00%	100.00%
	54.61%	0.00%	38.28%
	38.28%	0.00%	38.28%
Native American Firms	9	0	9
	100.00%	0.00%	100.00%
	3.07%	0.00%	2.15%
	2.15%	0.00%	2.15%
Nonminority Female Firms	85	0	85
	100.00%	0.00%	100.00%
	29.01%	0.00%	20.33%
	20.33%	0.00%	20.33%
Non-M/WBE Firms	0	125	125

	0.00%	100.00%	100.00%
	0.00%	100.00%	29.90%
	0.00%	29.90%	29.90%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q16 What is the highest level education completed by the primary owner of your company? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q16 What is the highest level education completed by the primary owner of your company?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Some High School	2	0	2
	100.00%	0.00%	100.00%
	0.68%	0.00%	0.48%
	0.48%	0.00%	0.48%
High School Graduate	28	7	35
	80.00%	20.00%	100.00%
	9.56%	5.60%	8.37%
	6.70%	1.67%	8.37%
Trade or Technical Education	7	2	9
	77.78%	22.22%	100.00%
	2.39%	1.60%	2.15%
	1.67%	0.48%	2.15%
Some College	49	12	61
	80.33%	19.67%	100.00%
	16.72%	9.60%	14.59%
	11.72%	2.87%	14.59%
College Degree	143	66	209
	68.42%	31.58%	100.00%
	48.81%	52.80%	50.00%
	34.21%	15.79%	50.00%
Post Graduate Degree	59	35	94
	62.77%	37.23%	100.00%
	20.14%	28.00%	22.49%
	14.11%	8.37%	22.49%
Don't Know	5	3	8
	62.50%	37.50%	100.00%
	1.71%	2.40%	1.91%
	1.20%	0.72%	1.91%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q17 What year was your company established? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q17 What year was your company established?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total

Prior to 1960	3	10	13
	23.08%	76.92%	100.00%
	1.04%	8.33%	3.18%
	0.73%	2.44%	3.18%
1961 to 1980	23	16	39
	58.97%	41.03%	100.00%
	7.96%	13.33%	9.54%
	5.62%	3.91%	9.54%
1981 to 2000	103	62	165
	62.42%	37.58%	100.00%
	35.64%	51.67%	40.34%
	25.18%	15.16%	40.34%
2001 to 2007	96	18	114
	84.21%	15.79%	100.00%
	33.22%	15.00%	27.87%
	23.47%	4.40%	27.87%
2008 to 2014	64	14	78
	82.05%	17.95%	100.00%
	22.15%	11.67%	19.07%
	15.65%	3.42%	19.07%
Total	289	120	409
	70.66%	29.34%	100.00%
	100.00%	100.00%	100.00%
	70.66%	29.34%	100.00%

Table: Q18 How many years of experience in your company's line of business does the primary owner(s) of your firm have in the line of business? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q18 How many years of experience in your company's line of business does the primary owner(s) of your firm have in the line of business?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
0-5 years	7	2	9
	77.78%	22.22%	100.00%
	2.39%	1.60%	2.15%
	1.67%	0.48%	2.15%
6-10 years	17	2	19
	89.47%	10.53%	100.00%
	5.80%	1.60%	4.55%
	4.07%	0.48%	4.55%
11-15 years	25	3	28
	89.29%	10.71%	100.00%
	8.53%	2.40%	6.70%
	5.98%	0.72%	6.70%
16-20 years	15	3	18
	83.33%	16.67%	100.00%
	5.12%	2.40%	4.31%
	3.59%	0.72%	4.31%
20+ years	228	114	342
	66.67%	33.33%	100.00%

	77.82%	91.20%	81.82%
	54.55%	27.27%	81.82%
Don't Know	1	1	2
	50.00%	50.00%	100.00%
	0.34%	0.80%	0.48%
	0.24%	0.24%	0.48%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q19 In the last three years, what was the average number of employees your company kept on payroll, including full-time and part-time staff? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q19 In the last three years, what was the average number of employees your company kept on payroll, including full-time and part-time staff?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
0-10	189	44	233
	81.12%	18.88%	100.00%
	64.51%	35.20%	55.74%
	45.22%	10.53%	55.74%
11-20	43	20	63
	68.25%	31.75%	100.00%
	14.68%	16.00%	15.07%
	10.29%	4.78%	15.07%
21-30	20	15	35
	57.14%	42.86%	100.00%
	6.83%	12.00%	8.37%
	4.78%	3.59%	8.37%
31-40	8	9	17
	47.06%	52.94%	100.00%
	2.73%	7.20%	4.07%
	1.91%	2.15%	4.07%
41+	32	37	69
	46.38%	53.62%	100.00%
	10.92%	29.60%	16.51%
	7.66%	8.85%	16.51%
Don't Know	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q20 Which of the following categories best approximate your company's gross revenues for calendar year 2013? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q20 Which of the following categories best	M/WBE or Non-M/WBE Classification (not based on certification)
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approximate your company's gross revenues for calendar year 2013?	M/WBE Firms	Non-M/WBE Firms	Total
Up to \$50,000?	28	4	32
	87.50%	12.50%	100.00%
	9.56%	3.20%	7.66%
	6.70%	0.96%	7.66%
\$50,001 to \$100,000?	23	1	24
	95.83%	4.17%	100.00%
	7.85%	0.80%	5.74%
	5.50%	0.24%	5.74%
\$100,001 to \$300,000?	44	12	56
	78.57%	21.43%	100.00%
	15.02%	9.60%	13.40%
	10.53%	2.87%	13.40%
\$300,001 to \$500,000?	37	15	52
	71.15%	28.85%	100.00%
	12.63%	12.00%	12.44%
	8.85%	3.59%	12.44%
\$500,001 to \$1 million?	48	13	61
	78.69%	21.31%	100.00%
	16.38%	10.40%	14.59%
	11.48%	3.11%	14.59%
\$1,000,001 to \$3 million?	46	20	66
	69.70%	30.30%	100.00%
	15.70%	16.00%	15.79%
	11.00%	4.78%	15.79%
\$3,000,001 to \$5 million?	22	9	31
	70.97%	29.03%	100.00%
	7.51%	7.20%	7.42%
	5.26%	2.15%	7.42%
\$5,000,001 to \$10 million?	9	13	22
	40.91%	59.09%	100.00%
	3.07%	10.40%	5.26%
	2.15%	3.11%	5.26%
Over \$10 million?	17	29	46
	36.96%	63.04%	100.00%
	5.80%	23.20%	11.00%
	4.07%	6.94%	11.00%
Don't Know	19	9	28
	67.86%	32.14%	100.00%
	6.48%	7.20%	6.70%
	4.55%	2.15%	6.70%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q21 What percentage of these gross revenues was earned from SAWS, the private sector, and other public government projects? SAWS * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q21 What percentage of these gross revenues was earned from SAWS, the private sector, and other public government projects? SAWS	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Up to 10%	282	114	396
	71.21%	28.79%	100.00%
	96.25%	91.20%	94.74%
	67.46%	27.27%	94.74%
11% to 20%	4	3	7
	57.14%	42.86%	100.00%
	1.37%	2.40%	1.67%
	0.96%	0.72%	1.67%
21% to 30%	3	1	4
	75.00%	25.00%	100.00%
	1.02%	0.80%	0.96%
	0.72%	0.24%	0.96%
31% to 40%	2	3	5
	40.00%	60.00%	100.00%
	0.68%	2.40%	1.20%
	0.48%	0.72%	1.20%
41% to 50%	1	2	3
	33.33%	66.67%	100.00%
	0.34%	1.60%	0.72%
	0.24%	0.48%	0.72%
71% to 80%	1	1	2
	50.00%	50.00%	100.00%
	0.34%	0.80%	0.48%
	0.24%	0.24%	0.48%
81% to 100%	0	1	1
	0.00%	100.00%	100.00%
	0.00%	0.80%	0.24%
	0.00%	0.24%	0.24%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q21 What percentage of these gross revenues was earned from SAWS, the private sector, and other public government projects? Private Sector * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q21 What percentage of these gross revenues was earned from SAWS, the private sector, and other public government projects? Private Sector	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Up to 10%	61	17	78
	78.21%	21.79%	100.00%
	20.82%	13.60%	18.66%
	14.59%	4.07%	18.66%
11% to 20%	27	8	35
	77.14%	22.86%	100.00%
	9.22%	6.40%	8.37%
	6.46%	1.91%	8.37%

21% to 30%	22	6	28
	78.57%	21.43%	100.00%
	7.51%	4.80%	6.70%
	5.26%	1.44%	6.70%
31% to 40%	12	11	23
	52.17%	47.83%	100.00%
	4.10%	8.80%	5.50%
	2.87%	2.63%	5.50%
41% to 50%	35	17	52
	67.31%	32.69%	100.00%
	11.95%	13.60%	12.44%
	8.37%	4.07%	12.44%
51% to 60%	8	5	13
	61.54%	38.46%	100.00%
	2.73%	4.00%	3.11%
	1.91%	1.20%	3.11%
61% to 70%	16	7	23
	69.57%	30.43%	100.00%
	5.46%	5.60%	5.50%
	3.83%	1.67%	5.50%
71% to 80%	10	14	24
	41.67%	58.33%	100.00%
	3.41%	11.20%	5.74%
	2.39%	3.35%	5.74%
81% to 100%	102	40	142
	71.83%	28.17%	100.00%
	34.81%	32.00%	33.97%
	24.40%	9.57%	33.97%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q21 What percentage of these gross revenues was earned from SAWS, the private sector, and other public government projects? Public Sector * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q21 What percentage of these gross revenues was earned from SAWS, the private sector, and other public government projects? Public Sector	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Up to 10%	94	39	133
	70.68%	29.32%	100.00%
	32.08%	31.20%	31.82%
	22.49%	9.33%	31.82%
11% to 20%	17	13	30
	56.67%	43.33%	100.00%
	5.80%	10.40%	7.18%
	4.07%	3.11%	7.18%
21% to 30%	17	15	32
	53.13%	46.88%	100.00%
	5.80%	12.00%	7.66%

	4.07%	3.59%	7.66%
31% to 40%	13	10	23
	56.52%	43.48%	100.00%
	4.44%	8.00%	5.50%
	3.11%	2.39%	5.50%
41% to 50%	39	17	56
	69.64%	30.36%	100.00%
	13.31%	13.60%	13.40%
	9.33%	4.07%	13.40%
51% to 60%	8	5	13
	61.54%	38.46%	100.00%
	2.73%	4.00%	3.11%
	1.91%	1.20%	3.11%
61% to 70%	17	5	22
	77.27%	22.73%	100.00%
	5.80%	4.00%	5.26%
	4.07%	1.20%	5.26%
71% to 80%	30	6	36
	83.33%	16.67%	100.00%
	10.24%	4.80%	8.61%
	7.18%	1.44%	8.61%
81% to 100%	58	15	73
	79.45%	20.55%	100.00%
	19.80%	12.00%	17.46%
	13.88%	3.59%	17.46%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q22 Does your company hold any of the following certifications from a recognized certification agency? Minority Business Enterprise (MBE) * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q22 Does your company hold any of the following certifications from a recognized certification agency? Minority Business Enterprise (MBE)	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	195	14	209
	93.30%	6.70%	100.00%
	66.55%	11.20%	50.00%
	46.65%	3.35%	50.00%
No	97	109	206
	47.09%	52.91%	100.00%
	33.11%	87.20%	49.28%
	23.21%	26.08%	49.28%
Don't Know	1	2	3
	33.33%	66.67%	100.00%
	0.34%	1.60%	0.72%
	0.24%	0.48%	0.72%
Total	293	125	418
	70.10%	29.90%	100.00%

	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q22 Does your company hold any of the following certifications from a recognized certification agency? Small Business Enterprise (SBE) * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q22 Does your company hold any of the following certifications from a recognized certification agency? Small Business Enterprise (SBE)	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	238	63	301
	79.07%	20.93%	100.00%
	81.23%	50.40%	72.01%
	56.94%	15.07%	72.01%
No	54	59	113
	47.79%	52.21%	100.00%
	18.43%	47.20%	27.03%
	12.92%	14.11%	27.03%
Don't Know	1	3	4
	25.00%	75.00%	100.00%
	0.34%	2.40%	0.96%
	0.24%	0.72%	0.96%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q22 Does your company hold any of the following certifications from a recognized certification agency? Woman Business Enterprise (WBE) * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q22 Does your company hold any of the following certifications from a recognized certification agency? Woman Business Enterprise (WBE)	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	138	3	141
	97.87%	2.13%	100.00%
	47.10%	2.40%	33.73%
	33.01%	0.72%	33.73%
No	154	121	275
	56.00%	44.00%	100.00%
	52.56%	96.80%	65.79%
	36.84%	28.95%	65.79%
Don't Know	1	1	2
	50.00%	50.00%	100.00%
	0.34%	0.80%	0.48%
	0.24%	0.24%	0.48%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q22 Does your company hold any of the following certifications from a recognized certification agency? Disadvantaged Business Enterprise (DBE) * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q22 Does your company hold any of the following certifications from a recognized certification agency? Disadvantaged Business Enterprise (DBE)	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	124	8	132
	93.94%	6.06%	100.00%
	42.32%	6.40%	31.58%
	29.67%	1.91%	31.58%
No	168	116	284
	59.15%	40.85%	100.00%
	57.34%	92.80%	67.94%
	40.19%	27.75%	67.94%
Don't Know	1	1	2
	50.00%	50.00%	100.00%
	0.34%	0.80%	0.48%
	0.24%	0.24%	0.48%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q22 Does your company hold any of the following certifications from a recognized certification agency? HUBZone * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q22 Does your company hold any of the following certifications from a recognized certification agency? HUBZone	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	121	13	134
	90.30%	9.70%	100.00%
	41.30%	10.40%	32.06%
	28.95%	3.11%	32.06%
No	170	111	281
	60.50%	39.50%	100.00%
	58.02%	88.80%	67.22%
	40.67%	26.56%	67.22%
Don't Know	2	1	3
	66.67%	33.33%	100.00%
	0.68%	0.80%	0.72%
	0.48%	0.24%	0.72%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q22 Does your company hold any of the following certifications from a recognized certification agency? 8A * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q22 Does your company hold any of the following certifications from a recognized certification agency? 8A	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total

Yes	49	2	51
	96.08%	3.92%	100.00%
	16.72%	1.60%	12.20%
	11.72%	0.48%	12.20%
No	240	122	362
	66.30%	33.70%	100.00%
	81.91%	97.60%	86.60%
	57.42%	29.19%	86.60%
Don't Know	4	1	5
	80.00%	20.00%	100.00%
	1.37%	0.80%	1.20%
	0.96%	0.24%	1.20%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

**Table: Q22 Does your company hold any of the following certifications from a recognized certification agency? Other *
M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].**

Q22 Does your company hold any of the following certifications from a recognized certification agency? Other	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	60	13	73
	82.19%	17.81%	100.00%
	20.48%	10.40%	17.46%
	14.35%	3.11%	17.46%
No	230	111	341
	67.45%	32.55%	100.00%
	78.50%	88.80%	81.58%
	55.02%	26.56%	81.58%
Don't Know	3	1	4
	75.00%	25.00%	100.00%
	1.02%	0.80%	0.96%
	0.72%	0.24%	0.96%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q23_REC0DE * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q23_REC0DE	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
.	238	116	354
	67.23%	32.77%	100.00%
	81.23%	92.80%	84.69%
	56.94%	27.75%	84.69%
American Subcontractor Association	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%

	0.24%	0.00%	0.24%
CEFPI	0	1	1
	0.00%	100.00%	100.00%
	0.00%	0.80%	0.24%
	0.00%	0.24%	0.24%
Central South Texas Small Business Veteran Certification	0	1	1
	0.00%	100.00%	100.00%
	0.00%	0.80%	0.24%
	0.00%	0.24%	0.24%
City of Houston	0	1	1
	0.00%	100.00%	100.00%
	0.00%	0.80%	0.24%
	0.00%	0.24%	0.24%
DBE, HUB	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
DOT	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Disabled	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
ESBE	3	1	4
	75.00%	25.00%	100.00%
	1.02%	0.80%	0.96%
	0.72%	0.24%	0.96%
ESBE, HUBE	4	0	4
	100.00%	0.00%	100.00%
	1.37%	0.00%	0.96%
	0.96%	0.00%	0.96%
GSA	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
HUB, HUBE	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Hispanic American Business Enterprise HUBE	8	0	8
	100.00%	0.00%	100.00%
	2.73%	0.00%	1.91%
	1.91%	0.00%	1.91%
ISO	0	1	1
	0.00%	100.00%	100.00%
	0.00%	0.80%	0.24%
	0.00%	0.24%	0.24%
SCTRCA	5	1	6

	83.33%	16.67%	100.00%
	1.71%	0.80%	1.44%
	1.20%	0.24%	1.44%
SWMB	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Texas HUB	22	0	22
	100.00%	0.00%	100.00%
	7.51%	0.00%	5.26%
	5.26%	0.00%	5.26%
Texas HUB, WBENC	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Veteran Business Enterprise	5	3	8
	62.50%	37.50%	100.00%
	1.71%	2.40%	1.91%
	1.20%	0.72%	1.91%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q24 On a scale from 1 to 6 (1 being extremely easy and 6 being extremely difficult) how would you rate your ease of obtaining notification of business opportunities with San Antonio Water Systems? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q24 On a scale from 1 to 6 (1 being extremely easy and 6 being extremely difficult) how would you rate your ease of obtaining notification of business opportunities with San Antonio Water Systems?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Extremely Easy	56	40	96
	58.33%	41.67%	100.00%
	19.11%	32.00%	22.97%
	13.40%	9.57%	22.97%
Somewhat Easy	39	29	68
	57.35%	42.65%	100.00%
	13.31%	23.20%	16.27%
	9.33%	6.94%	16.27%
Easy	61	28	89
	68.54%	31.46%	100.00%
	20.82%	22.40%	21.29%
	14.59%	6.70%	21.29%
Difficult	31	8	39
	79.49%	20.51%	100.00%
	10.58%	6.40%	9.33%
	7.42%	1.91%	9.33%
Somewhat Difficult	38	8	46
	82.61%	17.39%	100.00%

	12.97%	6.40%	11.00%
	9.09%	1.91%	11.00%
Extremely Difficult	42	9	51
	82.35%	17.65%	100.00%
	14.33%	7.20%	12.20%
	10.05%	2.15%	12.20%
Don't Know	26	3	29
	89.66%	10.34%	100.00%
	8.87%	2.40%	6.94%
	6.22%	0.72%	6.94%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q25_a How do you obtain notification of bid/proposal opportunities? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q25_a How do you obtain notification of bid/proposal opportunities?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
SAWS website	61	40	101
	60.40%	39.60%	100.00%
	20.82%	32.00%	24.16%
	14.59%	9.57%	24.16%
Contact from SAWS	106	62	168
	63.10%	36.90%	100.00%
	36.18%	49.60%	40.19%
	25.36%	14.83%	40.19%
Private bidding subscription	30	3	33
	90.91%	9.09%	100.00%
	10.24%	2.40%	7.89%
	7.18%	0.72%	7.89%
Other Primes/Subcontractors	22	7	29
	75.86%	24.14%	100.00%
	7.51%	5.60%	6.94%
	5.26%	1.67%	6.94%
Trade or industry associations	4	0	4
	100.00%	0.00%	100.00%
	1.37%	0.00%	0.96%
	0.96%	0.00%	0.96%
Local newspapers with general circulation	5	1	6
	83.33%	16.67%	100.00%
	1.71%	0.80%	1.44%
	1.20%	0.24%	1.44%
Don't Know	35	7	42
	83.33%	16.67%	100.00%
	11.95%	5.60%	10.05%
	8.37%	1.67%	10.05%
Other	30	5	35
	85.71%	14.29%	100.00%
	10.24%	4.00%	8.37%

	7.18%	1.20%	8.37%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q25_b How do you obtain notification of bid/proposal opportunities? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q25_b How do you obtain notification of bid/proposal opportunities?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
SAWS website	24	7	31
	77.42%	22.58%	100.00%
	8.19%	5.60%	7.42%
	5.74%	1.67%	7.42%
Contact from SAWS	34	25	59
	57.63%	42.37%	100.00%
	11.60%	20.00%	14.11%
	8.13%	5.98%	14.11%
Private bidding subscription	23	6	29
	79.31%	20.69%	100.00%
	7.85%	4.80%	6.94%
	5.50%	1.44%	6.94%
Other Primes/Subcontractors	21	6	27
	77.78%	22.22%	100.00%
	7.17%	4.80%	6.46%
	5.02%	1.44%	6.46%
Trade or industry associations	9	1	10
	90.00%	10.00%	100.00%
	3.07%	0.80%	2.39%
	2.15%	0.24%	2.39%
Local newspapers with general circulation	7	1	8
	87.50%	12.50%	100.00%
	2.39%	0.80%	1.91%
	1.67%	0.24%	1.91%
Don't Know	2	0	2
	100.00%	0.00%	100.00%
	0.68%	0.00%	0.48%
	0.48%	0.00%	0.48%
Other	8	1	9
	88.89%	11.11%	100.00%
	2.73%	0.80%	2.15%
	1.91%	0.24%	2.15%
No Response	165	78	243
	67.90%	32.10%	100.00%
	56.31%	62.40%	58.13%
	39.47%	18.66%	58.13%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q25_c How do you obtain notification of bid/proposal opportunities? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q25_c How do you obtain notification of bid/proposal opportunities?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
SAWS website	3	0	3
	100.00%	0.00%	100.00%
	1.02%	0.00%	0.72%
	0.72%	0.00%	0.72%
Contact from SAWS	3	0	3
	100.00%	0.00%	100.00%
	1.02%	0.00%	0.72%
	0.72%	0.00%	0.72%
Private bidding subscription	11	12	23
	47.83%	52.17%	100.00%
	3.75%	9.60%	5.50%
	2.63%	2.87%	5.50%
Other Primes/Subcontractors	23	7	30
	76.67%	23.33%	100.00%
	7.85%	5.60%	7.18%
	5.50%	1.67%	7.18%
Trade or industry associations	13	2	15
	86.67%	13.33%	100.00%
	4.44%	1.60%	3.59%
	3.11%	0.48%	3.59%
Local newspapers with general circulation	5	0	5
	100.00%	0.00%	100.00%
	1.71%	0.00%	1.20%
	1.20%	0.00%	1.20%
Don't Know	0	1	1
	0.00%	100.00%	100.00%
	0.00%	0.80%	0.24%
	0.00%	0.24%	0.24%
Other	4	0	4
	100.00%	0.00%	100.00%
	1.37%	0.00%	0.96%
	0.96%	0.00%	0.96%
No Response	231	103	334
	69.16%	30.84%	100.00%
	78.84%	82.40%	79.90%
	55.26%	24.64%	79.90%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q25_d How do you obtain notification of bid/proposal opportunities? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q25_d How do you obtain notification of bid/proposal opportunities?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total

SAWS website	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Other Primes/Subcontractors	6	9	15
	40.00%	60.00%	100.00%
	2.05%	7.20%	3.59%
	1.44%	2.15%	3.59%
Trade or industry associations	10	7	17
	58.82%	41.18%	100.00%
	3.41%	5.60%	4.07%
	2.39%	1.67%	4.07%
Local newspapers with general circulation	10	0	10
	100.00%	0.00%	100.00%
	3.41%	0.00%	2.39%
	2.39%	0.00%	2.39%
Other	7	2	9
	77.78%	22.22%	100.00%
	2.39%	1.60%	2.15%
	1.67%	0.48%	2.15%
No Response	259	107	366
	70.77%	29.23%	100.00%
	88.40%	85.60%	87.56%
	61.96%	25.60%	87.56%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q25_e How do you obtain notification of bid/proposal opportunities? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q25_e How do you obtain notification of bid/proposal opportunities?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Trade or industry associations	4	6	10
	40.00%	60.00%	100.00%
	1.37%	4.80%	2.39%
	0.96%	1.44%	2.39%
Local newspapers with general circulation	2	4	6
	33.33%	66.67%	100.00%
	0.68%	3.20%	1.44%
	0.48%	0.96%	1.44%
Other	5	0	5
	100.00%	0.00%	100.00%
	1.71%	0.00%	1.20%
	1.20%	0.00%	1.20%
No Response	282	115	397
	71.03%	28.97%	100.00%
	96.25%	92.00%	94.98%
	67.46%	27.51%	94.98%
Total	293	125	418

	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q25_f How do you obtain notification of bid/proposal opportunities? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q25_f How do you obtain notification of bid/proposal opportunities?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Trade or industry associations	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Local newspapers with general circulation	2	5	7
	28.57%	71.43%	100.00%
	0.68%	4.00%	1.67%
	0.48%	1.20%	1.67%
Other	0	1	1
	0.00%	100.00%	100.00%
	0.00%	0.80%	0.24%
	0.00%	0.24%	0.24%
No Response	290	119	409
	70.90%	29.10%	100.00%
	98.98%	95.20%	97.85%
	69.38%	28.47%	97.85%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q25_g How do you obtain notification of bid/proposal opportunities? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q25_g How do you obtain notification of bid/proposal opportunities?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
No Response	290	119	409
	70.90%	29.10%	100.00%
	100.00%	100.00%	100.00%
	70.90%	29.10%	100.00%
Total	290	119	409
	70.90%	29.10%	100.00%
	100.00%	100.00%	100.00%
	70.90%	29.10%	100.00%

Table: Q25_h How do you obtain notification of bid/proposal opportunities? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q25_h How do you obtain notification of bid/proposal opportunities?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
No Response	290	119	409
	70.90%	29.10%	100.00%
	100.00%	100.00%	100.00%
	70.90%	29.10%	100.00%

Total	290	119	409
	70.90%	29.10%	100.00%
	100.00%	100.00%	100.00%
	70.90%	29.10%	100.00%

Table: Q26_RECODE * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q26_RECODE	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
	259	119	378
	68.52%	31.48%	100.00%
	88.40%	95.20%	90.43%
	61.96%	28.47%	90.43%
Client referrals	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
500.00 to 1,000.00 dollars worth of advertising in the media. (Anything digital) to help promote.	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
ACG	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Ad agency	0	1	1
	0.00%	100.00%	100.00%
	0.00%	0.80%	0.24%
	0.00%	0.24%	0.24%
Auctions	0	1	1
	0.00%	100.00%	100.00%
	0.00%	0.80%	0.24%
	0.00%	0.24%	0.24%
Bid subscription	1	2	3
	33.33%	66.67%	100.00%
	0.34%	1.60%	0.72%
	0.24%	0.48%	0.72%
Builders association	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Do not bid on projects	2	0	2
	100.00%	0.00%	100.00%
	0.68%	0.00%	0.48%
	0.48%	0.00%	0.48%
Email	13	2	15

	86.67%	13.33%	100.00%
	4.44%	1.60%	3.59%
	3.11%	0.48%	3.59%
HUB website	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
I do not get any information on the SAWS projects, but would like to.	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Information from city of San Antonio which may include information from SAWS. Also through the Veterans Association	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Internet	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Never received notifications or work from SAWS	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Private subscription	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Referrals from old clients	2	0	2
	100.00%	0.00%	100.00%
	0.68%	0.00%	0.48%
	0.48%	0.00%	0.48%
San Antonio Electric Bidding System	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
San Antonio River Authority	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
The Blue Book	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Word of mouth	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Would like to start receiving SAWS notifications	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%

	0.24%	0.00%	0.24%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q27 Do you perform as a prime contractor, subcontractor, or both? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q27 Do you perform as a prime contractor, subcontractor, or both?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Prime	94	49	143
	65.73%	34.27%	100.00%
	32.08%	39.20%	34.21%
	22.49%	11.72%	34.21%
Sub	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Both	141	46	187
	75.40%	24.60%	100.00%
	48.12%	36.80%	44.74%
	33.73%	11.00%	44.74%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q28 In general, which of the following dollar ranges best approximate your company's largest prime contract awarded between January 1, 2011 and December 31, 2013? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q28 In general, which of the following dollar ranges best approximate your company's largest prime contract awarded between January 1, 2011 and December 31, 2013?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
None	8	3	11
	72.73%	27.27%	100.00%
	2.73%	2.40%	2.63%
	1.91%	0.72%	2.63%
Up to \$50,000?	67	10	77
	87.01%	12.99%	100.00%
	22.87%	8.00%	18.42%
	16.03%	2.39%	18.42%
\$50,001 to \$100,000?	32	14	46
	69.57%	30.43%	100.00%
	10.92%	11.20%	11.00%
	7.66%	3.35%	11.00%
\$100,001 to \$200,000?	19	5	24
	79.17%	20.83%	100.00%
	6.48%	4.00%	5.74%
	4.55%	1.20%	5.74%

\$200,001 to \$300,000?	18	6	24
	75.00%	25.00%	100.00%
	6.14%	4.80%	5.74%
	4.31%	1.44%	5.74%
\$300,001 to \$400,000?	7	4	11
	63.64%	36.36%	100.00%
	2.39%	3.20%	2.63%
	1.67%	0.96%	2.63%
\$400,001 to \$500,000?	10	3	13
	76.92%	23.08%	100.00%
	3.41%	2.40%	3.11%
	2.39%	0.72%	3.11%
\$500,001 to \$1 million?	21	6	27
	77.78%	22.22%	100.00%
	7.17%	4.80%	6.46%
	5.02%	1.44%	6.46%
Over \$1 million?	41	39	80
	51.25%	48.75%	100.00%
	13.99%	31.20%	19.14%
	9.81%	9.33%	19.14%
Don't Know	12	5	17
	70.59%	29.41%	100.00%
	4.10%	4.00%	4.07%
	2.87%	1.20%	4.07%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q29 Between January 1, 2011 and December 31, 2013, how many times has your company been awarded a SAWS project as a prime contractor/vendor? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q29 Between January 1, 2011 and December 31, 2013, how many times has your company been awarded a SAWS project as a prime contractor/vendor?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
None	198	63	261
	75.86%	24.14%	100.00%
	67.58%	50.40%	62.44%
	47.37%	15.07%	62.44%
1-10 Times	33	27	60
	55.00%	45.00%	100.00%
	11.26%	21.60%	14.35%
	7.89%	6.46%	14.35%
11-25 Times	3	3	6
	50.00%	50.00%	100.00%

	1.02%	2.40%	1.44%
	0.72%	0.72%	1.44%
26-50 Times	0	2	2
	0.00%	100.00%	100.00%
	0.00%	1.60%	0.48%
	0.00%	0.48%	0.48%
Over 100 Times	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q30 Between January 1, 2011 and December 31, 2013, which the following dollar ranges approximates your company's total volume of work with SAWS. * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q30 Between January 1, 2011 and December 31, 2013, which the following dollar ranges approximates your company's total volume of work with SAWS.	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
None	190	57	247
	76.92%	23.08%	100.00%
	64.85%	45.60%	59.09%
	45.45%	13.64%	59.09%
Up to \$50,000?	17	5	22
	77.27%	22.73%	100.00%
	5.80%	4.00%	5.26%
	4.07%	1.20%	5.26%
\$50,001 to \$100,000?	7	6	13
	53.85%	46.15%	100.00%
	2.39%	4.80%	3.11%
	1.67%	1.44%	3.11%
\$100,001 to \$200,000?	6	4	10
	60.00%	40.00%	100.00%
	2.05%	3.20%	2.39%
	1.44%	0.96%	2.39%
\$200,001 to \$300,000?	4	3	7
	57.14%	42.86%	100.00%
	1.37%	2.40%	1.67%
	0.96%	0.72%	1.67%
\$300,001 to \$400,000?	1	1	2
	50.00%	50.00%	100.00%
	0.34%	0.80%	0.48%
	0.24%	0.24%	0.48%

\$400,001 to \$500,000?	3	3	6
	50.00%	50.00%	100.00%
	1.02%	2.40%	1.44%
	0.72%	0.72%	1.44%
\$500,001 to \$1 million?	0	5	5
	0.00%	100.00%	100.00%
	0.00%	4.00%	1.20%
	0.00%	1.20%	1.20%
\$1,000,001 to \$3 million?	2	2	4
	50.00%	50.00%	100.00%
	0.68%	1.60%	0.96%
	0.48%	0.48%	0.96%
\$3,000,001 to \$5 million?	0	3	3
	0.00%	100.00%	100.00%
	0.00%	2.40%	0.72%
	0.00%	0.72%	0.72%
Over \$5 million?	0	2	2
	0.00%	100.00%	100.00%
	0.00%	1.60%	0.48%
	0.00%	0.48%	0.48%
Don't Know	5	4	9
	55.56%	44.44%	100.00%
	1.71%	3.20%	2.15%
	1.20%	0.96%	2.15%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Prequalification Requirements? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Prequalification Requirements?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	24	10	34
	70.59%	29.41%	100.00%
	8.19%	8.00%	8.13%
	5.74%	2.39%	8.13%
No	201	82	283
	71.02%	28.98%	100.00%
	68.60%	65.60%	67.70%
	48.09%	19.62%	67.70%
Don't Know	10	3	13
	76.92%	23.08%	100.00%

	3.41%	2.40%	3.11%
	2.39%	0.72%	3.11%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Bid bond requirements? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Bid bond requirements?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	25	3	28
	89.29%	10.71%	100.00%
	8.53%	2.40%	6.70%
	5.98%	0.72%	6.70%
No	200	89	289
	69.20%	30.80%	100.00%
	68.26%	71.20%	69.14%
	47.85%	21.29%	69.14%
Don't Know	10	3	13
	76.92%	23.08%	100.00%
	3.41%	2.40%	3.11%
	2.39%	0.72%	3.11%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Performance/payment bond requirement? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Performance/payment bond requirement?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	16	6	22
	72.73%	27.27%	100.00%
	5.46%	4.80%	5.26%
	3.83%	1.44%	5.26%

No	209	86	295
	70.85%	29.15%	100.00%
	71.33%	68.80%	70.57%
	50.00%	20.57%	70.57%
Don't Know	10	3	13
	76.92%	23.08%	100.00%
	3.41%	2.40%	3.11%
	2.39%	0.72%	3.11%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Cost of bidding/proposing? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Cost of bidding/proposing?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	13	5	18
	72.22%	27.78%	100.00%
	4.44%	4.00%	4.31%
	3.11%	1.20%	4.31%
No	212	87	299
	70.90%	29.10%	100.00%
	72.35%	69.60%	71.53%
	50.72%	20.81%	71.53%
Don't Know	10	3	13
	76.92%	23.08%	100.00%
	3.41%	2.40%	3.11%
	2.39%	0.72%	3.11%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Financing? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following	M/WBE or Non-M/WBE Classification (not based on certification)
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been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Financing?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	15	1	16
	93.75%	6.25%	100.00%
	5.12%	0.80%	3.83%
	3.59%	0.24%	3.83%
No	210	91	301
	69.77%	30.23%	100.00%
	71.67%	72.80%	72.01%
	50.24%	21.77%	72.01%
Don't Know	10	3	13
	76.92%	23.08%	100.00%
	3.41%	2.40%	3.11%
	2.39%	0.72%	3.11%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Insurance (general liability, professional liability, etc.)? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Insurance (general liability, professional liability, etc.)?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	12	3	15
	80.00%	20.00%	100.00%
	4.10%	2.40%	3.59%
	2.87%	0.72%	3.59%
No	213	89	302
	70.53%	29.47%	100.00%
	72.70%	71.20%	72.25%
	50.96%	21.29%	72.25%
Don't Know	10	3	13
	76.92%	23.08%	100.00%
	3.41%	2.40%	3.11%
	2.39%	0.72%	3.11%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Price of supplies/materials * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Price of supplies/materials	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	11	2	13
	84.62%	15.38%	100.00%
	3.75%	1.60%	3.11%
	2.63%	0.48%	3.11%
No	214	90	304
	70.39%	29.61%	100.00%
	73.04%	72.00%	72.73%
	51.20%	21.53%	72.73%
Don't Know	10	3	13
	76.92%	23.08%	100.00%
	3.41%	2.40%	3.11%
	2.39%	0.72%	3.11%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Proposal/Bid specifications * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Proposal/Bid specifications	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	20	14	34
	58.82%	41.18%	100.00%
	6.83%	11.20%	8.13%
	4.78%	3.35%	8.13%
No	204	78	282
	72.34%	27.66%	100.00%
	69.62%	62.40%	67.46%
	48.80%	18.66%	67.46%
Don't Know	11	3	14
	78.57%	21.43%	100.00%
	3.75%	2.40%	3.35%
	2.63%	0.72%	3.35%
No Response	58	30	88
	65.91%	34.09%	100.00%

	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Limited time given to prepare bid package or quote * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Limited time given to prepare bid package or quote	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	29	15	44
	65.91%	34.09%	100.00%
	9.90%	12.00%	10.53%
	6.94%	3.59%	10.53%
No	196	77	273
	71.79%	28.21%	100.00%
	66.89%	61.60%	65.31%
	46.89%	18.42%	65.31%
Don't Know	10	3	13
	76.92%	23.08%	100.00%
	3.41%	2.40%	3.11%
	2.39%	0.72%	3.11%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Limited knowledge of purchasing contracting policies and procedures * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Limited knowledge of purchasing contracting policies and procedures	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	24	9	33
	72.73%	27.27%	100.00%
	8.19%	7.20%	7.89%
	5.74%	2.15%	7.89%
No	201	82	283
	71.02%	28.98%	100.00%
	68.60%	65.60%	67.70%

	48.09%	19.62%	67.70%
Don't Know	10	4	14
	71.43%	28.57%	100.00%
	3.41%	3.20%	3.35%
	2.39%	0.96%	3.35%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Lack of experience * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Lack of experience	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	11	4	15
	73.33%	26.67%	100.00%
	3.75%	3.20%	3.59%
	2.63%	0.96%	3.59%
No	215	88	303
	70.96%	29.04%	100.00%
	73.38%	70.40%	72.49%
	51.44%	21.05%	72.49%
Don't Know	9	3	12
	75.00%	25.00%	100.00%
	3.07%	2.40%	2.87%
	2.15%	0.72%	2.87%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Lack of personnel * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Lack of personnel	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	8	2	10

	80.00%	20.00%	100.00%
	2.73%	1.60%	2.39%
	1.91%	0.48%	2.39%
No	218	90	308
	70.78%	29.22%	100.00%
	74.40%	72.00%	73.68%
	52.15%	21.53%	73.68%
Don't Know	9	3	12
	75.00%	25.00%	100.00%
	3.07%	2.40%	2.87%
	2.15%	0.72%	2.87%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Contract too large * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Contract too large	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	23	7	30
	76.67%	23.33%	100.00%
	7.85%	5.60%	7.18%
	5.50%	1.67%	7.18%
No	203	85	288
	70.49%	29.51%	100.00%
	69.28%	68.00%	68.90%
	48.56%	20.33%	68.90%
Don't Know	9	3	12
	75.00%	25.00%	100.00%
	3.07%	2.40%	2.87%
	2.15%	0.72%	2.87%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Selection process * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Selection process	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	39	12	51
	76.47%	23.53%	100.00%
	13.31%	9.60%	12.20%
	9.33%	2.87%	12.20%
No	184	80	264
	69.70%	30.30%	100.00%
	62.80%	64.00%	63.16%
	44.02%	19.14%	63.16%
Don't Know	12	3	15
	80.00%	20.00%	100.00%
	4.10%	2.40%	3.59%
	2.87%	0.72%	3.59%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Unnecessary restrictive contract specifications * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Unnecessary restrictive contract specifications	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	23	9	32
	71.88%	28.13%	100.00%
	7.85%	7.20%	7.66%
	5.50%	2.15%	7.66%
No	202	83	285
	70.88%	29.12%	100.00%
	68.94%	66.40%	68.18%
	48.33%	19.86%	68.18%
Don't Know	10	3	13
	76.92%	23.08%	100.00%
	3.41%	2.40%	3.11%
	2.39%	0.72%	3.11%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%

	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Slow payment or nonpayment * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Slow payment or nonpayment	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	7	4	11
	63.64%	36.36%	100.00%
	2.39%	3.20%	2.63%
	1.67%	0.96%	2.63%
No	218	88	306
	71.24%	28.76%	100.00%
	74.40%	70.40%	73.21%
	52.15%	21.05%	73.21%
Don't Know	10	3	13
	76.92%	23.08%	100.00%
	3.41%	2.40%	3.11%
	2.39%	0.72%	3.11%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Competing with large companies * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q31 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a prime contractor/consultant? Competing with large companies	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	74	17	91
	81.32%	18.68%	100.00%
	25.26%	13.60%	21.77%
	17.70%	4.07%	21.77%
No	152	75	227
	66.96%	33.04%	100.00%
	51.88%	60.00%	54.31%
	36.36%	17.94%	54.31%
Don't Know	9	3	12

	75.00%	25.00%	100.00%
	3.07%	2.40%	2.87%
	2.15%	0.72%	2.87%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q32 When you were a prime contractor/vendor, what was the average amount of time that it typically took to receive payment for your services on SAWS funded projects * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q32 When you were a prime contractor/vendor, what was the average amount of time that it typically took to receive payment for your services on SAWS funded projects	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Less Than 30 Days	30	22	52
	57.69%	42.31%	100.00%
	10.24%	17.60%	12.44%
	7.18%	5.26%	12.44%
31-60 Days	25	18	43
	58.14%	41.86%	100.00%
	8.53%	14.40%	10.29%
	5.98%	4.31%	10.29%
61-90 Days	4	4	8
	50.00%	50.00%	100.00%
	1.37%	3.20%	1.91%
	0.96%	0.96%	1.91%
91-120 Days	2	2	4
	50.00%	50.00%	100.00%
	0.68%	1.60%	0.96%
	0.48%	0.48%	0.96%
Not Applicable	171	46	217
	78.80%	21.20%	100.00%
	58.36%	36.80%	51.91%
	40.91%	11.00%	51.91%
Don't Know	3	3	6
	50.00%	50.00%	100.00%
	1.02%	2.40%	1.44%
	0.72%	0.72%	1.44%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

	70.10%	29.90%	100.00%
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Table: Q33 Between January 1, 2011 and December 31, 2012, have you ever submitted a bid or quote for a SAWS contract, were informed that you were the lowest bidder, and then found out that another firm was actually doing the work? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q33 Between January 1, 2011 and December 31, 2012, have you ever submitted a bid or quote for a SAWS contract, were informed that you were the lowest bidder, and then found out that another firm was actually doing the work?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	5	3	8
	62.50%	37.50%	100.00%
	1.71%	2.40%	1.91%
	1.20%	0.72%	1.91%
No	227	92	319
	71.16%	28.84%	100.00%
	77.47%	73.60%	76.32%
	54.31%	22.01%	76.32%
Don't Know	3	0	3
	100.00%	0.00%	100.00%
	1.02%	0.00%	0.72%
	0.72%	0.00%	0.72%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q34 As a prime contractor/consultant, are you required to have bonding? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q34 As a prime contractor/consultant, are you required to have bonding?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	80	28	108
	74.07%	25.93%	100.00%
	27.30%	22.40%	25.84%
	19.14%	6.70%	25.84%
No	153	67	220
	69.55%	30.45%	100.00%
	52.22%	53.60%	52.63%
	36.60%	16.03%	52.63%
Don't Know	2	0	2
	100.00%	0.00%	100.00%
	0.68%	0.00%	0.48%
	0.48%	0.00%	0.48%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%

	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q35 What is your current aggregate bonding limit? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q35 What is your current aggregate bonding limit?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Below \$100,000	10	0	10
	100.00%	0.00%	100.00%
	3.41%	0.00%	2.39%
	2.39%	0.00%	2.39%
\$100,001 to \$250,000	6	0	6
	100.00%	0.00%	100.00%
	2.05%	0.00%	1.44%
	1.44%	0.00%	1.44%
\$250,001 to \$500,000	6	0	6
	100.00%	0.00%	100.00%
	2.05%	0.00%	1.44%
	1.44%	0.00%	1.44%
\$500,001 to \$1 million	11	6	17
	64.71%	35.29%	100.00%
	3.75%	4.80%	4.07%
	2.63%	1.44%	4.07%
\$1,000,001 to \$1.5 million	12	2	14
	85.71%	14.29%	100.00%
	4.10%	1.60%	3.35%
	2.87%	0.48%	3.35%
\$1,500,001 to \$3 million	12	3	15
	80.00%	20.00%	100.00%
	4.10%	2.40%	3.59%
	2.87%	0.72%	3.59%
\$3,00,001 to \$5 million	7	0	7
	100.00%	0.00%	100.00%
	2.39%	0.00%	1.67%
	1.67%	0.00%	1.67%
Over \$5 million	12	9	21
	57.14%	42.86%	100.00%
	4.10%	7.20%	5.02%
	2.87%	2.15%	5.02%
Don't Know	5	8	13
	38.46%	61.54%	100.00%
	1.71%	6.40%	3.11%
	1.20%	1.91%	3.11%
No Response	212	97	309
	68.61%	31.39%	100.00%
	72.35%	77.60%	73.92%
	50.72%	23.21%	73.92%

Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q36 What is your current single project bonding limit? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q36 What is your current single project bonding limit?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Below \$100,000	9	0	9
	100.00%	0.00%	100.00%
	3.07%	0.00%	2.15%
	2.15%	0.00%	2.15%
\$100,001 to \$250,000	7	0	7
	100.00%	0.00%	100.00%
	2.39%	0.00%	1.67%
	1.67%	0.00%	1.67%
\$250,001 to \$500,000	7	1	8
	87.50%	12.50%	100.00%
	2.39%	0.80%	1.91%
	1.67%	0.24%	1.91%
\$500,001 to \$1 million	9	4	13
	69.23%	30.77%	100.00%
	3.07%	3.20%	3.11%
	2.15%	0.96%	3.11%
\$1,000,001 to \$1.5 million	14	2	16
	87.50%	12.50%	100.00%
	4.78%	1.60%	3.83%
	3.35%	0.48%	3.83%
\$1,500,001 to \$3 million	12	4	16
	75.00%	25.00%	100.00%
	4.10%	3.20%	3.83%
	2.87%	0.96%	3.83%
\$3,00,001 to \$5 million	6	3	9
	66.67%	33.33%	100.00%
	2.05%	2.40%	2.15%
	1.44%	0.72%	2.15%
Over \$5 million	9	6	15
	60.00%	40.00%	100.00%
	3.07%	4.80%	3.59%
	2.15%	1.44%	3.59%
Don't Know	8	8	16
	50.00%	50.00%	100.00%
	2.73%	6.40%	3.83%
	1.91%	1.91%	3.83%
No Response	212	97	309
	68.61%	31.39%	100.00%
	72.35%	77.60%	73.92%
	50.72%	23.21%	73.92%
Total	293	125	418

	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q37 As a prime contractor/consultant did you experience discriminatory behavior by SAWS when bidding or working on a project between 2011 and 2013 * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q37 As a prime contractor/consultant did you experience discriminatory behavior by SAWS when bidding or working on a project between 2011 and 2013	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	2	1	3
	66.67%	33.33%	100.00%
	0.68%	0.80%	0.72%
	0.48%	0.24%	0.72%
No	157	83	240
	65.42%	34.58%	100.00%
	53.58%	66.40%	57.42%
	37.56%	19.86%	57.42%
Not Applicable	76	11	87
	87.36%	12.64%	100.00%
	25.94%	8.80%	20.81%
	18.18%	2.63%	20.81%
No Response	58	30	88
	65.91%	34.09%	100.00%
	19.80%	24.00%	21.05%
	13.88%	7.18%	21.05%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q38 What was the most noticeable way you became aware of the discrimination against your company? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q38 What was the most noticeable way you became aware of the discrimination against your company?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Verbal Comment	2	0	2
	100.00%	0.00%	100.00%
	0.68%	0.00%	0.48%
	0.48%	0.00%	0.48%
Written Statement	0	1	1
	0.00%	100.00%	100.00%
	0.00%	0.80%	0.24%
	0.00%	0.24%	0.24%
No Response	291	124	415
	70.12%	29.88%	100.00%
	99.32%	99.20%	99.28%
	69.62%	29.67%	99.28%
Total	293	125	418

	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q39 Which of the following do you consider the primary reason for your company being discriminated against? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q39 Which of the following do you consider the primary reason for your company being discriminated against?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Owner's Race or Ethnicity	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Both	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Don't Know	0	1	1
	0.00%	100.00%	100.00%
	0.00%	0.80%	0.24%
	0.00%	0.24%	0.24%
No Response	291	124	415
	70.12%	29.88%	100.00%
	99.32%	99.20%	99.28%
	69.62%	29.67%	99.28%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q40 When did the discrimination first occur? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q40 When did the discrimination first occur?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
During Bidding Process	1	1	2
	50.00%	50.00%	100.00%
	0.34%	0.80%	0.48%
	0.24%	0.24%	0.48%
Both	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
No Response	291	124	415
	70.12%	29.88%	100.00%
	99.32%	99.20%	99.28%
	69.62%	29.67%	99.28%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q41 Did you file a complaint? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q41 Did you file a complaint?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
No	2	1	3
	66.67%	33.33%	100.00%
	0.68%	0.80%	0.72%
	0.48%	0.24%	0.72%
No Response	291	124	415
	70.12%	29.88%	100.00%
	99.32%	99.20%	99.28%
	69.62%	29.67%	99.28%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q42 In general, which of the following dollar ranges best approximates your company's largest subcontract awarded between January 1, 2011 and December 31, 2013? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q42 In general, which of the following dollar ranges best approximates your company's largest subcontract awarded between January 1, 2011 and December 31, 2013?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
None	19	3	22
	86.36%	13.64%	100.00%
	6.48%	2.40%	5.26%
	4.55%	0.72%	5.26%
Up to \$50,000?	60	12	72
	83.33%	16.67%	100.00%
	20.48%	9.60%	17.22%
	14.35%	2.87%	17.22%
\$50,001 to \$100,000?	27	17	44
	61.36%	38.64%	100.00%
	9.22%	13.60%	10.53%
	6.46%	4.07%	10.53%
\$100,001 to \$200,000?	18	8	26
	69.23%	30.77%	100.00%
	6.14%	6.40%	6.22%
	4.31%	1.91%	6.22%
\$200,001 to \$300,000?	14	5	19
	73.68%	26.32%	100.00%
	4.78%	4.00%	4.55%
	3.35%	1.20%	4.55%
\$300,001 to \$400,000?	5	2	7
	71.43%	28.57%	100.00%
	1.71%	1.60%	1.67%
	1.20%	0.48%	1.67%
\$400,001 to \$500,000?	10	2	12

	83.33%	16.67%	100.00%
	3.41%	1.60%	2.87%
	2.39%	0.48%	2.87%
\$500,001 to \$1 million?	16	5	21
	76.19%	23.81%	100.00%
	5.46%	4.00%	5.02%
	3.83%	1.20%	5.02%
Over \$1 million?	20	15	35
	57.14%	42.86%	100.00%
	6.83%	12.00%	8.37%
	4.78%	3.59%	8.37%
Don't Know	11	7	18
	61.11%	38.89%	100.00%
	3.75%	5.60%	4.31%
	2.63%	1.67%	4.31%
No Response	93	49	142
	65.49%	34.51%	100.00%
	31.74%	39.20%	33.97%
	22.25%	11.72%	33.97%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q43 Between January 1, 2011 and December 31, 2013, how many times has your company been awarded a subcontract with a prime contractor for a project with SAWS? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q43 Between January 1, 2011 and December 31, 2013, how many times has your company been awarded a subcontract with a prime contractor for a project with SAWS?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
None	159	42	201
	79.10%	20.90%	100.00%
	54.27%	33.60%	48.09%
	38.04%	10.05%	48.09%
1-10 times	37	30	67
	55.22%	44.78%	100.00%
	12.63%	24.00%	16.03%
	8.85%	7.18%	16.03%
11-25 times	1	3	4
	25.00%	75.00%	100.00%
	0.34%	2.40%	0.96%
	0.24%	0.72%	0.96%
26-50 times	0	1	1
	0.00%	100.00%	100.00%
	0.00%	0.80%	0.24%
	0.00%	0.24%	0.24%
Don't Know	3	0	3
	100.00%	0.00%	100.00%
	1.02%	0.00%	0.72%

	0.72%	0.00%	0.72%
No Response	93	49	142
	65.49%	34.51%	100.00%
	31.74%	39.20%	33.97%
	22.25%	11.72%	33.97%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q44 Between January 1, 2011 and December 31, 2013, which of the following dollar ranges approximates your company's total volume of work on a SAWS project? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q44 Between January 1, 2011 and December 31, 2013, which of the following dollar ranges approximates your company's total volume of work on a SAWS project?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
None	2	0	2
	100.00%	0.00%	100.00%
	0.68%	0.00%	0.48%
	0.48%	0.00%	0.48%
Up to \$50,000?	12	7	19
	63.16%	36.84%	100.00%
	4.10%	5.60%	4.55%
	2.87%	1.67%	4.55%
\$50,001 to \$100,000?	4	8	12
	33.33%	66.67%	100.00%
	1.37%	6.40%	2.87%
	0.96%	1.91%	2.87%
\$100,001 to \$200,000?	9	3	12
	75.00%	25.00%	100.00%
	3.07%	2.40%	2.87%
	2.15%	0.72%	2.87%
\$200,001 to \$500,000?	5	7	12
	41.67%	58.33%	100.00%
	1.71%	5.60%	2.87%
	1.20%	1.67%	2.87%
\$500,001 to \$1 million?	3	1	4
	75.00%	25.00%	100.00%
	1.02%	0.80%	0.96%
	0.72%	0.24%	0.96%
\$1,000,001 to \$3 million?	0	4	4
	0.00%	100.00%	100.00%
	0.00%	3.20%	0.96%
	0.00%	0.96%	0.96%
Over \$5 million?	0	2	2
	0.00%	100.00%	100.00%
	0.00%	1.60%	0.48%
	0.00%	0.48%	0.48%
Don't Know	6	3	9

	66.67%	33.33%	100.00%
	2.05%	2.40%	2.15%
	1.44%	0.72%	2.15%
No Response	252	90	342
	73.68%	26.32%	100.00%
	86.01%	72.00%	81.82%
	60.29%	21.53%	81.82%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Performance/payment bond requirement? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Performance/payment bond requirement?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	3	1	4
	75.00%	25.00%	100.00%
	1.02%	0.80%	0.96%
	0.72%	0.24%	0.96%
No	38	34	72
	52.78%	47.22%	100.00%
	12.97%	27.20%	17.22%
	9.09%	8.13%	17.22%
No Response	252	90	342
	73.68%	26.32%	100.00%
	86.01%	72.00%	81.82%
	60.29%	21.53%	81.82%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Cost of bidding/proposing? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Cost of bidding/proposing?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	2	2	4
	50.00%	50.00%	100.00%
	0.68%	1.60%	0.96%
	0.48%	0.48%	0.96%
No	39	33	72
	54.17%	45.83%	100.00%
	13.31%	26.40%	17.22%

	9.33%	7.89%	17.22%
No Response	252	90	342
	73.68%	26.32%	100.00%
	86.01%	72.00%	81.82%
	60.29%	21.53%	81.82%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Financing? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Financing?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	2	1	3
	66.67%	33.33%	100.00%
	0.68%	0.80%	0.72%
	0.48%	0.24%	0.72%
No	39	34	73
	53.42%	46.58%	100.00%
	13.31%	27.20%	17.46%
	9.33%	8.13%	17.46%
No Response	252	90	342
	73.68%	26.32%	100.00%
	86.01%	72.00%	81.82%
	60.29%	21.53%	81.82%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Insurance (general liability, professional liability, etc.)? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Insurance (general liability, professional liability, etc.)?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	0	1	1
	0.00%	100.00%	100.00%
	0.00%	0.80%	0.24%
	0.00%	0.24%	0.24%
No	41	34	75
	54.67%	45.33%	100.00%
	13.99%	27.20%	17.94%
	9.81%	8.13%	17.94%
No Response	252	90	342
	73.68%	26.32%	100.00%

	86.01%	72.00%	81.82%
	60.29%	21.53%	81.82%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Price of supplies/materials * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Price of supplies/materials	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	1	1	2
	50.00%	50.00%	100.00%
	0.34%	0.80%	0.48%
	0.24%	0.24%	0.48%
No	40	34	74
	54.05%	45.95%	100.00%
	13.65%	27.20%	17.70%
	9.57%	8.13%	17.70%
No Response	252	90	342
	73.68%	26.32%	100.00%
	86.01%	72.00%	81.82%
	60.29%	21.53%	81.82%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Limited time given to prepare bid package or quote * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Limited time given to prepare bid package or quote	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	4	5	9
	44.44%	55.56%	100.00%
	1.37%	4.00%	2.15%
	0.96%	1.20%	2.15%
No	37	30	67
	55.22%	44.78%	100.00%
	12.63%	24.00%	16.03%
	8.85%	7.18%	16.03%
No Response	252	90	342
	73.68%	26.32%	100.00%
	86.01%	72.00%	81.82%
	60.29%	21.53%	81.82%

Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Lack of experience * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Lack of experience	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	2	1	3
	66.67%	33.33%	100.00%
	0.68%	0.80%	0.72%
	0.48%	0.24%	0.72%
No	39	34	73
	53.42%	46.58%	100.00%
	13.31%	27.20%	17.46%
	9.33%	8.13%	17.46%
No Response	252	90	342
	73.68%	26.32%	100.00%
	86.01%	72.00%	81.82%
	60.29%	21.53%	81.82%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Lack of personnel * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Lack of personnel	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	2	1	3
	66.67%	33.33%	100.00%
	0.68%	0.80%	0.72%
	0.48%	0.24%	0.72%
No	39	34	73
	53.42%	46.58%	100.00%
	13.31%	27.20%	17.46%
	9.33%	8.13%	17.46%
No Response	252	90	342
	73.68%	26.32%	100.00%
	86.01%	72.00%	81.82%
	60.29%	21.53%	81.82%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

	70.10%	29.90%	100.00%
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Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Contracts too large * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Contracts too large	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	1	4	5
	20.00%	80.00%	100.00%
	0.34%	3.20%	1.20%
	0.24%	0.96%	1.20%
No	40	31	71
	56.34%	43.66%	100.00%
	13.65%	24.80%	16.99%
	9.57%	7.42%	16.99%
No Response	252	90	342
	73.68%	26.32%	100.00%
	86.01%	72.00%	81.82%
	60.29%	21.53%	81.82%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Slow payment or nonpayment * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Slow payment or nonpayment	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	3	2	5
	60.00%	40.00%	100.00%
	1.02%	1.60%	1.20%
	0.72%	0.48%	1.20%
No	38	33	71
	53.52%	46.48%	100.00%
	12.97%	26.40%	16.99%
	9.09%	7.89%	16.99%
No Response	252	90	342
	73.68%	26.32%	100.00%
	86.01%	72.00%	81.82%
	60.29%	21.53%	81.82%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Competing with large companies * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q45 In your experience, have any of the following been a barrier to obtaining work on SAWS projects as a subcontractor with primes? Competing with large companies	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	15	5	20
	75.00%	25.00%	100.00%
	5.12%	4.00%	4.78%
	3.59%	1.20%	4.78%
No	26	30	56
	46.43%	53.57%	100.00%
	8.87%	24.00%	13.40%
	6.22%	7.18%	13.40%
No Response	252	90	342
	73.68%	26.32%	100.00%
	86.01%	72.00%	81.82%
	60.29%	21.53%	81.82%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q46 Between January 1, 2011 and December 31, 2013, in general when you were a subcontractor what was the average amount of time that it typically took to receive payment for your services from the prime contractor/vendor? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q46 Between January 1, 2011 and December 31, 2013, in general when you were a subcontractor what was the average amount of time that it typically took to receive payment for your services from the prime contractor/vendor?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Less Than 30 Days	11	9	20
	55.00%	45.00%	100.00%
	3.75%	7.20%	4.78%
	2.63%	2.15%	4.78%
31-60 Days	17	16	33
	51.52%	48.48%	100.00%
	5.80%	12.80%	7.89%
	4.07%	3.83%	7.89%
61-90 Days	3	7	10
	30.00%	70.00%	100.00%
	1.02%	5.60%	2.39%
	0.72%	1.67%	2.39%
91-120 Days	3	2	5
	60.00%	40.00%	100.00%
	1.02%	1.60%	1.20%
	0.72%	0.48%	1.20%
Over 120 Days	1	0	1

	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Not Applicable	2	0	2
	100.00%	0.00%	100.00%
	0.68%	0.00%	0.48%
	0.48%	0.00%	0.48%
Don't Know	4	1	5
	80.00%	20.00%	100.00%
	1.37%	0.80%	1.20%
	0.96%	0.24%	1.20%
No Response	252	90	342
	73.68%	26.32%	100.00%
	86.01%	72.00%	81.82%
	60.29%	21.53%	81.82%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q47 Between January 1, 2011 and December 31, 2013, have you ever submitted a bid with a prime contractor for a project with SAWS, were informed that you were the lowest bidder, and then found out that another subcontractor was actually doing the work? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q47 Between January 1, 2011 and December 31, 2013, have you ever submitted a bid with a prime contractor for a project with SAWS, were informed that you were the lowest bidder, and then found out that another subcontractor was actually doing the work?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	9	1	10
	90.00%	10.00%	100.00%
	3.07%	0.80%	2.39%
	2.15%	0.24%	2.39%
No	190	75	265
	71.70%	28.30%	100.00%
	64.85%	60.00%	63.40%
	45.45%	17.94%	63.40%
Don't Know	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
No Response	93	49	142
	65.49%	34.51%	100.00%
	31.74%	39.20%	33.97%
	22.25%	11.72%	33.97%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q48 As a subcontractor, are you required to have bonding for company's type of work? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q48 As a subcontractor, are you required to have bonding for company's type of work?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	68	11	79
	86.08%	13.92%	100.00%
	23.21%	8.80%	18.90%
	16.27%	2.63%	18.90%
No	131	65	196
	66.84%	33.16%	100.00%
	44.71%	52.00%	46.89%
	31.34%	15.55%	46.89%
Don't Know	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
No Response	93	49	142
	65.49%	34.51%	100.00%
	31.74%	39.20%	33.97%
	22.25%	11.72%	33.97%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q49 What is your current aggregate bonding limit? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q49 What is your current aggregate bonding limit?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Below \$100,000	5	0	5
	100.00%	0.00%	100.00%
	1.71%	0.00%	1.20%
	1.20%	0.00%	1.20%
\$100,001 to \$250,000	7	0	7
	100.00%	0.00%	100.00%
	2.39%	0.00%	1.67%
	1.67%	0.00%	1.67%
\$250,001 to \$500,000	7	0	7
	100.00%	0.00%	100.00%
	2.39%	0.00%	1.67%
	1.67%	0.00%	1.67%
\$500,001 to \$1 million	12	7	19
	63.16%	36.84%	100.00%
	4.10%	5.60%	4.55%
	2.87%	1.67%	4.55%
\$1,000,001 to \$1.5 million	9	0	9
	100.00%	0.00%	100.00%
	3.07%	0.00%	2.15%
	2.15%	0.00%	2.15%

\$1,500,001 to \$3 million	10	0	10
	100.00%	0.00%	100.00%
	3.41%	0.00%	2.39%
	2.39%	0.00%	2.39%
\$3,00,001 to \$5 million	4	0	4
	100.00%	0.00%	100.00%
	1.37%	0.00%	0.96%
	0.96%	0.00%	0.96%
Over \$5 million	8	0	8
	100.00%	0.00%	100.00%
	2.73%	0.00%	1.91%
	1.91%	0.00%	1.91%
Don't Know	6	4	10
	60.00%	40.00%	100.00%
	2.05%	3.20%	2.39%
	1.44%	0.96%	2.39%
No Response	225	114	339
	66.37%	33.63%	100.00%
	76.79%	91.20%	81.10%
	53.83%	27.27%	81.10%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q50 What is your current single project bonding limit? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q50 What is your current single project bonding limit?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Below \$100,000	6	0	6
	100.00%	0.00%	100.00%
	2.05%	0.00%	1.44%
	1.44%	0.00%	1.44%
\$100,001 to \$250,000	9	0	9
	100.00%	0.00%	100.00%
	3.07%	0.00%	2.15%
	2.15%	0.00%	2.15%
\$250,001 to \$500,000	8	0	8
	100.00%	0.00%	100.00%
	2.73%	0.00%	1.91%
	1.91%	0.00%	1.91%
\$500,001 to \$1 million	12	6	18
	66.67%	33.33%	100.00%
	4.10%	4.80%	4.31%
	2.87%	1.44%	4.31%
\$1,000,001 to \$1.5 million	10	1	11
	90.91%	9.09%	100.00%
	3.41%	0.80%	2.63%
	2.39%	0.24%	2.63%
\$1,500,001 to \$3 million	6	0	6

	100.00%	0.00%	100.00%
	2.05%	0.00%	1.44%
	1.44%	0.00%	1.44%
\$3,00,001 to \$5 million	4	0	4
	100.00%	0.00%	100.00%
	1.37%	0.00%	0.96%
	0.96%	0.00%	0.96%
Over \$5 million	7	0	7
	100.00%	0.00%	100.00%
	2.39%	0.00%	1.67%
	1.67%	0.00%	1.67%
Don't Know	6	4	10
	60.00%	40.00%	100.00%
	2.05%	3.20%	2.39%
	1.44%	0.96%	2.39%
No Response	225	114	339
	66.37%	33.63%	100.00%
	76.79%	91.20%	81.10%
	53.83%	27.27%	81.10%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

**Table: Q51 As a subcontractor, do prime contractors on a SAWS project require you to have a bond for your type of work? *
M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].**

Q51 As a subcontractor, do prime contractors on a SAWS project require you to have a bond for your type of work?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	27	3	30
	90.00%	10.00%	100.00%
	9.22%	2.40%	7.18%
	6.46%	0.72%	7.18%
No	24	8	32
	75.00%	25.00%	100.00%
	8.19%	6.40%	7.66%
	5.74%	1.91%	7.66%
Don't Know	17	0	17
	100.00%	0.00%	100.00%
	5.80%	0.00%	4.07%
	4.07%	0.00%	4.07%
No Response	225	114	339
	66.37%	33.63%	100.00%
	76.79%	91.20%	81.10%
	53.83%	27.27%	81.10%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q52 As a subcontractor did you experience discriminatory behavior between January 1, 2011 and December 31, 2013 from a prime contractor/consultant working or bidding/proposing on a SAWS project? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q52 As a subcontractor did you experience discriminatory behavior between January 1, 2011 and December 31, 2013 from a prime contractor/consultant working or bidding/proposing on a SAWS project?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	3	1	4
	75.00%	25.00%	100.00%
	1.02%	0.80%	0.96%
	0.72%	0.24%	0.96%
No	137	68	205
	66.83%	33.17%	100.00%
	46.76%	54.40%	49.04%
	32.78%	16.27%	49.04%
Not Applicable	57	7	64
	89.06%	10.94%	100.00%
	19.45%	5.60%	15.31%
	13.64%	1.67%	15.31%
Don't Know	2	0	2
	100.00%	0.00%	100.00%
	0.68%	0.00%	0.48%
	0.48%	0.00%	0.48%
No Response	94	49	143
	65.73%	34.27%	100.00%
	32.08%	39.20%	34.21%
	22.49%	11.72%	34.21%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q53 What was the most noticeable way you became aware of the discrimination against your company? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q53 What was the most noticeable way you became aware of the discrimination against your company?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Verbal Comment	2	1	3
	66.67%	33.33%	100.00%
	0.68%	0.80%	0.72%
	0.48%	0.24%	0.72%
Action Taken Against the Company	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Don't Know	0	1	1
	0.00%	100.00%	100.00%
	0.00%	0.80%	0.24%
	0.00%	0.24%	0.24%

No Response	290	123	413
	70.22%	29.78%	100.00%
	98.98%	98.40%	98.80%
	69.38%	29.43%	98.80%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q54 Which of the following do you consider the primary reason for your company being discriminated against? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q54 Which of the following do you consider the primary reason for your company being discriminated against?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Owner's Race or Ethnicity	2	1	3
	66.67%	33.33%	100.00%
	0.68%	0.80%	0.72%
	0.48%	0.24%	0.72%
Owner's Gender	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Both	0	1	1
	0.00%	100.00%	100.00%
	0.00%	0.80%	0.24%
	0.00%	0.24%	0.24%
No Response	290	123	413
	70.22%	29.78%	100.00%
	98.98%	98.40%	98.80%
	69.38%	29.43%	98.80%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q55 When did the discrimination first occur? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q55 When did the discrimination first occur?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
After contract awarded	1	1	2
	50.00%	50.00%	100.00%
	0.34%	0.80%	0.48%
	0.24%	0.24%	0.48%
Both	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Don't Know	1	1	2
	50.00%	50.00%	100.00%
	0.34%	0.80%	0.48%

	0.24%	0.24%	0.48%
No Response	290	123	413
	70.22%	29.78%	100.00%
	98.98%	98.40%	98.80%
	69.38%	29.43%	98.80%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q56 Did you file a complaint? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q56 Did you file a complaint?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
No	2	2	4
	50.00%	50.00%	100.00%
	0.68%	1.60%	0.96%
	0.48%	0.48%	0.96%
No Response	290	123	413
	70.22%	29.78%	100.00%
	98.98%	98.40%	98.80%
	69.38%	29.43%	98.80%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q57 Have you experienced or observed a situation in which a prime contractors/consultants includes minority or woman subcontractors on a bid or proposal for a SAWS project to the good faith effort requirements, and then drops the company as a subcontractor * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q57 Have you experienced or observed a situation in which a prime contractors/consultants includes minority or woman subcontractors on a bid or proposal for a SAWS project to the good faith effort requirements, and then drops the company as a subcontractor	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	17	2	19
	89.47%	10.53%	100.00%
	5.80%	1.60%	4.55%
	4.07%	0.48%	4.55%
No	274	123	397
	69.02%	30.98%	100.00%
	93.52%	98.40%	94.98%
	65.55%	29.43%	94.98%
Don't Know	2	0	2

	100.00%	0.00%	100.00%
	0.68%	0.00%	0.48%
	0.48%	0.00%	0.48%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q58 Have you experienced or observed a situation in which a prime contractors/consultants includes minority or woman subcontractors on a bid or proposal for a non-SAWS project to the good faith effort requirements, and then drops the company as a subcontractor after winning the award for no legitimate reason? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q58 Have you experienced or observed a situation in which a prime contractors/consultants includes minority or woman subcontractors on a bid or proposal for a non-SAWS project to the good faith effort requirements, and then drops the company as a subcontractor after winning the award for no legitimate reason?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	47	14	61
	77.05%	22.95%	100.00%
	16.04%	11.20%	14.59%
	11.24%	3.35%	14.59%
No	244	111	355
	68.73%	31.27%	100.00%
	83.28%	88.80%	84.93%
	58.37%	26.56%	84.93%
Don't Know	2	0	2
	100.00%	0.00%	100.00%
	0.68%	0.00%	0.48%
	0.48%	0.00%	0.48%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q59 How often do prime contractors/vendors who use your firm as a subcontractor on public-sector projects with M/WBE goals solicit your firm on projects (private or public) without M/WBE goals? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q59 How often do prime contractors/vendors who use your firm as a subcontractor on public-sector projects with M/WBE goals solicit your firm on projects (private or public) without M/WBE goals?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Very Often	19	5	24
	79.17%	20.83%	100.00%
	6.48%	4.00%	5.74%
	4.55%	1.20%	5.74%
Sometimes	54	15	69
	78.26%	21.74%	100.00%
	18.43%	12.00%	16.51%

	12.92%	3.59%	16.51%
Seldom	52	16	68
	76.47%	23.53%	100.00%
	17.75%	12.80%	16.27%
	12.44%	3.83%	16.27%
Never	94	34	128
	73.44%	26.56%	100.00%
	32.08%	27.20%	30.62%
	22.49%	8.13%	30.62%
Not Applicable	59	49	108
	54.63%	45.37%	100.00%
	20.14%	39.20%	25.84%
	14.11%	11.72%	25.84%
Don't Know	15	6	21
	71.43%	28.57%	100.00%
	5.12%	4.80%	5.02%
	3.59%	1.44%	5.02%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Harassment. * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Harassment.	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	2	0	2
	100.00%	0.00%	100.00%
	0.68%	0.00%	0.48%
	0.48%	0.00%	0.48%
No	279	122	401
	69.58%	30.42%	100.00%
	95.22%	97.60%	95.93%
	66.75%	29.19%	95.93%
Don't Know	12	3	15
	80.00%	20.00%	100.00%
	4.10%	2.40%	3.59%
	2.87%	0.72%	3.59%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Unequal or unfair treatment. * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Unequal or unfair treatment.	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	10	2	12
	83.33%	16.67%	100.00%
	3.41%	1.60%	2.87%
	2.39%	0.48%	2.87%
No	271	120	391
	69.31%	30.69%	100.00%
	92.49%	96.00%	93.54%
	64.83%	28.71%	93.54%
Don't Know	12	3	15
	80.00%	20.00%	100.00%
	4.10%	2.40%	3.59%
	2.87%	0.72%	3.59%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Bid shopping or bid manipulation. * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Bid shopping or bid manipulation.	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	14	1	15
	93.33%	6.67%	100.00%
	4.78%	0.80%	3.59%
	3.35%	0.24%	3.59%
No	267	121	388
	68.81%	31.19%	100.00%
	91.13%	96.80%	92.82%
	63.88%	28.95%	92.82%
Don't Know	12	3	15
	80.00%	20.00%	100.00%
	4.10%	2.40%	3.59%
	2.87%	0.72%	3.59%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Double standards in performance. * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Double standards in performance.	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	8	1	9
	88.89%	11.11%	100.00%
	2.73%	0.80%	2.15%
	1.91%	0.24%	2.15%
No	272	121	393
	69.21%	30.79%	100.00%
	92.83%	96.80%	94.02%
	65.07%	28.95%	94.02%
Don't Know	13	3	16
	81.25%	18.75%	100.00%
	4.44%	2.40%	3.83%
	3.11%	0.72%	3.83%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Denial of opportunity to bid. * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Denial of opportunity to bid.	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	9	4	13
	69.23%	30.77%	100.00%
	3.07%	3.20%	3.11%
	2.15%	0.96%	3.11%
No	271	118	389
	69.67%	30.33%	100.00%
	92.49%	94.40%	93.06%
	64.83%	28.23%	93.06%
Don't Know	13	3	16
	81.25%	18.75%	100.00%
	4.44%	2.40%	3.83%
	3.11%	0.72%	3.83%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Unfair denial of contract award. * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Unfair denial of contract award.	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	6	4	10
	60.00%	40.00%	100.00%
	2.05%	3.20%	2.39%
	1.44%	0.96%	2.39%
No	274	118	392
	69.90%	30.10%	100.00%
	93.52%	94.40%	93.78%
	65.55%	28.23%	93.78%
Don't Know	13	3	16
	81.25%	18.75%	100.00%
	4.44%	2.40%	3.83%
	3.11%	0.72%	3.83%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Unfair termination. * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Unfair termination.	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	3	1	4
	75.00%	25.00%	100.00%
	1.02%	0.80%	0.96%
	0.72%	0.24%	0.96%
No	277	121	398
	69.60%	30.40%	100.00%
	94.54%	96.80%	95.22%
	66.27%	28.95%	95.22%
Don't Know	13	3	16
	81.25%	18.75%	100.00%
	4.44%	2.40%	3.83%
	3.11%	0.72%	3.83%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Unequal price quotes from suppliers. * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q60 Still talking about SAWS and its prime contractors/consultants, while doing business or attempting to do business, have you experienced any of the following as a form in discrimination: Unequal price quotes from suppliers.	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	6	1	7
	85.71%	14.29%	100.00%
	2.05%	0.80%	1.67%
	1.44%	0.24%	1.67%
No	274	121	395
	69.37%	30.63%	100.00%
	93.52%	96.80%	94.50%
	65.55%	28.95%	94.50%
Don't Know	13	3	16
	81.25%	18.75%	100.00%
	4.44%	2.40%	3.83%
	3.11%	0.72%	3.83%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q61 There is an informal network of prime contractors/subcontractors that has excluded my company from doing business in the private sector: * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q61 There is an informal network of prime contractors/subcontractors that has excluded my company from doing business in the private sector:	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Strongly Agree	36	4	40
	90.00%	10.00%	100.00%
	12.29%	3.20%	9.57%
	8.61%	0.96%	9.57%
Somewhat Agree	36	8	44
	81.82%	18.18%	100.00%
	12.29%	6.40%	10.53%
	8.61%	1.91%	10.53%
Neither Agree Nor Disagree	64	31	95
	67.37%	32.63%	100.00%
	21.84%	24.80%	22.73%
	15.31%	7.42%	22.73%
Somewhat Disagree	75	47	122
	61.48%	38.52%	100.00%
	25.60%	37.60%	29.19%
	17.94%	11.24%	29.19%
Strongly Disagree	79	35	114
	69.30%	30.70%	100.00%
	26.96%	28.00%	27.27%
	18.90%	8.37%	27.27%
Don't Know	3	0	3

	100.00%	0.00%	100.00%
	1.02%	0.00%	0.72%
	0.72%	0.00%	0.72%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q62 Has your company applied for a commercial (business) bank loan between January 1, 2011 and December 31, 2013? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q62 Has your company applied for a commercial (business) bank loan between January 1, 2011 and December 31, 2013?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	74	20	94
	78.72%	21.28%	100.00%
	25.26%	16.00%	22.49%
	17.70%	4.78%	22.49%
No	213	93	306
	69.61%	30.39%	100.00%
	72.70%	74.40%	73.21%
	50.96%	22.25%	73.21%
Don't Know	6	12	18
	33.33%	66.67%	100.00%
	2.05%	9.60%	4.31%
	1.44%	2.87%	4.31%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q63 Were you approved or denied for a commercial (business) bank loan? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q63 Were you approved or denied for a commercial (business) bank loan?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Approved	53	19	72
	73.61%	26.39%	100.00%
	18.09%	15.20%	17.22%
	12.68%	4.55%	17.22%
Denied	21	2	23
	91.30%	8.70%	100.00%
	7.17%	1.60%	5.50%
	5.02%	0.48%	5.50%
No Response	219	104	323
	67.80%	32.20%	100.00%
	74.74%	83.20%	77.27%
	52.39%	24.88%	77.27%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q64 Which of the following do you believe was the primary reason for your being denied a loan? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q64 Which of the following do you believe was the primary reason for your being denied a loan?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Insufficient Documentation	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Insufficient Business History	5	2	7
	71.43%	28.57%	100.00%
	1.71%	1.60%	1.67%
	1.20%	0.48%	1.67%
Confusion about the Process	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Other, please specify	3	0	3
	100.00%	0.00%	100.00%
	1.02%	0.00%	0.72%
	0.72%	0.00%	0.72%
Don't Know	11	0	11
	100.00%	0.00%	100.00%
	3.75%	0.00%	2.63%
	2.63%	0.00%	2.63%
No Response	272	123	395
	68.86%	31.14%	100.00%
	92.83%	98.40%	94.50%
	65.07%	29.43%	94.50%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q65 Please specify, which of the following do you believe was the primary reason for your being denied a loan. Other, specify. * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q65 Please specify, which of the following do you believe was the primary reason for your being denied a loan. Other, specify.	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
.	283	125	408
	69.36%	30.64%	100.00%
	96.59%	100.00%	97.61%
	67.70%	29.90%	97.61%
Discriminatory lending practices.	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Dollar amount of loan requested was over credit limit.	1	0	1
	100.00%	0.00%	100.00%

	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Don't know the reason	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Financial stability	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
I was denied due to lack of equity and years in business	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Insufficient credit history	2	0	2
	100.00%	0.00%	100.00%
	0.68%	0.00%	0.48%
	0.48%	0.00%	0.48%
Lack of understanding of industry.	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Not enough money	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
They said it was credit issue but I don't think so.	1	0	1
	100.00%	0.00%	100.00%
	0.34%	0.00%	0.24%
	0.24%	0.00%	0.24%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q66 Have you experienced discriminatory behavior from the private sector between January 1, 2011 and December 31, 2013? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q66 Have you experienced discriminatory behavior from the private sector between January 1, 2011 and December 31, 2013?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Yes	25	3	28
	89.29%	10.71%	100.00%
	8.53%	2.40%	6.70%
	5.98%	0.72%	6.70%
No	267	121	388
	68.81%	31.19%	100.00%
	91.13%	96.80%	92.82%
	63.88%	28.95%	92.82%
Don't Know	1	1	2

	50.00%	50.00%	100.00%
	0.34%	0.80%	0.48%
	0.24%	0.24%	0.48%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q67 What was the most noticeable way you became aware of the discrimination against your company? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q67 What was the most noticeable way you became aware of the discrimination against your company?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Verbal comment	12	1	13
	92.31%	7.69%	100.00%
	4.10%	0.80%	3.11%
	2.87%	0.24%	3.11%
Written statement	0	1	1
	0.00%	100.00%	100.00%
	0.00%	0.80%	0.24%
	0.00%	0.24%	0.24%
Action taken against the company	10	1	11
	90.91%	9.09%	100.00%
	3.41%	0.80%	2.63%
	2.39%	0.24%	2.63%
Don't Know	4	0	4
	100.00%	0.00%	100.00%
	1.37%	0.00%	0.96%
	0.96%	0.00%	0.96%
No Response	267	122	389
	68.64%	31.36%	100.00%
	91.13%	97.60%	93.06%
	63.88%	29.19%	93.06%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q68 Which of the following do you consider the primary reason for your company being discriminated against? * M/WBE or Non-M/WBE Classification (not based on certification) [count, row %, column %, total %].

Q68 Which of the following do you consider the primary reason for your company being discriminated against?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
Owner's race or ethnicity	7	0	7
	100.00%	0.00%	100.00%
	2.39%	0.00%	1.67%
	1.67%	0.00%	1.67%
Owner's gender	3	1	4
	75.00%	25.00%	100.00%
	1.02%	0.80%	0.96%

	0.72%	0.24%	0.96%
Both	9	0	9
	100.00%	0.00%	100.00%
	3.07%	0.00%	2.15%
	2.15%	0.00%	2.15%
Don't Know	7	2	9
	77.78%	22.22%	100.00%
	2.39%	1.60%	2.15%
	1.67%	0.48%	2.15%
No Response	267	122	389
	68.64%	31.36%	100.00%
	91.13%	97.60%	93.06%
	63.88%	29.19%	93.06%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

Table: Q69 When did the discrimination first occur? * M/WBE or Non-M/WBE Classification (not based on certification)
[count, row %, column %, total %].

Q69 When did the discrimination first occur?	M/WBE or Non-M/WBE Classification (not based on certification)		
	M/WBE Firms	Non-M/WBE Firms	Total
During Bidding Process	11	2	13
	84.62%	15.38%	100.00%
	3.75%	1.60%	3.11%
	2.63%	0.48%	3.11%
After Contract Award	4	1	5
	80.00%	20.00%	100.00%
	1.37%	0.80%	1.20%
	0.96%	0.24%	1.20%
Both	7	0	7
	100.00%	0.00%	100.00%
	2.39%	0.00%	1.67%
	1.67%	0.00%	1.67%
Don't Know	4	0	4
	100.00%	0.00%	100.00%
	1.37%	0.00%	0.96%
	0.96%	0.00%	0.96%
No Response	267	122	389
	68.64%	31.36%	100.00%
	91.13%	97.60%	93.06%
	63.88%	29.19%	93.06%
Total	293	125	418
	70.10%	29.90%	100.00%
	100.00%	100.00%	100.00%
	70.10%	29.90%	100.00%

APPENDIX F: SURVEY OF VENDORS REGRESSION ANALYSIS

APPENDIX F: SURVEY OF VENDORS REGRESSION ANALYSIS

APPENDIX SECTIONS

1. Introduction
2. Overview of Multivariate Regression and Description of Analytical Model
3. Regression Model Variables
4. Assessing Variables in the Model
5. Multivariate Regression Model Results
6. Summary of Survey Findings

I. INTRODUCTION

Whereas **Chapter 3** and **4** reported findings of disparity and nondisparity related to the utilization of vendors in the San Antonio Water System (SAWS) procurement activities according to selected race, ethnicity, and gender categories, this section reports findings from a telephone survey of a sample of 418¹ firms representative of the SAWS vendors examined in the study to assess race, ethnicity, and gender effects on vendor revenue during the 2013 tax year. To determine these effects, MGT of America, Inc. (MGT) applied a multivariate regression model to survey findings.

There are two key questions for consideration in this analysis:

1. Do minority- and woman-owned firms tend to earn significantly less revenue than firms owned by nonminority males?
2. If “yes,” are their lower revenues due to race or gender classification or to other factors?

Case law and social science research provide some guidance for addressing these questions. From research literature, we know that in addition to race and gender, factors such as firm capacity, owner experience, and education bear a relation to a firm’s gross revenues. When multiple factors come into play, sometimes a multivariate statistical analysis can improve our understanding of more complex relationships among factors affecting company earnings. In this study, we employ linear regression to analyze variables, including race and gender that can affect a firm’s success.

2. OVERVIEW OF MULTIVARIATE REGRESSION AND DESCRIPTION OF ANALYTICAL MODEL

Multivariate regression was employed to examine the influence of selected company and business characteristics, especially owner race and gender, on 2013 gross revenues reported by 418 firms participating in a telephone survey administered during September/October 2014. For this analysis, gross revenue was the dependent variable, or the variable to be explained by the presence, absence, or strength of “selected characteristics” variables, known as “independent” or “explanatory” variables.

Since disparity analysis is an established domain of research, the selection of the independent company characteristics variables for this study was based on an extensive review of disparity study research literature. Most economic studies of discrimination are based on the seminal work of Nobel Prize recipient Gary Becker, “The Economics of Discrimination.”² Becker was the first to define discrimination in financial

¹ In order to provide an accurate and complete regression analysis some responses had to be removed. For example if a person surveyed did not answer the revenue or race question, this response was removed. This number reflects those changes.

² Becker, Gary. 1971, second edition. “The Economics of Discrimination.” The University of Chicago Press, Chicago, p. 167.

and economic terms. Since Becker, labor economists and statistical researchers including Blinder and Oaxaca, Corcoran and Duncan, Gwaltney and Long, Reimers, Saunders, Darity and Myers, Hanuschek, Hirsch, Topel and Blau, and others have adopted a standard in disparity study research of using company earnings, or revenue, as the dependent variable in race and gender discrimination analysis.³ Comparable worth studies have also proposed regression models using gross revenue as the dependent variable for policy analysis,⁴ and the U.S. Department of Commerce employs regression analysis (included in 48 CFR 19) to establish price evaluation adjustments for small disadvantaged businesses in federal procurement programs.⁵

3. REGRESSION MODEL VARIABLES

Timothy Bates⁶ used at least five general determinants, including firm capacity, managerial ability, manager/owner experience, and demographic characteristics such as race and gender, to explain statistical variations in firm gross revenues. These are elaborated below in terms of the dependent/independent variable relationship regression seeks to resolve.

DEPENDENT VARIABLE

For this analysis, the dependent variable (the variable to be explained by the independent variables in the model) was defined operationally as “firm 2013 gross revenues.” Ideally, this variable is measured as the exact dollar figure for gross revenues. However, years of experience in conducting information and opinion surveys with companies have shown us that firms tend to be reluctant to release precise dollar figures but more responsive when inquiries about earnings are presented as a dollar range. Accordingly, to encourage greater participation in this study’s telephone survey, nine company gross revenue categories were defined, ranging from Category 1, “Up to \$50,000” to Category 9, “More than \$10 million.”

INDEPENDENT VARIABLES

The independent (i.e., explanatory) variables were those characteristics hypothesized as contributing to the variation in the dependent variable (2013 gross revenues). For this study, independent variables included:

- ♦ **Number of full-time employees** – The more employees a company has, the greater product volume it is likely to have to generate higher revenues.
- ♦ **Owner’s years of experience** – The longer a company owner has been in a particular business, the more likely it is that the owner has knowledge of how to acquire contracts and the skills and experience to succeed in that business.
- ♦ **Owner’s level of education** – The research literature consistently reports a positive relationship between education and level of income.

³ “Race and Gender Discrimination Across Urban Labor Markets,” 1996. Ed. Susan Schmitz. Garland Publishers, New York, New York, p. 184.

⁴ Gunderson, Morley. 1994. “Male-Female Wage Differentials and Policy Responses.” In “Equal Employment Opportunity: Labor Market Discrimination and Public Policy,” pp. 207-227.

⁵ “Federal Acquisition Regulations for Small Disadvantaged Businesses; Notice and Rules.” June 30, 1998. Memorandum for Office of Federal Procurement Policy, Economic and Statistics Administration, Department of Commerce.

⁶ Bates, Timothy. “The Declining Status of Minorities in the New York City Construction Industry.” Reprinted from *Economic Development Quarterly*, Vol. 12, No. 1, February 1998, pp. 88-100.

- ◆ **Age of company** – It is argued that a company’s longevity is an indicator of both success and the owner’s managerial ability.
- ◆ **Race/ethnic group/gender of firm owners** – The proposition to be tested was whether there was a statistically significant relationship between race, ethnicity, and gender classification of minority firm owners and firm revenue. In the analysis, the category “Non-M/WBE” served as a reference group against which all other race and gender groups were compared.

Finally, since companies tend to be organized around a business concentration (e.g., Construction or Construction-Related Professional Services), type of business was introduced as a moderator variable to determine if the model, given adequate sample size, behaved differently as a predictor of gross revenue when respondents’ line of business was considered.

Participants’ responses to the survey provided the data to examine the relative importance of these factors. The operational relationship between these constructs (i.e., firm capacity, capability, experience, race, and gender) and measures derived from survey items is presented in **Table F-1**.

TABLE F-1
MODEL CONSTRUCTS, VARIABLES, AND MEASURES

MODEL CONSTRUCTS	TELEPHONE SURVEY VARIABLES	TELEPHONE SURVEY MEASURES
Capacity	Number of Employees	Number of Full-time and Part-time Employees Reported
	Private Contracting	% Total Revenue from Private Sources
Owner's Managerial Ability	Owner’s Education	Level of Education (from “some high school” to “postgraduate degree”)
	Owner’s Experience	Years of Experience
	Company Age	2014 Minus Reported “Year of Establishment”
Demographics	Business Owner Groups	African American, Hispanic American, Asian American, Native American, Nonminority Woman, and Non-M/WBE Firms
	Gender of Company Owner	Gender of Company Majority Owner or Shareholder

Source: San Antonio Water System survey of vendors results.

EXPLORING VARIABLE RELATIONSHIPS: HOW REGRESSION ANALYSIS WORKS

Multiple regression analysis permits simultaneous examination not only of the effects on the dependent variable of **all** independent variables in the multivariate model, but also the effect of each unique variable (i.e., controlling for the effects of the other independent variables in the equation). The effect of each predictor (independent) variable on the dependent variable is expressed as the magnitude of the change in the dependent variable (Y) for each unit change in the independent variable (X) plus an “error term.” Since the independent variable is never a perfect predictor of the dependent variable—that is, X is expressed as an imperfect predictor of Y such that one unit change in X **never** leads to one unit change in Y—the “error term,” ϵ , is postulated to acknowledge the residual change in the value of Y that X cannot explain.

The goal in sound regression modeling, therefore, is to minimize residual values associated with the independent variables and to maximize their explanatory power. In other words, a good model that seeks to explain what causes revenue earnings, in this case, will hypothesize a combination of independent variables based on solid research findings having sufficient explanatory power to account for case-by-case differences in company revenue, while minimizing that portion of variation in revenue values that the independent variable cannot explain (i.e., minimizing the difference between Y values predicted by the X's in the model and *actual* Y values).

3. ASSESSING VARIABLES IN THE MODEL

As suggested earlier, in a model with multiple independent, or predictor, variables, the effect of each individual independent variable is expressed as the expected change in the dependent variable (y) for each unit change in the independent variable (x), holding constant (or controlling for) the values of all the other independent variables (i.e., the effect on Y of the other X's in the equation). When X and Y values are plotted on a graph, linear regression attempts to find a straight line of best fit (also known as the least-squares line) that minimizes the differences between actual Y and predicted Y values as a function of X. The slope of this line represents the statistical relationship between the predicted values of Y based on X. The point at which this regression line crosses the Y axis (otherwise known as the constant) represents the predicted value of Y when X = 0. If the effect of X on Y is determined to be statistically significant (e.g., a significance level of $p < 0.05$ asserts that the calculated relationship between X and Y could occur due to chance only 5 times in 100), it can be asserted that X may indeed play a role in determining the value of Y (in the case of this study, company revenues). For example, if the slope coefficient of the variable representing one of the specific racial groups is determined to be statistically significant, then, all other things being equal, the hypothesis that race of the owner of a firm affects the annual revenue of the firm has only a 5 percent chance of being false. In disparity research, theory asserts that the negative effect of race on revenue earnings associated with being a minority-owned business is likely a product of discrimination.

MULTIVARIATE REGRESSION MODEL

Mathematically, the multivariate linear regression model is expressed as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \dots + \varepsilon$$

Where: Y = annual firm gross revenues

β_0 = the constant, representing the value of Y when $X_i = 0$

β_i = coefficient representing the magnitude of X_i 's effect on Y

X_i = the independent variables, such as capacity, experience, managerial ability, race, and gender

ε = the error term, representing the variance in Y unexplained by X_i

This equation describes the hypothesized relationship between the dependent variable and the independent variables and was used to test the hypothesis that there is no difference in 2012 revenue earnings for M/WBE firms when compared with non-M/WBE firms. Traditionally, the hypothesis of no difference (known as the null hypothesis) is represented as: $H_0 : Y_1 = Y_2$.

We can reject the null hypothesis if the analysis indicates that race and gender have been found to affect firm revenue (i.e., $H_1 : Y_1 \neq Y_2$, the alternate hypothesis). Results are statistically significant if it is

determined that the probability of achieving this difference due to chance was less than 5 in 100 (i.e., $p < 0.05$).

5. MULTIVARIATE REGRESSION MODEL RESULTS

The regression model tested the effects of selected demographic and business characteristic variables on revenue earnings elicited from firms participating in the study. According to the following categories presented in **Table F-2**:⁷

TABLE F-2
SURVEY OF VENDORS DATA
GROSS REVENUE CATEGORIES

GROSS REVENUE CATEGORIES	
1	= Up to \$50,000
2	= \$50,001 to \$100,000
3	= \$100,001 to \$300,000
4	= \$300,001 to \$500,000
5	= \$500,001 to \$1 million
6	= \$1,000,001 to \$3 million
7	= \$3,000,001 to \$5 million
8	= \$5,000,001 to \$10 million
9	= Greater than \$10 million

Source: San Antonio Water System survey of vendors results.

The tests for multicollinearity among independent variables and variance inflation due to outlier observations revealed no substantive problems with the data.⁸ An initial analysis also determined that one independent variable, percentage of business in the private sector, made no substantive contribution to the model, and was, therefore, removed. These adjustments yielded values for the variables listed in **Table F-3**.

⁷ Despite the ordinal nature of the dependent variable, findings are reported based on a linear regression analysis; specifically, Ordinary Least Squares (OLS). Menard (1995) notes this as an acceptable and common practice, “particularly when the dependent variable has five or more [ordered] categories. Since this [OLS] is probably the easiest approach for readers to understand, sometimes other approaches are tried, just to confirm that the use of OLS does not...distort the findings.” In this case, the nine categories of revenue were also analyzed using ordered Logit (SPSS 11.5), with nearly identical findings to those achieved with OLS with respect to magnitude of effect of the independent variables and both sign and significance. For further discussion, see Menard, S., “Applied logistic regression analysis,” (*Sage university papers series. Quantitative applications in the social sciences; no. 07-106*), Thousand Oaks, California: Sage Publications, 1995.

⁸ Multicollinearity refers to excessive intercorrelation among the independent variables in a multiple regression model, which obscures the effect of each on the dependent variable to the extent that they behave as one variable and may measure two highly correlated components of the same theoretical factor. Outliers are observations in a data set that are substantially different from the bulk of the data, perhaps because of a data entry error or some other cause that would reasonably explain a data anomaly.

TABLE F-3
 SURVEY OF VENDORS DATA
 RESULTS OF REGRESSION ANALYSIS

COEFFICIENTS			
	UNSTANDARDIZED COEFFICIENTS		STANDARDIZED COEFFICIENTS
	B	Std. Error	Beta
(Constant)	4.414	0.762	
African Americans (n=28)	-1.763	0.424	-0.171
Hispanic Americans (n=160)	-0.401	0.246	-0.076
Asian Americans (n=11)	0.526	0.608	0.033
Native Americans (n=9)	-1.892	0.684	-0.107
Nonminority Females (n=85)	0.181	0.279	0.028
Company Age	0.009	0.006	0.061
Number of Employees	0.917	0.068	0.542
High School	-1.066	0.392	-0.118
Some College	-0.885	0.312	-0.128
College Degree	-0.465	0.238	-0.090
Owner's Years of Experience	0.037	0.105	0.014
Other Professional Services	-0.822	0.550	-0.146
Architecture & Engineering ⁹	-0.615	0.579	-0.087
Other Services	-2.049	1.250	-0.067
Procurement	-0.320	0.541	-0.058
General Construction	-0.752	0.556	-0.114

Source: San Antonio Water System survey of vendors results.

Bold type indicates statistically significant results ($p \leq 0.05$).

⁹ Respondents were asked to specify their company's primary line of business. The options were: Heavy Civil/Utility Construction, Architecture and Engineering, Other Professional Services, Procurement (refer to [Appendix D, Survey of Vendors' Instrument](#)), thus the survey of vendors' analyses was based on these primary line of businesses.

RESULTS

- ◆ The model testing the effects of the variables listed in **Table F-3** on revenue reported by companies participating in the telephone survey explained 51.3 percent of the variance of the revenue variable ($R^2_j = 0.477$, $F = 22.860$, $df = 16,401$, $p \leq 0.000$).
- ◆ When controlling for the effects of variables related to company demographics (i.e. company capacity, ownership level of education and experience), M/WBE status had a significant impact on 2013 company earnings for African and Native Americans.
- ◆ Among the company characteristics variables, other than M/WBE status, revenue for all groups increased as a function of number of employees and owner's education.
- ◆ None of the business industry types had a significant impact on company revenues.

DERIVING PREDICTED REVENUE FOR RACE/GENDER/ETHNICITY CATEGORIES

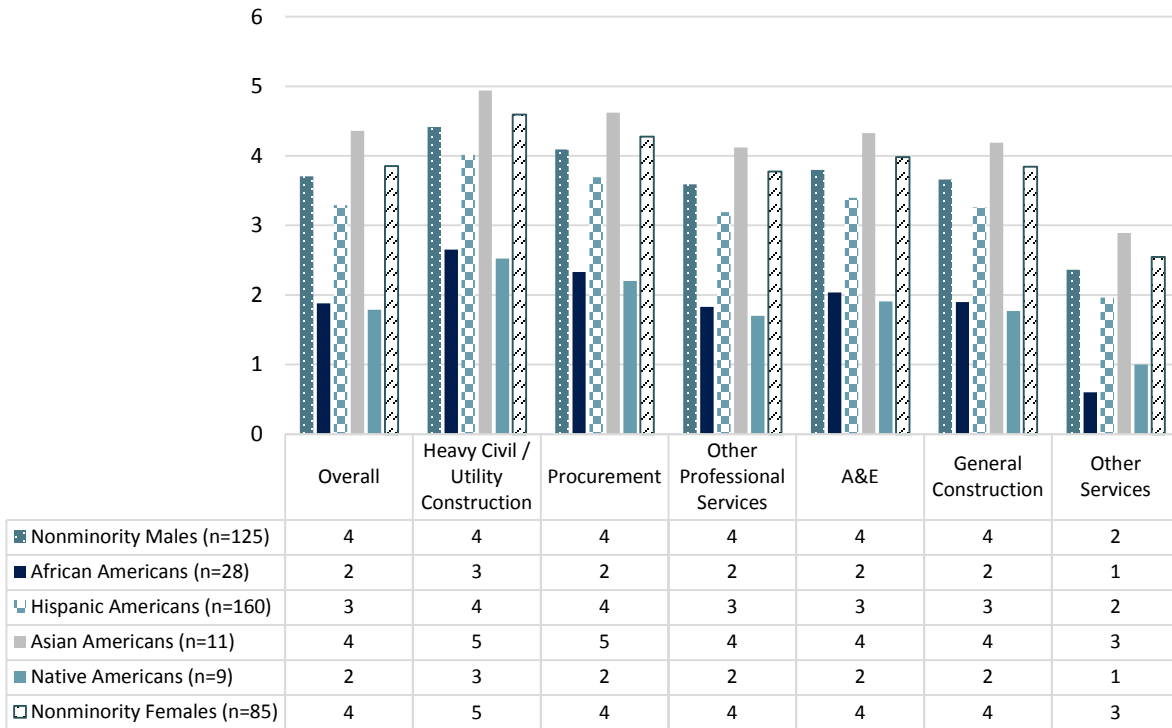
Values from **Table F-3** were inserted into the regression model in order to derive predicted revenue categories for each race, ethnicity, and gender classification. The following equation illustrates how predicted revenue would be calculated for an African American in the Heavy Civil/Utility Construction industry business category.¹⁰

Gross Revenues = 4.414 – 1.763 African American + 0.009 Company Age + 0.917 Number of Employees – 1.066 High School – 0.885 Some College - 0.465 College Degree + 0.035 Owner's Experience.

For instance, using **Table F-4** below to interpret the effect of race, ethnicity, and gender classification on predicted gross revenue for an African American in the Heavy Civil/Utility Construction industry, holding all other variables constant, we would add the value of the constant (4.414) to the coefficient value for an African American (-1.763) to obtain a predicted revenue value of 2.651 (rounded to 3, representing the category "\$100,001 to \$300,000"). Similarly, to derive the effect of race, ethnicity, and gender classification on predicted gross revenue for an African American in the Procurement industry category, holding all other variables constant, we would simply note the value of the constant and add it to the African American coefficient and the Procurement coefficient (2.331, rounded to 2, representing the category "\$50,001 to \$100,000").

¹⁰ To derive coefficients for the race, ethnicity, and gender classifications, the "Non-M/WBE" category was used as the reference variable, coded as value "0."

TABLE F-4
 SURVEY OF VENDORS DATA
 GROSS REVENUE CATEGORIES FROM SURVEY OF VENDORS



Source: San Antonio Water System survey of vendors results.

GROSS REVENUE CATEGORIES			
1	= Up to \$50,000	6	= \$1,000,001 to \$3 million
2	= \$50,001 to \$100,000	7	= \$3,000,001 to \$5 million
3	= \$100,001 to \$300,000	8	= \$5,000,001 to \$10 million
4	= \$300,001 to \$500,000	9	= Greater than \$10 million
5	= \$500,001 to \$1 million		

6. SUMMARY OF SURVEY FINDINGS

Regarding the positive significant effects of the non-race, ethnicity, and gender classification variables—company age and number of employees—it would be expected that a firm’s revenue might be positively related to its size and age, supporting the logical conclusion that larger, more established firms tend to do more business. However, even when these impacts were considered, African American, Hispanic American, and Native American owned firms responding to the telephone survey earned less revenue in 2013 than did their non-M/WBE counterparts, supporting the conclusion that M/WBE status is negatively related to earnings when compared with earnings for non-M/WBEs.

APPENDIX G: M/WBE PROGRAM DISPARITY STUDY INTERVIEW REQUEST NOTIFICATION

APPENDIX G: M/WBE PROGRAM DISPARITY STUDY INTERVIEW REQUEST NOTIFICATION



Memorandum

TO: San Antonio-area Small, Minority, and Woman-owned Businesses (SMWBs)

FROM: Marisol V. Robles, SAWS Small, Minority, and Woman-owned Business Program Manager

SUBJECT: Interviews conducted by Innovative Strategies for the SAWS Minority and Woman-owned Business Program Disparity Study

Date: August 26, 2014

NOTIFICATION OF TELEPHONE SURVEYS :

San Antonio Water System (SAWS) is currently conducting a Minority and Woman-owned Business Enterprise (M/WBE) Program Disparity Study to determine SAWS' utilization of M/WBEs in its contracting practices. This study is part of an ongoing effort by the Board of Trustees and SAWS staff to ensure proper minority representation in contracts of all types that are awarded by SAWS. The Disparity Study will identify any gaps between M/WBE business availability in the San Antonio area, and the percentages of M/WBE firms actually utilized by SAWS. MGT of America, Inc. is managing the Disparity Study for SAWS.

Innovative Strategies, a subcontractor to MGT of America, Inc. is conducting face-to-face interviews with firms who have registered as vendors in the SAWS Vendor Registration and Notification (VRN) system to determine if SAWS' vendors have experienced any obstacles in their efforts to compete for contracts.

If you are contacted by Innovative Strategies, please consider participating in an interview. Your input is important to the community, as SAWS seeks to improve its efforts in reinvesting rate-payer dollars into Minority and Woman-owned Business Enterprises through contracting opportunities.

CONTACT INFORMATION:

For any questions or concerns related to the telephone surveys or the SAWS Minority and Woman-owned Business Enterprise Program Disparity Study, please contact Marisol V. Robles, SMWB Program Manager:

Marisol V. Robles
SMWB Program Manager
San Antonio Water System
210-233-3420 Telephone (direct)
210-233-4988 Facsimile
marisol.robles@saws.org



APPENDIX H: PERSONAL INTERVIEW GUIDE

APPENDIX H: PERSONAL INTERVIEW GUIDE

READ: *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 San Antonio Water System (SAWS), its prime vendors, and in the private sector. Your responses and comments should be focused on the time period between January 1, 2011 and December 31, 2013.*

1. Please **specify** your company's primary line of business? (Try to get a good feel for what they do.)

1. **Heavy Civil/Utility Construction** (water and sewer line construction, storm water construction, construction management, pump stations, excavating, excavation work, structural steel erection, demolition, etc.) Specify _____
2. **Architecture and Engineering** (architecture, engineering, civil engineering, environmental engineering, mechanical engineering, etc.) Specify _____
3. **Professional Services** (accounting, legal services, consulting, etc.) Specify _____
4. **Procurement** (commodities, and non-professional services such as security, sewer line scoping, janitorial services, electrical, plumbing, mechanical, hauling, landscaping, etc.) Specify _____
5. **Other:** Specify _____

2. 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 |

3. In the last three years, what was the average, number of employees did your company keep on the payroll, including full-time and part-time staff?

- 0 - 10 1
- 11 - 20 2
- 21 - 30 3
- 31 - 40 4
- 41+ 5

4. Is **more than 50 percent** of your company owned and controlled by a woman or women?

- Yes 1
- No 2
- Don't Know 3

5. 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
- Black or African American 2
- Asian 3
- Hispanic or Latino 4
- American Indian/Alaskan Native 5
- Native Hawaiian/Other 6
- Pacific Islander Group 7
- No Response/Don't Know 8
- Other 9 Specify: _____

6. In what year was your business established or purchased by the most recent owner (s)?

7. Have you ever submitted a bid, quote, or proposal to SAWS in response to a contracting opportunity?

- Yes 1
- No 2
- Don't Know 3

7a. If no, please explain why.

[SKIP – If response is NO and explanation provided, then skip to Q9]

8. Think back to the last time you submitted a bid, quote, or proposal to SAWS – how did you learn about that opportunity?

8a. Was that notification method helpful?

- Yes 1
- No 2

9. How do you learn about bids, quotes, or proposals for SAWS procurement opportunities?

9a. What other notification methods would you like to see SAWS incorporate?

10. Has any SAWS staff made attempts to encourage you to respond to invitations to bid or requests for proposal/quote?

- Yes 1
- No 2

10a. If yes, please describe their outreach efforts.

10b. Please indicate any outreach efforts you would like to see implemented.

11. Have you been awarded a contract/purchase order with SAWS as a prime vendor?

- Yes 1
- No 2

[SKIP – if respondent answers NO, then skip to Question 15.]

12. How many times have you been awarded a contract or purchase order with SAWS?

- 1-10 times 1
- 11-25 times 2
- 26-50 times 3
- 51-100 times 4
- Over 100 times 5

13. As a prime vendor, have you ever protested a bid, proposal, or contract awarded by SAWS?

- Yes 1
- No 2

13a. If yes, please provide as much detail as possible.

14. What do you think would be the effect to your business if you filed a complaint regarding a contract award or protesting a bid or proposal with SAWS?

15. Do you bid or work as a subcontractor/subconsultant on SAWS projects?

- Yes 1
- No 2

[SKIP – if respondent answers NO, then skip to Question 17.]

16. Do prime vendors who use your firm as a subcontractor on other government-sponsored projects with M/WBE goals solicit your firm on projects without M/WBE goals? (City of San Antonio, Bexar County, or private)

- Very Often 1
- Sometimes 2
- Seldom 3
- Never 4

17. Do you have any recommendation on how SAWS can improve the procurement and/or selection process, if applicable?

18. Do you feel SAWS has ever treated your company unfairly in the bidding, solicitation, or contract award process?

- Yes 1
- No 2

18a. If yes, please provide as much detail as possible.

19. Have any of the following been a barrier to winning or successfully completing contracts for SAWS.

	Yes (1)	No (2)
Prequalification requirements (1)	<input type="radio"/>	<input type="radio"/>
Bid bond requirement (2)	<input type="radio"/>	<input type="radio"/>
Performance/payment bond requirement (3)	<input type="radio"/>	<input type="radio"/>
Cost to prepare a bid, proposal, or quote(4)	<input type="radio"/>	<input type="radio"/>
Financing (5)	<input type="radio"/>	<input type="radio"/>
Cost of insurance (general liability, professional liability, etc.) (6)	<input type="radio"/>	<input type="radio"/>
Price of supplies/materials (7)	<input type="radio"/>	<input type="radio"/>
Proposal/Bid specifications (8)	<input type="radio"/>	<input type="radio"/>
Limited time given to prepare bid or quote (9)	<input type="radio"/>	<input type="radio"/>
Limited knowledge of purchasing contracting policies and procedures (10)	<input type="radio"/>	<input type="radio"/>
Lack of experience (11)	<input type="radio"/>	<input type="radio"/>
Lack of personnel (12)	<input type="radio"/>	<input type="radio"/>
Contracts or subcontracts too large (13)	<input type="radio"/>	<input type="radio"/>
Selection process (14)	<input type="radio"/>	<input type="radio"/>
Unnecessary restrictive contract specifications (15)	<input type="radio"/>	<input type="radio"/>
Slow payment or nonpayment (16)	<input type="radio"/>	<input type="radio"/>
Competing with larger companies (17)	<input type="radio"/>	<input type="radio"/>

20. Which of the following categories best approximates your company's largest **prime contract** awarded between **January 1, 2011 and December 31, 2013**?

- Not applicable 1
- Up to \$50,000? 2
- \$50,001 to \$100,000? 3
- \$100,001 to \$200,000? 4
- \$200,001 to \$300,000? 5
- \$300,001 to \$400,000? 6
- \$400,001 to \$500,000? 7
- \$500,001 to \$1 million? 8
- Over \$1 million? 9
- Don't Know 10

21. Which of the following categories best approximates your company's largest **subcontract** awarded between **January 1, 2011 and December 31, 2013**?

- Not applicable 1
- Up to \$50,000? 2
- \$50,001 to \$100,000? 3
- \$100,001 to \$200,000? 4
- \$200,001 to \$300,000? 5
- \$300,001 to \$400,000? 6
- \$400,001 to \$500,000? 7
- \$500,001 to \$1 million? 8
- Over \$1 million? 9
- Don't Know 10

22. Between **January 1, 2011 and December 31, 2013**, which of the following dollar ranges approximates your company's total volume of work on a SAWS project.

- None 1
- Up to \$50,000? 2
- \$50,001 to \$100,000? 3
- \$100,001 to \$200,000? 4
- \$200,001 to \$500,000? 5
- \$500,001 to \$1 million? 6
- \$1,000,001 to \$3 million? 7
- \$3,000,001 to \$5 million? 8
- Over \$5 million? 9
- Don't Know 99

23. What were your company's approximate gross revenues for calendar year 2013?

\$ _____

[If respondent does not provide an answer, read following ranges for respondent to select one.]

- 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

24. Is your firm certified as: (READ CHOICES)

- Minority Business Enterprise (MBE) 1
- Small Business Enterprise (SBE) 2
- Woman Business Enterprise (WBE) 3
- Disadvantaged Business Enterprise (DBE) 4
- HubZone 5
- 8A 6
- Other 7 Specify _____

25. In your opinion, what are the biggest obstacles faced by M/WBE businesses in securing contracts with SAWS?

26. Should SAWS continue their M/WBE Program, what recommendations would you want to see in a program?

27. Do you feel 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

27a. If yes, do you feel the informal network has an effect upon you winning contracts?

- Yes 1
- No 2

28. Do you believe your company experienced discrimination from SAWS or its prime vendors due to the race, ethnicity, or gender of the company’s owner(s)?

	Yes (1)	No (2)
a. Race/ethnicity	<input type="radio"/>	<input type="radio"/>
b. Gender	<input type="radio"/>	<input type="radio"/>
c. Both	<input type="radio"/>	<input type="radio"/>

28a. If yes, explain why. *(Ask if they have documented evidence to support their response)*

29. Do you believe your company experienced discrimination with other public sector agencies or the private sector in the San Antonio region?

	Yes (1)	No (2)
a. Race/ethnicity	<input type="radio"/>	<input type="radio"/>
b. Gender	<input type="radio"/>	<input type="radio"/>
c. Both	<input type="radio"/>	<input type="radio"/>

29a. If yes, explain why. *(Ask if they have documented evidence to support their response)*

30. Have you experienced access to capital as being an impediment to securing contracts with SAWS or subcontracts on SAWS projects?

- Yes 1
- No 2

30a. If yes, describe how?

31. Have you experienced bonding as being an impediment to securing contracts with SAWS or subcontracts on SAWS projects (if applicable)?

- Yes 1
- No 2

31a. If yes, describe how?

32. Is there anything that we have not covered that you feel will be helpful to this study?

- Yes 1
- No 2

32a. If yes, please explain.

AFFIDAVIT

_____ (interviewee) HEREBY ACKNOWLEDGE
THAT THE INFORMATION I GAVE IS TRUE AND AN ACCURATE REFLECTION OF MY PAST
EXPERIENCES IN PROCUREMENT AND BUSINESS OPPORTUNITIES WITH THE SAN ANTONIO
WATER SYSTEM. ADDITIONALLY, THIS INFORMATION WAS GIVEN FREELY AND I HAVE NOT
BEEN COERCED OR RECEIVED ANY REMUNERATION FOR MY COMMENTS.

SIGNATURE

DATE

SIGNATURE OF INTERVIEWER AS WITNESS

DATE

APPENDIX I: PUBLIC HEARING NOTIFICATIONS

APPENDIX I: M/WBE PROGRAM DISPARITY STUDY PUBLIC HEARING ANNOUNCEMENTS

San Antonio Water System wants to do business with You.



SAWS Minority and Woman-Owned Business Enterprise Program Disparity Study:

Public Hearing Notice

San Antonio Water System (SAWS) is conducting a Disparity Study, and invites all interested parties to a public hearing to learn more about the study and provide testimony of their experiences doing business or attempting to do business with SAWS. The Disparity Study will review the utilization of SAWS Minority- and Women-owned Business Enterprises (M/WBE) contracting by examining 1.) the procurement of utility construction /heavy civil, architecture and engineering, other professional services and procurement, 2.) the subcontracting practices of prime contractors/professional consultants who do business with SAWS, and 3.) the anecdotal evidence collected from a broad cross section of M/WBE and non-M/WBE firms.

Friday, August 15, 2014

2:00 p.m.

Mission Branch Library

3134 Roosevelt Ave.

San Antonio, TX 78214

Friday, August 22, 2014

6:30 p.m.

San Antonio Water System

Customer Center Building

2800 U.S. Highway 281 North

San Antonio, TX 78212 (Take the Saint Mary's St. exit. The building is off of the 281 North-bound access road.)

Please contact Marisol V. Robles, SMWB Program Manager, at 210-233-3420, or marisol.robles@saws.org, for more information.



San Antonio Water System wants to do business with You.



SAWS Minority and Woman-Owned Business Enterprise Program Disparity Study:

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Friday, August 22, 2014

6:30 p.m.

San Antonio Water System

Customer Center Building

2800 U.S. Highway 281 North

San Antonio, TX 78212 (Take the Saint Mary's St. exit. The building is off of the 281 North-bound access road.)

Please contact Marisol V. Robles, SMWB Program Manager, at 210-233-3420, or marisol.robles@saws.org, for more information.



APPENDIX J: PUBLIC USE MICRODATA SAMPLE (PUMS) REGRESSION ANALYSIS

APPENDIX J: PUBLIC USE MICRODATA SAMPLE (PUMS) REGRESSION ANALYSIS

The following presents corresponding regression analyses discussed in [Chapter 6, Private Sector Analyses](#), and [Section 8 Results of Self-Employment Analysis](#).

LOGISTIC REGRESSION VARIABLES

The variable names and operational definitions are provided below for the logistic regression analyses. When interpreting [Table J-1](#) to [Table J-5](#), the third column— Exp (B) — is the most informative index with regard to the influence of the independent variables on the likelihood of being self-employed. From the inverse of this value, we can interpret a likelihood value of its effect on self-employment. For example, the Exp (B) for an African American is .446 from [Table J-1](#), the inverse of this is 2.24. This means that a nonminority male is 2.24 times more likely to be self-employed than an African American. Columns A and B are reported as a matter of convention to give the reader another indicator of both the magnitude of the variable’s effect and the direction of the effect (“-“ suggests the greater the negative B value the more it depresses the likelihood of being 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 and Ethnicity:** African American, Asian American, Hispanic American, Native American
- ◆ **Gender:** Not minority female or not

Other Indicator Variables

- ◆ **Marital Status:** Married or not
- ◆ **Age and Age Squared:** Squaring the age variable acknowledges the positive, curvilinear relationship between each year of age and earnings
- ◆ **Disability Status:** From individuals’ reports of 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

LOGISTIC REGRESSION RESULTS

TABLE J-1
RESULTS OF LOGISTIC REGRESSION, ALL CONTRACT CATEGORIES

	B	Sig.	Exp (B)
African American	-0.808	0.000	0.446
Hispanic American	-0.524	0.000	0.592
Asian American	-0.257	0.069	0.773
Native American	0.319	0.342	1.376
Gender (1=Female)	-0.912	0.000	0.402
Marital Status (1=Married)	0.103	0.161	1.109
Age	0.071	0.000	1.073
Age ²	0.000	0.025	1.000
Disability (1=Yes)	-0.025	0.850	0.976
Tenure (1=Yes)	0.390	0.000	1.477
Value	0.000	0.000	1.000
Mortgage	0.000	0.010	1.000
Unearn	0.000	0.107	1.000
Resdinc	0.000	0.206	1.000
P65	0.041	0.586	1.041
P18	0.146	0.049	1.157
Some College (1=Yes)	0.276	0.077	1.318
College Graduate (1=Yes)	0.143	0.562	1.153
More than College (1=Yes)	-0.113	0.167	0.893
Number of Observations	10,058		
Chi-squared statistic (df=19)	534.708		
Log Likelihood	-6,783		

Source: The Public Use Microdata Samples (PUMS) data from 2012 American Community Survey (San Antonio, Texas). Calculations using SPSS Statistics.

Note: **Bold** indicates statistically significant at $p < .05$.

Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.

TABLE J-2
RESULTS OF LOGISTIC REGRESSION, CONSTRUCTION

	B	Sig.	Exp (B)
African American	0.061	0.823	1.063
Hispanic American	-0.129	0.404	0.879
Asian American	-1.945	0.008	0.143
Native American	1.405	0.021	4.075
Sex (1=Female)	-0.980	0.003	0.375
Marital Status (1=Married)	-0.137	0.355	0.872
Age	0.055	0.106	1.057
Age ²	0.000	0.434	1.000
Disability (1=Yes)	-0.353	0.199	0.703
Tenure (1=Yes)	0.246	0.145	1.279
Value	0.000	0.012	1.000
Mortgage	0.000	0.635	1.000
Unearn	0.000	0.270	1.000
Resdinc	0.000	0.803	1.000
P65	0.058	0.719	1.059
P18	0.327	0.029	1.387
Some College (1=Yes)	0.085	0.730	1.089
College Graduate (1=Yes)	0.100	0.807	1.105
More than College (1=Yes)	0.038	0.796	1.039
Number of Observations	1,985		
Chi-squared statistic (df=19)	87.402		
Log Likelihood	1,662.723		

Source: The Public Use Microdata Samples (PUMS) data from 2012 American Community Survey (San Antonio, Texas). Calculations using SPSS Statistics.

Note: **Bold** indicates statistically significant at $p < .05$.

Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.

TABLE J-3
RESULTS OF LOGISTIC REGRESSION, PROFESSIONAL SERVICES

	B	Sig.	Exp (B)
African American	-1.923	0.000	0.146
Hispanic American	-1.477	0.000	0.228
Asian American	-0.547	0.034	0.579
Native American	0.602	0.387	1.826
Sex (1=Female)	-1.409	0.000	0.244
Marital Status (1=Married)	0.035	0.828	1.036
Age	0.095	0.019	1.100
Age ²	-0.001	0.145	0.999
Disability (1=Yes)	-0.174	0.567	0.840
Tenure (1=Yes)	0.656	0.001	1.927
Value	0.000	0.327	1.000
Mortgage	0.000	0.000	1.000
Unearn	0.000	0.114	1.000
Resdinc	0.000	0.021	1.000
P65	0.065	0.673	1.067
P18	-0.219	0.180	0.803
Some College (1=Yes)	-18.096	0.998	0.000
College Graduate (1=Yes)	-17.721	0.998	0.000
More than College (1=Yes)	-0.577	0.033	0.562
Number of Observations	3,189		
Chi-squared statistic (df=19)	374.246		
Log Likelihood	-1,582.921		

Source: The Public Use Microdata Samples (PUMS) data from 2012 American Community Survey (San Antonio, Texas). Calculations using SPSS Statistics.

Note: **Bold** indicates statistically significant at $p < .05$.

Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.

TABLE J-4
RESULTS OF LOGISTIC REGRESSION, OTHER SERVICES

	B	Sig.	Exp (B)
African American	-0.438	0.028	0.645
Hispanic American	-0.355	0.007	0.701
Asian American	0.090	0.664	1.094
Native American	-0.129	0.822	0.879
Sex (1=Female)	-0.403	0.018	0.668
Marital Status (1=Married)	0.131	0.243	1.140
Age	0.075	0.006	1.078
Age ²	0.000	0.134	1.000
Disability (1=Yes)	0.292	0.116	1.340
Tenure (1=Yes)	0.427	0.002	1.532
Value	0.000	0.059	1.000
Mortgage	0.000	0.044	1.000
Unearn	0.000	0.810	1.000
Resdinc	0.000	0.996	1.000
P65	0.002	0.984	1.002
P18	0.303	0.009	1.354
Some College (1=Yes)	0.090	0.687	1.094
College Graduate (1=Yes)	0.059	0.869	1.060
More than College (1=Yes)	-0.228	0.062	0.796
Number of Observations	3,542		
Chi-squared statistic (df=19)	190.6482472		
Log Likelihood	-2,671.279		

Source: The Public Use Microdata Samples (PUMS) data from 2012 American Community Survey (San Antonio, Texas). Calculations using SPSS Statistics.

Note: **Bold** indicates statistically significant at $p < .05$.

Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.

TABLE J-5
RESULTS OF LOGISTIC REGRESSION, GOODS

	B	Sig.	Exp (B)
African American	-0.795	0.157	0.451
Hispanic American	-0.266	0.367	0.766
Asian American	0.484	0.270	1.622
Native American	-18.666	0.999	0.000
Sex (1=Female)	-0.699	0.081	0.497
Marital Status (1=Married)	0.625	0.031	1.868
Age	0.151	0.036	1.163
Age ²	-0.001	0.059	0.999
Disability (1=Yes)	-0.424	0.443	0.654
Tenure (1=Yes)	0.368	0.252	1.445
Value	0.000	0.233	1.000
Mortgage	0.000	0.262	1.000
Unearn	0.000	0.553	1.000
Resdinc	0.000	0.317	1.000
P65	0.305	0.198	1.357
P18	-0.139	0.595	0.870
Some College (1=Yes)	-0.340	0.651	0.712
College Graduate (1=Yes)	-0.052	0.946	0.949
More than College (1=Yes)	-0.396	0.176	0.673
Number of Observations	1,342		
Chi-squared statistic (df=19)	57.831		
Log Likelihood	-575.743		

Source: The Public Use Microdata Samples (PUMS) data from 2012 American Community Survey (San Antonio, Texas). Calculations using SPSS Statistics.

Note: **Bold** indicates 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.

LINEAR REGRESSION VARIABLES

The variable names and operational definitions are provided below for the linear regression analyses. When interpreting the linear regression **Table J-6** to **Table J-10**, the first column— Unstandardized B — is the most informative index with regard to the influence of the independent variables on the earnings of a self-employed individual. Each number in this column represents a percent change in earnings. For example, the corresponding number for an African American is $-.596$, from **Table J-6**, meaning that an African American will earn 59.6 percent less than a nonminority male. The other four columns are reported in order to give the reader another indicator of both the magnitude of the variable’s effect and the direction of the effect. Standard Error (Std. Error) reports the standard deviation in the sampling distribution. Standardized B reports the standard deviation change in the dependent variable from on standard deviation increase in the independent variable. The t and Sig. columns simply report the level and strength of a variable’s significance.

Variables

- ◆ **Race and Ethnicity:** African American, Asian American, Hispanic American, Native American
- ◆ **Gender:** Not minority female or not

Other Indicator Variables

- ◆ **Marital Status:** Married or not
- ◆ **Age and Age Squared:** Squaring the age variable acknowledges the positive, curvilinear relationship between each year of age and earnings
- ◆ **Disability Status:** From individuals’ reports of health-related disabilities
- ◆ **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

LINEAR REGRESSION RESULTS

TABLE J-6
RESULTS OF LINEAR REGRESSION, ALL CONTRACT CATEGORIES

	UNSTANDARDIZED		STANDARDIZED		Sig.
	B	Std. Error	B	t	
African American	-0.596	0.118	-0.141	-5.042	0.000
Hispanic American	-0.704	0.077	-0.328	-9.178	0.000
Asian American	-0.402	0.124	-0.093	-3.245	0.001
Native American	-0.502	0.276	-0.048	-1.816	0.070
Nonminority Women (1=Female)	-0.311	0.092	-0.096	-3.379	0.001
Marital Status (1=Married)	0.239	0.060	0.108	3.952	0.000
Disability (1=Yes)	-0.245	0.111	-0.059	-2.221	0.027
Age	0.046	0.014	0.562	3.218	0.001
Age ²	0.000	0.000	-0.477	-2.738	0.006
Speaks English Well (1=Yes)	0.012	0.072	0.005	0.172	0.864
Some College (1=Yes)	-0.416	0.136	-0.084	-3.058	0.002
College Graduate (1=Yes)	-0.391	0.216	-0.049	-1.810	0.071
More than College (1=Yes)	-0.222	0.072	-0.085	-3.081	0.002
Constant	9.744	0.339		28.703	0.000

Source: The Public Use Microdata Samples (PUMS) data from 2012 American Community Survey (San Antonio, Texas). Calculations using SPSS Statistics.

Note: **Bold** indicates statistically significant at $p < .05$.

TABLE J-7
RESULTS OF LINEAR REGRESSION, CONSTRUCTION

	UNSTANDARDIZED		STANDARDIZED		Sig.
	B	Std. Error	B	t	
African American	-0.464	0.199	-0.127	-2.331	0.020
Hispanic American	-0.687	0.129	-0.380	-5.339	0.000
Asian American	0.342	0.601	0.030	0.569	0.569
Native American	-0.738	0.388	-0.101	-1.902	0.058
Nonminority Women (1=Female)	0.001	0.253	0.000	0.006	0.996
Marital Status (1=Married)	0.225	0.102	0.118	2.197	0.029
Disability (1=Yes)	-0.012	0.209	-0.003	-0.059	0.953
Age	0.014	0.023	0.200	0.615	0.539
Age ²	0.000	0.000	-0.134	-0.414	0.679
Speaks English Well (1=Yes)	0.248	0.125	0.124	1.992	0.047
Some College (1=Yes)	-0.188	0.184	-0.056	-1.022	0.308
College Graduate (1=Yes)	-0.613	0.306	-0.106	-2.000	0.046
More than College (1=Yes)	-0.161	0.111	-0.080	-1.447	0.149
Constant	10.264	0.547		18.748	0.000

Source: The Public Use Microdata Samples (PUMS) data from 2012 American Community Survey (San Antonio, Texas). Calculations using SPSS Statistics.

Note: **Bold** indicates statistically significant at $p < .05$.

TABLE J-8
RESULTS OF LINEAR REGRESSION, PROFESSIONAL SERVICES

	UNSTANDARDIZED		STANDARDIZED		Sig.
	B	Std. Error	B	t	
African American	-0.430	0.341	-0.071	-1.262	0.208
Hispanic American	0.058	0.229	0.019	0.254	0.800
Asian American	-0.037	0.260	-0.009	-0.143	0.886
Native American	-0.806	0.608	-0.074	-1.327	0.186
Nonminority Women (1=Female)	-0.138	0.171	-0.047	-0.803	0.423
Marital Status (1=Married)	0.442	0.144	0.176	3.077	0.002
Disability (1=Yes)	-0.349	0.283	-0.070	-1.235	0.218
Age	0.105	0.035	1.177	3.027	0.003
Age ²	-0.001	0.000	-1.085	-2.796	0.006
Speaks English Well (1=Yes)	-0.446	0.191	-0.170	-2.332	0.020
More than College (1=Yes)	-0.348	0.262	-0.074	-1.327	0.186
Constant	8.461	0.857		9.876	0.000

Source: The Public Use Microdata Samples (PUMS) data from 2012 American Community Survey (San Antonio, Texas). Calculations using SPSS Statistics.

Note: **Bold** indicates statistically significant at $p < .05$.

TABLE J-9
RESULTS OF LINEAR REGRESSION, OTHER SERVICES

	Unstandardized		Standardized		Sig.
	B	Std. Error	B	t	
African American	-0.561	0.157	-0.166	-3.570	0.000
Hispanic American	-0.672	0.108	-0.353	-6.216	0.000
Asian American	-0.482	0.161	-0.141	-2.999	0.003
Native American	0.204	0.448	0.020	0.455	0.649
Nonminority Women (1=Female)	-0.561	0.132	-0.202	-4.238	0.000
Marital Status (1=Married)	0.092	0.085	0.047	1.088	0.277
Disability (1=Yes)	-0.279	0.141	-0.084	-1.975	0.049
Age	0.060	0.022	0.809	2.760	0.006
Age ²	-0.001	0.000	-0.745	-2.541	0.011
Speaks English Well (1=Yes)	-0.047	0.097	-0.024	-0.485	0.628
Some College (1=Yes)	-0.373	0.179	-0.092	-2.088	0.037
College Graduate (1=Yes)	0.198	0.286	0.030	0.691	0.490
More than College (1=Yes)	-0.035	0.100	-0.016	-0.350	0.726
Constant	9.454	0.506		18.692	0.000

Source: The Public Use Microdata Samples (PUMS) data from 2012 American Community Survey (San Antonio, Texas). Calculations using SPSS Statistics.

Note: **Bold** indicates statistically significant at $p < .05$.

TABLE J-10
RESULTS OF LINEAR REGRESSION, GOODS

	Unstandardized		Standardized		Sig.
	B	Std. Error	B	t	
African American	-0.776	0.466	-0.197	-1.663	0.101
Hispanic American	-0.662	0.251	-0.391	-2.637	0.010
Asian American	-0.087	0.383	-0.032	-0.228	0.820
Nonminority Women (1=Female)	0.129	0.287	0.052	0.450	0.654
Marital Status (1=Married)	0.044	0.236	0.023	0.186	0.853
Disability (1=Yes)	0.035	0.483	0.009	0.073	0.942
Age	-0.020	0.060	-0.270	-0.331	0.741
Age ²	0.000	0.001	0.387	0.478	0.634
Speaks English Well (1=Yes)	-0.202	0.256	-0.118	-0.789	0.433
Some College (1=Yes)	0.001	0.604	0.000	0.002	0.998
College Graduate (1=Yes)	-0.432	0.592	-0.079	-0.729	0.468
More than College (1=Yes)	0.157	0.231	0.076	0.681	0.498
Constant	10.942	1.301		8.408	0.000

Source: The Public Use Microdata Samples (PUMS) data from 2012 American Community Survey (San Antonio, Texas). Calculations using SPSS Statistics.

Note: **Bold** indicates statistically significant at $p < .05$.

APPENDIX K: SELECTED POLICIES OF OTHER M/WBE PROGRAMS

APPENDIX K: SELECTED POLICIES OF OTHER M/WBE PROGRAMS

Appendix K provides an overview of the program design and practices of federal, state and local government small, minority, women business enterprise (S/M/WBE) programs. The following covers S/M/WBE program design, small business size standards, and policies and practices used by agencies to stimulate S/M/WBE utilization.

Most state and local government agencies have some policy promoting local small business development. Such assistance may include direct subsidies to businesses, funds for management and technical assistance to small and new entrepreneurs, mentor-protégé programs, and bonding assistance, as well as collaboration with and support for organizations that provide management and technical assistance to businesses.

A substantial number of these agencies also have procurement preference programs for small business. Some S/M/WBE programs are nominal and some seem to have substantial resources devoted to S/M/WBE program design and implementation. In general, the demand by some courts and some legislation for race-neutral business development policies has increased the resources devoted to race-neutral S/M/WBE programs.

The following provides a menu of policies. Some policies have worked in some localities have not been effective in others. Some policies have been discontinued for budget reasons. In many instances, it is difficult to determine whether a particular policy is directly responsible for the success of a program. Where possible sections begin with policies of public utilities.

SMALL BUSINESS ASPIRATIONAL GOALS

Commitment from the top leadership is a core element of most summaries of policies in other S/M/WBE programs.¹ One starting point for such commitment is setting overall aspirational goals separate from project goals. Some agencies use fairly straightforward methods to calculate aspirational goals and other agencies use more involved methodologies.

Milwaukee Metropolitan Sewer District (MMSD). MMSD established S/M/WBE aspirational goals of 13 percent for MBEs, 5 percent for SBEs, and 2 percent for WBEs. In 2011, MMSD awarded contracts and subcontracts of about \$17.5 million to over 145 S/M/WBEs.

East Bay Municipal Utility District (Oakland, CA). An aspirational goal of awarding 50 percent of all annual contract awards less than \$70,000 to SBEs.

Pepco (Maryland and the District of Columbia). Pepco, which is an electric service provider, established a Minority Business Development Department in the 1970s. In 2009, Pepco started a program targeting

¹ See, e.g., National Women's Business Council, *1999 NWBC Best Practices Guide: Contracting with Women* (July 1999); R. Auskalis, C. Ketchum and C. Carter, *Purchasing From Minority Business Enterprise: Best Practices*, Center For Strategic Supply Research 1995).

businesses that are at least 51 percent owned by minorities, women, service disabled veterans, and not-for-profit sheltered workshops with a 25 percent goal to be met with prime contracting and subcontracting utilization. Goal achievement is reported annually.

SMALL BUSINESS PRIME CONTRACTING PROGRAMS

BIDDER ROTATION

Some political jurisdictions use bidder rotation schemes to limit habit purchases from majority firms and to ensure S/M/WBEs have an opportunity to bid along with majority firms. A number of agencies, including the City of Indianapolis, Indiana; Fairfax County, Virginia; the Port Authority of New York and New Jersey; and Miami-Dade County, Florida, use bid rotation to encourage S/M/WBE utilization, particularly in architecture and engineering. Some examples of bidder rotation from these agencies include:

Miami-Dade County, Florida. Miami-Dade County uses small purchase orders for the Community Business Enterprise program and rotates on that basis. In addition, Miami-Dade County utilizes an Equitable Distribution Program, whereby a pool of qualified architecture and engineering professionals are rotated awards of county miscellaneous architecture and engineering services as prime contractors and subcontractors.

SMALL BUSINESS SET-ASIDES

Sacramento Municipal Utility District (SMUD). Contracts of \$75,000 and below may be made available to SBEs only. For service contracts, SMUD may award sheltered market multi-year contracts up to \$225,000.

East Bay Municipal Utility District (Oakland, CA). A set-aside of at least 25 percent of all annual contract awards of \$70,000 or less to SBEs.

Other small business set-asides include:

- ◆ The City of Denver Defined Selection Pool program puts contracts up to \$1 million in a selection pool, which can only be bid on by certified SBEs. This program applies to construction and professional service contracts. A SBE is defined as a firm with revenue less than or equal to 50 percent of the Small Business Administration (SBA) small business standard and the owner has a personal net worth of less than \$1.3 million. In the most recent annual report, M/WBEs won 73.7 percent of selection pool contracts.²
- ◆ The City of Tampa, Florida, SBE program is a set-aside program for firms with less than 25 employees and less than \$2 million in revenue.³
- ◆ The City of San Diego, California, set aside all construction contracts up to \$250,000.
- ◆ Hillsborough County, Florida, set aside construction contracts up to \$200,000.

² City of Denver, Office of Economic Development, Division of Small Business Opportunities, *2010 Annual Report*, at 3. <http://www.denvergov.org/Portals/690/documents/DSBO/DSBO%20Annual%20Report-FINAL-2010.pdf>.

³ Small Business Enterprise (SBE) Program Executive Order No. 2002-48 (December 18, 2002).

SBE BID PREFERENCES

A number of agencies have bid preferences for SBEs, such as Miami-Dade County, Florida; Colorado Department of Transportation; Port Authority of New York and New Jersey; Sacramento Municipal Utility District (SMUD), California; Port of Portland, Oregon; City of Sacramento, California; City of Oakland, California; and East Bay Municipal Utility District. SBE bid preferences operate along similar lines as M/WB/E bid preferences.

Sacramento Municipal Utility District (SMUD). All SBEs who bid on open solicitations qualify for a 5 percent bid preference. The 5 percent is based on the lowest responsible bid (capped at \$250,000). SBEs also receive an additional 10 points in Request for Proposal (RFP) evaluations.

East Bay Municipal Utility District (Oakland, CA). A 5 percent bid preference (not to exceed \$50,000 per year of the annual contract), to SBEs per contract year on supplies contracts, on general services contracts where price is the determining factor, and on the lump sum bid amount on construction contracts.

Colorado Department of Transportation. Prime consultants receive up to five evaluation points if the consultant is either a small business or will use a small business as a subconsultant.

Port of Portland Bid Preferences for Small Business (Portland, Oregon). The Port of Portland found that a bid preference of 5 percent had no impact on contract outcomes, but a bid preference of 10 percent did impact contract outcomes.

RACE-NEUTRAL JOINT VENTURES

Atlanta, Georgia. The City of Atlanta requires establishment of joint ventures on large projects of over \$10 million.⁴ Primes are required to create a joint venture with a firm from a different ethnic/gender group in order to ensure prime contracting opportunities for all businesses. This rule applies to women- and minority-owned firms as well as nonminority firms. This rule has resulted in tens of millions of dollars in contract awards to women- and minority-owned firms.

Washington Suburban Sanitation Commission (WSSC). The WSSC Competitive Business Demonstration Project has required joint ventures between a local SBE and an established firm in procurement areas that do not generate enough SBE bids.

CONSTRUCTION MANAGEMENT, REQUEST FOR PROPOSALS, AND DESIGN-BUILD

One method of debundling in construction is through the use of multi-prime construction contracts in which a construction project is divided into several prime contracts which are then managed by a construction manager at risk (CM at Risk or CMAR). For example, this approach has been used on projects where each prime contractor is responsible for installation and repair in particular areas. The construction manager is responsible for obtaining materials at volume discounts based upon total agency purchases. If one contractor defaults, a change order is issued to another prime contractor working in an adjacent area. The construction manager at risk is responsible for cost overruns that result from prime contractor default.

Construction management also facilitates the rotation of contracts within an area of work. For example, if several subcontractors have the capacity of bidding on an extended work activity (e.g., concrete flat

⁴ City of Atlanta Ordinance Sec. 2-1450 and Sec. 2-1451.

work, traffic control, hauling), the construction manager can rotate contracting opportunities over the duration of the activity.

Using a request for proposal process can provide the flexibility for including M/WBE participation in prime contractor requirements and selection. One of the nonfinancial criteria can be the proposer's approach and past history with M/WBE subcontractor utilization as well as women and minority workforce participation.

A number of agencies around the country, the Charlotte-Mecklenburg School System, the Tri-County Metropolitan Transportation District of Oregon, and the City of Columbia, have had some success with this approach.⁵

The Colorado Department of Transportation (DOT) has required DBE and Emerging Small Business (ESB) performance plans for bidders on design-build projects. Colorado DOT achieved \$187 million in DBE utilization on the \$1.2 billion T-REX project using this approach.⁶

PURCHASING CARDS

A number of agencies promote the utilization of M/WBEs on purchasing cards. The Commonwealth of Virginia and the City of Hampton, Virginia, for example, require the purchasing card vendor to report on M/WBE utilization by agency staff. A number of universities, including the University of Wisconsin at Madison, target M/WBE vendors for purchasing card transactions for travel.

OTHER SBE PRIME CONTRACTORS ASSISTANCE

North Carolina Department of Transportation (NCDOT) Fully Operated Rental Agreements. Under these arrangements, a firm may bid an hourly rate for using certain equipment and the necessary staff. In these field-let contracts, engineers select the firm with the appropriate equipment and the lowest bid rate. If that firm is not available, the engineers select the next lowest hourly rate. This rental agreement technique is used primarily to supplement NCDOT equipment in the event of NCDOT equipment failure or peak demand for NCDOT services. The rental agreement technique is attractive to small contractors because the typical small firm has much better knowledge of its own hourly costs than it does of the costs to complete an entire project.

Florida Department of Transportation (Florida DOT) Business Development Initiative. The Florida DOT has undertaken a stepped-up small business initiative with the following principle components:

- ◆ Reserving certain construction, maintenance, and professional services contracts for small businesses.
- ◆ Providing bid preference points to small businesses, and to firms offering subcontracts to small businesses on professional services contracts.
- ◆ Waiving performance and bid bond requirements for contracts under \$250,000.
- ◆ Using a modified pre-qualification process for certain construction and maintenance projects.

⁵ Federal Transit Administration, Lessons Learned #45 (May 2002). www.fta.dot.gov/library/program/II/man/II45.html.

⁶ D. Wilson, *Colorado Department of Transportation Statewide Transportation Disparity Study*, 2009, at 3-20.

SMALL BUSINESS PROGRAM FOR SUBCONTRACTS

SMALL BUSINESS PROJECT GOALS

Sacramento Municipal Utility District (SMUD). All prime bids that include 20 percent SBE subcontract utilization with SEED vendors will receive a 5 percent bid preference (capped at \$250,000) and 10 points on RFP evaluations. Proposals with less than 20 percent SBE subcontract utilization are awarded a 5 percent bid preference on the part of their bid that includes SBE subcontractors.

CPS Energy (San Antonio). Contractors classified as a “Large Business” are required to submit a Subcontracting Plan and Subcontracting Report to the CPS Energy Supplier Diversity Office for any contract is expected to meet or exceed \$650,000 (\$1,500,000 for construction) at the time the bid or proposal is awarded.

Charlotte, North Carolina. The City of Charlotte, which includes public utilities, has a comprehensive SBE program including SBE set asides and business assistance.⁷ In addition, the City sets department goals for SBE utilization, sets SBE goals on formal and informal contracts, and makes SBE utilization part of department performance review utilization numbers. The City has a waiver provisions for bidders, but has rejected bids for bidder noncompliance with the SBE program. Charlotte achieved 28.9 percent M/WBE subcontractor utilization in construction and 33.1 percent M/WBE subcontractor utilization in architecture and engineering through small business subcontracting goals.⁸

S/M/WBE INCLUSION IN FINANCIAL AND PROFESSIONAL SERVICES

New York Con Edison. In 2012, two MBE fund managers handled \$490 million for the U.S. small-cap and U.S. large-cap equity funds for the Con Ed pension fund.⁹ Con Edison has used minority insurance brokers for business travel/employee crime protection, liability and property insurance, lease obligations, and special liability insurance required by railroads.

Port Authority of New York and New Jersey. The Port Authority has encouraged the use of S/M/WBEs in finance through its financial advisory call-in program which targets small firms to serve as a pool of advisors for the Port Authority Chief Financial Officer. The financial advisors address debt issuance, financial advisory services, real estate transactions, and green initiatives. There are three to four firms in each of these categories in the financial advisory call-in program.

The Port Authority of New York and New Jersey’s Specialty Insurance Program sets aside five sets of insurance policies to small brokers, and the Port’s Financial Advisors Call In program pre-qualifies small firms for task orders in financial advisory services, real estate transactions, debt issuance, and green initiatives.

HISTORICALLY UNDERUTILIZED BUSINESS ZONES (HUBZONE) PROGRAM

Another variant of an SBE program provides incentives for SBEs located in distressed areas. For example, under the 1997 Small Business Reauthorization Act, the federal government started the federal HUBZone

⁷ A description of the Charlotte SBE program can be found at www.charmeck.org/Departments/Economic+Development/Small+Business/Home.htm.

⁸ MGT, The City of Charlotte Update Disparity Study, 2011, Exhibit 7-1.

⁹ New York Con Edison, *Diversity Annual Report, 2012*.

program. A HUBZone firm is a small business that is: (1) owned and controlled by U.S. citizens; (2) has at least 35 percent of its employees who reside in a HUBZone; and (3) has its principal place of business located in a HUBZone.¹⁰ HUBZone programs can serve as a vehicle for encouraging M/WBE contract utilization. Nationally, there are 5,357 female and minority HUBZone firms, representing 56.2 percent of total HUBZone firms.¹¹

City of New York. The City of New York has a HUBZone type program providing subcontracting preferences to small construction firms (with less than \$2 million in average revenue) that either perform 25 percent of their work in economically distressed areas or for which 25 percent of their employees are economically disadvantaged individuals.¹²

State of California. The State of California provides a five percent preference for a business work site located in state enterprise zones and an additional one to four percent preference (not to exceed \$50,000 on goods and services contracts in excess of \$100,000) for hiring from within the enterprise zone.¹³

M/WBE PROJECT GOAL SETTING

North Carolina DOT. The NCDOT regulations emphasize that goals should be set on projects “determined appropriate by the Department [of Transportation].”¹⁴ Individual goals are set based on a project’s geographic location, characteristics of the project, the percentage of the type of work typically performed by M/WBEs, the areas in which M/WBEs are known to provide services, and the goals set by the North Carolina General Assembly.¹⁵ The NCDOT M/WBE regulations specify (although they do not limit to) particular areas for M/WBE goals: clearing and grubbing, hauling and trucking, storm drainage, concrete and masonry construction, guardrail, landscaping, erosion control, reinforcing steel, utility construction, and pavement marking.

The NCDOT goal setting process begins with an engineering estimate of the project to determine what items might reasonably be subcontracted. Next estimates of the percentage of work that could be potentially performed by DBEs and M/WBEs are developed.¹⁶ These estimates are confidential and made available only to the Estimator (and staff), the Provisions Engineer in the Proposals and Contracts Section (and staff), and members of the DBE/M/WBE Committee at the DBE/M/WBE Committee meetings.

Next NCDOT looks at whether there are M/WBEs available based on the NCDOT DBE/M/WBE directory and the location of the project. The NCDOT Directory is a searchable database that classifies firms by location, prime contractor/subcontractor status and six-digit work type.¹⁷ The Goal Setting Committee is assisted in this process by Equal Employment Opportunity (EEO) Compliance staff in the Office of Civil Rights.

¹⁰ 13 C.F.R. 126.200 (1999).

¹¹ Based on the SBA pro-net database located at <http://pro-net.sba.gov/pro-net/search.html>.

¹² New York Administrative Code § 6-108.1. For a description of the New York local business enterprise program see <http://www.nyc.gov/html/sbs/html/lbe.html>.

¹³ Cal Code Sec 4530 *et seq.*

¹⁴ 19A NCAC 02D.1108(a).

¹⁵ 19A NCAC 02D.1108(a).

¹⁶ NCDOT, Division of Highways, Roadway Design and Design Services Unit, *Policy and Procedure Manual*, Chapter 10, at 4.

¹⁷ <http://apps.dot.state.nc.us/constructionunit/directory/>.

Prime contractors then submit documentation of good faith efforts to achieve the individual project goal. A statement of how they will make efforts to achieve the goal satisfies the good faith effort requirements.

The NCDOT Goal Setting Committee (in collaboration with the EEO Compliance staff) seeks to set goals relative to where there is interest, availability and capacity, beyond mere looking at the certification lists. NCDOT relies on the EEO Compliance staff to provide input on whether existing businesses are fully occupied. However, if EEO Compliance says M/WBEs are not fully occupied, but prime contractors submit evidence that M/WBEs are fully occupied (for example, with invoices), then NCDOT accepts those explanations.

As part of goal setting NCDOT regulations provide:

- ◆ A documented excessive subcontractor bid constitutes a basis for not subcontracting with an M/WBE.
- ◆ A documented record of poor experience constitutes a basis for not subcontracting with an M/WBE.¹⁸

In addition, a review of NCDOT DBE and M/WBE goals has been a regular topic at the Associated General Contractors (AGC)-DOT Joint Cooperative Committee meetings.¹⁹

COMBINED RACE NEUTRAL AND RACE CONSCIOUS PROGRAMS

A number of agencies (Tampa, Florida; Hillsborough County, Florida; Jacksonville, Florida; Port Authority of New York and New Jersey; and State of Connecticut) combine race neutral and race conscious program features.

City of St. Paul, Minnesota. The City of Saint Paul Vendor Outreach program requires that contractors document their solicitation of bids from SBEs, MBEs, and WBEs, in addition to listing subcontracting opportunities, attending pre-bid conferences and seeking assistance from M/WBE organizations.²⁰ St. Paul achieved 10.4 percent SBE spending (out of \$113.2 million in total spending). In the SBE program, 62.5 percent of SBE spending went to WBEs, 21.2 percent to nonminority males and 16.3 percent to MBEs.²¹

DBE PROGRAMS

Following the federal model, some agencies have added DBE programs.²² SBE programs focus on the disadvantage of the business, HUBZone programs focus on the disadvantage of the business location, and DBE programs focus on the disadvantage of the individual operating the business.

State of North Carolina. The State of North Carolina changed the definition of minority used in the state minority construction program to include socially and economically disadvantaged individuals, as defined

¹⁸ The last two elements are adopted by the North Carolina DOT. 19A NCAC 02D.1110(7).

¹⁹ AGC-DOT Joint Cooperative Committee Meeting Minutes, February 2001 through August 2003.

²⁰ City of St. Paul, Vendor Outreach Program, Ordinance 84.08, .09

²¹ City of St. Paul, *Vendor Outreach Program Detailed Report*, FY 2004, at 6.

²² DBE programs and Airport Concession Disadvantaged Enterprise (ACDBE) programs are required to be developed and implemented as a part of the federal funding process.

in the federal rules.²³ Socially disadvantaged individuals are those who have been subjected to racial or ethnic prejudice or cultural bias because of their identity as a member of a group without regard to their individual qualities.²⁴ Economically disadvantaged individuals are those socially disadvantaged individuals whose ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities as compared to others in the same business area that are not socially disadvantaged.²⁵ This rule permits firms certified under the federal 8(a), DBE, and small disadvantaged business enterprise (S/DBE) programs to be certified as a minority firm in North Carolina. This rule also implies firms owned by majority males are eligible for the program as there are firms owned by majority males that qualify for the 8(a) Business Development, DBE, and S/DBE programs by making an individual showing of their social and economic disadvantage.

Milwaukee Emerging Business Enterprise Program. The City of Milwaukee, Wisconsin, defines disadvantage by six dimensions:

1. Disadvantage with respect to education.
2. Disadvantage with respect to location.
3. Disadvantage with respect to employment.
4. Social disadvantage (lack of traditional family structure, impoverished background, and related issues).
5. Lack of business training.
6. Economic disadvantage (credit issues, inability to win contracts, and related issues).

The City of Milwaukee defines an emerging business as a business owned by an individual satisfying the sixth dimension of disadvantage and three out of the five other dimensions of disadvantage.²⁶ The City of Milwaukee has set a goal of 18 percent spending with emerging businesses, including both prime contracting and subcontracting.

TWO TIER CERTIFICATION

State of Oregon. The State of Oregon has a two-tier system for small business certification. Under the 2009 definitions of emerging small business (ESB) tiers, a Tier One firm employs fewer than 20 full-time equivalent employees and has average annual gross receipts for the last three years that do not exceed \$1,633,110 (for construction), or \$653,244 (for non-construction). A Tier Two firm employs fewer than 30 full-time equivalent employees and has average annual gross receipts for the last three years that do not exceed \$3,266,219 (for construction) or \$1,088,744 (for non-construction).²⁷ An ESB cannot be a subsidiary or a franchise. In 2006, small business program participation was extended from seven to 12 years.²⁸

²³ NC GS § 143-128.2(g).

²⁴ 15 USC 637(a)(5).

²⁵ 15 USC 637(a)(6)(A).

²⁶ Milwaukee Ordinance, Emerging Business Enterprise Program, 360-01 (12).

²⁷ OAR 445-050-0115. The ESB size standards are adjusted annually to reflect changes in the Consumer price Index.

²⁸ OAR 445-050-0135.

State of New Jersey. For the State of New Jersey, there are separate size standards for small businesses and emerging small businesses. For large projects, the State of New Jersey carves out portions of the contract for both tiers of small business. Thus, a single solicitation requires the prime to spend a certain percentage of the contract with small firms and another percentage with emerging small firms. Along related lines, the federal government sets aside contracts for bidding only amongst small firms, and other contracts may be set aside for bidding only by emerging small firms.

Federal Government. The federal government has the additional categories:

- ◆ “Emerging Small Business,” defined as being 50 percent of the SBA size standards.
- ◆ “Very Small Business,” defined as fewer than 15 employees and less than \$1 million in revenue.

OUTREACH

New York Con Edison. Con Edison partnered with the National Minority Supplier Development Council’s Corporate Plus Program to identify M/WBEs with the experience and capacity. Con Edison new vendors have provided services in nontraditional areas of opportunity, such as dry-ice blasting, real-estate, environmental remediation, gas pipe, and fuel. Con Edison also co-hosted Minority Supplier Development Council’s Sustainability Summit to recruit M/WBEs who provide energy-efficient and environmentally friendly goods and services. Finally, Con Edison supported the Construction Mentorship Program, a nine-month executive education program for M/WBEs. Con Edison reported spending over \$1.5 billion with M/WBEs from 2008 to 2012.

VETERANS PROGRAMS

City of Orlando. Under Florida statutes Section 295.187 a “veteran business enterprise” (VBE) is defined as:

An independently owned and operated business:

1. Employs 200 or fewer permanent full-time employees;
2. Together with its affiliates has a net worth of \$5 million or less or, if a sole proprietorship, has a net worth of \$5 million or less including personal and business investments;
3. Is organized to engage in commercial transactions;
4. Is domiciled in this state;
5. Is at least 51 percent owned by one or more wartime veterans or service-disabled veterans; and
6. the management and daily business operations of which are controlled by one or more wartime veterans or service-disabled veterans or, for a service-disabled veteran having a permanent and total disability, by the spouse or permanent caregiver of the veteran.²⁹

The City of Orlando provides the following bid incentives for VBEs:

1. Fifteen percent on bids up to \$1,500;
2. Ten percent on bids from \$1,500.01 to \$19,999.99;

²⁹ Fl Stat Sec.295.187(c). Florida Veteran Business Enterprise Opportunity Act.

3. Nine percent on bids from \$20,000 to \$39,999.99;
4. Eight percent on bids from \$40,000 to \$59,999.99;
5. Seven percent on bids from \$60,000 to \$79,999.99;
6. Six percent on bids from \$80,000 to \$99,999.99;
7. Five percent on bids from \$100,000 to \$149,999.99;
8. Four percent on bids from \$150,000 to \$249,999.99;
9. Three percent on bids from \$250,000 to \$499,999.99;
10. Two percent on bids from \$500,000 to \$999,999.99; and
11. One percent on bids for \$1,000,000 or more.³⁰

³⁰ Orlando Code, Chapter 7, Article XI, Sec. 7.1102(C).