# 2015 Disparity Study for the Washington Suburban Sanitary Commission

### **FINAL REPORT**

Prepared by



July 28, 2016





Mr. Reginald Smith, Vice President 3800 Esplanade Way, Suite 210 Tallahassee, Florida 32311 P: 850.386.3191 F: 850.385.4501 rsmith@mgtamer.com July 28, 2016

# 2015 DISPARITY STUDY FOR WASHINGTON SUBURBAN SANITARY COMMISSION FINAL REPORT

#### **TABLE OF CONTENTS**

<b>EXECUTIVE</b>	SUMMARY	. ES-1
1.	Study Overview	ES-1
2.	Methodology	ES-3
3.	Important Findings	ES-5
4.	Commendations and Recommendations	ES-9
CHAPTER 1	INTRODUCTION	1-1
1.	Introduction	1-1
2.	Study Team	1-1
3.	Background	1-3
4.	Overview of Study Approach	1-4
5.	Report Organization	1-5
6.	Glossary of Terms	1-6
CHAPTER 2	LEGAL FRAMEWORK	2-1
1.	Introduction	2-1
2.	Standards of Review for Race-Specific and Gender-Specific Programs	2-2
3.	To Withstand Strict Scrutiny, an M/WBE Program Must Be Based on Thorough Evidence Showing a Compelling Governmental Interest	2-4
4.	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.	Anecdotal Evidence of Discrimination in Disparity Studies	
7.	To Withstand Strict Scrutiny, an M/WBE Program Must Be Narrowly Tailored to Remedy Identified Discrimination	
8.	Small Business Procurement Preferences	
9.	Conclusions	
CHAPTER 3	REVIEW OF POLICIES, PROCEDURES, AND PROGRAMS	3-1
1.	Introduction	3-1
2.	Methodology	
3	Historical Background	3-4



2.	Collection and Management of Data	6-2
1.	Introduction	6-1
CHAPTER 6	PRIVATE SECTOR AND NON-GOAL ANALYSIS	6-1
7.	Summary	5-14
6.	Disparity Analyses	
5.	Availability Estimates Analyses	
4.	Utilization Analysis	5-3
3.	Data Collection and Management	5-2
2.	Chapter Definitions	5-1
1.	Introduction	5-1
CHAPTER 5	TOTAL UTILIZATION, AVAILABILITY, AND DISPARITY ANALYS	SES5-1
9.	Summary	4-19
8.	Disparity Analyses	4-15
7.	Availability Estimates	4-13
6	Procurement Card (P-Card) Transactions	4-11
5.	Utilization Analyses	4-7
4.	Market Area Analysis	4-6
3.	Data Collection and Management	4-5
2.	Chapter Definitions	4-1
1.	Introduction	4-1
CHAPTER 4	MARKET AREA AND PRIME UTILIZATION, AVAILABILITY, AND ANALYSES	
13.	Conclusions	3-20
12.	SLMBE Office	3-19
11.	Reporting MBE Utilization	3-18
10.	Outreach	3-16
9.	Prompt Payment	3-16
8.	Nondiscrimination in Contracting	3-15
7.	Mentor-Protégé Program	3-15
6.	Good Faith Efforts	3-13
5.	MBE Goals and Incentives	3-11
4.	Certification	3-6



3.	Private Sector Utilization Analysis, Commercial Construction Permits	6-4	
4.	Nexus between Commercial and Public Construction	6-6	
5.	Private Sector Disparities, U.S. Census Bureau, 2012 Survey of Business Owners Data	6-7	
6.	Analysis of Race, Ethnicity, and Gender on Self Employment Rates and Earnings	6-28	
7.	Conclusion	6-38	
CHAPTER	7 ANECDOTAL ANALYSIS	7-1	
1.	Introduction	7-1	
2.	Methodology	7-1	
3.	Demographics	7-7	
4.	Barriers to Doing Business with WSSC	7-12	
5.	Stakeholder Interviews	<b>7-1</b> 3	
6.	Access to Capital and Bonding	7-14	
7.	Disparate Treatment and Discrimination	7-14	
7.	Suggested Remedies from Anecdotal Participants	7-16	
8.	Conclusions	7-16	
CHAPTER	8 FINDINGS AND RECOMMENDATIONS	8-1	
1.	Introduction	8-1	
2.	Findings	8-1	
3.	Commendations and Recommendations	8-5	
4.	Conclusion	8-6	
LIST OF T	ABLES		
CHAPTER	3		
Table 3-1:	Documents Reviewed During Policy and Procedures Review		
Table 3-2:	WSSC MBE and WBE Percentage Prime Utilization in 1999, 2005 And 2010 Disparity Stud	lies	
Table 3-3:	WSSC MBE and WBE Subcontractor Utilization in 1999 and 2010 Disparity Studies		
Table 3-4:	able 3-4: MBE Awards by Fiscal Year and Contracting Area FY 2010 Through FY 2014		



Table 3-5: WSSC Supplier Diversity Goals and Outcome Measurements

- Table 4-1: Overall Utilization Inside/Outside WSSC Relevant Market Area
- Table 4-2: Availability Analysis, Prime Level Architecture and Engineering Percentage of Availability by Business Ownership Classification
- Table 4-3: Availability Analysis, Prime Level Construction Percentage of Availability by Business Ownership Classification
- Table 4-4: Availability Analysis, Prime Level Professional Services Percentage of Availability by Business Ownership Classification
- Table 4-5: Availability Analysis, Prime Level Goods and General Services Percentage of Availability by Business Ownership Classification
- Table 4-6: Disparity Indices and T-Test Results for Minority- And Women-Owned Firms, Architecture and Engineering Primes
- Table 4-7: Disparity Indices and T-Test Results for Minority- And Women-Owned Firms, Construction Primes
- Table 4-8: Disparity Indices and T-Test Results for Minority- And Women-Owned Firms, Professional Services, Primes
- Table 4-9: Disparity Indices and T-Test Results for Minority- And Women-Owned Firms, Goods and General Services, Primes

#### **CHAPTER 5**

- Table 5-1: Availability Analysis, Prime Plus Subcontractor Architecture and Engineering Percentage of Availability by Business Ownership Classification
- Table 5-2: Availability Analysis, Prime Plus Subcontractor Construction Percentage of Availability by Business Ownership Classification
- Table 5-3: Availability Analysis, Prime Plus Subcontractor Professional Services Percentage of Availability by Business Ownership Classification
- Table 5-4: Availability Analysis, Prime Plus Subcontractor Goods and General Services Percentage of Availability by Business Ownership Classification
- Table 5-5: Disparity Indices and T-Test Results Architecture and Engineering Prime Plus Subcontractors
- Table 5-6: Disparity Indices and T-Test Results Construction Prime Plus Subcontractors
- Table 5-7: Disparity Indices and T-Test Results Professional Services Prime Plus Subcontractors
- Table 5-8: Disparity Indices and T-Test Results Goods and General Services Prime Plus Subcontractors

#### **CHAPTER 6**

- TABLE 6-1: Private Sector Census Disparities NAICS Code 23, Construction U.S. Census 2012 Survey of Business Owners, State of Maryland Marketplace
- Table 6-2: Private Sector Census Disparities NAICS Code 42, Wholesale Trade U.S. Census 2012 Survey of Business Owners, State of Maryland Marketplace



- Table 6-3: Private Sector Census Disparities NAICS Code 54, Professional, Scientific and Technical Services U.S. Census 2012 Survey of Business Owners, State of Maryland Marketplace
- Table 6-4: Private Sector Census Disparities NAICS Code 56 Administrative and Support / Waste Management and Remediation Services U.S. Census 2012 Survey of Business Owners, State of Maryland Marketplace
- Table 6-5: Private Sector Census Disparities NAICS Code 81, Other Services (Except Public Administration) U.S. Census 2012 Survey of Business Owners, State of Maryland Marketplace
- Table 6-6: Private Sector Census Disparities NAICS Code 23, Construction U.S. Census 2012 Survey of Business Owners, Washington-Arlington-Alexandria, Dc-VA-MD-WV Marketplace
- Table 6-7: Private Sector Census Disparities NAICS Code 42, Wholesale Trade U.S. Census 2012 Survey of Business Owners, Washington-Arlington-Alexandria, Dc-VA-MD-WV Marketplace
- Table 6-8: Private Sector Census Disparities NAICS Code 54, Professional, Scientific and Technical Services U.S. Census 2012 Survey of Business Owners, Washington-Arlington-Alexandria, Dc-VA-MD-WV Marketplace
- Table 6-9: Private Sector Census Disparities NAICS Code 56 Administrative and Support / Waste Management and Remediation Services U.S. Census 2012 Survey of Business Owners, Washington-Arlington-Alexandria, Dc-VA-MD-WV Marketplace
- Table 6-10: Private Sector Census Disparities NAICS Code 81, Other Services (Except Public Administration) U.S. Census 2012 Survey of Business Owners, Washington-Arlington-Alexandria, Dc-VA-MD-WV Marketplace
- Table 6-11: Percentage Self-Employed/2014 Earnings by Racial, Ethnic, And Gender Business Ownership Classification
- Table 6-12: Self-Employment "Odds Ratios" Of Minority Groups Relative to Nonminority Males After Controlling for Selected Demographic and Economic Characteristics
- Table 6-13: Earnings Elasticities of Minority Groups Relative to Nonminority Males After Controlling for Selected Demographic and Economic Characteristics

- Table 7-1: Washington Suburban Sanitary Commission Survey of Vendors Demographics Number of Respondents
- Table 7-2: Washington Suburban Sanitary Commission Survey of Vendors Demographics Number of Employees
- Table 7-3: Washington Suburban Sanitary Commission Survey of Vendors Demographics Largest Contract Awarded Prime
- Table 7-4: Washington Suburban Sanitary Commission Survey of Vendors Demographics Largest Contract Awarded Subcontractor
- Table 7-5: Washington Suburban Sanitary Commission Discrimination
- Table 7-6: Washington Suburban Sanitary Commission Discrimination by Primes



- Table 8-1: Summary of Prime Utilization by Procurement Category and Business Ownership Classification
- Table 8-2: Summary of Prime Plus Subcontractor Utilization by Procurement Category and Business Ownership Classification

#### LIST OF FIGURES

#### **CHAPTER 4**

- Figure 4A: Distribution and Percentage of Dollars for All Procurement Categories Within WSSC Relevant Market Area
- Figure 4B: Utilization Analysis, Prime Expenditures Architecture and Engineering Within WSSC Relevant Market Area, Percentage of Utilization by Business Ownership Classification
- Figure 4C: Utilization Analysis, Prime Expenditures Construction Within WSSC Relevant Market Area Percentage of Utilization by Business Ownership Classification
- Figure 4D: Utilization Analysis, Prime Expenditures Professional Services Within WSSC Relevant Market Area Percentage of Utilization by Business Ownership Classification
- Figure 4E: Utilization Analysis, Prime Expenditures Goods and General Services Within WSSC Relevant Market Area, Percentage of Utilization by Business Ownership Classification
- Figure 4F: Procurement Card Analysis Percentage of Dollars by M/WBE and Non-M/WBE Firms
- Figure 4G: Procurement Card Analysis Percentage of Dollars by M/WBE Business Ownership Classification

#### **CHAPTER 5**

- Figure 5A: Utilization Analysis, Prime Plus Subcontractor Expenditures Architecture and Engineering Within WSSC Relevant Market Area Percentage of Utilization by Business Ownership Classification
- Figure 5B: Utilization Analysis, Prime Plus Subcontractor Expenditures Construction Within WSSC Relevant Market Area Percentage of Utilization by Business Ownership Classification
- Figure 5C: Utilization Analysis, Prime Plus Subcontractor Expenditures Professional Services Within WSSC Relevant Market Area Percentage of Utilization by Business Ownership Classification
- Figure 5D: Utilization Analysis, Prime Plus Subcontractor Expenditures Goods and General Services Within WSSC Relevant Market Area Percentage of Utilization by Business Ownership Classification

#### **CHAPTER 6**

- Figure 6A: Utilization Analysis of Firms Commercial Construction at the Prime Contractor Level
- Figure 6B: Utilization Analysis of Firms Commercial Construction at the Subcontractor Level



Figure 7A: Washington Suburban Sanitary Commission Survey of Vendors Demographics Business

Industry

Figure 7B: Washington Suburban Sanitary Commission Survey of Vendors Demographics Number of

Years in Business

#### **APPENDICES**

Appendix A – Detailed Market Area Analyses

Appendix B – Detailed Prime Disparity Indices

Appendix C – Prime Utilization Analyses by Based on Expenditures

Appendix D – Prime Utilization Analyses Based on Contract Awards

Appendix E – Detailed Total Utilization Analyses

Appendix F - Detailed Total Disparity Indices

Appendix G – Public Use Microdata Sample (PUMS) Regression

Appendix H – Survey of Vendors Instrument

Appendix I – Survey of Vendors Results

Appendix J – In-depth Interview Guide

Appendix K – Survey of Vendor Regression

Appendix L – Standard Deviation Tests

Appendix M – Procurement Card (P-card) Transaction Analysis

Appendix N – Private Sector Disparities



# Executive Summary **WSSC 2015 Disparity Study**



#### 1. STUDY OVERVIEW

#### **STUDY TEAM**

In April 2015, the Washington Suburban Sanitary Commission (WSSC) contracted with MGT of America, Inc. (MGT) to conduct a Disparity Study. MGT subcontracted with:

#### **CHAPTER SECTIONS**

- 1. Study Overview
- 2. Methodology
- 3. Important Findings
- 4. Commendations and Recommendations
- McMillon Communications, Inc., based in the Washington, D.C.

  Metropolitan area developed and implemented the Community Outreach Plan tailored to inform the business community about WSSC's Disparity Study, coordinated and managed the focus groups, and conducted in-depth interviews with area business owners.
- ▶ Transformation Consultants, a Richmond, VA-based firm coordinated and managed the public meetings, and conducted data verification of area firms.
- ▶ Oppenheim Research, a Tallahassee, FL-based firm conducted the survey of vendors and conducted the custom census surveys.

#### STUDY OBJECTIVES

The objectives of this study were:

- Determine whether the WSSC, either in the past or currently, engages in discriminatory practices in the solicitation and award of contracts in Construction, Architecture and Engineering, Professional Service, and Goods and General Services to minority- and women-owned business enterprises (M/WBEs).
- ▶ Determine if a legally justified basis exists for the establishment of an M/WBE program in accordance with the guidelines set forth by the Supreme Court and relevant subsequent cases.

#### STUDY DEFINITIONS

**Study Period**. MGT analyzed expenditures between July 1, 2009, and June 30, 2014.

**Procurement Categories**. MGT analyzed Construction, Architecture and Engineering, Professional Services, and Goods and General Services expenditures.

#### **ETHNIC GENDER GROUPS**

- African Americans: an individual having origins in any of the black racial groups of Africa.
- American Indians/Native Americans: an individual having origins in any of the original peoples of North America and who is a documented member of a North American tribe, band, or otherwise



has a special relationship with the United States or a state through treaty, agreement, or some other form of recognition. This includes an individual who claims to be an American Indian/Native American and who is regarded as such by the American Indian/Native American community of which the individual claims to be a part, but does not include an individual of Eskimo or Aleutian origin.

- Asian Americans: an individual having origins in the Far East, Southeast Asia, or the Indian subcontinent, and who is regarded as such by the community of which the person claims to be a part.
- ▶ **Hispanic Americans**: an individual of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race, and who is regarded as such by the community of which the person claims to be a part. Hispanics of African ancestry are not counted among the African American group.
- **Nonminority Woman (Female)**: a woman, regardless of race or ethnicity, unless she is also a member of an ethnic or racial minority group and elects that category in lieu of the gender category.
- ▶ 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.

#### **RELEVANT MARKET**

Most WSSC contract payments were made to firms located in the following cities and counties in Maryland, Virginia, West Virginia, and the District of Columbia:

Anne Arundel, MD	City of Fredericksburg, VA,	Howard County, MD
Arlington County, VA	City of Manassas, VA	Jefferson County, WV
Baltimore County, MD	Clarke County, VA	Loudoun County, VA
Calvert County, MD	District of Columbia, DC,	Montgomery County, MD
Carroll County, MD	Fairfax County, VA	Prince George's County, MD
Charles County, VA	Fauquier County, VA	Prince William County, VA
City of Baltimore, MD	City of Fredericksburg, VA	Spotsylvania County, VA
City of Fairfax, VA	City of Manassas Park, VA	Stafford County, VA
City of Falls Church, VA	Fredrick County, VA	Warren County, VA

#### STUDY DATA

The study used the following sources:

- 1. MAPS (Materials, Accounts Payable, Purchasing System) WSSC's financial account system that stores vendor payment information.
- 2. PRISM™– (WSSC's web-based compliance system) a secure, web-based portal that tracks WSSC's spend with subcontractors working with primes on WSSC projects.
- 3. CBR (Centralized Bidder Registration) a mandatory web-based system where all prospective bidders, contractors, vendors, and subcontractors that provide the goods and services procured by WSSC must register.



4. SLMBE Approval/Certification Database – the listing of MBE-certified firms and WSSC-approved small local business enterprises (SLBEs).

Thus, electronic data on awards and payment transactions at the prime level were extracted from MAPS, and subcontractor payment data was extracted from PRISM. In terms of WSSC vendor data, electronic data was extracted from CBR and MAPS.

Custom census, used as a source for subcontractor availability, involves using Dun & Bradstreet as a source of business availability. A short survey is conducted on a random sample of firms supplied by Dun & Bradstreet, asking ethnic and gender status, had they bid or considered bidding on projects by the WSSC, had they bid or considered bidding as a prime contractor, subcontractor, or both, and had they worked as a prime contractor, subcontractor, or both.

#### 2. METHODOLOGY

The study is driven by the following research questions:

#### RESEARCH QUESTIONS

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

- 1. Is there factual predicate to support a race- and gender-conscious M/WBE program for the WSSC?
- 2. How does case law inform the research methodology in a particular region for a particular client?
- 3. Are there disparities between the availability and utilization of M/WBE primes and subcontractors? 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/WBE primes and subcontractors?
- 4. Does the WSSC passively engage in practices that result in disparities?
- 5. Are there statistically significant disparities in the utilization of M/WBEs by prime contractors on projects where there are no M/WBE goals?
- 6. Is there qualitative/anecdotal evidence of disparate treatment of M/WBE subcontractors by prime contractors?



#### STUDY TASKS

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

- Establish data parameters and finalize the work plan.
- Conduct a legal review.
- Review policies, procedures, and programs.
- Conduct market area and utilization analysis.
- Determine the availability of qualified firms.
- Analyze prime and subcontractor utilization and availability data for disparity.
- Conduct a survey of business owners.
- Collect and analyze anecdotal information.
- Prepare and present draft and final reports for the study.

#### REPORT ORGANIZATION

The report consists of the following chapters:

#### CHAPTER 2 LEGAL FRAMEWORK

Presents the legal framework and an overview of the controlling legal precedents that impact remedial procurement programs with a particular concentration on the United States Court of Appeals for the Fourth Circuit.

#### **CHAPTER 3** REVIEW OF POLICIES, PROCEDURES, AND PROGRAMS

Provides a review of the WSSC's policies, procedures, M/WBE programs, and race- and gender-neutral efforts.

# CHAPTER 4 MARKET AREA, AND PRIME UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES

Presents the methodology used to determine the WSSC's relevant market area and statistical analysis of prime vendor utilization, availability, and disparity by the WSSC for the procurement of Construction, Architecture and Engineering, Professional Services, and Goods and General Services contracts.

#### CHAPTER 5 TOTAL UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES

Presents the methodology used to determine the WSSC's statistical analysis of total utilization, availability, and disparity by the WSSC for the procurement of Construction, Architecture and Engineering, Professional Services, and Goods and General Services contracts.

#### CHAPTER 6 PRIVATE SECTOR AND NON-GOAL ANALYSES

Provides an analysis of the presence of disparity in the private sector and its effect on the ability of firms to win procurement contracts from the WSSC.



#### **CHAPTER 7 ANECDOTAL ANALYSIS**

Presents an analysis of anecdotal data collected from the survey of business owners, personal interviews, focus groups, and community meetings.

#### **CHAPTER 8 FINDINGS AND RECOMMENDATIONS**

A summary of the findings and recommendations based upon the analyses presented in the report chapters.

**APPENDICES** Additional analyses, documents used to conduct the study, and back up documentation.

The report is accompanied by Appendices with supporting details:

Appendix A	Detailed Market Area Analyses
Appendix B	Detailed Prime Disparity Indices
Appendix C	Detailed Prime Utilization Analyses by Based on Expenditures
Appendix D	Prime Utilization Analyses Based on Contract Awards
Appendix E	Detailed Total Utilization Analyses
Appendix F	Detailed Total Disparity Indices
Appendix G	Public Use Microdata Sample (PUMS) Regression
Appendix H	Survey of Vendors Instrument
Appendix I	Survey of Vendors Results
Appendix J	In-depth Interview Guide
Appendix K	Survey of Vendor Regression
Appendix L	Standard Deviation Tests
Appendix M	Procurement Card Transaction Analysis
Appendix N	Private Sector Disparities

#### 3. IMPORTANT FINDINGS

#### FINDING A: M/WBE PRIME UTILIZATION (Reference Chapter 4 and Appendix C)

The dollar value of M/WBE prime utilization on WSSC projects over the current study period within the relevant market was as follows:

- Across all contract categories, minority firms were paid \$205.36 million, 16.74 percent of all prime dollars. Nonminority women-owned firms were paid \$91.80 million, 7.49 percent of all prime dollars.
- In Architecture & Engineering, minority firms were paid \$16.97 million at the prime level, 7.10 percent of the total Architecture & Engineering prime dollars; nonminority women-owned firms were paid \$1.60 million at the prime level, 0.67 percent of the total Architecture & Engineering



- prime contract dollars (**Table E-1**). There was disparity for all M/WBE groups. (There was no Architecture & Engineering prime availability for Native Americans.)
- In Construction, minority firms were paid \$87.26 million at the prime level, 16.11 percent of the total Construction prime contract dollars; Nonminority Women-owned firms were paid \$3.91 million at the prime level, 0.73 percent of the total Construction prime contract dollars (**Table E-1**). There was disparity for all M/WBE groups except Hispanic American-owned firms.
- In Professional Services, minority firms were paid \$15.95 million at the prime level, 15.69 percent of the total Professional Services prime dollars; Nonminority Women-owned firms were paid \$6.96 million at the prime level, 6.85 percent of the total Professional Services prime dollars (**Table E-1**). There was disparity for all M/WBE groups except Hispanic Americans. (There was no professional services prime availability for Native Americans.)
- In Goods and General Services, minority firms were paid \$85.16 million at the prime level, 24.78 percent of the Goods and General Services prime contract dollars; Nonminority Women-owned firms were paid \$79.32 million at the prime level, 23.08 percent of the Goods and General Services prime contract dollars (**Table E-1**). There was only substantial disparity for Hispanic Americans.

TABLE E-1
SUMMARY OF PRIME CONTRACTOR UTILIZATION
BY PROCUREMENT CATEGORY AND BUSINESS OWNERSHIP CLASSIFICATION

BUSINESS OWNERSHIP CLASSIFICATION	ARCHITECTURE & ENGINEERING (\$)	CONSTRUCTION (\$)	PROFESSIONAL SERVICES (\$)	GOODS AND GENERAL SERVICES (\$)
Total Minority Firms	\$16,972,187	\$87,265,659	\$15,955,963	\$85,167,909
Total Nonminority Women Firms	\$1,604,441	\$3,912,050	\$6,967,205	\$79,322,798
Total M/WBE Firms	\$18,576,628	\$91,177,708	\$22,923,168	\$164,490,707
	(%)	(%)	(\$)	(\$)
Total Minority Firms	7.10%	16.11%	15.69%	24.78%
Total Nonminority Women Firms	0.67%	0.73%	6.85%	23.08%
Total M/WBE Firms	7.77%	16.84%	22.54%	47.86%

Source: Chapter 4, Market Area, and Prime Utilization, Availability, and Disparity Analyses.



**Chapter 4** found that M/WBEs overall were underutilized in all business categories as prime contractors, overall during the study period, except for in the Goods and General Services category.

#### FINDING B: PROCURMENT CARDS (P-CARDS) (Reference Chapter 4 and Appendix M)

For P-cards, minority firms were paid \$794,659, 3.16 percent of p-card dollars; Nonminority Women-owned firms were paid \$829,865, 3.30 percent of p-card dollars.

#### FINDING C: M/WBE TOTAL UTILIZATION AND DISPARITY (Reference Chapter 5 and Appendix E)

The dollar value of M/WBE total utilization (prime contractors and subcontractors combined) on WSSC projects over the study period from within the relevant market was as follows:

- Across all contract categories, minority firms were paid approximately \$388.07 million, 31.65 percent of total dollars. Nonminority women-owned firms were paid approximately \$142.31 million, 11.61 percent of total dollars.
- In Architecture & Engineering, minority firms were paid approximately \$70.78 million, 29.60 percent of the total Architecture & Engineering dollars; nonminority women-owned firms were paid approximately \$9.09 million at the sub level, 3.80 percent of total Architecture & Engineering dollars (**Table 8-2**). There was disparity for all M/WBE groups. (There was no Architecture and Engineering subcontractor availability for Native American-owned firms.)
- In Construction, minority firms were paid approximately \$175.90 million, 32.48 percent of total Construction dollars; nonminority women-owned firms were paid approximately \$22.62 million, 4.18 percent of total Construction dollars (**Table 8-2**). There was disparity for all M/WBE groups except Hispanic Americans.
- In Professional Services, minority firms were paid approximately \$26.96 million, 26.50 percent of total Professional Services dollars; nonminority women-owned firms were paid approximately \$7.59 million, 7.46 percent of total Professional Services dollars (**Table 8-2**). There was disparity for all M/WBE groups except Hispanic Americans.
- In Goods and General Services, minority firms were paid approximately \$114.41 million, 33.29 percent of total Goods and General Services dollars; Nonminority Women-owned firms were paid approximately \$103.00 million, 29.97 percent of total Goods and Nonprofessional Services dollars (**Table 8-2**). There was disparity for all M/WBE groups except Asian Americans and Nonminority Women.



TABLE E-2
SUMMARY OF TOTAL UTILIZATION
BY PROCUREMENT CATEGORY AND BUSINESS OWNERSHIP CLASSIFICATION

BUSINESS OWNERSHIP	ARCHITECTURE & ENGINEERING	CONSTRUCTION	PROFESSIONAL SERVICES	GOODS AND GENERAL SERVICES
CLASSIFICATION	(\$)	(\$)	(\$)	(\$)
Total Minority Firms	\$70,789,913	\$175,900,325	\$26,965,021	\$114,416,589
Total Nonminority Women Firms	\$9,094,497	\$22,624,666	\$7,592,791	\$103,003,449
Total M/WBE Firms	\$79,884,410	\$198,524,990	\$34,557,812	\$217,420,038
Total Minority Firms	29.60%	32.48%	26.50%	33.29%
Total Nonminority Women Firms	3.80%	4.18%	7.46%	29.97%
Total M/WBE Firms	33.40%	36.66%	33.96%	63.26%

Source: Chapter 5, Prime Plus Subcontractor Utilization, Availability, and Disparity Analyses

#### FINDING D: REGRESSION ANALYSIS (Reference Appendix K)

A statistical analysis of survey data in the Washington area that controlled for the effects of variables related to company capacity variables (e.g., company capacity, owner level of education, and experience), found that African American firms with the same capacity and experience earned less than comparable non-M/WBE firms.

The private sector results from **Chapter 6** summarized in **Findings E**, **F** and **G** below are consistent with the reports from business owners in **Finding I** below that M/WBE utilization is very low in the absence of requirements and incentives.

# FINDING E: DISPARITIES IN SURVEY OF BUSINESS OWNERS DATA (Reference Chapter 6 and Appendix N)

In 240 disparity ratios in the Survey of Business Owners data from the U.S. Census Bureau for six procurement categories, covering Washington MSA and surrounding areas, only ten instances of over-utilization were found for M/WBE groups.

# FINDING F: PRIVATE SECTOR COMMERCIAL CONSTRUCTION (Reference Chapter 6 and Appendix N)

As a whole, M/WBE utilization in private sector commercial construction was very low, as measured by data from building permits from Prince George's County. From between July 1, 2009, and June 30, 2014, minority prime contractors won 0.15 percent of prime permits and nonminority women-owned firms received 0.00 percent of permits. MBE subcontractors were issued 2.93 percent of all subcontracting permits and WBEs 0.00 percent of subcontracting permits. When subcontractors utilized on WSSC construction projects were cross referenced with the commercial construction projects, a total of two M/WBE firms were utilized on commercial construction projects as subcontractors.



# FINDING G: DISPARITIES IN SELF-EMPLOYMENT AND REVENUE EARNINGS (Reference Chapter 6 and Appendix N)

Econometric analysis using data from 2014 American Community Survey U.S. Census Bureau data for the Washington area found African Americans and nonminority women were much less likely to be self-employed than nonminority males with the same background. The research also found that African Americans, Hispanic Americans, Asian Americans, and Nonminority Women who were self-employed earned less than comparable nonminority males who were self-employed.

#### FINDING H: ACCESS TO CAPITAL (Reference Chapter 7 and Appendix I)

An analysis of data in the National Survey of Small Business Finance (NSSBF) found that African American businesses were much more likely to be denied loans than comparable businesses owned by nonminority males. These NSSBF results are consistent with data in the 2016 local survey for this report. About 2.7 percent of non-M/WBE loan applicants reported being denied commercial bank loans, as compared to 50.0 percent of African American loan applicants. Access to capital is a barrier to business formation and growth on top of the barriers in the previous findings.

#### FINDING I: SURVEY RESULTS (Reference Chapter 7 and Appendix I)

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 (58 or 21.7% of M/WBEs). M/WBE subcontractors stated their biggest barrier working with primes on WSSC projects is competing with large companies (35 or 13.1% of M/WBEs).

With respect to disparate treatment, M/WBE subcontractor respondents in **Chapter 7** reported:

- Seldom or never solicit firms on projects (private or public) without M/WBE goals 28.1 percent or 75 respondents.
- ▶ An informal network precluded their firms from obtaining work in the private sector 26.2 percent or 70 respondents.
- ▶ Selected to satisfy good faith efforts requirements and then dropped on other public sector/private sector projects 13.5 percent or 36 respondents.

#### 4. COMMENDATIONS AND RECOMMENDATIONS

Most of the following commendations and recommendations from **Chapter 8, Findings 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 WSSC 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; credit disparities; and business owner reports of



disparate treatment. WSSC should tailor its M/WBE and Small Local Business Enterprise (SLBE) 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 who were the low-bidding subcontractors.

#### COMMENDATION B: SMALL LOCAL BUSINESS ENTERPRISE (SLBE) PROGRAM

WSSC should be commended for its extensive set of incentives for SLBE participation, including SLBE bid incentives, sheltered markets, subcontractor goals, mentor-protégé program, and small contracts rotation. These SLBE incentives are some of the broadest set of small business incentives by a local government agency in general, let alone a local public utility, in the country. Small business programs, such as WSSC's SLBE incentives, have the advantage that they are not subject to constitutional challenge on equal protection grounds even in the absence of a disparity study.

#### COMMENDATION C: OUTREACH

WSSC should be commended for its extensive outreach activities, which include widespread coverage of the program on the WSSC website, partnerships with numerous business organizations, participation in numerous events, monthly training, and other activities discussed in **Chapter 3, Review of Policies, Procedures, and Programs**.

#### RECOMMENDATION D: TWO-TIER SIZE STANDARDS.

Size standards for procurement M/WBE programs face a dilemma. If the size standard is placed too high, large firms crowd out new firms. If the size standard is placed too low, too many experienced firms lose the advantages of the program. One solution to this dilemma is to adopt a two-tier standard for M/WBE and SLBE certification. Thus, for example, contracts can be set aside for small and very small firms and goals that included very large SLBEs and M/WBEs can be established on large projects. A standard approach is to use the SBA size standard for small firms and a percentage of the SBA size standard (e.g., 25 or 50 percent) for very small firms.

#### RECOMMENDATION E: DATA

WSSC should work to improve prime contractor compliance with entering non-M/WBE subcontractor data in PRISM.

#### **CONCLUSION**

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



Introduction

**WSSC 2015 Disparity Study** 



#### **CHAPTER 1: INTRODUCTION**

In the **2015 Disparity Study** report, MGT of America, Inc. (MGT) provides our methodologies to collecting data and conducting various analyses to conduct this study for the Washington Suburban Sanitary Commission (WSSC). The result: the 2015 WSSC Disparity Study delivers on our commitment to provide a study which is accurate, valid, reliable, and legally defensible.

#### **CHAPTER SECTIONS**

- 1. Study Team
- 2. Background
- 3. Overview of Study Approach
- 4. Report Organization
- 5. Glossary of Terms

#### 1. STUDY TEAM

The MGT team who conducted the WSSC's Disparity Study is the most experienced in the country and has the most well-rounded experience and in-depth understanding of the legal, social, economic, and political context in which disparity studies are typically conducted. The experience of our team enables us to navigate the challenges, obstacles, and volatility, which can easily derail the most well-planned and executed study. The team of experts who dedicated their time, attention, and expertise to this study include:

#### MGT PROJECT TEAM

MGT is a Tallahassee-based research and management consulting firm. Since 1990, MGT has conducted disparity and disparity-related studies. Our team included the expertise of:

#### Mr. Reggie Smith, Executive-In-Charge.

Mr. Smith is the leader of MGT's disparity study business unit and is nationally recognized for managing and directing disparity studies. He has directed over three dozen studies since joining MGT and has managed some of the largest disparity studies in the country. He played a key role in developing and refining MGT's methodology and quality standards for conducting disparity studies. Mr. Smith is a highly skilled project manager with the knowledge and skills necessary to manage the complexity of a disparity study. In addition to his disparity study experience, Mr. Smith has extensive knowledge in consulting, training, and public relations services to private and public sector agencies, particularly in local government. Mr. Smith also specializes in the management and direction of reengineering, operational assessments, organizational and performance reviews, and administrative technology projects for city, county, and state government agencies. He has a deep understanding of the environment in which cities, counties, school boards, and public authorities operate and also has served as team member on a number of performance reviews in several states.



#### Ms. Vernetta Mitchell, Senior Consultant/Project Manager.

Ms. Mitchell is an expert in minority business program development and has developed and managed small, minority, and women business programs within local government and private sector companies for over 18 years. In addition, her experience extends to the functional knowledge of procurement processes. She has extensive knowledge and experience in project management, project scheduling, analytical reporting, facilitation, and public relations. Ms. Mitchell's experience in procurement, construction, and program administration has expanded her expertise in the development and management of data collection processes that has led to more efficient analyses and reporting of business participation. Ms. Mitchell performs research regarding local business climates to bring her up to date on M/WBE issues that may be present during her anecdotal research.

#### Dr. J. Vincent Eagan, JD, Technical Advisor.

Dr. Eagan is a nationally recognized disparity study expert in the law and economics of small, minority, and women business programs. As a consultant, business analyst, and expert witness he has advised a wide variety of public agencies, including federal, state, and municipal governments; airport, transit, and public authorities; and school boards. Dr. Eagan has produced more than 80 articles, monographs, and conference papers on a wide range of topics, with a particular focus on government policy towards small business and public procurement. He has served in an editorial capacity on several academic journals, including the *Harvard Journal of Law and Technology*, the *Harvard Journal of Law and Legislation, Review of Real Estate Research*, and *Business and Economic Review*. He is a former board member of the National Economics Association and a former Charter Fellow of the Southern Center for Public Policy Studies, specializing in small business issues. He is currently a member of the academic advisory panel for *Business Week* magazine. Dr. Eagan has taught in graduate programs in business and economics at Howard University and Georgia State University.

#### Ms. Marilyn Wiley, MS, Consultant/Quantitative Analyst.

Ms. Wiley has 14 years of disparity study data collection and analysis experience evaluating data, collecting hard copy and electronic data, managing and organizing large data sets, and conducting data analyses. Since joining MGT, Ms. Wiley has served as project director or co-project director on several disparity study projects and typically has major data management responsibity on most disparity projects. Ms. Wiley has substantial knowledge of statistical analysis, which is a critical component in providing accurate utilization, availability, and disparity results. Ms. Wiley also has advance knowledge using Microsoft Office software such as Access, Excel, PowerPoint, and Word. She is able to provide data recommendations and consultations in regards to disparity study related issues.

#### MGT SUBCONSULTANTS

#### McMillon Communications - Doris McMillon, President (MBE).

Ms. McMillon is the President and Chief Strategic Officer for McMillon Communications, Inc., a WBENC certified company, a full-service communications firm specializing in strategic positioning and effective communications. Based in the Washington, D.C. Metropolitan area, McMillon Communications, Inc.



represents, a powerful blend of branding communications to tactics to cultivate business success for agencies, non-profit organizations, and corporate entities. With a myriad of exceptional talent and diverse media experience, Ms. McMillon brings unequaled leadership and qualifications to establish McMillon Communications, Inc. as a top notch communications firm. Clients benefit from a variety of staple services including influential media training, key message development, executive presentation coaching, image consulting, customer service training, facilitation and moderation, and video production. Additionally, McMillon Communications, Inc. has partnered with Pearson Learning and Technology ED, to provide access to continuing education through online certificate training programs.

McMillon Communications, Inc. developed and implemented the Community Outreach Plan tailored to inform the business community about WSSC's Disparity Study, coordinated and managed the focus groups, conducted interviews with area trade associations and business organizations, and conducted in-depth interviews with area business owners.

#### Transformation Consulting, LLC – Lee Brazzell, President (MBE).

The firm's 25+ years in the fields of human, business, and organizational development, provides clients the experience, knowledge, and innovative methods for moving their company forward. Transformation's clients range from Fortune 500 to educational institutions. Transformation Consultants are diverse in thinking, age, professional backgrounds, gender, and ethnicity. All consultants possess master's degrees or higher in business, leadership, organizational development, education, or human resources.

Transformation Consultants, a Richmond, VA-based firm, coordinated and managed the public meetings, and conducted data verification of area firms. Transformation Consultants has worked with MGT on several disparity studies.

#### Oppenheim Research – Anneliese Oppenheim, President (WBE).

For over ten years, Ms. Anneliese Oppenheim has provided polling and research services for MGT. Oppenheim Research is a Tallahassee-based public opinion polling and research firm that conducted the survey of vendors and the custom census surveys.

#### 2. BACKGROUND

In April 2015, the Washington Suburban Sanitary Commission (WSSC) contracted with MGT of America, Inc. (MGT) to conduct a Disparity Study. The objectives of this study were:

- Determine whether the WSSC, either in the past or currently, engages in discriminatory practices in the solicitation and award of contracts in Construction, Architecture and Engineering, Professional Services, and Goods and General Services to minority- and women-owned business enterprises (M/WBEs).
- Determine if a legally justified need exists for the establishment of an M/WBE program in accordance with the guidelines set forth by the Supreme Court and relevant subsequent cases.



#### 3. OVERVIEW OF STUDY APPROACH

MGT followed a carefully designed work plan that allowed study team members to fully analyze availability and utilization of M/WBEs in the procurement practices of the WSSC for the study period of July 1, 2009 through June 30, 2014. The Disparity Study business categories, defined in **Chapter 4, Market Area and Utilization Analyses**, are:

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

The Disparity Study analyzed contracting opportunities in these procurement 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.

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

- Establish data parameters and finalize the work plan.
- Conduct a legal review.
- Review policies, procedures, and programs.
- Conduct market area and utilization analysis.
- Determine the availability of qualified firms.
- Analyze prime and subcontractor utilization and availability data for disparity.
- Conduct a survey of business owners.
- Collect and analyze anecdotal information.
- Prepare and present draft and final reports for the study.

#### **RESEARCH QUESTIONS**

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

- 1. Is there factual predicate to support a race- and gender-conscious M/WBE program for the WSSC?
- 2. How does case law inform the research methodology in a particular region for a particular client?
- 3. Are there disparities between the availability and utilization of M/WBE primes and subcontractors? 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/WBE primes and subcontractors?
- 4. Does the WSSC passively engage in practices that result in disparities?
- 5. Are there statistically significant disparities in the utilization of M/WBEs by prime contractors on projects where there are no M/WBE goals?
- 6. Is there qualitative/anecdotal evidence of disparate treatment of M/WBE subcontractors by prime contractors?



#### 4. REPORT ORGANIZATION

In addition to this introductory chapter, this 2015 Disparity Study report consists of:

#### CHAPTER 2 LEGAL FRAMEWORK

Presents the legal framework and an overview of the controlling legal precedents that impact remedial procurement programs with a particular concentration on the United States Court of Appeals for the Fourth Circuit.

#### **CHAPTER 3** REVIEW OF POLICIES, PROCEDURES, AND PROGRAMS

Provides a review of the WSSC's policies, procedures, M/WBE programs, and race- and gender-neutral efforts.

# CHAPTER 4 MARKET AREA, AND PRIME UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES

Presents the methodology used to determine the WSSC's relevant market area and statistical analysis of prime vendor utilization, availability, and disparity by the WSSC for the procurement of Construction, Architecture and Engineering, Professional Services, and Goods and General Services contracts.

#### CHAPTER 5 TOTAL UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES

Presents the methodology used to determine the WSSC's statistical analysis of total utilization, availability, and disparity by the WSSC for the procurement of Construction, Architecture and Engineering, Professional Services, and Goods and General Services contracts.

#### **CHAPTER 6 PRIVATE SECTOR AND NON-GOAL ANALYSES**

Provides an analysis of the presence of disparity in the private sector and its effect on the ability of firms to win procurement contracts from the WSSC.

#### CHAPTER 7 ANECDOTAL ANALYSIS

Presents an analysis of anecdotal data collected from the survey of business owners, personal interviews, focus groups, and community meetings.

#### **CHAPTER 8 FINDINGS AND RECOMMENDATIONS**

A summary of the findings and recommendations based upon the analyses presented in the report chapters.

#### **APPENDICES** Additional analyses, documents used to conduct the study, and back up documentation.



MGT recommends reading the disparity study report in its entirety to understand the basis for the findings and conclusions presented in **Chapter 8**, **Findings and Recommendations**.

#### 5. GLOSSARY OF TERMS

The glossary of terms was developed to help the reader understand common terms and acronyms used throughout the report. Additional and more detailed definitions can be found in various chapters of the report.

Anecdotal A personal account of incidents through surveys, interviews, public hearings, and

focus groups.

Aspirational Goals A benchmark percentage of spending by an agency with a particular group over a

period of time. The aspirational goal is typically an annual goal.

Anecdotal A compiled list of firms developed from several different sources including firms

that bid on work, registered vendors, as well as various business lists such as Dun & Bradstreet and the Centralized Bidder Registration List. Ultimately this compiled

list was used as the foundation in developing the pool of available firms to

participate in the anecdotal activities.

Centralized

Purchasing

Database

One point within an agency where all purchasing transactions are processed.

Compelling Interest Factual demonstration by a government agency of strong basis in the evidence of

past or present racial discrimination sufficient to justify remedial action.

Centralized Bidder

Registration

Centralized Bidder Registration System (CBR) was WSSC's registration database where all vendors and prospective vendors are required to register in order to bid on available solicitations. By submitting the registration, the vendors will be notified of upcoming contracts, based on their specified North America Industry Classification System (NAICS) code(s) for which they are eligible to submit a bid. This service is available to vendors for FREE, there is no cost to the bidder ...

community.

Contract All types of WSSC agreements, to include direct payments and purchase orders, for

the procurement of Construction, Architecture and Engineering, Professional

Services, and Goods and General Services.

Custom Census Custom census involves using Dun & Bradstreet as a source of business availability.

A short survey is conducted on a random sample of firms supplied by Dun & Bradstreet, asking ethnic and gender status, had they bid or considered bidding on



projects by the WSSC, had they bid or considered bidding as a prime contractor, subcontractor, or both, and had they worked as a prime contractor, subcontractor, or both.

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

purchase order.

Disparity Index/ Disparity Ratio The ratio of the percentage of business utilization and the percentage of business availability for a particular demographic group times 100 (Calculated for primes and subcontractors.).

Disparity Study A study that reviews and analyzes the utilization and availability of minority- and

women-owned businesses in a particular market area to determine if disparity exists in the awarding of contracts to minority- and women-owned businesses by a public

entity.

Expenditures vs. Awards Expenditures are payments made to a prime contractor or vendor by WSSC, and to subcontractors by a WSSC prime contractor or vendor. Awards reflect anticipated dollar amounts a prime contractor or vendor are scheduled to receive upon completion of a contract.

Good Faith Efforts Documented evidence of what activities that occurred to meet established project

goals to contract with M/WBE firms.

Lowest Responsible, Responsive Bidder An entity that provides a price that is lower than its competition, has responded to the needs of the requestor, and has not violated statutory requirements for vendor eligibility.

M/WBE An ethnic minority or nonminority woman, or group thereof, owning at least 51

percent of the general stock and controlling the day-to-day operations of a

business.

Master Vendor Database A database that maintains firms who have conducted business with the WSSC, registered with the WSSC, bid on WSSC projects, or are certified as minority,

woman, or approved small local business with WSSC.

MBE An acronym for Minority Business Enterprise. A business owned and operated by a

male or female who is African-American, Asian-American, Hispanic-American,

Native-American.



MSA Metropolitan Statistical Area. Metropolitan Statistical Areas are geographic entities

defined by the U.S. Office of Management and Budget (OMB) for use by Federal

statistical agencies in collecting, tabulating, and publishing Federal statistics.

Non-M/WBE An acronym for firms not identified as minority- or women-owned.

Nonminority
Women (Female)

A woman, regardless of race or ethnicity, unless she is also a member of an ethnic or racial minority group and elects that category in lieu of the gender category.

Passive Discrimination The act of perpetuating discrimination by awarding contracts to firms that

discriminate against minority- and women-owned firms.

Post-enactment Actions or events that take place after law has been changed.

Pre-enactment Actions or events that take place before or during current law.

Prima Facie Legally sufficient to establish a fact or a case.

Prime The contractor or vendor to whom a purchase order or contract is issued by WSSC.

Private Sector The part of the national economy that is not under direct government control.

Procurement Category

The type of service or good provided under a contract awarded. The categories analyzed are Construction, Architecture and Engineering, Professional Services, and

Goods and General Services.

Project Goals Goals placed on an individual project or contract, as opposed to aspirational goals,

placed on overall agency spending.

Public Sector The part of an economy that is controlled by the government.

PUMS Public Use Microdata Sample (PUMS) contains records for a sample of housing units

with information on the characteristics of each unit and each person in it. PUMS files are available from the American Community Survey (ACS) and the Decennial

Census.

Procurement Card (P-Card)

A WSSC authorized credit card used by WSSC employees to procure goods and

general services.

Purchase Order A commercial document and first official offer issued by a buyer to a seller,

indicating types, quantities, and agreed prices for products or services.

Regression Analysis Techniques for modeling and analyzing several variables when the focus is on the

relationship between a dependent variable and one or more independent variables.



More specifically, regression analysis helps one to understand how the typical value of the dependent variable changes when any one of the independent variables is varied, while the other independent variables are held fixed. For the purpose of this study, a multivariate regression was used to examine the influence of selected company and business characteristics, especially owner race and gender, on gross revenues reported by firms participating in a survey of vendors administered during the study.

Relevant Market

The geographical area where the firms that have been awarded the majority of

WSSC contract dollars are located.

Reverse

Discrimination

Unfair acts against a majority group.

Set Aside Contracts and purchases that are reserved for an established type of business that

competes against like businesses, e.g., small business.

SBE An acronym for Small Business Enterprise.

SLBE An acronym for Small Local Business Enterprise.

Sole Source Contracting or purchasing goods or general services from one entity.

Statistically Significant

The likelihood that a result or relationship is caused by something other than mere random chance. Statistical hypothesis testing is traditionally employed to determine if a result is statistically significant or not. This provides a "p-value" representing the probability that random chance could explain the result. In general, a 5% or lower p-value is considered to be statistically significant.

Strict Scrutiny Highest level of federal judicial review to determine whether certain governmental

policies are constitutional.

Subcontractor A vendor or contractor providing goods or services to a prime contractor or vendor

under contract with WSSC.

Survey of Vendors Telephone/Web-based survey administered to firms listed in the master vendor

database to solicit responses from business owners and representatives about their firms and their experiences doing business or attempting to do business with the

WSSC.

Utilization Examines payments or awards made to primes and subcontractors in the WSSC

geographic market area for each procurement category (Construction, Architecture and Engineering, Professional Services, and Goods and General Services). The



measures are presented as dollars, a percentage of dollars, as well as the percentage of firms utilized by racial, ethnic, and gender classification.

Total Utilization Adding together prime plus subcontractor utilization.



Legal Framework

**WSSC 2015 Disparity Study** 



#### **CHAPTER 2: LEGAL FRAMEWORK**

This chapter provides legal background for the study. The focus of the review is on relevant decisions from U.S. Supreme Court and the Fourth Circuit Court of Appeals, which covers the Prince George's County and Montgomery County areas. This chapter is the standard MGT chapter for the Fourth Circuit on this legal material, reviewed for recent cases. The material that follows does not constitute legal advice to the Washington Suburban Sanitary Commission on minority and women business enterprise (M/WBE) programs, affirmative action, or any other matter. Instead, it provides a context for the statistical and anecdotal analysis that appears in subsequent chapters of this report.

#### 1. INTRODUCTION

The Supreme Court decisions in *Richmond v. Croson Company (Croson)*, <sup>1</sup> *Adarand v. Peña (Adarand)*, <sup>2</sup> and later cases have established and applied the constitutional standards for an affirmative action program. This chapter identifies and discusses those decisions, summarizing how courts evaluate the constitutionality of race-specific and gender-specific programs. Decisions of the Fourth Circuit offer the most directly binding authority; in particular, the recent decision involving the North Carolina Department of Transportation (NCDOT) M/WBE program in *H.B. Rowe v. Tippett*. <sup>3</sup> Where the Fourth Circuit has not directly addressed an issue involving M/WBE programs since the *Croson* decision, this review considers decisions from other circuits.

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

A remedial race-conscious program is subject to strict judicial scrutiny under the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution.

#### **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. Anecdotal Evidence of Discrimination in Disparity Studies
- 7. To Withstand Strict
  Scrutiny, an M/WBE
  Program Must Be Narrowly
  Tailored to Remedy
  Identified Discrimination
- 8. Small Business Procurement Preferences
- 9. Conclusions

<sup>&</sup>lt;sup>3</sup> H.B. Rowe v. Tippett, 615 F.3d 233 (4<sup>th</sup> Cir 2010).



<sup>&</sup>lt;sup>1</sup> Richmond v. Croson, 488 U.S. 469 (1989).

<sup>&</sup>lt;sup>2</sup> Adarand v. Peña, 515 U.S. 200 (1995).

- Strict scrutiny has two basic components: a compelling governmental interest in remedying identified discrimination, or the present effects of past discrimination, in the marketplace, and narrow tailoring of the program to remedy that discrimination
- To survive the strict scrutiny standard, a remedial race-conscious program must be based on a compelling governmental interest.
  - "Compelling interest" means the government must prove past or present racial discrimination requiring remedial attention.
  - There must be a specific "strong basis in the evidence" for the compelling governmental interest.
  - Statistical evidence is preferred and possibly necessary as a practical matter; anecdotal evidence is permissible and can offer substantial support, but it probably cannot stand on its own.
- Program(s) designed to address the compelling governmental interest must be narrowly tailored to remedy the identified discrimination.
  - "Narrow tailoring" means the remedy must fit the findings.
  - The evidence showing compelling interest must guide the tailoring very closely.
  - Race-neutral alternatives must be considered first.
  - A lesser standard, intermediate judicial scrutiny, applies to programs that establish gender preferences.
  - To survive the intermediate scrutiny standard, the remedial gender-conscious program must serve important governmental objectives and be substantially related to the achievement of those objectives.
  - The evidence does not need to be as strong and the tailoring does not need to be as specific under the lesser standard.

# 2. 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 (Council) adopted a Minority Business Utilization Plan (the Plan) following a public hearing in which seven citizens testified about historical societal discrimination. In adopting the Plan, the Council also relied on a study indicating that "while the general population of Richmond was 50



percent African American, only 0.67 percent of the city's prime construction contracts had been awarded to minority businesses in the five-year period from 1978 to 1983."

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." 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.

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

J.A. Croson Company, a non-MBE mechanical plumbing and heating contractor, filed a lawsuit against the city of Richmond alleging that the Plan was unconstitutional because it violated the Equal Protection Clause of the Fourteenth Amendment. After a considerable record of litigation and appeals, the Fourth Circuit struck down the Richmond Plan and the Supreme Court affirmed this decision.<sup>7</sup> The Supreme Court determined that strict scrutiny was the appropriate standard of judicial review for MBE programs, which means that a race-conscious program must be based on a compelling governmental interest and be narrowly tailored to achieve its objectives. This standard requires a firm evidentiary basis for concluding that the underutilization of minorities is a product of past discrimination.<sup>8</sup>

#### GENDER-SPECIFIC PROGRAMS

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

<sup>&</sup>lt;sup>9</sup> Mississippi University for Women v. Hogan, 458 U.S. 718, 724 (1982) (quoting **Kirchberg v. Feenstra**, 450 U.S. 455, 461 (1981)); see also **United States v. Virginia**, 518 U.S. 515, 531 (1996), Nguyen v. U.S., 533 U.S. 53, 60 (2001). For an earlier Fourth Circuit application of intermediate scrutiny see *Adkins v. Rumsfeld*, 464 F.3d 456, 468 (4th Cir. 2006).



<sup>&</sup>lt;sup>4</sup> Croson. at 479-80.

<sup>&</sup>lt;sup>5</sup> Id. at 480.

bI <sup>6</sup>

<sup>&</sup>lt;sup>7</sup> Id. at 511.

<sup>&</sup>lt;sup>8</sup> Id. at 493.

The Fourth Circuit has ruled that the **intermediate scrutiny** standard is satisfied by "by showing at least that the classification serves important governmental objectives and that the discriminatory means employed are substantially related to the achievement of those objectives." The Fourth Circuit in *H.B. Rowe* agreed with other federal circuits that intermediate scrutiny "can rest safely on something less than the 'strong basis in evidence'." This 'something less' can mean that the state statute in this instance must "present sufficient probative evidence in support of its stated rationale for enacting a gender preference, i.e., . . . the evidence [must be] sufficient to show that the preference rests on evidence-informed analysis rather than on stereotypical generalizations." 12

# 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 a more real world education experience. More recently, in *Petit v. Chicago*, the Seventh Circuit relied on *Grutter v. Bollinger (Grutter)* in stating that urban police departments had "an even more compelling need for diversity" than universities and upheld the Chicago program "under the *Grutter* standards." The recent holding that other compelling interests may support affirmative action does not yet appear to have any application to public contracting. 15

*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 or the present effects of past discrimination in the relevant market.<sup>16</sup> Second, the governmental actor enacting the M/WBE program must have somehow perpetuated the discrimination to

<sup>&</sup>lt;sup>16</sup> Croson, 488 U.S. at 492, 509-10.



 $<sup>^{10}</sup>$  H.B. Rowe, at 242 (quoting Hogan, 458 U.S. 718, 724).

<sup>&</sup>lt;sup>11</sup> H.B. Rowe, at 242 (citing Engineering Contractors v. Dade County, 122 F.3d 895, 909 (11th Cir. 1997)).

<sup>&</sup>lt;sup>12</sup> Id. at 242 (citing *Engineering Contractors* at 910, Concrete Works at 959).

<sup>&</sup>lt;sup>13</sup> Hunter v. Regents of University of California, 190 F.3d 1061 (9th Cir. 1999).

<sup>&</sup>lt;sup>14</sup> Petit v. Chicago, 352 F.3d 1111 (7th Cir. 2003).

<sup>&</sup>lt;sup>15</sup> *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).

be remedied by the program,<sup>17</sup> either actively or at least passively with "the infusion of tax dollars into a discriminatory industry."<sup>18</sup>

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 sector affirmative action program. <sup>19</sup> Some cases required both preenactment and post-enactment evidence. <sup>20</sup>

The Supreme Court case of *Shaw v. Hunt*<sup>21</sup> (*Shaw*) raised anew the issue of post-enactment evidence in defending local public sector affirmative action programs. *Shaw* involved the use of racial factors in drawing voting districts in North Carolina. In *Shaw*, the Supreme Court rejected the use of reports providing evidence of discrimination in North Carolina because the reports were not developed before the voting districts were designed. Thus, the critical issue was whether the legislative body believed that discrimination had existed before the districts were drafted.<sup>22</sup> Following the *Shaw* decision, two district courts rejected the use of post-enactment evidence in the evaluation of the constitutionality of local minority business programs.<sup>23</sup> A federal circuit court decision, covering the federal small disadvantaged business enterprise program, stated that, "For evidence to be relevant in a strict scrutiny analysis of the constitutionality of a statute, it must be proven to have been before Congress prior to enactment of the racial classification."<sup>24</sup> The issue of post-enactment evidence was not directly addressed in *H.B. Rowe*, although the NCDOT M/WBE program was upheld with respect to African-American and Native-American business enterprises (but not women-owned, Hispanic and Asian-American firms) based on studies conducted after the program was enacted.

<sup>&</sup>lt;sup>24</sup> Rothe v. U.S. Dept. of Defense, 413 F.3d 1327, 1328 (Fed Cir 2005).



<sup>&</sup>lt;sup>17</sup> Coral Construction v. King County, 941 F.2d 910, 918 (9th Cir 1991).

<sup>&</sup>lt;sup>18</sup> Id. at 922.

<sup>&</sup>lt;sup>19</sup> See, e.g., Engineering Contractors v. Dade County, 122 F.3d 895 (11<sup>th</sup> Cir. 1997); Contractors Association v. Philadelphia, 6 F.3d 990, 1009 n. 18 (3rd Cir. 1993); Concrete Works v. Denver, 36 F.3d 1513 (10<sup>th</sup> Cir. 1994).

<sup>&</sup>lt;sup>20</sup> See, e.g., *Coral Construction*, 941 F.2d 910, 920.

<sup>&</sup>lt;sup>21</sup> Shaw v. Hunt, 517 U.S. 899 (1996).

<sup>&</sup>lt;sup>22</sup> Id. at 910.

<sup>&</sup>lt;sup>23</sup> 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).

#### RACIAL CLASSIFICATIONS SUBJECT TO STRICT SCRUTINY

In *Scott v. Jackson*, the city argued that its disadvantaged business program was not a racial classification subject to strict scrutiny because (1) it was based upon disadvantage, not race, and (2) it was a goals program and not a quota. The Fifth Circuit disagreed with the claim that the Jackson program was not a racial classification because the city applied the federal Section 8(d) of the Small Business Act (15 U.S.C. § 637(d)), which grants a rebuttable presumption of social and economic disadvantage to firms owned by minorities.<sup>25</sup> Such a presumption is subject to strict scrutiny. The Fifth Circuit also noted that strict scrutiny applied not simply when race-conscious measures were required, but also when such measures were authorized or encouraged.<sup>26</sup> While this issue was not directly addressed in *H.B. Rowe*, the Fourth Circuit did state in an earlier case that with regard to a claim that an employment affirmative action program was not a racial quota, "In the end, appellees cannot escape the reality that these preferences will deny some persons the opportunity to be a state trooper or to advance as a state trooper solely because they belong to a certain race."<sup>27</sup>

4. SIGNIFICANT STATISTICAL DISPARITIES BETWEEN AVAILABILITY OF QUALIFIED, WILLING AND ABLE MINORITY AND WOMEN BUSINESS ENTERPRISES (M/WBES), ON THE ONE HAND, AND UTILIZATION OF SUCH M/WBES, ON THE OTHER, WILL SATISFY STRICT SCRUTINY AND JUSTIFY A NARROWLY TAILORED M/WBE PROGRAM

The Supreme Court in *Croson* stated that "where gross statistical disparities can be shown, they alone in a proper case may constitute *prima facie* proof of a pattern or practice of discrimination." 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.<sup>29</sup>

The Supreme Court in *Croson* recognized statistical measures of disparity that compared the number of qualified and available M/WBEs with the rate of state construction dollars actually awarded to M/WBEs in order to demonstrate discrimination in a local construction industry.<sup>30</sup> To meet this more precise requirement, courts, including the Fourth Circuit, have accepted the use of a disparity index.<sup>31</sup>In a disparity index the researcher divides the percentage of total dollars that a particular group receives by the percent

<sup>&</sup>lt;sup>31</sup> H.B. Rowe, at 244. See also, Engineering Contractors, 122 F.3d at 914; Concrete Works IV, 321 F.3d at 964-69.



<sup>&</sup>lt;sup>25</sup> Scott v. City of Jackson, 199 F.3d 206, 216-17 (5th 1999).

<sup>&</sup>lt;sup>26</sup> Id.at 215 (quoting *Bras v. California Public Utilities Commission*, 59 F.3d 869, 875 (9<sup>th</sup> Cir. 1995)).

<sup>&</sup>lt;sup>27</sup> Maryland Troopers Assn v. Evans, 993 F.2d 1072, 1078 (4th Cir 1993).

<sup>&</sup>lt;sup>28</sup> Croson, 488 U.S. at 501, quoting Hazelwood School Division v. United States, 433 U.S. 299, 307-308 (1977).

<sup>&</sup>lt;sup>29</sup> Id. at 501.

<sup>&</sup>lt;sup>30</sup> Croson, 488 U.S. at 503-504.

that group represents in the available pool of available firms, and the result is multiplied by 100. An index below 80% is considered evidence of a statistically significant disparity on which an inference of discrimination may be based.

#### **DETERMINING AVAILABILITY**

To perform proper disparity analysis, the government must determine "availability"—the number of qualified minority contractors willing and able to perform a particular service for the state and local government. In *Croson*, the Court stated, "Where there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality's prime contractors, an inference of discriminatory exclusion could arise." <sup>32</sup>

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. 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. The federal courts have provided guidance on data sources and statistical techniques for measuring M/WBE availability, although there is no consensus or requirement among these courts regarding a single "best" source or technique. Different forms of data used to measure availability give rise to particular controversies. In *H.B. Rowe* subcontractor availability was estimated using NCDOT-approved subcontractors, subcontractor awardees and prime contractors. The plaintiff's expert argued in the case that subcontractor bidder data should be employed to estimate subcontractor availability rather than a vendor based approach. The Fourth Circuit in *H.B. Rowe* noted that the available subcontractor bidder data did not change the results of the vendor data.<sup>34</sup>

#### 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 in the context of analyzing M/WBE programs, and the relevant market was not directly addressed in *H.B. Rowe*. However, the study in Rowe defined the relevant market as the geographic area in which vendors receiving 75 percent of the dollars spent by a government agency in a particular procurement category have an office.

<sup>&</sup>lt;sup>34</sup> H.B. Rowe, at 246. In Concrete Works, in the context of plaintiffs' complaint that the city of Denver had not used such information, the Tenth Circuit noted that bid information also has its limits. Firms that bid may not be qualified or able, and firms that do not bid may be qualified and able, to undertake agency contracts. Concrete Works II, 36 F.3d at 89-90; Concrete Works IV, 321 F.3d at 983-84.



WASHINGTON SUBURBAN SANITARY COMMISSION Final Report | July 28, 2016

<sup>32</sup> Croson, 488 U.S. at 509 (emphasis added).

<sup>&</sup>lt;sup>33</sup> Id., 488 U.S. at 498.

#### FIRM QUALIFICATIONS

Another availability consideration is whether M/WBE firms are qualified to perform the required services. In Croson, the Supreme Court noted that although gross statistical disparities may demonstrate prima facie proof of discrimination, "when special qualifications are required to fill particular jobs, comparisons to the general population (rather than to the smaller group of individuals who possess the necessary qualifications) may have little probative value." The Court, however, did not define the test for determining whether a firm is qualified. In H.B. Rowe, the plaintiff's expert argued that prime contractor assessment of subcontractor qualifications should be used to assess M/WBE subcontractor qualification. But the Fourth Circuit noted that there was no data on prime contractor assessment of subcontractor qualifications.<sup>36</sup>

#### **WILLINGNESS**

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

#### **ABILITY**

Another availability consideration is whether the firms being considered are able to perform a particular service. Courts have recognized that contractor "capacity" is an important element in determining M/WBE availability. Thus, legal challenges to race- and gender-conscious government contracting programs often question whether M/WBE firms have the "capacity" to perform particular services. In *Rowe* the court noted that the disparity study consultant explained that capacity does not have the same force for subcontracts, which are relatively small. NCDOT study provided evidence that more than 90 percent of subcontracts were less than \$500,000. In addition, the study for NCDOT contained a regression analysis indicating that "African American ownership had a significant negative impact on firm revenue unrelated to firm capacity or experience."

#### DISPARITY INDEX AND CONTRACT VALUE

In the *Rowe* decision the plaintiff noted that there was no substantial disparity when the percentage of subcontractors utilized (as opposed to the percent of dollars awarded) was compared to their availability. However, the Fourth Circuit noted that "the State pointed to evidence that prime contractors used minority

<sup>&</sup>lt;sup>39</sup> Id



<sup>35</sup> Croson, 488 U.S. at 501, quoting Hazelwood School District v. United States, 433 U.S. 299, 308, n.13 (1977).

<sup>&</sup>lt;sup>36</sup> H.B. Rowe, at 246.

<sup>&</sup>lt;sup>37</sup> Western States Paving Co. v. Washington State DOT, 407 F. 3d 983, 999-1000 (and cases cited therein) (9<sup>th</sup> Cir. 2005), cert. denied, 546 U.S. 1170 (2006); Rothe Development Corp. v. U.S. Department of Defense, et al., 545 F. 3e 1023, 1042-45 (Fed. Cir. 2008).

<sup>&</sup>lt;sup>38</sup> Id at 247

businesses for low value work in order to comply with the Department's goals."<sup>40</sup> Along these lines the Fourth Circuit noted that the average subcontract awarded to nonminority male subcontractors was more than double the size of subcontracts won by MBE subcontractors.<sup>41</sup> Thus, the Court looked to evidence of low average dollar awards in assessing the relevance of different disparity ratios.<sup>42</sup>

#### STATISTICAL SIGNIFICANCE IN DISPARITY STUDIES

Generally, courts reported decisions upholding preferential M/WBE programs involve programs that reflect statistically-driven disparity studies. In practical effect, courts require statistical evidence. Further, the statistical evidence needs to be held to appropriate professional standards.<sup>43</sup> In *H.B. Rowe* the court noted that the NCDOT study focused on disparity ratios lower than 80 percent and conducted t- tests of statistical significance. [See comments to preceding paragraph.] As noted previously, an index or ratio below 80% is considered evidence of a statistically significant disparity on which an inference of discrimination may be based.

#### NON-GOAL EVIDENCE

Another question that has arisen in the case law is whether evidence of a decline in M/WBE utilization following a change in or termination of an M/WBE program is relevant and persuasive evidence of discrimination. The Fourth Circuit in *H.B. Rowe* found that a 38 percent decline in M/WBE utilization following the suspension of the program "surely provides a basis for a fact finder to infer that discrimination played some role in prime contractors' reduced utilization of these groups during the suspension." <sup>44</sup> Similarly, the Eighth Circuit in *Sherbrooke Turf Inc. v. Minnesota Department of Transportation* and the Tenth Circuit in *Concrete Works IV* found that such a decline in M/WBE utilization was evidence that prime contractors were not willing to use M/WBEs in the absence of legal requirements. <sup>45</sup>

# 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." \*Groson provided that the government "can use its spending

<sup>&</sup>lt;sup>46</sup> Coral Construction, 941 F.2d at 922 (citing Croson, 488 U.S. at 492) (emphasis added).



<sup>&</sup>lt;sup>40</sup> Id. at 247.

<sup>&</sup>lt;sup>41</sup> Id. at 245.

<sup>&</sup>lt;sup>42</sup> Id. at 247.

<sup>&</sup>lt;sup>43</sup> Contractors Association, 91 F.3d at 599-601.

<sup>&</sup>lt;sup>44</sup> H.B.Rowe, at 248.

<sup>&</sup>lt;sup>45</sup> Concrete Works at 985; Sherbrooke Turf, 345 F.3d 964, 973 (8<sup>th</sup> Cir 2003).

powers to remedy private discrimination, if it identifies that discrimination with the particularity required by the Fourteenth Amendment."<sup>47</sup> 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."<sup>48</sup>

In the *H.B. Rowe* case the Fourth Circuit found that the State's application of a statute providing for preferential use of African American and Native American subcontractors in public sector contracting was constitutional. At the same time, however, the Court found that the State failed to justify applying the same statute to women-owned, Asian American and Hispanic American subcontractors and held such application to be unconstitutional.<sup>49</sup> The Fourth Circuit criticized the evidence offered by NCDOT for not having a t-test of statistical significance, for not showing that WBEs sought private sector work, and for less anecdotal evidence of private sector discrimination against WBEs than was shown for minorities. The Fourth Circuit contrasted affidavits produced in the *Concrete Works* case of firms testifying they sought private sector work and could not obtain it. The court also stated that NCDOT didn't establish the overlap between private sector and public sector work in transportation although the court acknowledged that some of the subcontracting was the same in both sectors. Unlike building construction there is negligible private sector highway construction to compare and connect to public highway construction. The econometric evidence of self-employment was not addressed. The Fourth Circuit did acknowledge that,

We do not suggest that the proponent of a gender-conscious program must always tie private discrimination to public action...Rather, we simply hold where, as here, there exists substantial probative evidence of overutilization in the relevant public sector, a state must present something more than generalized private-sector data unsupported by compelling anecdotal evidence to justify a gender-conscious program.<sup>50</sup>

#### 6. 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

<sup>&</sup>lt;sup>50</sup> Id., at 255.



<sup>&</sup>lt;sup>47</sup> See *Croson*; see generally I. Ayres and F. Vars, "When Does Private Discrimination Justify Public Affirmative Action?" 98 *Columbia Law Review* 1577 (1998).

<sup>&</sup>lt;sup>48</sup> Croson, 488 U.S. at 492.

<sup>&</sup>lt;sup>49</sup> H.B. Rowe, at 257.

determination that broader remedial relief is justified." <sup>51</sup> Although *Croson* did not expressly consider the form or level of specificity required for anecdotal evidence, the Fourth Circuit has addressed both issues.

In *H.B. Rowe* there was evidence from a telephone survey, interviews and focus groups. The Fourth Circuit favorably cited survey evidence of a "good old boys" network excluding MBEs from work, double standards in qualifications, primes viewing MBEs as less qualified, dropping MBEs after contract award and the firms changing their behavior when not required to use MBEs. This material was affirmed in interviews and focus groups. The Fourth Circuit also seemed to give some weight to the differences in responses between ethnic/gender groups regarding the aforementioned barriers. The Fourth Circuit concluded that, "The survey in the 2004 study exposed an informal, racially exclusive network that systematically disadvantaged minority subcontractors."<sup>52</sup>

The plaintiff argued that this data was not verified. To which the Fourth Circuit responded, "a fact finder could very well conclude that anecdotal evidence need not—and indeed cannot—be verified because it "is nothing more than a witness' narrative of an incident told from the witness' perspective and including the witness' perceptions." The Fourth Circuit also commented favorably on the NCDOT study survey oversampling MBEs as long as the sample was random. The Fourth Circuit did state, citing precedent in *Maryland Troopers*, that it was problematic to infer "discrimination from reports of cronyism absent evidence of racial animus." <sup>54</sup>

## 7. 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.<sup>55</sup> The Fourth Circuit has laid out the following factors in determining whether or not a program was narrowly tailored:

(1) the necessity of the policy and the efficacy of alternative race neutral policies; (2) the planned duration of the policy; (3) the relationship between the numerical goal and the percentage of minority group members in the relevant population; (4) the flexibility of the

<sup>&</sup>lt;sup>55</sup> Contractors Association, 91 F.3d at 605; Engineering Contractors, 122 F.3d at 926-929; Verdi v. DeKalb County School District, 135 Fed. Appx 262, 2005 WL 38942 (11<sup>th</sup> Cir. 2005).



<sup>&</sup>lt;sup>51</sup> Croson, 488 U.S. at 509.

<sup>&</sup>lt;sup>52</sup> H.B. Rowe, at 251.

<sup>&</sup>lt;sup>53</sup> H.B. Rowe, at 249 (quoting Concrete Works, 321 F.3d at 989).

<sup>&</sup>lt;sup>54</sup> H.B. Rowe at 251 (citing Maryland Troopers).

policy, including the provision of waivers if the goal cannot be met; and (5) the burden of the policy on innocent third parties.<sup>56</sup>

In *H.B. Rowe* the Fourth Circuit added to this list "over-inclusiveness," defined as the "tendency to benefit particular minority groups that have not been shown to have suffered invidious discrimination." <sup>57</sup>

#### RACE-NEUTRAL ALTERNATIVES

Concerning race-neutral alternatives, the Supreme Court in *Croson* concluded that a governmental entity must demonstrate that it has "seriously considered" use of "workable" race-neutral means to increase minority business participation in contracting or purchasing activities. In *H.B. Rowe* the Fourth Circuit noted that NCDOT had a Small Business Enterprise program and had undertaken all the race neutral methods suggested by the DOT DBE program regulations. The Court went on to note that the plaintiff had identified "no viable race-neutral alternatives that North Carolina has *failed* to consider and adopt" (emphasis in the original). The Court further noted that disparities persisted in spite of NCDOT employment of these race-neutral initiatives.

#### **DURATION OF THE REMEDY**

With respect to program duration, in *Adarand v. Peña*, the Supreme Court wrote that a program should be "appropriately limited such that it will not last longer than the discriminatory effects it is designed to eliminate." In *H.B. Rowe* the Fourth Circuit stated that "the district court found two facts particularly compelling in establishing that it was narrowly tailored: the statute's provisions (1) setting a specific expiration date and (2) requiring a new disparity study every 5 years."... We agree." Other appellate courts have noted possible mechanisms for limiting program duration: required termination if goals have been met<sup>61</sup> and decertification of MBEs who achieve certain levels of success, or mandatory review of MBE certification at regular, relatively brief periods.

#### RELATIONSHIP OF GOALS TO AVAILABILITY

Narrow tailoring under the *Croson* standard requires that remedial goals be in line with measured availability. Merely setting percentages without a carefully selected basis in statistical studies, as the city of

<sup>59</sup> Adarand, 515 U.S. at 238 (internal quotations and citations omitted).

<sup>&</sup>lt;sup>62</sup> Adarand v. Slater, 228 F.3d at 1179, 1180.



<sup>&</sup>lt;sup>56</sup> H.B. Rowe at 252 (quoting Belk v. Charlotte-Mecklenburg Bd. of Educ., 269 F.3d 305, 344 (4th Cir. 2001))

<sup>&</sup>lt;sup>57</sup> H.B.Rowe, at 252 (quoting Alexander, 95 F.3d at 316).

<sup>&</sup>lt;sup>58</sup> H.B.Rowe at 252.

<sup>&</sup>lt;sup>60</sup> H.B. Rowe, at 253 (quoting H.B. Rowe, Inc., 589 F. Supp. 2d at 597).

<sup>&</sup>lt;sup>61</sup> Sherbrooke, 354 F.3d at 972.

Richmond did in *Croson* itself, has played a strong part in decisions finding other programs unconstitutional.<sup>63</sup>

In *H.B. Rowe* the Fourth Circuit found that NCDOT participation goals were related to percentage MBE availability. First, the NCDOT goals were set project by project. Second, there was a report detailing the type of work likely to be subcontracted. Third, the NCDOT goal setting committee checks it database for availability. Finally, Fourth Circuit noted that 10 percent of the NCDOT projects had a zero M/WBE goal.<sup>64</sup>

#### **FLEXIBILITY**

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

The Program contemplates a waiver of project-specific goals when prime contractors make good faith efforts to meet those goals...Good faith efforts essentially require only that the prime contractor solicit and consider bids from minorities. The State does not require or expect the prime contractor to accept any bid from an unqualified bidder, or any bid that is not the lowest bid. Moreover, prime contractors can bank any excess minority participation for use against future goals over the following two years. Given the lenient standard and flexibility of the "good faith" requirement, it comes as little surprise that as of July 2003, only 13 of 878 good faith submissions-including Rowe's-had failed to demonstrate good faith efforts.<sup>65</sup>

In contrast, the Third Circuit observed in *Contractors Association* that, "As we have explained, the 15 percent participation goal and the system of presumptions, which in practice require non-black contractors to meet the goal on virtually every contract, result in a 15 percent set-aside for black contractors in the subcontracting market." <sup>66</sup>

The Fourth Circuit also noted that,

The State does not require or expect the prime contractor to accept any bid from an unqualified bidder, or any bid that is not the lowest bid. Moreover, prime contractors can bank any excess minority participation for use against future goals over the following two years.<sup>67</sup>

<sup>&</sup>lt;sup>67</sup> H.B. Rowe, at 253.



<sup>&</sup>lt;sup>63</sup> Contractors Association, 91 F.3d at 607 ("The district court also found ... that the ... Ordinance offered only one reference point for the percentages selected for the various set-asides -- the percentages of minorities and women in the general population."). See also Builders Association of Greater Chicago, 256 F.3d at 647.

<sup>&</sup>lt;sup>64</sup> H.B. Rowe, at 253. As previously noted, however, the Fourth Circuit held that there was insufficient evidence supporting the North Carolina's application of the statutory program to women-owned, Asian American and Hispanic American subcontractors and, hence, unconstitutional. Id., at 257.

<sup>&</sup>lt;sup>65</sup> Id.,, at 254.

<sup>&</sup>lt;sup>66</sup> Contractors Association, 91 F.3d at 606.

#### **BURDEN ON THIRD PARTIES**

Narrow tailoring also requires minimizing the burden of the program on third parties. Waivers and good faith compliance are tools that serve this purpose of reducing the burden on third parties.<sup>68</sup> The plaintiff in *H.B. Rowe* argued that the solicitation requirements were burdensome and that it was forced to subcontract out work that could be self-performed. The Fourth Circuit noted that the solicitation requirements could be met with existing staff and the M/WBE program did not require subcontracting out work that could be self-performed.<sup>69</sup>

#### **OVER-INCLUSION**

Finally, narrow tailoring involves limiting the number and type of beneficiaries of the program. As noted above, there has to be evidence of discrimination to justify a group-based remedy, and over-inclusion of uninjured individuals or groups can endanger the entire program. However, the statute in question limited relief to "those racial or ethnicity classifications... that have been subjected to discrimination in the relevant marketplace and that have been adversely affected in their ability to obtain contracts with the Department." <sup>70</sup>

#### 8. SMALL BUSINESS PROCUREMENT PREFERENCES

Small business procurement preferences have existed since the 1940s. The first small business program had its origins in the Smaller War Plants Corporation (SWPC), established during World War II.<sup>71</sup> 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." Continuing this policy, current federal law requires that government agencies award a "fair proportion" of procurement contracts to small business concerns. The regulations are designed to implement this general policy.

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:

<sup>&</sup>lt;sup>74</sup> See 32 C.F.R. §§ 1-701.1 to 1-707.7.



<sup>&</sup>lt;sup>68</sup> 49 CFR, Section 26, Part 53.

<sup>&</sup>lt;sup>69</sup> H.B. Rowe, at 254.

<sup>&</sup>lt;sup>70</sup> N.C. Gen. Stat. § 136-28.4(c)(2).

<sup>&</sup>lt;sup>71</sup> 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.

<sup>&</sup>lt;sup>72</sup> 10 U.S.C. § 2301 (1976).

<sup>&</sup>lt;sup>73</sup> 15 USC 631(a).

...to make studies and recommendations to the appropriate Federal agencies to insure that a fair proportion of the total purchases and contracts for property and services for the Government be placed with small-business enterprises, to insure that a fair proportion of Government contracts for research and development be placed with small-business concerns, to insure that a fair proportion of the total sales of Government property be made to small-business concerns, and to insure a fair and equitable share of materials, supplies, and equipment to small-business concerns.<sup>75</sup>

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.<sup>76</sup>

There has been only one constitutional challenge to the long-standing federal SBE programs. In *J.H. Rutter Rex Manufacturing v. United States*, <sup>77</sup> 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. <sup>78</sup> 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 <u>rationally related</u> to the sound legislative purpose of promoting small businesses in order to contribute to the security and economic health of this Nation.<sup>79</sup>

A large number of state and local governments have maintained small business preference programs for many years.<sup>80</sup> No district court cases were found overturning a state and local small business preference program. There are no reported cases of litigation against local SBE programs. The legal foundations that have typically sued M/WBE programs have actually promoted SBE procurement preference programs as a race-neutral substitute for M/WBE programs.

<sup>&</sup>lt;sup>80</sup> 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).



<sup>&</sup>lt;sup>75</sup> 15 U.S.C. § 637(b)(11).

<sup>&</sup>lt;sup>76</sup> Federal Acquisition Regulations 19.502-2.

<sup>&</sup>lt;sup>77</sup> 706 F.2d 702 (5<sup>th</sup> Cir. 1983), cert. denied, 464 U.S. 1008 (1983).

<sup>&</sup>lt;sup>78</sup> 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).

<sup>&</sup>lt;sup>79</sup> J. H. Rutter Rex Manufacturing, at 706 F.2d at 730 (emphasis added). See also Dandridge v. Williams, 397 U.S. 471 (1970).

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*, 81 the state court ruled that the Cincinnati SBE program had race and gender preferences and had deprived the plaintiff of constitutionally protected property interest without due process of law. The city acknowledged that it had not offered evidence to satisfy strict scrutiny because it felt that it had been operating a race-neutral program.

#### 9. CONCLUSIONS

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

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

<sup>&</sup>lt;sup>81</sup>Cleveland Construction v. Cincinnati, Case No. A0402638 (Ct Comm Pleas, Hamilton County, Ohio 2005).



-

### CHAPTER 3

Review of Policies, Procedures, and Programs

**WSSC 2015 Disparity Study** 



#### 1. INTRODUCTION

**Chapter 3** focuses on policies and procedures used by the Washington Suburban Sanitary Commission (WSSC) to purchase goods and services. It provides a brief description of the procurement and contracting environment in which minority and women business enterprises (MBEs), <sup>82</sup> and small local business enterprises (SLBEs) operate as well as background for the data analysis and foundations for the report recommendations. Finally, it provides a brief description of the remedial efforts undertaken by the WSSC with regard to procurement in the categories of Construction, Architecture & Engineering (A&E), Professional Services, and Goods and General Services.

Our review of policies and procedures is presented in 10 sections. Section 2 describes the methodology used to conduct the review of contracting policies, procedures, and programs. Sections 3 through 12 cover programs to assist Small, Local, and Minority Business Enterprises (SLMBEs).

#### 2. METHODOLOGY

This section discusses the steps taken to summarize WSSC's race- and gender-based programs, and race- and gender-neutral programs. Our review focused on elements of the remedial programs that might affect MBE and SLBE utilization. The analysis included the following steps:

- ▶ Collection, review, and summarization of WSSC's contracting and purchasing policies currently in use. Discussions with managers about the changes that contracting and purchasing policies underwent during the study period and their effects on the remedial programs.
- Development of questionnaires administered to key WSSC contracting and purchasing staff and officials to determine how existing contracting and purchasing policies have been implemented. Interviews were conducted with WSSC management and staff regarding the application of policies, discretionary use of policies, exceptions to written policies and procedures, and impact of policies on key users.

#### CHAPTER SECTIONS

- 1. Introduction
- 2. Methodology
- 3. Historical Background
- 4. Certification
- 5. MBE Goals and Incentives
- 6. Good Faith Efforts
- 7. Mentor Protégé Program
- 8. Nondiscrimination in Contracting
- 9. Prompt Payment
- 10. Outreach
- 11. Reporting MBE Utilization
- 12. SLMBE Office
- 13. Conclusions



<sup>82</sup> WSSC uses the term MBE to refer to firms owned by women and minorities.

Review of applicable WSSC rules, resolutions, and policies that guide the remedial programs. This included discussing with both WSSC personnel and program participants the operations, policies, and procedures of the remedial programs and any remedial policy changes over time.

Finally, MGT collected and reviewed copies of previous disparity studies in the geographic region and performed a review of race- and gender-neutral programs. In all, MGT conducted seven interviews with current WSSC staff during April 2015. For this portion of the study, WSSC documents collected and reviewed are itemized in **Table 3-1**.

TABLE 3-1
DOCUMENTS REVIEWED DURING POLICY AND PROCEDURES REVIEW

INDEX	DOCUMENTS REVIEWED DURING POLICY AND PROCEDURES REVIEW  DESCRIPTION					
Procurement Documents						
	General Conditions					
1.	WSSC, Procurement Office, General Conditions – Goods and Supplies, Revised: September 2012					
2.	Part II WSSC, Procurement Office, General Conditions – Professional Services, Revised: September 2012					
3.	WSSC, Procurement Office, General Conditions – Architecture & Engineering Services, Revised: July 1, 2014					
4.	WSSC, General Conditions – Construction, Revised: December 2014					
	Other Procurement Related Documents					
5.	WSSC, SP No. ACQ 10-01, Centralized Bidder Registration (CBR) Procedures, Effective Date June 1, 2010					
6.	WSSC, Procurement Regulations, Effective August, 1, 2012					
7.	Procurement Office Solicitation No. 1067 For Information Technology (IT) Basic Ordering Agreement (BOA) Technical Staff and Services, Solicitation Amendment No. 7, December 11, 2012					
8.	WSSC Procurement Office, Bonding & Insurance Requirements for SCP/SEP, Revised 08/27/13					
9.	WSSC, Procurement Office Instructions to Bidders/Offerors, Revised April 9, 2015					
10.	Contractor Fact Sheet, Contract No. BT5652A14, March 2015					
11.	WSSC, Approved Budget, FY 2015					
12.	WSSC, Organizational Chart, 1-5-2015					
13.	Business Policies and Procedures					
SLMBE	Documents					
	Resolutions and Standard Procedures					
14.	WSSC, SP MBE 96-01, Minority Business Enterprise (MBE) Program, Effective Date: June 1, 1996					
15.	WSSC, Resolution No. 97-1521, Adopted November 20, 1996					



### TABLE 3-1 (cont.) DOCUMENTS REVIEWED DURING POLICY AND PROCEDURES REVIEW

INDEX	DESCRIPTION			
16.	WSSC, Resolution 2008-1784 ("Eligibility Requirements for SLBE Program"), adopted September 19, 2007			
17.	WSSC, Resolution 2011-1909, Adoption of a New Minority Business Enterprise (MBE) Program to Replace Standard Procedure MBE 96-01			
18.	WSSC, SP No. MBE 11-01, ("Minority Business Enterprise Program"), Effective Date: May 1, 2011			
19.	WSSC, SLBE No. SP 12-01, ("Small Local Business Enterprise (SLBE) Program"), Effective Date: August 26, 2011			
20.	WSSC, Resolution 2012-1933, Adoption of a New Small Local Business Enterprise (SLBE) Program to Replace Standard Procedure SLBE $08-01$			
	Legislative Reports			
21.	Small Local and Minority Business Enterprise Office Legislative Report FY 2010			
22.	Small Local and Minority Business Enterprise Office Legislative Report FY 2011			
23.	Small Local and Minority Business Enterprise Office Legislative Report FY 2012			
24.	Small Local and Minority Business Enterprise Office Legislative Report FY 2013			
25.	Small Local and Minority Business Enterprise Office Legislative Report FY 2014			
	Disparity Studies			
26.	Margaret Barnes, A Study of the Washington Suburban Sanitary Commission's Contract Awarding to Minorities and Non-minorities, October 11, 1977			
27.	MBELDEF, WSSC's Minority Business Program – Executive Summary and Recommendations, March 1988			
28.	MGT, Minority Business Enterprise Disparity Study for the Washington Suburban Sanitary Commission, March 1999			
29.	BBC, WSSC 2005 Disparity Study			
30.	Mason Tillman, Washington Suburban Sanitary Commission 2010 Disparity Study, January 2011			
31.	NERA, Disadvantaged Business Enterprise Disparity Study, Prepared for the Maryland Department of Transportation (2013)			
	Other Documents			
32.	Maryland Attorney General Opinion 181, Procurement – Minority Business Enterprises – WSSC May No Continue MBE Program Following Expiration of Statutes Authorizing the Program, September 8, 2006			
33.	MBELDEF, WSSC's Minority Business Program - Part I Legal Analysis, March 1988			
34.	WSSC, MBE/SLBE Subcontracting/Sub-Consulting Execution Certification for Architectural & Engineering Consultants			
35.	WSSC, Good Faith Efforts Guide, 05-07-2014			



#### 3. HISTORICAL BACKGROUND

#### MBE AND SLBE PROGRAMS

WSSC commissioned a small MBE utilization study in 1977.<sup>83</sup> In 1978, WSSC adopted Resolution 78-504, which pledged to encourage MBE utilization. In February 1985, after collecting additional data, WSSC adopted the Minority Procurement Policy (MPP), for the purpose of increasing the participation of minority-owned firms in the bidding process for procurement contracts. The MPP set a goal of awarding to MBE firms 25 percent of the value of all procurement contracts awarded annually.<sup>84</sup> Concrete General, a Maryland construction firm, sued WSSC over the MPP program. In 1991, a federal district court granted summary judgment to Concrete General.<sup>85</sup> The court found that WSSC did not have legal authority to implement the MPP and that elements of the MPP were unconstitutional.

WSSC discontinued the mandatory MBE goals program for construction contracts following the *Concrete General* litigation. In November 1996, the Commission amended its then-existing MBE Program, (Standard Procedure MBE 96-01; Resolution No. 97-1521), by eliminating the requirement that a fixed percentage of WSSC construction contracts be allocated to MBE subcontracting; instead, WSSC encouraged the construction community to increase MBE participation in WSSC construction contracts voluntarily. In January 2001, subsequent to enactment of legislative authority, WSSC established an SLBE program. Under the voluntary MBE subcontracting program for construction, contractors were encouraged to subcontract 20 percent of the contract to MBEs.

WSSC released disparity studies in 1999, 2005, and 2010. <sup>86</sup> In July 2006, the legislative authority for WSSC's MBE program expired. In a written opinion, Maryland's Attorney General stated that, because statutory authority had lapsed, WSSC could not continue the race-conscious elements of its MBE program. Authority for WSSC's MBE program was legislatively reinstated effective June 1, 2007. Shortly thereafter, the Commission re-authorized Standard Procedure ("SP") MBE 96-01, as amended, as its MBE program with a view to eventually replacing it with a more current program. In 2011, subsequent to the completion of its 2010 Disparity Study, WSSC adopted Resolution 2011-1909, which authorized a new MBE Program, under SP No. MBE 11-01. In 2012, WSSC also adopted Resolution 2012-1933, which authorized a new SLBE Program, under SP No. SLBE 12-01.

<sup>&</sup>lt;sup>86</sup> An examination of WSSC's Minority Business Program, which analyzed MBE utilization in WSSC procurements as far back as the 1970s, was completed in 1988. MBELDEF, WSSC's Minority Business Program– Executive Summary and Recommendations, March 1988.



<sup>&</sup>lt;sup>83</sup> Margaret Barnes, A Study of the Washington Suburban Sanitary Commission's Contract Awarding to Minorities and Non-minorities, October 11, 1977.

<sup>&</sup>lt;sup>84</sup> Minority Procurement Policy, Section 4-4 of the WSSC Basic Purchasing Policies, § C(1) (b). To achieve the 25 percent goal, the MPP granted to WSSC purchasing agents discretion to use one of several, mandatory race-conscious practices, requiring, for example, that: procurement contracts with subcontracting opportunities allocate at least 10% of the contract's total value to minority subcontractors; procurement contracts be awarded to minority-owned firms that submit a bid within 10% of the lowest bid; competitive bidding of procurement contracts be restricted to minority-owned firms; etc.

<sup>&</sup>lt;sup>85</sup> Concrete General v. Wash. Suburban Sanitary Com'n, 779 F. Supp. 370 (D. Md. 1991). Given that Concrete General's sole injury was the rejection of its low bid for a contract, the court ruled that Concrete General only had standing to challenge the MPP restricted bidding provision.

#### PREVIOUS DISPARITY STUDIES

**Table 3-2** shows percentage MBE and WBE prime utilization in the 1999, 2005 and 2010 WSSC disparity studies. Given the different methodologies (different relevant markets, different exclusions of prime contracts, etc.) of the studies there are probably limits to directly comparing the percentages between the studies. With that caveat in mind the strongest continuous upward percentage growth across all three studies for MBEs was in construction. There were some declines for MBEs and WBE percentage prime utilization from the 2005 study to the 2010 study.

TABLE 3-2
WSSC MBE AND WBE PERCENTAGE PRIME UTILIZATION
IN 1999, 2005 AND 2010 DISPARITY STUDIES

PROCUREMENT CATEGORY	1999 STUDY		2005 STUDY		2010 STUDY	
	MBE	WBE	MBE	WBE	MBE	WBE
Construction Primes	5.7%	0.7%	10.3%	0.4%	21.4%	1.9%
Architecture & Engineering Primes	1.4%	0.0%	14.0%	1.1%	8.9%	0.0%
Professional Services Primes	10.2%	2.7%	17.5%	13.8%	14.5%	3.4%
Procurement (Goods & Services) Primes	27.0%	6.0%	20.9%	39.3%	20.6%	17.1%

Sources: MGT, Minority Business Enterprise Disparity Study for the Washington Suburban Sanitation Commission, March 1999; BBC, WSSC 2005 Disparity Study; Mason Tillman, Washington Suburban Sanitary Commission 2010 Disparity Study.

It is even more challenging to compare subcontracting data across the three studies. The 1999 and 2005 studies had very limited subcontracting data on non-M/WBE subcontractors. The 2005 Study had very limited subcontracting data as a whole. Consequently, **Table 3-3** just presents the dollar value of subcontracting for the 1999 and 2010 studies for construction and architecture and engineering. Because the 1999 Study covered a longer time period subcontractor utilization is presented on an annual basis and as a percentage of prime contractor spending in each business category. Between the 1999 and 2010 studies M/WBE subcontractor utilization as a percentage of prime utilization declined in construction and increased in architecture and engineering. Again, differences in methodologies between the two studies may account for some of these differences.

TABLE 3-3
WSSC MBE AND WBE SUBCONTRACTOR UTILIZATION
IN 1999 AND 2010 DISPARITY STUDIES

114 1555 71140 2010 0151 71141 1 5100125					
SUBCONTRACTOR UTILIZATION	CONSTRUCTION	N	ARCHITECTURE & ENGINEERING		
SUBCONTRACTOR UTILIZATION	1999 STUDY	2010 STUDY	1999 STUDY	2010 STUDY	
M/WBE Subcontractor Utilization	\$75,566,054	\$34,315,800	\$14,759,131	\$42,220,918	
Total Prime Spending	\$634,787,911	\$532,657,942	\$94,852,912	\$186,875,887	
M/WBE Subcontract Dollars as a Share of Total Prime Spending	11.9%	6.4%	15.6%	22.6%	
Annual MBE Subcontractor Utilization	\$5,072,783	\$3,778,109	\$1,399,488	\$5,851,898	
Annual WBE Subcontractor Utilization	\$2,483,823	\$1,941,191	\$76,425	\$1,184,922	
Annual M/WBE Subcontractor Utilization	\$7,556,605	\$5,719,300	\$1,475,913	\$7,036,820	

Sources: MGT, Minority Business Enterprise Disparity Study for the Washington Suburban Sanitation Commission, March 1999; Mason Tillman, Washington Suburban Sanitary Commission 2010 Disparity Study.



#### 4. CERTIFICATION

#### MBE CERTIFICATION

WSSC rules define an MBE as:

any legal entity, except a joint venture, that is organized to engage in commercial transactions, which is certified as being at least fifty-one (51%) owned, managed, and controlled by one or more socially and economically disadvantaged minority and/or woman individuals as defined in Article Section 14-301 of the State Finance and Procurement Article of the Maryland Annotated Code, and that is ready, willing, and able to sell goods or services that are purchased by WSSC. Unless otherwise stated, the term "MBE" as used in this Standard Procedure is inclusive of women-owned business enterprises ("WBEs") and is limited to firms that have obtained MBE certification in accordance with the provisions of Section VII.A.<sup>87</sup>

The Maryland Code defines "socially disadvantaged individual" as "an individual who has been subjected to racial or ethnic prejudice or cultural bias within American society because of membership in a group and without regard to individual qualities. Social disadvantage must stem from circumstances beyond the control of the individual." More specifically, the Maryland Code defines a "socially and economically disadvantaged individual" as a citizen or lawfully permanent resident of the United States who is,

- (i) in any of the following minority groups:
  - 1. African American an individual having origins in any of the black racial groups of Africa;
  - 2. American Indian/Native American an individual having origins in any of the original peoples of North America and who is a documented member of a North American tribe, band, or otherwise has a special relationship with the United States or a state through treaty, agreement, or some other form of recognition. This includes an individual who claims to be an American Indian/Native American and who is regarded as such by the American Indian/Native American community of which the individual claims to be a part, but does not include an individual of Eskimo or Aleutian origin;
  - 3. Asian an individual having origins in the Far East, Southeast Asia, or the Indian subcontinent, and who is regarded as such by the community of which the person claims to be a part;

<sup>&</sup>lt;sup>88</sup> MD Code, State Finance and Procurement, Section 14-301(I).



Ī

<sup>&</sup>lt;sup>87</sup> WSSC, SP No. MBE 11-01, Section III.L.

- 4. Hispanic an individual of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race, and who is regarded as such by the community of which the person claims to be a part;
- 5. Physically or mentally disabled an individual who has an impairment that substantially limits one or more major life activity, who is regarded generally by the community as having such a disability, and whose disability has substantially limited his or her ability to engage in competitive business; or
- 6. Women a woman, regardless of race or ethnicity, unless she is also a member of an ethnic or racial minority group and elects that category in lieu of the gender category; or
- (ii) otherwise found by the certification agency to be a socially and economically disadvantaged individual.<sup>89</sup>

The Maryland Code defines an "economically disadvantaged individual" as "a socially disadvantaged individual 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 or similar line of business who are not socially disadvantaged." The Maryland Code sets a personal net worth limit on the definition of economically disadvantage, providing that an "individual whose personal net worth exceeds \$1,500,000 may not be found to be economically disadvantaged." Personal net worth" for the Maryland Code's definition of economic disadvantage "means "the net value of the assets of an individual remaining after total liabilities are deducted" including "the individual's share of assets held jointly or as community property with the individual's spouse," but does not include "the individual's ownership interest in the applicant or a certified minority business enterprise; or the individual's equity in his or her primary place of residence." Page 192

The Maryland/WSSC definition of socially and economically disadvantaged is similar to the federal definition of socially and economically disadvantaged individual.<sup>93</sup> Like the federal definition, WSSC provides that "there is a rebuttable presumption that an individual who is a member of a minority group [defined above] is socially and economically disadvantaged."<sup>94</sup> In addition, this definition of socially and economically disadvantaged means that the program is in principle open to disadvantaged nonminority males, as is true of the federal DBE program. The State of Maryland also includes nonprofits organized for the disabled in its definition of MBE.<sup>95</sup>

<sup>95</sup> Maryland State Finance and Procurement Section 14-301(h)(3).



<sup>89</sup> MD Code, State Finance and Procurement, Section 14-301(k)(1).

<sup>&</sup>lt;sup>90</sup> Id. Section 14-301(e).

<sup>91</sup> Id. Section 14-301.

<sup>&</sup>lt;sup>92</sup> Id. Section 14-301(i)(3).

<sup>93 15</sup> US Code Section 637.

<sup>94</sup> Id. Section 14-301(k)(2).

WSSC accepts MBE certification by the Maryland Department of Transportation (MDOT), the Prince George's County Supplier Development & Diversity Division (SDDD), the District of Columbia's Department of Small and Local Business Development (DC-DSLBD), the Capital Region Minority Supplier Development Council, and the Women Presidents' Educational Organization (WPEO).<sup>96</sup>

#### MBE GRADUATION

Under SP MBE No. 11-01, MBE firms graduate from eligibility for the remedies therein under any of the following three conditions:

- 1. The firm graduates from a MBE, WBE, DBE certification program, or third party certifying organization accepted by WSSC.
- 2. When the firm has received WSSC average annual payments (as a prime and/or subcontractor) during any three-year period that are equal to or greater than the following per industry:

. . . . . . . . . .

a.	Wholesale	\$4,000,000
b.	Retail	\$3,000,000
c.	Manufacturing	\$2,000,000
d.	Services	\$10,000,000
e.	Construction	\$7,000,000
f.	Architecture and Engineering	\$4,500,000

3. When the MBE has been certified and registered to do business with WSSC for ten consecutive years beginning with May 11, 2011, the effective date of SP No. MBE-11-01.97

WSSC policy allows for a MBE that has graduated to petition for reinstatement of the firm's MBE status for purposes of the WSSC MBE policy. 98 In the three years following graduation the firm must show that it competed unsuccessfully for WSSC projects and maintained its certification with the third party certification agencies recognized by WSSC.

#### SLBE APPROVAL PROCESS

WSSC uses the current definition of small business enterprise (SBE) provided by State of Maryland regulations.<sup>99</sup> An SLBE is an SBE that is a Local Business Enterprise. A Local Business Enterprise is a firm with

<sup>&</sup>lt;sup>99</sup> WSSC, SP SLBE 12-01, Section III.FF, which defines a Small Business Enterprise as a small business qualifying under COMAR 21.11.01.04, "or any successor regulation adopted pursuant to State Finance & Procurement Article, Section 14-203 or any successor provision thereto."



\_

<sup>&</sup>lt;sup>96</sup> WSSC, SP No. MBE 11-01, Section VII.A.3. Some organizational titles have changed.

 $<sup>^{\</sup>rm 97}$  WSSC, SP Number MBE 11-01, Section VII.B.2.

<sup>&</sup>lt;sup>98</sup> WSSC, SP No. MBE 11-01, Section VII.B.5.

its principal place of business or Significant Employee presence in Prince George's or Montgomery County.<sup>100</sup> A Significant Employee Presence is defined as no less than 25 percent of a firm's total number of employees are domiciled in either Prince George's or Montgomery County.<sup>101</sup>

WSSC follows the current SBE definition outlined in the Code of Maryland Regulation 21.11.01.04 in its SP SLBE No. 12-01, and are as follows:

With respect to employees, either:

- (i) The wholesale operations of the Business did not employ more than 50 persons in its most recently completed three fiscal years;
- (ii) The retail operations of the Business did not employ more than 25 persons in its most recently completed three fiscal years;
- (iii) The manufacturing operations of the Business did not employ more than 100 persons in its most recently completed three fiscal years;
- (iv) The service operations of the Business did not employ more than 100 persons in its most recently completed three fiscal years;
- (v) The construction operations of the Business did not employ more than 50 persons in its most recently completed three fiscal years; or
- (vi) The architect and engineering services of the Business did not employ more than 100 persons in its most recently completed three fiscal years.

With respect to gross sales:

- (i) The gross sales of its wholesale operations did not exceed an average of \$4,000,000 in its most recently completed three fiscal years;
- (ii) The gross sales of its retail operations did not exceed an average of \$3,000,000 in its most recently completed three fiscal years;
- (iii) The gross sales of its manufacturing operations did not exceed an average of \$2,000,000 in its most recently completed three fiscal years;
- (iv) The gross sales of its service operations did not exceed an average of \$10,000,000 in its most recently completed three fiscal years;
- (v) The gross sales of its construction operations did not exceed an average of \$7,000,000 in its most recently completed three fiscal years; and

<sup>&</sup>lt;sup>101</sup> WSSC, SLBE 12-01, Section III, DD.



<sup>&</sup>lt;sup>100</sup> WSSC, SLBE 12-01, Section III.P.

(vi) The gross sales of its architecture and engineering operations did not exceed an average of \$4,500,000 in its most recently completed three fiscal years. 102

In addition to the size requirements discussed above, (1) an SLBE has to be in business at least one year or the principals of the business have to have at least three years of relevant experience prior to forming the business; and (2) in the year preceding approval of its SLBE status the firm must not have had more than \$1,000,000 in contract payments in open competition from WSSC.<sup>103</sup>

#### **SLBE GRADUATION**

In addition to the size standards discussed above, the WSSC SLBE program has graduation criteria. A SLBE will graduate from the SLBE program if it has received cumulative total of either (1) \$10 million of WSSC-funded prime contracts and/or subcontractor payment for WSSC A&E, Goods and Services, and Professional Services contracts, or (2) \$14 million for WSSC construction prime contracts or subcontracts, since the firm's initial approval as an SLBE.<sup>104</sup>

#### NUMBER OF CERTIFIED MBES AND APPROVED SLBE FIRMS

There were 629 MBEs and 209 SLBEs in the WSSC Centralized Bidder Registration (CBR) System in August 2015. Over 80 firms were added to the WSSC SLBE program in FY 2014. Way of comparison there were:

- 818 MBEs in the Prince George's County MBE Directory in FY 2014.<sup>107</sup>
- ▶ 1,219 MBEs and 1,171 SBEs in the State of Maryland certification directory in Prince George's County in September 2015.<sup>108</sup>
- 756 MBEs and 740 SBEs in the State of Maryland certification directory in Montgomery County in September 2015. 109

<sup>&</sup>lt;sup>109</sup> http://mbe.mdot.state.md.us/directory/search\_focus.asp.



<sup>&</sup>lt;sup>102</sup> If a business has not existed for 3 years, the employment and gross sales shall be the average(s) for each year or part of year during which the business has been in existence. COMAR 21.11.01.04 Small Business Eligibility/Certification.

<sup>&</sup>lt;sup>103</sup> WSSC, SP No. SLBE 12-01, Section IV.

<sup>&</sup>lt;sup>104</sup> WSSC, SP No. SLBE 12-01, Section VI.B. These graduation criteria are an increase in the graduation criteria from the previous SLBE program. WSSC SP No. 08-01, Graduation and Suspension Criteria.

<sup>&</sup>lt;sup>105</sup> WSSC Centralized Bidder Registry,

http://www.cbr-wssc.com/index.asp?switchID=11aedd0e432747c2bcd97b82808d24a0&s=3df8a820012c09fd73447ab491a0c15caparanteed.

<sup>&</sup>lt;sup>106</sup> WSSC, Small, Local and Minority Business Enterprise Office Legislative Report FY 2014, page 9.

<sup>&</sup>lt;sup>107</sup> Prince George's County, Proposed Operating Budget FY 2016, Volume I, Office of Central Services, page 146.

 $<sup>^{108}</sup>$  http://mbe.mdot.state.md.us/directory/search\_focus.asp.

#### 5. MBE GOALS AND INCENTIVES

#### MBE PROGRAM INCENTIVES

The current WSSC incentives are tailored to disparities identified in the 2010 WSSC disparity study. Consequently, there are prime contract and subcontract incentives by ethnic/gender group, contract size, and procurement category. WSSC also has set race-neutral incentives for MBE utilization, which are similar to the SLBE incentives discussed below.

#### **CONSTRUCTION CONTRACTS**

For prime construction contracts under \$1,000,000:

- WSSC may grant a five percent bid discount to qualified African American, Asian American, Native American, and non-minority female MBE bidders.
- ▶ WSSC may award a prime contract to African American, Hispanic American, Asian American, and non-minority female MBEs whose proposals, submitted in response to an RFP, are evaluated to be within five percent of the total points of the highest ranked non-MBE firm.
- ▶ These two remedies can only be implemented after consideration of the construction subcontracting remedy below.

WSSC may set contract-specific goals and overall subcontractor goals for African American, Asian American, and Native American firms.

#### ARCHITECTURE AND ENGINEERING

For prime A&E contracts under \$1,000,000, WSSC may award a prime contract to African American, Hispanic American, Asian American, and non- minority female MBEs whose proposals are evaluated to be within five percent of the total points of the highest ranked non-MBE firm. This remedy can only be implemented after consideration of the Hispanic A&E subcontracting remedy below.

For any A&E prime contract:

- WSSC may award incentive points of less than five percent of total points to non-MBEs who demonstrates good faith efforts to utilize Hispanic-owned subcontractors.
- WSSC may set contract-specific goals and overall subcontractor goals for Hispanic subcontractors.

#### GOODS AND GENERAL SERVICES

For prime goods and general services contracts under \$1,000,000:

WSSC may grant a five percent bid discount to qualified African American, Asian American, Hispanic American, and non-minority female MBE bidders.



- ▶ WSSC may award a prime contract to African American, Hispanic American, Asian American, and non-minority female MBEs whose proposals are evaluated to be within five percent of the total points of the highest ranked non-MBE firm.
- ▶ These two remedies can only be implemented after consideration of the goods and services subcontracting remedy below.

WSSC may set contract-specific goals and overall subcontractor goals for African American and Asian American firms.

#### PROFESSIONAL SERVICES

For prime professional services contracts under \$500,000:

- WSSC may grant a five percent bid discount to qualified African American, Asian American, Hispanic American, and non-minority female MBE bidders.
- WSSC may award a prime contract to African American, Hispanic American, Asian American, and non-minority female MBEs whose proposals are evaluated to be within five percent of the total points of highest ranked non-MBE firm.
- These two remedies can only be implemented after consideration of the professional services subcontracting remedy below.

WSSC may set contract-specific goals and overall voluntary subcontractor goals for African American, Asian American, Hispanic American, and Non-Minority Female firms.

#### SLBE PROCUREMENT INITIATIVES

WSSC has several initiatives to promote the use of SLBEs, including expanded project unbundling, a mentor protégé program, outreach (discussed below), bid debriefings, bond and insurance waivers, and expedited payments (discussed below). In addition to these incentives, WSSC has several procurement incentives:

#### SHELTERED MARKET

The SLMBE Office, in conjunction with the WSSC Chief Procurement Officer, may place contracts of \$750,000 or less in a Sheltered Market for award to an SLBE or joint venture with a SLBE. In determining whether a Sheltered Market should be used, the SLMBE Office, in conjunction with the WSSC Chief Procurement Officer, considers whether there are at least three SLBEs available and capable to participate, the degree of under-utilization of SLBE prime contractors in that industry, and the degree to which the WSSC SLBE prime contractor goals are being achieved. If no bid is received or the low bid is deemed fiscally unacceptable, the contract is removed from the Sheltered Market program.



#### **SMALL CONTRACTS ROTATION**

The WSSC program allows for the rotation of small prime contracts of the following sizes:

Construction, A&E, Goods & Services <\$1,000,000.</p>

Professional Services <\$500,000.</p>

Bids are limited to small and local firms, including MBE groups who have been significantly underutilized. No firm in the pool will receive a second contract until all other firms in the pool have had at least one contract. This program applies to A&E, Construction, Goods and General Services, and Professional Services.

#### SUBCONTRACT REQUIREMENTS

WSSC policy allows for requiring firms to subcontract a predetermined percentage of a contract (up to 40 percent) to SLBEs.

#### PRICE PREFERENCES

WSSC may award a contract to a SLBE who submits a bid within ten percent or \$50,000 (whichever is less) of the low bid by a non-SLBE. For RFPs, SLBEs may be given preference points not to exceed ten points.

#### 6. GOOD FAITH EFFORTS

Firms not meeting the MBE/SLBE subcontracting requirements may apply for waiver pre- or post-award. Firms requesting such a waiver must submit good faith efforts (GFE) documentation. WSSC GFE submissions are evaluated on a point system. Points are awarded for each GFE element on an "all or nothing" basis. Points are awarded when completed documentation is submitted at the time the waiver is being requested, either at bid or post award. Failure to include the completed GFE documentation and failure to achieve at least 90 out of 125 points can render the bid non-responsive.

The WSSC GFE elements and associated points are as follows:

- 1. Provide a copy of the advertisement(s) in local and/or trade publications and the services they are attempting to subcontract. This effort would need to be made well in advance of pre-bid meetings, and at the very least, well before the bid or proposal due date. (5 points)
- Provide a list of MBE/SLBE firms who were contacted. There also should be a statement regarding what type of contact was made with each firm and why these firms were not suitable to service this project. (5 points)
- 3. Provide the list of opportunities the prime contractor (bidder and/or proposer) had in regards to the portion of the project they intended to subcontract out. What areas would be better served by an entity who may have specialized services (i.e., trucking, paving, special supplies, electrical engineering, or asbestos abatement)? (5 points)



- 4. Submit a copy of information that was forwarded to the list of potential subcontracting firms. This step is to illustrate that adequate information was provided to firms who were contacted. (10 points)
- 5. Provide evidence that no bid was rejected without a sound reason. This can be addressed adequately by complying with requirements 2-3. (5 points)
- 6. Demonstrate attempts were made to assist interested MBE/SLBE firms with obtaining bonding and/or insurance the bidder/proposer may make as a requirement of the MBE/SLBE firm to subcontract. (10 points)
- 7. Demonstrate they (Prime Contractor Bidder and/or Proposer) utilized the services of the SLMBE Office and the Centralized Bidder Registration (CBR) or any successor web-based compliance system thereto, or one of the certifying agencies recognized by WSSC in establishing the initial contact list. Provide a copy of the information that was furnished by these agencies and used in contacting bidders. (10 points)
- 8. Provide the list of MBE/SLBE firms who were invited to bid on subcontract work, but were not available to work. (15 points)
- 9. Provide the list of MBE/SLBE firms who were invited to bid on subcontract work, but did not respond to the Invitation for Bid (IFB). (15 points)
- 10. Provide the list of MBE/SLBE firms who submitted bids, which were not the low acceptable bid or fiscally sound according to my company's contracting policies. (15 points)
- 11. Demonstrate the Bidder selected portions of the work that could be performed by MBE/SLBE firms in order to increase the likelihood of meeting the subcontracting requirements (including, where applicable, breaking down the contract work into economically feasible units to facilitate subcontractor participation). (10 points)
- 12. Provide documentation that MBE/SLBE firms were invited, where appropriate, to meetings/conferences to inform them of subcontracting opportunities. (10 points)
- 13. Provide documentation of written notice, to a reasonable number of specific MBE/SLBE firms of the bidder's interest in the contract that is being solicited, in sufficient time in order to allow MBE/SLBE firms to participate effectively. (10 points)<sup>110</sup>

Waiver requests from bidders on WSSC projects decreased from 18 in FY13 to three in FY14.<sup>111</sup>

#### SUBCONTRACTOR SUBSTITUTION

Firms cannot substitute any SLBE/MBE subcontractor, vendor, or supplier without approval of the WSSC. A prime also cannot arbitrarily terminate a SLBE/MBE subcontractor and self-perform the work without

<sup>&</sup>lt;sup>111</sup> WSSC, Small, Local and Minority Business Enterprise Office Legislative Report FY 2014, page 16.



<sup>&</sup>lt;sup>110</sup> WSSC, Good Faith Efforts Guide, 5/7/2014, pages 8-9.

approval from WSSC. A prime can substitute a subcontractor who is unwilling to perform, but if a prime can no longer satisfy the SLBE/MBE goal, then the primes must submit a waiver with GFE documentation. 112

#### 7. MENTOR-PROTÉGÉ PROGRAM

WSSC's Mentor-Protégé Program seeks to increase the number of WSSC certified M/WBEs and SLBEs capable of winning larger construction, architecture & engineering, goods and general services, and professional service contracts with WSSC and other organizations. The initial focus of the program is on firms with the potential to work on prime construction contracts of \$500,000 and \$3 million or higher, in the areas of General Contractor-Buildings, General Contractor-Heavy Civil, Mechanical, Electrical, Concrete, Site Work, Or Steel Erection, Sewer & Water Abatement, Lining, Repair, and Replacement & Rehabilitation.

The Mentor-Protégé trains protégés for proficiency in the following categories: Construction Contract Law, Construction Estimating, Financial Management, Managing Project Management, Permitting, Securing Insurance and Bonding, OSHA, Planning and Scheduling, Project Controls, and Professional Development. Further skills development is fostered in: e-builder, pipe leak/break-detection, Primavera, Acoustic Fiber Optics, and Microsoft QuickBooks.

#### 8. NONDISCRIMINATION IN CONTRACTING

WSSC includes a commercial nondiscrimination component in its nondiscrimination policy. This commercial nondiscrimination policy is implemented by barring discrimination against subcontractors, as evidenced in WSSC General Condition's language below:

Discrimination in any manner against any employee or applicant for employment by the Contractor or a subcontractor on the basis of sex, race, creed, color, age, mental or physical handicap, sexual orientation, or national origin is prohibited. ...the Contractor shall include a similar nondiscrimination clause in all subcontracts. ... if the Contractor fails to include a nondiscrimination clause in a subcontract, the Commission shall provide a reasonable opportunity to cure the defect. If the Contractor fails to cure the defect within the time period granted, the Commission may declare the contract void and the Contractor shall be entitled to the reasonable value of work that has been performed and materials that have been provided to date. If the Contractor cures the defect, the Contract remains in force according to its revised terms. ...if the Contractor willfully fails to comply with the requirements of the nondiscrimination clause, the Commission may compel the Contractor

 $<sup>^{\</sup>rm 112}$  WSSC, Good Faith Efforts Guide, page 5.



to continue to perform under the Contract as provided in Maryland Annotated Code, Public Utilities, § 20-106(b).<sup>113</sup> (emphasis added)

#### 9. PROMPT PAYMENT

WSSC's General Conditions provide for prompt payment of vendors and subcontractors as evidenced by the language below:

- Payment will be made for the total number of items contained in each delivery (shipment) within 30 days after the shipment has been received, inspected, and accepted by the Commission. 114
- The Commission has the right to terminate for default a material breach of the Contract, which shall include, but not be limited to the following events: ...the Contractor repeatedly fails to make prompt payments to subcontractors for labor, materials, or equipment. 115

In addition, as noted above, the MBE and SLBE programs provides for expedited payments to MBEs and SLBEs. WSSC requires prime contractors have a contract clause agreeing to pay subcontractors for satisfactory performance within 15 days of WSSC payment to the prime contractor and to pay subcontractor retainage within 15 days of satisfactory completion by the subcontractor.

#### 10. OUTREACH

On a fiscal year basis, the WSSC's extensive outreach efforts, in summary, included:

- Holding pre-bid conferences.
- Participating in over 65 events such as business/procurement fairs, tradeshows, and networking events.
- ► Conducting monthly trainings on WSSC's web-based compliance system (PRISM<sup>™</sup>), a subcontract reporting tool for both internal and external end-users established in 2012.
- Processing over 600 contract-related memoranda identifying opportunities on WSSC-funded contracts in FY14.
- Making available to any unsuccessful Bidder a debriefing from the WSSC Procurement Office.
- ▶ Hosting a "How to do Business with WSSC" events.

<sup>&</sup>lt;sup>115</sup> WSSC, Procurement Office, General Conditions – Goods and Supplies, Revised: September 2012, page 10.



<sup>&</sup>lt;sup>113</sup> Part II WSSC, Procurement Office, General Conditions – Professional Services, Revised: September 2012, page 14. WSSC also includes commercial nondiscrimination language in its MBE policy. WSSC, SP No. MBE 11-01, Section V.L.

<sup>&</sup>lt;sup>114</sup> WSSC, Procurement Office, General Conditions – Goods and Supplies, Revised: September 2012, page 6.

- Partnering with numerous business organizations, including: Women's President's Educational Organization, the Governor's Office of Minority Affairs, Prince George's Community College Center for Minority Business Development, Prince George's County Supplier Development and Diversity Division (SDDD) and Economic Development Divisions, Montgomery County Procurement and Minority, Female, and Disabled-owned (MFD) Divisions, and MD/DC Minority Suppliers Development Council.
- Providing improved communication to suppliers via: slmbe@wsscwater.com and the SLMBE Office
   QR Code and rapid response e-blasts of procurement opportunities.

#### The SLMBE public website provides:

- Event Calendar
- SLMBE Legislative Reports
- SLMBE Programs
- Supplier Development
- Disparity Study
- Compliance
- Success Stories

#### Quick links to:

- Prince George's County: Supplier Development and Diversity Division (SDDD)
- Montgomery County Chamber of Commerce
- Prince George's County Chamber of Commerce
- Maryland Small Business Development Center
- Women Presidents' Educational Organization
- United Communities Against Poverty (UCAP)
- Small Business Resource Magazine (Washington Metropolitan Area)
- Baltimore Washington Corridor Chamber
- Small Business Administration Maryland
- Greater Hispanic Chamber of Commerce
- Governor's Office of Minority Affairs
- American Builders & Contractors
- ▶ Hispanic Chamber of Commerce Montgomery County
- Maryland Washington Minority Contractors' Association
- eMaryland Marketplace
- Institute for Supply Management

#### Forms & References

- SLMBE Subcontracting Certification Form
- Architecture & Engineering MBE/SLBE Certification
- Architecture & Engineering Certification Form
- Good Faith Effort Guide



#### Resources

- Minority Business Enterprise (SP MBE 11-01)
- Minority Business Enterprise (SP 96-01)
- Small Local Business Enterprise (SP 12-01)
- Small Local Business Enterprise (SP 08-01)

#### 11. REPORTING MBE UTILIZATION

WSSC policy requires the reporting of MBE and SLBE utilization. <sup>116</sup> WSSC validates subcontractor utilization through the use of compliance reporting tools. WSSC has produced comprehensive legislative reports on MBE and SLBE utilization and the activities of the SLMBE office over a number of years. **Table 3-4** below shows MBE percentage awards by procurement area from FY10 through FY14. WSSC MBE overall percentage utilization ranged from 18 to 31 percent from FY10 to FY14.

TABLE 3-4
MBE AWARDS BY FISCAL YEAR AND CONTRACTING AREA
FY 2010 THROUGH FY 2014

FISCAL YEAR	A&E SERVICES	CONSTRUCTION SERVICES	GOODS AND GENERAL SERVICES	PROFESSIONAL SERVICES	OVERALL MBE PERCENT	OVERALL MBE DOLLARS (MILLIONS)
2010	47%	16%	34%	25%	29%	\$77.1
2011	36%	8%	41%	38%	31%	\$133.2
2012	27%	10%	42%	31%	18%	\$129.0
2013	31%	18%	37%	54%	25%	\$186.2
2014	40%	15%	41%	32%	23%	\$228.5

Source: WSSC Small, Local and Minority Business Enterprise Office Legislative Report FY 2014.

WSSC awarded \$111.2 million to SLBE prime contractors and subcontractors in FY 2014, 11.4 percent of total WSSC awards. 

117 About 94.8 percent of WSSC SLBE awards went to SLBE construction subcontractors. 

WSSC spent five percent of P-card expenditures with MBEs. 

118

 $<sup>^{118}</sup>$  WSSC Small, Local and Minority Business Enterprise Office Legislative Report FY 2014, page 15.



<sup>&</sup>lt;sup>116</sup> WSSC SP No. MBE 11-01 Section V.K. and WSSC, SP No. SLBE 12-01, Section V.K.

<sup>&</sup>lt;sup>117</sup> WSSC Small, Local and Minority Business Enterprise Office Legislative Report FY 2014, page 14.

#### 12. SLMBE OFFICE

The SLMBE Office currently manages the MBE and SLBE programs. The SLMBE Office reported to the WSSC General Manager during the study period. <sup>119</sup> The SLMBE Office had an authorized staff of nine and a budget of \$1,183,700 in FY14. <sup>120</sup>

The mission of the SLMBE office is as follows:

The SLMBE Office is dedicated to creating an inclusive purchasing environment while building sustainable relationships; expanding opportunities; and cultivating the growth of small, local and minority business enterprises which adds value to the Commission and the community we serve. 121

At the corporate level, WSSC also continued to make "Integrate Supply Chain Management and Supplier Diversity" one of its strategic priorities for the FY14-FY18 period. In addition, the WSSC budget lists four objectives under the Goal: Increase Small, Local and Minority Business Enterprise (SLMBE) participation in WSSC programs. This goal is under the Strategic Priority: Integrate Supply Chain Management and Supplier Diversity. These four supplier diversity objectives and outcome measures are presented in **Table 3-5** below.

<sup>122</sup> https://www.wsscwater.com/about-us/overview.html.



<sup>&</sup>lt;sup>119</sup> WSSC, Organizational Chart, January 15, 2015.

<sup>&</sup>lt;sup>120</sup> WSSC, Approved Budget FY 2015, page 4-2.

<sup>&</sup>lt;sup>121</sup> WSSC, Small, Local and Minority Business Enterprise Office, Legislative Report FY 2014, page7.

TABLE 3-5
WSSC SUPPLIER DIVERSITY GOALS AND OUTCOME MEASUREMENTS

OBJECTIVE	OUTCOME MEASURE
Increase the number of registered and certified MBEs ten percent annually	Total number of registered and certified MBEs/Annual percentage increase/decrease in newly registered MBEs
Increase the number of approved SLBEs five percent annually	Total number of approved SLBEs/Annual percentage increase/decrease in newly approved SLBEs
Increase the number of contracts awarded to certified MBEs five percent annually	Total number of contracts awarded to certified MBEs/Annual percentage increase/decrease in contracts awards to MBEs
Increase the number of contracts awarded to approved SLBEs five-ten percent annually	Total number of contracts awarded to certified SLBEs/Annual percentage increase/decrease in contracts awards to SLBEs

Source: WSSC, Approved Budget, FY 2015, page 2-38.

#### 13. CONCLUSIONS

WSSC has a long-standing MBE policy and revised MBE and SLBE programs. Both programs have a range of tools to increase the utilization of firms eligible for these programs. WSSC has conducted several disparity studies in the past, which have laid a foundation for the design of current remedial programs.



### CHAPTER 4

Market Area, and Prime Utilization, Availability, and Disparity Analyses

**WSSC 2015 Disparity Study** 



# CHAPTER 4: MARKET AREA ANALYSIS, AND PRIME UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES

#### 1. INTRODUCTION

This chapter presents the results of MGT of America's (MGT) market area analysis, and prime utilization, availability, and disparity analyses of firms used on the Washington Suburban Sanitary Commission (WSSC) prime contracts for Construction, Architecture and Engineering, Professional Services, and Goods and General Services between July 1, 2009 and June 30, 2014. The following section, **Section 2**, **Chapter Definitions**, presents the definitions to key terms that are used in this chapter.

The prime utilization, availability, and disparity analyses lay the foundation to answer the first part to one of our research questions: Are there disparities between the availability and utilization of M/WBEs as prime contractors?

#### **CHAPTER SECTIONS**

- 1. Introduction
- 2. Chapter Definitions
- 3. Data Collection and Management
- 4. Market Area Analysis
- 5. Utilization Analyses
- 6. Procurement Card (P-Card) Transactions
- 7. Availability Estimates
- 8. Disparity Analyses
- 9. Summary

#### 2. CHAPTER DEFINITIONS

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

#### BUSINESS OWNERSHIP CLASSIFICATION 123

WSSC rules define an MBE as:

any legal entity, except a joint venture, that is organized to engage in commercial transactions, which is certified as being at least fifty-one (51%) owned, managed, and controlled by one or more socially and economically disadvantaged minority and/or woman individuals as defined in Article Section 14-301 of the State Finance and Procurement Article of the Maryland Annotated Code, and that is ready, willing, and able to sell goods or services that are purchased by WSSC. Unless otherwise stated, the term "MBE" as used in this Standard Procedure is inclusive of womenowned business enterprises ("WBEs") and is limited to firms that have obtained MBE certification in accordance with the provisions of Section VII.A.<sup>124</sup>

<sup>&</sup>lt;sup>123</sup> Business ownership classification was based on the race, ethnicity, and gender classification of the owner during the study period. <sup>124</sup> WSSC, SP No. MBE 11-01, Section III.L.



This report uses M/WBE to refer to firms owned by minorities and women, and MBE to refer to firms owned by minorities. WSSC defines minority and women individuals as follows:

- African Americans: an individual having origins in any of the black racial groups of Africa;
- American Indians/Native Americans: an individual having origins in any of the original peoples of North America and who is a documented member of a North American tribe, band, or otherwise has a special relationship with the United States or a state through treaty, agreement, or some other form of recognition. This includes an individual who claims to be an American Indian/Native American and who is regarded as such by the American Indian/Native American community of which the individual claims to be a part, but does not include an individual of Eskimo or Aleutian origin;
- **Asian Americans**: an individual having origins in the Far East, Southeast Asia, or the Indian subcontinent, and who is regarded as such by the community of which the person claims to be a part;
- **Hispanic Americans**: an individual of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race, and who is regarded as such by the community of which the person claims to be a part. Hispanics of African ancestry are not counted among the African American group;
- Nonminority Woman (Female): a woman, regardless of race or ethnicity, unless she is also a member of an ethnic or racial minority group and elects that category in lieu of the gender category.<sup>125</sup>
- Non-MBE 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.

STUDY PERIOD. MGT analyzed expenditures or payments between July 1, 2009 and June 30, 2014.

PROCUREMENT CATEGORIES. MGT analyzed Construction, Architecture and Engineering, Professional Services, and Goods and General Services expenditures.

- Certain purchases were excluded from the analyses results presented in this study. Examples include:
  - Transactions outside of the study period.
  - Transactions for debit services.
  - Administrative items such as utility payments, leases for real estate, or insurance.
  - Salary and fringe benefits, training, parking, or conference fees.

<sup>&</sup>lt;sup>125</sup> WSSC uses the definitions from the State of Maryland. MD Code, State Finance and Procurement, Section 14-301(k)(1). Note, however, that the State of Maryland also includes the disabled and socially and economically disadvantaged in its definition of minority.



Transactions associated to nonprofit organizations and governmental agencies.

UTILIZATION. Dollars expended or paid to firms located within the WSSC Relevant Market Area during the study period. The utilization analyses also assessed the effectiveness of initiatives in promoting the inclusion of M/WBEs in WSSC contracting and procurement activities. The effectiveness of the program initiatives is further examined and discussed in **Chapter 8**, **Findings and Recommendations**.

AWARDED DOLLARS. Contracts, purchase orders, or dollars awarded to firms by WSSC during the study period. A utilization analysis based on awarded dollars can be found in **Appendix D**.

### MARKET AREA METHODOLOGY

In order to establish the appropriate geographic boundaries for the study's analyses, the overall market utilization was established. The use of counties as a geographical area 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 utilization and relevant market area.

- Overall Market Utilization. To determine the geographic location of each firm utilized by WSSC during the study period, MGT updated each firm's business location by county and state using the Zone Improvement Plan (ZIP) Code Database. The dollars expended were summarized by county and state according to the location of each firm that provided Construction, Architecture and Engineering, Professional Services, and Goods and General Services to WSSC. The overall market utilization results are presented in Section 4, Market Area Analyses of this chapter.
- PRelevant Market Area. Based on the results of the overall market utilization analyses, MGT and WSSC staff agreed that the WSSC Relevant Market Area would include those cities and counties in the Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area (MSA) plus Anne Arundel County, MD, Baltimore County, MD, Carroll County, MD, City of Baltimore, MD, and Howard County, MD. The WSSC Relevant Market Area represents a fixed geopolitical boundary. Hence, the analyses presented in this report, such as utilization, availability, anecdotal, and disparity were based on the WSSC Relevant Market Area.

#### **WSSC RELEVANT MARKET**

Anne Arundel, MD Arlington County, VA Baltimore County, MD Calvert County, MD Carroll County, MD Charles County, VA City of Baltimore, MD City of Fairfax, VA City of Falls Church, VA City of Fredericksburg, VA, City of Manassas Park, VA City of Manassas, VA Clarke County, VA District of Columbia, DC, Fairfax County, VA Fauquier County, VA Fredrick County, VA Howard County, MD Jefferson County, WV Loudoun County, VA Montgomery County, MD Prince George's County, MD Prince William County, VA Spotsylvania County, VA Stafford County, VA Warren County, VA

Corresponding market area analyses showing the dollars expended by county for each procurement category are presented in **Appendix A**, **Detailed Market Area Analyses** of this report.



### 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: Central Bidders Registration data and firms utilized during the study period by WSSC. Using these data sources, the availability was refined to firms located within the WSSC Relevant Market Area. All availability methods have strengths and weaknesses. The bidder/vendor approach has been approved in the federal courts. It is true that this method can understate M/WBE availability, but the prime M/WBE availability percentages are not low in the report.

Prime Level Availability. The Prime Availability Analyses was prepared using the WSSC's CBR Database. This database consists of firms registered to do business with WSSC. The Prime Availability also include firms utilized as primes in their respective business categories (Architecture and Engineering, Construction, Professional Services, and Goods and General Services). There is case law where studies estimating availability based on vendor data have been upheld in federal court.<sup>126</sup>

### DISPARITY ANALYSIS METHODOLOGY

Disparity, in this context, is the analysis of the differences between the utilization of minority- and womenowned 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 minority- and women-owned firms located in the study's relevant market area, which is the WSSC Relevant Market Area. The detailed disparity indices by procurement category, study period, and business ownership classification are located in **Appendix B, Detailed Prime Disparity Indices**. MGT's methodology on statistical significance is provided in **Appendix L, Standard Deviation Tests**.

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*.<sup>127</sup> 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 minority- and women-owned firms can be assessed with reference to the utilization of nonminority- and women-owned firms.

<sup>&</sup>lt;sup>127</sup>Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia, 91 F 3d at 603.



<sup>&</sup>lt;sup>126</sup>H.B.Rowe v. North Carolina DOT, 589 FSupp.2d 587 (ED NC 2008).

### **DISPARITY INDEX FORMULA**

Disparity Index =

 $%Um_1p_1 \div %Am_1p_1 \times 100$ 

Um<sub>1</sub>p<sub>1</sub> = utilization of minority- and womenowned firms<sub>1</sub> for procurement<sub>1</sub>
 Am<sub>1</sub>p<sub>1</sub> = availability of minority- and womenowned firms<sub>1</sub> for procurement<sub>1</sub>

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." <sup>128</sup> In the employment discrimination framework, an employment disparity index below 80 indicates a "substantial disparity." The Supreme Court has accepted the use of the "80 percent rule" in *Connecticut* v. *Teal* (*Teal*), 457 U.S. 440 (1982). <sup>129</sup> Therefore, firms are considered substantially underutilized (substantial disparity) if the disparity indices is 80 or less.

### 3. DATA COLLECTION AND MANAGEMENT

MGT conducted data assessment interviews with key WSSC staff knowledgeable about the prime contract, 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 WSSC staff, it was agreed that following sources maintained the most comprehensive sets of data:

- 1. MAPS (Materials, Accounts Payable, Purchasing System) WSSC's financial account system that stores vendor payment information.
- 2. CBR Centralized Bidder Registration is a mandatory web-based system where all prospective bidders, contractors, vendors, and subcontractors that provide the goods and services procured by WSSC must register.
- 3. SLMBE Certification Database the listing of WSSC approved MBE-certified firms, and small local business enterprises (SLBE).

Thus electronic data on awards and payment transactions at the prime level were extracted from MAPS, and vendor data was extracted from CBR and MAPS. The SLMBE Certification Database was used to cross-reference the prime and vendor data and update any gaps in those data.

Next, MGT staff compiled and reconciled the sets of data and developed a master set of prime payments, and prime awards, which hereafter will be referred to as the Master Payment Database, and Master Awards

<sup>&</sup>lt;sup>129</sup> 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.



<sup>&</sup>lt;sup>128</sup> Equal Employment Opportunity Commission, Uniform Guidelines on Employee Selection Procedures.

Database. MGT compiled and reconciled the dataset with the CBR database, which hereafter is referred to as the Master Availability Database.

### 4. MARKET AREA ANALYSIS

In order to establish the appropriate geographic boundaries for the statistical analysis, the WSSC Relevant Market Area was determined as described in **Section 2**, **Chapter Definitions**. The following analysis presents results on the relevant market area analyses. The corresponding detailed market area analyses are presented in **Appendix A**, **Detailed Market Area Analyses** to this report.

### MARKET AREA ANALYSES

**Table 4-1** shows the overall utilization of \$1,456,308,984 were spent with firms during the study period. This table separates dollars paid to firms located inside the WSSC Relevant Market Area, and to firms outside of the relevant market area between July 1, 2009 and June 30, 2014 at the prime level. The percentage of dollars paid to firms inside the WSSC Relevant Market Area for Architecture and Engineering was 98.02 percent, 87.85 percent in Construction, 91.68 percent in in Professional Services, and 70.87 percent in Goods and General Services.

TABLE 4-1
OVERALL UTILIZATION
INSIDE/OUTSIDE WSSC RELEVANT MARKET AREA

LOCATION OF FIRMS	DOLLARS	PERCENT OF	CUMULATIVE
LOCATION OF FIRIVIS	DOLLARS	DOLLARS	PERCENT <sup>1</sup>
ARCHITECTURE & ENGINEERING			
Inside Relevant Market Area	\$239,085,828	98.02%	98.02%
Outside Market Area	<u>\$4,834,740</u>	<u>1.98%</u>	100.00%
ARCHITECTURE & ENGINEERING, TOTAL	\$243,920,568	100.00%	
CONSTRUCTION			
Inside Relevant Market Area	\$541,552,124	87.85%	87.85%
Outside Market Area	<u>\$74,886,727</u>	<u>12.15%</u>	100.00%
CONSTRUCTION, TOTAL	\$616,438,851	100.00%	
PROFESSIONAL SERVICES			
Inside Relevant Market Area	\$101,738,753	91.68%	91.68%
Outside Market Area	<u>\$9,235,927</u>	<u>8.32%</u>	100.00%
PROFESSIONAL SERVICES, TOTAL	\$110,974,680	100.00%	
GOODS AND SERVICES			
Inside Relevant Market Area	\$343,693,822	70.87%	70.87%
Outside Market Area	\$141,281,063	<u>29.13%</u>	100.00%
GOODS AND SERVICES, TOTAL	\$484,974,885	100.00%	
ALL BUSINESS CATEGORIES			
Inside Relevant Market Area	\$1,226,070,527	84.19%	84.19%
Outside Market Area	\$230,238,457	<u>15.81%</u>	100.00%
ALL BUSINESS CATEGORIES, TOTAL	\$1,456,308,984	100.00%	

Source: Data retrieved from the WSSC MAPS system for the period of 07/01/2009 through 06/30/2014.



**FIGURE 4A** pie chart illustrates that firms located within, or inside, the WSSC Relevant Market Area accounted for \$1,226,070,527, then separates the dollars paid and percentage of utilization to those firms in all procurement categories at the prime level.

FOR ALL PROCUREMENT CATEGORIES WITHIN WSSC RELEVANT MARKET AREA Architecture & Engineering, \$239,085,828 Construction, 19.50% \$541,552,124 44.17% Architecture & Engineering Construction Professional Services ■ Goods and Genral Services Professional Services. Goods & General Service \$101,738,753 \$343,693,822 8.30% 28.03%

FIGURE 4A

DISTRIBUTION AND PERCENTAGE OF DOLLARS
FOR ALL PROCUREMENT CATEGORIES WITHIN WSSC RELEVANT MARKET AREA

Source: Data retrieved from the WSSC MAPS system for the period of 07/01/2009 through 06/30/2014.

### 5. UTILIZATION ANALYSES

The prime utilization analyses presented in this chapter are calculated based on expenditures paid to firms located within the WSSC Relevant Market Area. The subsequent results present MGT's utilization analyses of firms on Architecture and Engineering, Construction, Professional Services, and Goods and General Services during the study period of July 1, 2009 through June 30, 2014. A separate utilization analyses based on award dollars are presented in **Appendix D – Prime Utilization Analyses Based on Awards**. The percentage of utilization presented in **Figures 4B** through **4E** by business ownership classification and procurement category was used to calculate disparity.

### UTILIZATION ANALYSES AT THE PRIME LEVEL

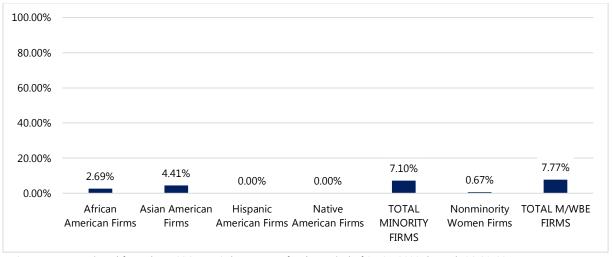
**Figure 4B** shows that the percentage of minority business utilization at the prime level based on Architecture and Engineering expenditures was 7.10 percent or \$16,972,187, and 7.77 percent which equates to \$18,576,628 for M/WBE firms combined. Among M/WBE firms, utilization was higher with Asian American-owned firms (4.41%) followed by African American-owned firms (2.69%). The corresponding analyses showing the utilization of firms by business ownership classification and year are presented in **Appendix C, Table C-1**.



FIGURE 4B

UTILIZATION ANALYSIS, PRIME EXPENDITURES

ARCHITECTURE AND ENGINEERING WITHIN WSSC RELEVANT MARKET AREA,
PERCENTAGE OF UTILIZATION BY BUSINESS OWNERSHIP CLASSIFICATION



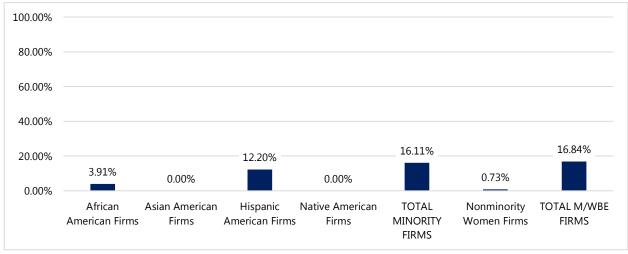
Source: Data retrieved from the WSSC MAPS data system for the period of 07/01/2009 through 06/30/2014.

**Figure 4C** shows that the percentage of minority business utilization based on Construction expenditures, was 16.11 percent or \$87,265,659 at the prime level. The combined utilization of M/WBE firms was 16.84 percent which equates to \$91,177,708. Among M/WBE firms, utilization was higher with Hispanic Americanowned firms (12.20%) followed by African American-owned firms (3.91%). The corresponding analyses showing the utilization of firms by business ownership classification and year are presented in **Appendix C**, **Table C-2**.

FIGURE 4C

UTILIZATION ANALYSIS, PRIME EXPENDITURES

CONSTRUCTION WITHIN WSSC RELEVANT MARKET AREA
PERCENTAGE OF UTILIZATION BY BUSINESS OWNERSHIP CLASSIFICATION



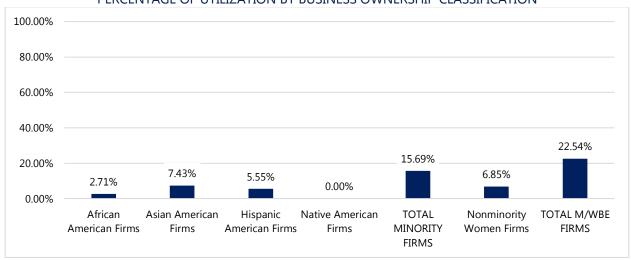


Source: Data retrieved from the WSSC MAPS data system for the period of 07/01/2009 through 06/30/2014.

**Figure 4D** shows that the minority business utilization based on Professional Services expenditures was 15.69 percent or \$15,955,963 at the prime level. In terms of M/WBE firms, as a whole, the utilization was 22.54 percent which equates to \$22,923,168. Among M/WBE firms, utilization was higher with Asian American-owned firms (7.43%) followed by Nonminority Women-owned firms (6.85%). The corresponding analyses showing the utilization of firms by business ownership classification and year are presented in **Appendix C, Table C-3**.



# FIGURE 4D UTILIZATION ANALYSIS, PRIME EXPENDITURES PROFESSIONAL SERVICES WITHIN WSSC RELEVANT MARKET AREA PERCENTAGE OF UTILIZATION BY BUSINESS OWNERSHIP CLASSIFICATION

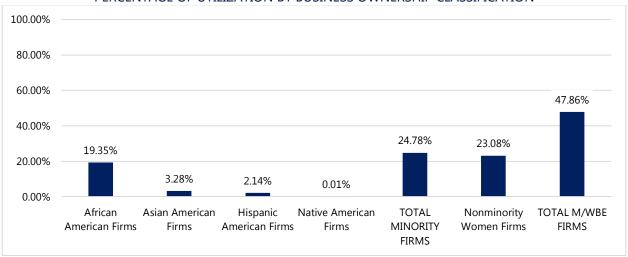


Source: Data retrieved from the WSSC MAPS data system for the period of 07/01/2009 through 06/30/2014.

**Figure 4E** shows that the utilization of minority firms based on Goods and General Services expenditures was 24.78 percent or \$85,167,909 at the prime level. In terms of M/WBE firms, as a whole, the utilization was 47.86 percent which equates to \$164,790,707. Among M/WBE firms, utilization was higher with Nonminority Women-owned firms (23.08%) followed by African American-owned firms (19.35%). The corresponding analyses showing the utilization of firms by business ownership classification and year are presented in **Appendix C, Table C-4**.



FIGURE 4E
UTILIZATION ANALYSIS, PRIME EXPENDITURES
GOODS AND GENERAL SERVICES WITHIN WSSC RELEVANT MARKET AREA,
PERCENTAGE OF UTILIZATION BY BUSINESS OWNERSHIP CLASSIFICATION



Source: Data retrieved from the WSSC MAPS data system for the period of 07/01/2009 through 06/30/2014.

### 6. PROCUREMENT CARD (P-CARD) TRANSACTIONS

The objective of the analysis is to analyze the P-Card transactions and the distribution of dollars among identified M/WBE and non-M/WBE firms. Therefore, the analysis presents results based on total P-Card activity (firms located inside and outside the WSSC market area). Examples of transactions *excluded* from the analyses include travel, hotel lodging, supermarkets, gift card novelty stores, discount stores, restaurants non-profit organizations, conferences, cable providers, and global courier services (such as Federal Express, United Parcel Services). Examples of transactions *included* in the analyses include catering, office equipment and repair services, printing services, automotive parts and repair services, construction-related services, small appliances and repair services, furniture and repair services, and computer-related purchases and services.

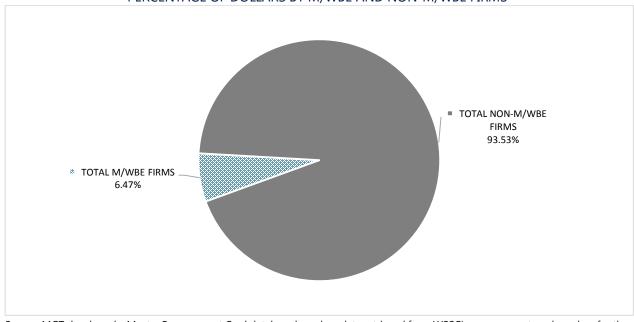
**Figures 4F** illustrates the percentage of the \$25,147,423 in P-Card transactions that were spent with M/WBE and non-M/WBE firms. The breakdown of transactions by business classification is presented in **Figure 4G**.

<sup>&</sup>lt;sup>131</sup> There is an indicator (MCC Description) in the data which describes the type of transaction, such as restaurants, fast food restaurants, catering. Based on these examples restaurants/fast food restaurants transactions were excluded from the analyses; however, catering transactions were included.



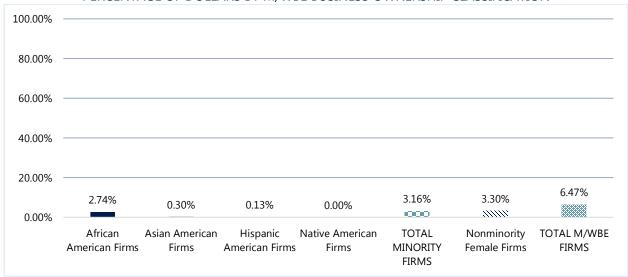
<sup>&</sup>lt;sup>130</sup> The P-Card analysis presents the distribution of dollars among identified M/WBE and non-M/WBE firms; therefore, a disparity analysis will not be conducted.

FIGURE 4F
PROCUREMENT CARD ANALYSIS
PERCENTAGE OF DOLLARS BY M/WBE AND NON-M/WBE FIRMS



Source: MGT developed a Master Procurement Card database based on data retrieved from WSSC's procurement card vendors for the period between 07/01/2009 through 06/30/2014.

FIGURE 4G
PROCUREMENT CARD ANALYSIS
PERCENTAGE OF DOLLARS BY M/WBE BUSINESS OWNERSHIP CLASSIFICATION



Source: MGT developed a Master Procurement Card database based on data retrieved from WSSC's procurement card vendors for the period between 07/01/2009 through 06/30/2014.



### 7. AVAILABILITY ESTIMATES ANALYSES

As mentioned, the courts have not defined a single source of estimating availability. The availability analyses use firms identified in WSSC's CBR database, and firms utilized by WSSC. The availability of prime firms is based on those firms located within the WSSC Relevant Market Area. It is true that availability is unlikely to be constant over time, but this is a problem shared by 99% of disparity studies. Historical availability data is rarely available across all business categories and ethnic/gender groups.

The subsequent results present MGT's availability analyses of firms for Architecture and Engineering, Construction, Professional Services, and Goods and General Services at the prime levels during the study period. **Tables 4-2** through **4-5** provides estimates of availability for primes in each procurement category. **Table 4-2** shows the prime availability for the Architecture and Engineering category. The availability calculation for M/WBEs was 57.26 percent, with Asians having the highest percentage of availability accounting for 24.36 percent.

TABLE 4-2

AVAILABILITY ANALYSIS, PRIME LEVEL

ARCHITECTURE AND ENGINEERING

PERCENTAGE OF AVAILABILITY BY BUSINESS OWNERSHIP CLASSIFICATION

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS				
African American Firms	20.09%				
Asian American Firms	24.36%				
Hispanic American Firms	2.99%				
Native American Firms	0.00%				
TOTAL MINORITY FIRMS	47.44%				
Nonminority Female Firms	9.83%				
TOTAL M/WBE FIRMS	57.26%				
TOTAL NON-M/WBE FIRMS	42.74%				
TOTAL FIRMS	100.00%				

Source: Data retrieved from the CBR database provided by WSSC of firms registered to do business with WSSC and firms utilized by WSSC.



**Table 4-3** shows the prime availability of M/WBEs in the Construction category. M/WBEs accounted for 39.14 percent of available firms, with African Americans having the highest percentage of availability at 14.37 percent.

TABLE 4-3
AVAILABILITY ANALYSIS, PRIME LEVEL
CONSTRUCTION
PERCENTAGE OF AVAILABILITY BY BUSINESS OWNERSHIP CLASSIFICATION

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS
African American Firms	14.37%
Asian American Firms	4.28%
Hispanic American Firms	11.01%
Native American Firms	1.83%
TOTAL MINORITY FIRMS	31.49%
Nonminority Women Firms	7.65%
TOTAL M/WBE FIRMS	39.14%
TOTAL NON-M/WBE FIRMS	60.86%
TOTAL FIRMS	100.00%

Source: Data retrieved from the CBR database provided by WSSC of firms registered to do business with WSSC and firms utilized by WSSC.

**TABLE 4-4** indicate M/WBE percentage of availability for Professional Services was 57.82 percent, with African Americans having the highest percentage of availability among M/WBEs at 32.86 percent.

TABLE 4-4
AVAILABILITY ANALYSIS, PRIME LEVEL
PROFESSIONAL SERVICES
PERCENTAGE OF AVAILABILITY BY BUSINESS OWNERSHIP CLASSIFICATION

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS
African American Firms	32.86%
Asian American Firms	12.63%
Hispanic American Firms	2.58%
Native American Firms	0.00%
TOTAL MINORITY FIRMS	48.06%
Nonminority Women Firms	9.76%
TOTAL M/WBE FIRMS	57.82%
TOTAL NON-M/WBE FIRMS	42.18%
TOTAL FIRMS	100.00%

Source: Data retrieved from the CBR database provided by WSSC of firms registered to do business with WSSC and firms utilized by WSSC.



**TABLE 4-5** shows that in the Goods and General Services category, M/WBEs accounted for 40.54 percent availability, with African American having the highest prime level percentage of availability among M/WBEs with 23.75 percent.

TABLE 4-5

AVAILABILITY ANALYSIS, PRIME LEVEL

GOODS AND GENERAL SERVICES

PERCENTAGE OF AVAILABILITY BY BUSINESS OWNERSHIP CLASSIFICATION

7	
BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS
African American Firms	23.75%
Asian American Firms	2.72%
Hispanic American Firms	3.63%
Native American Firms	0.15%
TOTAL MINORITY FIRMS	30.25%
Nonminority Female Firms	10.29%
TOTAL M/WBE FIRMS	40.54%
TOTAL NON-M/WBE FIRMS	59.46%
TOTAL FIRMS	100.00%

Source: Data retrieved from the CBR database provided by WSSC of firms registered to do business with WSSC and firms utilized by WSSC.

### 8. DISPARITY ANALYSES

The next series of tables present the disparity indices summary results on the prime level for Architecture and Engineering, Construction, Professional Services, and Goods and General Services. The disparity indices results, as defined in **Section 2**, **Chapter Definitions**, are calculated based on the utilization percentages, as presented in **Section 4**, **Utilization Analyses**, and availability percentages, as presented in **Section 5**, **Availability Analyses** of this chapter.

### DISPARITY ANALYSES AND STATISTICAL SIGNIFICANCE AT THE PRIME LEVEL

**Table 4-6** presents a summary of the percent of dollars, percentage of available firms, and the resulting disparity indices along with the t-test results, or test for statistical significance, for minority- and nonminority women-owned firms in Architecture and Engineering at the prime consultant level. Overall, minority firms (disparity index 14.97) and M/WBE firms (disparity index 13.57) 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**.

The t-test results indicate that the findings of substantial underutilization exists for minority-owned firms, and nonminority women-owned. 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 4-6 DISPARITY INDICES AND T-TEST RESULTS FOR MINORITY- AND WOMEN-OWNED FIRMS,

### ARCHITECTURE AND ENGINEERING PRIMES

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPAC OF UTILIZATION		STATISTICAL SIGNIFICANCE
African American Firms	2.69%	20.09%	13.39	Underutilization	*	¥¥
Asian American Firms	4.41%	24.36%	18.10	Underutilization	*	¥¥
Hispanic American Firms	0.00%	2.99%	0.00	Underutilization	*	¥¥
Native American Firms	0.00%	0.00%	-	N/A		NOT APPLICABLE
Total Minority Firms	7.10%	47.44%	14.97	Underutilization	*	¥¥
Nonminority Women Firms	0.67%	9.83%	6.82	Underutilization	*	¥¥
Total M/WBE Firms	7.77%	57.26%	13.57	Underutilization	*	¥¥
Non-M/WBE Firms	92.23%	42.74%	215.82	Overutilization		¥¥

Source: MGT developed a Master Payments 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.

Statistical Significance refers to a t-test performed to determine whether the disparity indices are within a small sampling error of 100. Statistical significance is not based on tests of whether disparity violates the "80 rule."

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

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

**Table 4-7** presents a summary of the disparity indices results for Construction at the prime contractor level. Overall, minority firms (disparity index 51.15) and M/WBE firms (disparity index 43.03) were substantially underutilized. Among M/WBE firms, all utilized M/WBE groups were substantially underutilized, except Hispanic Americans which were overutilized. The corresponding results on disparity indices by year and business ownership classification are presented in **Appendix B**, **Table B-2**.



<sup>\*</sup> indicate a substantial level of disparity, which is a disparity index below 80.00.

In addition, **Table 4-7** also presents a summary of the percent of dollars, available firm, and disparity indices results along with the t-test results or test for statistical significance for minority- and nonminority womenowned firms in construction at the prime contractor level. The t-test results indicate that the findings of substantial underutilization exist for minority-owned firms, as a whole, as well as nonminority womenowned and M/WBE firms, as a whole.

TABLE 4-7
DISPARITY INDICES AND T-TEST RESULTS FOR MINORITY- AND WOMENOWNED FIRMS,
CONSTRUCTION PRIMES

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPA OF UTILIZATION		STATISTICAL SIGNIFICANCE
African American Firms	3.91%	14.37%	27.21	Underutilization	*	¥¥
Asian American Firms	0.00%	4.28%	0.00	Underutilization	*	
Hispanic American Firms	12.20%	11.01%	110.82	Overutilization		¥¥
Native American Firms	0.00%	1.83%	0.00	Underutilization	*	¥¥
<b>Total Minority Firms</b>	16.11%	31.49%	51.15	Underutilization	*	¥¥
Nonminority Female Firms	0.73%	7.65%	9.55	Underutilization	*	¥¥
Total M/WBE Firms	16.84%	39.14%	43.03	Underutilization	*	¥¥
Non-M/WBE Firms	83.16%	60.86%	136.65	Overutilization		¥¥

Source: MGT developed a Master Payments 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.

Statistical Significance refers to a t-test performed to determine whether the disparity indices are within a small sampling error of 100. Statistical significance is not based on tests of whether disparity violates the "80 rule."

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

**Table 4-8** presents a summary of the disparity indices results for Professional Services at the prime consultant level. Overall, minority firms (disparity index 32.64) and M/WBE firms (disparity index 38.98) were substantially underutilized. Among M/WBE firms, all utilized M/WBE groups were substantially underutilized, except for Hispanic Americans. The t-test results indicate that the findings of substantial underutilization exist for minority-owned firms, as a whole, as well as nonminority women-owned and M/WBE firms, as a whole. The corresponding results on disparity indices by year and business ownership classification are presented in **Appendix B**, **Table B-3**.



<sup>\*</sup> indicate a substantial level of disparity, which is a disparity index below 80.00.

## TABLE 4-8 DISPARITY INDICES AND T-TEST RESULTS FOR MINORITY- AND WOMEN-OWNED FIRMS,

### PROFESSIONAL SERVICES, PRIMES

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPACT UTILIZATION	OF	STATISTICAL SIGNIFICANCE
African American Firms	2.71%	32.86%	8.25	Underutilization	*	¥¥
Asian American Firms	7.43%	12.63%	58.85	Underutilization	*	¥¥
Hispanic American Firms	5.55%	2.58%	214.91	Overutilization		¥¥
Native American Firms	0.00%	0.00%	0.00	N/A	*	NOT APPLICABLE
<b>Total Minority Firms</b>	15.69%	48.06%	32.64	Underutilization	*	¥¥
Nonminority Women Firms	6.85%	9.76%	70.21	Underutilization	*	¥¥
Total M/WBE Firms	22.54%	57.82%	38.98	Underutilization	*	¥¥
Non-M/WBE Firms	77.46%	42.18%	183.66	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.

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

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

Statistical Significance refers to a t-test performed to determine whether the disparity indices are within a small sampling error of 100. Statistical significance is not based on tests of whether disparity violates the "80 rule."

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

**Table 4-9** presents a summary of the disparity indices results for Goods and General Services at the prime consultant level. Overall, minority firms (disparity index 81.92) and M/WBE firms (disparity index 118.06) were overutilized. Among M/WBE firms, all utilized M/WBE groups were underutilized, except for Asian Americans (120.59 disparity index) and Nonminority Women-owned firms (224.30 disparity index). The test results indicate that the findings of substantial underutilization exist for minority-owned firms, as a whole, and substantial overutilization for nonminority women-owned and M/WBE firms, as a whole. The corresponding results on disparity indices by year and business ownership classification are presented in **Appendix B, Table B-4**.



<sup>\*</sup> indicate a substantial level of disparity, which is a disparity index below 80.00.

## TABLE 4-9 DISPARITY INDICES AND T-TEST RESULTS FOR MINORITY- AND WOMEN-OWNED FIRMS,

### GOODS AND GENERAL SERVICES, PRIMES

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPA OF UTILIZATION		STATISTICAL SIGNIFICANCE
African American Firms	19.35%	23.75%	81.47	Underutilization		¥¥
Asian American Firms	3.28%	2.72%	120.59	Overutilization		¥¥
Hispanic American Firms	2.14%	3.63%	58.95	Underutilization	*	
Native American Firms	0.01%	0.15%	6.67	Underutilization	*	NOT APPLICABLE
<b>Total Minority Firms</b>	24.78%	30.25%	81.92	Underutilization		¥¥
Nonminority Women Firms	23.08%	10.29%	224.30	Overutilization		¥¥
Total M/WBE Firms	47.86%	40.54%	118.06	Overutilization		¥¥
Non-M/WBE Firms	52.14%	59.46%	87.69	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.

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

Statistical Significance refers to a t-test performed to determine whether the disparity indices are within a small sampling error of 100. Statistical significance is not based on tests of whether disparity violates the "80 rule."

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

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

### 9. SUMMARY

M/WBEs were underutilized in all business categories, overall during the study period, except for in the Goods and General Services category. The percentage of utilization used to calculate disparity was based on expended dollars (payments) made during the study period. A utilization analyses of the awarded dollars provided in **Appendix D** showed that M/WBE firms received greater amounts of award dollars than for actual payments of those awarded contracts.



<sup>\*</sup> indicate a substantial level of disparity, which is a disparity index below 80.00.

### **CHAPTER 5**

Total Utilization, Availability, and Disparity Analyses

**WSSC 2015 Disparity Study** 



### CHAPTER 5: TOTAL UTILIZATION, AVAILABILITY, AND DISPARITY ANALYSES

### 1. INTRODUCTION

This chapter presents the results of MGT of America's (MGT) total M/WBE utilization, availability, and disparity analyses of firms used on Washington Suburban Sanitary Commission (WSSC) prime and subcontracts for Architecture and Engineering, Construction, Professional Services, and Goods and General Services projects between July 1, 2009, and June 30, 2014.

The subcontractor utilization, availability, and disparity analyses also lays the foundation to answer the first part to one of our research questions: Are there disparities between the availability and utilization of M/WBEs as subcontractors?

#### CHAPTER SECTIONS

- 1. Introduction
- 2. Chapter Definitions
- 3. Data Collection and Management
- 4. Utilization Analyses
- 5. Availability Estimates Analyses
- 6. Disparity Analyses
- 7. Summary

### 2. CHAPTER DEFINITIONS

Definitions for the Business Ownership Classification, Disparity Analyses Methodology, Procurement Categories, and Study Period are outlined in **Section 2** of **Chapter 4**, **Market Area and Prime Utilization**, **Availability, and Disparity Analyses**. To understand the analyses presented in this chapter, it is important to define and understand the following definitions.

- Utilization. Dollars expended or paid to M/WBE primes and to subcontractors by prime firms located within the WSSC Relevant Market Area during the study period. The utilization analyses also assessed the effectiveness of initiatives in promoting the inclusion of MWBEs in WSSC contracting and procurement activities. The effectiveness of the program initiatives is further examined and discussed in Chapter 8, Findings and Recommendations.
- ▶ **Total Utilization Calculations**. WSSC prime contractors primarily reported M/WBE subcontractors which explains why the sub data are so heavily weighted towards M/WBE firms. Therefore, we provide an analysis of prime plus subcontracting utilization based on adding the prime and subcontracting expenditures.

### 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: custom census, firms identified in CBR, primes and subcontractors utilized during the study period, and



M/WBE certified data. Using these data sources, the availability estimates were refined to firms located within the WSSC Relevant Market Area.

#### **CUSTOM CENSUS**

Availability estimates for Architecture and Engineering, Construction, Professional Services, and Goods and General Services at the prime plus subcontractor levels were based on firms represented in the Study's custom census. Some cases<sup>132</sup> have allowed what is known as "custom census" as a source to calculate the availability of firms. Custom census involves using Dun & Bradstreet as a source of business availability. Dun & Bradstreet is a current data source containing information on individual firms, including firm revenue, number of employees, and specific areas of work. It should be noted there are deficiencies to Dun & Bradstreet, which include:

- No racial, ethnic, and gender information.
- No indication of whether a firm is interested to work on WSSC projects.
- No indication of whether a firm primarily works as a prime contractor or subcontractor.

These deficiencies were addressed by first pulling a random sample of firms from Dun & Bradstreet. The sample was limited to firms located in the WSSC Relevant Market Area<sup>133</sup> and identified as providing Architecture and Engineering, Construction, Professional Services, and Nonprofessional or General Services based on six-digit North American Industry Classification System (NAICS) codes. Once this process was completed, the remaining deficiencies were addressed by conducting a short survey. Firms were asked:

- Racial, ethnic, and gender information.
- ▶ Had they bid or considered bidding on WSSC projects (which indicates the firm's interest).
- When bidding on projects (not limited to WSSC projects), if they primarily bid as a prime contractor, subcontractor, or both.

The custom census gathered data from 828 firms that responded to the survey of a sample size of 5,960 firms, which were limited to firms in the NAICS codes in which WSSC lets contracts.

Availability estimates at the prime plus subcontractor/subconsultant levels were also based on firms represented in the CBR database, firms utilized as primes and subcontractors by WSSC.

### 3. DATA COLLECTION AND MANAGEMENT

MGT conducted data assessment interviews with key WSSC staff knowledgeable about the prime contract, subcontract, and vendor data in order to identify the most appropriate data sources to use for the study.

<sup>133</sup> The WSSC Relevant Market Area is defined in Chapter 4, Market Area and Prime Utilization, Availability, and Disparity.



-

<sup>&</sup>lt;sup>132</sup> Northern Contracting v. Illinois DOT, 2005 U.S. Dist. LEXIS 19868 (ND IL 2005).

Based on the data assessment interviews and follow-up discussions with WSSC staff, it was agreed WSSC's web-based compliance system (PRISM™) maintained the most comprehensive sets of subcontractor data. WSSC's web-based compliance system (PRISM™) is a secure, web-based portal that tracks spending with subcontractors working with primes on WSSC projects. Collection of prime data is discussed in **Chapter 4, Section 3**.

WSSC tracked subcontractors in their web-based compliance system (PRISM™). This data was heavily weighted towards M/WBEs subcontractor payments, but lacked much of the payments to nonminority firms. WSSC extracted the subcontractor data from the web-based compliance system (PRISM™) and submitted the data to MGT in an Excel spreadsheet. Once the data was received, MGT updated any pertinent information that was missing such as the vendor's race and ethnicity, and the vendor's local county and state information. MGT compiled the subcontractor data into a Master Subcontractor Payment Database prior to conducting the subcontractor payment analyses.

### 4. UTILIZATION ANALYSES

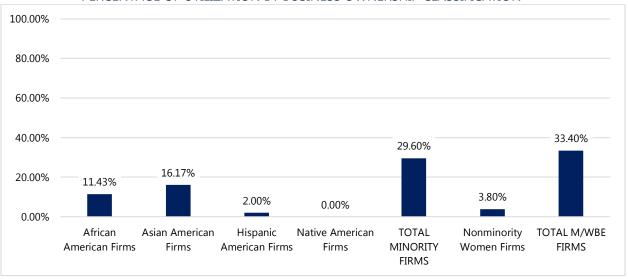
The prime plus subcontractor (total) utilization analyses are based on firms located in the WSSC Relevant Market Area identified in **Chapter 4**. The subsequent results present MGT's prime plus subcontractor utilization analyses of firms on Architecture and Engineering, Construction, Professional Services, and Goods and General Services contracts during the study period. The prime plus subcontractor utilization analyses in this chapter is based on both prime and subcontractor expenditures, and is thus used to calculate disparity. Expenditures provide totals of actual dollars paid to M/WBE subcontractors and an estimate of dollars for non-M/WBE subcontractors. The detailed utilization by procurement category and study period can be found in **Appendix E, Detailed Total Utilization Analyses**.



### UTILIZATION ANALYSES

**Figure 5A** shows the utilization of minority firms based on Architecture and Engineering prime plus subcontractor expenditures was 29.61 percent. The combined MWBE utilization was 33.41 percent. Among MWBE firms, utilization was higher with Asian American-owned firms (16.17%) followed by African American -owned firms (11.43%). **Appendix E, Table E-1** provides a detailed utilization analyses with prime and subcontractor data by year and business ownership classification as reported by MAPS and WSSC's webbased compliance system (PRISM™).

FIGURE 5A
UTILIZATION ANALYSIS, PRIME PLUS SUBCONTRACTOR EXPENDITURES
ARCHITECTURE AND ENGINEERING WITHIN WSSC RELEVANT MARKET AREA
PERCENTAGE OF UTILIZATION BY BUSINESS OWNERSHIP CLASSIFICATION



Source: Data retrieved from MAPS and WSSC's web-based compliance system (PRISM $^{\text{TM}}$ ) for the period of 07/01/2009 through 06/30/2014.

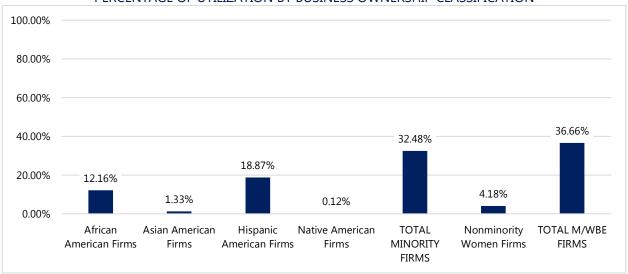


**Figure 5B** shows the prime plus subcontractor utilization of minority firms based on Construction expenditures was 32.48 percent. In terms of MWBE firms, the utilization was 36.66 percent. Among MWBE firms, utilization was higher with Hispanic American-owned firms (18.87%) followed by African American-owned firms (12.16%). **Appendix E, Table E-2** provides a detailed utilization analyses with prime and subcontractor data by year and business ownership classification.

FIGURE 5B

UTILIZATION ANALYSIS, PRIME PLUS SUBCONTRACTOR EXPENDITURES

CONSTRUCTION WITHIN WSSC RELEVANT MARKET AREA
PERCENTAGE OF UTILIZATION BY BUSINESS OWNERSHIP CLASSIFICATION

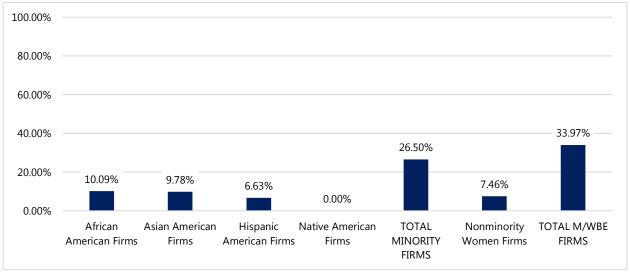


Source: Data retrieved from MAPS and WSSC's web-based compliance system (PRISM $^{\text{TM}}$ ) for the period of 07/01/2009 through 06/30/2014.



**Figure 5C** shows the prime plus subcontractor utilization of minority firms based on Professional Services expenditures was 26.50 percent. The utilization of M/WBE firms, as a whole, was 33.97 percent. Among M/WBE firms, utilization was higher with African American-owned firms (10.09%) followed by Asian American-owned firms (9.78%). A detailed utilization analyses of prime and subcontractor data by year and business ownership classification is presented in **Appendix E**, **Table E-3**.

FIGURE 5C
UTILIZATION ANALYSIS, PRIME PLUS SUBCONTRACTOR EXPENDITURES
PROFESSIONAL SERVICES WITHIN WSSC RELEVANT MARKET AREA
PERCENTAGE OF UTILIZATION BY BUSINESS OWNERSHIP CLASSIFICATION



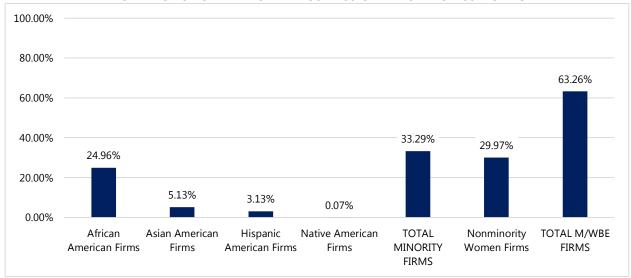
Source: Data retrieved from MAPS and WSSC's web-based compliance system (PRISM $^{\text{TM}}$ ) for the period of 07/01/2009 through 06/30/2014.



**Figure 5D** shows the prime plus subcontractor utilization of minority firms based on Goods and General Services expenditures was 33.29 percent. In terms of M/WBE firms, the utilization was 63.26 percent. Among M/WBE firms, utilization was higher with Nonminority Women-owned firms (29.97%) followed by African American-owned firms (24.96%). **Appendix E, Table E-4** provides a detailed utilization analyses of prime and subcontractor data by year and business ownership classification.

FIGURE 5D

UTILIZATION ANALYSIS, PRIME PLUS SUBCONTRACTOR EXPENDITURES
GOODS AND GENERAL SERVICES WITHIN WSSC RELEVANT MARKET AREA
PERCENTAGE OF UTILIZATION BY BUSINESS OWNERSHIP CLASSIFICATION



Source: Data retrieved from MAPS and WSSC's web-based compliance system (PRISM $^{\text{TM}}$ ) for the period of 07/01/2009 through 06/30/2014.

### 5. AVAILABILITY ESTIMATES ANALYSES

The prime plus subcontractor availability analyses uses firms identified in the custom census, CBR database, and prime and subcontractor firms utilized on WSSC projects for Architecture and Engineering, Construction, Professional Services, and Goods and General Services. Availability calculations were limited to firms located in the WSSC Relevant Market Area. The subsequent results present MGT's estimates of availability analyses of firms on Architecture and Engineering, Construction, Professional Services, and Goods and General Services at the prime plus subcontractor levels. Availability is unlikely to be constant over time. Historical availability data is rarely available across all business categories and ethnic/gender groups.



**Tables 5-1** through **5-4** provide availability estimates for prime plus subcontractors in each procurement category. **Table 5-1** shows the prime plus subcontractor availability for the Architecture and Engineering category. M/WBEs availability estimates are 59.78 percent, with Asian American-owned firms having the highest availability accounting for 21.26 percent.

TABLE 5-1

AVAILABILITY ANALYSIS, PRIME PLUS SUBCONTRACTOR

ARCHITECTURE AND ENGINEERING

PERCENTAGE OF AVAILABILITY BY BUSINESS OWNERSHIP CLASSIFICATION

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS
African American Firms	20.42%
Asian American Firms	21.26%
Hispanic American Firms	4.00%
Native American Firms	0.21%
TOTAL MINORITY FIRMS	45.89%
Nonminority Women Firms	13.89%
TOTAL M/WBE FIRMS	59.78%
TOTAL NON-M/WBE FIRMS	40.22%
TOTAL FIRMS	100.00%

Source: Data retrieved from the custom census, CBR, and utilized firms.



**Table 5-2** shows the prime plus subcontractor availability estimates of M/WBEs in the Construction category. M/WBEs accounted for 67.80 percent of available firms, with African American-owned firms having the highest availability at 33.45 percent.

TABLE 5-2
AVAILABILITY ANALYSIS, PRIME PLUS SUBCONTRACTOR
CONSTRUCTION

PERCENTAGE OF AVAILABILITY BY BUSINESS OWNERSHIP CLASSIFICATION

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS
African American Firms	33.45%
Asian American Firms	6.67%
Hispanic American Firms	14.49%
Native American Firms	1.15%
TOTAL MINORITY FIRMS	55.76%
Nonminority Women Firms	12.04%
TOTAL M/WBE FIRMS	67.80%
TOTAL NON-M/WBE FIRMS	32.20%
TOTAL FIRMS	100.00%

Source: Data retrieved from the custom census, CBR, and utilized firms.

**Table 5-3** shows, for the Professional Services procurement category, M/WBEs had 72.61 percent prime plus subcontractor availability, with African American-owned firms having the highest among M/WBEs at 36.65 percent, followed by Nonminority Women-owned firms with 20.89 percent.

TABLE 5-3

AVAILABILITY ANALYSIS, PRIME PLUS SUBCONTRACTOR

PROFESSIONAL SERVICES

PERCENTAGE OF AVAILABILITY BY BUSINESS OWNERSHIP CLASSIFICATION

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS
African American Firms	36.65%
Asian American Firms	11.53%
Hispanic American Firms	3.20%
Native American Firms	0.34%
TOTAL MINORITY FIRMS	51.72%
Nonminority Women Firms	20.89%
TOTAL M/WBE FIRMS	72.61%
TOTAL NON-M/WBE FIRMS	27.39%
TOTAL FIRMS	100.00%

Source: Data retrieved from the custom census, CBR, and utilized firms.



**Table 5-4** shows, for the Goods and General Services category, M/WBEs had 57.02 percent availability, with African American-owned firms having the highest prime plus subcontractor availability among M/WBEs with 31.74 percent.

TABLE 5-4

AVAILABILITY ANALYSIS, PRIME PLUS SUBCONTRACTOR

GOODS AND GENERAL SERVICES

PERCENTAGE OF AVAILABILITY BY BUSINESS OWNERSHIP CLASSIFICATION

TERCENTAGE OF AVAILABLETT BY BOSINESS OWNERSHIF CLASSIFICATION					
BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS				
African American Firms	31.74%				
Asian American Firms	4.92%				
Hispanic American Firms	5.51%				
Native American Firms	0.27%				
TOTAL MINORITY FIRMS	42.44%				
Nonminority Women Firms	14.58%				
TOTAL M/WBE FIRMS	57.02%				
TOTAL NON-M/WBE FIRMS	42.98%				
TOTAL FIRMS	100.00%				

Source: Data retrieved from the custom census, CBR, and utilized firms.

### 6. DISPARITY ANALYSES

The next series of figures present the disparity indices summary results for Architecture and Engineering, Construction, Professional Services, and Goods and General Services at the prime plus subcontractor or total utilization levels. The disparity indices results are calculated based on the estimated prime plus subcontractor utilization percentages, as presented in **Section 4**, **Utilization Analyses** and availability estimates based on custom census, CBR, and utilized firms as presented in **Section 5**, **Availability Estimates Analyses** of this chapter. 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<sup>134</sup>.

### DISPARITY ANALYSES AND STATISTICAL SIGNIFICANCE

**Table 5-5** presents a summary of the disparity indices results for Architecture and Engineering at the prime plus subcontractor level. Overall, M/WBE firms (disparity index 55.89) were substantially underutilized. Among M/WBE firms, all utilized M/WBE groups were substantially underutilized. The t-test results indicate the findings of substantial underutilization exist for minority-owned firms—except for Native American Firms due to no utilization or availability identified. The corresponding results on disparity indices by year

<sup>134</sup> Defined in Chapter 4, Market Area and Prime Utilization, Availability, and Disparity, Section 2, Chapter Definitions.



\_

and business ownership classification based on utilization percentages of actual expenditures reported by WSSC are presented in **Appendix F**, **Table F-1**.

TABLE 5-5
DISPARITY INDICES AND T-TEST RESULTS
ARCHITECTURE AND ENGINEERING PRIME PLUS SUBCONTRACTORS

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABL E FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPACT OF UTILIZATION		STATISTICAL SIGNIFICANCE
African American Firms	11.43%	20.42%	55.97	Underutilization	*	¥¥
Asian American Firms	16.17%	21.26%	76.06	Underutilization	*	¥¥
Hispanic American Firms	2.00%	4.00%	50.00	Underutilization	*	¥¥
Native American Firms	0.00%	0.21%	0.00	Underutilization	*	
<b>Total Minority Firms</b>	29.60%	45.89%	64.50	Underutilization	*	¥¥
Nonminority Women Firms	3.80%	13.89%	27.36	Underutilization	*	¥¥
Total M/WBE Firms	33.40%	59.78%	55.87	Underutilization	*	¥¥
Non-M/WBE Firms	66.60%	40.22%	165.59	Overutilization		¥¥

Source: MGT developed a Master Subcontractor Payments and Subcontractor Availability Database to analyze disparity results 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.

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



<sup>\*</sup> indicate a substantial level of disparity, which is a disparity index below 80.00.

**Table 5-6** presents a summary of the disparity indices results for Construction at the prime plus subcontractor level. Overall, minority firms (disparity index 58.25) and M/WBE firms (disparity index 54.07) were substantially underutilized. Among M/WBE firms, all utilized M/WBE groups were substantially underutilized, except Asian Americans which were overutilized. The t-test results indicate findings of substantial underutilization exist for minority-owned firms, as a whole, as well as Nonminority Womenowned firms. The corresponding results on disparity indices by year and business ownership classification based on utilization percentages of actual expenditures reported by WSSC are presented in **Appendix F**, **Table F-2**.

TABLE 5-6
DISPARITY INDICES AND T-TEST RESULTS
CONSTRUCTION PRIME PLUS SUBCONTRACTORS

BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPACT OF UTILIZATION		STATISTICAL SIGNIFICANCE
African American Firms	12.16%	33.45%	36.35	Underutilization	*	¥¥
Asian American Firms	1.33%	6.67%	19.94	Underutilization	*	¥¥
Hispanic American Firms	18.87%	14.49%	130.23	Overutilization		¥¥
Native American Firms	0.12%	1.15%	10.43	Underutilization	*	¥¥
<b>Total Minority Firms</b>	32.48%	55.76%	58.25	Underutilization	*	¥¥
Nonminority Women Firms	4.18%	12.04%	34.72	Underutilization	*	¥¥
Total M/WBE Firms	36.66%	67.80%	54.07	Underutilization	*	¥¥
Non-M/WBE Firms	63.34%	32.20%	196.71	Overutilization		¥¥

Source: MGT developed a Master Subcontractor Payments and Subcontractor Availability Database to analyze disparity results 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.



<sup>\*</sup> indicate a substantial level of disparity, which is a disparity index below 80.00.

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

**Figure Table 5-7** presents a summary of the prime plus subcontractor disparity indices results for Professional Services. Overall, M/WBE firms (disparity index 46.78) were substantially underutilized. Among M/WBE firms, all utilized M/WBE groups were substantially underutilized, except for Hispanic Americanowned firms. The t-test results indicate findings of substantial underutilization exist for minority-owned firms, as a whole, as well as Nonminority Women-owned.

The corresponding results on disparity indices by year and business ownership classification based on utilization percentages of actual expenditures reported by WSSC are presented in **Appendix F**, **Table F-3**.

TABLE 5-7
DISPARITY INDICES AND T-TEST RESULTS
PROFESSIONAL SERVICES PRIME PLUS SUBCONTRACTORS

THO ESSION AL SERVICES FRANCE LOS SOBEOTATIONETORS						
BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE	DISPARITY INDEX	DISPARATE IMPACT OF UTILIZATION		STATISTICAL SIGNIFICANCE
		(%)				
African American Firms	10.09%	36.65%	27.53	Underutilization	*	¥¥
Asian American Firms	9.78%	11.53%	84.82	Underutilization		¥¥
Hispanic American Firms	6.63%	3.20%	207.19	Overutilization		¥¥
Native American Firms	0.00%	0.34%	0.00	Underutilization	*	¥¥
<b>Total Minority Firms</b>	26.50%	51.72%	51.24	Underutilization	*	¥¥
Nonminority Women Firms	7.46%	20.89%	35.71	Underutilization	*	¥¥
Total M/WBE Firms	33.96%	72.61%	46.77	Underutilization	*	¥¥
Non-M/WBE Firms	66.04%	27.39%	241.11	Overutilization		¥¥

Source: MGT developed a Master Subcontractor Payments and Subcontractor Availability Database to analyze disparity results 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.



<sup>\*</sup> indicate a substantial level of disparity, which is a disparity index below 80.00.

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

**Table 5-8** presents a summary of the prime plus subcontractor disparity indices results for Goods and General Services. Overall, M/WBE firms (disparity index 110.94) were overutilized. The t-test results indicate findings of substantial underutilization exist for minority-owned firms, as a whole. The corresponding results on disparity indices by year and business ownership classification based on utilization percentages of actual expenditures reported by WSSC are presented in **Appendix F**, **Table F-4**.

TABLE 5-8
DISPARITY INDICES AND T-TEST RESULTS
GOODS AND GENERAL SERVICES PRIME PLUS SUBCONTRACTORS

GOODS / IND GENERAL SERVICES I MINE I EOS SODEONITO (CTORS						
BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPACT ( UTILIZATION	OF	STATISTICAL SIGNIFICANCE
		(70)				
African American Firms	24.96%	31.74%	78.64	Underutilization	*	¥¥
Asian American Firms	5.13%	4.92%	104.27	Overutilization		¥¥
Hispanic American Firms	3.13%	5.51%	56.81	Underutilization	*	
Native American Firms	0.07%	0.27%	25.93	Underutilization	*	
<b>Total Minority Firms</b>	33.29%	42.44%	78.44	Underutilization	*	¥¥
Nonminority Women Firms	29.97%	14.58%	205.56	Overutilization		¥¥
Total M/WBE Firms	63.26%	57.02%	110.94	Overutilization		¥¥
Non-M/WBE Firms	36.74%	42.98%	85.48	Underutilization		¥¥

Source: MGT developed a Master Subcontractor Payments and Subcontractor Availability Database to analyze disparity results 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.

### 7. SUMMARY

Prime and subcontractor utilization calculations were based on actual dollars paid or expenditure dollars during the study period. M/WBE firms were underutilized for all procurement categories except for Goods and General Services.



<sup>\*</sup> indicate a substantial level of disparity, which is a disparity index below 80.00.

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

### CHAPTER 6

Private Sector and Non-Goal Analyses

**WSSC 2015 Disparity Study** 



### 1. INTRODUCTION

MGT of America, Inc. (MGT), in **Chapter 2, Legal Framework**, detailed that the government entity enacting a minority- and women-owned business enterprise (M/WBE) program must have shown to have actively or passively perpetuated discrimination. The questions this chapter attempts to answer are:

- 1) Does Washington Suburban Sanitary Commission (WSSC) passively engage in practices which result in disparities?
- 2) Are there disparities in utilization of M/WBE firms as prime contractors or subcontractors for commercial private sector construction projects relative to their availability?
- 3) Are there disparities for M/WBE firms in the entry into and earnings from self-employment?

The private sector analysis evaluates the presence or absence of discrimination in the private sector marketplace, and is used to determine if there is evidence to support anecdotal comments from **Chapter 7**, **Anecdotal Analysis** regarding difficulties M/WBE firms have in securing work on private sector projects. The analysis examines M/WBE utilization and availability in the WSSC's market area<sup>135</sup> private commercial construction industry in order to determine disparities in M/WBE utilization at the prime contractor and subcontractor levels.

### **CHAPTER SECTIONS**

- 1. Introduction
- 2. Collection and Management of Permits Data
- 3. Private SectorUtilization Analysis,CommercialConstruction Permits
- 4. Nexus Between
  Commercial and Public
  Construction
- 5. Private Sector
  Disparities, U.S. Census
  Bureau, 2012 Survey of
  Business Owners Data
- 6. Analysis of Race, Ethnicity, and Gender Effects on Self-Employment Rates and Earnings
- 7. Conclusion

Once the record of private sector utilization was established, we also were able to compare the rates of M/WBE and non-M/WBE utilization in the private sector to their utilization by the WSSC for public sector construction procurement.

### **METHODOLOGY**

Our methodology for the collection of data and the calculation of the WSSC's market area as the basis for our analysis of private sector utilization of M/WBE firms and non-M/WBE firms and their availability is described in this section.

<sup>&</sup>lt;sup>135</sup> Refer to the **Chapter 4**, **Market Area, and Prime Utilization, Availability, and Disparity Analyses, Section 2**, **Chapter Definitions** for the WSSC's market area as defined for the purposes of this Study.



### PRIVATE SECTOR ANALYSIS - RATIONALE

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." 136 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.<sup>137</sup> According to this argument, discriminatory practices found in the private sector marketplace may be indicative of government's passive or, in some cases, active participation in local discrimination. To remedy such discrimination, Croson provided government "can use its spending powers to remedy private discrimination, if it identifies discrimination with the particularity required by the Fourteenth Amendment." <sup>138</sup> Passive discrimination was examined in a disparity analysis of the utilization of M/WBE construction subcontractors by majority prime contractors on projects funded in the WSSC 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/WBE firms as prime contractors for commercial private sector construction projects relative to their availability?
- Are there disparities in utilization of M/WBE firms as subcontractors for commercial private sector construction projects relative to their availability?
- ▶ To what extent are contractors utilized on WSSC projects also utilized on private sector construction projects?

### 2. COLLECTION AND MANAGEMENT OF PERMITS DATA

The source of data for the commercial construction permit data (such as building, electrical, plumbing) was provided by Prince George's County, Maryland, Department of Permitting, Inspections, and Enforcement (DPIE).<sup>139</sup> The data was transmitted electronically in spreadsheet format for construction projects permitted. The permit's data provided to MGT included the following, but not limited, data fields:

<sup>&</sup>lt;sup>139</sup> MGT was referred to Montgomery County's Department of Permitting Services website to download the data; however, the data did not contain key data fields. Therefore, the analyses could not be conducted. Due to possible data limitations (such as gaps in permits data), MGT applied a multi-pronged approach to examine the private sector. In addition to an analysis of commercial construction permits, an examination of private sector census disparities based on U.S. Census Bureau, 2012 Survey of Business Owners data, as well as an examination of race, ethnicity, and gender effects on self-employment rates and earnings were conducted.



<sup>&</sup>lt;sup>136</sup> Croson, 488 U.S. 469, (1989) 109 US Reporter at 720-21, 744-45.

<sup>&</sup>lt;sup>137</sup> Adarand v. Slater, 228 F.3d 1147 (10th Cir. 2000).

<sup>&</sup>lt;sup>138</sup> See Richmond v. Croson, 488 U.S at. 492.

- Permit Type Text
- Permit #
- Project Description
- Scope of Work Provided
- Owner of Project,
- Owner Address, City, State, ZIP Code

- Contractor Professional Name, Address,
   City, State, ZIP Code, Phone Number
- Job Location
- Date Issued
- Dollar Value of Permit
- Construction Value of Project

The value in examining permits is that they offer up-to-date records of actual construction activity undertaken in the area. In order to isolate only commercial construction projects as the focus of analysis, public sector and residential permit records, where identified, were excluded.

Based on the permit type description (such as building, electrical, plumbing), permits were categorized according to two types of level of work performed: prime contractor and subcontractor. The construction value of the project/permit was not consistently available. Therefore, the utilization of commercial construction permits presented in this chapter examined the utilization of construction values (where dollars were available) by business ownership classification.

### MARKET AREA METHODOLOGY

A United States county is the geographical unit of measure selected for determining market area. Counties are geographical units based on the following considerations: 1) the courts have accepted counties as a standard geographical unit of analysis in conducting equal employment opportunity and disparity analyses; 2) county boundaries are externally determined and thus free from any researcher bias resulting from any arbitrary determinations of geographical units of analysis; and 3) the U.S. Census and other federal and state data are routinely collected and reported by county.

The market area for the Study was determined to be cities and counties in the Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area (MSA) plus the City of Baltimore, MD, and the following Maryland Counties: Anne Arundel, Baltimore, Carroll, and Howard The private sector analysis also presents private sector disparities results based on the U.S. Census, 2012 Survey of Business Owners data for the State of Maryland and Washington-Arlington-Alexandria, DC-VA-MD-WV MSA. **Appendix N, Private Sector Disparities** presents results for the Baltimore-Columbia-Towson, MD metro area, Silver Spring-Frederick-Rockville, MD metro area, and District of Columbia.

The analysis of race, ethnicity, and gender effects on self-employment rates and earnings results was based on Public Use Microdata Samples (PUMS) data derived from the 2014 American Community Survey (ACS) for the Washington, DC Combined Metropolitan Statistical Area (CMSA).



#### BUSINESS OWNERSHIP CLASSIFICATION AND PROCUREMENT CATEGORY

In **Chapter 4**, 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 analysis for business ownership classification. Since the permits data did not contain the contractor's race, ethnic, or gender information, MGT assigned business ownership classification using various vendor lists obtained from trade associations and certification agencies in order to conduct a vendor match procedure. This vendor match procedure allowed MGT to assign business ownership classification to firms presented in the permit data. In order to achieve the greatest number of potential match combinations, in addition to linking the various lists to the permits data, a manual match also was conducted. Firms identified as nonminority male and firms for which there was no business ownership classification were considered to be non-M/WBE firms and counted as non-M/WBE firms in the analysis conducted for this Study.

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

## 3. PRIVATE SECTOR UTILIZATION ANALYSIS, COMMERCIAL CONSTRUCTION PERMITS

### PRIME CONTRACTOR LEVEL OF WORK

The following section presents results from the analysis of the utilization of M/WBE and non-M/WBE firms in the private sector commercial construction market. The utilization of M/WBE and non-M/WBE firms for commercial construction permits data based on prime contractor and subcontractor level of work are presented in **Figure 6A** and **Figure 6B**, respectively.

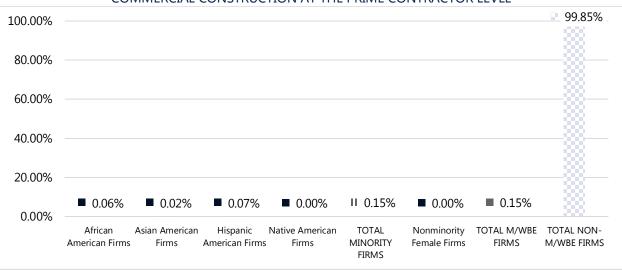
Based on the permit construction value of prime contractor level work, a total of \$86.3 million<sup>140</sup> were analyzed. **Figure 6A** shows between July 1, 2009, and June 30, 2014, M/WBE firms, as a whole, received approximately 0.15 percent or \$133,000. Among M/WBE firms, utilization was higher with Hispanic American firms (0.07%) followed by African American firms (0.06%).

<sup>&</sup>lt;sup>140</sup> There were gaps in the data which included permits with no construction value dollars associated. Therefore, the analyses were based on identified commercial permits with construction value dollars.



\_

## FIGURE 6A UTILIZATION ANALYSIS OF FIRMS COMMERCIAL CONSTRUCTION AT THE PRIME CONTRACTOR LEVEL



Source: MGT developed a Master Commercial Private Sector Database based on commercial construction permitting data issued by Prince George's County between July 1, 2009, and June 30, 2014.



Based on the permit construction value of subcontractor level work, close to \$53 million<sup>141</sup> were analyzed. **Figure 6B** shows M/WBE firms, as a whole, received 2.9 percent or \$1.6 million. Among M/WBE firms, utilization was higher with Asian American firms (2.2%) followed by African Americans (0.6%).

COMMERCIAL CONSTRUCTION AT THE SUBCONTRACTOR LEVEL 97.07% 100.00% 80.00% 60.00% 40.00% 20.00% 11 2.93% 2.93% 2.24% 0.62% 0.07% 0.00% 0.00% 11111 0.00% African Asian American Hispanic Native American TOTAL Nonminority TOTAL M/WBE TOTAL NON-MINORITY M/WBE FIRMS American Firms Firms American Firms Firms Female Firms FIRMS **FIRMS** 

FIGURE 6B

UTILIZATION ANALYSIS OF FIRMS

COMMERCIAL CONSTRUCTION AT THE SUBCONTRACTOR LEVEL

Source: MGT developed a Master Commercial Private Sector Database based on commercial construction permitting data issued by Prince George's County between July 1, 2009, and June 30, 2014.

### 4. NEXUS BETWEEN COMMERICAL AND PUBLIC CONSTRUCTION

MGT utilized two data sets to compare the utilization of firms. The first data set contained a listing of permits issued to contractors. The second data set contained firms utilized on WSSC public sector construction projects from July 1, 2009, to June 30, 2014.

The goal of this analysis was to examine public sector and private sector contracting patterns for construction. In doing so, MGT compared the public sector utilization of firms in WSSC-issued data with private sector utilization of such firms as reflected in the private commercial permit data. The general questions to be answered regarding the permitting analysis included the following:

- ▶ To what extent do utilized prime contractors which appear in the WSSC data also appear in the permitting data for commercial construction projects?
- ▶ What is the utilization of subcontractors which are in both the WSSC data and the permitting data for commercial construction projects?

<sup>&</sup>lt;sup>141</sup> There were gaps in the data which included permits with no construction value dollars associated. Therefore, the analyses were based on identified commercial permits with construction value dollars.



-

When prime contractors utilized on WSSC public construction projects were cross referenced with the commercial construction projects, a total of four M/WBE firms were utilized on commercial construction projects. Out of the four M/WBE firms, two firms were utilized on commercial construction projects at the prime level. Out of the four M/WBE firms, two firms were utilized on commercial construction projects at the subcontractor level.

When subcontractors utilized on WSSC public construction projects were cross referenced with the commercial construction projects, a total of three M/WBE firms were utilized on commercial construction projects. Out of the three M/WBE firms, one firm was utilized on commercial construction projects at the prime level and two firms were utilized on commercial construction projects at the subcontractor level.

## 5. PRIVATE SECTOR DISPARITIES, U.S. CENSUS BUREAU, 2012 SURVEY OF BUSINESS OWNERS DATA

In addition to commercial permits<sup>142</sup> and PUMS data derived from the 2014 ACS<sup>143</sup>, MGT obtained and analyzed U.S. Census Bureau's 2012 Survey of Business Owners (SBO) to measure private sector disparities. SBO provides data on economic and demographic characteristics for businesses and business owners by geography (such as states, metropolitan areas), industries defined by North American Industry Classification System (NAICS) codes, firm receipts (firm sales), <sup>144</sup> firm employment size, and business ownership classification. The survey has been administered every five years since 1972 as part of the economic census. The most recent data, 2012 SBO, was released in 2016 and used in the Study. The SBO gathers data on firms with paid employees, including workers on the payroll (employer firms) and firms without paid employees, including sole proprietors and partners of unincorporated businesses that do not have any other employees on the payroll (nonemployer firms). All firms represent a compilation of employer firms and nonemployer firms.

The following presents measures of private sector disparities based on 2012 SBO data. MGT calculated private sector disparity indices to examine whether minority- and women-owned firms received a proportional share of firm sales based on the availability of minority- and women-owned firms. Disparity indices were examined for all firms and employer firms. All firms were examined since it is plausible nonemployer firms can provide services at the subcontractor/subconsultant level, as well hire independent contractors to increase capacity. The results are presented by NAICS codes at the two-digit level for the State of Maryland and Washington-Arlington-Alexandria, DC-VA-MD-WV MSA marketplaces.

<sup>&</sup>lt;sup>144</sup> Sales includes total shipments, receipts, revenue, or business done by the firm.



WASHINGTON SUBURBAN SANITARY COMMISSION Final Report | July 28, 2016

<sup>&</sup>lt;sup>142</sup> **Chapter 6**, **Section 3**, **Private Sector Utilization Analysis**, **Commercial Construction Permits** presents analysis of utilization of M/WBE and non-M/WBE firms in private sector commercial construction market.

<sup>&</sup>lt;sup>143</sup> Chapter 6, Section 6, Analysis of Race, Ethnicity, and Gender Effects on Self-Employment Rates and Earnings presents analysis on the effects of race and gender, along with other individual economic and demographic characters, on individuals' participation in the private sector as self-employed business owners.

The following NAICS codes were analyzed and thus presented in the following section:

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

The results based on the State of Maryland are presented first followed by the Washington-Arlington-Alexandria, DC-VA-MD-WV MSA.

#### STATE OF MARYLAND MARKETPLACE

**Tables 6-1** through **6-5** shows the measures of private sector disparities based on U.S. Census, 2012 SBO data for the population of available firms in the State of Maryland by M/WBE<sup>145</sup> for construction; wholesale trade; professional, scientific, and technical services; administrative and support and waste management and remediation services; and other services (except public administration).

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

### NAICS CODE 23: CONSTRUCTION, STATE MARKETPLACE

**Table 6-1** shows the availability, sales, and disparity results for construction. The results were derived from those firms which provide construction or construction-related services based on the NAICS Code 23.

There were a total of 53,715 construction firms (all firms <sup>146</sup>) in the State of Maryland in 2012, of which 34.6 percent were owned by minorities and 12.2 percent by nonminority women.

- African American firms (disparity index of 15.64) were substantially underutilized, accounting for 12.5 percent of all firms and close to 2 percent of sales.
- Native American firms (disparity index of 35.63) were substantially underutilized, accounting for 0.8 percent of all firms and 0.3 percent of sales.

<sup>&</sup>lt;sup>146</sup> All firms, a compilation of employer firms and nonemployer firms, were examined since nonemployer firms can provide services at the subcontractor/subconsultant level, as well hire independent contractors to increase capacity.



<sup>&</sup>lt;sup>145</sup> The following tables present results for M/WBE groups, such as firms owned by African Americans, Asian Americans, Hispanic Americans, Native Americans, and nonminority women.

- Asian American firms (disparity index of 31.80) were substantially underutilized, accounting for 3.7 percent of all firms and 1.2 percent of sales.
- ▶ Hispanic American firms (disparity index of 15.75) were substantially underutilized, accounting for 17.7 percent of all firms and 2.8 percent of sales.
- Nonminority women firms (disparity index of 88.57) were underutilized, accounting for 12.2 percent of all firms and 10.8 percent of sales.

There were a total of 14,038 construction employer firms <sup>147</sup> in the State of Maryland in 2012, of which 11.9 percent were owned by minorities and 18.5 percent by nonminority women firms.

- African American firms (disparity index of 56.51) were substantially underutilized, accounting for 2.9 percent of employer firms and 1.7 percent of sales.
- Asian American firms (disparity index of 45.19) were substantially underutilized, accounting for 2.3 percent of employer firms and 1.1 percent of sales.
- ▶ Hispanic American firms (disparity index of 32.03) were substantially underutilized, accounting for 6.3 percent of employer firms and 2 percent of sales.
- Nonminority women firms (disparity index of 57.89) were substantially underutilized, accounting for 18.5 percent of employer firms and 10.7 percent of sales.
- Native American firms (disparity index of 105.51 were overutilized, accounting for 0.3 percent of employer firms and 0.3 percent of sales.

<sup>&</sup>lt;sup>147</sup> Employer firms include firms with payroll at any time during 2012.



## TABLE 6-1 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 23, CONSTRUCTION U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,

STATE OF MARYLAND MARKETPLACE

BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)
All Firms	53,715	\$41,126,852	14,038	\$39,079,928
African American Firms	6,685	\$800,691	413	\$649,707
Asian American Firms <sup>1</sup>	1,961	\$477,440	328	\$412,650
Hispanic American Firms	9,482	\$1,143,228	887	\$791,032
Native American Firms <sup>2</sup>	436	\$118,943	37	\$108,674
Nonminority Women Firms <sup>3</sup>	6,527	\$4,426,207	2,600	\$4,190,184
	PERCEN	TAGE OF MARKETPLAC	CE	
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	12.45%	1.95%	2.94%	1.66%
Asian American Firms <sup>1</sup>	3.65%	1.16%	2.34%	1.06%
Hispanic American Firms	17.65%	2.78%	6.32%	2.02%
Native American Firms <sup>2</sup>	0.81%	0.29%	0.26%	0.28%
Nonminority Women Firms <sup>3</sup>	12.15%	10.76%	18.52%	10.72%
	Ε	DISPARITY INDEX		
		ALL FIRMS		EMPLOYER FIRMS
All Firms		100.00		100.00
African American Firms		15.64		56.51
Asian American Firms <sup>1</sup>		31.80		45.19
Hispanic American Firms		15.75		32.03
Native American Firms <sup>2</sup>		35.63		105.51
Nonminority Women Firms <sup>3</sup>		88.57		57.89

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

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

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

### NAICS CODE 42: WHOLESALE TRADE, STATE LEVEL

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

There were a total of 10,203 wholesale trade firms (all firms) in the State of Maryland in 2012, of which 22.2 percent were owned by minorities and 22.7 percent by nonminority women.

African American firms (disparity index of 5.59) were substantially underutilized, accounting for 11.9 percent of all firms and 0.7 percent of sales.



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

- Asian American firms (disparity index of 26.20) were substantially underutilized, accounting for 7 percent of all firms and 1.8 percent of sales.
- ▶ Hispanic American firms (disparity index of 19.32) were substantially underutilized, accounting for 2.9 percent of all firms and 0.6 percent of sales.
- Nonminority women firms (disparity index of 29.31) were substantially underutilized, accounting for 22.7 percent of all firms and 6.7 percent of sales.
- ▶ Data for Native American all firms were withheld; therefore, private sector disparities were not conducted.

There were a total of 4,787 wholesale trade employer firms in the State of Maryland in 2012, of which 10.9 percent were owned by minorities and close to 21 percent by nonminority women.

- African American firms (disparity index of 25.45) were substantially underutilized, accounting for 2.5 percent of employer firms and 0.6 percent of sales.
- Asian American firms (disparity index of 26.26) were substantially underutilized, accounting for 6.9 percent of employer firms and 1.8 percent of sales.
- ▶ Hispanic American firms (disparity index 35.70) were substantially underutilized, accounting for 1.5 percent of employer firms and 0.5 percent of sales.
- Nonminority women firms (disparity index of 31.54) were substantially underutilized, accounting for close to 21 percent of employer firms and 6.6 percent of sales.
- ▶ Data for Native American employer firms were withheld; therefore, private sector disparities were not conducted.



# TABLE 6-2 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 42, WHOLESALE TRADE U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,

STATE OF MARYLAND MARKETPLACE

BUSINESS OWNERSHIP CLASSIFICATION	ALL FIRMS (#)	ALL FIRMS, SALES (\$1,000)	EMPLOYER FIRMS (#)	EMPLOYER FIRMS SALES (\$1,000)
All Firms	10,203	\$84,858,921	4,787	\$84,419,782
African American Firms	1,210	\$562,702	119	\$533,992
Asian American Firms <sup>1</sup>	717	\$1,562,286	329	\$1,523,544
Hispanic American Firms	294	\$472,349	72	\$453,264
Native American Firms <sup>2</sup>	47	S	1	S
Nonminority Women Firms <sup>3</sup>	2,317	\$5,649,109	1,005	\$5,589,977
	PERCEN <sup>®</sup>	TAGE OF MARKETPLAC	CE	
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	11.86%	0.66%	2.49%	0.63%
Asian American Firms <sup>1</sup>	7.03%	1.84%	6.87%	1.80%
Hispanic American Firms	2.88%	0.56%	1.50%	0.54%
Native American Firms <sup>2</sup>	0.46%	S	0.02%	S
Nonminority Women Firms <sup>3</sup>	22.71%	6.66%	20.99%	6.62%
	D:	ISPARITY INDICES		
		ALL FIRMS		EMPLOYER FIRMS
All Firms		100.00		100.00
African American Firms		5.59		25.45
Asian American Firms <sup>1</sup>		26.20		26.26
Hispanic American Firms		19.32 35.70		35.70
Native American Firms <sup>2</sup>		S		S
Nonminority Women Firms <sup>3</sup>		29.31		31.54

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

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

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

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

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

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

There were a total of 88,897 professional, scientific, and technical services firms (all firms) in the State of Maryland in 2012, of which 29.8 percent were owned by minorities and close to 30 percent by nonminority women.

- African American firms (disparity index of 19.44) were substantially underutilized, accounting for 17.4 percent of all firms and 3.4 percent of sales.
- Asian American firms (disparity index of 71.9) were substantially underutilized, accounting for close to 8 percent of all firms and 5.7 percent of sales.
- ▶ Hispanic American firms (disparity index of 42.99) were substantially underutilized, accounting for 3.9 percent of all firms and 1.7 percent of sales.
- Native American firms (disparity index of 28.29) were substantially underutilized, accounting for 0.6 percent of all firms and 0.2 percent of sales.
- Nonminority women firms (disparity index of 30.79) were substantially underutilized, accounting for close to 30 percent of all firms and 9.2 percent of sales.

There were a total of 17,841 professional, scientific, and technical services employer firms in the State of Maryland in 2012, of which 18.6 percent were owned by minorities and 23.9 percent by nonminority women.

- African American firms (disparity index of 43.08) were substantially underutilized, accounting for 6.7 percent of employer firms and 2.9 percent of sales.
- Asian American firms (disparity index of 60.50) were substantially underutilized, accounting for 9.3 percent of employer firms and 5.6 percent of sales,
- ▶ Hispanic American firms (disparity index 68.62) were substantially underutilized, accounting for 2.4 percent of employer firms and 1.6 percent of sales.
- Native American firms (disparity index of 51.05) were substantially underutilized, accounting for 0.3 percent of employer firms and 0.1 percent of sales.
- Nonminority women firms (disparity index of 33.93) were substantially underutilized, accounting for 23.9 percent of employer firms and 8.1 percent of sales.



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

STATE OF MARYLAND MARKETPLACE

ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS
(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)
88,897	\$55,140,546	17,841	\$51,409,864
15,422	\$1,859,410	1,194	\$1,482,359
7,073	\$3,152,343	1,658	\$2,890,374
3,506	\$934,957	422	\$834,481
492	\$86,331	50	\$73,548
26,623	\$5,085,184	4,264	\$4,168,398
PERCEN	TAGE OF MARKETPLAG	CE	
100.00%	100.00%	100.00%	100.00%
17.35%	3.37%	6.69%	2.88%
7.96%	5.72%	9.29%	5.62%
3.94%	1.70%	2.37%	1.62%
0.55%	0.16%	0.28%	0.14%
29.95%	9.22%	23.90%	8.11%
D	ISPARITY INDICES		
	ALL FIRMS		EMPLOYER FIRMS
	100.00		100.00
	19.44		43.08
	71.85		60.50
	42.99		68.62
	28.29 51.0		51.05
	30.79		33.93
	(#) 88,897 15,422 7,073 3,506 492 26,623 PERCEN 100.00% 17.35% 7.96% 3.94% 0.55% 29.95%	(#) (\$1,000)  88,897 \$55,140,546  15,422 \$1,859,410  7,073 \$3,152,343  3,506 \$934,957  492 \$86,331  26,623 \$5,085,184  PERCENTAGE OF MARKETPLAGE  100.00% 100.00%  17.35% 3.37%  7.96% 5.72%  3.94% 1.70%  0.55% 0.16%  29.95% 9.22%  DISPARITY INDICES  ALL FIRMS  100.00  19.44  71.85  42.99  28.29	(#) (\$1,000) FIRMS (#)  88,897 \$55,140,546 17,841  15,422 \$1,859,410 1,194  7,073 \$3,152,343 1,658  3,506 \$934,957 422  492 \$86,331 50  26,623 \$5,085,184 4,264  PERCENTAGE OF MARKETPLACE  100.00% 100.00% 100.00%  17.35% 3.37% 6.69%  7.96% 5.72% 9.29%  3.94% 1.70% 2.37%  0.55% 0.16% 0.28%  29.95% 9.22% 23.90%  DISPARITY INDICES  ALL FIRMS  100.00  19.44  71.85  42.99  28.29

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

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

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

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

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

There were a total of 44,483 administrative and support and waste management and remediation services firms (all firms) in the State of Maryland in 2012, of which 49.2 percent were owned by minorities and 31.4 percent by nonminority women.



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

- African American firms (disparity index of 22.74) were substantially underutilized, accounting for 27.1 percent of all firms and 6.2 percent of sales.
- Asian American firms (disparity index of 58.96) were substantially underutilized, accounting for 4.4 percent of all firms and 2.6 percent of sales.
- ▶ Hispanic American firms (disparity index of 17.65) were substantially underutilized, accounting for 16.85 percent of all firms and close to 3.0 percent of sales.
- Native American firms (disparity index of 63.80) were substantially underutilized, accounting for 0.9 percent of all firms and 0.6 percent of sales.
- Nonminority women firms (disparity index of 49.64) were substantially underutilized, accounting for 31.4 percent of all firms and 15.6 percent of sales.

There were a total of 6,998 administrative and support and waste management and remediation services employer firms in the State of Maryland in 2012, of which 20.8 percent were owned by minorities and 23.6 percent by nonminority women.

- African American firms (disparity index 57.00) were substantially underutilized, accounting for 9.6 percent of employer firms and 5.5 percent of sales.
- Asian American firms (disparity index of 60.15) were substantially underutilized, accounting for 4.1 percent of employer firms and 2.5 percent of sales.
- Hispanic American firms (disparity index of 36.82) were substantially underutilized, accounting for 6.4 percent of employer firms and 2.4 percent of sales.
- Native American firms (disparity index of 84.36) were overutilized, accounting for 0.7 percent of employer firms and 0.6 percent of sales.
- Nonminority women firms (disparity index of 63.12) were substantially underutilized, accounting for 23.6 percent of employer firms and 14.9 percent of sales.



## TABLE 6-4 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 56

## ADMINISTRATIVE AND SUPPORT / WASTE MANAGEMENT AND REMEDIATION SERVICES U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,

#### STATE OF MARYLAND MARKETPLACE

BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)
All Firms	44,483	\$14,930,887	6,998	\$14,154,161
African American Firms	12,050	\$919,728	669	\$771,242
Asian American Firms <sup>1</sup>	1,937	\$383,313	287	\$349,190
Hispanic American Firms	7,495	\$443,962	449	\$334,368
Native American Firms <sup>2</sup>	394	\$84,369	47	\$80,194
Nonminority Women Firms <sup>3</sup>	13,967	\$2,327,334	1,649	\$2,105,159
	PERCEN <sup>®</sup>	TAGE OF MARKETPLAC	CE	
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	27.09%	6.16%	9.56%	5.45%
Asian American Firms <sup>1</sup>	4.35%	2.57%	4.10%	2.47%
Hispanic American Firms	16.85%	2.97%	6.42%	2.36%
Native American Firms <sup>2</sup>	0.89%	0.57%	0.67%	0.57%
Nonminority Women Firms <sup>3</sup>	31.40%	15.59%	23.56%	14.87%
		DISPARITY INDEX		
		ALL FIRMS		EMPLOYER FIRMS
All Firms		100.00		100.00
African American Firms		22.74		57.00
Asian American Firms <sup>1</sup>		58.96		60.15
Hispanic American Firms		17.65		36.82
Native American Firms <sup>2</sup>		63.80		84.36
Nonminority Women Firms <sup>3</sup>		49.64		63.12

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

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

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

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

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

There were a total of 62,180 other services (except Public Administration) firms (all firms) in the State of Maryland in 2012, of which 56.7 percent were owned by minorities and close to 25 percent by nonminority women.

- African American firms (disparity index of 21.37) were substantially underutilized, accounting for close to 35 percent of all firms and 7.5 percent of sales.
- Asian American (disparity index of 75.42) firms were substantially underutilized, accounting for 13.2 percent of all firms and close to 10 percent of sales.
- ▶ Hispanic American firms (disparity index of 39.48) were substantially underutilized, accounting for 7.6 percent of all firms and 3 percent of sales.
- Native American firms (disparity index of 18.45) were substantially underutilized, accounting for 0.9 percent of all firms and 0.2 percent of sales.
- Nonminority women firms (disparity index of 72.05) were substantially underutilized, accounting for close to 25 percent of all firms and close to 18 percent of sales

There were a total of 7,088 administrative and support and waste management and remediation services employer firms in the State of Maryland in 2012, of which 27.4 percent were owned by minorities and 28.2 percent by nonminority women.

- African American firms (disparity index 50.94) were substantially underutilized, accounting for 5.4 percent of employer firms and 2.8 percent of sales.
- Asian American firms (disparity index of 46.06) were substantially underutilized, accounting for 18.6 percent of employer firms and 8.6 percent of sales.
- ▶ Hispanic American firms (disparity index of 52.53) were substantially underutilized, accounting for 3.4 percent of employer firms and 1.8 percent of sales.
- Nonminority women firms (disparity index of 57.30) were substantially underutilized, accounting for 28.2 percent of employer firms and 16.2 percent of sales.
- Data for Native American employer firms were withheld; therefore, private sector disparities were not conducted.



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

STATE OF MARYLAND MARKETPLACE

ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS
(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)
62,180	\$6,633,976	7,088	\$5,270,490
21,736	\$495,562	384	\$145,453
8,226	\$661,873	1,316	\$450,746
4,749	\$200,055	240	\$93,748
538	\$10,590	4	S
15,523	\$1,193,284	2,001	\$852,598
PERCEN <sup>-</sup>	TAGE OF MARKETPLAC	CE	
100.00%	100.00%	100.00%	100.00%
34.96%	7.47%	5.42%	2.76%
13.23%	9.98%	18.57%	8.55%
7.64%	3.02%	3.39%	1.78%
0.87%	0.16%	0.06%	S
24.96%	17.99%	28.23%	16.18%
C	ISPARITY INDEX		
	ALL FIRMS		EMPLOYER FIRMS
	100.00		100.00
	21.37		50.94
	75.42		46.06
	39.48		52.53
	18.45		S
	72.05		57.30
	(#) 62,180 21,736 8,226 4,749 538 15,523 PERCENT 100.00% 34.96% 13.23% 7.64% 0.87% 24.96%	(#) (\$1,000) 62,180 \$6,633,976 21,736 \$495,562 8,226 \$661,873 4,749 \$200,055 538 \$10,590 15,523 \$1,193,284 PERCENTAGE OF MARKETPLAGE 100.00% 100.00% 34.96% 7.47% 13.23% 9.98% 7.64% 3.02% 0.87% 0.16% 24.96% 17.99% DISPARITY INDEX ALL FIRMS 100.00 21.37 75.42 39.48 18.45	(#)         (\$1,000)         FIRMS (#)           62,180         \$6,633,976         7,088           21,736         \$495,562         384           8,226         \$661,873         1,316           4,749         \$200,055         240           538         \$10,590         4           15,523         \$1,193,284         2,001           PERCENTAGE OF MARKETPLACE           100.00%         100.00%         100.00%           34.96%         7.47%         5.42%           13.23%         9.98%         18.57%           7.64%         3.02%         3.39%           0.87%         0.16%         0.06%           24.96%         17.99%         28.23%           DISPARITY INDEX           ALL FIRMS           100.00         21.37           75.42         39.48           18.45

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

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

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

## WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV METRO AREA MARKETPLACE<sup>148</sup>

**Tables 6-6** through **6-10** show the measures of private sector disparities based on U.S. Census, 2012 SBO data for the population of available firms in the Washington-Arlington-Alexandria, DC-VA-MD-WV metro area marketplace by race, ethnicity, and gender for construction; wholesale trade; professional, scientific,

<sup>&</sup>lt;sup>148</sup> Based on all sectors (NAICS codes 00), there was a total of 567,153 firms (all firms) in the Washington-Arlington-Alexandria, DC-VA-MD-WV metro area marketplace compared to 531,953 for the State of Maryland marketplace. Therefore, the following results by NAICS code may present data (such as the number of firms, firm sales) higher than the State of Maryland marketplace.



WASHINGTON SUBURBAN SANITARY COMMISSION Final Report | July 28, 2016

<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

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

and technical services; administrative and support and waste management and remediation services; and other services (except public administration).

Based on the analysis of the U.S. Census, 2012 SBO data, overall there remains a significant gap between the market share of M/WBE firms and their share of the Washington-Arlington-Alexandria, DC-VA-MD-WV metro area marketplace business population, where data were available.

### NAICS CODE 23: CONSTRUCTION, METRO AREA MARKETPLACE

**Table 6-6** shows the availability, sales, and disparity results for construction (NAICS Code 23). There were a total of 54,854 construction firms (all firms<sup>149</sup>) in the Washington-Arlington-Alexandria, DC-VA-MD-WV metro area marketplace in 2012, of which 51.7 percent were owned by minorities.

- African American firms (disparity index 18.57) were substantially underutilized, accounting for 11.2 percent of all firms and 2.1 percent of sales.
- Asian American firms (disparity index 31.09) were substantially underutilized, accounting for 6.8 percent of all firms and 2.1 percent of sales.
- ▶ Hispanic American firms (disparity index 15.77) were substantially underutilized, accounting for 32.8 percent of all firms and 5.2 percent of sales.
- Native American firms (disparity index 37.09) were substantially underutilized, accounting for 0.9 percent of all firms and 0.3 percent of sales.
- ▶ Data for nonminority women all firms were withheld; therefore, private sector disparities were not conducted.

There were a total of 11,679 construction employer firms<sup>150</sup> in the Washington-Arlington-Alexandria, DC-VA-MD-WV metro area marketplace in 2012, of which 24.4 percent were owned by minorities.

- African American firms (disparity index 40.54) were substantially underutilized, accounting for 4.5 percent of employer firms and 1.8 percent of sales.
- Asian American firms (disparity index 33.55) were substantially underutilized, accounting for 5.7 percent of employer firms and 1.9 percent of sales.
- ▶ Hispanic American firms (disparity index 29.09) were substantially underutilized, accounting for 13.3 percent of employer firms and 3.9 percent of sales.
- Native American firms (disparity index 34.73) were substantially underutilized, accounting for 0.9 percent of employer firms and 0.3 percent of sales.

<sup>&</sup>lt;sup>150</sup> Employer firms include firms with payroll at any time during 2012.



<sup>&</sup>lt;sup>149</sup> All firms include firms with and without payroll at any time during 2012.

 Data for nonminority women employer firms were withheld; therefore, private sector disparities were not conducted.

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

### WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MARKETPLACE

BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES EMPLOYER		EMPLOYER FIRMS
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)
All Firms	54,854	\$45,973,813	11,679	\$43,715,742
African American Firms	6,166	\$959,658	527	\$799,791
Asian American Firms <sup>1</sup>	3,703	\$965,003	668	\$838,856
Hispanic American Firms	17,984	\$2,377,593	1,548	\$1,685,646
Native American Firms <sup>2</sup>	501	\$155,745	110	\$142,978
Nonminority Women Firms <sup>3</sup>	N/A	N/A	N/A	N/A
	PERCEN'	TAGE OF MARKETPLAC	CE	
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	11.24%	2.09%	4.51%	1.83%
Asian American Firms <sup>1</sup>	6.75%	2.10%	5.72%	1.92%
Hispanic American Firms	32.79%	5.17%	13.25%	3.86%
Native American Firms <sup>2</sup>	0.91%	0.34%	0.94%	0.33%
Nonminority Women Firms <sup>3</sup>	N/A	N/A	N/A	N/A
		DISPARITY INDEX		
		ALL FIRMS		EMPLOYER FIRMS
All Firms		100.00		100.00
African American Firms		18.57		40.54
Asian American Firms <sup>1</sup>		31.09		33.55
Hispanic American Firms		15.77		29.09
Native American Firms <sup>2</sup>		37.09		34.73
Nonminority Women Firms <sup>3</sup>		N/A		N/A

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

N/A denotes data on business ownership classification group was not available.

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

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

#### NAICS CODE 42: WHOLESALE TRADE, METRO AREA MARKETPLACE

**Table 6-7** shows the availability, sales, and disparity results for wholesale trade (NAICS Code 42). There were a total of 7,924 wholesale trade firms (all firms) in the Washington-Arlington-Alexandria, DC-VA-MD-WV metro area marketplace in 2012, of which 33.1 percent were owned by minorities.

African American firms (disparity index of 18.54) were substantially underutilized, accounting for 13.3 percent of all firms and 2.5 percent of sales.



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

 $<sup>^{\</sup>rm 2}\,\text{Native}$  American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

- Asian American firms (disparity index of 13.41) were substantially underutilized, accounting for 13.7 percent of all firms and 1.8 percent of sales.
- ▶ Hispanic American firms (disparity index of 29.90) were substantially underutilized, accounting for 5.5 percent of all firms and 1.7 percent of sales.
- Data for Native American and nonminority women all firms were withheld; therefore, private sector disparities were not conducted.

There were a total of 3,571 wholesale trade employer firms in the Washington-Arlington-Alexandria, DC-VA-MD-WV metro area marketplace in 2012, of which 18.8 percent were owned by minorities.

- African American firms (disparity index 71.52) were substantially underutilized, accounting for 3.4 percent of employer firms and 2.4 percent of sales.
- Asian American firms (disparity index of 13.99) were substantially underutilized, accounting for 12.6 percent of employer firms and 1.8 percent of sales.
- ▶ Hispanic American firms (disparity index of 64.40) were substantially underutilized, accounting for 2.6 percent of employer firms and 1.6 percent of sales.
- ▶ Data for Native American and nonminority women employer firms were withheld; therefore, private sector disparities were not conducted.



## TABLE 6-7 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 42, WHOLESALE TRADE

### U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,

### WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MARKETPLACE

BUSINESS OWNERSHIP CLASSIFICATION	ALL FIRMS (#)	ALL FIRMS, SALES (\$1,000)	EMPLOYER FIRMS (#)	EMPLOYER FIRMS SALES (\$1,000)
All Firms	7,924	\$75,386,914	3,571	\$74,752,330
African American Firms	1,055	\$1,861,293	122	\$1,826,425
Asian American Firms <sup>1</sup>	1,085	\$1,384,536	449	\$1,315,073
Hispanic American Firms	439	\$1,248,951	91	\$1,226,744
Native American Firms <sup>2</sup>	41	S	8	S
Nonminority Women Firms <sup>3</sup>	N/A	N/A	N/A	N/A
	PERCEN <sup>®</sup>	TAGE OF MARKETPLAC	CE	
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	13.31%	2.47%	3.42%	2.44%
Asian American Firms <sup>1</sup>	13.69%	1.84%	12.57%	1.76%
Hispanic American Firms	5.54%	1.66%	2.55%	1.64%
Native American Firms <sup>2</sup>	0.52%	S	0.22%	S
Nonminority Women Firms <sup>3</sup>	N/A	N/A	N/A	N/A
		DISPARITY INDEX		
		ALL FIRMS		EMPLOYER FIRMS
All Firms		100.00		100.00
African American Firms		18.54		71.52
Asian American Firms <sup>1</sup>		13.41		13.99
Hispanic American Firms		29.90		64.40
Native American Firms <sup>2</sup>		S		S
Nonminority Women Firms <sup>3</sup>		N/A		N/A

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

N/A denotes data on business ownership classification group was not available.

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

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

## NAICS CODE 54: PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES, METRO AREA MARKETPLACE

**Table 6-8** shows the availability, sales, and disparity results for professional, scientific, and technical services (NAICS Code 54). There were a total of 123,327 professional, scientific and technical services firms (all firms) in the Washington-Arlington-Alexandria, DC-VA-MD-WV metro area marketplace in 2012, of which 32 percent were owned by minorities.

African American firms (disparity index of 16.94) were substantially underutilized, accounting for 14.2 percent of all firms and 2.4 percent of sales.



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

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

- Native American firms (disparity index of 29.63) were substantially underutilized, accounting for 0.6 percent of all firms and 0.2 percent of sales.
- Asian American firms (disparity index of 56.80) were substantially underutilized, accounting for 11.8 percent of all firms and 6.7 percent of sales.
- Hispanic American firms (disparity index of 32.42) were substantially underutilized, accounting for
   5.4 percent of all firms and 1.8 percent of sales.
- Data for nonminority women all firms were withheld; therefore, private sector disparities were not conducted.

There were a total of 26,176 professional, scientific and technical services employer firms in the Washington-Arlington-Alexandria, DC-VA-MD-WV metro area marketplace in 2012, of which 26.2 percent were owned by minorities.

- African American firms (disparity index of 33.88) were substantially underutilized, accounting for 6.3 percent of employer firms and 2.1 percent of sales.
- Asian American firms (disparity index of 40.56) were substantially underutilized, accounting for 16.4 percent of employer firms and 6.7 percent of sales.
- ▶ Hispanic American firms (disparity index of 52.95) were substantially underutilized, accounting for 3.1 percent of employer firms and 1.7 percent of sales.
- Native American firms (disparity index of 43.55) were substantially underutilized, accounting for 0.4 percent of employer firms and 0.2 percent of sales.
- Data for nonminority women employer firms withheld; therefore, private sector disparities were not conducted.



## TABLE 6-8 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 54, PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,

WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MARKETPLACE

BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)
All Firms	123,327	\$135,932,663	26,176	\$130,602,522
African American Firms	17,458	\$3,258,974	1,654	\$2,796,161
Asian American Firms <sup>1</sup>	14,606	\$9,143,894	4,296	\$8,693,919
Hispanic American Firms	6,677	\$2,385,861	819	\$2,163,513
Native American Firms <sup>2</sup>	723	\$236,092	93	\$202,083
Nonminority Women Firms <sup>3</sup>	N/A	N/A	N/A	N/A
	PERCEN	TAGE OF MARKETPLA	CE	
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	14.16%	2.40%	6.32%	2.14%
Asian American Firms <sup>1</sup>	11.84%	6.73%	16.41%	6.66%
Hispanic American Firms	5.41%	1.76%	3.13%	1.66%
Native American Firms <sup>2</sup>	0.59%	0.17%	0.36%	0.15%
Nonminority Women Firms <sup>3</sup>	N/A	N/A	N/A	N/A
	[	DISPARITY INDEX		
		ALL FIRMS		EMPLOYER FIRMS
All Firms		100.00		100.00
African American Firms		16.94		33.88
Asian American Firms <sup>1</sup>		56.80 40.56		40.56
Hispanic American Firms		32.42		52.95
Native American Firms <sup>2</sup>		29.63		43.55
Nonminority Women Firms <sup>3</sup>		N/A		N/A

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

N/A denotes data on business ownership classification group was not available.

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

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

## NAICS CODE 56: ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT AND REMEDIATION SERVICES, METRO AREA MARKETPLACE

**Table 6-9** shows the availability, sales, and disparity results for administrative and support and waste management and remediation services (NAICS Code 56). There were a total 46,433 administrative and support and waste management and remediation services firms (all firms) in the Washington-Arlington-Alexandria, DC-VA-MD-WV metro area marketplace in 2012, of which close to 60 percent were owned by minorities.

African American firms (disparity index of 23.75) were substantially underutilized, accounting for 22.9 percent of all firms and 5.4 percent of sales.



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

- Asian American firms (disparity index of 38.81) were substantially underutilized, accounting for 7.8 percent of all firms and 3 percent of sales.
- ▶ Hispanic American firms (disparity index of 18.49) were substantially underutilized, accounting for 28.3 percent of all firms and 5.2 percent of sales.
- ▶ Data for Native American and nonminority women all firms were withheld; therefore, private sector disparities were not conducted.

There were a total of 7,403 administrative and support and waste management and remediation services employer firms in the Washington-Arlington-Alexandria, DC-VA-MD-WV metro area marketplace in 2012, of which 27.6 percent were owned by minorities.

- African American firms (disparity index of 50.63) were substantially underutilized, accounting for 9.9 percent of employer firms and 5 percent of sales.
- Asian American firms (disparity index of 46.55) were substantially underutilized, accounting for close to 6 percent of employer firms and 2.8 percent of sales.
- ▶ Hispanic American firms (disparity index of 39.84) were substantially underutilized, accounting for 11.3 percent of employer firms and 4.5 percent of sales.
- ▶ Data for Native American and nonminority women employer firms withheld; therefore, private sector disparities were not conducted.



## TABLE 6-9 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 56

## ADMINISTRATIVE AND SUPPORT / WASTE MANAGEMENT AND REMEDIATION SERVICES U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,

WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MARKETPLACE

BUSINESS OWNERSHIP	ALL FIRMS	FIRMS ALL FIRMS, SALES EMPLOYER		EMPLOYER FIRMS
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)
All Firms	46,433	46,433 \$22,859,686 7,403		\$21,993,223
African American Firms	10,623	\$1,242,009	735	\$1,105,561
Asian American Firms <sup>1</sup>	3,600	\$687,814	442	\$611,311
Hispanic American Firms	13,153	\$1,197,557	834	\$987,128
Native American Firms <sup>2</sup>	479	S	35	S
Nonminority Women Firms <sup>3</sup>	N/A	N/A	N/A	N/A
	PERCEN <sup>®</sup>	TAGE OF MARKETPLAC	CE	
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	22.88%	5.43%	9.93%	5.03%
Asian American Firms <sup>1</sup>	7.75%	3.01%	5.97%	2.78%
Hispanic American Firms	28.33%	5.24%	11.27%	4.49%
Native American Firms <sup>2</sup>	1.03%	S	0.47%	S
Nonminority Women Firms <sup>3</sup>	N/A	N/A	N/A	N/A
		DISPARITY INDEX		
		ALL FIRMS		EMPLOYER FIRMS
All Firms		100.00		100.00
African American Firms		23.75		50.63
Asian American Firms <sup>1</sup>		38.81		46.55
Hispanic American Firms		18.49		39.84
Native American Firms <sup>2</sup>		S		S
Nonminority Women Firms <sup>3</sup>		N/A		N/A

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

N/A denotes data on business ownership classification group was not available.

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

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

## NAICS CODE 81: OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION), METRO AREA MARKETPLACE

**Table 6-10** shows the availability, sales, and disparity results for NAICS Code, other services (except public administration). There were a total 61,853 other services (except public administration) firms (all firms) in the Washington-Arlington-Alexandria, DC-VA-MD-WV metro area marketplace in 2012, of which 64.3 percent were owned by minorities.



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

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

- African American firms (disparity index of 24.20) were substantially underutilized, accounting for 28.6 percent of all firms and 6.9 percent of sales.
- Asian American firms (disparity index of 73.37) were substantially underutilized, accounting for 21.9 percent of all firms and 16.1 percent of sales.
- ▶ Hispanic American firms (disparity index of 39.94) were substantially underutilized, accounting for 12.9 percent of all firms and 5.1 percent of sales.
- Data for Native American and nonminority women all firms were withheld; therefore, private sector disparities were not conducted.

There were a total of 6,736 other services (except public administration) employer firms in the Washington-Arlington-Alexandria, DC-VA-MD-WV metro area marketplace in 2012, of which 39.1 percent were owned by minorities.

- African American firms (disparity index of 52.47) were substantially underutilized, accounting for 5.8 percent of employer firms and 3 percent of sales.
- Asian American firms (disparity index of 47.67) were substantially underutilized, accounting for 27.7 percent of employer firms and 13.2 percent of sales.
- Hispanic American firms (disparity index of 52.39) were substantially underutilized, accounting for
   5.1 percent of employer firms and 2.7 percent of sales.
- ▶ Data for Native American and nonminority women employer firms were withheld; therefore, private sector disparities were not conducted.



# TABLE 6-10 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 81, OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION) U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,

WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV MARKETPLACE

BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES EMPLOYER		EMPLOYER FIRMS
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)
All Firms	61,853	\$6,503,226	6,736	\$5,055,834
African American Firms	17,664	\$449,528	387	\$152,402
Native American Firms <sup>1</sup>	560	S	32	S
Asian American Firms <sup>2</sup>	13,564	\$1,046,342	1,868	\$668,327
Hispanic American Firms	7,959	\$334,181	345	\$135,657
Nonminority Women Firms <sup>3</sup>	N/A	N/A	N/A	N/A
	PERCENT	TAGE OF MARKETPLAC	CE	
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	28.56%	6.91%	5.75%	3.01%
Native American Firms <sup>1</sup>	0.91%	S	0.48%	S
Asian American Firms <sup>2</sup>	21.93%	16.09%	27.73%	13.22%
Hispanic American Firms	12.87%	5.14%	5.12%	2.68%
Nonminority Women Firms <sup>3</sup>	N/A	N/A	N/A	N/A
	D	ISPARITY INDEX		
		ALL FIRMS		EMPLOYER FIRMS
All Firms		100.00		100.00
African American Firms		24.20		52.47
Native American Firms <sup>1</sup>		S		S
Asian American Firms <sup>2</sup>		73.37		47.67
Hispanic American Firms		39.94		52.39
Nonminority Women Firms <sup>3</sup>		N/A		N/A

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

N/A denotes data on business ownership classification group was not available.

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

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

### 6. ANALYSIS OF RACE, ETHNICITY, AND GENDER EFFECTS ON SELF-EMPLOYMENT RATES AND EARNINGS

The purpose of this analysis 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 in five categories of private sector business activity in the Washington, DC Combined Metropolitan Statistical Area (CMSA). Findings for minority business enterprises are compared to the self-employment participation and earnings



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

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

record of nonminority male business owners to determine if a disparity in self-employment rates and earnings exists, and if it is attributable to differences in race, ethnicity, and gender. Adopting the methodology and variables employed by a City of Denver disparity study (see *Concrete Works v. City and County of Denver*<sup>151</sup>), we use PUMS data derived from the 2014 American Community Survey (ACS), to which we apply appropriate regression statistics to draw conclusions.

To guide this investigation, three general research questions were posed. Questions and variables used to respond to each, followed by a report of findings, are reported below:

## 1. Are racial, ethnic, and gender minority groups less likely than nonminority males to be self-employed?

This analysis examined the statistical effects of the following variables on the likelihood of being self-employed in the Washington, DC CMSA: race, ethnicity, and gender of business owner (African American, Asian American, Hispanic American, Native American, nonminority women, nonminority men), marital status, age, self-reported health-related disabilities, availability of capital (household property value, monthly total mortgage payments, unearned income) and other characteristics (number of individuals over the age of 65 living in household, number of children under the age of 18 living in household), and level of education.

### 2. Does racial, ethnic, and gender status have an impact on individual's self-employment earnings?

This analysis examined the statistical effects of the following variables on income from self-employment for business owners in the Washington, DC CMSA: race, ethnicity, and gender of business owner (African American, Asian American, Hispanic American, Native American, nonminority women, nonminority men), marital status, age, self-reported health-related disabilities, and availability of capital (household property value, monthly total mortgage payments, unearned income), and level of education.

# 3. If minority- and women-owned business enterprises (M/WBEs) and nonminority male owned firms shared similar traits and marketplace "conditions" (i.e., similar "rewards" in terms of capital and asset accrual), what would be the effect on rates of self-employment by race, ethnicity, and gender?

Derived from a similar model employed by a City of Denver disparity study, MGT created a model that leveraged statistical findings in response to the first two questions to determine if race, gender, and ethnic effects derived from those findings would persist if nonminority male demographic and economic characteristics were combined with M/WBE self-employment data. More precisely, in contrast to Question 1, which permitted a comparison of self-employment rates based on demographic and economic characteristics reported by the 2014 census for individual M/WBE categories and nonminority males, respectively, this analysis posed the question, "How would M/WBE rates change, if M/WBEs

<sup>&</sup>lt;sup>151</sup> Concrete Works v. City and County of Denver, 321 F.3 950 (10th Cir. 2003).



operated in a nonminority male business world and how much of this change is attributable to race, gender, or ethnicity?"

#### **FINDINGS**

- 1. Are racial, ethnic, and gender minority groups less likely than nonminority males to be selfemployed?
  - In all industries, nonminority males were one and a half times as likely to be self-employed as African Americans. 152
  - In all industries, nonminority males were nearly one and a half times as likely to be self-employed as nonminority women.
  - Nonminority males were nearly one and a half times as likely as African Americans to be selfemployed in the other services industry.
  - Nonminority males were over four times as likely as African Americans to be self-employed in the goods and supplies industry.
- 2. Does racial, ethnic, and gender have an impact on an individual's self-employment earnings?
  - In the Washington DC CMSA, all groups reported significantly lower earnings in all business type categories, except for Native Americans.
  - Overall, Hispanic Americans reported significantly lower earnings than nonminority males: 63.6 percent less.
  - ▶ In the other services, nonminority women reported significantly lower earnings than nonminority males: 53.0 percent less.
  - ▶ The most egregious effect on earnings elasticities was found in the construction industry for nonminority women. In the construction industry, nonminority women earned 93.8 percent less than nonminority males.
- 3. If M/WBEs and nonminority males shared similar traits and marketplace "conditions" (i.e., similar "rewards" in terms of capital and asset accrual), what would be the effect on rates of self-employment by race, ethnicity, and gender?
  - Overall, comparing self-employed nonminority males with self-employed African Americans, over 95 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 56 percent of the disparity in self-employment rates was attributable to race differences.

<sup>&</sup>lt;sup>152</sup> These 'likelihood" characteristics were derived from **Table 6-11** by calculating the inverse of the reported odds ratios.



- Comparing self-employed nonminority males with self-employed Hispanic Americans in the construction industry, over 74 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 professional services, over 98 percent of the disparity in self-employment rates was attributable to race differences.
- ▶ Comparing self-employed nonminority males with self-employed African Americans in the professional services, over 86 percent of the disparity in self-employment rates was attributable to race differences.

The following details goal, objectives, research basis and questions, findings, and conclusions from the analyses. 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, we will compare these findings to the self-employment participation and earnings record of nonminority male business owners 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 investigation are provided by the PUMS data derived from the 2014 American Community Survey, to which we apply appropriate regression statistics to draw conclusions. **Table 6-11** presents a general picture of self-employment rates by race, median earnings, and sample sizes (n) in the Washington, DC CMSA, calculated from the 5-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 findings regarding minority status effects on self-employment rates, self-employment earnings, and attributions of these differences to discrimination, per se.

TABLE 6-11

PERCENTAGE SELF-EMPLOYED/2014 EARNINGS BY
RACIAL, ETHNIC, AND GENDER BUSINESS OWNERSHIP CLASSIFICATION

William CENSIN CONTROL							
BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF SELF- EMPLOYED	2014 SAMPLE CENSUS (n)	2014 MEDIAN EARNINGS				
Non-M/WBE Firms	8.03%	315	\$100,000.00				
African American Firms	3.66%	114	\$68,000.00				
Hispanic American Firms	3.65%	58	\$50,021.07				
Asian American Firms	7.74%	130	\$44,100.00				
Native American Firms	7.14%	3	\$80,000.00				
Nonminority Women Firms	4.84%	133	\$60,000.00				
TOTAL	5.75%	753	\$70,000.00				

Source: PUMS data from 2014 American Community Survey (Washington, DC CMSA) and MGT of America, Inc., calculations using SPSS Statistics software.



## 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, 2014). We also know, in general, the likelihood of being self-employed increases with age (ACS PUMS, 2014). 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 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" 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 2014 U.S. Census to answer research questions about the effects of discrimination on self-employment and self-employment earnings using multiple regression statistics.

### 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 selfemployed?
- 2) Does racial, ethnic, and gender status have an impact on individuals' earnings?



A third question, to be addressed later—How much does racial, ethnic, and gender discrimination influence the probability of being self-employed? —draws conclusions based on findings from questions one and two.

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 questions one and two—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 2014 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 question one, a categorical scale with only two possible values, and in question two, 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 question one. To analyze question two, 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:

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

#### Where:

Y = a continuous variable (e.g., 2014 earnings from self-employment)

 $\beta_0$  = the constant, representing the value of Y when  $X_I = 0$ 

 $\beta_{I}$  = coefficient representing the magnitude of  $X_{I}$ 's effect on Y

X<sub>I</sub> = the independent variables, such as age, human capital (e.g., level of education), availability of capital, race/ethnicity/gender, etc.

 $\varepsilon$  = the error term, representing the variance in Y unexplained by  $X_I$ 

This equation may be summarized as:

<sup>&</sup>lt;sup>153</sup> Logistical regression, or logit, models generate predicted probabilities that are almost identical to those calculated by a probit procedure, used in *Concrete Works v. City and County of Denver* case. Logit, however, has the added advantage of dealing more effectively with observations at the extremes of a distribution. For a complete explanation, see *Interpreting Probability Models* (T.F. Liao, Text 101 in the Sage University series).



-

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

in which Y is the dependent variable and  $\mu$  represents the expected values of Y as a result of the effects of  $\beta$ , 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,  $\eta$ , into the linear model such that:

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

When the data are continuously distributed, the  $\eta$  and  $\mu$  are identical, 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  $\eta$  and  $\mu$  becomes  $\eta = \log[\mu/(1-\mu)]$  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:

$$log[\mu/(1-\mu)] = \alpha + \sum \beta_i k_i$$

#### Where:

 $\mu$  = the probability of being self-employed

 $\alpha$  = a constant term

 $\beta$  = coefficient of independent variable k

 $k_i$  = an independent variable, such as age, marital status, etc.

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.



#### RESULTS OF THE SELF-EMPLOYMENT ANALYSIS

QUESTION ONE: 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 2014 U.S. Census ACS 5-percent PUMS data. 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 the Washington, DC CMSA.
- Employed in construction, professional services, other services, architecture and engineering, <sup>154</sup> or goods and supplies.
- Employed full-time (more than 35 hours a week).
- ▶ 18 years of age or older.
- ▶ Employed in the private sector.

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

- ▶ *Race and Gender:* African American, Asian American, Hispanic American, Native American<sup>155</sup>, nonminority women, 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.

<sup>&</sup>lt;sup>155</sup> There were insufficient census numbers available for analysis.



<sup>&</sup>lt;sup>154</sup> Due to inadequate sample numbers for all races in the architecture and engineering PUMS 2014 data, architecture and engineering was merged with the professional services category.

#### **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. In **Table 6-12**, odds ratios are presented by minority group, reporting the effect of race, ethnicity, and gender on the odds of being self-employed in 2014, holding all other variables constant. Full regression results for all the variables are presented in **Appendix G, Public Use Microdata Sample (PUMS) Regression**.

TABLE 6-12
SELF-EMPLOYMENT "ODDS RATIOS" OF MINORITY GROUPS RELATIVE TO
NONMINORITY MALES AFTER CONTROLLING FOR
SELECTED DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

BUSINESS OWNERSHIP CLASSIFICATION	CONSTRUCTION	PROFESSIONAL SERVICES	OTHER SERVICES	GOODS & SUPPLIES
African American Firms	0.522	0.742	0.705	0.229
Hispanic American Firms	0.982	0.622	0.730	0.591
Asian American Firms	0.452	0.709	1.706	1.670
Native American Firms	*	*	*	*
Nonminority Women Firms	0.530	0.685	0.939	0.681

Source: PUMS data from 2014 American Community Survey (Washington, DC CMSA) 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.

The results reveal the following:

- Nonminority males were nearly one and a half times as likely as African Americans to be selfemployed in the other services industry.
- Nonminority males were over four times as likely as African Americans in the goods and supplies industry.

## QUESTION TWO: DOES RACIAL, ETHNIC, AND GENDER 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 the Washington, DC CMSA, 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, ethnicity, and gender.

To derive a set of variables known to predict earnings, the dependent variable, we used 2014 wages from employment for self-employed individuals, as reported in the 5-percent PUMS data. These included:



<sup>\*</sup> There were insufficient census numbers available for analysis.

- ▶ *Race and Gender:* African American, Asian American, Hispanic American, Native American <sup>156</sup>, 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.

#### **FINDINGS**

**Table 6-13** 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 Hispanic Americans in construction is -.514 meaning that a Hispanic American will earn 51.4 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 G, Public Use Microdata Sample (PUMS) Regression.** 

TABLE 6-13
EARNINGS ELASTICITIES OF MINORITY GROUPS RELATIVE TO NONMINORITY
MALES AFTER CONTROLLING FOR
SELECTED DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

BUSINESS OWNERSHIP CLASSIFICATION	CONSTRUCTION	Professional Services	OTHER SERVICES	GOODS & SUPPLIES
African American Firms	-0.072	-0.568	-0.211	0.329
Hispanic American Firms	-0.514	-0.691	-0.382	-1.084
Asian American Firms	-0.528	-0.209	-0.759	-0.548
Native American Firms	*	*	*	*
Nonminority Women Firms	-0.938	-0.543	-0.530	-0.610

Source: PUMS data from 2014 American Community Survey (Washington DC, CMSA) 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.

The results reveal the following:

 $<sup>^{156}</sup>$  There were insufficient census numbers available for analysis.



<sup>\*</sup> There were insufficient census numbers available for analysis.

- In the other services, nonminority women reported significantly lower earnings than nonminority males: 53.0 percent less.
- ▶ The most egregious effect on earnings elasticities was found in the construction industry for nonminority women. In the construction industry, nonminority women earned 93.8 percent less than nonminority males.

### 7. CONCLUSION

**Section 3** presented a summary of firm utilization at the prime contractor and subcontractor by racial, ethnic and gender classification comparing M/WBE utilization for the WSSC private sector construction projects with commercial construction projects from July 1, 2009 and June 30, 2014. According to the findings from commercial construction projects, substantial M/WBE underutilization was evident in the private sector. When compared to findings from the commercial construction projects, M/WBE firms fared better on WSSC projects.

Based on the analysis of the U.S. Census, 2012 SBO data, overall there remains a significant gap between the market share of M/WBE firms and their share of the State of Maryland and Washington-Arlington-Alexandria, DC-VA-MD-WV metro area marketplaces business population, where data were available.

In general, findings from the PUMS 2014 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 2014 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.<sup>157</sup>

Capacity alone is not a sufficient explanation for these differences, especially at the subcontractor level in the construction business category, where capacity is a lesser consideration and availability far exceeds the record of utilization, especially in the private sector. This chapter presented statistical evidence that disparities associated with race and gender persist after controls for capacity and business experience are considered. Moreover, the evidence of very small M/WBE utilization on commercial construction projects, supported by anecdotal comments from M/WBE firms (see **Chapter 7**), supports the claim M/WBE firms face a number steep barriers in seeking work on private sector construction projects. To the extent which M/WBE subcontractor utilization is minimal in the private sector, credence may be given to the proposition established in *Croson*, in which government could be a passive participant in private sector discrimination if it did not require contractors who apply for public sector construction projects to solicit and negotiate with M/WBE subcontractors in good faith efforts.

<sup>&</sup>lt;sup>157</sup> **Appendix N** reports self-employment rates and earnings in greater detail by race, ethnicity, and gender and business category.



\_

## **CHAPTER 7**

Anecdotal Analysis

**WSSC 2015 Disparity Study** 



### 1. INTRODUCTION

The anecdotal analysis was structured to conform to case law in addition to answering a basic research question: *Is there qualitative/anecdotal evidence of disparate treatment of M/WBE subcontractors by prime contractors?* The collection of anecdotal information is a widely accepted research methodology that is based upon 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. The findings in this chapter support the overall underutilization of minority and women firms in the market area.

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

### **CHAPTER SECTIONS**

- 1. Introduction
- 2. Methodology
- 3. Demographics
- 4. Barriers to Doing Business with WSSC
- 5. Stakeholder Interviews
- Access to Capital and Bonding
- 7. Disparate Treatment and Discrimination
- 8. Suggested Remedies from Anecdotal Participants
- 9. Conclusion

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.

MGT worked with WSSC staff to develop a Community Outreach Plan tailored to identify communication methods to inform the community of the anecdotal activities that would take place as part of the Study. The Plan contained elements such as press releases, email blasts to business owners, and email blasts and assistance from area trade associations and business organizations, which we refer to as stakeholders for purposes of this study. Input and administration of the Community Outreach Plan was provided by McMillon Communications.

The following sections present MGT's approach to collecting anecdotal data, the methods employed, and the quantitative and qualitative results of the data collected.

#### 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 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, focus groups, community meetings, and in-depth interviews to collect anecdotal information and to identify issues that were common to businesses in the market area between the fiscal years of July 1, 2009, and June 30, 2014. To ensure a broad representation of firms in the marketplace, MGT's sample methodology for the focus groups, interviews, and survey of vendors included randomly selecting firms from the WSSC's Master Anecdotal Database developed for the study. Sample sets were double checked to ensure firms do not participate in more than one anecdotal activity. The community meetings were open to the public; therefore, chances are that firms who attended the community meetings may have been randomly selected for other anecdotal activities. In conjunction with the quantitative data, MGT also was able to draw inferences from these data as to the prevalence of obstacles perceived as limiting the participation of M/WBEs and other firms in the WSSC's procurement transactions.

Collective responses from the in-depth interviews, community meetings, and focus groups provided in this chapter are not altered for context, but are edited for grammar. Otherwise responses were unfiltered or unedited. However, readers should be cautioned that anecdotal comments in this chapter detail the perceptions and opinions of individuals, and the evidentiary weight of these opinions depends on how much they are corroborated by statements of others and the quantitative data in the report.

### SURVEY OF VENDORS

The survey of vendors gathered information on business ownership, work performed, and/or bid with the WSSC, with primes who have contracts with the WSSC, work bid, and/or performed in the private sector, and barriers, perceived or real, that prevented firms from doing business with the WSSC during the study period. MGT attempted to collect data in proportion to the distribution of M/WBEs and non-M/WBEs in the relevant market area. Oppenheim Research, Inc., a woman-owned business research firm administered a controlled survey using the **Appendix H – Survey of Vendors Instrument**. On average, five to seven attempts were made to contact firms.

In most municipalities, 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 tend to be insufficient in number to permit a valid and representative sample. This problem is compounded when analyses are stratified further by business type. Insufficient sample size can pose problems for the statistical confidence of the results. For the WSSC's Native American-owned



businesses, representation was extremely low. 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.

### **FOCUS GROUPS**

MGT facilitated two focus groups with M/WBE and non-M/WBE firms with the assistance of McMillon Communications, an MBE-certified African American-owned firm located in Prince George's County, Maryland. The first focus group was held on October 21, 2015, at the Silver Spring Civic Center, 1 Veterans Place, Silver Spring, MD. The second focus group included subcontractor and subconsultant firms and was held at the Laurel Executive Conference Center, 312 Marshall Avenue, Suite 104, Laurel, MD on October 22, 2015. McMillon Communications provided recruitment assistance, administrative support, and coordination. Using the Master Anecdotal Database, two samples of randomly selected firms were provided to McMillon Communications to recruit for the two focus groups. The focus group discussions were voice recorded after all participants agreed to be recorded.

#### **COMMUNITY MEETINGS**

Area firms, M/WBEs included, who have done business or attempted to do business with the WSSC or its prime firms were invited to attend one of three community meetings. The meetings were designed to provide the business community information about the disparity study, answer any questions, and accept anecdotal comments on their experiences, which were recorded by a court reporter. Transformation Consulting, an MBE-certified African American-owned firm located in the City of Richmond, Virginia<sup>158</sup> provided administrative support and management.

The community meetings were held September 24, 2015, at the Montgomery County Community College, Homer S. Gudelsky Institute for Technical Education, 51 Mannakee Street, Rockville, MD, and a second at Prince George's Community College, Rennie Room – Largo Student Center, 301 Largo Road, Upper Marlboro, MD. The third community meeting was held on October 22, 2015, at the Washington Suburban Sanitary Commission, Richard G. Hocevar Building Auditorium, 14501 Sweitzer Lane, Laurel, MD. Press releases were distributed and electronic notices were sent to vendors listed in the WSSC's directory. The meetings were transcribed by Deposition Services, Inc., an MBE-certified Asian American-owned court reporting service located in Montgomery County, Maryland.

### **STAKEHOLDERS**

MGT contacted the associations and organizations listed below to inform them of the study, request their assistance to distribute the community meetings notices and anecdotal data collection reminders to their members or constituents, and participate in stakeholder interviews. In addition, MGT requested copies of

<sup>&</sup>lt;sup>158</sup> The city of Richmond is an independent city in the Commonwealth of Virginia and is not associated or located in a county.



\_

membership or vendor lists from these organizations to create a nonduplicative database that was used to update gaps in the WSSC's Master Vendor and Anecdotal Databases. Organization and associations contacted were:

- 100 Black Men of Greater Washington, DC
- AFL-CIO
- African-American Chamber of Commerce of Montgomery County
- Anne Arundel County Economic
   Development Authority (AAEDC)
- Asian Pacific American Chamber of Commerce
- Associated Builders & Contractors, Inc. (Metro Washington Chapter)
- Associated Builders & Contractors, Inc. (National)
- Associated General Contractors of Metro DC
- Baltimore City Government
- Baltimore Washington Corridor Chamber
- Black Chamber of Commerce Anne Arundel County
- ▶ Bowie Business Innovation Center
- Calvert County Chamber of Commerce
- Calvert County Minority Business Alliance
- Capital Region Minority Supplier
   Development Council
- CASA
- Center for Business Inclusion & Diversity
- Charles County Chamber of Commerce
- Charles County Minority Business Advocacy Council's (MBAC)
- DC Chamber of Commerce

- DC Government Department of Small and Local Business Development
- DC Government Department of Transportation - Office of Civil Rights
- FSC First
- Governor's Office of Minority Affairs
- Greater Baltimore Committee
- Greater Bowie Chamber of Commerce
- Greater Hispanic Chamber of Commerce
- Greater Prince George's Business Roundtable
- Greater Washington Board of Trade
- Greater Washington Hispanic Chamber of Commerce
- Greater Washington Urban League
- Hispanic Chamber of Commerce of Montgomery County
- Howard County Economic Development Authority (HCEDA)
- Howard County Office of Military Affairs
- KoBE
- Laurel Board of Trade
- Maryland Chamber of Commerce
- Maryland Commission on Indian Affairs
- Maryland Department of Business & Economic Development
- Maryland Hispanic Chamber of Commerce
- Maryland Minority Contractors Associations, Inc.



- Maryland Procurement Technical Assistance Program (PTAP)
- Maryland Small Business Development Center
- Maryland Small Business Reserve
- Maryland-India Business Roundtable
- Maryland-National Capital Building Industry Association
- MD Washington Minority Companies Association, Inc.
- Minority Business Development Agency -Capitol MBDA Business Center
- Minority Business Roundtable
- Montgomery County Chamber of Commerce
- Montgomery County Council At Large
- Montgomery County Council District 1
- Montgomery County Council District 2
- Montgomery County Council District 3
- Montgomery County Council District 4
- Montgomery County Council District 5
- Montgomery County Department of Economic Development (MCDED)
- NAACP Prince George's County
- National Association of Minority Contractors - DC Chapter
- National Association of Women Business
   Owners Baltimore Regional

- National Association of Women Business
   Owners Greater DC
- National Association of Women in Construction
- National Association of Women in Construction - MD Chapter
- People For Change Coalition
- Prince George's Chamber of Commerce
- Prince George's Community College Center for Entrepreneurial Development
- Prince George's Contractors and Business Association
- Prince George's County Council District 1
- Prince George's County Council District 2
- Prince George's County Council District 3
- Prince George's County Council District 4
- Prince George's County Council District 5
- Prince George's County Council District 6
- Prince George's County Council District 7
- Prince George's County Council District 8
- Prince George's County Council District 9
- Prince George's County Economic
   Development Corporation
- Prince George's County Public Schools
- Prince George's County Supplier
   Development and Diversity Division
- The Links, Inc.
- ▶ The Retired Military Officers Association
- The Vets Group
- U.S. Small Business Administration -Baltimore Office
- U.S. Small Business Administration US



- U.S. Small Business Administration -Washington DC Office
- US Black Chambers, Inc.
- Washington Gas
- Washington Metro Area Transit Authority (Metro)
- Women Business Owners of Montgomery County

- Women Business Owners of Prince George's County
- Women Construction Owners & Executives, USA (WCOE)
- Women of Prince George's
- Women Presidents' Education Organization
- Women's Business Enterprise National Council - MD DC

### **IN-DEPTH INTERVIEWS**

The in-depth interviews were one-on-one interviews with business owners to gather information regarding the firm's primary line of business, ethnicity and education/training background of the owner, business history, size and gross revenues during selected calendar and/or fiscal years, and information about the firms' experiences in attempting to do, and conducting business with, the WSSC (both directly as a prime and/or as a subcontractor). The in-depth interviews—which are structured settings where an interviewer or facilitator uses an interview guide to solicit input from participants—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 In-depth Interview Guide (Appendix J) included questions designed to establish a profile for each business. Additionally, MGT asked questions related to experiences with the 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 the WSSC. McMillon Communications conducted the M/WBE and non-M/WBE interviews. The interviewer made no attempt to prompt or guide responses from the participants, although follow-up questions were asked to obtain further clarification or information as necessary and appropriate. 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 the WSSC or its primes.



# 3. DEMOGRAPHICS

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

### SURVEY OF VENDORS DEMOGRAPHICS

During the months of February and March 2016, Oppenheim Research a woman-owned firm located in Leon County, FL conducted the surveys. A randomly selected list of businesses from the Master Anecdotal Database were surveyed to solicit information about their firm and experiences during the study period, which resulted in 426 completed surveys with owners and representatives. The Survey of Vendors allowed MGT to reach a broader segment of the business population in a more time-efficient and cost-effective manner. **Table 7-1** provides the race, ethnicity, and gender of the respondents who participated in the survey.

TABLE 7-1
WASHINGTON SUBURBAN SANITARY COMMISSION
SURVEY OF VENDORS DEMOGRAPHICS
NUMBER OF RESPONDENTS

BUSINESS OWNERSHIP	NUMBER OF	PERCENTAGE OF
CLASSIFICATION	RESPONDENTS	TOTAL
African American	122	28.6%
Asian American	32	7.5%
Hispanic American	17	4.0%
Native American	6	1.4%
Nonminority Women	90	21.1%
Non-M/WBE <sup>159</sup>	130	30.5%
Other/Don't Know <sup>160</sup>	29	6.8%
Total	426	100%

Source: Responses from survey conducted by Oppenheim Research, 2016.

<sup>&</sup>lt;sup>160</sup> Participants did not associate their race/ethnicity/gender with the groups selected for the survey or chose not to provide their race/ethnicity/gender.

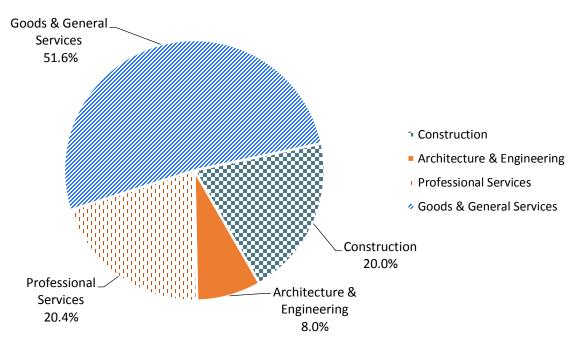


\_

<sup>&</sup>lt;sup>159</sup> Firms identified as nonminority male-owned or firm's ethnicity could not be identified.

The respondents were asked to identify their primary type of business as either Architecture and Engineering (A&E), Construction (C), Professional Services (PS), or Goods and General Services (GS). The distribution of the respondents are provided in **Figure 7A**. The procurement category definitions are discussed in **Chapter 4**, **Market Area and Prime Utilization**, **Availability**, **and Disparity Analyses**.

FIGURE 7A
WASHINGTON SUBURBAN SANITARY COMMISSION
SURVEY OF VENDORS DEMOGRAPHICS
BUSINESS INDUSTRY



Source: Responses from survey conducted by Oppenheim Research, 2016.

As part of the survey, several questions were asked to gather capacity information of the respondents such as number of employees, years in business, and largest contracts or subcontracts. **Tables 7-2** through **7-4** and **Figure 7B** provide the responses to these questions. **Table 7-2** shows that 43.5 percent of the firms surveyed have 0-10 employees excluding the owner, meaning a majority of firms are small businesses which may have implications for the type and size of projects firms are willing to pursue. Minority and women businesses make up 33.6 percent of firms with 10 or fewer employees.



TABLE 7-2
WASHINGTON SUBURBAN SANITARY COMMISSION
SURVEY OF VENDORS DEMOGRAPHICS
NUMBER OF EMPLOYEES

RACE/ETHNICITY/GENDER	0-10 EMPLOYEES	11-20 EMPLOYEES	21-30 EMPLOYEES	31-40 EMPLOYEES	41+ EMPLOYEES
African American	17.4%	5.4%	2.3%	0.5%	3.1%
Asian American	4.2%	0.7%	0.2%	0.7%	1.6%
Hispanic American	1.9%	0.7%	0.7%	0.5%	0.2%
Native American	0.0%	0.7%	0.2%	0.2%	0.2%
Nonminority Women	10.1%	3.8%	3.1%	0.9%	3.3%
Non-M/WBE	8.5%	6.1%	3.1%	1.4%	11.0%
Other/Don't Know <sup>161</sup>	1.4%	0.9%	0.2%	0.2%	3.3%
TOTAL	43.5%	18.3%	9.8%	4.4%	22.7%

Source: Responses from survey conducted by Oppenheim Research, 2016. Note: The totals may not equal the sum of components due to rounding.

**Figure 7-B** details participant's responses to the number of years they have been in their primary line of business. Firms in business for 20 or more years represent 82.2 percent of the respondents. M/WBEs account for 47.4 percent.

FIGURE 7B
WASHINGTON SUBURBAN SANITARY COMMISSION
SURVEY OF VENDORS DEMOGRAPHICS
NUMBER OF YEARS IN BUSINESS



Source: Responses from survey conducted by Oppenheim Research, 2016.

 $<sup>^{161}</sup>$  Participants did not associate their race/ethnicity/gender with the groups selected for the survey.



WASHINGTON SUBURBAN SANITARY COMMISSION Final Report | July 28, 2016 To gain a better understanding of the respondent's business we asked if they primarily bid, proposed, or provided quotes as a prime, subcontractor, or both. Survey respondents who indicated they bid as a prime only were 39.9 percent or 170 respondents. Survey respondents who indicated they bid as primarily subcontractors total 21.6 percent or 92 respondents. Respondents who indicated they bid as both a prime and subcontractor were 38.5 percent or 164 respondents. As the survey continued, this question guides the remaining responses on the respondent's experiences working with WSSC as a prime or as a subcontractor working with primes contracted with WSSC.

**Table 7-3** shows the responses from primes when asked to indicate their largest contract awarded during the study period, regardless of who awarded the contract. The largest percentage of prime contracts awarded to M/WBEs, as well as non-M/WBE, are in the "greater than \$1 million" range.

TABLE 7-3
WASHINGTON SUBURBAN SANITARY COMMISSION
SURVEY OF VENDORS DEMOGRAPHICS
LARGEST CONTRACT AWARDED- PRIME

	UP TO	\$50,001	\$100,001	\$200,001	\$300,001	\$400,001	\$500,001	> \$1
RACE/ETHNICITY/GENDER	\$50,000	-	-	-	-	-	- \$1	MILLION
	Ψ30,000	\$100,000	\$200,000	\$300,000	\$400,000	\$500,000	MILLION	THELIOIV
African American	4.9%	2.3%	2.1%	1.6%	0.5%	0.9%	1.2%	5.9%
Asian American	0.9%	0.7%	0.5%	0.0%	0.2%	0.2%	0.5%	2.6%
Hispanic American	0.7%	0.2%	0.0%	0.0%	0.0%	0.2%	0.5%	0.9%
Native American	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	1.2%
Nonminority Women	2.8%	1.6%	0.9%	0.9%	0.2%	1.4%	1.4%	3.8%
Non-M/WBE	3.3%	1.9%	0.5%	1.2%	1.2%	1.2%	2.8%	6.3%
Other/Don't Know <sup>162</sup>	0.0%	0.0%	0.2%	0.9%	0.2%	0.2%	0.2%	2.1%
Total	12.60%	6.70%	4.20%	4.60%	2.30%	4.10%	6.80%	22.80%

Source: Responses from survey conducted by Oppenheim Research, 2016.

<sup>&</sup>lt;sup>162</sup> Participants did not associate their race/ethnicity/gender with the groups selected for the survey.



\_

Over 21 percent of the survey participants indicated they are subcontractors or subconsultants. This includes primes who also work as subcontractors or subconsultants. Detailed in **Table 7-4** are the survey responses indicating the range of subcontracts awarded during the study period. For M/WBEs, as well as non-M/WBEs, the largest subcontracts are in the "greater than \$1 million" range.

TABLE 7-4
WASHINGTON SUBURBAN SANITARY COMMISSION
SURVEY OF VENDORS DEMOGRAPHICS
LARGEST CONTRACT AWARDED - SUBCONTRACTOR

RACE/ETHNICITY/GENDER	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 American	2.8%	0.9%	0.9%	1.6%	0.7%	0.7%	2.1%	3.5%
Asian American	0.0%	1.2%	1.2%	0.0%	0.0%	0.0%	0.5%	1.4%
Hispanic American	0.5%	0.0%	0.0%	0.2%	0.2%	0.2%	0.2%	0.9%
Native American	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%
Nonminority Women	0.7%	1.2%	1.2%	0.9%	0.2%	0.7%	1.9%	1.4%
Non-M/WBE	0.5%	1.2%	1.2%	0.7%	1.6%	1.2%	1.6%	5.4%
Other/Don't Know <sup>163</sup>	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	1.6%
Total	4.50%	4.70%	4.70%	3.40%	2.70%	2.80%	7.20%	14.20%

Source: Responses from survey conducted by Oppenheim Research, 2016.

#### FOCUS GROUP DEMOGRAPHICS

MGT provided McMillon Communications a randomly selected list of firms that were not selected for other anecdotal activities from the WSSC's Master Anecdotal Database in order to invite those firms to participate in a focus group. McMillon Communications attempted to contact 62 firms to participate and after making several attempts to contact firms, six firms participated in the two focus groups.

The focus group for primes included two Professional Services firms, one architectural firm, and one services firm. The participating firms were M/WBE firms. There were two engineering firms who attended the focus group for subcontractors, one African American- and one Asian American-owned firm.

# PUBLIC MEETINGS DEMOGRAPHICS

The community meetings in total had 190 attendees from varying industries, such as construction, trucking, supplies, engineering, nonprofit advocacy, information technology, financial services, and many state or local governmental representatives. Official testimonies were received and recorded from 20 attendees.

<sup>&</sup>lt;sup>163</sup> Participants did not associate their race/ethnicity/gender with the groups selected for the survey.



WASHINGTON SUBURBAN SANITARY COMMISSION Final Report | July 28, 2016

### IN-DEPTH INTERVIEW DEMOGRAPHICS

The personal interviews were conducted during the months of February and March 2016. To obtain interviewees, a random sample of firms not previously selected for other anecdotal activities from the WSSC's Master Anecdotal Database were contacted. The interviews were conducted either at the firm owner's office, at a location designated by the firm's owner, or via telephone. The recruitment efforts of McMillon Communications resulted in 38 firms that were interviewed out of the 700 firms provided in the sample.

- Of the 38 firms interviewed, the ethnic and gender composition of the firm's ownership were 13 African Americans, three Asian Americans, one Hispanic American, six nonminority women, and 15 nonminority males.
- ▶ There were no Native American-owned firms interviewed.
- The industries represented included, but were not limited to, general contracting, specialty trade contractors, promotional items, architecture and engineering, software development consulting, auto parts, security services, landscaping, and communications.

## 4. BARRIERS TO DOING BUSINESS WITH WSSC

MGT documented participant responses concerning barriers faced in the procurement process and factors that frequently prevented businesses from winning or being awarded contracts. In the normal course of business, entrepreneurs may face certain barriers when establishing and operating a business enterprise and several factors may prevent a business from being selected for a contract or purchase order. This section summarizes the anecdotal responses from the survey of vendors, focus groups, community meetings, and interviews where MGT identified trends in barriers.

### PROCUREMENT PROCESS

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 (58 or 21.7% of M/WBEs). M/WBE subcontractors stated their biggest barrier working with primes on WSSC projects is competing with large companies (35 or 13.1% of M/WBEs). Additional key barriers for M/WBE firms included:

- ▶ Limited time given to prepare bid package or quote 15.7 percent.
- ▶ Performance/payment bond requirements 12.8 percent.
- Cost of bidding/proposing 12.3 percent.
- Contracts too large 11.6 percent.



## ANECDOTAL RESPONSES

Focus group, interview, and community meeting anecdotal comments about barriers to doing business or attempting to do business with the WSSC, or with primes who bid or are contracted with the WSSC, are provided below:

- An African American professional services consulting firm owner stated WSSC awards small projects to national firms through cooperative agreements and this process creates barriers for small local firms to win contracts.
- An African American provider of goods and supplies firm owner stated the WSSC's use of national cooperative agreements has significantly reduced the amount of work his firm does with WSSC.
- An Asian American engineering firm owner stated primes "beat him down" to a price lower than his nonminority counterpart for same services.
- An African American owner of a professional consulting firm stated the lack of notice of purchasing and contracting opportunities creates a barrier to her firm bidding on WSSC projects. She continued by stating large prime firms know about projects well before they are formally advertised, giving them an advantage of time to prepare their bid.
- An African American architecture firm owner stated primes use his firm to "meet the MBE goal" then reduce his scope or never award the scope listed for his firm.
- A nonminority goods and supplies firm representative stated that after presenting a product to various WSSC departments and staff, WSSC awarded a purchase order to a firm without giving his firm an opportunity to submit a bid.

# 5. STAKEHOLDER INTERVIEWS

In addition to receiving anecdotal comments from the business owners, MGT conducted interviews with 10 area trade associations and business associations to get their perceptions on the impact of the M/WBE program to its members. During the interview, stakeholders were asked to provide their perceptions on the barriers their members faced doing business or attempting to do business with the WSSC or the WSSC's primes, M/WBE Program improvement recommendations, and any other comments they felt were relevant to this disparity study.

Each of the stakeholders provide capacity building, advocacy, and/or business development programs to its members or any business owner who has a need for their services. When asked if the stakeholders had a working relationship with the WSSC to assist M/WBE firms, many stated they did not outside of various conferences WSSC is involved in, i.e. Power C. Stakeholders agree that getting M/WBE firms in front of contracting and financial opportunities to compete is difficult. The time provided to respond to request for proposals from when the proposal is advertised is too short.



A few of the recommendations suggested by the stakeholders include:

- ▶ Tie WSSC performance evaluations to M/WBE goal achievement.
- ▶ Reach out to organizations that represent M/WBEs and get feedback on how and what their members are doing in the marketplace.
- Engage a third party to manage program compliance.
- ▶ Provide tips or workshops on leveraging M/WBE certification.

## 6. ACCESS TO CAPITAL AND BONDING

Survey respondents were asked if they applied for a commercial loan between July 1, 2009, and June 30, 2014, and whether their loan was approved or denied. If their loan was denied, a follow up question asked what they believed was the basis of their denial. Of the 126 (29.6% of the total) respondents who applied for a commercial loan, 20.2 percent were M/WBEs. The approval rate was 15.0 percent and denial rate for M/WBEs was 5.2 percent. The loan amount approved for most of the M/WBE firms varied from \$500,000 up to \$1 million.

# 7. DISPARATE TREATMENT AND DISCRIMINATION

Anecdotal evidence must determine if M/WBE firms experience disparate treatment or are discriminated against by the agency, primes contracted by an agency, or in the private sector marketplace. Therefore, participants were asked if they experienced discriminatory or disparate behavior by the WSSC, its primes, or in the private sector during the study period. No firm had specific evidence of discrimination but felt there is disparate treatment against M/WBE firms in the marketplace. Survey respondents were asked if they experienced or observed M/WBEs being included on a bid to meet goals or to satisfy good faith efforts then were dropped after the prime won the project, and whether this practice occurred on WSSC or non-WSSC projects. Of the M/WBEs, 13.5 percent responded this occurred on non-WSSC projects compared to 1.1 percent on WSSC projects.

#### ANECDOTAL RESPONSES

- An Asian American owner of a Professional Services firm stated there is an old-boys network which keeps a lot of new companies from getting business.
- An African American Professional Services firm owner stated, "I've seen it at work. But, I managed to get around it by showing what our team could do."

**Table 7-5** illustrates the survey of vendor respondents' experiences of discriminatory behavior from the WSSC, a prime contracted by the WSSC, or while conducting business in the private sector.



TABLE 7-5
WASHINGTON SUBURBAN SANITARY COMMISSION
DISCRIMINATION

	BY WSSC	BY PRIMES	PRIVATE SECTOR
M/WBE (Prime)	1.9%		
Non-M/WBE (Prime)	0.7%		
M/WBE (Subcontractor)		1.2%	
Non-M/WBE(Subcontractor)		0.2%	
All M/WBE Firms			10.6%
All non-M/WBE Firms			0.9%

Source: Responses from telephone survey conducted by Oppenheim Research, 2016.

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

- ▶ An informal network precluded their firms from obtaining work in the private sector 26.2 percent.
- ▶ Seldom or never being solicited when there were no M/WBE goals 28.1 percent.

**Table 7-6** provide survey results of M/WBE subcontractors when asked if they experience various forms of discrimination by primes.

TABLE 7-6
WASHINGTON SUBURBAN SANITARY COMMISSION
DISCRIMINATION BY PRIMES

Form of Discrimination	Percentage of Respondents
Harassment	3.7%
Unequal or unfair treatment	7.9%
Bid shopping or bid manipulation	10.1%
Double standard in performance	6.7%
Denial of opportunity to bid	4.1%
Unfair denial of contract award	6.0%
Unfair termination	2.6%
Unequal price quotes from suppliers	3.4%

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



# 8. 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 suggested remedies provided by participants are:

- ▶ Engage a third-party to manage program compliance.
- Unbundle contracts, where possible, to allow smaller firms to bid.
- Extend the time period to submit bids, quotes, and proposals.
- Enhance transparency about the procurement process and open access to any firm interested in learning how to do business with the WSSC.
- Include M/WBE goal achievement to WSSC personnel evaluations.

## 9. CONCLUSION

MGT collected anecdotal information from focus groups, surveys, community meetings, and personal interviews. These activities resulted in 495 business owners or representatives participating in this disparity study process. In comparison, the Ninth Circuit Court of Appeals accepted anecdotal information of disparate treatment from 57 interviewees without any supporting survey evidence in *Coral Construction*. Anecdotal data collection was a challenge due to lack of businesses interested in working with the WSSC or on WSSC projects. The recruiting efforts for each of the anecdotal activities required more time than usual and more attempts to contact firms.

As indicated at the beginning of this chapter, MGT sought to answer the research question: *Is there qualitative/anecdotal evidence of disparate treatment of M/WBE subcontractors by prime contractors?* There is qualitative/anecdotal evidence presented in this chapter of disparate treatment of M/WBE subcontractors by prime contractors that is consistent with the statistical evidence in **Chapters 4, 5,** and **6**; in particular, the obstacles to obtaining work in the absence of remedial efforts. Based on the anecdotal information gathered, there is a lack of clear cut evidence of disparate treatment by the WSSC directly.

<sup>&</sup>lt;sup>164</sup> Coral Construction v. King County, 941 F.2d 910, 917 (9th Cir 1991).



# CHAPTER 8

Findings and Recommendations

**WSSC 2015 Disparity Study** 



## **CHAPTER 8: FINDINGS AND RECOMMENDATIONS**

### 1. INTRODUCTION

In 2015, MGT of America, Inc. (MGT) was retained to conduct a Disparity Study for the Washington Suburban Sanitary Commission (WSSC) to provide current data on WSSC programs. In this chapter, MGT provides findings for WSSC on minority- and women-business enterprise (M/WBE) utilization and availability. This study consisted of fact-finding to analyze WSSC procurement trends and practices for the study period from July 1, 2009, to June 30, 2014 and to evaluate the impact of remedial efforts; and to evaluate various options for future program development.

#### **CHAPTER SECTIONS**

- 1. Introduction
- 2. Findings
- 3. Commendations and Recommendations
- 4. Conclusion

The results of this study and conclusions drawn are presented in detail in **Chapters 3** through **7** of this report.

### 2. FINDINGS

## FINDING A: M/WBE PRIME UTILIZATION

The dollar value of M/WBE prime utilization on WSSC projects over the current study period within the relevant market was as follows:

- Across all contract categories, minority firms were paid approximately \$205.36 million at the prime level, 16.74 percent of all prime dollars. Nonminority women-owned firms were paid approximately \$91.80 million at the prime level, 7.49 percent of all prime dollars.
- In Architecture & Engineering, minority firms were paid approximately \$16.97 million at the prime level, 7.10 percent of Architecture & Engineering prime dollars; nonminority women-owned firms were paid approximately \$1.60 million at the prime level, 0.67 percent of Architecture & Engineering prime contract dollars (**Table 8-1**). There was disparity for all M/WBE groups. (There was no Architecture & Engineering prime availability for Native Americans.)
- In Construction, minority firms were paid approximately \$87.26 million at the prime level, 16.11 percent of the total Construction prime contract dollars; nonminority women-owned firms were paid approximately \$3.91 million at the prime level, 0.72 percent of the total Construction prime contract dollars (**Table 8-1**). There was disparity for all M/WBE groups except Hispanic Americanowned firms.
- In Professional Services, minority firms were paid approximately \$15.95 million at the prime level, 15.68 percent of Professional Services prime dollars; nonminority women-owned firms were paid



- approximately \$6.96 million, 6.85 percent of professional services prime dollars (**Table 8-1**). There was disparity for all M/WBE groups except Hispanic Americans. (There was no Professional Services prime availability for Native Americans.)
- In Goods and General Services, minority firms were paid approximately \$85.16 million at the prime level, 24.78 percent of Goods and General Services prime contract dollars; nonminority womenowned firms were paid approximately \$79.32 million, 23.08 percent of Goods and General Services prime contract dollars (**Table 8-1**). There was only substantial disparity for Hispanic Americans.

TABLE 8-1
SUMMARY OF PRIME UTILIZATION
BY PROCUREMENT CATEGORY AND BUSINESS OWNERSHIP CLASSIFICATION

BUSINESS OWNERSHIP	ARCHITECTURE & ENGINEERING	CONSTRUCTION	PROFESSIONAL SERVICES	GOODS AND GENERAL SERVICES		
CLASSIFICATION	(\$)	(\$)	(\$)	(\$)		
Total Minority Firms	\$16,972,187	\$87,265,659	\$15,955,963	\$85,167,909		
Total Nonminority Women Firms	\$1,604,441	\$3,912,050	\$6,967,205	\$79,322,798		
Total M/WBE Firms	\$18,576,628	\$91,177,708	\$22,923,168	\$164,490,707		
	(%)	(%)	(%)	(%)		
Total Minority Firms	7.10%	16.11%	15.68%	24.78%		
Total Nonminority Women Firms	0.67%	0.72%	6.85%	23.08%		
Total M/WBE Firms	7.77%	16.84%	22.53%	47.86%		

Source: Chapter 4, Market Area, and Prime Utilization, Availability, and Disparity Analyses.

# FINDING B: PROCURMENT CARDS (P-CARDS)

For P-cards, minority firms were paid \$794,659, 3.16 percent of p-card dollars; nonminority women-owned firms were paid \$829,865, 3.30 percent of p-card dollars.

### FINDING C: M/WBE TOTAL UTILIZATION AND DISPARITY

The dollar value of M/WBE total utilization (prime contractors and subcontractors combined) on WSSC projects over the study period from within the relevant market was as follows:

- Across all contract categories, minority firms were paid approximately \$388.07 million, 31.65 percent of total dollars. Nonminority women-owned firms were paid approximately \$142.31 million, 11.61 percent of total dollars.
- In Architecture & Engineering, minority firms were paid approximately \$70.78 million, 29.61 percent of total Architecture & Engineering dollars; nonminority women-owned firms were paid approximately \$9.09 million, 3.80 percent of total Architecture & Engineering dollars (**Table 8-2**). There was disparity for all M/WBE groups.
- In Construction, minority firms were paid approximately \$175.90 million, 32.48 percent of total Construction dollars; nonminority women-owned firms were paid approximately \$22.62 million,



- 4.18 percent of total Construction dollars (**Table 8-2**). There was disparity for all M/WBE groups except Hispanic Americans.
- In Professional Services, minority firms were paid approximately \$26.96 million, 26.50 percent of total Professional Services dollars; nonminority women-owned firms were paid approximately \$7.59 million, 7.46 percent of total Professional Services dollars (**Table 8-2**). There was disparity for all M/WBE groups except Hispanic Americans.
- In Goods and General Services, minority firms were paid approximately \$114.41 million, 33.29 percent of total Goods and General Services dollars; nonminority women-owned firms were paid approximately \$103.00 million, 29.97 percent of total Goods and General Services dollars (**Table 8-2**). There was disparity for all M/WBE groups except Asian Americans and nonminority women.

TABLE 8-2
SUMMARY OF PRIME PLUS SUBCONTRACTOR UTILIZATION
BY PROCUREMENT CATEGORY AND BUSINESS OWNERSHIP CLASSIFICATION

BUSINESS OWNERSHIP CLASSIFICATION	ARCHITECTURE & ENGINEERING (\$)	CONSTRUCTION (\$)	PROFESSIONAL SERVICES (\$)	GOODS AND GENERAL SERVICES (\$)
Total Minority Firms	\$70,789,913	\$175,900,325	\$26,965,021	\$114,416,589
Total Nonminority Women Firms	\$9,094,497	\$22,624,666	\$7,592,791	\$103,003,449
Total M/WBE Firms	\$79,884,410	\$198,524,990	\$34,557,812	\$217,420,038
Total Minority Firms	29.60%	32.48%	26.50%	33.29%
Total Nonminority Women Firms	3.80%	4.18%	7.46%	29.97%
Total M/WBE Firms	33.40%	36.66%	33.96%	63.26%

Source: Chapter 5, Total Utilization, Availability, and Disparity Analyses.

### FINDING D: REGRESSION ANALYSIS

In a statistical analysis of survey data in the Washington area that controlled for the effects of variables related to company capacity variables (e.g., company capacity, owner level of education, and experience), M/WBE status had a negative effect on 2014 company earnings of African American owned firms.

## FINDING E: DISPARITIES IN SURVEY OF BUSINESS OWNERS DATA

In 240 disparity ratios in the Survey of Business Owners data from the U.S. Census Bureau for six procurement categories, covering Washington MSA and surrounding areas, only ten instances of over-utilization were found for M/WBE groups.

# FINDING F: PRIVATE SECTOR COMMERCIAL CONSTRUCTION

As a whole, M/WBE utilization in private sector commercial construction was very low, as measured by data from building permits from Prince George's County. From between July 1, 2009, and June 30, 2014, minority prime contractors won 0.15 percent of prime permits and nonminority women-owned firms received 0.00 percent of permits. MBE subcontractors were issued 2.93 percent of all subcontracting permits and WBEs



0.00 percent of subcontracting permits. When subcontractors utilized on WSSC public construction projects were cross referenced with the commercial construction projects, a total of two M/WBE firms were utilized on commercial construction projects as subcontractors. These results are consistent with the anecdotal **Finding I** below.

### FINDING G: DISPARITIES IN SELF-EMPLOYMENT AND REVENUE EARNINGS

Econometric analysis using data from 2014 American Community Survey U.S. Census Bureau data for the Washington area found statistically significant disparities for entry into self-employment for African Americans and Nonminority women. There were statistically significant disparities in earnings from self-employment for African Americans, Hispanic Americans, Asian Americans, and Nonminority Women.

#### FINDING H: 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 after controlling for a number of business factors. These NSSBF results are consistent with data in the 2016 local survey for this report. About 2.7 percent of non-M/WBE loan applicants reported being denied commercial bank loans, as compared to 50.0 percent of African American applicants.

### FINDING I: 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 (58 or 21.7% of M/WBEs). M/WBE subcontractors stated their biggest barrier working with primes on WSSC projects is competing with large companies (35 or 13.1% 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 28.1 percent or 75 respondents.
- ▶ An informal network precluded their firms from obtaining work in the private sector 26.2 percent or 70 respondents.
- ▶ Selected to satisfy good faith efforts requirements and then dropped on other public sector/private sector projects 13.5 percent or 36 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 WSSC 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; credit disparities; and anecdotal evidence of disparate treatment. WSSC should tailor its M/WBE and Small Local Business Enterprise (SLBE) 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 who were the low-bidding subcontractors.

### COMMENDATIONS AND RECOMMENDATIONS B: DATA MANAGEMENT

WSSC should be commended for conducting previous disparity studies every five to six years and in significant strides in tracking M/WBE utilization. In particular, WSSC should be commended for:

- Requiring the reporting of MBE and SLBE utilization.
- Validating M/WBE subcontractor utilization through the use of compliance reporting tools.
- Producing comprehensive annual legislative reports on MBE and SLBE utilization and the activities of the WSSC Small, Local and Minority Business Enterprise (SLMBE) office over a number of years.

### **RECOMMENDATIONS**

- ▶ Improve prime contractor compliance with entering non-M/WBE subcontractor data in WSSC's web-based compliance system (PRISM™).
- Update the CBR data, at minimum, every two years.

# COMMENDATION C: SMALL LOCAL BUSINESS ENTERPRISE (SLBE) PROGRAM

WSSC should be commended for its extensive set of incentives for SLBE participation, including SLBE bid incentives, sheltered markets, subcontractor goals, mentor-protégé program, and small contracts rotation. These SLBE incentives are some of the broadest set of small business incentives by a local government agency in general, let alone a local public utility, in the country. Small business programs, such as WSSC's SLBE incentives, have the advantage that they are not subject to constitutional challenge on equal protection grounds even in the absence of a disparity study.

#### COMMENDATION D: OUTREACH

WSSC should be commended for its extensive outreach activities, which include widespread coverage of the program on the WSSC website, partnerships with numerous business organizations, participation in numerous events, monthly training, and other activities discussed in **Chapter 3, Review of Policies, Procedures, and Programs**.



### COMMENDATION AND RECOMMENDATION E: CERTIFICATION

WSSC should be commended for its acceptance of certification from other organizations, in particular the Maryland Department of Transportation (MDOT).

#### RECOMMENDATION

**Two-Tier Size Standards**. The federal case law points to the use of size standards and net worth requirements as one factor in the narrow tailoring of remedial procurement programs. At present, the Maryland DOT uses federal size standards, which the federal courts have found to be narrowly tailored.

Size standards for remedial procurement programs face a dilemma. If the size standard is placed too high, large firms crowd out new firms. If the size standard is placed too low, too many experienced firms lose the advantages of the remedial program. One solution to this dilemma is to adopt a two-tier standard for M/WBE and SLBE certification. The states of Oregon and New Jersey and the federal government have used a two-tier size standard. Thus, for example, contracts can be set aside for small and very small firms and goals that included very large SLBEs and M/WBEs can be established on large projects. A standard approach is to use the SBA size standard for small firms and a percentage of the SBA size standard (e.g., 25 or 50 percent) for very small firms.

# 4. CONCLUSION

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



# APPENDIX A

# DETAILED MARKET AREA ANALYSES

**WSSC 2015 Disparity Study** 



## **OVERVIEW**

- The geographic market area analysis is based on dollars expended in the Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area (MSA). The cities and counties identified in this MSA are:
  - Arlington County, VA
  - Calvert County, MD
  - Charles County, VA
  - City of Fairfax, VA
  - City of Falls Church, VA
  - City of Fredericksburg, VA
  - City of Manassas Park, VA
  - City of Manassas, VA
  - Clarke County, VA
  - District of Columbia, DC
  - ▶ Fairfax County, VA

- ▶ Fauquier County, VA
- Frederick County, MD
- Jefferson County, WV
- Loudoun County, VA
- Montgomery County, MD
- Prince George's County, MD
- Prince William County, VA
- Spotsylvania County, VA
- Stafford County, VA
- Warren County, VA

In addition to those counties in the MSA, **Baltimore County**, **MD**, **City of Baltimore**, **Anne Arundel County**, **MD**, **Carroll County**, **MD**, and **Howard County**, **MD** also were included in the relevant market area.

2. MGT proposed the **Washington-Arlington-Alexandria**, **DC-VA-MD-WV MSA**, and the four additional counties as the relevant geographic market area because it is a realistic economic region in which businesses do business.



# TABLE A-1 WASHINGTON SUBURBAN SANITARY COMMISSION MARKET AREA, PRIME LEVEL ARCHITECTURE AND ENGINEERING FY 2010-2014

FY 2010-2014						
LOCATION OF FIRMS		DOLLARS	PERCENT OF DOLLARS			
ARCHITECTURE & ENGINEERING						
Inside Relevant Market Area						
CARROLL COUNTY, MD	\$	67,197,631	27.55%			
PRINCE GEORGES COUNTY, MD	\$	65,050,838	26.67%			
BALTIMORE COUNTY, MD	\$	44,987,885	18.44%			
MONTGOMERY COUNTY, MD	\$	29,169,964	11.96%			
ANNE ARUNDEL COUNTY, MD	\$	21,731,767	8.91%			
DISTRICT OF COLUMBIA, DC	\$	5,728,675	2.35%			
HOWARD COUNTY, MD		2,054,508	0.84%			
FAIRFAX CITY COUNTY, VA	\$	2,032,529	0.83%			
BALTIMORE CITY COUNTY, MD	\$	490,135	0.20%			
ARLINGTON COUNTY, VA	\$	472,742	0.19%			
FAIRFAX COUNTY, VA	\$	169,155	0.07%			
Inside WSSC's Market Area, Total		\$239,085,828	98.02%			
Outside WSSC's Market Area						
DALLAS COUNTY, TX	\$	2,350,868	0.96%			
ALLEGHENY COUNTY, PA	\$	1,030,486	0.42%			
NEW CASTLE COUNTY, DE	\$	479,475	0.20%			
WASHTENAW COUNTY, MI	\$	232,225	0.10%			
MIDDLESEX COUNTY, MA	\$ \$ \$	148,250	0.06%			
SOMERSET COUNTY, NJ	\$	124,460	0.05%			
RACINE COUNTY, WI	\$	92,400	0.04%			
MCLENNAN COUNTY, TX	\$	80,659	0.03%			
ALACHUA COUNTY, FL	\$	63,901	0.03%			
ROCKINGHAM COUNTY, NH	\$	50,470	0.02%			
COOK COUNTY, IL	\$	49,225	0.02%			
NASSAU COUNTY, NY	\$	40,531	0.02%			
BERGEN COUNTY, NJ	\$	23,500	0.01%			
HENNEPIN COUNTY, MN	\$	20,940	0.01%			
PHILADELPHIA COUNTY, PA	\$	14,155	0.01%			
RAMSEY COUNTY, MN	\$	8,950	0.00%			
SACRAMENTO COUNTY, CA	\$	7,400	0.00%			
WASHINGTON COUNTY, MD	\$	6,500	0.00%			
CECIL COUNTY, MD	\$	4,300	0.00%			
MONMOUTH COUNTY, NJ	\$	3,240	0.00%			
HILLSBOROUGH COUNTY, FL	\$	2,807	0.00%			
Outside WSSC'S Market Area, Total		\$4,834,740	1.98%			
ARCHITECTURE & ENGINEERING, TOTAL		\$243,920,568	100.00%			

Source: Data retrieved from the WSSC MAPS system for the period of 07/01/2009 through 06/30/2014



# TABLE A-2 WASHINGTON SUBURBAN SANITARY COMMISSION MARKET AREA, PRIME LEVEL CONSTRUCTION FY 2010-2014

FY 2010-2014		252 251 15 25
LOCATION OF FIRMS	DOLLARS	PERCENT OF DOLLARS
CONSTRUCTIO	N	
Inside Relevant Market Area		
PRINCE GEORGES COUNTY, MD	\$161,907,125	26.26%
HOWARD COUNTY, MD	\$81,995,155	13.30%
DISTRICT OF COLUMBIA, DC	\$74,745,754	12.13%
ANNE ARUNDEL COUNTY, MD	\$68,209,949	11.07%
MONTGOMERY COUNTY, MD	\$43,822,760	7.11%
CLARKE COUNTY, VA	\$39,846,225	6.46%
BALTIMORE COUNTY, MD	\$39,411,861	6.39%
FREDERICK COUNTY, MD	\$13,047,905	2.12%
ARLINGTON COUNTY, VA	\$9,737,743	1.58%
PRINCE WILLIAM COUNTY, VA	\$4,779,066	0.78%
FAIRFAX COUNTY, VA	\$3,326,320	0.54%
LOUDOUN COUNTY, VA	\$558,585	0.09%
CARROLL COUNTY, MD	\$163,677	0.03%
Inside WSSC's Market Area, Total	<u>\$541,552,124</u>	<u>87.85%</u>
Outside WSSC's Market Area		
LIVINGSTON COUNTY, MI	\$15,030,195	2.44%
CHITTENDEN COUNTY, VT	\$12,410,409	2.01%
FULTON, GA	\$10,421,281	1.69%
ESSEX COUNTY, NJ	\$6,342,582	1.03%
HARFORD COUNTY, MD	\$5,873,919	0.95%
MONTGOMERY COUNTY, OH	\$4,946,516	0.80%
CUMBERLAND COUNTY, PA	\$4,164,915	0.68%
LANCASTER COUNTY, PA	\$3,217,291	0.52%
GLOUCESTER COUNTY, NJ	\$2,771,058	0.45%
YORK COUNTY, PA	\$2,540,749	0.41%
TARRANT COUNTY, TX	\$2,503,103	0.41%
ERIE COUNTY, NY	\$2,083,962	0.34%
MONTGOMERY COUNTY, PA	\$1,120,290	0.18%
CUYAHOGA COUNTY, OH	\$1,055,669	0.17%
SAINT CHARLES COUNTY, MO	\$292,795	0.05%
MONROE COUNTY, NY	\$104,261	0.02%
MAHONING COUNTY, OH	\$7,508	0.00%
TALBOT COUNTY, MD	\$224	0.00%
Outside WSSC's Market Area, Total	<u>\$74,886,727</u>	<u>12.15%</u>
CONSTRUCTION, TOTAL	\$616,438,851	100.00%

Source: Data retrieved from the WSSC MAPS system for the period of 07/01/2009 through 06/30/2014



# TABLE A-3 WASHINGTON SUBURBAN SANITARY COMMISSION MARKET AREA, PRIME LEVEL PROFESSIONAL SERVICES FY 2010-2014

FY 2010-2014						
LOCATION OF FIRMS	DOLLARS	PERCENT OF DOLLARS				
PROFESSIONAL SER	VICES					
Inside Relevant Market Area						
BALTIMORE COUNTY, MD	\$67,189,270	60.54%				
PRINCE GEORGES COUNTY, MD	\$15,567,766	14.03%				
HOWARD COUNTY, MD	\$7,332,631	6.61%				
FAIRFAX COUNTY, VA	\$3,372,843	3.04%				
ANNE ARUNDEL COUNTY, MD	\$3,148,916	2.84%				
DISTRICT OF COLUMBIA, DC	\$2,316,340	2.09%				
MONTGOMERY COUNTY, MD	\$1,548,055	1.39%				
FREDERICK COUNTY, MD	\$897,770	0.81%				
FALLS CHURCH COUNTY, VA	\$223,416	0.20%				
ARLINGTON COUNTY, VA	\$131,740	0.12%				
CARROLL COUNTY, MD	\$10,006	0.01%				
Inside WSSC's Market Area, Total	<u>\$101,738,753</u>	<u>91.68%</u>				
Outside WSSC's Market Area						
CUMBERLAND COUNTY, PA	\$1,506,933	1.36%				
CHESTERFIELD COUNTY, VA	\$1,344,261	1.21%				
COOK COUNTY, IL	\$1,241,127	1.12%				
MARION COUNTY, IN	\$799,975	0.72%				
LAKE COUNTY, FL	\$640,025	0.58%				
LOS ANGELES COUNTY, CA	\$423,318	0.38%				
NEW YORK COUNTY, NY	\$422,554	0.38%				
OAKLAND COUNTY, MI	\$413,202	0.37%				
ALLEGHENY COUNTY, PA	\$384,668	0.35%				
BROWARD COUNTY, FL	\$363,200	0.33%				
ESSEX COUNTY, MA	\$300,000	0.27%				
DALLAS COUNTY, TX	\$236,768	0.21%				
SAN FRANCISCO COUNTY, CA	\$233,381	0.21%				
CANADA	\$232,479	0.21%				
MECKLENBURG COUNTY, NC	\$121,568	0.11%				
SAINT LOUIS COUNTY, MO	\$100,720	0.09%				
ALEXANDRIA CITY COUNTY, VA	\$78,000	0.07%				
POLK COUNTY, FL	\$53,568	0.05%				
TARRANT COUNTY, TX	\$52,881	0.05%				
SALT LAKE COUNTY, UT	\$29,997	0.03%				
MORRIS COUNTY, NJ	\$28,338	0.03%				
SNOHOMISH COUNTY, WA	\$25,000	0.02%				
GWINNETT COUNTY, GA	\$23,857	0.02%				
EL DORADO COUNTY, CA	\$22,001	0.02%				
JOHNSON COUNTY, KS	\$20,635	0.02%				



LOCATION OF FIRMS	DOLLARS	PERCENT OF DOLLARS
SANTA CLARA COUNTY, CA	\$18,200	0.02%
ARAPAHOE COUNTY, CO	\$17,340	0.02%
MILWAUKEE COUNTY, WI	\$15,900	0.01%
MIDDLESEX COUNTY, NJ	\$15,000	0.01%
SAN DIEGO COUNTY, CA	\$15,000	0.01%
COBB COUNTY, GA	\$12,823	0.01%
MULTNOMAH COUNTY, OR	\$10,490	0.01%
HILLSBOROUGH COUNTY, NH	\$6,608	0.01%
WAKE COUNTY, NC	\$6,510	0.01%
ROCKINGHAM COUNTY, NH	\$6,450	0.01%
DUPAGE COUNTY, IL	\$5,800	0.01%
CHESTER COUNTY, PA	\$5,014	0.00%
HENRICO COUNTY, VA	\$1,545	0.00%
JEFFERSON COUNTY, AL	\$790	0.00%
Outside WSSC's Market Area, Total	<u>\$9,235,927</u>	<u>8.32%</u>
PROFESSIONAL SERVICES, TOTAL	\$110,974,680	100.00%

Source: Data retrieved from the WSSC MAPS system for the period of 07/01/2009 through 06/30/2014



FY 2010-2014  PERCENT OF						
LOCATION OF FIRMS	LOCATION OF FIRMS DOLLARS					
GOODS AND GENERAL SERVICES		DOLLARS				
Inside Relevant Market Area						
BALTIMORE COUNTY, MD	\$ 115,958,628	23.91%				
PRINCE GEORGES COUNTY, MD	\$ 90,212,219	18.60%				
FAUQUIER COUNTY, VA	\$ 30,114,686	6.21%				
MONTGOMERY COUNTY, MD	\$ 20,900,510	4.31%				
HOWARD COUNTY, MD	\$ 19,439,577	4.01%				
FAIRFAX COUNTY, VA	\$ 17,884,355	3.69%				
DISTRICT OF COLUMBIA, DC	\$ 16,779,825	3.46%				
ANNE ARUNDEL COUNTY, MD	\$ 13,118,715	2.71%				
FREDERICK COUNTY, MD	\$ 8,158,753	1.68%				
CARROLL COUNTY, MD	\$ 5,468,242	1.13%				
BALTIMORE CITY COUNTY, MD	\$ 1,631,829	0.34%				
FALLS CHURCH COUNTY, VA	\$ 1,237,511	0.26%				
CALVERT COUNTY, MD	\$ 966,382	0.20%				
PRINCE WILLIAM COUNTY, VA	\$ 667,782	0.14%				
CHARLES COUNTY, MD	\$ 486,526	0.10%				
ARLINGTON COUNTY, VA	\$ 349,026	0.07%				
LOUDOUN COUNTY, VA	\$ 230,198	0.05%				
SPOTSYLVANIA COUNTY, VA	\$ 89,058	0.02%				
Inside WSSC's Market Area, Total	\$ \$343,693,822	<u>70.87%</u>				
Outside WSSC's Market Area						
SOMERSET COUNTY, NJ	\$ 22,865,329	4.71%				
COOK COUNTY, IL	\$ 17,090,301	3.52%				
FULTON COUNTY, GA	\$ 12,157,022	2.51%				
SUFFOLK COUNTY, MA	\$ 10,561,986	2.18%				
DALLAS COUNTY, TX	\$ 8,504,406	1.75%				
DUPAGE COUNTY, IL	\$ 5,791,203	1.19%				
BOWIE COUNTY, TX	\$ 5,496,262	1.13%				
ONONDAGA COUNTY, NY	\$ 5,398,938	1.11%				
ALLEGHENY COUNTY, PA	\$ 3,665,566	0.76%				
VIRGINIA BEACH COUNTY, VA	\$ 2,543,743	0.52%				
WINDHAM COUNTY, VT	\$ 2,492,681	0.51%				
ORANGE COUNTY, CA	\$ 2,485,741	0.51%				
DORCHESTER COUNTY, MD	\$ 2,374,590	0.49%				
NEW YORK COUNTY, NY	\$ 2,332,401	0.48%				
LOS ANGELES COUNTY, CA	\$ 2,185,646	0.45%				
HARFORD COUNTY, MD	\$ 2,012,232	0.41%				
HUDSON COUNTY, NJ	\$ 1,799,901	0.37%				
WARREN COUNTY, NJ	\$ 1,613,904	0.33%				



LOCATION OF FIRMS	DOLLARS		PERCENT OF
ROWAN COUNTY, NC	\$	1,374,596	DOLLARS 0.28%
DUVAL COUNTY, FL	\$	1,299,631	0.27%
CANADA	\$	1,113,202	0.23%
DAUPHIN COUNTY, PA	\$	1,022,073	0.21%
JEFFERSON COUNTY, OH	\$	1,014,893	0.21%
PLACER COUNTY, CA	\$	913,503	0.19%
KING GEORGE COUNTY, VA	\$	909,680	0.19%
SAN FRANCISCO COUNTY, CA	\$	849,703	0.18%
SANTA CLARA COUNTY, CA	\$	837,772	0.17%
QUEEN ANNES COUNTY, MD	\$	757,648	0.16%
CUYAHOGA COUNTY, OH	\$	748,811	0.15%
ESSEX COUNTY, NJ	\$	725,664	0.15%
KNOX COUNTY, TN	\$	683,078	0.14%
MECKLENBURG COUNTY, NC	\$	671,986	0.14%
CHESTER COUNTY, PA	\$	659,257	0.14%
RIVERSIDE COUNTY, CA	\$	633,100	0.13%
LARIMER COUNTY, CO	\$	561,806	0.12%
TALBOT COUNTY, MD	\$	553,808	0.11%
ALAMEDA COUNTY, CA	\$	542,894	0.11%
KING COUNTY, WA	\$	489,725	0.10%
LEON COUNTY, FL	\$	480,103	0.10%
MAHONING COUNTY, OH	\$	452,392	0.09%
MARICOPA COUNTY, AZ	\$	421,865	0.09%
HANOVER COUNTY, VA	\$	388,876	0.08%
CHESTERFIELD COUNTY, VA	\$	370,082	0.08%
BROWARD COUNTY, FL	\$	347,398	0.07%
MONTGOMERY COUNTY, PA	\$	332,669	0.07%
ELMORE COUNTY, AL	\$	321,971	0.07%
CECIL COUNTY, MD	\$	311,959	0.06%
WASHINGTON COUNTY, PA	\$	310,445	0.06%
PHILADELPHIA COUNTY, PA	\$	278,975	0.06%
SAINT CROIX COUNTY, WI	\$	278,234	0.06%
JEFFERSON COUNTY, CO	\$	262,891	0.05%
BUTLER COUNTY, PA	\$	254,171	0.05%
HAMILTON COUNTY, OH	\$	247,619	0.05%
THURSTON COUNTY, WA	\$	239,056	0.05%
BERNALILLO COUNTY, NM	\$	235,950	0.05%
DELAWARE COUNTY, PA	\$	230,613	0.05%
JACKSON COUNTY, MI	\$	229,000	0.05%



LOCATION OF FIRMS	IS DOLLARS		PERCENT OF DOLLARS
HARRIS COUNTY, TX	\$	225,713	0.05%
YORK COUNTY, PA	\$	222,471	0.05%
TARRANT COUNTY, TX	\$	219,177	0.05%
WICOMICO COUNTY, MD	\$	216,831	0.04%
INDIANA COUNTY, PA	\$	205,353	0.04%
UNION COUNTY, NC	\$	204,775	0.04%
TRAVIS COUNTY, TX	\$	203,878	0.04%
MARION COUNTY, FL	\$	201,070	0.04%
BUCKS COUNTY, PA	\$	176,816	0.04%
GWINNETT COUNTY, GA	\$	176,611	0.04%
BEXAR COUNTY, TX	\$	172,851	0.04%
VOLUSIA COUNTY, FL	\$	170,356	0.04%
LAKE COUNTY, IL	\$	168,992	0.03%
ERIE COUNTY, NY	\$	166,305	0.03%
MIDDLESEX COUNTY, MA	\$	156,486	0.03%
CAMDEN COUNTY, NJ	\$	156,396	0.03%
SAN MATEO COUNTY, CA	\$	152,514	0.03%
WARREN COUNTY, OH	\$	144,447	0.03%
SUFFOLK COUNTY, NY	\$	140,109	0.03%
BARRY COUNTY, MO	\$	131,581	0.03%
SANGAMON COUNTY, IL	\$	128,837	0.03%
LEBANON COUNTY, PA	\$	124,944	0.03%
MONTGOMERY COUNTY, NY	\$	114,816	0.02%
SKAGIT COUNTY, WA	\$	108,431	0.02%
MONROE COUNTY, NY	\$	103,449	0.02%
GLOUCESTER COUNTY, VA	\$	103,028	0.02%
MILWAUKEE COUNTY, WI	\$	102,190	0.02%
HILLSBOROUGH COUNTY, FL	\$	101,193	0.02%
HENRICO COUNTY, VA	\$	98,624	0.02%
HARRISON COUNTY, TX	\$	94,116	0.02%
CUMBERLAND COUNTY, ME	\$	88,450	0.02%
BEAVER COUNTY, PA	\$	85,254	0.02%
JEFFERSON COUNTY, KY		82,786	0.02%
PASSAIC COUNTY, NJ	\$ \$	82,504	0.02%
ROCKINGHAM COUNTY, NH	\$	79,240	0.02%
KANE COUNTY, IL	\$	78,981	0.02%
ANCHORAGE BOROUGH, AK	\$	77,612	0.02%
PIERCE COUNTY, WI	\$	77,108	0.02%
HENRY COUNTY, GA	\$	76,675	0.02%



LOCATION OF FIRMS	DOLLARS		PERCENT OF DOLLARS
JOHNSON COUNTY, KS	\$	76,420	0.02%
FRANKLIN COUNTY, PA	\$	73,856	0.02%
UNION COUNTY, NJ	\$	73,668	0.02%
LUZERNE COUNTY, PA	\$	70,375	0.01%
FAIRFIELD COUNTY, CT	\$	65,868	0.01%
MIDDLESEX COUNTY, NJ	\$	65,606	0.01%
VENTURA COUNTY, CA	\$	61,041	0.01%
CRAWFORD COUNTY, PA	\$	60,019	0.01%
BOULDER COUNTY, CO		59,555	0.01%
HILLSBOROUGH COUNTY, NH	\$ \$	56,483	0.01%
BROOME COUNTY, NY	\$	54,264	0.01%
CUMBERLAND COUNTY, PA		50,970	0.01%
LEHIGH COUNTY, PA	\$ \$	49,580	0.01%
PALM BEACH COUNTY, FL	\$	48,804	0.01%
CAYUGA COUNTY, NY		48,316	0.01%
WASHINGTON COUNTY, OR	\$ \$	44,799	0.01%
BAY COUNTY, FL	\$	41,533	0.01%
ARAPAHOE COUNTY, CO	\$ \$	41,409	0.01%
RUTLAND COUNTY, VT		39,575	0.01%
HENNEPIN COUNTY, MN	\$	39,203	0.01%
SAN DIEGO COUNTY, CA	\$	37,015	0.01%
RAMSEY COUNTY, MN	\$	36,184	0.01%
ALLEN COUNTY, IN	\$	35,955	0.01%
ALBANY COUNTY, NY	\$ \$	35,612	0.01%
UNION COUNTY, AR		34,860	0.01%
BURLINGTON COUNTY, NJ	\$	34,266	0.01%
CHARLESTON COUNTY, SC	\$	32,590	0.01%
DENVER COUNTY, CO	\$	31,237	0.01%
CONTRA COSTA COUNTY, CA	\$	30,685	0.01%
POLK COUNTY, FL	\$	29,421	0.01%
SALT LAKE COUNTY, UT	\$	29,400	0.01%
BERKS COUNTY, PA	\$	29,035	0.01%
NEW CASTLE COUNTY, DE	\$ \$ \$ \$	28,435	0.01%
FRANKLIN COUNTY, MA	\$	25,922	0.01%
OAKLAND COUNTY, MI	\$	24,939	0.01%
CULPEPER COUNTY, VA		24,513	0.01%
GUILFORD COUNTY, NC	\$ \$	23,624	0.00%
CLEARFIELD COUNTY, PA		23,112	0.00%
CHESAPEAKE COUNTY, VA	\$	22,794	0.00%



LOCATION OF FIRMS	DOLLARS		PERCENT OF DOLLARS
CLARK COUNTY, NV	\$	22,645	0.00%
STEARNS COUNTY, MN	\$	21,975	0.00%
ATLANTIC COUNTY, NJ	\$	21,615	0.00%
SUSSEX COUNTY, DE	\$	20,894	0.00%
PINELLAS COUNTY, FL	\$	20,090	0.00%
RICHMOND COUNTY, VA	\$	19,931	0.00%
PROVIDENCE COUNTY, RI	\$	19,805	0.00%
SANTA BARBARA COUNTY, CA	\$	19,394	0.00%
WAKE COUNTY, NC		18,891	0.00%
STRAFFORD COUNTY, NH	\$ \$	17,998	0.00%
NASSAU COUNTY, NY	\$	17,545	0.00%
BERGEN COUNTY, NJ		17,228	0.00%
JACKSON COUNTY, MO	\$ \$	14,764	0.00%
LANCASTER COUNTY, PA	\$	14,580	0.00%
POLK COUNTY, IA	\$	13,613	0.00%
JEFFERSON COUNTY, AL	\$	13,296	0.00%
CUMBERLAND COUNTY, NJ	\$	12,493	0.00%
HAMPSHIRE COUNTY, MA		11,600	0.00%
NEW HAVEN COUNTY, CT	\$ \$	10,015	0.00%
DAVIDSON COUNTY, TN	\$	8,892	0.00%
EAU CLAIRE COUNTY, WI	\$	8,860	0.00%
RENSSELAER COUNTY, NY	\$	7,242	0.00%
ANGELINA COUNTY, TX	\$	7,175	0.00%
OZAUKEE COUNTY, WI		6,960	0.00%
MARION COUNTY, IN	\$ \$	6,855	0.00%
PIMA COUNTY, AZ	\$	6,000	0.00%
MANATEE COUNTY, FL		5,612	0.00%
SEMINOLE COUNTY, FL	\$ \$	5,510	0.00%
GLOUCESTER COUNTY, NJ	\$	5,386	0.00%
SEDGWICK COUNTY, KS	\$	4,158	0.00%
ERIE COUNTY, PA	\$	4,100	0.00%
STEUBEN COUNTY, IN	\$	3,767	0.00%
OUTAGAMIE COUNTY, WI	\$	3,650	0.00%
MULTNOMAH COUNTY, OR	\$ \$ \$	3,500	0.00%
GREENUP COUNTY, KY	\$	2,930	0.00%
CARSON COUNTY, NV	\$	2,918	0.00%
LAKE COUNTY, FL	\$ \$	2,100	0.00%
BUNCOMBE COUNTY, NC		1,807	0.00%
CLARKE COUNTY, GA	\$	1,645	0.00%



LOCATION OF FIRMS	ı	DOLLARS	PERCENT OF DOLLARS
LORAIN COUNTY, OH	\$	1,570	0.00%
SAINT MARYS COUNTY, MD	\$	1,481	0.00%
BAHAMAS	\$	1,464	0.00%
WILLIAMSON COUNTY, TN	\$	1,446	0.00%
MERRIMACK COUNTY, NH	\$	1,380	0.00%
SANILAC COUNTY, MI	\$	1,217	0.00%
LOS ANGELES, CA	\$	1,052	0.00%
GREENE COUNTY, MO	\$	960	0.00%
ALEXANDRIA COUNTY, VA	\$	663	0.00%
WASHTENAW COUNTY, MI	\$	611	0.00%
ROCK COUNTY, WI	\$	461	0.00%
MINNEHAHA COUNTY, SD	\$	240	0.00%
COOKE COUNTY, TX	\$	219	0.00%
Outside WSSC's Market Area, Total	<u>\$</u>	141,281,063	<u>29.13%</u>
GOODS AND GENERAL SERVICES, TOTAL	\$	484,974,885	100.00%

Source: Data retrieved from the WSSC MAPS system for the period of 07/01/2009 through 06/30/2014



# APPENDIX B

# DETAILED PRIME DISPARITY INDICES

**WSSC 2015 Disparity Study** 



#### APPENDIX B: DETAILED PRIME DISPARITY INDICES

#### TABLE B-1 WASHINGTON SUBURBAN SANITARY COMMISSION ARCHITECTURE AND ENGINEERING DISPARITY RESULTS

		DISPARITION				
YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPAG UTILIZATION	
	African American Firms	6.98%	20.09%	34.75	Underutilization	*
	Asian American Firms	12.27%	24.36%	50.37	Underutilization	*
	Hispanic American Firms	0.00%	2.99%	0.00	Underutilization	*
2009-10	Native American Firms	0.00%	0.00%	-	n/a	
2009-10	TOTAL MINORITY FIRMS	19.25%	47.44%	40.58	Underutilization	*
	Nonminority Women Firms	5.43%	9.83%	55.24	Underutilization	*
	TOTAL M/WBE FIRMS	24.68%	57.26%	43.10	Underutilization	*
	Non-M/WBE Firms	75.32%	42.74%	176.25	Overutilization	
	African American Firms	2.06%	20.09%	10.26	Underutilization	*
	Asian American Firms	2.94%	24.36%	12.07	Underutilization	*
	Hispanic American Firms	0.00%	2.99%	0.00	Underutilization	*
2010-11	Native American Firms	0.00%	0.00%	-	n/a	
2010-11	TOTAL MINORITY FIRMS	5.00%	47.44%	10.54	Underutilization	*
	Nonminority Women Firms	0.98%	9.83%	9.97	Underutilization	*
	TOTAL M/WBE FIRMS	5.98%	57.26%	10.44	Underutilization	*
	Non-M/WBE Firms	94.02%	42.74%	220.01	Overutilization	
	African American Firms	1.29%	20.09%	6.42	Underutilization	*
	Asian American Firms	5.79%	24.36%	23.77	Underutilization	*
	Hispanic American Firms	0.00%	2.99%	0.00	Underutilization	*
2011-12	Native American Firms	0.00%	0.00%	-	n/a	
2011-12	TOTAL MINORITY FIRMS	7.08%	47.44%	14.93	Underutilization	*
	Nonminority Women Firms	0.09%	9.83%	0.92	Underutilization	*
	TOTAL M/WBE FIRMS	7.17%	57.26%	12.52	Underutilization	*
	Non-M/WBE Firms	92.83%	42.74%	217.22	Overutilization	
	African American Firms	3.34%	20.09%	16.63	Underutilization	*
	Asian American Firms	3.03%	24.36%	12.44	Underutilization	*
	Hispanic American Firms	0.00%	2.99%	0.00	Underutilization	*
2012-13	Native American Firms	0.00%	0.00%	-	n/a	
2012-13	TOTAL MINORITY FIRMS	6.37%	47.44%	13.43	Underutilization	*
	Nonminority Women Firms	0.06%	9.83%	0.61	Underutilization	*
	TOTAL M/WBE FIRMS	6.43%	57.26%	11.23	Underutilization	*
	Non-M/WBE Firms	93.57%	42.74%	218.95	Overutilization	



## TABLE B-1(cont.) WASHINGTON SUBURBAN SANITARY COMMISSION ARCHITECTURE AND ENGINEERING DISPARITY RESULTS

YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPAC UTILIZATION	
	African American Firms	4.30%	20.09%	21.41	Underutilization	*
	Asian American Firms	2.14%	24.36%	8.79	Underutilization	*
	Hispanic American Firms	0.00%	2.99%	0.00	Underutilization	*
2013-14	Native American Firms	0.00%	0.00%	-	n/a	
2015-14	TOTAL MINORITY FIRMS	6.44%	47.44%	13.58	Underutilization	*
	Nonminority Women Firms	0.48%	9.83%	4.88	Underutilization	*
	TOTAL M/WBE FIRMS	6.92%	57.26%	12.08	Underutilization	*
	Non-M/WBE Firms	93.08%	42.74%	217.81	Overutilization	
	African American Firms	2.69%	20.09%	13.39	Underutilization	*
	Asian American Firms	4.41%	24.36%	18.10	Underutilization	*
	Hispanic American Firms	0.00%	2.99%	0.00	Underutilization	*
TOTAL	Native American Firms	0.00%	0.00%	-	n/a	
(OVERALL)	TOTAL MINORITY FIRMS	7.10%	47.44%	14.97	Underutilization	*
	Nonminority Women Firms	0.67%	9.83%	6.82	Underutilization	*
	TOTAL M/WBE FIRMS	7.77%	57.26%	13.57	Underutilization	*
	Non-M/WBE Firms	92.23%	42.74%	215.82	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.

The index is based on the actual percentage value and not the rounded utilization and availability estimates Percentage values presented.

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



<sup>\*</sup> indicate a substantial level of disparity, which is a disparity index below 80.00.

## TABLE B-2 WASHINGTON SUBURBAN SANITARY COMMISSION CONSTRUCTION DISPARITY RESULTS

		ISPARITY RESUL	13			
YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPAG UTILIZATION	
	African American Firms	2.02%	14.37%	14.06	Underutilization	*
	Asian American Firms	0.00%	4.28%	0.00	Underutilization	*
	Hispanic American Firms	17.68%	11.01%	160.59	Overutilization	
2000 10	Native American Firms	0.00%	1.83%	0.00	Underutilization	*
2009-10	TOTAL MINORITY FIRMS	19.70%	31.49%	62.55	Underutilization	*
	Nonminority Female Firms	1.03%	7.65%	13.47	Underutilization	*
	TOTAL M/WBE FIRMS	20.73%	39.14%	52.96	Underutilization	*
	Non-M/WBE Firms	79.27%	60.86%	130.26	Overutilization	
	African American Firms	4.34%	14.37%	30.20	Underutilization	*
	Asian American Firms	0.00%	4.28%	0.00	Underutilization	*
	Hispanic American Firms	7.63%	11.01%	69.31	Underutilization	*
2010-11	Native American Firms	0.00%	1.83%	0.00	Underutilization	*
2010-11	TOTAL MINORITY FIRMS	11.97%	31.49%	38.01	Underutilization	*
	Nonminority Female Firms	0.84%	7.65%	10.99	Underutilization	*
	TOTAL M/WBE FIRMS	12.81%	39.14%	32.73	Underutilization	*
	Non-M/WBE Firms	87.19%	60.86%	143.27	Overutilization	
	African American Firms	3.39%	14.37%	23.59	Underutilization	*
	Asian American Firms	0.00%	4.28%	0.00	Underutilization	*
	Hispanic American Firms	9.34%	11.01%	84.84	Underutilization	
2011-12	Native American Firms	0.00%	1.83%	0.00	Underutilization	*
2011-12	TOTAL MINORITY FIRMS	12.73%	31.49%	40.42	Underutilization	*
	Nonminority Female Firms	0.29%	7.65%	3.79	Underutilization	*
	TOTAL M/WBE FIRMS	13.03%	39.14%	33.29	Underutilization	*
	Non-M/WBE Firms	86.97%	60.86%	142.91	Overutilization	
	African American Firms	3.85%	14.37%	26.79	Underutilization	*
	Asian American Firms	0.00%	4.28%	0.00	Underutilization	*
	Hispanic American Firms	17.50%	11.01%	158.96	Overutilization	
2012-13	Native American Firms	0.00%	1.83%	0.00	Underutilization	*
	TOTAL MINORITY FIRMS	21.35%	31.49%	67.79	Underutilization	*
	Nonminority Female Firms	0.75%	7.65%	9.81	Underutilization	*
	TOTAL M/WBE FIRMS	22.10%	39.14%	56.46	Underutilization	*
	Non-M/WBE Firms	77.90%	60.86%	128.01	Overutilization	



## TABLE B-2 (cont.) WASHINGTON SUBURBAN SANITARY COMMISSION CONSTRUCTION DISPARITY RESULTS

YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPAC UTILIZATION	
	African American Firms	7.48%	14.37%	52.05	Underutilization	*
	Asian American Firms	0.00%	4.28%	0.00	Underutilization	*
	Hispanic American Firms	8.41%	11.01%	76.39	Underutilization	*
2013-14	Native American Firms	0.00%	1.83%	0.00	Underutilization	*
2013-14	TOTAL MINORITY FIRMS	15.89%	31.49%	50.45	Underutilization	*
	Nonminority Female Firms	1.50%	7.65%	19.62	Underutilization	*
	TOTAL M/WBE FIRMS	17.39%	39.14%	44.43	Underutilization	*
	Non-M/WBE Firms	82.61%	60.86%	135.75	Overutilization	
	African American Firms	3.91%	14.37%	27.21	Underutilization	*
	Asian American Firms	0.00%	4.28%	0.00	Underutilization	*
	Hispanic American Firms	12.20%	11.01%	110.82	Overutilization	
TOTAL	Native American Firms	0.00%	1.83%	0.00	Underutilization	*
(OVERALL)	TOTAL MINORITY FIRMS	16.11%	31.49%	51.15	Underutilization	*
	Nonminority Female Firms	0.73%	7.65%	9.55	Underutilization	*
	TOTAL M/WBE FIRMS	16.84%	39.14%	43.03	Underutilization	*
	Non-M/WBE Firms	83.16%	60.86%	136.65	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.

The index is based on the actual percentage value and not the rounded utilization and availability estimates Percentage values presented.



<sup>\*</sup> indicate a substantial level of disparity, which is a disparity index below 80.00.

## TABLE B-3 WASHINGTON SUBURBAN SANITARY COMMISSION PROFESSIONAL SERVICES DISPARITY RESULTS

		DISPARITY RE.	30L13			
YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPA UTILIZATION	
	African American Firms	2.77%	32.86%	8.43	Underutilization	*
	Asian American Firms	1.83%	12.63%	14.49	Underutilization	*
	Hispanic American Firms	12.98%	2.58%	502.61	Overutilization	
2009-10	Native American Firms	0.00%	0.00%	-	n/a	
2009-10	TOTAL MINORITY FIRMS	17.58%	48.06%	36.58	Underutilization	*
	Nonminority Female Firms	2.67%	9.76%	27.37	Underutilization	*
	TOTAL M/WBE FIRMS	20.25%	57.82%	35.02	Underutilization	*
	Non-M/WBE Firms	79.75%	42.18%	189.07	Overutilization	
	African American Firms	5.89%	32.86%	17.93	Underutilization	*
	Asian American Firms	17.93%	12.63%	142.01	Overutilization	
	Hispanic American Firms	2.74%	2.58%	106.10	Overutilization	
2010-11	Native American Firms	0.00%	0.00%	-	n/a	
2010-11	TOTAL MINORITY FIRMS	26.56%	48.06%	55.26	Underutilization	*
	Nonminority Female Firms	3.99%	9.76%	40.90	Underutilization	*
	TOTAL M/WBE FIRMS	30.56%	57.82%	52.85	Underutilization	*
	Non-M/WBE Firms	69.44%	42.18%	164.62	Overutilization	
	African American Firms	2.12%	32.86%	6.45	Underutilization	*
	Asian American Firms	3.68%	12.63%	29.15	Underutilization	*
	Hispanic American Firms	4.77%	2.58%	184.71	Overutilization	
2011-12	Native American Firms	0.00%	0.00%	-	n/a	
2011-12	TOTAL MINORITY FIRMS	10.57%	48.06%	21.99	Underutilization	*
	Nonminority Female Firms	6.81%	9.76%	69.80	Underutilization	*
	TOTAL M/WBE FIRMS	17.38%	57.82%	30.06	Underutilization	*
	Non-M/WBE Firms	82.62%	42.18%	195.87	Overutilization	
	African American Firms	1.52%	32.86%	4.63	Underutilization	*
	Asian American Firms	7.38%	12.63%	58.45	Underutilization	*
	Hispanic American Firms	0.84%	2.58%	32.53	Underutilization	*
2012-13	Native American Firms	0.00%	0.00%	-	n/a	
2012-13	TOTAL MINORITY FIRMS	9.74%	48.06%	20.27	Underutilization	*
	Nonminority Female Firms	11.33%	9.76%	116.13	Overutilization	
	TOTAL M/WBE FIRMS	21.08%	57.82%	36.46	Underutilization	*
	Non-M/WBE Firms	78.92%	42.18%	187.10	Overutilization	



## TABLE B-3 (cont.) WASHINGTON SUBURBAN SANITARY COMMISSION PROFESSIONAL SERVICES DISPARITY RESULTS

YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPA	
	African American Firms	7.06%	6 32.86%	21.49	Underutilization	*
	Asian American Firms	38.68%	6 12.63%	306.36	Overutilization	
	Hispanic American Firms	13.189	2.58%	510.36	Overutilization	
2013-14	Native American Firms	0.00%	6 0.00%	-	n/a	
2013-14	TOTAL MINORITY FIRMS	58.92%	48.06%	122.59	Overutilization	
	Nonminority Female Firms	6.54%	9.76%	67.04	Underutilization	*
	TOTAL M/WBE FIRMS	65.45%	6 57.82%	113.20	Overutilization	
	Non-M/WBE Firms	34.55%	42.18%	81.91	Underutilization	
	African American Firms	2.719	32.86%	8.25	Underutilization	*
	Asian American Firms	7.439	6 12.63%	58.85	Underutilization	*
	Hispanic American Firms	5.55%	6 2.58%	214.91	Overutilization	
TOTAL	Native American Firms	0.009	6 0.00%	-	n/a	
(OVERALL)	TOTAL MINORITY FIRMS	15.69%	48.06%	32.64	Underutilization	*
	Nonminority Female Firms	6.85%	6 9.76%	70.21	Underutilization	*
	TOTAL M/WBE FIRMS	22.549	6 57.82%	38.98	Underutilization	*
	Non-M/WBE Firms	77.46%	42.18%	183.64	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.

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



The index is based on the actual percentage value and not the rounded utilization and availability estimates Percentage values presented.

<sup>\*</sup> indicate a substantial level of disparity, which is a disparity index below 80.00.

## TABLE B-4 WASHINGTON SUBURBAN SANITARY COMMISSION GOODS AND GENERAL SERVICES DISPARITY RESULTS

Percent Of Dollars			DISPARITY RES	ULI3_			
African American Firms	YEAR			FIRMS ESTIMATE			
Hispanic American Firms   0.89%   3.63%   24.52   Underutilization   *		African American Firms	26.58%		111.92	Overutilization	
Native American Firms   0.00%   0.15%   0.00   Underutilization   * TOTAL MINORITY FIRMS   29.90%   30.25%   98.84   Underutilization   Volume		Asian American Firms	2.43%	2.72%	89.34	Underutilization	
TOTAL MINORITY FIRMS   29.90%   30.25%   98.84   Underutilization		Hispanic American Firms	0.89%	3.63%	24.52	Underutilization	*
Nonminority Women Firms   11.77%   10.29%   114.33   114.07   102.79   114.35   10.274   10.275   114.35   10.275   114.35   10.275   114.35   10.275   114.35   10.275   114.35   10.275   114.35   10.275   114.35   10.275   114.35   10.275   114.35   10.275   114.35   10.275   114.35   10.275   114.35   10.275   114.35   10.275   114.35   10.275   114.35   10.275   114.35   10.275   10	2000 10	Native American Firms	0.00%	0.15%	0.00	Underutilization	*
TOTAL M/WBE FIRMS   41.67%   40.54%   102.79   Overutilization	2009-10	TOTAL MINORITY FIRMS	29.90%	30.25%	98.84	Underutilization	
Non-M/WBE Firms   58.33%   59.46%   98.10   Underutilization		Nonminority Women Firms	11.77%	10.29%	114.38	Overutilization	
African American Firms		TOTAL M/WBE FIRMS	41.67%	40.54%	102.79	Overutilization	
Asian American Firms		Non-M/WBE Firms	58.33%	59.46%	98.10	Underutilization	
Hispanic American Firms   0.53%   3.63%   14.60   Underutilization   *		African American Firms	19.12%	23.75%	80.51	Underutilization	
Native American Firms   0.00%   0.15%   0.00   Underutilization   *		Asian American Firms	2.11%	2.72%	77.57	Underutilization	*
TOTAL MINORITY FIRMS   Nonminority Women Firms   27.74%   10.29%   269.58   Overutilization		Hispanic American Firms	0.53%	3.63%	14.60	Underutilization	*
Nonminority Women Firms   27.74%   10.29%   269.58   Overutilization   TOTAL M/WBE FIRMS   49.50%   40.54%   122.10   Overutilization   Non-M/WBE Firms   50.50%   59.46%   84.93   Underutilization   African American Firms   17.85%   23.75%   75.16   Underutilization   Maive American Firms   2.66%   2.72%   97.79   Underutilization   Hispanic American Firms   0.03%   0.15%   20.00   Underutilization   TOTAL MINORITY FIRMS   24.28%   30.25%   80.26   Underutilization   TOTAL M/WBE FIRMS   44.12%   40.54%   108.83   Overutilization   TOTAL M/WBE FIRMS   44.12%   40.54%   108.83   Overutilization   Asian American Firms   20.93%   23.75%   88.13   Underutilization   Asian American Firms   20.93%   23.75%   88.13   Underutilization   Hispanic American Firms   2.90%   3.63%   79.89   Underutilization   Mon-M/WBE American Firms   2.90%   3.63%   79.89   Underutilization   TOTAL M/NORITY FIRMS   28.57%   30.25%   94.45   Underutilization   TOTAL M/NORITY FIRMS   28.57%   30.25%   94.45   Underutilization   TOTAL M/NORITY FIRMS   29.63%   10.29%   287.95   Overutilization   287.95   Overutilization   287.95   Overutilization   287.95   Overutilization   287.95   Overutilization   287.95   Overutilization   287.95   Ove	2010 11	Native American Firms	0.00%	0.15%	0.00	Underutilization	*
TOTAL M/WBE FIRMS	2010-11	TOTAL MINORITY FIRMS	21.76%	30.25%	71.93	Underutilization	*
Non-M/WBE Firms   50.50%   59.46%   84.93   Underutilization		Nonminority Women Firms	27.74%	10.29%	269.58	Overutilization	
African American Firms 17.85% 23.75% 75.16 Underutilization *  Asian American Firms 2.66% 2.72% 97.79 Underutilization    Hispanic American Firms 3.74% 3.63% 103.03 Overutilization    Native American Firms 0.03% 0.15% 20.00 Underutilization    TOTAL MINORITY FIRMS 24.28% 30.25% 80.26 Underutilization    Nonminority Women Firms 19.84% 10.29% 192.81 Overutilization    TOTAL M/WBE FIRMS 44.12% 40.54% 108.83 Overutilization    Non-M/WBE Firms 55.88% 59.46% 93.98 Underutilization    African American Firms 20.93% 23.75% 88.13 Underutilization    Asian American Firms 4.74% 2.72% 174.26 Overutilization    Hispanic American Firms 2.90% 3.63% 79.89 Underutilization    Hispanic American Firms 0.00% 0.15% 0.00 Underutilization    Native American Firms 0.00% 0.15% 0.00 Underutilization    Native American Firms 29.63% 10.29% 287.95 Overutilization    TOTAL MINORITY FIRMS 29.63% 10.29% 287.95 Overutilization		TOTAL M/WBE FIRMS	49.50%	40.54%	122.10	Overutilization	
Asian American Firms 2.66% 2.72% 97.79 Underutilization Hispanic American Firms 3.74% 3.63% 103.03 Overutilization 7  Native American Firms 0.03% 0.15% 20.00 Underutilization 7  TOTAL MINORITY FIRMS 24.28% 30.25% 80.26 Underutilization 8  Nonminority Women Firms 19.84% 10.29% 192.81 Overutilization 9  TOTAL M/WBE FIRMS 44.12% 40.54% 108.83 Overutilization 9  Non-M/WBE Firms 55.88% 59.46% 93.98 Underutilization 9  African American Firms 20.93% 23.75% 88.13 Underutilization 9  Asian American Firms 4.74% 2.72% 174.26 Overutilization 9  Hispanic American Firms 2.90% 3.63% 79.89 Underutilization		Non-M/WBE Firms	50.50%	59.46%	84.93	Underutilization	
Hispanic American Firms   3.74%   3.63%   103.03   Overutilization		African American Firms	17.85%	23.75%	75.16	Underutilization	*
Native American Firms   0.03%   0.15%   20.00   Underutilization   *		Asian American Firms	2.66%	2.72%	97.79	Underutilization	
### TOTAL MINORITY FIRMS   Nonminority Women Firms   19.84%   10.29%   192.81   Overutilization		Hispanic American Firms	3.74%	3.63%	103.03	Overutilization	
TOTAL MINORITY FIRMS   24.28%   30.25%   80.26   Underutilization	2011 12	Native American Firms	0.03%	0.15%	20.00	Underutilization	*
TOTAL M/WBE FIRMS  Non-M/WBE Firms  55.88%  59.46%  93.98  Underutilization  African American Firms  20.93%  Asian American Firms  4.74%  2.72%  Hispanic American Firms  2.90%  Native American Firms  0.00%  0.15%  TOTAL MINORITY FIRMS  Nonminority Women Firms  29.63%  TOTAL M/WBE FIRMS  44.12%  40.54%  108.83  Overutilization  10.883  Overutilization  4.74%  2.72%  174.26  Overutilization  *  TOTAL MINORITY FIRMS  28.57%  30.25%  94.45  Underutilization  TOTAL M/WBE FIRMS  58.20%  40.54%  143.56  Overutilization	2011-12	TOTAL MINORITY FIRMS	24.28%	30.25%	80.26	Underutilization	
Non-M/WBE Firms   55.88%   59.46%   93.98   Underutilization		Nonminority Women Firms	19.84%	10.29%	192.81	Overutilization	
African American Firms 20.93% 23.75% 88.13 Underutilization Asian American Firms 4.74% 2.72% 174.26 Overutilization Hispanic American Firms 2.90% 3.63% 79.89 Underutilization *  Native American Firms 0.00% 0.15% 0.00 Underutilization *  TOTAL MINORITY FIRMS 28.57% 30.25% 94.45 Underutilization Nonminority Women Firms 29.63% 10.29% 287.95 Overutilization TOTAL M/WBE FIRMS 58.20% 40.54% 143.56 Overutilization		TOTAL M/WBE FIRMS	44.12%	40.54%	108.83	Overutilization	
Asian American Firms 4.74% 2.72% 174.26 Overutilization Hispanic American Firms 2.90% 3.63% 79.89 Underutilization *  Native American Firms 0.00% 0.15% 0.00 Underutilization *  TOTAL MINORITY FIRMS 28.57% 30.25% 94.45 Underutilization Nonminority Women Firms 29.63% 10.29% 287.95 Overutilization TOTAL M/WBE FIRMS 58.20% 40.54% 143.56 Overutilization		Non-M/WBE Firms	55.88%	59.46%	93.98	Underutilization	
Hispanic American Firms   2.90%   3.63%   79.89   Underutilization   *		African American Firms	20.93%	23.75%	88.13	Underutilization	
Native American Firms         0.00%         0.15%         0.00         Underutilization         *           TOTAL MINORITY FIRMS         28.57%         30.25%         94.45         Underutilization           Nonminority Women Firms         29.63%         10.29%         287.95         Overutilization           TOTAL M/WBE FIRMS         58.20%         40.54%         143.56         Overutilization		Asian American Firms	4.74%	2.72%	174.26	Overutilization	
TOTAL MINORITY FIRMS 28.57% 30.25% 94.45 Underutilization  Nonminority Women Firms 29.63% 10.29% 287.95 Overutilization  TOTAL M/WBE FIRMS 58.20% 40.54% 143.56 Overutilization		Hispanic American Firms	2.90%	3.63%	79.89	Underutilization	*
TOTAL MINORITY FIRMS 28.57% 30.25% 94.45 Underutilization  Nonminority Women Firms 29.63% 10.29% 287.95 Overutilization  TOTAL M/WBE FIRMS 58.20% 40.54% 143.56 Overutilization	2012-13	Native American Firms	0.00%	0.15%	0.00	Underutilization	*
TOTAL M/WBE FIRMS 58.20% 40.54% 143.56 Overutilization	2012-13	TOTAL MINORITY FIRMS	28.57%	30.25%	94.45	Underutilization	
		Nonminority Women Firms	29.63%	10.29%	287.95	Overutilization	
Non-M/WBE Firms 41.80% 59.46% 70.30 Underutilization *		TOTAL M/WBE FIRMS	58.20%	40.54%	143.56	Overutilization	
		Non-M/WBE Firms	41.80%	59.46%	70.30	Underutilization	*



## TABLE B-4 (cont.) WASHINGTON SUBURBAN SANITARY COMMISSION GOODS AND GENERAL SERVICES DISPARITY RESULTS

YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPA UTILIZATIOI	
	African American Firms	12.34%	23.75%	51.96	Underutilization	*
	Asian American Firms	4.75%	2.72%	174.63	Overutilization	
	Hispanic American Firms	3.09%	3.63%	85.12	Underutilization	
2013-14	Native American Firms	0.01%	0.15%	6.67	Underutilization	*
2015-14	TOTAL MINORITY FIRMS	20.19%	30.25%	66.74	Underutilization	*
	Nonminority Women Firms	23.80%	10.29%	231.29	Overutilization	
	TOTAL M/WBE FIRMS	43.99%	40.54%	108.51	Overutilization	
	Non-M/WBE Firms	56.01%	59.46%	94.20	Underutilization	
	African American Firms	19.35%	23.75%	81.47	Underutilization	
	Asian American Firms	3.28%	2.72%	120.59	Overutilization	
	Hispanic American Firms	2.14%	3.63%	58.95	Underutilization	*
TOTAL	Native American Firms	0.01%	0.15%	6.67	Underutilization	*
(OVERALL)	TOTAL MINORITY FIRMS	24.78%	30.25%	81.92	Underutilization	
	Nonminority Women Firms	23.08%	10.29%	224.30	Overutilization	
	TOTAL M/WBE FIRMS	47.86%	40.54%	118.06	Overutilization	
	Non-M/WBE Firms	52.14%	59.46%	87.69	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. The index is based on the actual percentage value and not the rounded utilization and availability estimates Percentage values presented.



<sup>\*</sup> indicate a substantial level of disparity, which is a disparity index below 80.00.

### APPENDIX C

PRIME UTILIZATION BASED ON EXPENDITURES

**WSSC 2015 Disparity Study** 



#### APPENDIX C: PRIME UTILIZATION BASED ON EXPENDITURES

# TABLE C-1 WASHINGTON SUBURBAN SANITARY COMMISSION ARCHITECTURE AND ENGINEERING UTILIZATION ANALYSES, PRIME LEVEL BASED ON EXPENDITURES

FY 2010-2014

BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Firms	\$1,035,482	\$1,156,141	\$1,043,574	\$1,946,596	\$1,242,266	\$6,424,060
Asian American Firms	\$1,819,005	\$1,645,819	\$4,699,615	\$1,764,371	\$619,317	\$10,548,127
Hispanic American Firms	\$0	\$0	\$0	\$0	\$0	\$0
Native American Firms	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL MINORITY FIRMS	\$2,854,487	\$2,801,960	\$5,743,190	\$3,710,967	\$1,861,583	\$16,972,187
Nonminority Women Firms	\$805,241	\$549,969	\$76,411	\$34,350	\$138,471	\$1,604,441
TOTAL M/WBE FIRMS	\$3,659,728	\$3,351,929	\$5,819,601	\$3,745,317	\$2,000,053	\$18,576,628
TOTAL NON-M/WBE FIRMS	\$11,165,270	\$52,709,298	\$75,286,984	\$54,467,073	\$26,880,574	\$220,509,200
TOTAL FIRMS	\$14,824,998	\$56,061,227	\$81,106,584	\$58,212,390	\$28,880,628	\$239,085,828
BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(0.4)					
	(%)	(%)	(%)	(%)	(%)	(%)
African American Firms	(%)	(%) 2.06%	(%) 1.29%	(%) 3.34%	(%) 4.30%	(%) 2.69%
African American Firms	6.98%	2.06%	1.29%	3.34%	4.30%	2.69%
African American Firms Asian American Firms	6.98% 12.27%	2.06% 2.94%	1.29% 5.79%	3.34% 3.03%	4.30% 2.14%	2.69% 4.41%
African American Firms Asian American Firms Hispanic American Firms	6.98% 12.27% 0.00%	2.06% 2.94% 0.00%	1.29% 5.79% 0.00%	3.34% 3.03% 0.00%	4.30% 2.14% 0.00%	2.69% 4.41% 0.00%
African American Firms Asian American Firms Hispanic American Firms Native American Firms	6.98% 12.27% 0.00% 0.00%	2.06% 2.94% 0.00% 0.00%	1.29% 5.79% 0.00% 0.00%	3.34% 3.03% 0.00% 0.00%	4.30% 2.14% 0.00% 0.00%	2.69% 4.41% 0.00% 0.00%
African American Firms Asian American Firms Hispanic American Firms Native American Firms TOTAL MINORITY FIRMS	6.98% 12.27% 0.00% 0.00% 19.25%	2.06% 2.94% 0.00% 0.00% <b>5.00%</b>	1.29% 5.79% 0.00% 0.00% <b>7.08%</b>	3.34% 3.03% 0.00% 0.00% <b>6.37%</b>	4.30% 2.14% 0.00% 0.00% <b>6.44%</b>	2.69% 4.41% 0.00% 0.00% <b>7.10%</b>
African American Firms Asian American Firms Hispanic American Firms Native American Firms TOTAL MINORITY FIRMS Nonminority Women Firms	6.98% 12.27% 0.00% 0.00% <b>19.25%</b> 5.43%	2.06% 2.94% 0.00% 0.00% <b>5.00%</b> 0.98%	1.29% 5.79% 0.00% 0.00% <b>7.08%</b> 0.09%	3.34% 3.03% 0.00% 0.00% <b>6.37%</b> 0.06%	4.30% 2.14% 0.00% 0.00% <b>6.44%</b> 0.48%	2.69% 4.41% 0.00% 0.00% <b>7.10%</b> 0.67%

Source: Data retrieved from the WSSC MAPS data system for the period of 07/01/2009 through 06/30/2014.



# TABLE C-2 WASHINGTON SUBURBAN SANITARY COMMISSION CONSTRUCTION UTILIZATION ANALYSES, PRIME LEVEL BASED ON EXPENDITURES

FY 2010-2014

BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Firms	\$1,556,105	\$3,159,335	\$6,635,124	\$5,140,641	\$4,695,301	\$21,186,506
Asian American Firms	\$0	\$0	\$0	\$0	\$0	\$0
Hispanic American Firms	\$13,625,928	\$5,546,060	\$18,275,718	\$23,354,068	\$5,277,379	\$66,079,153
Native American Firms	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL MINORITY FIRMS	\$15,182,033	\$8,705,395	\$24,910,842	\$28,494,709	\$9,972,680	\$87,265,659
Nonminority Women Firms	\$788,919	\$611,673	\$571,754	\$997,854	\$941,849	\$3,912,050
TOTAL M/WBE FIRMS	\$15,970,952	\$9,317,068	\$25,482,597	\$29,492,563	\$10,914,528	\$91,177,708
TOTAL NON-M/WBE FIRMS	\$61,085,582	\$63,396,592	\$170,084,604	\$103,943,448	\$51,864,190	\$450,374,416
TOTAL FIRMS	\$77,056,535	\$72,713,660	\$195,567,201	\$133,436,011	\$62,778,718	\$541,552,124
		T11	+/	4-00, .00,0==	+0= ::0 :=0	+- :=, :
BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
BUSINESS OWNERSHIP CLASSIFICATION						
	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	2009-2010 (%)	2010-11 (%)	2011-12 (%)	2012-13 (%)	2013-14 (%)	TOTAL (%)
CLASSIFICATION African American Firms	2009-2010 (%) 2.02%	2010-11 (%) 4.34%	2011-12 (%) 3.39%	2012-13 (%) 3.85%	2013-14 (%) 7.48%	TOTAL (%) 3.91%
CLASSIFICATION  African American Firms  Asian American Firms	2009-2010 (%) 2.02% 0.00%	2010-11 (%) 4.34% 0.00%	2011-12 (%) 3.39% 0.00%	2012-13 (%) 3.85% 0.00%	2013-14 (%) 7.48% 0.00%	TOTAL (%) 3.91% 0.00%
CLASSIFICATION  African American Firms  Asian American Firms  Hispanic American Firms	2009-2010 (%) 2.02% 0.00% 17.68%	2010-11 (%) 4.34% 0.00% 7.63%	2011-12 (%) 3.39% 0.00% 9.34%	2012-13 (%) 3.85% 0.00% 17.50%	2013-14 (%) 7.48% 0.00% 8.41%	TOTAL (%) 3.91% 0.00% 12.20%
CLASSIFICATION  African American Firms  Asian American Firms  Hispanic American Firms  Native American Firms	2009-2010 (%) 2.02% 0.00% 17.68% 0.00%	2010-11 (%) 4.34% 0.00% 7.63% 0.00%	2011-12 (%) 3.39% 0.00% 9.34% 0.00%	2012-13 (%) 3.85% 0.00% 17.50% 0.00%	2013-14 (%) 7.48% 0.00% 8.41% 0.00%	TOTAL (%) 3.91% 0.00% 12.20% 0.00%
CLASSIFICATION  African American Firms Asian American Firms Hispanic American Firms Native American Firms TOTAL MINORITY FIRMS	2009-2010 (%) 2.02% 0.00% 17.68% 0.00% 19.70%	2010-11 (%) 4.34% 0.00% 7.63% 0.00% 11.97%	2011-12 (%) 3.39% 0.00% 9.34% 0.00% 12.73%	2012-13 (%) 3.85% 0.00% 17.50% 0.00% 21.35%	2013-14 (%) 7.48% 0.00% 8.41% 0.00% 15.89%	TOTAL (%) 3.91% 0.00% 12.20% 0.00% 16.11%
CLASSIFICATION  African American Firms  Asian American Firms  Hispanic American Firms  Native American Firms  TOTAL MINORITY FIRMS  Nonminority Women Firms	2009-2010 (%) 2.02% 0.00% 17.68% 0.00% 19.70% 1.03%	2010-11 (%) 4.34% 0.00% 7.63% 0.00% 11.97% 0.84%	2011-12 (%) 3.39% 0.00% 9.34% 0.00% 12.73% 0.29%	2012-13 (%) 3.85% 0.00% 17.50% 0.00% 21.35% 0.75%	2013-14 (%) 7.48% 0.00% 8.41% 0.00% 15.89%	TOTAL (%) 3.91% 0.00% 12.20% 0.00% 16.11% 0.73%

Source: Data retrieved from the WSSC MAPS data system for the period of 07/01/2009 through 06/30/2014.



# TABLE C-3 WASHINGTON SUBURBAN SANITARY COMMISSION PROFESSIONAL SERVICES UTILIZATION ANALYSES, PRIME LEVEL BASED ON EXPENDITURES

FY 2010-2014

BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Firms	\$439,350	\$514,385	\$1,060,754	\$323,264	\$418,892	\$2,756,645
Asian American Firms	\$289,838	\$1,564,673	\$1,838,976	\$1,566,576	\$2,295,430	\$7,555,492
Hispanic American Firms	\$2,058,010	\$239,433	\$2,386,432	\$177,909	\$782,041	\$5,643,826
Native American Firms	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL MINORITY FIRMS	\$2,787,199	\$2,318,491	\$5,286,161	\$2,067,749	\$3,496,363	\$15,955,963
Nonminority Women Firms	\$424,194	\$348,224	\$3,403,766	\$2,403,200	\$387,821	\$6,967,205
TOTAL M/WBE FIRMS	\$3,211,393	\$2,666,715	\$8,689,928	\$4,470,949	\$3,884,184	\$22,923,168
TOTAL NON-M/WBE FIRMS	\$12,649,592	\$6,060,120	\$41,312,869	\$16,742,733	\$2,050,272	\$78,815,585
TOTAL FIRMS	\$15,860,985	\$8,726,835	\$50,002,796	\$21,213,682	\$5,934,456	\$101,738,753
BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(%)	(%)	(%)	(%)	(%)	(%)
African American Firms	2.770/					
	2.77%	5.89%	2.12%	1.52%	7.06%	2.71%
Asian American Firms	1.83%	5.89% 17.93%	2.12% 3.68%	1.52% 7.38%	7.06% 38.68%	2.71% 7.43%
Asian American Firms Hispanic American Firms						
	1.83%	17.93%	3.68%	7.38%	38.68%	7.43%
Hispanic American Firms	1.83% 12.98%	17.93% 2.74%	3.68% 4.77%	7.38% 0.84%	38.68% 13.18%	7.43% 5.55%
Hispanic American Firms Native American Firms	1.83% 12.98% 0.00%	17.93% 2.74% 0.00%	3.68% 4.77% 0.00%	7.38% 0.84% 0.00%	38.68% 13.18% 0.00%	7.43% 5.55% 0.00%
Hispanic American Firms Native American Firms TOTAL MINORITY FIRMS	1.83% 12.98% 0.00% <b>17.58%</b>	17.93% 2.74% 0.00% <b>26.56%</b>	3.68% 4.77% 0.00% <b>10.57%</b>	7.38% 0.84% 0.00% <b>9.74%</b>	38.68% 13.18% 0.00% <b>58.92%</b>	7.43% 5.55% 0.00% <b>15.69%</b>
Hispanic American Firms Native American Firms TOTAL MINORITY FIRMS Nonminority Women Firms	1.83% 12.98% 0.00% <b>17.58%</b> 2.67%	17.93% 2.74% 0.00% <b>26.56%</b> 3.99%	3.68% 4.77% 0.00% <b>10.57%</b> 6.81%	7.38% 0.84% 0.00% <b>9.74%</b> 11.33%	38.68% 13.18% 0.00% <b>58.92%</b> 6.54%	7.43% 5.55% 0.00% <b>15.69%</b> 6.85%

Source: Data retrieved from the WSSC MAPS data system for the period of 07/01/2009 through 06/30/2014.



# TABLE C-4 WASHINGTON SUBURBAN SANITARY COMMISSION GOODS AND GENERAL SERVICES UTILIZATION ANALYSES, PRIME LEVEL BASED ON EXPENDITURES FY 2010-2014

BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Firms	\$16,280,605	\$16,438,666	\$11,498,625	\$14,559,164	\$7,711,574	\$66,488,633
Asian American Firms	\$1,490,698	\$1,813,909	\$1,716,201	\$3,298,095	\$2,970,644	\$11,289,548
Hispanic American Firms	\$545,759	\$459,439	\$2,409,659	\$2,016,264	\$1,932,856	\$7,363,978
Native American Firms	\$0	\$2,000	\$18,750	\$0	\$5,000	\$25,750
TOTAL MINORITY FIRMS	\$18,317,062	\$18,714,014	\$15,643,235	\$19,873,523	\$12,620,074	\$85,167,909
Nonminority Women Firms	\$7,208,982	\$23,848,632	\$12,780,936	\$20,611,164	\$14,873,084	\$79,322,798
TOTAL M/WBE FIRMS	\$25,526,044	\$42,562,646	\$28,424,171	\$40,484,687	\$27,493,158	\$164,490,707
TOTAL NON-M/WBE FIRMS	\$35,722,269	\$43,409,080	\$36,002,516	\$29,075,426	\$34,993,823	\$179,203,115
TOTAL FIRMS	\$61,248,314	\$85,971,725	\$64,426,688	\$69,560,113	\$62,486,981	\$343,693,822
BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
BUSINESS OWNERSHIP CLASSIFICATION						
	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	2009-2010 (%)	2010-11 (%)	2011-12 (%)	2012-13 (%)	2013-14 (%)	TOTAL (%)
CLASSIFICATION African American Firms	2009-2010 (%) 26.58%	2010-11 (%) 19.12%	2011-12 (%) 17.85%	2012-13 (%) 20.93%	2013-14 (%) 12.34%	TOTAL (%) 19.35%
CLASSIFICATION  African American Firms  Asian American Firms	2009-2010 (%) 26.58% 2.43%	2010-11 (%) 19.12% 2.11%	2011-12 (%) 17.85% 2.66%	2012-13 (%) 20.93% 4.74%	2013-14 (%) 12.34% 4.75%	TOTAL (%) 19.35% 3.28%
CLASSIFICATION  African American Firms  Asian American Firms  Hispanic American Firms	2009-2010 (%) 26.58% 2.43% 0.89%	2010-11 (%) 19.12% 2.11% 0.53%	2011-12 (%) 17.85% 2.66% 3.74%	2012-13 (%) 20.93% 4.74% 2.90%	2013-14 (%) 12.34% 4.75% 3.09%	TOTAL (%) 19.35% 3.28% 2.14%
CLASSIFICATION  African American Firms  Asian American Firms  Hispanic American Firms  Native American Firms	2009-2010 (%) 26.58% 2.43% 0.89% 0.00%	2010-11 (%) 19.12% 2.11% 0.53% 0.00%	2011-12 (%) 17.85% 2.66% 3.74% 0.03%	2012-13 (%) 20.93% 4.74% 2.90% 0.00%	2013-14 (%) 12.34% 4.75% 3.09% 0.01%	TOTAL (%) 19.35% 3.28% 2.14% 0.01%
CLASSIFICATION  African American Firms Asian American Firms Hispanic American Firms Native American Firms TOTAL MINORITY FIRMS	2009-2010 (%) 26.58% 2.43% 0.89% 0.00% 29.90%	2010-11 (%) 19.12% 2.11% 0.53% 0.00% 21.76%	2011-12 (%) 17.85% 2.66% 3.74% 0.03% 24.28%	2012-13 (%) 20.93% 4.74% 2.90% 0.00% 28.57%	2013-14 (%) 12.34% 4.75% 3.09% 0.01% 20.19%	TOTAL (%) 19.35% 3.28% 2.14% 0.01% 24.78%
CLASSIFICATION  African American Firms Asian American Firms Hispanic American Firms Native American Firms TOTAL MINORITY FIRMS Nonminority Women Firms	2009-2010 (%) 26.58% 2.43% 0.89% 0.00% 29.90% 11.77%	2010-11 (%) 19.12% 2.11% 0.53% 0.00% 21.76% 27.74%	2011-12 (%) 17.85% 2.66% 3.74% 0.03% 24.28% 19.84%	2012-13 (%) 20.93% 4.74% 2.90% 0.00% 28.57% 29.63%	2013-14 (%) 12.34% 4.75% 3.09% 0.01% 20.19% 23.80%	TOTAL (%) 19.35% 3.28% 2.14% 0.01% 24.78% 23.08%

 $Source: Data\ retrieved\ from\ the\ WSSC\ MAPS\ data\ system\ for\ the\ period\ of\ 07/01/2009\ through\ 06/30/2014.$ 



### APPENDIX D

## PRIME UTILIZATION ANALYSES BASED ON CONTRACT AWARDS

**WSSC 2015 Disparity Study** 



### APPENDIX D: PRIME UTILIZATION ANALYSES BASED ON CONTRACT AWARDS

# TABLE D-1 WASHINGTON SUBURBAN SANITARY COMMISSION ARCHITECTURE AND ENGINEERING UTILIZATION ANALYSES, PRIME LEVEL BASED ON CONTRACT AWARDS FY 2010-2014

		11203	2011			
BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Firms	\$1,201,836	\$1,495,752	\$970,307	\$2,609,249	\$3,389,339	\$9,666,484
Asian American Firms	\$1,911,166	\$1,738,022	\$6,444,467	\$2,046,064	\$2,205,427	\$14,345,146
Hispanic American Firms	\$0	\$0	\$0	\$0	\$0	\$0
Native American Firms	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL MINORITY FIRMS	\$3,113,003	\$3,233,774	\$7,414,774	\$4,655,313	\$5,594,767	\$24,011,630
Nonminority Women Firms	\$822,285	\$596,722	\$76,640	\$67,300	\$2,226,842	\$3,789,789
TOTAL M/WBE FIRMS	\$3,935,288	\$3,830,496	\$7,491,413	\$4,722,613	\$7,821,609	\$27,801,419
TOTAL NON-M/WBE FIRMS	\$9,714,098	\$54,355,309	\$81,003,941	\$64,472,932	\$50,844,265	\$260,390,545
TOTAL FIRMS	\$13,649,386	\$58,185,805	\$88,495,354	\$69,195,545	\$58,665,874	\$288,191,964
BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(%)	(%)	(%)	(%)	(%)	(%)
African American Firms	8.81%	2.57%	1.10%	3.77%	5.78%	3.35%
Asian American Firms	14.00%	2.99%	7.28%	2.96%	3.76%	4.98%
Hispanic American Firms	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Native American Firms	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY FIRMS	22.81%	5.56%	8.38%	6.73%	9.54%	8.33%
Nonminority Women Firms	6.02%	1.03%	0.09%	0.10%	3.80%	1.32%
			0.470/	6.83%	13.33%	9.65%
TOTAL M/WBE FIRMS	28.83%	6.58%	8.47%	0.85%	13.33%	3.0376
TOTAL NON-M/WBE FIRMS	<b>28.83%</b> 71.17%	<b>6.58%</b> 93.42%	91.53%	93.17%	86.67%	90.35%



# TABLE D-2 WASHINGTON SUBURBAN SANITARY COMMISSION CONSTRUCTION UTILIZATION ANALYSES, PRIME LEVEL BASED ON CONTRACT AWARDS

FY 2010-2014

		F1 20	10-2014			
BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Firms	\$1,752,880	\$3,228,772	\$7,363,474	\$5,338,205	\$6,292,362	\$23,975,693
Asian American Firms	\$0	\$0	\$0	\$0	\$0	\$0
Hispanic American Firms	\$14,175,493	\$5,674,834	\$18,834,730	\$30,390,293	\$30,311,123	\$99,386,473
Native American Firms	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL MINORITY FIRMS	\$15,928,373	\$8,903,605	\$26,198,204	\$35,728,498	\$36,603,485	\$123,362,166
Nonminority Women Firms	\$824,940	\$779,144	\$608,641	\$887,407	\$1,002,296	\$4,102,428
TOTAL M/WBE FIRMS	\$16,753,313	\$9,682,749	\$26,806,845	\$36,615,905	\$37,605,781	\$127,464,594
TOTAL NON-M/WBE FIRMS	\$69,309,338	\$64,435,760	\$190,015,289	\$140,181,118	\$174,865,736	\$638,807,241
TOTAL FIRMS	\$86,062,651	\$74,118,510	\$216,822,134	\$176,797,023	\$212,471,517	\$766,271,835
BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(%)	(%)	(%)	(%)	(%)	(%)
African American Firms	2.04%	4.36%	3.40%	3.02%	2.96%	3.13%
Asian American Firms	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Hispanic American Firms	16.47%	7.66%	8.69%	17.19%	14.27%	12.97%
Native American Firms	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY FIRMS	18.51%	12.01%	12.08%	20.21%	17.23%	16.10%
Nonminority Women Firms	0.96%	1.05%	0.28%	0.50%	0.47%	0.54%
TOTAL M/WBE FIRMS	19.47%	13.06%	12.36%	20.71%	17.70%	16.63%
TOTAL NON-M/WBE FIRMS	80.53%	86.94%	87.64%	79.29%	82.30%	83.37%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%



# TABLE D-3 WASHINGTON SUBURBAN SANITARY COMMISSION PROFESSIONAL SERVICES UTILIZATION ANALYSES, PRIME LEVEL BASED ON CONTRACT AWARDS FY 2010-2014

BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Firms	\$581,780	\$630,488	\$1,331,675	\$336,352	\$612,642	\$3,492,937
Asian American Firms	\$378,357	\$1,739,342	\$1,962,274	\$2,090,635	\$6,210,232	\$12,380,841
Hispanic American Firms	\$2,058,010	\$239,933	\$2,386,457	\$177,909	\$3,648,587	\$8,510,896
Native American Firms	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL MINORITY FIRMS	\$3,018,147	\$2,609,763	\$5,680,406	\$2,604,896	\$10,471,461	\$24,384,674
Nonminority Women Firms	\$464,926	\$394,471	\$3,847,922	\$3,158,484	\$4,354,762	\$12,220,565
TOTAL M/WBE FIRMS	\$3,483,073	\$3,004,234	\$9,528,328	\$5,763,380	\$14,826,223	\$36,605,238
TOTAL NON-M/WBE FIRMS	\$12,946,901	\$7,033,938	\$44,545,095	\$29,962,702	\$11,707,251	\$106,195,887
TOTAL FIRMS	\$16,429,973	\$10,038,172	\$54,073,423	\$35,726,082	\$26,533,474	\$142,801,125
BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(%)	(%)	(%)	(%)	(%)	(%)
African American Firms	3.54%	6.28%	2.46%	0.94%	2.31%	2.45%
Asian American Firms	2.30%	17.33%	3.63%	5.85%	23.41%	8.67%
Hispanic American Firms	12.53%	2.39%	4.41%	0.50%	13.75%	5.96%
Native American Firms	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY FIRMS	18.37%	26.00%	10.50%	7.29%	39.47%	17.08%
Nonminority Women Firms	2.83%	3.93%	7.12%	8.84%	16.41%	8.56%
TOTAL M/WBE FIRMS	21.20%	29.93%	17.62%	16.13%	55.88%	25.63%
TOTAL NON-M/WBE FIRMS	78.80%	70.07%	82.38%	83.87%	44.12%	74.37%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%



# TABLE D-4 WASHINGTON SUBURBAN SANITARY COMMISSION GOODS AND GENERAL SERVICES UTILIZATION ANALYSES, PRIME LEVEL BASED ON CONTRACT AWARDS FY 2010-2014

BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Firms	\$16,286,385	\$18,356,490	\$12,286,307	\$15,679,065	\$16,737,482	\$79,345,729
Asian American Firms	\$1,523,397	\$1,885,573	\$2,468,582	\$3,997,402	\$4,855,069	\$14,730,022
Hispanic American Firms	\$608,114	\$548,964	\$2,460,093	\$2,114,022	\$3,884,749	\$9,615,942
Native American Firms	\$0	\$0	\$18,750	\$0	\$5,000	\$23,750
TOTAL MINORITY FIRMS	\$18,417,896	\$20,791,027	\$17,233,732	\$21,790,488	\$25,482,300	\$103,715,443
Nonminority Female Firms	\$7,888,134	\$26,090,789	\$12,917,116	\$22,002,180	\$19,869,982	\$88,768,201
TOTAL M/WBE FIRMS	\$26,306,031	\$46,881,816	\$30,150,847	\$43,792,668	\$45,352,281	\$192,483,643
TOTAL NON-M/WBE FIRMS	\$38,281,699	\$35,539,024	\$28,164,385	\$22,093,624	\$53,617,233	\$177,695,965
TOTAL FIRMS	\$64,587,730	\$82,420,840	\$58,315,232	\$65,886,292	\$98,969,514	\$370,179,609
BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(%)	(%)	(%)	(%)	(%)	(%)
African American Firms	25.22%	22.27%	21.07%	23.80%	16.91%	21.43%
Asian American Firms	2.36%	2.29%	4.23%	6.07%	4.91%	3.98%
Hispanic American Firms	0.94%	0.67%	4.22%	3.21%	3.93%	2.60%
Native American Firms	0.00%	0.00%	0.03%	0.00%	0.01%	0.01%
TOTAL MINORITY FIRMS	28.52%	25.23%	29.55%	33.07%	25.75%	28.02%
Nonminority Female Firms	12.21%	31.66%	22.15%	33.39%	20.08%	23.98%
TOTAL M/WBE FIRMS	40.73%	56.88%	51.70%	66.47%	45.82%	52.00%
TOTAL NON-M/WBE FIRMS	59.27%	43.12%	48.30%	33.53%	54.18%	48.00%



### APPENDIX E

### DETAILED TOTAL UTILIZATION ANALYSES

**WSSC 2015 Disparity Study** 



#### APPENDIX E: DETAILED TOTAL UTILIZATION ANALYSES

The prime plus subcontractor payment dollars (total utilization) presented in the following tables represent the original prime payment dollars from the MAPS system combined with the subcontractor payment dollars retrieved from WSSC's web-based compliance system (PRISM™). These tables reflect the prime plus subcontractor dollars as recorded by WSSC staff.

TABLE E-1
WASHINGTON SUBURBAN SANITARY COMMISSION
ARCHITECTURE AND ENGINEERING
UTILIZATION ANALYSES, PRIME PLUS SUBCONTRACTOR
BASED ON EXPENDITURES
FY 2010-2014

BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Firms	\$3,635,890	\$4,606,132	\$5,618,033	\$8,066,919	\$5,410,900	\$27,337,874
Asian American Firms	\$5,980,290	\$5,092,139	\$10,443,151	\$9,977,648	\$7,169,366	\$38,662,593
Hispanic American Firms	\$140,537	\$370,695	\$1,091,445	\$1,555,846	\$1,630,923	\$4,789,446
Native American Firms	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL MINORITY FIRMS	\$9,756,717	\$10,068,965	\$17,152,628	\$19,600,413	\$14,211,189	\$70,789,913
Nonminority Women Firms	\$1,088,095	\$1,148,428	\$869,856	\$2,896,299	\$3,091,818	\$9,094,497
TOTAL M/WBE FIRMS	\$10,844,813	\$11,217,394	\$18,022,484	\$22,496,712	\$17,303,008	\$79,884,410
TOTAL NON-M/WBE FIRMS	\$3,980,186	\$44,843,833	\$63,084,100	\$35,715,679	\$11,577,620	\$159,201,418
TOTAL FIRMS	\$14,824,998	\$56,061,227	\$81,106,584	\$58,212,390	\$28,880,628	\$239,085,828
				+1	711	4/
BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
BUSINESS OWNERSHIP CLASSIFICATION						
	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	2009-2010 (%)	2010-11 (%)	2011-12 (%)	2012-13 (%)	2013-14 (%)	TOTAL (%)
CLASSIFICATION African American Firms	2009-2010 (%) 24.53%	2010-11 (%) 8.22%	2011-12 (%) 6.93%	2012-13 (%) 13.86%	2013-14 (%) 18.74%	TOTAL (%) 11.43%
CLASSIFICATION  African American Firms  Asian American Firms	2009-2010 (%) 24.53% 40.34%	2010-11 (%) 8.22% 9.08%	2011-12 (%) 6.93% 12.88%	2012-13 (%) 13.86% 17.14%	2013-14 (%) 18.74% 24.82%	TOTAL (%) 11.43% 16.17%
CLASSIFICATION  African American Firms  Asian American Firms  Hispanic American Firms	2009-2010 (%) 24.53% 40.34% 0.95%	2010-11 (%) 8.22% 9.08% 0.66%	2011-12 (%) 6.93% 12.88% 1.35%	2012-13 (%) 13.86% 17.14% 2.67%	2013-14 (%) 18.74% 24.82% 5.65%	TOTAL (%) 11.43% 16.17% 2.00%
CLASSIFICATION  African American Firms  Asian American Firms  Hispanic American Firms  Native American Firms	2009-2010 (%) 24.53% 40.34% 0.95% 0.00%	2010-11 (%) 8.22% 9.08% 0.66% 0.00%	2011-12 (%) 6.93% 12.88% 1.35% 0.00%	2012-13 (%) 13.86% 17.14% 2.67% 0.00%	2013-14 (%) 18.74% 24.82% 5.65% 0.00%	TOTAL (%) 11.43% 16.17% 2.00% 0.00%
CLASSIFICATION  African American Firms  Asian American Firms  Hispanic American Firms  Native American Firms  TOTAL MINORITY FIRMS	2009-2010 (%) 24.53% 40.34% 0.95% 0.00% <b>65.82%</b>	2010-11 (%) 8.22% 9.08% 0.66% 0.00% 17.96%	2011-12 (%) 6.93% 12.88% 1.35% 0.00% 21.16%	2012-13 (%) 13.86% 17.14% 2.67% 0.00% 33.67%	2013-14 (%) 18.74% 24.82% 5.65% 0.00% 49.21%	TOTAL (%) 11.43% 16.17% 2.00% 0.00% 29.60%
CLASSIFICATION  African American Firms  Asian American Firms  Hispanic American Firms  Native American Firms  TOTAL MINORITY FIRMS  Nonminority Women Firms	2009-2010 (%) 24.53% 40.34% 0.95% 0.00% <b>65.82%</b> 7.34%	2010-11 (%) 8.22% 9.08% 0.66% 0.00% 17.96% 2.05%	2011-12 (%) 6.93% 12.88% 1.35% 0.00% 21.16% 1.07%	2012-13 (%) 13.86% 17.14% 2.67% 0.00% 33.67% 4.98%	2013-14 (%) 18.74% 24.82% 5.65% 0.00% 49.21% 10.71%	TOTAL (%) 11.43% 16.17% 2.00% 0.00% 29.60% 3.80%

Source: Data retrieved from MAPS and WSSC's web-based compliance system (PRISM™) for the period of 07/01/2009 through 06/30/2014.



# TABLE E-2 WASHINGTON SUBURBAN SANITARY COMMISSION CONSTRUCTION UTILIZATION ANALYSES, PRIME PLUS SUBCONTRACTORS BASED ON EXPENDITURES FY 2010-2014

		FT ZC	J10-201 <del>4</del>			
BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Firms	\$5,310,940	\$7,729,464	\$13,806,761	\$19,102,828	\$19,887,193	\$65,837,186
Asian American Firms	\$78,092	\$469,657	\$679,803	\$1,774,486	\$4,219,710	\$7,221,748
Hispanic American Firms	\$16,740,622	\$11,842,448	\$28,846,613	\$30,668,035	\$14,083,118	\$102,180,837
Native American Firms	\$0	\$0	\$315	\$485	\$659,755	\$660,555
TOTAL MINORITY FIRMS	\$22,129,654	\$20,041,569	\$43,333,492	\$51,545,834	\$38,849,776	\$175,900,325
Nonminority Women Firms	\$2,503,302	\$3,911,264	\$3,879,258	\$5,467,024	\$6,863,818	\$22,624,666
TOTAL M/WBE FIRMS	\$24,632,956	\$23,952,833	\$47,212,751	\$57,012,858	\$45,713,593	\$198,524,990
TOTAL NON-M/WBE FIRMS	\$52,423,579	\$48,760,827	\$148,354,450	\$76,423,153	\$17,065,125	\$343,027,134
TOTAL FIRMS	\$77,056,535	\$72,713,660	\$195,567,201	\$133,436,011	\$62,778,718	\$541,552,124
BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(%)	(%)	(%)	(%)	(%)	(%)
African American Firms	6.89%	10.63%	7.06%	14.32%	31.68%	12.16%

BOSINESS OMNEKSHIL	2009-2010	2010-11	2011-12	2012-13	2013-14	IOIAL
CLASSIFICATION	(%)	(%)	(%)	(%)	(%)	(%)
African American Firms	6.89%	10.63%	7.06%	14.32%	31.68%	12.16%
Asian American Firms	0.10%	0.65%	0.35%	1.33%	6.72%	1.33%
Hispanic American Firms	21.73%	16.29%	14.75%	22.98%	22.43%	18.87%
Native American Firms	0.00%	0.00%	0.00%	0.00%	1.05%	0.12%
TOTAL MINORITY FIRMS	28.72%	27.57%	22.16%	38.63%	61.88%	32.48%
Nonminority Women Firms	3.25%	5.38%	1.98%	4.10%	10.93%	4.18%
TOTAL M/WBE FIRMS	31.97%	32.95%	24.14%	42.73%	72.81%	36.66%
TOTAL NON-M/WBE FIRMS	68.03%	67.05%	75.86%	57.27%	27.19%	63.34%
TOTAL FIRMS	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Data retrieved from MAPS and WSSC's web-based compliance system (PRISM™) for the period of 07/01/2009 through 06/30/2014.



# TABLE E-3 WASHINGTON SUBURBAN SANITARY COMMISSION PROFESSIONAL SERVICES UTILIZATION ANALYSES, PRIME PLUS SUBCONTRACTORS BASED ON EXPENDITURES FY 2010-2014

BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Firms	\$703,169	\$1,133,384	\$3,141,441	\$2,433,903	\$2,856,976	\$10,268,873
Asian American Firms	\$289,838	\$1,681,462	\$2,100,721	\$2,301,431	\$3,572,590	\$9,946,041
Hispanic American Firms	\$2,058,010	\$279,853	\$2,709,657	\$486,930	\$1,215,656	\$6,750,107
Native American Firms	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL MINORITY FIRMS	\$3,051,017	\$3,094,699	\$7,951,818	\$5,222,264	\$7,645,222	\$26,965,021
Nonminority Women Firms	\$424,194	\$417,206	\$3,528,888	\$2,748,246	\$474,257	\$7,592,791
TOTAL M/WBE FIRMS	\$3,475,212	\$3,511,905	\$11,480,707	\$7,970,510	\$8,119,479	\$34,557,812
TOTAL NON-M/WBE FIRMS	\$12,385,773	\$5,214,929	\$38,522,090	\$13,243,172	-\$2,185,023	\$67,180,941
TOTAL FIRMS	\$15,860,985	\$8,726,835	\$50,002,796	\$21,213,682	\$5,934,456	\$101,738,753
BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
BUSINESS OWNERSHIP CLASSIFICATION						
	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	2009-2010 (%)	2010-11 (%)	2011-12 (%)	2012-13 (%)	2013-14 (%)	TOTAL (%)
CLASSIFICATION African American Firms	2009-2010 (%) 4.43%	2010-11 (%) 12.99%	2011-12 (%) 6.28%	2012-13 (%) 11.47%	2013-14 (%) 48.14%	TOTAL (%) 10.09%
CLASSIFICATION African American Firms Asian American Firms	2009-2010 (%) 4.43% 1.83%	2010-11 (%) 12.99% 19.27%	2011-12 (%) 6.28% 4.20%	2012-13 (%) 11.47% 10.85%	2013-14 (%) 48.14% 60.20%	TOTAL (%) 10.09% 9.78%
CLASSIFICATION  African American Firms  Asian American Firms  Hispanic American Firms	2009-2010 (%) 4.43% 1.83% 12.98%	2010-11 (%) 12.99% 19.27% 3.21%	2011-12 (%) 6.28% 4.20% 5.42%	2012-13 (%) 11.47% 10.85% 2.30%	2013-14 (%) 48.14% 60.20% 20.48%	TOTAL (%) 10.09% 9.78% 6.63%
CLASSIFICATION  African American Firms  Asian American Firms  Hispanic American Firms  Native American Firms	2009-2010 (%) 4.43% 1.83% 12.98% 0.00%	2010-11 (%) 12.99% 19.27% 3.21% 0.00%	2011-12 (%) 6.28% 4.20% 5.42% 0.00%	2012-13 (%) 11.47% 10.85% 2.30% 0.00%	2013-14 (%) 48.14% 60.20% 20.48% 0.00%	TOTAL (%) 10.09% 9.78% 6.63% 0.00%
CLASSIFICATION  African American Firms Asian American Firms Hispanic American Firms Native American Firms TOTAL MINORITY FIRMS	2009-2010 (%) 4.43% 1.83% 12.98% 0.00% 19.24%	2010-11 (%) 12.99% 19.27% 3.21% 0.00% 35.47%	2011-12 (%) 6.28% 4.20% 5.42% 0.00% 15.90%	2012-13 (%) 11.47% 10.85% 2.30% 0.00% 24.62%	2013-14 (%) 48.14% 60.20% 20.48% 0.00% 128.82%	TOTAL (%) 10.09% 9.78% 6.63% 0.00% 26.50%
CLASSIFICATION  African American Firms Asian American Firms Hispanic American Firms Native American Firms TOTAL MINORITY FIRMS Nonminority Women Firms	2009-2010 (%) 4.43% 1.83% 12.98% 0.00% 19.24% 2.67%	2010-11 (%) 12.99% 19.27% 3.21% 0.00% 35.47% 4.78%	2011-12 (%) 6.28% 4.20% 5.42% 0.00% 15.90% 7.06%	2012-13 (%) 11.47% 10.85% 2.30% 0.00% 24.62% 12.96%	2013-14 (%) 48.14% 60.20% 20.48% 0.00% 128.82% 7.99%	TOTAL (%) 10.09% 9.78% 6.63% 0.00% 26.50% 7.46%

Source: Data retrieved from MAPS and WSSC's web-based compliance system (PRISM™) for the period of 07/01/2009 through 06/30/2014. Note: Because of the mismatch of flows of prime payments and sub payments can result in negative numbers for a particular year. For example, if prime received very small payments for a year in which subs received very large payments. The payments even out over the study period.



# TABLE E-4 WASHINGTON SUBURBAN SANITARY COMMISSION GOODS AND GENERAL SERVICES UTILIZATION ANALYSES, PRIME PLUS SUBCONTRACTORS BASED ON EXPENDITURES FY 2010-2014

BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Firms	\$19,108,318	\$19,838,669	\$16,067,659	\$19,489,767	\$11,277,498	\$85,781,911
Asian American Firms	\$2,337,622	\$3,901,580	\$3,269,107	\$3,973,940	\$4,157,929	\$17,640,178
Hispanic American Firms	\$1,447,652	\$1,387,625	\$2,893,100	\$2,728,860	\$2,313,078	\$10,770,314
Native American Firms	\$0	\$2,000	\$124,011	\$19,026	\$79,150	\$224,187
TOTAL MINORITY FIRMS	\$22,893,591	\$25,129,874	\$22,353,877	\$26,211,593	\$17,827,655	\$114,416,589
Nonminority Women Firms	\$11,815,908	\$28,704,208	\$17,472,734	\$25,116,778	\$19,893,821	\$103,003,449
TOTAL M/WBE FIRMS	\$34,709,500	\$53,834,082	\$39,826,610	\$51,328,370	\$37,721,476	\$217,420,038
TOTAL NON-M/WBE FIRMS	\$26,538,814	\$32,137,644	\$24,600,077	\$18,231,743	\$24,765,505	\$126,273,783
TOTAL FIRMS	\$61,248,314	\$85,971,725	\$64,426,688	\$69,560,113	\$62,486,981	\$343,693,822
BUSINESS OWNERSHIP	2009-2010	2010-11	2011-12	2012-13	2013-14	TOTAL
BUSINESS OWNERSHIP CLASSIFICATION	2009-2010 (%)	2010-11 (%)	2011-12 (%)	2012-13 (%)	2013-14 (%)	TOTAL (%)
CLASSIFICATION	(%)	(%)	(%)	(%)	(%)	(%)
CLASSIFICATION African American Firms	(%) 31.20%	(%) 23.08%	(%) 24.94%	(%) 28.02%	(%) 18.05%	(%) 24.96%
CLASSIFICATION African American Firms Asian American Firms	(%) 31.20% 3.82%	(%) 23.08% 4.54%	(%) 24.94% 5.07%	(%) 28.02% 5.71%	(%) 18.05% 6.65%	(%) 24.96% 5.13%
CLASSIFICATION  African American Firms  Asian American Firms  Hispanic American Firms	(%) 31.20% 3.82% 2.36%	(%) 23.08% 4.54% 1.61%	(%) 24.94% 5.07% 4.49%	(%) 28.02% 5.71% 3.92%	(%) 18.05% 6.65% 3.70%	(%) 24.96% 5.13% 3.13%
CLASSIFICATION  African American Firms  Asian American Firms  Hispanic American Firms  Native American Firms	(%) 31.20% 3.82% 2.36% 0.00%	(%) 23.08% 4.54% 1.61% 0.00%	(%) 24.94% 5.07% 4.49% 0.19%	(%) 28.02% 5.71% 3.92% 0.03%	(%) 18.05% 6.65% 3.70% 0.13%	(%) 24.96% 5.13% 3.13% 0.07%
CLASSIFICATION  African American Firms  Asian American Firms  Hispanic American Firms  Native American Firms  TOTAL MINORITY FIRMS	(%) 31.20% 3.82% 2.36% 0.00% <b>37.38%</b>	(%) 23.08% 4.54% 1.61% 0.00% 29.23%	(%) 24.94% 5.07% 4.49% 0.19% 34.69%	(%) 28.02% 5.71% 3.92% 0.03% <b>37.68</b> %	(%) 18.05% 6.65% 3.70% 0.13% <b>28.53%</b>	(%) 24.96% 5.13% 3.13% 0.07% 33.29%
CLASSIFICATION  African American Firms Asian American Firms Hispanic American Firms Native American Firms TOTAL MINORITY FIRMS Nonminority Women Firms	(%) 31.20% 3.82% 2.36% 0.00% <b>37.38%</b> 19.29%	(%) 23.08% 4.54% 1.61% 0.00% 29.23% 33.39%	(%) 24.94% 5.07% 4.49% 0.19% 34.69% 27.12%	(%) 28.02% 5.71% 3.92% 0.03% <b>37.68%</b> 36.11%	(%) 18.05% 6.65% 3.70% 0.13% 28.53% 31.84%	(%) 24.96% 5.13% 3.13% 0.07% 33.29% 29.97%

 $Source: Data\ retrieved\ from\ WSSC's\ web-based\ compliance\ system\ (PRISM^{\tt m})\ for\ the\ period\ of\ 07/01/2009\ through\ 06/30/2014.$ 



### APPENDIX F

### DETAILED TOTAL DISPARITY INDICES

**WSSC 2015 Disparity Study** 



#### APPENDIX F: DETAILED TOTAL DISPARITY ANALYSES

## TABLE F-1 DISPARITY RESULTS ARCHITECTURE AND ENGINEERING, PRIME PLUS SUBCONTRACTOR BY YEAR AND BUSINESS OWNER CLASSIFICATION

	DITEMMENT	DOSHNESS OWN	VER CEASSIFICA	111011		
YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPAG UTILIZATION	
	African American Firms	24.53%	20.42%	120.13	Overutilization	
	Asian American Firms	40.34%	21.26%	189.75	Overutilization	
	Hispanic American Firms	0.95%	4.00%	23.75	Underutilization	*
	Native American Firms	0.00%	0.21%	0.00	Underutilization	*
2009-10	TOTAL MINORITY FIRMS	65.82%	45.89%	143.43	Overutilization	
	Nonminority Women Firms	7.34%	13.89%	52.84	Underutilization	*
	TOTAL M/WBE FIRMS	73.16%	59.78%	122.38	Overutilization	
	Non-M/WBE Firms	26.84%	40.22%	66.73	Underutilization	*
	African American Firms	8.22%	20.42%	40.25	Underutilization	*
	Asian American Firms	9.08%	21.26%	42.71	Underutilization	*
	Hispanic American Firms	0.66%	4.00%	16.50	Underutilization	*
	Native American Firms	0.00%	0.21%	0.00	Underutilization	*
2010-11	TOTAL MINORITY FIRMS	17.96%	45.89%	39.14	Underutilization	*
	Nonminority Women Firms	2.05%	13.89%	14.76	Underutilization	*
	TOTAL M/WBE FIRMS	20.01%	59.78%	33.47	Underutilization	*
	Non-M/WBE Firms	79.99%	40.22%	198.88	Overutilization	
	African American Firms	6.93%	20.42%	33.94	Underutilization	*
	Asian American Firms	12.88%	21.26%	60.58	Underutilization	*
	Hispanic American Firms	1.35%	4.00%	33.75	Underutilization	*
	Native American Firms	0.00%	0.21%	0.00	Underutilization	*
2011-12	TOTAL MINORITY FIRMS	21.16%	45.89%	46.11	Underutilization	*
	Nonminority Women Firms	1.07%	13.89%	7.70	Underutilization	*
	TOTAL M/WBE FIRMS	22.23%	59.78%	37.19	Underutilization	*
	Non-M/WBE Firms	77.77%	40.22%	193.36	Overutilization	
	African American Firms	13.86%	20.42%	67.87	Underutilization	*
	Asian American Firms	17.14%	21.26%	80.62	Underutilization	
	Hispanic American Firms	2.67%	4.00%	66.75	Underutilization	*
2012 12	Native American Firms	0.00%	0.21%	0.00	Underutilization	*
2012-13	TOTAL MINORITY FIRMS	33.67%	45.89%	73.37	Underutilization	*
	Nonminority Women Firms	4.98%	13.89%	35.85	Underutilization	*
	TOTAL M/WBE FIRMS	38.65%	59.78%	64.65	Underutilization	*
	Non-M/WBE Firms	61.35%	40.22%	152.54	Overutilization	
	African American Firms	18.74%	20.42%	91.77	Underutilization	
	Asian American Firms	24.82%	21.26%	116.75	Overutilization	
	Hispanic American Firms	5.65%	4.00%	141.25	Overutilization	
2013-14	Native American Firms	0.00%	0.21%	0.00	Underutilization	*
2013-14	TOTAL MINORITY FIRMS	49.21%	45.89%	107.23	Overutilization	
	Nonminority Women Firms	10.71%	13.89%	77.11	Underutilization	*
	TOTAL M/WBE FIRMS	59.92%	59.78%	100.23	Overutilization	
	Non-M/WBE Firms	40.08%	40.22%	99.65	Underutilization	



### TABLE F-1 (cont.) DISPARITY RESULTS

### ARCHITECTURE AND ENGINEERING, PRIME PLUS SUBCONTRACTOR BY YEAR AND BUSINESS OWNER CLASSIFICATION

YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPAG UTILIZATION	
	African American Firms	11.43%	20.42%	55.97	Underutilization	*
	Asian American Firms	16.17%	21.26%	76.06	Underutilization	*
	Hispanic American Firms	2.00%	4.00%	50.00	Underutilization	*
TOTAL	Native American Firms	0.00%	0.21%	0.00	Underutilization	*
(OVERALL)	TOTAL MINORITY FIRMS	29.60%	45.89%	64.50	Underutilization	*
	Nonminority Women Firms	3.80%	13.89%	27.36	Underutilization	*
	TOTAL M/WBE FIRMS	33.40%	59.78%	55.87	Underutilization	*
	Non-M/WBE Firms	66.60%	40.22%	165.59	Overutilization	

Source: MGT developed a Master Prime payments, Subcontractor payments, and Availability database for WSSC for the period between 07/01/2009 to 06/30/2014.

The percentage of dollars is taken from the prime plus subcontractor utilization shown in **Chapter 5.** 

The percentage of available firms is taken from the prime plus subcontractor availability shown in **Chapter 5**.

The disparity index is the ratio of % of dollars (utilization) to % of available firms times 100.



<sup>\*</sup> An asterisk is used to indicate a substantial level of disparity – disparity index below 80.00.

## TABLE F-2 DISPARITY RESULTS CONSTRUCTION, PRIME PLUS SUBCONTRACTOR BY YEAR AND BUSINESS OWNER CLASSIFICATION

YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPA UTILIZATION	
	African American Firms	6.89%	33.45%	20.60	Underutilization	*
	Asian American Firms	0.10%	6.67%	1.50	Underutilization	*
	Hispanic American Firms	21.73%	14.49%	149.97	Overutilization	
2000 10	Native American Firms	0.00%	1.15%	0.00	Underutilization	*
2009-10	TOTAL MINORITY FIRMS	28.72%	55.76%	51.51	Underutilization	*
	Nonminority Women Firms	3.25%	12.04%	26.99	Underutilization	*
	TOTAL M/WBE FIRMS	31.97%	67.80%	47.15	Underutilization	*
	Non-M/WBE Firms	68.03%	32.20%	211.27	Overutilization	
	African American Firms	10.63%	33.45%	31.78	Underutilization	*
	Asian American Firms	0.65%	6.67%	9.75	Underutilization	*
	Hispanic American Firms	16.29%	14.49%	112.42	Overutilization	
2010-11	Native American Firms	0.00%	1.15%	0.00	Underutilization	*
2010-11	TOTAL MINORITY FIRMS	27.57%	55.76%	49.44	Underutilization	*
	Nonminority Women Firms	5.38%	12.04%	44.68	Underutilization	*
	TOTAL M/WBE FIRMS	32.95%	67.80%	48.60	Underutilization	*
	Non-M/WBE Firms	67.05%	32.20%	208.23	Overutilization	
	African American Firms	7.06%	33.45%	21.11	Underutilization	*
	Asian American Firms	0.35%	6.67%	5.25	Underutilization	*
	Hispanic American Firms	14.75%	14.49%	101.79	Overutilization	
2011-12	Native American Firms	0.00%	1.15%	0.00	Underutilization	*
2011-12	TOTAL MINORITY FIRMS	22.16%	55.76%	39.74	Underutilization	*
	Nonminority Women Firms	1.98%	12.04%	16.45	Underutilization	*
	TOTAL M/WBE FIRMS	24.14%	67.80%	35.60	Underutilization	*
	Non-M/WBE Firms	75.86%	32.20%	235.59	Overutilization	
	African American Firms	14.32%	33.45%	42.81	Underutilization	*
	Asian American Firms	1.33%	6.67%	19.94	Underutilization	*
	Hispanic American Firms	22.98%	14.49%	158.59	Overutilization	
2012-13	Native American Firms	0.00%	1.15%	0.00	Underutilization	*
	TOTAL MINORITY FIRMS	38.63%	55.76%	69.28	Underutilization	*
	Nonminority Women Firms	4.10%	12.04%	34.05	Underutilization	*
	TOTAL M/WBE FIRMS	42.73%	67.80%	63.02	Underutilization	*
	Non-M/WBE Firms	57.27%	32.20%	177.86	Overutilization	



## TABLE F-2 (cont.) DISPARITY RESULTS CONSTRUCTION, PRIME PLUS SUBCONTRACTOR LEVEL BY YEAR AND OWNER CLASSIFICATION

YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPAC UTILIZATION	T OF
	African American Firms	31.68%	33.45%	94.71	Underutilization	
	Asian American Firms	6.72%	6.67%	100.75	Overutilization	
	Hispanic American Firms	22.43%	14.49%	154.80	Overutilization	
2013-14	Native American Firms	1.05%	1.15%	91.30	Underutilization	
2013-14	TOTAL MINORITY FIRMS	61.88%	55.76%	110.98	Overutilization	
	Nonminority Women Firms	10.93%	12.04%	90.78	Underutilization	
	TOTAL M/WBE FIRMS	72.81%	67.80%	107.39	Overutilization	
	Non-M/WBE Firms	27.19%	32.20%	84.44	Underutilization	
	African American Firms	12.16%	33.45%	36.35	Underutilization	*
	Asian American Firms	1.33%	6.67%	19.94	Underutilization	*
	Hispanic American Firms	18.87%	14.49%	130.23	Overutilization	
TOTAL	Native American Firms	0.12%	1.15%	10.43	Underutilization	*
(OVERALL)	TOTAL MINORITY FIRMS	32.48%	55.76%	58.25	Underutilization	*
	Nonminority Women Firms	4.18%	12.04%	34.72	Underutilization	*
	TOTAL M/WBE FIRMS	36.66%	67.80%	54.07	Underutilization	*
	Non-M/WBE Firms	63.34%	32.20%	196.71	Overutilization	

Source: MGT developed a Master Prime payments, Subcontractor payments, and Availability database for WSSC for the period between 07/01/2009 to 06/30/2014.

The percentage of dollars is taken from the prime plus subcontractor utilization shown in **Chapter 5.** 

The percentage of available firms is taken from the prime plus subcontractor availability shown in Chapter 5.

The disparity index is the ratio of % of dollars (utilization) to % of available firms times 100.



<sup>\*</sup> An asterisk is used to indicate a substantial level of disparity – disparity index below 80.00.

## TABLE F-3 DISPARITY RESULTS PROFESSIONAL SERVICES, PRIME PLUS SUBCONTRACTOR BY YEAR AND BUSINESS OWNER CLASSIFICATION

	DI TEAR AIN	D DOZINESS OWI	VEK CLASSIFICA	411011		
YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPAC UTILIZATION	
	African American Firms	4.43%	36.65%	12.09	Underutilization	*
	Asian American Firms	1.83%	11.53%	15.87	Underutilization	*
	Hispanic American Firms	12.98%	3.20%	405.63	Overutilization	
2009-10	Native American Firms	0.00%	0.34%	0.00	Underutilization	*
2003-10	TOTAL MINORITY FIRMS	19.24%	51.72%	37.20	Underutilization	*
	Nonminority Women Firms	2.67%	20.89%	12.78	Underutilization	*
	TOTAL M/WBE FIRMS	21.91%	72.61%	30.17	Underutilization	*
	Non-M/WBE Firms	78.09%	27.39%	285.10	Overutilization	
	African American Firms	12.99%	36.65%	35.44	Underutilization	*
	Asian American Firms	19.27%	11.53%	167.13	Overutilization	
	Hispanic American Firms	3.21%	3.20%	100.31	Overutilization	
2010-11	Native American Firms	0.00%	0.34%	0.00	Underutilization	*
2010-11	TOTAL MINORITY FIRMS	35.47%	51.72%	68.58	Underutilization	*
	Nonminority Women Firms	4.78%	20.89%	22.88	Underutilization	*
	TOTAL M/WBE FIRMS	40.25%	72.61%	55.43	Underutilization	*
	Non-M/WBE Firms	59.75%	27.39%	218.15	Overutilization	
	African American Firms	6.28%	36.65%	17.14	Underutilization	*
	Asian American Firms	4.20%	11.53%	36.43	Underutilization	*
	Hispanic American Firms	5.42%	3.20%	169.38	Overutilization	
2011-12	Native American Firms	0.00%	0.34%	0.00	Underutilization	*
2011-12	TOTAL MINORITY FIRMS	15.90%	51.72%	30.74	Underutilization	*
	Nonminority Women Firms	7.06%	20.89%	33.80	Underutilization	*
	TOTAL M/WBE FIRMS	22.96%	72.61%	31.62	Underutilization	*
	Non-M/WBE Firms	77.04%	27.39%	281.27	Overutilization	
	African American Firms	11.47%	36.65%	31.30	Underutilization	*
	Asian American Firms	10.85%	11.53%	94.10	Underutilization	
	Hispanic American Firms	2.30%	3.20%	71.88	Underutilization	*
	Native American Firms	0.00%	0.34%	0.00	Underutilization	*
2012-13	TOTAL MINORITY FIRMS	24.62%	51.72%	47.60	Underutilization	*
	Nonminority Women Firms	12.96%	20.89%	62.04	Underutilization	*
	TOTAL M/WBE FIRMS	37.58%	72.61%	51.76	Underutilization	*
	Non-M/WBE Firms	62.42%	27.39%	227.89	Overutilization	



## TABLE F-3 (cont.) DISPARITY RESULTS PROFESSIONAL SERVICES, PRIME PLUS SUBCONTRACTOR BY YEAR AND BUSINESS OWNER CLASSIFICATION

YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPAC UTILIZATION	
	African American Firms	48.14%	36.65%	131.35	Overutilization	
	Asian American Firms	60.20%	11.53%	522.12	Overutilization	
	Hispanic American Firms	20.48%	3.20%	640.00	Overutilization	
2013-14	Native American Firms	0.00%	0.34%	0.00	Underutilization	*
2015-14	TOTAL MINORITY FIRMS	128.82%	51.72%	249.07	Overutilization	
	Nonminority Women Firms	7.99%	20.89%	38.25	Underutilization	*
	TOTAL M/WBE FIRMS	136.81%	72.61%	188.42	Overutilization	
	Non-M/WBE Firms	-36.81%	27.39%	-134.39	Underutilization	*
	African American Firms	10.09%	36.65%	27.53	Underutilization	*
	Asian American Firms	9.78%	11.53%	84.82	Underutilization	
	Hispanic American Firms	6.63%	3.20%	207.19	Overutilization	
TOTAL (OVERALL)	Native American Firms	0.00%	0.34%	0.00	Underutilization	*
	TOTAL MINORITY FIRMS	26.50%	51.72%	51.24	Underutilization	*
	Nonminority Women Firms	7.46%	20.89%	35.71	Underutilization	*
	TOTAL M/WBE FIRMS	33.96%	72.61%	46.77	Underutilization	*
	Non-M/WBE Firms	66.04%	27.39%	241.11	Overutilization	

Source: MGT developed Master Prime payments, Subcontractor payments, and Availability database for WSSC for the period between 07/01/2009 to 06/30/2014.

The percentage of dollars is taken from the prime plus subcontractor utilization shown in Chapter 5.

The percentage of available firms is taken from the prime plus subcontractor availability shown in Chapter 5.

The disparity index is the ratio of % of dollars (utilization) to % of available firms times 100.

Note: Because of the mismatch of flows of prime payments and sub payments can result in negative numbers for a particular year. For example, if prime received very small payments for a year in which subs received very large payments. The payments even out over the study period.



<sup>\*</sup> An asterisk is used to indicate a substantial level of disparity – disparity index below 80.00.

#### TABLE F-4 DISPARITY RESULTS

### GOODS AND GENERAL SERVICES, PRIME PLUS SUBCONTRACTOR BY YEAR AND BUSINESS OWNER CLASSIFICATION

	BY YEAR AINL	DOSINESS OF	MINEL CEASSII	ICATION		
YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE (%)	DISPARITY INDEX	DISPARATE IMPAG UTILIZATION	
2009-10	African American Firms	31.20%	31.74%	98.30	Underutilization	
	Asian American Firms	3.82%	4.92%	77.64	Underutilization	*
	Hispanic American Firms	2.36%	5.51%	42.83	Underutilization	*
	Native American Firms	0.00%	0.27%	0.00	Underutilization	*
	TOTAL MINORITY FIRMS	37.38%	42.44%	88.08	Underutilization	
	Nonminority Women Firms	19.29%	14.58%	132.30	Overutilization	
	TOTAL M/WBE FIRMS	56.67%	57.02%	99.39	Underutilization	
	Non-M/WBE Firms	43.33%	42.98%	100.81	Overutilization	
	African American Firms	23.08%	31.74%	72.72	Underutilization	*
	Asian American Firms	4.54%	4.92%	92.28	Underutilization	
	Hispanic American Firms	1.61%	5.51%	29.22	Underutilization	*
	Native American Firms	0.00%	0.27%	0.00	Underutilization	*
2010-11	TOTAL MINORITY FIRMS	29.23%	42.44%	68.87	Underutilization	*
	Nonminority Women Firms	33.39%	14.58%	229.01	Overutilization	
	TOTAL M/WBE FIRMS	62.62%	57.02%	109.82	Overutilization	
	Non-M/WBE Firms	37.38%	42.98%	86.97	Underutilization	
	African American Firms	24.94%	31.74%	78.58	Underutilization	*
	Asian American Firms	5.07%	4.92%	103.05	Overutilization	
	Hispanic American Firms	4.49%	5.51%	81.49	Underutilization	
2011 12	Native American Firms	0.19%	0.27%	70.37	Underutilization	*
2011-12	TOTAL MINORITY FIRMS	34.69%	42.44%	81.74	Underutilization	
	Nonminority Women Firms	27.12%	14.58%	186.01	Overutilization	
	TOTAL M/WBE FIRMS	61.81%	57.02%	108.40	Overutilization	
	Non-M/WBE Firms	38.19%	42.98%	88.86	Underutilization	
	African American Firms	28.02%	31.74%	88.28	Underutilization	
	Asian American Firms	5.71%	4.92%	116.06	Overutilization	
	Hispanic American Firms	3.92%	5.51%	71.14	Underutilization	*
2012-13	Native American Firms	0.03%	0.27%	11.11	Underutilization	*
2012-13	TOTAL MINORITY FIRMS	37.68%	42.44%	88.78	Underutilization	
	Nonminority Women Firms	36.11%	14.58%	247.67	Overutilization	
	TOTAL M/WBE FIRMS	73.79%	57.02%	129.41	Overutilization	
	Non-M/WBE Firms	26.21%	42.98%	60.98	Underutilization	*
	African American Firms	18.05%	31.74%	56.87	Underutilization	*
	Asian American Firms	6.65%	4.92%	135.16	Overutilization	
	Hispanic American Firms	3.70%	5.51%	67.15	Underutilization	*
2013-14	Native American Firms	0.13%	0.27%	48.15	Underutilization	*
	TOTAL MINORITY FIRMS	28.53%	42.44%	67.22	Underutilization	*
	Nonminority Women Firms	31.84%	14.58%	218.38	Overutilization	
	TOTAL M/WBE FIRMS	60.37%	57.02%	105.88	Overutilization	
	Non-M/WBE Firms	39.63%	42.98%	92.21	Underutilization	



## TABLE F-4 DISPARITY RESULTS GOODS AND GENERAL SERVICES, PRIME PLUS SUBCONTRACTOR BY YEAR AND BUSINESS OWNER CLASSIFICATION

	D1 12/11/11/00	DOSINESS OWI	1LIT CL 19911 1C	(11014		
YEAR	BUSINESS OWNERSHIP CLASSIFICATION	PERCENT OF DOLLARS	AVAILABLE FIRMS ESTIMATE	DISPARITY INDEX	DISPARATE IM UTILIZATI	
	African American Firms	24.060/	(%)	70.64	la alometilio ation	*
	African American Firms	24.96%	31.74%	78.64 l	Jnderutilization	^
	Asian American Firms	5.13%	4.92%	104.27	Overutilization	
TOTAL (OVERALL)	Hispanic American Firms	3.13%	5.51%	56.81 l	Jnderutilization	*
	Native American Firms	0.07%	0.27%	25.93 l	Jnderutilization	*
	TOTAL MINORITY FIRMS	33.29%	42.44%	78.44 U	<b>Underutilization</b>	*
	Nonminority Women Firms	29.97%	14.58%	205.56	Overutilization	
	TOTAL M/WBE FIRMS	63.26%	57.02%	110.94	Overutilization	
	Non-M/WBE Firms	36.74%	42.98%	85.48 l	Jnderutilization	

Source: MGT developed a Master Prime payments, Subcontractor payments, and Availability database for WSSC for the period between 07/01/2009 to 06/30/2014.

The percentage of dollars is taken from the prime plus subcontractor utilization shown in **Chapter 5**.

The percentage of available firms is taken from the prime plus subcontractor availability shown in **Chapter 5**.

The disparity index is the ratio of % of dollars (utilization) to % available firms times 100.



<sup>\*</sup> An asterisk is used to indicate a substantial level of disparity – disparity index below 80.00.

### APPENDIX G

## PUBLIC USE MICRODATA SAMPLE (PUMS) REGRESSION

**WSSC 2015 Disparity Study** 



#### **APPENDIX G: PUMS REGRESSION**

Below, variable names and operational definitions are provided. When interpreting **Tables G-1** to **G-4**, 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. 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, ethnicity, and gender indicator variables:

African American

Asian American

Hispanic American

Native American<sup>1</sup>

Sex: Nonminority woman or not

#### Other indicator variables:

Marital Status: Married or not

Age

Age2: age squared. Used to acknowledge the positive, curvilinear relationship between each year of age and self-employment.

Disability: Individuals self-reported health-related disabilities.

Tenure: Owns their own home

Value: Household property value.

Mortgage: Monthly total mortgage payments.

Unearn: Unearned income, such as interests and dividends.

<sup>&</sup>lt;sup>1</sup> There were insufficient census numbers available for analysis.



WASHINGTON SUBURBAN SANITARY COMMISSION Final Report | July 28, 2016 Resdinc: Household income less individuals' personal income.

P65: Number of individuals over the age of 65 living in the household.

P18: Number of children under the age of 18 living in the household.

Some College: Some college education

College Graduate: College degree

More than College: Professional or graduate degree

TABLE G-1
RESULTS OF LOGISTIC REGRESSION
CONSTRUCTION
WASHINGTON DC, CMSA

Variables	В	Sig.	Exp (B)
African American	-0.651	0.104	0.522
Hispanic American	-0.018	0.952	0.982
Asian American	-0.794	0.143	0.452
Native American	*	*	*
Sex (1=Female)	-0.635	0.132	0.530
Marital Status (1=Married)	0.695	0.019	2.004
Age	0.314	0.002	1.368
Age <sup>2</sup>	-0.003	0.010	0.997
Disability (1=Yes)	0.718	0.071	2.050
Tenure (1=Yes)	0.495	0.203	1.641
Value	0.000	0.183	1.000
Mortgage	0.000	0.427	1.000
Unearn	0.000	0.138	1.000
Resdinc	0.000	0.236	1.000
P65	-0.314	0.297	0.730
P18	-0.142	0.576	0.868
Some College (1=Yes)	-0.881	0.398	0.414
College Graduate (1=Yes)	-0.672	0.527	0.511
More than College (1=Yes)	0.212	0.395	1.237
Number of Observations	1582		
Chi-squared statistic (df=19)	95.593		
Log Likelihood	-666.284		
C   (DUI) (C)   ( )   ( )   ( )		•.	

Source: The Public Use Microdata Samples (PUMS) data from 2014 American Community Survey and Calculations using SPSS. Note: **BOLD** statistically significant at p < .05.

Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.



<sup>\*</sup> There were insufficient census numbers available for analysis.

## TABLE G-2 RESULTS OF LOGISTIC REGRESSION PROFESSIONAL SERVICES WASHINGTON DC, CMSA

Variables	В	Sig.	Exp (B)
African American	-0.298	0.128	0.742
Hispanic American	-0.475	0.194	0.622
Asian American	-0.345	0.131	0.709
Native American	*	*	*
Sex (1=Female)	-0.378	0.026	0.685
Marital Status (1=Married)	0.099	0.553	1.104
Age	0.119	0.010	1.127
Age <sup>2</sup>	-0.001	0.136	0.999
Disability (1=Yes)	0.083	0.802	1.087
Tenure (1=Yes)	0.423	0.092	1.527
Value	0.000	0.025	1.000
Mortgage	0.000	0.000	1.000
Unearn	0.000	0.000	1.000
Resdinc	0.000	0.122	1.000
P65	-0.089	0.558	0.915
P18	-0.128	0.421	0.880
Some College (1=Yes)	-17.803	0.999	0.000
College Graduate (1=Yes)	-18.381	0.999	0.000
More than College (1=Yes)	-1.374	0.003	0.253
Number of Observations	4797		
Chi-squared statistic (df=19)	288.364		
Log Likelihood	-1806.782		

Source: The Public Use Microdata Samples (PUMS) data from 2014 American Community Survey and Calculations using SPSS. Note: **BOLD** statistically significant at p < .05.

Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.



<sup>\*</sup> There were insufficient census numbers available for analysis.

# TABLE G-4 RESULTS OF LOGISTIC REGRESSION OTHER SERVICES WASHINGTON DC, CMSA

Variables	В	Sig.	Exp (B)
African American	-0.350	0.054	0.705
Hispanic American	-0.315	0.730	
Asian American	0.534	0.001	1.706
Native American	*	*	*
Sex (1=Female)	-0.063	0.730	0.939
Marital Status (1=Married)	0.278	0.062	1.320
Age	0.079	0.032	1.082
Age <sup>2</sup>	0.000	0.220	1.000
Disability (1=Yes)	-0.407	0.240	0.666
Tenure (1=Yes)	0.243	0.285	1.275
Value	0.000	0.442	1.000
Mortgage	0.000	0.004	1.000
Unearn	0.000	0.000	1.000
Resdinc	0.000	0.751	1.000
P65	-0.017	0.903	0.983
P18	-0.064	0.640	0.938
Some College (1=Yes)	-0.268	0.660	0.765
College Graduate (1=Yes)	0.307	0.681	1.359
More than College (1=Yes)	0.113	0.482	1.119
Number of Observations	5179		
Chi-squared statistic (df=19)	196.5575		
Log Likelihood	-2188.688		

Source: The Public Use Microdata Samples (PUMS) data from 2014 American Community Survey and Calculations using SPSS. Note: **BOLD** statistically significant at p < .05.

Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.



<sup>\*</sup> There were insufficient census numbers available for analysis

# TABLE G-4 RESULTS OF LOGISTIC REGRESSION GOODS AND SUPPLIES WASHINGTON DC, CMSA

Variables	В	Sig.	Exp (B)	
African American	-1.473	0.012	0.229	
Hispanic American	-0.526	0.591		
Asian American	0.513	0.138	1.670	
Native American	*	*	*	
Sex (1=Female)	-0.384	0.363	0.681	
Marital Status (1=Married)	0.402	0.265	1.495	
Age	0.104	0.270	1.110	
Age <sup>2</sup>	-0.001	0.373	0.999	
Disability (1=Yes)	-1.386	0.247	0.250	
Tenure (1=Yes)	0.714	0.129	2.042	
Value	0.000	0.009	1.000	
Mortgage	0.000	0.218	1.000	
Unearn	0.000	0.000	1.000	
Resdinc	0.000	0.882	1.000	
P65	-0.034	0.917	0.967	
P18	-0.387	0.230	0.679	
Some College (1=Yes)	1.068	0.330	2.910	
College Graduate (1=Yes)	-16.338	0.999	0.000	
More than College (1=Yes)	0.318	0.384	1.375	
Number of Observations	1455			
Chi-squared statistic (df=19)	90.18868			
Log Likelihood	-409.912			

Source: The Public Use Microdata Samples (PUMS) data from 2014 American Community Survey and Calculations using SPSS. Note: BOLD statistically significant at p < .05.

Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.

Below, variable names and operational definitions are provided. When interpreting the linear regression **Tables G-5** to **G-8**, the first column— Unstandardized B — is the most informative index with regard to the influence of the independent variables on the earnings of a self-employed individual. Each number in this column represents a percent change in earnings. The other four columns are reported in order to give the reader another indicator of both the magnitude of the variable's effect and the direction of the effect. Std. Error reports the standard deviation in the sampling distribution. Standardized B reports the standard deviation change in the dependent variable from on standard deviation increase in the independent variable. The t and Sig. columns simply report the level and strength of a variable's significance.



<sup>\*</sup> There were insufficient census numbers available for analysis

### **VARIABLES**

### Race, ethnicity and gender indicator variables:

African American

Asian American

Hispanic American

Native American<sup>2</sup>

Nonminority Woman

#### Other indicator variables:

Marital Status: Married or not

Disability: Individuals self-reported health-related disabilities.

Age

Age2: age squared. Used to acknowledge the positive, curvilinear relationship between each year of age and self-employment.

Speaks English Well: Person's ability to speak English if not a native speaker.

Some College: Some college education

College Graduate: College degree

More than College: Professional or graduate degree

<sup>&</sup>lt;sup>2</sup> There were insufficient census numbers available for analysis.



\_

# TABLE G-5 RESULTS OF LINEAR REGRESSION CONSTRUCTION WASHINGTON DC, CMSA

WASHINGTON DC, CIVISA										
	Unstai	ndardized	Standa	ırdized						
Variables	В	Std. Error	В	t	Sig.					
African American	-0.072	0.330	-0.022	-0.219	0.827					
Hispanic American	-0.514	0.257	-0.239	-1.996	0.049					
Asian American	-0.528	0.450	-0.118	-1.172	0.245					
Nonminority Women (1=Female)	-0.938	0.366	-0.273	-2.566	0.012					
Marital Status (1=Married)	0.185	0.237	0.079	0.778	0.438					
Disability (1=Yes)	-0.242	0.311	-0.079	-0.778	0.439					
Age	-0.040	0.096	-0.427	-0.421	0.675					
Age <sup>2</sup>	0.000	0.001	0.410	0.404	0.687					
Speaks English Well (1=Yes)	-0.409	0.225	-0.203	-1.816	0.073					
Some College (1=Yes)	0.522	1.109	0.059	0.470	0.639					
College Graduate (1=Yes)	0.951	0.920	0.108	1.034	0.304					
More than College (1=Yes)	-0.120	0.210	-0.061	-0.573	0.568					
_										
Constant	12.131	2.353		5.156	0.000					

Source: The Public Use Microdata Samples (PUMS) data from 2014 American Community Survey and Calculations using SPSS

Note: **BOLD** statistically significant at p < .05.

TABLE G-6
RESULTS OF LINEAR REGRESSION
PROFESSIONAL SERVICES
WASHINGTON DC, CMSA

With the Colon Bey ellist										
	Unstai	ndardized	Standa	rdized						
Variables	В	Std. Error	В	t	Sig.					
African American	-0.568	0.160	-0.225	-3.548	0.000					
Hispanic American	-0.691	0.325	-0.131	-2.127	0.034					
Asian American	-0.209	0.214	-0.069	-0.978	0.329					
Nonminority Women (1=Female)	-0.543	0.137	-0.249	-3.955	0.000					
Marital Status (1=Married)	0.162	0.132	0.074	1.227	0.221					
Disability (1=Yes)	-0.304	0.280	-0.066	-1.084	0.279					
Age	0.109	0.038	1.324	2.911	0.004					
Age <sup>2</sup>	-0.001	0.000	-1.335	-2.918	0.004					
Speaks English Well (1=Yes)	-0.300	0.160	-0.126	-1.868	0.063					
More than College (1=Yes)	-0.344	0.406	-0.049	-0.848	0.397					
Constant	9.131	0.925		9.868	0.000					

Source: The Public Use Microdata Samples (PUMS) data from 2014 American Community Survey and Calculations using SPSS

Note: **BOLD** statistically significant at p < .05.



# TABLE G-7 RESULTS OF LINEAR REGRESSION OTHER SERVICES WASHINGTON DC, CMSA

	Unstai	ndardized	Standa							
Variables	В	Std. Error	В	t	Sig.					
African American	-0.211	0.138	-0.089	-1.534	0.126					
Hispanic American	-0.382	0.206	-0.113	-1.858	0.064					
Asian American	-0.759	0.141	-0.358	-5.391	0.000					
Nonminority Women (1=Female)	-0.530	0.141	-0.214	-3.769	0.000					
Marital Status (1=Married)	0.174	0.118	0.086	1.476	0.141					
Disability (1=Yes)	-0.090	0.269	-0.017	-0.334	0.739					
Age	0.098	0.027	1.292	3.574	0.000					
Age <sup>2</sup>	-0.001	0.000	-1.159	-3.252	0.001					
Speaks English Well (1=Yes)	0.015	0.118	0.008	0.128	0.898					
Some College (1=Yes)	-1.195	0.482	-0.127	-2.480	0.014					
College Graduate (1=Yes)	-1.069	0.610	-0.093	-1.754	0.081					
More than College (1=Yes)	-0.488	0.122	-0.207	-3.988	0.000					
_										
Constant	8.747	0.623		14.049	0.000					

Source: The Public Use Microdata Samples (PUMS) data from 2014 American Community Survey and Calculations using SPSS

Note: **BOLD** statistically significant at p < .05.



# TABLE G-8 RESULTS OF LINEAR REGRESSION GOODS AND SUPPLIES WASHINGTON DC, CMSA

W/ SHINGTON BC, CIVIS/ C										
	Unsta	ndardized	Standa							
Variables	В	Std. Error	В	t	Sig.					
African American	0.329	0.431	0.095	0.763	0.449					
Hispanic American	-1.084	0.636	-0.273	-1.704	0.095					
Asian American	-0.548	0.334	-0.298	-1.639	0.108					
Nonminority Women (1=Female)	-0.610	0.312	-0.252	-1.955	0.056					
Marital Status (1=Married)	-0.218	0.286	-0.107	-0.761	0.450					
Disability (1=Yes)	0.949	0.866	0.140	1.096	0.279					
Age	0.203	0.076	2.599	2.662	0.011					
Age <sup>2</sup>	-0.002	0.001	-2.598	-2.698	0.010					
Speaks English Well (1=Yes)	0.398	0.306	0.226	1.300	0.200					
Some College (1=Yes)	-1.299	0.895	-0.192	-1.452	0.153					
More than College (1=Yes)	-0.436	0.306	-0.195	-1.426	0.160					
Constant	6.783	1.770		3.832	0.000					

Source: The Public Use Microdata Samples (PUMS) data from 2014 American Community Survey and Calculations using SPSS.

Note: **BOLD** statistically significant at p < .05.



## APPENDIX H

## SURVEY OF VENDORS INSTRUMENT

**WSSC 2015 Disparity Study** 



## APPENDIX H: SURVEY OF VENDORS INSTRUMENT

	, my name is and I am calling on behalf of the Washington Suburban Sanitary Commission, or WSSC, to n data on WSSC's utilization of area businesses in WSSC contracts.
Q1.	Is this (Company's name)? IF COMPANY NAME VERIFIED, CONTINUE
Q2.	Are you the owner or an authorized decision maker in your company? [IF NO] - May I speak with that person? [IF NO, SCHEDULE CALL-BACK]?
IF OV	VNER IS PUT ON THE LINE: CONTINUE
IF TR	ANSFERRED TO ANOTHER PARTY (CEO MANAGER ETC). Are you able to answer questions concerning business

WSSC has retained MGT of America to conduct a disparity study. This is not a sales call. Your responses to this research survey will be aggregated for the overall analysis and used only for the disparity study. Individual information is kept confidential. Your firm has been randomly selected to participate in a survey of businesses to evaluate how WSSC buys goods and services, the subcontracting practices

of prime contractors/vendors who do business with WSSC, and the anecdotal evidence about doing business or attempting to do business collected from a broad cross section of all interested businesses between *July 1, 2009 and June 30, 2014*. The results of the study will provide the basis, if warranted, for recommendations to improve WSSC's current procurement programs.

This is a great opportunity for you to provide feedback regarding your experience doing business with or attempting to do business with WSSC. The survey will only take a few minutes of your time to complete.



practices of this company? IF YES, CONTINUE

## **Q3.** What is your title? [REQUIRE ANSWER]

$\mathbf{O}$	Owner		1
$\mathbf{C}$	CEO/President		2
O	Manager/Financial Officer	3	
$\mathbf{C}$	Other	_ 4	

If Owner or CEO Is Selected, Then Skip To: **Q4**. Please verify their name.



Q3a		you able to answer questions concerning the ownership and business activities of the company? [REQUIRE SWER]
	<b>O</b>	Yes 1 No 2 (If No, discontinue survey)
		on Statement: Your company's input is very important so we request that the survey is completed by a of management with more knowledge of the establishment and functions of the business. Thank you.
Q4.	Plea	se VERIFY your name just in case we have any further questions? [REQUIRE ANSWER]
	Cor	ntact Name:
Q5.	Plea	se specify your company's primary line of business? [REQUIRE ANSWER]
	1.	<b>Construction</b> (water and sewer line construction, excavating, general contracting, construction management, carpentry, site work, electrical, etc.):
	2.	<b>Architecture and Engineering</b> (ex. architecture, engineering, civil engineering, environmental engineering, mechanical engineering, etc.):
	3.	Professional Services (ex: accounting, legal services, IT consulting, accountant, consultant, etc.):
		Non-Professional Services (ex: maintenance services, janitorial, security, auto repair, etc.):
	5. 6.	Goods, Equipment, Supplies (commodities, computers, vehicles, furniture, etc.): Other
		[S - IF THE ANSWER TO QUESTION 5 IS 2, THEN SKIP TO QUESTION 7]
		[S - IF THE ANSWER TO QUESTION 5 IS 3, THEN SKIP TO QUESTION 8]

[A - IF THE ANSWER TO QUESTION 5 IS NOT 1, THEN SKIP TO QUESTION 12]

[S - IF THE ANSWER TO QUESTION 5 IS 4, THEN SKIP TO QUESTION 9]

[S - IF THE ANSWER TO QUESTION 5 IS 5, THEN SKIP TO QUESTION 10]

[S - IF THE ANSWER TO QUESTION 5 IS 6, THEN SKIP TO QUESTION 11]



Q6.	Please SPECIFY Construction Type
	[REQUIRE ANSWER]
	[A - IF THE ANSWER TO QUESTION 5 IS NOT 2, THEN SKIP TO QUESTION 12]
Q7.	Please SPECIFY Architectural and Engineering Type
	[REQUIRE ANSWER]
	[A - IF THE ANSWER TO QUESTION 5 IS NOT 3, THEN SKIP TO QUESTION 12]
Q8.	Please SPECIFY Professional Services  [REQUIRE ANSWER]
	[A - IF THE ANSWER TO QUESTION 5 IS NOT 4, THEN SKIP TO QUESTION 12]
Q9.	Please SPECIFY Non-Professional Services Type
	[REQUIRE ANSWER]
	[A - IF THE ANSWER TO QUESTION 5 IS NOT 5, THEN SKIP TO QUESTION 12]
Q10	. Please SPECIFY Goods, Equipment, Supplies
	[REQUIRE ANSWER]
	[A - IF THE ANSWER TO QUESTION 5 IS NOT 6, THEN SKIP TO QUESTION 12]



Q11.	Ple	ase SPECIFY O	ther		
				[REQUIRE ANS	WER]
Q12.	ls y	our company	at least 51 percent ow	ned, managed, and	controlled by a woman or women?
	[RE	EQUIRE ANSW	ER]		
	0	Yes	1		
	0	No	2		
	0	Don't Know	3		
Ψ		EQUIRE ANSW		ica, managea, ana e	ontrolled by one of the following racial or ethnic groups?
	0	Anglo/Cauca	sian/White	1	
	0	Black/Africar	n American	2	
	0	American Inc	dian/Alaskan Native	3	
	0	Asian or Paci	fic Islander	4	
	0	Hispanic or L	atino	5	
	0	Other		6 Specify:	
	O	Don't Know		7	
Q14.	Wł	nat is the high	est level of education c	ompleted by the pri	mary owner of your company? [REQUIRE ANSWER]
O					
	0	Some high so	chool	1	
	0	High school a	graduate	2	
	0	Trade or tech	nnical education	3	
	0	Some college	9	4	
	0	College degr	ee	5	
	0	Post graduat	e degree	6	
	0	Don't know		7	
Q15.	In	what year wa	ıs your company establ	ished? [	REQUIRE ANSWER]



Q16.	How many combined y	years of	experience	do you	or the	primary	owner(s)	of your	firm h	ave in	the	company's
	primary line of business	s?	[REQUIRE	<b>ANSWE</b>	R]							

O	0 – 5 years	1
$\mathbf{O}$	6 – 10 years	2
$\mathbf{O}$	11 – 15 years	3
0	16 – 20 years	4
$\mathbf{O}$	20 + years	5
$\mathbf{O}$	Don't know	6

## **Q17**. In the last three years, what was the average number of employees on your company's payroll, including full-time and part-time staff? [REQUIRE ANSWER]

O	0 - 10	1
$\mathbf{C}$	11 - 20	2
$\mathbf{C}$	21 - 30	3
$\mathbf{O}$	31 - 40	4
$\mathbf{O}$	41+	5
$\mathbf{C}$	Don't know	6

## **Q18.** Which of the following ranges best approximates your company's gross revenues for calendar year 2014? [REQUIRE ANSWER]

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
	\$50,001 to \$100,000? \$100,001 to \$300,000? \$300,001 to \$500,000? \$500,001 to \$1 million? \$1,000,001 to \$3 million? \$3,000,001 to \$5 million? \$5,000,001 to \$10 million? Over \$10 million?



Q19.		t percentage of these gross revenues was e or projects? (Must total 100%)	arned from	WSSC, t	he privat	te sector, and otl	ner publi	c gov	vernment
	WSS	C% Private Sector%	6 N	Non-WSS	SC Public	Sector%			
Q20.	Does <i>appli</i>	your company hold any of the following coies.	ertifications	from a	recogniz	ed certification a	gency?	Chec	k all that
	O	Minority Business Enterprise (MBE)	1						
	0	Small Business Enterprise (SBE)	2						
	$\mathbf{O}$	Woman Business Enterprise (WBE)	3						
	$\mathbf{O}$	Disadvantaged Business Enterprise (DBE)	4						
	$\mathbf{O}$	Small Local Business Enterprise (SLBE)	5						
	O	Other	6 Specify						
	O	Don't Know	7						
Q21.		s your company bid/quote/propose contractor/supplier? OR both?	primarily	as a	prime	contractor/con	sultant	or	vendor?
		[RE	QUIRE ANS	WER]					
	0	Prime Contractor/Consultant or Vendor	1						
	•	Subcontractor/subconsultant or Supplier	2						
	•	Both	3						

[A - IF THE ANSWER TO QUESTION 21 IS NOT 1 or 3, THEN SKIP TO QUESTION 35]



**Q22.** In general, which of the following ranges best approximates your company's largest **prime contract** awarded between *July 1, 2009 and June 30, 2014*?

$\mathbf{C}$	None	1
O	Up to \$50,000?	2
O	\$50,001 to \$100,000?	3
O	\$100,001 to \$200,000?	4
O	\$200,001 to \$300,000?	5
O	\$300,001 to \$400,000?	6
O	\$400,001 to \$500,000?	7
O	\$500,001 to \$1 million?	8
O	Over \$1 million?	9
O	Don't Know	10



**Q23.** In your experience, have any of the following been a barrier to attempting to do work or while working on WSSC projects as a **prime contractor/vendor**?

[REQUIRE ANSWER TO EACH OF THE FOLLOWING]



	YES(1)	NO (2)	DON'T KNOW (3)
Prequalification requirements			
2. Bid bond requirement			
3. Performance/payment bond requirement			
4. Cost of bidding/proposing			
5. Financing			
6. Insurance (general liability, professional liability, etc.)			
7. Price of supplies/materials			
8. Proposal/Bid specifications			
9. Short or limited time given to prepare bid package or quote			
Limited knowledge of purchasing contracting policies and procedures			
11. Lack of experience			
12. Lack of personnel			
13. Contract too large			
14. Selection process/evaluation criteria			
15. Unnecessary restrictive contract specifications			
16. Slow payment or nonpayment			
17. Competing with large companies			
18. Changes in the scope of work (after work began)			
19. Meeting MBE or SLBE goals or good faith effort requirements			
20. Operating at or near capacity			



Q24.	As	a prime contractor/vendor	are you required	I to have bonding? [REQUIRE ANSWER]
	0	Yes 1		
	0	No 2		
	0	Don't Know 3		
		[A - IF THE	ANSWER TO QUE	STION 24 IS NOT 1, THEN SKIP TO QUESTION 27]
Q25.	Wh	at is your current aggrega	te bonding capac	ity? [REQUIRE ANSWER]
	O	Below \$100,000	1	
	0	\$100,001 to \$250,000	2	
	0	\$250,001 to \$500,000	3	
	$\mathbf{O}$	\$500,001 to \$1,000,000	4	
	O	\$1,000,001 to \$1,500,000	5	
	0	\$1,500,001 to \$3,000,000	6	
	O	\$3,000,001 to \$5,000,000	7	
	O	Over \$ 5 million	8	
	0	Don't know	9	
Q26.	Wh	at is your current single lin	mit bonding capa	city? [REQUIRE ANSWER]
	O	Below \$100,000	1	
	0	\$100,001 to \$250,000	2	
	O	\$250,001 to \$500,000	3	
		\$500,001 to \$1,000,000	4	
		\$1,000,001 to \$1,500,000		
		\$1,500,001 to \$3,000,000		
		\$3,000,001 to \$5,000,000		
		Over\$ 5 million	8	
	0	Don't know	9	



	<b>9</b> and <b>2014</b> ? [REQUIRE ANS\	or by WSSC when attempting to work o WER]
1		
1		
2		
3		
4	TO OUTSTION OF IS NOT 4. THEN	CVID TO CUESTION OF
THE ANSWER	TO QUESTION 27 IS NOT 1, THEN	SKIP TO QUESTION 35]
are of the discr	rimination against your company?	[REQUIRE ANSWER]
	1	
Oocuments	2	
the Company	3	
	4 Specify	_
	5	
HE ANSWER TO	QUESTION 28 IS NOT 4, THEN SE	KIP TO QUESTION 30]
do you consi	der the primary reason for you	ır company being discriminated agains
nicity 1		
2		
r 3		
4Speci	ifv	
5		_
HE ANSWER TO	QUESTION 30 IS NOT 4, THEN SE	KIP TO QUESTION 32]
ANSWER]		
	ANSWER]	ANSWER]



Q32.	W	hen did the discriminat	ion first occur?	[1	REQUIRE ANSWER]
	0	During the bidding pro	cess 1		
	O	During contract negoti	ations 2		
	O	After contract award	3		
	O	All of the Above		4	
	0	Don't Know	5		
Q33.	Did	you file a complaint?		[1	REQUIRE ANSWER]
	$\mathbf{c}$	Yes 1			
	O	No 2			
	0	Don't Know 3			
Q34.	by W	/SSC or their prime con	tractor/vendor? [	REQUII	more detail of the alleged discrimination you have experienced RE ANSWER]  mgtamer.com, (704-531-4098)
Q35.	_	eneral, which of the fo <b>9 and June 30, 2014</b> ? [			roximates your company's largest <b>subcontract</b> between <b>July 1</b> ,
	0	None		1	
	0	Up to \$50,000?		2	
	O	\$50,001 to \$100,000?	•	3	
	O	\$100,001 to \$200,000	)?	4	
	0	\$200,001 to \$300,000	)?	5	
	O	\$300,001 to \$400,000	)?	6	
	O	\$400,001 to \$500,000	)?	7	
	O	\$500,001 to \$1 millio	n?	8	
	O	Over \$1 million?		9	
	0	Don't Know		10	
		[A - IF <sup>-</sup>	THE ANSWER TO	QUESTI	ON 35 IS 1, THEN SKIP TO QUESTION 50]



**Q36.** In your experience, have any of the following been a barrier when attempting to do work or while working as a subcontractor with primes on projects for WSSC?

### [REQUIRE ANSWER TO EACH OF THE FOLLOWING]

		YES (1)	NO (2)	DON'T KNOW (3)
1.	Performance/payment bond requirement			
2.	Cost of bidding/proposing			
3.	Financing			
4.	Insurance (general liability, professional liability, etc.)			
5.	Price of supplies/materials			
6.	Short or limited time given to prepare bid estimate or quote			
7.	Lack of experience			
8.	Lack of personnel			
9.	Contract too large			
10.	Slow payment or nonpayment			
11.	Competing with large companies			
12.	Solicitation of subcontractor bids after contract award (i.e. bid shopping)			
13.	Awarded scope of work reduced or eliminated			
14.	Operating at or near capacity			

	or vendor for a	a project with WSSC, we	ere informed that you were the l	lowest bidder/selected firm, and then found
	out that anoth	er subcontractor was a	ctually doing the work?	[REQUIRE ANSWER]
	O Yes	1		
	O No	2		
	O Don't Know	w 3		
Q38.	As a subcontra [REQUIRE ANS	•	ctors on WSSC projects require	you to have a bond for your type of work?
	O Yes	1		
	O No	2		

Q37. Between July 1, 2009 and June 30, 2014, have you ever submitted a bid/quote/proposal with a prime contractor



O Don't know

3

prime		s a subcontractor did y tractor/vendor working	-	roposing on a WSSC project? [R	EQUIRE ANSWER]
	0	Yes 1	1		
	O	No 2	2		
	0	Not Applicable 3	3		
	0		4		
		[A - IF 7	THE ANSWER T	TO QUESTION 39 IS NOT 1, THEN SKI	P TO QUESTION 47]
Q40.	Ho	w did you become awa	re of the discri	imination against your company?	[REQUIRE ANSWER]
	0	Verbal Comment		1	
	0	Written Statement/Do	ocuments	2	
	$\mathbf{O}$	Action Taken against t	the Company	3	
	$\mathbf{O}$	Other Actions:		4 Specify	
	$\mathbf{O}$	Don't Know		5	
		[A - IF TH	IE ANSWER TO	QUESTION 40 IS NOT 4, THEN SKIP	TO QUESTION 42]
Q41.	Spec	[A - IF TH			TO QUESTION 42]
Q41. Q42.	Wh	cify DISCRIMINATORY A	ACTION [REQU	IRE ANSWER]	TO QUESTION 42] company being discriminated against
	Wh	cify DISCRIMINATORY A	ACTION [REQUI	IRE ANSWER]	
	Wh [R]	cify DISCRIMINATORY A	ACTION [REQUI	IRE ANSWER]	
	Wh [R	cify DISCRIMINATORY A nich of the following EQUIRE ANSWER]	do you consid	IRE ANSWER]	
	Wh [R	nich of the following e EQUIRE ANSWER]  Owner's race or ethni	do you consid	IRE ANSWER]  der the primary reason for your c	
	Wh [R	cify DISCRIMINATORY A nich of the following EQUIRE ANSWER] Owner's race or ethni Owner's gender Both race and gender	do you considerity 1 2 3	IRE ANSWER]  der the primary reason for your c	
	Wh [R	cify DISCRIMINATORY A nich of the following EQUIRE ANSWER]  Owner's race or ethni Owner's gender  Both race and gender  Other Reason:  Don't Know	do you considerity 1 2 3 4 Spect 5	IRE ANSWER]  der the primary reason for your c	company being discriminated against



Q44.	W	hen did the d	liscrimination firs	t occur?	[REQUIRE ANSWER]
	O	During the b	oidding process	1	
	O	During conti	ract negotiations	2	
	O	After contra	ct award	3	
	0	All of the Ab	ove	4	
	O	Don't Know		5	
Q45.	Dic	d you file a co	mplaint?	[REQUIRE	E ANSWER]
	O	Yes	1		
	O	No	2		
	O	Don't Know	3		
Q46.			speak directly to contractor/vendo	•	provide more detail of the alleged discrimination you have experienced JIRE ANSWER]
	<b>O</b>	Yes 1 (MGT o	contact Vernetta	Mitchell <u>v</u>	vmitchel@mgtamer.com, (704-531-4098)

**Q47.** Have you experienced or observed a situation in which a prime contractor/vendor includes minority or woman subcontractors on a bid or proposal to satisfy the "good faith effort" requirements, and then drops the company as a subcontractor after winning the award for no legitimate reason? [REQUIRE ANSWER]

O	ct	O Non-WSSC Project						
O Yes (1)	O No (2)	O DK* (3)	O Y	es (1)	O No (2)	O DK* (3)		

<sup>\*</sup>DK means Don't Know



**Q48.** Still talking about prime contractors/consultants or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: [REQUIRE ANSWER]

		Yes (1)	No (2)	Don't Know (3)
1.	Harassment			
2.	Unequal or unfair treatment			
3.	Bid shopping or bid manipulation			
4.	Double standards in performance			
5.	Denial of opportunity to bid			
6.	Unfair denial of contract award			
7.	Unfair termination			
8.	Unequal price quotes from suppliers			

O	Q49.	How often do prime contractors/vendors who use your firm as a subcontractor on p	oublic-sector projects
	with M	/WBE goals solicit your firm on projects (private or public) without M/WBE goals?	[REQUIRE
	ANSWE	R]	

O	Very Often	1
O	Sometimes	2
O	Seldom	3
O	Never	4
O	Not Applicable	5
O	Don't know	6

Q50. Has your company applied for a commercial (business) bank loan or line of credit between *July 1, 2009* and *June 30, 2014*? [REQUIRE ANSWER]

$\mathbf{O}$	Yes	1
O	No	2
$\circ$	Don't know	3

[A - IF THE ANSWER TO QUESTION 50 IS NOT 1, THEN SKIP TO QUESTION 53]



Q51.	Were you approved or denie	d for a commercial (business) bank loan or line of credit?
	[REQUIRE ANSWER]	
	O Approved 1 O Denied 2 O Don't Know 3  [A - IF THE	ANSWER TO QUESTION 50 IS NOT 1, THEN SKIP TO QUESTION 53]
Q52.	What was the highest amous [REQUIRE ANSWER]	nt of commercial bank loan your company received?
		7
Q53.	For the following statemer [REQUIRE ANSWER]	t, please indicate whether you: Agree, Neither Agree or Disagree, Disagree.
	e is an informal network of pri business in the private sector:	me contractors/vendors and subcontractors that has excluded my company from
	O Somewhat Agree	1
	O Neither Agree Nor Disagr	
	<ul><li>Strongly Disagree</li><li>Don't know</li></ul>	3 4



Q54.		·	•	havior when attempting to do work or working in the private sector
betwe			RE ANSW	/ER]
	0	Yes	:	1
	O	No	:	2
	O	Do not work in the private se	ector :	3
	O	Don't Know	4	4
		[A - IF THE AN	SWER TO	QUESTION 54 IS NOT 1, THEN SKIP TO END OF SURVEY]
Q55.	How	did you become aware of th	e discrimi	ination against your company? [REQUIRE ANSWER]
	O	Verbal comment	:	1
	$\mathbf{O}$	Written statement	:	2
	0	Action taken against compar	ny :	3
	O	Other Action	4	4 Specify
	O	Don't' Know		5
				O
		[A - IF THE AN	SWER TO	QUESTION 55 IS NOT 4, THEN SKIP TO QUESTION 57]
Q56.	Spec	cify DISCRIMINATORY ACTION	REQUIR	RE ANSWER]
		ch of the following do you co ate sector? [REQUIRE ANS\		he primary reason for your company being discriminated against in the
	O	Owner's race or ethnicity	1	
	O	Owner's gender	2	
	O	Both	3	
	$\mathbf{O}$	Other Reason	4 Specify	y
	O	Don't know	5	
		[A - IF THE AN	SWER TO	QUESTION 57 IS NOT 4, THEN SKIP TO QUESTION 59]
Q58.	Spec	ify REASON [REQUIRE ANSW	ER]	
				<del></del>



Q59.	When did the discrimination f	rst occur? [F	REQUIRE ANSWER]		
	O During bidding process	1			
	O During contract negotiation	is 2			
	• After contract award	3			
	O All of the Above	5			
	O Don't know	6			
-	Are you willing to speak directly by in the private sector? [REQUI	•	more detail of the alle	eged discrimination	n you have experienced
	<ul><li>Yes 1 (MGT contact Vernet</li><li>No 2</li></ul>	ta Mitchell <u>vmitchel</u>	@mgtamer.com, (704	-531-4098)	

That completes the survey. On behalf of the Washington Suburban Sanitary Commission's SLMBE Office, thank you for your participation in this interview. If you have any questions or would like more information about the disparity study please contact Linda Mann, Disparity Study Project Manager at (301) 206-8800 or visit <a href="https://www.wsscwater.com/disparitystudy">www.wsscwater.com/disparitystudy</a>.



## APPENDIX I

## SURVEY OF VENDORS RESULTS

**WSSC 2015 Disparity Study** 



### Q1 What is your title? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Eth	nnicity, Gender	Classification	(Business Owne	rship Classifica	tion)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q1 What is your	Owner	Count	82	15	8	5	43	37	5	2	197
title?		% within Q1 What is your title?	41.6%	7.6%	4.1%	2.5%	21.8%	18.8%	2.5%	1.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	67.2%	46.9%	47.1%	83.3%	47.8%	28.5%	19.2%	66.7%	46.2%
		% of Total	19.2%	3.5%	1.9%	1.2%	10.1%	8.7%	1.2%	.5%	46.2%
	CEO/President	Count	19	5	3	0	18	21	3	0	69
		% within Q1 What is your title?	27.5%	7.2%	4.3%	0.0%	26.1%	30.4%	4.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	15.6%	15.6%	17.6%	0.0%	20.0%	16.2%	11.5%	0.0%	16.2%
		% of Total	4.5%	1.2%	.7%	0.0%	4.2%	4.9%	.7%	0.0%	16.2%
	Manager/Financial	Count	17	11	4	1	26	61	13	1	134
	Officer	% within Q1 What is your title?	12.7%	8.2%	3.0%	.7%	19.4%	45.5%	9.7%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	13.9%	34.4%	23.5%	16.7%	28.9%	46.9%	50.0%	33.3%	31.5%
		% of Total	4.0%	2.6%	.9%	.2%	6.1%	14.3%	3.1%	.2%	31.5%
	Other, Please Specify	Count	4	1	2	0	3	11	5	0	26
		% within Q1 What is your title?	15.4%	3.8%	7.7%	0.0%	11.5%	42.3%	19.2%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	3.1%	11.8%	0.0%	3.3%	8.5%	19.2%	0.0%	6.1%
		% of Total	.9%	.2%	.5%	0.0%	.7%	2.6%	1.2%	0.0%	6.1%



			Race, Eth	nnicity, Gender	Classification	(Business Owne	rship Classifica	tion)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q1 What is your title?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



### Q4 Please specify your company's primary line of business? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

			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	Other Firms	Don't Know	Total
Q4 Please specify	Construction (water	Count	19	6	9	1	9	36	3	2	85
your company's primary line of business?	and sewer line construction, excavating, general	% within Q4 Please specify your company's primary line of business?	22.4%	7.1%	10.6%	1.2%	10.6%	42.4%	3.5%	2.4%	100.0%
	contracting, construction management, carpentry, site work, electrical, etc.)	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	15.6%	18.8%	52.9%	16.7%	10.0%	27.7%	11.5%	66.7%	20.0%
	ciccirical, etc.)	% of Total	4.5%	1.4%	2.1%	.2%	2.1%	8.5%	.7%	.5%	20.0%
Architecture & Engineering (ex. architecture, engineering, civil engineering, environmental engineering, mechanical	Count	11	7	1	1	7	4	3	0	34	
	architecture, engineering, civil engineering, environmental engineering,	% within Q4 Please specify your company's primary line of business?	32.4%	20.6%	2.9%	2.9%	20.6%	11.8%	8.8%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	9.0%	21.9%	5.9%	16.7%	7.8%	3.1%	11.5%	0.0%	8.0%
	engineering, etc.)	% of Total	2.6%	1.6%	.2%	.2%	1.6%	.9%	.7%	0.0%	8.0%
	Professional Services	Count	33	11	3	4	26	6	4	0	87
	(ex: accounting, legal services, IT consulting, accountant,	% within Q4 Please specify your company's primary line of business?	37.9%	12.6%	3.4%	4.6%	29.9%	6.9%	4.6%	0.0%	100.0%
	consultant, etc.)	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	27.0%	34.4%	17.6%	66.7%	28.9%	4.6%	15.4%	0.0%	20.4%
		% of Total	7.7%	2.6%	.7%	.9%	6.1%	1.4%	.9%	0.0%	20.4%
	Non-Professional	Count	40	2	3	0	18	22	3	1	89
	Services (ex: maintenance services, janitorial, security, auto repair,	% within Q4 Please specify your company's primary line of business?	44.9%	2.2%	3.4%	0.0%	20.2%	24.7%	3.4%	1.1%	100.0%
	etc.)	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.8%	6.3%	17.6%	0.0%	20.0%	16.9%	11.5%	33.3%	20.9%
		% of Total	9.4%	.5%	.7%	0.0%	4.2%	5.2%	.7%	.2%	20.9%



			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	Other Firms	Don't Know	Total
	Goods	Count	19	6	1	0	30	62	13	0	131
	(commodities, computers, vehicles, furniture, etc.)	% within Q4 Please specify your company's primary line of business?	14.5%	4.6%	.8%	0.0%	22.9%	47.3%	9.9%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	15.6%	18.8%	5.9%	0.0%	33.3%	47.7%	50.0%	0.0%	30.8%
		% of Total	4.5%	1.4%	.2%	0.0%	7.0%	14.6%	3.1%	0.0%	30.8%
Total	·	Count	122	32	17	6	90	130	26	3	426
		% within Q4 Please specify your company's primary line of business?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



### Q10 Please SPECIFY other services \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

		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	Other Firms	Don't Know	Total
Q10 Please SPECIFY	Count	122	32	17	6	90	130	26	3	426
other services	% within Q10 Please SPECIFY other services	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q10 Please SPECIFY other services	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q11 Is your company at least 51% of the company owned and controlled by a woman or women? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

			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	Other Firms	Don't Know	Total
Q11 Is your	Yes	Count	39	13	4	3	90	0	8	0	157
company at least 51% of the company owned and controlled by a woman or women?		% within Q11 Is your company at least 51% of the company owned and controlled by a woman or women?	24.8%	8.3%	2.5%	1.9%	57.3%	0.0%	5.1%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	40.6%	23.5%	50.0%	100.0%	0.0%	30.8%	0.0%	36.9%
		% of Total	9.2%	3.1%	.9%	.7%	21.1%	0.0%	1.9%	0.0%	36.9%
	No	Count	83	19	13	3	0	129	18	3	268
		% within Q11 Is your company at least 51% of the company owned and controlled by a woman or women?	31.0%	7.1%	4.9%	1.1%	0.0%	48.1%	6.7%	1.1%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	68.0%	59.4%	76.5%	50.0%	0.0%	99.2%	69.2%	100.0%	62.9%
		% of Total	19.5%	4.5%	3.1%	.7%	0.0%	30.3%	4.2%	.7%	62.9%
	Don't Know	Count	0	0	0	0	0	1	0	0	1
	company a company of controlled women?  % within R Gender Cla (Business C	% within Q11 Is your company at least 51% of the company owned and controlled by a woman or women?	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	0.0%	0.0%	0.0%	.8%	0.0%	0.0%	.2%
		% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	.2%	0.0%	0.0%	.2%



		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	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q11 Is your company at least 51% of the company owned and controlled by a woman or women?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q12 Is your company at least 51% owned, managed, and controlled by one of the following racial or ethnic groups? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

			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	Other Firms	Don't Know	Total
Q12 Is your	Anglo/Caucasian/White	Count	0	0	0	0	90	130	0	0	220
company at least 51% owned, managed, and controlled by one of the following racial or ethnic groups?		% within Q12 Is your company at least 51% owned, managed, and controlled by one of the following racial or ethnic groups?	0.0%	0.0%	0.0%	0.0%	40.9%	59.1%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%	51.6%
		% of Total	0.0%	0.0%	0.0%	0.0%	21.1%	30.5%	0.0%	0.0%	51.6%
	Black/African American	Count	122	0	0	0	0	0	0	0	122
		% within Q12 Is your company at least 51% owned, managed, and controlled by one of the following racial or ethnic groups?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.6%
		% of Total	28.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.6%
	American	Count	0	0	0	6	0	0	0	0	6
		% within Q12 Is your company at least 51% owned, managed, and controlled by one of the following racial or ethnic groups?	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	1.4%
		% of Total	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	1.4%



			Race, Eth	nicity, Gender	r Classification	(Business Owner	ship Classifica	tion)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Asian or Pacific Islander	Count	0	32	0	0	0	0	0	0	32
	% within Q12 Is your company at least 51% owned, managed, and controlled by one of the following racial or ethnic groups?	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.5%
	% of Total	0.0%	7.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.5%
Hispanic or Latino	Count	0	0	17	0	0	0	0	0	17
	% within Q12 Is your company at least 51% owned, managed, and controlled by one of the following racial or ethnic groups?	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%
	% of Total	0.0%	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%
Don't Know	Count	0	0	0	0	0	0	0	3	3
	% within Q12 Is your company at least 51% owned, managed, and controlled by one of the following racial or ethnic groups?	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	.7%
	% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.7%	.7%



				Race, Eth	nnicity, Gender	r Classification	(Business Owner	rship Classifica	ntion)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	Other	Count	0	0	0	0	0	0	26	0	26
		% within Q12 Is your company at least 51% owned, managed, and controlled by one of the following racial or ethnic groups?	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	6.1%
		% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.1%	0.0%	6.1%
Total	'	Count	122	32	17	6	90	130	26	3	426
		% within Q12 Is your company at least 51% owned, managed, and controlled by one of the following racial or ethnic groups?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



#### Q14 What is the highest level of education completed by the primary owner of your company? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Eth	nicity, Gender	Classification	(Business Owner	ship Classifica	tion)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q14 What is the	Some High School	Count	0	1	1	0	1	1	0	0	4
highest level of education completed by the primary owner of your company?		% within Q14 What is the highest level of education completed by the primary owner of your company?	0.0%	25.0%	25.0%	0.0%	25.0%	25.0%	0.0%	0.0%	100.0%
your company:		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	3.1%	5.9%	0.0%	1.1%	.8%	0.0%	0.0%	.9%
		% of Total	0.0%	.2%	.2%	0.0%	.2%	.2%	0.0%	0.0%	.9%
	High School	Count	5	0	4	1	7	17	1	0	35
	Graduate	% within Q14 What is the highest level of education completed by the primary owner of your company?	14.3%	0.0%	11.4%	2.9%	20.0%	48.6%	2.9%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.1%	0.0%	23.5%	16.7%	7.8%	13.1%	3.8%	0.0%	8.2%
		% of Total	1.2%	0.0%	.9%	.2%	1.6%	4.0%	.2%	0.0%	8.2%
	Trade or Technical	Count	9	0	1	0	0	3	1	0	14
	Education	% within Q14 What is the highest level of education completed by the primary owner of your company?	64.3%	0.0%	7.1%	0.0%	0.0%	21.4%	7.1%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	7.4%	0.0%	5.9%	0.0%	0.0%	2.3%	3.8%	0.0%	3.3%
		% of Total	2.1%	0.0%	.2%	0.0%	0.0%	.7%	.2%	0.0%	3.3%



			Race, Eth	nnicity, Gender	Classification	(Business Owne	rship Classifica	tion)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Some College	Count	19	3	3	0	15	19	2	1	62
	% within Q14 What is the highest level of education completed by the primary owner of your company?	30.6%	4.8%	4.8%	0.0%	24.2%	30.6%	3.2%	1.6%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	15.6%	9.4%	17.6%	0.0%	16.7%	14.6%	7.7%	33.3%	14.6%
	% of Total	4.5%	.7%	.7%	0.0%	3.5%	4.5%	.5%	.2%	14.6%
College Degree	Count	41	11	3	1	35	47	9	1	148
	% within Q14 What is the highest level of education completed by the primary owner of your company?	27.7%	7.4%	2.0%	.7%	23.6%	31.8%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	33.6%	34.4%	17.6%	16.7%	38.9%	36.2%	34.6%	33.3%	34.7%
	% of Total	9.6%	2.6%	.7%	.2%	8.2%	11.0%	2.1%	.2%	34.7%
Post Graduate	Count	47	17	5	4	30	33	8	1	145
Degree	% within Q14 What is the highest level of education completed by the primary owner of your company?	32.4%	11.7%	3.4%	2.8%	20.7%	22.8%	5.5%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	38.5%	53.1%	29.4%	66.7%	33.3%	25.4%	30.8%	33.3%	34.0%
	% of Total	11.0%	4.0%	1.2%	.9%	7.0%	7.7%	1.9%	.2%	34.0%



				Race, Etl	nnicity, Gender	Classification	(Business Owne	rship Classifica	tion)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	Don't Know	Count	1	0	0	0	2	10	5	0	18
		% within Q14 What is the highest level of education completed by the primary owner of your company?	5.6%	0.0%	0.0%	0.0%	11.1%	55.6%	27.8%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	2.2%	7.7%	19.2%	0.0%	4.2%
		% of Total	.2%	0.0%	0.0%	0.0%	.5%	2.3%	1.2%	0.0%	4.2%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q14 What is the highest level of education completed by the primary owner of your company?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



#### Q15 In what year was your company established (range)? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Eth	nnicity, Gender	Classification	(Business Owner	ship Classifica	tion)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q15 In what year	Prior to 1940	Count	0	0	0	0	3	10	1	1	15
was your company established (range)?		% within Q15 In what year was your company established (range)?	0.0%	0.0%	0.0%	0.0%	20.0%	66.7%	6.7%	6.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	0.0%	0.0%	3.3%	7.7%	3.8%	33.3%	3.5%
		% of Total	0.0%	0.0%	0.0%	0.0%	.7%	2.3%	.2%	.2%	3.5%
	1940 to 1969	Count	2	0	0	0	8	27	4	2	43
		% within Q15 In what year was your company established (range)?	4.7%	0.0%	0.0%	0.0%	18.6%	62.8%	9.3%	4.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	0.0%	0.0%	0.0%	8.9%	20.8%	15.4%	66.7%	10.1%
		% of Total	.5%	0.0%	0.0%	0.0%	1.9%	6.3%	.9%	.5%	10.1%
	1970 to 1979	Count	3	3	1	0	7	14	1	0	29
		% within Q15 In what year was your company established (range)?	10.3%	10.3%	3.4%	0.0%	24.1%	48.3%	3.4%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	9.4%	5.9%	0.0%	7.8%	10.8%	3.8%	0.0%	6.8%
		% of Total	.7%	.7%	.2%	0.0%	1.6%	3.3%	.2%	0.0%	6.8%
	1980 to 1989	Count	19	5	2	1	15	36	11	0	89
		% within Q15 In what year was your company established (range)?	21.3%	5.6%	2.2%	1.1%	16.9%	40.4%	12.4%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	15.6%	15.6%	11.8%	16.7%	16.7%	27.7%	42.3%	0.0%	20.9%
		% of Total	4.5%	1.2%	.5%	.2%	3.5%	8.5%	2.6%	0.0%	20.9%



				Race, Eth	nnicity, Gender	Classification	(Business Owne	rship Classifica	tion)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	1990 to 1999	Count	26	5	3	3	25	20	6	0	88
		% within Q15 In what year was your company established (range)?	29.5%	5.7%	3.4%	3.4%	28.4%	22.7%	6.8%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	21.3%	15.6%	17.6%	50.0%	27.8%	15.4%	23.1%	0.0%	20.7%
		% of Total	6.1%	1.2%	.7%	.7%	5.9%	4.7%	1.4%	0.0%	20.7%
	2000 to 2009	Count	51	15	7	1	26	21	3	0	124
		% within Q15 In what year was your company established (range)?	41.1%	12.1%	5.6%	.8%	21.0%	16.9%	2.4%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	41.8%	46.9%	41.2%	16.7%	28.9%	16.2%	11.5%	0.0%	29.1%
		% of Total	12.0%	3.5%	1.6%	.2%	6.1%	4.9%	.7%	0.0%	29.1%
	2010 to 2014	Count	21	4	4	1	6	2	0	0	38
		% within Q15 In what year was your company established (range)?	55.3%	10.5%	10.5%	2.6%	15.8%	5.3%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	17.2%	12.5%	23.5%	16.7%	6.7%	1.5%	0.0%	0.0%	8.9%
		% of Total	4.9%	.9%	.9%	.2%	1.4%	.5%	0.0%	0.0%	8.9%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q15 In what year was your company established (range)?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q16 How many combined years of experience do you or the primary owner(s) of your company have in the company's primary line of business? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Eth	nicity, Gender	Classification	(Business Owner	ship Classifica	tion)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q16 How many	0-5 years	Count	4	2	0	0	2	2	0	0	10
combined years of experience do you or the primary owner(s) of your company have in the company's primary line of business?		% within Q16 How many combined years of experience do you or the primary owner(s) of your company have in the company's primary line of business?	40.0%	20.0%	0.0%	0.0%	20.0%	20.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	6.3%	0.0%	0.0%	2.2%	1.5%	0.0%	0.0%	2.3%
		% of Total	.9%	.5%	0.0%	0.0%	.5%	.5%	0.0%	0.0%	2.3%
	6-10 years	Count	8	2	2	1	1	1	0	0	15
		% within Q16 How many combined years of experience do you or the primary owner(s) of your company have in the company's primary line of business?	53.3%	13.3%	13.3%	6.7%	6.7%	6.7%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	6.6%	6.3%	11.8%	16.7%	1.1%	.8%	0.0%	0.0%	3.5%
		% of Total	1.9%	.5%	.5%	.2%	.2%	.2%	0.0%	0.0%	3.5%



			Race, Eth	nnicity, Gender	Classification	(Business Owner	ship Classifica	tion)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
11-15 years	Count	9	2	3	0	8	2	1	0	2
	% within Q16 How many combined years of experience do you or the primary owner(s) of your company have in the company's primary line of business?	36.0%	8.0%	12.0%	0.0%	32.0%	8.0%	4.0%	0.0%	100.09
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	7.4%	6.3%	17.6%	0.0%	8.9%	1.5%	3.8%	0.0%	5.99
	% of Total	2.1%	.5%	.7%	0.0%	1.9%	.5%	.2%	0.0%	5.99
16-20 years	Count % within Q16 How many	10	2	3	0	6	1	2	0	2
% wi com expe prim com com busii	% within Q16 How many combined years of experience do you or the primary owner(s) of your company have in the company's primary line of business?	41.7%	8.3%	12.5%	0.0%	25.0%	4.2%	8.3%	0.0%	100.09
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	8.2%	6.3%	17.6%	0.0%	6.7%	.8%	7.7%	0.0%	5.6
	% of Total	2.3%	.5%	.7%	0.0%	1.4%	.2%	.5%	0.0%	5.6
20+ years	Count	91	24	9	5	73	124	21	3	3!
	% within Q16 How many combined years of experience do you or the primary owner(s) of your company have in the company's primary line of business?	26.0%	6.9%	2.6%	1.4%	20.9%	35.4%	6.0%	.9%	100.0
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	74.6%	75.0%	52.9%	83.3%	81.1%	95.4%	80.8%	100.0%	82.2
	% of Total	21.4%	5.6%	2.1%	1.2%	17.1%	29.1%	4.9%	.7%	82.2



				Race, Eth	nicity, Gender	Classification (	Business Owner	ship Classifica	tion)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	Don't Know	Count	0	0	0	0	0	0	2	0	2
		% within Q16 How many combined years of experience do you or the primary owner(s) of your company have in the company's primary line of business?	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.7%	0.0%	.5%
		% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.5%	0.0%	.5%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q16 How many combined years of experience do you or the primary owner(s) of your company have in the company's primary line of business?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q17 In the last three years, what was the average number of employees on your company's payroll, including full-time and part-time staff? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Eth	nicity, Gender	· Classification	(Business Owner	ship Classificat	tion)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q17 In the last three	0-10 employees	Count	74	18	8	0	43	36	4	2	185
years, what was the average number of employees on your company's payroll, including full-time and part-time staff?		% within Q17 In the last three years, what was the average number of employees on your company's payroll, including full-time and part-time staff?	40.0%	9.7%	4.3%	0.0%	23.2%	19.5%	2.2%	1.1%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	60.7%	56.3%	47.1%	0.0%	47.8%	27.7%	15.4%	66.7%	43.4%
		% of Total	17.4%	4.2%	1.9%	0.0%	10.1%	8.5%	.9%	.5%	43.4%
	11-20 employees	Count	23	3	3	3	16	26	4	0	78
		% within Q17 In the last three years, what was the average number of employees on your company's payroll, including full-time and part-time staff?	29.5%	3.8%	3.8%	3.8%	20.5%	33.3%	5.1%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	18.9%	9.4%	17.6%	50.0%	17.8%	20.0%	15.4%	0.0%	18.3%
		% of Total	5.4%	.7%	.7%	.7%	3.8%	6.1%	.9%	0.0%	18.3%
	21-30 employees	Count	10	1	3	1	13	13	1	0	42
		% within Q17 In the last three years, what was the average number of employees on your company's payroll, including full-time and part-time staff?	23.8%	2.4%	7.1%	2.4%	31.0%	31.0%	2.4%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	8.2%	3.1%	17.6%	16.7%	14.4%	10.0%	3.8%	0.0%	9.9%
		% of Total	2.3%	.2%	.7%	.2%	3.1%	3.1%	.2%	0.0%	9.9%



				Race, Etł	nicity, Gender	Classification	(Business Owner	ship Classifica	tion)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	31-40 employees	Count	2	3	2	1	4	6	1	0	19
		% within Q17 In the last three years, what was the average number of employees on your company's payroll, including full-time and part-time staff?	10.5%	15.8%	10.5%	5.3%	21.1%	31.6%	5.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	9.4%	11.8%	16.7%	4.4%	4.6%	3.8%	0.0%	4.5%
		% of Total	.5%	.7%	.5%	.2%	.9%	1.4%	.2%	0.0%	4.5%
	41+ employees	Count	13	7	1	1	14	47	13	1	97
	41+ employees	% within Q17 In the last three years, what was the average number of employees on your company's payroll, including full-time and part-time staff?	13.4%	7.2%	1.0%	1.0%	14.4%	48.5%	13.4%	1.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	10.7%	21.9%	5.9%	16.7%	15.6%	36.2%	50.0%	33.3%	22.8%
		% of Total	3.1%	1.6%	.2%	.2%	3.3%	11.0%	3.1%	.2%	22.8%
	Don't Know	Count	0	0	0	0	0	2	3	0	5
		% within Q17 In the last three years, what was the average number of employees on your company's payroll, including full-time and part-time staff?	0.0%	0.0%	0.0%	0.0%	0.0%	40.0%	60.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	11.5%	0.0%	1.2%
		% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	.5%	.7%	0.0%	1.2%



		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	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
Total	% within Q17 In the last three years, what was the average number of employees on your company's payroll, including full-time and part-time staff?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q18 Which of the following categories best approximate your company's gross revenues for calendar year 2014? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

			<u>.</u>	osstabulation							
				Race, Eth	nicity, Gender	Classification	(Business Owner	ship Classificat	tion)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q18 Which of the	Up to \$50,000?	Count	14	2	1	0	3	2	0	0	22
following categories best approximate your company's gross revenues for calendar year 2014?		% within Q18 Which of the following categories best approximate your company's gross revenues for calendar year 2014?	63.6%	9.1%	4.5%	0.0%	13.6%	9.1%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	11.5%	6.3%	5.9%	0.0%	3.3%	1.5%	0.0%	0.0%	5.2%
		% of Total	3.3%	.5%	.2%	0.0%	.7%	.5%	0.0%	0.0%	5.2%
	\$50,001 to	Count	13	1	1	0	5	3	0	0	23
	\$100,000?	% within Q18 Which of the following categories best approximate your company's gross revenues for calendar year 2014?	56.5%	4.3%	4.3%	0.0%	21.7%	13.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	10.7%	3.1%	5.9%	0.0%	5.6%	2.3%	0.0%	0.0%	5.4%
		% of Total	3.1%	.2%	.2%	0.0%	1.2%	.7%	0.0%	0.0%	5.4%
	\$100,001 to	Count	14	6	1	0	12	5	1	0	39
	\$300,000?	% within Q18 Which of the following categories best approximate your company's gross revenues for calendar year 2014?	35.9%	15.4%	2.6%	0.0%	30.8%	12.8%	2.6%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	11.5%	18.8%	5.9%	0.0%	13.3%	3.8%	3.8%	0.0%	9.2%
		% of Total	3.3%	1.4%	.2%	0.0%	2.8%	1.2%	.2%	0.0%	9.2%



			Race, Eth	nnicity, Gender	Classification	(Business Owne	rship Classifica	tion)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
\$300,001 to	Count	18	3	1	0	6	2	0	0	30
\$500,000?	% within Q18 Which of the following categories best approximate your company's gross revenues for calendar year 2014?	60.0%	10.0%	3.3%	0.0%	20.0%	6.7%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	14.8%	9.4%	5.9%	0.0%	6.7%	1.5%	0.0%	0.0%	7.0%
	% of Total	4.2%	.7%	.2%	0.0%	1.4%	.5%	0.0%	0.0%	7.0%
\$500,001 to \$1	Count	13	2	1	0	13	18	2	0	49
million?	% within Q18 Which of the following categories best approximate your company's gross revenues for calendar year 2014?	26.5%	4.1%	2.0%	0.0%	26.5%	36.7%	4.1%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	10.7%	6.3%	5.9%	0.0%	14.4%	13.8%	7.7%	0.0%	11.5%
	% of Total	3.1%	.5%	.2%	0.0%	3.1%	4.2%	.5%	0.0%	11.5%
\$1,000,001 to \$3	Count	22	6	6	3	12	21	3	2	75
million?	% within Q18 Which of the following categories best approximate your company's gross revenues for calendar year 2014?	29.3%	8.0%	8.0%	4.0%	16.0%	28.0%	4.0%	2.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	18.0%	18.8%	35.3%	50.0%	13.3%	16.2%	11.5%	66.7%	17.6%
	% of Total	5.2%	1.4%	1.4%	.7%	2.8%	4.9%	.7%	.5%	17.6%



			Race, Eth	nnicity, Gender	Classification	(Business Owner	ship Classificat	tion)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
\$3,000,001 to \$5	Count	5	1	2	1	11	14	3	0	37
million?	% within Q18 Which of the following categories best approximate your company's gross revenues for calendar year 2014?	13.5%	2.7%	5.4%	2.7%	29.7%	37.8%	8.1%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.1%	3.1%	11.8%	16.7%	12.2%	10.8%	11.5%	0.0%	8.7%
	% of Total	1.2%	.2%	.5%	.2%	2.6%	3.3%	.7%	0.0%	8.7%
\$5,000,001 to \$10	Count	4	3	2	2	7	17	3	0	38
million?	% within Q18 Which of the following categories best approximate your company's gross revenues for calendar year 2014?	10.5%	7.9%	5.3%	5.3%	18.4%	44.7%	7.9%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	9.4%	11.8%	33.3%	7.8%	13.1%	11.5%	0.0%	8.9%
	% of Total	.9%	.7%	.5%	.5%	1.6%	4.0%	.7%	0.0%	8.9%
Over \$10 million?	Count	7	4	2	0	9	30	9	1	62
	% within Q18 Which of the following categories best approximate your company's gross revenues for calendar year 2014?	11.3%	6.5%	3.2%	0.0%	14.5%	48.4%	14.5%	1.6%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	5.7%	12.5%	11.8%	0.0%	10.0%	23.1%	34.6%	33.3%	14.6%
	% of Total	1.6%	.9%	.5%	0.0%	2.1%	7.0%	2.1%	.2%	14.6%



				Race, Eth	nnicity, Gender	Classification	(Business Owne	rship Classifica	tion)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	Don't Know	Count	12	4	0	0	12	18	5	0	51
		% within Q18 Which of the following categories best approximate your company's gross revenues for calendar year 2014?	23.5%	7.8%	0.0%	0.0%	23.5%	35.3%	9.8%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	9.8%	12.5%	0.0%	0.0%	13.3%	13.8%	19.2%	0.0%	12.0%
		% of Total	2.8%	.9%	0.0%	0.0%	2.8%	4.2%	1.2%	0.0%	12.0%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q18 Which of the following categories best approximate your company's gross revenues for calendar year 2014?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



#### Q19 What percentage of gross revenues was earned from the WSSC? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethnici	ty, Gender C	lassification (	(Business Owne	rship Classi	fication)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q19 What percentage of gross	No Percentage of Gross	Count	104	27	16	6	71	80	14	3	321
revenues was earned from the WSSC?	Revenue	% within Q19 What percentage of gross revenues was earned from the WSSC?	32.4%	8.4%	5.0%	1.9%	22.1%	24.9%	4.4%	.9%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	85.2%	84.4%	94.1%	100.0%	78.9%	61.5%	53.8%	100.0%	75.4%
		% of Total	24.4%	6.3%	3.8%	1.4%	16.7%	18.8%	3.3%	.7%	75.4%
	1% to 15%	Count	14	5	1	0	15	39	10	0	84
		% within Q19 What percentage of gross revenues was earned from the WSSC?	16.7%	6.0%	1.2%	0.0%	17.9%	46.4%	11.9%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	11.5%	15.6%	5.9%	0.0%	16.7%	30.0%	38.5%	0.0%	19.7%
		% of Total	3.3%	1.2%	.2%	0.0%	3.5%	9.2%	2.3%	0.0%	19.7%
	16% to 25%	Count	1	0	0	0	0	5	1	0	7
		% within Q19 What percentage of gross revenues was earned from the WSSC?	14.3%	0.0%	0.0%	0.0%	0.0%	71.4%	14.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	0.0%	3.8%	3.8%	0.0%	1.6%
		% of Total	.2%	0.0%	0.0%	0.0%	0.0%	1.2%	.2%	0.0%	1.6%
	26% to 50%	Count	2	0	0	0	2	4	1	0	9
		% within Q19 What percentage of gross revenues was earned from the WSSC?	22.2%	0.0%	0.0%	0.0%	22.2%	44.4%	11.1%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	0.0%	0.0%	0.0%	2.2%	3.1%	3.8%	0.0%	2.1%
		% of Total	.5%	0.0%	0.0%	0.0%	.5%	.9%	.2%	0.0%	2.1%



				Race, Ethnici	ty, Gender C	lassification (	Business Owner	rship Classi	fication)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	75% to 100%	Count	1	0	0	0	2	2	0	0	5
		% within Q19 What percentage of gross revenues was earned from the WSSC?	20.0%	0.0%	0.0%	0.0%	40.0%	40.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	2.2%	1.5%	0.0%	0.0%	1.2%
		% of Total	.2%	0.0%	0.0%	0.0%	.5%	.5%	0.0%	0.0%	1.2%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q19 What percentage of gross revenues was earned from the WSSC?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



#### Q19 What percentage of these gross revenues was earned from the Private Sector? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethnici	ty, Gender C	lassification	(Business Owne	rship Classi	fication)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q19 What percentage of these	No Percentage of Gross	Count	20	7	0	4	9	16	3	0	59
gross revenues was earned from the Private Sector?	Revenue	% within Q19 What percentage of these gross revenues was earned from the Private Sector?	33.9%	11.9%	0.0%	6.8%	15.3%	27.1%	5.1%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	16.4%	21.9%	0.0%	66.7%	10.0%	12.3%	11.5%	0.0%	13.8%
		% of Total	4.7%	1.6%	0.0%	.9%	2.1%	3.8%	.7%	0.0%	13.8%
	1% to 15%	Count	16	6	2	0	6	7	2	0	39
		% within Q19 What percentage of these gross revenues was earned from the Private Sector?	41.0%	15.4%	5.1%	0.0%	15.4%	17.9%	5.1%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	13.1%	18.8%	11.8%	0.0%	6.7%	5.4%	7.7%	0.0%	9.2%
		% of Total	3.8%	1.4%	.5%	0.0%	1.4%	1.6%	.5%	0.0%	9.2%
	16% to 25%	Count	8	2	0	0	2	8	1	1	22
		% within Q19 What percentage of these gross revenues was earned from the Private Sector?	36.4%	9.1%	0.0%	0.0%	9.1%	36.4%	4.5%	4.5%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	6.6%	6.3%	0.0%	0.0%	2.2%	6.2%	3.8%	33.3%	5.2%
		% of Total	1.9%	.5%	0.0%	0.0%	.5%	1.9%	.2%	.2%	5.2%



				Race, Ethnic	ity, Gender C	lassification	(Business Owner	ship Classi	fication)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	26% to 50%	Count	20	2	3	1	13	20	5	2	66
		% within Q19 What percentage of these gross revenues was earned from the Private Sector?	30.3%	3.0%	4.5%	1.5%	19.7%	30.3%	7.6%	3.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	16.4%	6.3%	17.6%	16.7%	14.4%	15.4%	19.2%	66.7%	15.5%
		% of Total	4.7%	.5%	.7%	.2%	3.1%	4.7%	1.2%	.5%	15.5%
	51% to 74%	Count	4	2	1	0	12	18	0	0	37
		% within Q19 What percentage of these gross revenues was earned from the Private Sector?	10.8%	5.4%	2.7%	0.0%	32.4%	48.6%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	6.3%	5.9%	0.0%	13.3%	13.8%	0.0%	0.0%	8.7%
		% of Total	.9%	.5%	.2%	0.0%	2.8%	4.2%	0.0%	0.0%	8.7%
	75% to 100%	Count	54	13	11	1	48	61	15	0	203
		% within Q19 What percentage of these gross revenues was earned from the Private Sector?	26.6%	6.4%	5.4%	.5%	23.6%	30.0%	7.4%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	44.3%	40.6%	64.7%	16.7%	53.3%	46.9%	57.7%	0.0%	47.7%
		% of Total	12.7%	3.1%	2.6%	.2%	11.3%	14.3%	3.5%	0.0%	47.7%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q19 What percentage of these gross revenues was earned from the Private Sector?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



#### Q19 What percentage of these gross revenues was earned from the Non-WSSC Public Sector? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethnic	ity, Gender C	Classification	(Business Owner	rship Classi	fication)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q19 What percentage of these	No Percentage of Gross	Count	34	6	7	0	24	34	6	0	111
gross revenues was earned from the Non-WSSC Public Sector?	Revenue	% within Q19 What percentage of these gross revenues was earned from the Non-WSSC Public Sector?	30.6%	5.4%	6.3%	0.0%	21.6%	30.6%	5.4%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	27.9%	18.8%	41.2%	0.0%	26.7%	26.2%	23.1%	0.0%	26.1%
		% of Total	8.0%	1.4%	1.6%	0.0%	5.6%	8.0%	1.4%	0.0%	26.1%
	1% to 15%	Count	12	7	2	0	18	21	5	0	65
		% within Q19 What percentage of these gross revenues was earned from the Non-WSSC Public Sector?	18.5%	10.8%	3.1%	0.0%	27.7%	32.3%	7.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	9.8%	21.9%	11.8%	0.0%	20.0%	16.2%	19.2%	0.0%	15.3%
		% of Total	2.8%	1.6%	.5%	0.0%	4.2%	4.9%	1.2%	0.0%	15.3%
	16% to 25%	Count	10	0	2	1	9	13	5	0	40
		% within Q19 What percentage of these gross revenues was earned from the Non-WSSC Public Sector?	25.0%	0.0%	5.0%	2.5%	22.5%	32.5%	12.5%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	8.2%	0.0%	11.8%	16.7%	10.0%	10.0%	19.2%	0.0%	9.4%
		% of Total	2.3%	0.0%	.5%	.2%	2.1%	3.1%	1.2%	0.0%	9.4%



			Race, Ethnic	ity, Gender C	lassification	(Business Owne	rship Classi	fication)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
26% to 50%	Count	18	3	3	0	19	29	3	1	76
	% within Q19 What percentage of these gross revenues was earned from the Non-WSSC Public Sector?	23.7%	3.9%	3.9%	0.0%	25.0%	38.2%	3.9%	1.3%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	14.8%	9.4%	17.6%	0.0%	21.1%	22.3%	11.5%	33.3%	17.8%
	% of Total	4.2%	.7%	.7%	0.0%	4.5%	6.8%	.7%	.2%	17.8%
51% to 74%	Count	7	2	1	1	6	6	2	1	26
	% within Q19 What percentage of these gross revenues was earned from the Non-WSSC Public Sector?	26.9%	7.7%	3.8%	3.8%	23.1%	23.1%	7.7%	3.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	5.7%	6.3%	5.9%	16.7%	6.7%	4.6%	7.7%	33.3%	6.1%
	% of Total	1.6%	.5%	.2%	.2%	1.4%	1.4%	.5%	.2%	6.1%
75% to 100%	Count	41	14	2	4	14	27	5	1	108
	% within Q19 What percentage of these gross revenues was earned from the Non-WSSC Public Sector?	38.0%	13.0%	1.9%	3.7%	13.0%	25.0%	4.6%	.9%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	33.6%	43.8%	11.8%	66.7%	15.6%	20.8%	19.2%	33.3%	25.4%
	% of Total	9.6%	3.3%	.5%	.9%	3.3%	6.3%	1.2%	.2%	25.4%



			Race, Ethnici	ty, Gender C	lassification	(Business Owne	rship Classi	fication)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q19 What percentage of these gross revenues was earned from the Non-WSSC Public Sector?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q20 Does your company hold any Minority Business Enterprise (MBE) certifications from a recognized certification agency? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

					, <del>*</del>		Business Owner		fication)	1	
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q20 Does your company hold	Yes	Count	98	25	13	5	38	5	4	0	188
any <b>Minority Business Enterprise (MBE)</b> certifications from a recognized certification agency?		% within Q20 Does your company hold any <i>Minority Business Enterprise (MBE)</i> certifications from a recognized certification agency?	52.1%	13.3%	6.9%	2.7%	20.2%	2.7%	2.1%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	80.3%	78.1%	76.5%	83.3%	42.2%	3.8%	15.4%	0.0%	44.1%
		% of Total	23.0%	5.9%	3.1%	1.2%	8.9%	1.2%	.9%	0.0%	44.1%
	No	Count	24	7	4	1	50	121	22	3	232
		% within Q20 Does your company hold any <i>Minority Business Enterprise (MBE)</i> certifications from a recognized certification agency?	10.3%	3.0%	1.7%	.4%	21.6%	52.2%	9.5%	1.3%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	19.7%	21.9%	23.5%	16.7%	55.6%	93.1%	84.6%	100.0%	54.5%
		% of Total	5.6%	1.6%	.9%	.2%	11.7%	28.4%	5.2%	.7%	54.5%
	Don't Know	Count	0	0	0	0	2	4	0	0	6
		% within Q20 Does your company hold any <i>Minority Business Enterprise (MBE)</i> certifications from a recognized certification agency?	0.0%	0.0%	0.0%	0.0%	33.3%	66.7%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	0.0%	0.0%	2.2%	3.1%	0.0%	0.0%	1.4%
		% of Total	0.0%	0.0%	0.0%	0.0%	.5%	.9%	0.0%	0.0%	1.4%



			Race, Ethnici	ty, Gender C	lassification (	Business Owner	ship Classi	fication)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q20 Does your company hold any <i>Minority Business Enterprise (MBE)</i> certifications from a recognized certification agency?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q20 Does your company hold any Small Business Enterprise (SBE) certifications from a recognized certification agency? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethnici	ity, Gender C	lassification	(Business Owne	rship Classi	fication)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q20 Does your company hold	Yes	Count	65	21	10	2	32	40	5	0	175
any <b>Small Business Enterprise (SBE)</b> certifications from a recognized certification agency?		% within Q20 Does your company hold any <b>Small Business Enterprise (SBE)</b> certifications from a recognized certification agency?	37.1%	12.0%	5.7%	1.1%	18.3%	22.9%	2.9%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	53.3%	65.6%	58.8%	33.3%	35.6%	30.8%	19.2%	0.0%	41.1%
		% of Total	15.3%	4.9%	2.3%	.5%	7.5%	9.4%	1.2%	0.0%	41.1%
	No	Count	55	11	7	4	55	84	21	3	240
		% within Q20 Does your company hold any <b>Small Business Enterprise (SBE)</b> certifications from a recognized certification agency?	22.9%	4.6%	2.9%	1.7%	22.9%	35.0%	8.8%	1.3%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	45.1%	34.4%	41.2%	66.7%	61.1%	64.6%	80.8%	100.0%	56.3%
		% of Total	12.9%	2.6%	1.6%	.9%	12.9%	19.7%	4.9%	.7%	56.3%
	Don't Know	Count	2	0	0	0	3	6	0	0	11
		% within Q20 Does your company hold any <b>Small Business Enterprise (SBE)</b> certifications from a recognized certification agency?	18.2%	0.0%	0.0%	0.0%	27.3%	54.5%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	0.0%	0.0%	0.0%	3.3%	4.6%	0.0%	0.0%	2.6%
		% of Total	.5%	0.0%	0.0%	0.0%	.7%	1.4%	0.0%	0.0%	2.6%



			Race, Ethnici	ty, Gender C	lassification (	Business Owner	ship Classi	fication)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q20 Does your company hold any <b>Small Business Enterprise (SBE)</b> certifications from a recognized certification agency?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q20 Does your company hold any Woman Business Enterprise (WBE) certifications from a recognized certification agency? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

							Business Owner	_ ·	fication)		
			African American	Asian American	Hispanic American	Native American	Nonminority Female	Non- M/WBE	Other	Don't	
			Firms	Firms	Firms	Firms	Firms	Firms	Firms	Know	Total
Q20 Does your company hold	Yes	Count	22	10	1	2	60	2	3	0	100
any <b>Woman Business Enterprise (WBE)</b> certifications from a recognized certification agency?		% within Q20 Does your company hold any <b>Woman Business Enterprise (WBE)</b> certifications from a recognized certification agency?	22.0%	10.0%	1.0%	2.0%	60.0%	2.0%	3.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	18.0%	31.3%	5.9%	33.3%	66.7%	1.5%	11.5%	0.0%	23.5%
		% of Total	5.2%	2.3%	.2%	.5%	14.1%	.5%	.7%	0.0%	23.5%
	No	Count	99	22	16	4	27	123	23	3	317
		% within Q20 Does your company hold any <b>Woman Business Enterprise (WBE)</b> certifications from a recognized certification agency?	31.2%	6.9%	5.0%	1.3%	8.5%	38.8%	7.3%	.9%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	81.1%	68.8%	94.1%	66.7%	30.0%	94.6%	88.5%	100.0%	74.4%
		% of Total	23.2%	5.2%	3.8%	.9%	6.3%	28.9%	5.4%	.7%	74.4%
	Don't Know	Count	1	0	0	0	3	5	0	0	9
		% within Q20 Does your company hold any <b>Woman Business Enterprise (WBE)</b> certifications from a recognized certification agency?	11.1%	0.0%	0.0%	0.0%	33.3%	55.6%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	3.3%	3.8%	0.0%	0.0%	2.1%
		% of Total	.2%	0.0%	0.0%	0.0%	.7%	1.2%	0.0%	0.0%	2.1%



		African American Firms	Race, Ethnici Asian American Firms	ty, Gender C Hispanic American Firms	lassification ( Native American Firms	Business Owner  Nonminority  Female  Firms	rship Classi Non- M/WBE Firms	fication) Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q20 Does your company hold any <b>Woman Business Enterprise (WBE)</b> certifications from a recognized certification agency?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q20 Does your company hold any Disadvantaged Business Enterprise (DBE) certifications from a recognized certification agency? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethnici	ty, Gender C	lassification	(Business Owner	rship Classi	fication)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q20 Does your company hold	Yes	Count	58	13	5	5	15	4	0	0	100
any <b>Disadvantaged Business Enterprise (DBE)</b> certifications from a recognized certification agency?		% within Q20 Does your company hold any <b>Disadvantaged Business Enterprise (DBE)</b> certifications from a recognized certification agency?	58.0%	13.0%	5.0%	5.0%	15.0%	4.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	47.5%	40.6%	29.4%	83.3%	16.7%	3.1%	0.0%	0.0%	23.5%
		% of Total	13.6%	3.1%	1.2%	1.2%	3.5%	.9%	0.0%	0.0%	23.5%
	No	Count	63	19	12	1	72	121	25	3	316
	company hold any  Disadvantaged Busines  Enterprise (DBE) certific  from a recognized certific  agency?  % within Race, Ethnicity,  Gender Classification (Bu  Ownership Classification	<b>Disadvantaged Business Enterprise (DBE)</b> certifications from a recognized certification	19.9%	6.0%	3.8%	.3%	22.8%	38.3%	7.9%	.9%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	51.6%	59.4%	70.6%	16.7%	80.0%	93.1%	96.2%	100.0%	74.2%
		% of Total	14.8%	4.5%	2.8%	.2%	16.9%	28.4%	5.9%	.7%	74.2%
	Don't Know	Count	1	0	0	0	3	5	1	0	10
		% within Q20 Does your company hold any <b>Disadvantaged Business Enterprise (DBE)</b> certifications from a recognized certification agency?	10.0%	0.0%	0.0%	0.0%	30.0%	50.0%	10.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	3.3%	3.8%	3.8%	0.0%	2.3%
		% of Total	.2%	0.0%	0.0%	0.0%	.7%	1.2%	.2%	0.0%	2.3%



			Race, Ethnici	ty, Gender C	lassification (	Business Owner	ship Classi	fication)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q20 Does your company hold any <b>Disadvantaged Business Enterprise (DBE)</b> certifications from a recognized certification agency?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q20 Does your company hold any Small Local Business Enterprise (SLBE) certifications from a recognized certification agency? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethnici	ity, Gender C	lassification	(Business Owne	rship Classi	fication)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q20 Does your company hold	Yes	Count	39	13	3	0	11	16	3	0	85
any <b>Small Local Business Enterprise (SLBE)</b> certifications from a recognized certification agency?		% within Q20 Does your company hold any <b>Small Local Business Enterprise (SLBE)</b> certifications from a recognized certification agency?	45.9%	15.3%	3.5%	0.0%	12.9%	18.8%	3.5%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	40.6%	17.6%	0.0%	12.2%	12.3%	11.5%	0.0%	20.0%
		% of Total	9.2%	3.1%	.7%	0.0%	2.6%	3.8%	.7%	0.0%	20.0%
	No	Count	79	18	13	6	74	105	23	3	321
		% within Q20 Does your company hold any <b>Small Local Business Enterprise (SLBE)</b> certifications from a recognized certification agency?	24.6%	5.6%	4.0%	1.9%	23.1%	32.7%	7.2%	.9%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	64.8%	56.3%	76.5%	100.0%	82.2%	80.8%	88.5%	100.0%	75.4%
		% of Total	18.5%	4.2%	3.1%	1.4%	17.4%	24.6%	5.4%	.7%	75.4%
	Don't Know	Count	4	1	1	0	5	9	0	0	20
		% within Q20 Does your company hold any <b>Small Local Business Enterprise (SLBE)</b> certifications from a recognized certification agency?	20.0%	5.0%	5.0%	0.0%	25.0%	45.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	3.1%	5.9%	0.0%	5.6%	6.9%	0.0%	0.0%	4.7%
		% of Total	.9%	.2%	.2%	0.0%	1.2%	2.1%	0.0%	0.0%	4.7%



			Race, Ethnici	ty, Gender C	lassification (	Business Owner	ship Classi	fication)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q20 Does your company hold any <b>Small Local Business Enterprise (SLBE)</b> certifications from a recognized certification agency?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q20 Does your company hold any certifications from a recognized certification agency? Don't Know \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

			osstabulatio								
				Race, Ethnici	T T		(Business Owner	rship Classi	fication)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q20 Does your company hold	Yes	Count	1	0	0	0	1	0	0	0	2
any certifications from a recognized certification agency? <b>Don't Know</b>		% within Q20 Does your company hold any certifications from a recognized certification agency? <b>Don't Know</b>	50.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	.5%
		% of Total	.2%	0.0%	0.0%	0.0%	.2%	0.0%	0.0%	0.0%	.5%
	No	Count	109	30	15	6	79	116	26	2	383
	from a recognized certificat agency? <b>Don't Know</b>	company hold any certifications from a recognized certification	28.5%	7.8%	3.9%	1.6%	20.6%	30.3%	6.8%	.5%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	89.3%	93.8%	88.2%	100.0%	87.8%	89.2%	100.0%	66.7%	89.9%
		% of Total	25.6%	7.0%	3.5%	1.4%	18.5%	27.2%	6.1%	.5%	89.9%
	Don't Know	Count	12	2	2	0	10	14	0	1	41
		% within Q20 Does your company hold any certifications from a recognized certification agency? <b>Don't Know</b>	29.3%	4.9%	4.9%	0.0%	24.4%	34.1%	0.0%	2.4%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	9.8%	6.3%	11.8%	0.0%	11.1%	10.8%	0.0%	33.3%	9.6%
		% of Total	2.8%	.5%	.5%	0.0%	2.3%	3.3%	0.0%	.2%	9.6%



			Race, Ethnici	ty, Gender C	lassification (	Business Owner	rship Classi	fication)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q20 Does your company hold any certifications from a recognized certification agency? <b>Don't Know</b>	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



#### Q20 Does your company hold any other certifications from a recognized certification agency? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethnici	ty, Gender C	lassification	(Business Owne	rship Classi	fication)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q20 Does your company hold	Yes	Count	17	2	1	2	9	9	3	0	43
any <b>OTHER</b> certifications from a recognized certification agency?		% within Q20 Does your company hold any <b>OTHER</b> certifications from a recognized certification agency?	39.5%	4.7%	2.3%	4.7%	20.9%	20.9%	7.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	13.9%	6.3%	5.9%	33.3%	10.0%	6.9%	11.5%	0.0%	10.1%
		% of Total	4.0%	.5%	.2%	.5%	2.1%	2.1%	.7%	0.0%	10.1%
	No	Count	99	28	15	4	74	109	23	3	355
		% within Q20 Does your company hold any <b>OTHER</b> certifications from a recognized certification agency?	27.9%	7.9%	4.2%	1.1%	20.8%	30.7%	6.5%	.8%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	81.1%	87.5%	88.2%	66.7%	82.2%	83.8%	88.5%	100.0%	83.3%
		% of Total	23.2%	6.6%	3.5%	.9%	17.4%	25.6%	5.4%	.7%	83.3%
	Don't Know	Count	6	2	1	0	7	12	0	0	28
		% within Q20 Does your company hold any <b>OTHER</b> certifications from a recognized certification agency?	21.4%	7.1%	3.6%	0.0%	25.0%	42.9%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.9%	6.3%	5.9%	0.0%	7.8%	9.2%	0.0%	0.0%	6.6%
		% of Total	1.4%	.5%	.2%	0.0%	1.6%	2.8%	0.0%	0.0%	6.6%



			Race, Ethnici	ty, Gender C	lassification (	Business Owner	rship Classi	fication)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q20 Does your company hold any <b>OTHER</b> certifications from a recognized certification agency?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q22 Does your company bid primarily as a prime contractor/consultant or vendor, subcontractor/subconsultant/supplier or both? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethnicit	y, Gender Cla	assification (B	usiness Ownersh	ip Classifica	tion)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q22 Does your company bid	Prime	Count	41	13	6	2	37	56	12	3	170
primarily as a prime contractor/consultant or vendor, subcontractor/subconsultant/ supplier or both?	contractor/consultant or vendor	% within Q22 Does your company bid primarily as a prime contractor/consultant or vendor, subcontractor/subconsultant/ supplier or both?	24.1%	7.6%	3.5%	1.2%	21.8%	32.9%	7.1%	1.8%	100.0
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	33.6%	40.6%	35.3%	33.3%	41.1%	43.1%	46.2%	100.0 %	39.9%	
		% of Total	9.6%	3.1%	1.4%	.5%	8.7%	13.1%	2.8%	.7%	39.9%
	Subcontractor/subcons	Count	28	6	5	0	18	27	8	0	92
	ultant or supplier	% within Q22 Does your company bid primarily as a prime contractor/consultant or vendor, subcontractor/subconsultant/ supplier or both?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%



				Race, Ethnicit	y, Gender Cla	assification (B	usiness Ownersh	ip Classifica	tion)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	Both	Count	53	13	6	4	35	47	6	0	164
		% within Q22 Does your company bid primarily as a prime contractor/consultant or vendor, subcontractor/subconsultant/ supplier or both?	32.3%	7.9%	3.7%	2.4%	21.3%	28.7%	3.7%	0.0%	100.0
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	43.4%	40.6%	35.3%	66.7%	38.9%	36.2%	23.1%	0.0%	38.5%
		% of Total	12.4%	3.1%	1.4%	.9%	8.2%	11.0%	1.4%	0.0%	38.5%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q22 Does your company bid primarily as a prime contractor/consultant or vendor, subcontractor/subconsultant/ supplier or both?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0	100.0 %	100.0
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0 %



## Q23 In general, which of the following ranges best approximate your company's largest prime contract awarded between July 1, 2009 and June 30, 2014? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethni	city, Gender	Classification (B	usiness Ownersl	nip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q23 In general, which of the	None	Count	6	1	1	0	1	6	0	0	15
following ranges best approximate your company's largest prime contract awarded between July 1, 2009 and June 30, 2014?		% within Q23 In general, which of the following ranges best approximate your company's largest prime contract awarded between July 1, 2009 and June 30, 2014?	40.0%	6.7%	6.7%	0.0%	6.7%	40.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.9%	3.1%	5.9%	0.0%	1.1%	4.6%	0.0%	0.0%	3.5%
		% of Total	1.4%	.2%	.2%	0.0%	.2%	1.4%	0.0%	0.0%	3.5%
	Up to \$50,000?	Count	21	4	3	0	12	14	0	0	54
		% within Q23 In general, which of the following ranges best approximate your company's largest prime contract awarded between July 1, 2009 and June 30, 2014?	38.9%	7.4%	5.6%	0.0%	22.2%	25.9%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	17.2%	12.5%	17.6%	0.0%	13.3%	10.8%	0.0%	0.0%	12.7%
		% of Total	4.9%	.9%	.7%	0.0%	2.8%	3.3%	0.0%	0.0%	12.7%



		Race, Ethnicity, Gender Classification (Business Ownership Classification)  African Asian Hispanic Native Nonminority Non-									
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
\$50,	0,001 to \$100,000?	Count	10	3	1	0	7	8	0	0	29
		% within Q23 In general, which of the following ranges best approximate your company's largest prime contract awarded between July 1, 2009 and June 30, 2014?	34.5%	10.3%	3.4%	0.0%	24.1%	27.6%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	8.2%	9.4%	5.9%	0.0%	7.8%	6.2%	0.0%	0.0%	6.8%
		% of Total	2.3%	.7%	.2%	0.0%	1.6%	1.9%	0.0%	0.0%	6.8%
\$100	00,001 to \$200,000?	Count	9	2	0	0	4	2	0	1	18
		% within Q23 In general, which of the following ranges best approximate your company's largest prime contract awarded between July 1, 2009 and June 30, 2014?	50.0%	11.1%	0.0%	0.0%	22.2%	11.1%	0.0%	5.6%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	7.4%	6.3%	0.0%	0.0%	4.4%	1.5%	0.0%	33.3%	4.2%
		% of Total	2.1%	.5%	0.0%	0.0%	.9%	.5%	0.0%	.2%	4.2%
\$200	00,001 to \$300,000?	Count	7	0	0	0	4	5	3	1	20
		% within Q23 In general, which of the following ranges best approximate your company's largest prime contract awarded between July 1, 2009 and June 30, 2014?	35.0%	0.0%	0.0%	0.0%	20.0%	25.0%	15.0%	5.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	5.7%	0.0%	0.0%	0.0%	4.4%	3.8%	11.5%	33.3%	4.7%
		% of Total	1.6%	0.0%	0.0%	0.0%	.9%	1.2%	.7%	.2%	4.7%
				Race, Ethni	city, Gender	Classification (B	usiness Owners	hip Classific	cation)		Total



		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	
\$300,001 to \$400,000	? Count	2	1	0	0	1	5	1	0	10
	% within Q23 In general, which of the following ranges best approximate your company's largest prime contract awarded between July 1, 2009 and June 30, 2014?	20.0%	10.0%	0.0%	0.0%	10.0%	50.0%	10.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	3.1%	0.0%	0.0%	1.1%	3.8%	3.8%	0.0%	2.3%
	% of Total	.5%	.2%	0.0%	0.0%	.2%	1.2%	.2%	0.0%	2.3%
\$400,001 to \$500,000	? Count	4	1	1	0	6	5	1	0	18
	% within Q23 In general, which of the following ranges best approximate your company's largest prime contract awarded between July 1, 2009 and June 30, 2014?	22.2%	5.6%	5.6%	0.0%	33.3%	27.8%	5.6%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	3.1%	5.9%	0.0%	6.7%	3.8%	3.8%	0.0%	4.2%
	% of Total	.9%	.2%	.2%	0.0%	1.4%	1.2%	.2%	0.0%	4.2%
\$500,001 to \$1	Count	5	2	2	1	6	12	0	1	29
million?	% within Q23 In general, which of the following ranges best approximate your company's largest prime contract awarded between July 1, 2009 and June 30, 2014?	17.2%	6.9%	6.9%	3.4%	20.7%	41.4%	0.0%	3.4%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.1%	6.3%	11.8%	16.7%	6.7%	9.2%	0.0%	33.3%	6.8%
	% of Total	1.2%	.5%	.5%	.2%	1.4%	2.8%	0.0%	.2%	6.8%



			Race, Ethni	city, Gender	Classification (B	usiness Ownersl	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Over \$1	million? Count	25	11	4	5	16	27	9	0	97
	% within Q23 In general, which of the following ranges best approximate your company's largest prime contract awarded between July 1, 2009 and June 30, 2014?	25.8%	11.3%	4.1%	5.2%	16.5%	27.8%	9.3%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	20.5%	34.4%	23.5%	83.3%	17.8%	20.8%	34.6%	0.0%	22.8%
	% of Total	5.9%	2.6%	.9%	1.2%	3.8%	6.3%	2.1%	0.0%	22.8%
Don't Kn	ow Count	5	1	0	0	15	19	4	0	44
	% within Q23 In general, which of the following ranges best approximate your company's largest prime contract awarded between July 1, 2009 and June 30, 2014?	11.4%	2.3%	0.0%	0.0%	34.1%	43.2%	9.1%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.1%	3.1%	0.0%	0.0%	16.7%	14.6%	15.4%	0.0%	10.3%
	% of Total	1.2%	.2%	0.0%	0.0%	3.5%	4.5%	.9%	0.0%	10.3%



				Race, Ethni	city, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	No Response	Count	28	6	5	0	18	27	8	0	92
		% within Q23 In general, which of the following ranges best approximate your company's largest prime contract awarded between July 1, 2009 and June 30, 2014?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q23 In general, which of the following ranges best approximate your company's largest prime contract awarded between July 1, 2009 and June 30, 2014?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime contractor/vendor: Prequalification requirements? \*

Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethni	city, Gender	Classification (B	usiness Ownersl	nip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	15	2	2	1	4	7	5	1	37
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime contractor/vendor: Prequalification requirements?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime contractor/vendor: Prequalification requirements?	40.5%	5.4%	5.4%	2.7%	10.8%	18.9%	13.5%	2.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	12.3%	6.3%	11.8%	16.7%	4.4%	5.4%	19.2%	33.3%	8.7%	
		% of Total	3.5%	.5%	.5%	.2%	.9%	1.6%	1.2%	.2%	8.7%
	No	Count	76	24	10	5	66	95	13	2	291
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime contractor/vendor: Prequalification requirements?	26.1%	8.2%	3.4%	1.7%	22.7%	32.6%	4.5%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	62.3%	75.0%	58.8%	83.3%	73.3%	73.1%	50.0%	66.7%	68.3%
		% of Total	17.8%	5.6%	2.3%	1.2%	15.5%	22.3%	3.1%	.5%	68.3%



			Race, Ethni	city, Gender	Classification (B	usiness Ownersl	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	3	0	0	0	2	1	0	0	6
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime contractor/vendor: Prequalification requirements?	50.0%	0.0%	0.0%	0.0%	33.3%	16.7%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	0.0%	0.0%	2.2%	.8%	0.0%	0.0%	1.4%
	% of Total	.7%	0.0%	0.0%	0.0%	.5%	.2%	0.0%	0.0%	1.4%
No Response	Count	28	6	5	0	18	27	8	0	92
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime contractor/vendor: Prequalification requirements?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
	% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%



			Race, Ethni	city, Gender	Classification (B	usiness Ownersl	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime contractor/vendor: Prequalification requirements?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Bid bond requirements? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethni	city, Gender	Classification (B	usiness Ownersł	nip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	17	4	1	0	1	4	0	0	27
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Bid bond requirements?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Bid bond requirements?	63.0%	14.8%	3.7%	0.0%	3.7%	14.8%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	13.9%	12.5%	5.9%	0.0%	1.1%	3.1%	0.0%	0.0%	6.3%
		% of Total	4.0%	.9%	.2%	0.0%	.2%	.9%	0.0%	0.0%	6.3%
	No	Count	75	21	11	6	69	98	18	3	301
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Bid bond requirements?	24.9%	7.0%	3.7%	2.0%	22.9%	32.6%	6.0%	1.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	61.5%	65.6%	64.7%	100.0%	76.7%	75.4%	69.2%	100.0%	70.7%	
		% of Total	17.6%	4.9%	2.6%	1.4%	16.2%	23.0%	4.2%	.7%	70.7%



				Race, Ethni	city, Gender (	Classification (B	usiness Ownersl	hip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	Don't Know	Count	2	1	0	0	2	1	0	0	6
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Bid bond requirements?	33.3%	16.7%	0.0%	0.0%	33.3%	16.7%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	3.1%	0.0%	0.0%	2.2%	.8%	0.0%	0.0%	1.4%
		% of Total	.5%	.2%	0.0%	0.0%	.5%	.2%	0.0%	0.0%	1.4%
	No Response	Count	28	6	5	0	18	27	8	0	92
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Bid bond requirements?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%
Total		Count	122	32	17	6	90	130	26	3	426
	rtal	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Bid bond requirements?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Performance / payment bond requirements? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethni	city, Gender	Classification (B	usiness Ownersl	nip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	12	3	2	0	0	1	0	0	18
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Performance / payment bond requirements?	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Performance / payment bond requirements?	66.7%	16.7%	11.1%	0.0%	0.0%	5.6%	0.0%	0.0%	100.0%	
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	9.8%	9.4%	11.8%	0.0%	0.0%	.8%	0.0%	0.0%	4.2%
		% of Total	2.8%	.7%	.5%	0.0%	0.0%	.2%	0.0%	0.0%	4.2%
	No	Count	80	22	10	6	70	101	18	3	310
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Performance / payment bond requirements?	25.8%	7.1%	3.2%	1.9%	22.6%	32.6%	5.8%	1.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	65.6%	68.8%	58.8%	100.0%	77.8%	77.7%	69.2%	100.0%	72.8%	
		% of Total	18.8%	5.2%	2.3%	1.4%	16.4%	23.7%	4.2%	.7%	72.8%



		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	Other Firms	Don't Know	Total
	Don't Know	Count	2	1	0	0	2	1	0	0	6
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Performance / payment bond requirements?	33.3%	16.7%	0.0%	0.0%	33.3%	16.7%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	3.1%	0.0%	0.0%	2.2%	.8%	0.0%	0.0%	1.4%
		% of Total	.5%	.2%	0.0%	0.0%	.5%	.2%	0.0%	0.0%	1.4%
	No Response	Count	28	6	5	0	18	27	8	0	92
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Performance / payment bond requirements?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Performance / payment bond requirements?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Cost bidding / proposing? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethni	city, Gender	Classification (B	usiness Ownersł	nip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	9	1	2	0	6	1	1	0	20
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Cost bidding / proposing?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Cost bidding / proposing?	45.0%	5.0%	10.0%	0.0%	30.0%	5.0%	5.0%	0.0%	100.0%
	Gender Classificatio Ownership Classific	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	7.4%	3.1%	11.8%	0.0%	6.7%	.8%	3.8%	0.0%	4.7%
		% of Total	2.1%	.2%	.5%	0.0%	1.4%	.2%	.2%	0.0%	4.7%
	No	Count	83	25	10	6	64	101	17	3	309
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Cost bidding / proposing?	26.9%	8.1%	3.2%	1.9%	20.7%	32.7%	5.5%	1.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	68.0%	78.1%	58.8%	100.0%	71.1%	77.7%	65.4%	100.0%	72.5%
		% of Total	19.5%	5.9%	2.3%	1.4%	15.0%	23.7%	4.0%	.7%	72.5%



		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	Other Firms	Don't Know	Total
	Don't Know	Count	2	0	0	0	2	1	0	0	5
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Cost bidding / proposing?	40.0%	0.0%	0.0%	0.0%	40.0%	20.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	0.0%	0.0%	0.0%	2.2%	.8%	0.0%	0.0%	1.2%
		% of Total	.5%	0.0%	0.0%	0.0%	.5%	.2%	0.0%	0.0%	1.2%
	No Response	Count	28	6	5	0	18	27	8	0	92
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Cost bidding / proposing?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Cost bidding / proposing?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Financing? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

		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	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	7	1	1	1	0	2	0	0	12
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Financing?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Financing?	58.3%	8.3%	8.3%	8.3%	0.0%	16.7%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	5.7%	3.1%	5.9%	16.7%	0.0%	1.5%	0.0%	0.0%	2.8%
		% of Total	1.6%	.2%	.2%	.2%	0.0%	.5%	0.0%	0.0%	2.8%
	No	Count	86	25	11	5	70	100	18	3	318
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Financing?	27.0%	7.9%	3.5%	1.6%	22.0%	31.4%	5.7%	.9%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	70.5%	78.1%	64.7%	83.3%	77.8%	76.9%	69.2%	100.0%	74.6%
		% of Total	20.2%	5.9%	2.6%	1.2%	16.4%	23.5%	4.2%	.7%	74.6%
	Don't Know	Count	1	0	0	0	2	1	0	0	4
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Financing? % within Race, Ethnicity, Gender Classification (Business Ownership Classification)	25.0%	0.0%	0.0%	0.0%	50.0%	25.0%	0.0%	0.0%	100.0%	
		Gender Classification (Business	.8%	0.0%	0.0%	0.0%	2.2%	.8%	0.0%	0.0%	.9%
		% of Total	.2%	0.0%	0.0%	0.0%	.5%	.2%	0.0%	0.0%	.9%



				Race, Ethni	city, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
No	o Response	Count	28	6	5	0	18	27	8	0	92
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Financing?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Financing?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Insurance (general liability, professional liability, etc.)?

\* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

			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	Other Firms	Don't Know	Total
Q24 In your experience, have any of the following been a	Yes	Count	5	1	1	1	0	0	0	0	8
barrier to attempting to do work or working on WSSC projects as a prime: Insurance (general liability, professional liability, etc.) ?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Insurance (general liability, professional liability, etc.) ?	62.5%	12.5%	12.5%	12.5%	0.0%	0.0%	0.0%	0.0%	100.0%
	Gender Classification Ownership Classificati	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.1%	3.1%	5.9%	16.7%	0.0%	0.0%	0.0%	0.0%	1.9%
	% of Total	1.2%	.2%	.2%	.2%	0.0%	0.0%	0.0%	0.0%	1.9%	
	No	Count	88	24	11	5	70	102	18	3	321
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Insurance (general liability, professional liability, etc.) ?	27.4%	7.5%	3.4%	1.6%	21.8%	31.8%	5.6%	.9%	100.0%	
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	72.1%	75.0%	64.7%	83.3%	77.8%	78.5%	69.2%	100.0%	75.4%
		% of Total	20.7%	5.6%	2.6%	1.2%	16.4%	23.9%	4.2%	.7%	75.4%



			Race, Ethni	city, Gender	Classification (B	usiness Ownersl	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	1	1	0	0	2	1	0	0	5
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Insurance (general liability, professional liability, etc.) ?	20.0%	20.0%	0.0%	0.0%	40.0%	20.0%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	3.1%	0.0%	0.0%	2.2%	.8%	0.0%	0.0%	1.2%
	% of Total	.2%	.2%	0.0%	0.0%	.5%	.2%	0.0%	0.0%	1.2%
No Response	Count	28	6	5	0	18	27	8	0	92
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Insurance (general liability, professional liability, etc.) ?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
	% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%



	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	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Insurance (general liability, professional liability, etc.) ?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Price of supplies / materials? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethni	city, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	6	1	0	0	2	0	0	0	9
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Price of supplies / materials?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Price of supplies / materials?	66.7%	11.1%	0.0%	0.0%	22.2%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.9%	3.1%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	2.1%
		% of Total	1.4%	.2%	0.0%	0.0%	.5%	0.0%	0.0%	0.0%	2.1%
	No	Count	86	24	12	6	69	102	18	3	320
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Price of supplies / materials?	26.9%	7.5%	3.8%	1.9%	21.6%	31.9%	5.6%	.9%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	70.5%	75.0%	70.6%	100.0%	76.7%	78.5%	69.2%	100.0%	75.1%	
		% of Total	20.2%	5.6%	2.8%	1.4%	16.2%	23.9%	4.2%	.7%	75.1%



				Race, Ethni	city, Gender	Classification (B	Susiness Owners	hip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	Don't Know	Count	2	1	0	0	1	1	0	0	5
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Price of supplies / materials?	40.0%	20.0%	0.0%	0.0%	20.0%	20.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	3.1%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	1.2%
		% of Total	.5%	.2%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	1.2%
	No Response	Count	28	6	5	0	18	27	8	0	92
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Price of supplies / materials?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Price of supplies / materials?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Proposal / Bid specifications? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethni	city, Gender	Classification (B	usiness Ownersl	nip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	18	3	2	0	5	10	2	1	41
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Proposal / Bid specifications?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Proposal / Bid specifications?	43.9%	7.3%	4.9%	0.0%	12.2%	24.4%	4.9%	2.4%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	14.8%	9.4%	11.8%	0.0%	5.6%	7.7%	7.7%	33.3%	9.6%
		% of Total	4.2%	.7%	.5%	0.0%	1.2%	2.3%	.5%	.2%	9.6%
	No	Count	74	22	10	6	66	92	16	2	288
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Proposal / Bid specifications?	25.7%	7.6%	3.5%	2.1%	22.9%	31.9%	5.6%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	60.7%	68.8%	58.8%	100.0%	73.3%	70.8%	61.5%	66.7%	67.6%
		% of Total	17.4%	5.2%	2.3%	1.4%	15.5%	21.6%	3.8%	.5%	67.6%



		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	Other Firms	Don't Know	Total	
	Don't Know	Count	2	1	0	0	1	1	0	0	5	
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Proposal / Bid specifications?	40.0%	20.0%	0.0%	0.0%	20.0%	20.0%	0.0%	0.0%	100.0%	
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	3.1%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	1.2%	
		% of Total	.5%	.2%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	1.2%	
	No Response	Count	28	6	5	0	18	27	8	0	92	
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Proposal / Bid specifications?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%	
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%	
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%	
Total		Count	122	32	17	6	90	130	26	3	426	
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Proposal / Bid specifications?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%	
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%	



Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Short or limited time to prepare bid package or quote?

\* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethni	city, Gender	Classification (B	usiness Owners	hip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	15	5	2	1	7	5	2	0	37
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Short or limited time to prepare bid package or quote?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Short or limited time to prepare bid package or quote?	40.5%	13.5%	5.4%	2.7%	18.9%	13.5%	5.4%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	12.3%	15.6%	11.8%	16.7%	7.8%	3.8%	7.7%	0.0%	8.7%
		% of Total	3.5%	1.2%	.5%	.2%	1.6%	1.2%	.5%	0.0%	8.7%
	No	Count	77	20	10	5	64	97	16	3	292
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Short or limited time to prepare bid package or quote?	26.4%	6.8%	3.4%	1.7%	21.9%	33.2%	5.5%	1.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	63.1%	62.5%	58.8%	83.3%	71.1%	74.6%	61.5%	100.0%	68.5%
		% of Total	18.1%	4.7%	2.3%	1.2%	15.0%	22.8%	3.8%	.7%	68.5%



		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	Other Firms	Don't Know	Total
Don't Know	Count	2	1	0	0	1	1	0	0	5
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Short or limited time to prepare bid package or quote?	40.0%	20.0%	0.0%	0.0%	20.0%	20.0%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	3.1%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	1.2%
	% of Total	.5%	.2%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	1.2%
No Response	Count	28	6	5	0	18	27	8	0	92
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Short or limited time to prepare bid package or quote?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
	% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%



			Race, Ethni	city, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Short or limited time to prepare bid package or quote?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Limited knowledge of purchasing and contracting policies and procedures? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

		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	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	12	4	3	1	7	5	1	1	34
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Limited knowledge of purchasing and contracting policies and procedures?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Limited knowledge of purchasing and contracting policies and procedures?	35.3%	11.8%	8.8%	2.9%	20.6%	14.7%	2.9%	2.9%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	9.8%	12.5%	17.6%	16.7%	7.8%	3.8%	3.8%	33.3%	8.0%
		% of Total	2.8%	.9%	.7%	.2%	1.6%	1.2%	.2%	.2%	8.0%
	No	Count	79	21	9	5	64	97	17	2	294
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Limited knowledge of purchasing and contracting policies and procedures?	26.9%	7.1%	3.1%	1.7%	21.8%	33.0%	5.8%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	64.8%	65.6%	52.9%	83.3%	71.1%	74.6%	65.4%	66.7%	69.0%
		% of Total	18.5%	4.9%	2.1%	1.2%	15.0%	22.8%	4.0%	.5%	69.0%



			Race, Ethni	city, Gender	Classification (B	usiness Ownersl	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	3	1	0	0	1	1	0	0	6
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Limited knowledge of purchasing and contracting policies and procedures?	50.0%	16.7%	0.0%	0.0%	16.7%	16.7%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	3.1%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	1.4%
	% of Total	.7%	.2%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	1.4%
No Response	Count	28	6	5	0	18	27	8	0	92
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Limited knowledge of purchasing and contracting policies and procedures?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
	% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%



			Race, Ethni	city, Gender	Classification (B	usiness Ownersl	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Limited knowledge of purchasing and contracting policies and procedures?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Lack of experience? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

		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	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	5	3	2	0	2	0	0	0	12
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Lack of experience?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Lack of experience?	41.7%	25.0%	16.7%	0.0%	16.7%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.1%	9.4%	11.8%	0.0%	2.2%	0.0%	0.0%	0.0%	2.8%
		% of Total	1.2%	.7%	.5%	0.0%	.5%	0.0%	0.0%	0.0%	2.8%
	No	Count	86	22	10	6	69	102	18	3	316
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Lack of experience?	27.2%	7.0%	3.2%	1.9%	21.8%	32.3%	5.7%	.9%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	70.5%	68.8%	58.8%	100.0%	76.7%	78.5%	69.2%	100.0%	74.2%
		% of Total	20.2%	5.2%	2.3%	1.4%	16.2%	23.9%	4.2%	.7%	74.2%
	Don't Know	Count	3	1	0	0	1	1	0	0	6
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Lack of experience?	50.0%	16.7%	0.0%	0.0%	16.7%	16.7%	0.0%	0.0%	100.0%	
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	3.1%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	1.4%
		% of Total	.7%	.2%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	1.4%



				Race, Ethni	icity, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	No Response	Count	28	6	5	0	18	27	8	0	92
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Lack of experience?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Lack of experience?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



#### Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Lack of personnel? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

		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	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	5	2	1	0	3	1	0	0	12
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Lack of personnel?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Lack of personnel?	41.7%	16.7%	8.3%	0.0%	25.0%	8.3%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.1%	6.3%	5.9%	0.0%	3.3%	.8%	0.0%	0.0%	2.8%
		% of Total	1.2%	.5%	.2%	0.0%	.7%	.2%	0.0%	0.0%	2.8%
	No	Count	87	23	11	6	67	101	18	3	316
	experience, have any of the following been a barrier to attempting to do work or working on WSSC projects		27.5%	7.3%	3.5%	1.9%	21.2%	32.0%	5.7%	.9%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	71.3%	71.9%	64.7%	100.0%	74.4%	77.7%	69.2%	100.0%	74.2%
		% of Total	20.4%	5.4%	2.6%	1.4%	15.7%	23.7%	4.2%	.7%	74.2%
	Don't Know	Count	2	1	0	0	2	1	0	0	6
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Lack of personnel?	33.3%	16.7%	0.0%	0.0%	33.3%	16.7%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	3.1%	0.0%	0.0%	2.2%	.8%	0.0%	0.0%	1.4%
		% of Total	.5%	.2%	0.0%	0.0%	.5%	.2%	0.0%	0.0%	1.4%



				Race, Ethni	city, Gender	Classification (B	usiness Ownersl	hip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	No Response	Count	28	6	5	0	18	27	8	0	92
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Lack of personnel?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Lack of personnel?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Contract too large? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

			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	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	8	2	2	0	4	2	0	0	18
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Contract too large?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Contract too large?	44.4%	11.1%	11.1%	0.0%	22.2%	11.1%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	6.6%	6.3%	11.8%	0.0%	4.4%	1.5%	0.0%	0.0%	4.2%
		% of Total	1.9%	.5%	.5%	0.0%	.9%	.5%	0.0%	0.0%	4.2%
	No	Count	85	23	10	6	67	100	18	3	312
	experience, hav following been attempting to o working on WS a prime: Contra	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Contract too large?	27.2%	7.4%	3.2%	1.9%	21.5%	32.1%	5.8%	1.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	69.7%	71.9%	58.8%	100.0%	74.4%	76.9%	69.2%	100.0%	73.2%
		% of Total	20.0%	5.4%	2.3%	1.4%	15.7%	23.5%	4.2%	.7%	73.2%
	Don't Know	Count	1	1	0	0	1	1	0	0	4
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Contract too large?	25.0%	25.0%	0.0%	0.0%	25.0%	25.0%	0.0%	0.0%	100.0%
	a prime: Contract too large? % within Race, Ethnicity, Gender Classification (Busine Ownership Classification)	.8%	3.1%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	.9%	
		% of Total	.2%	.2%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	.9%



				Race, Ethni	city, Gender	Classification (B	usiness Ownersl	hip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	No Response	Count	28	6	5	0	18	27	8	0	92
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Contract too large?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Contract too large?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Selection process / evaluation criteria? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethni	city, Gender	Classification (B	usiness Ownersl	nip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	17	5	2	1	5	9	1	1	41
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Selection process / evaluation criteria?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Selection process / evaluation criteria?	41.5%	12.2%	4.9%	2.4%	12.2%	22.0%	2.4%	2.4%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	13.9%	15.6%	11.8%	16.7%	5.6%	6.9%	3.8%	33.3%	9.6%
		% of Total	4.0%	1.2%	.5%	.2%	1.2%	2.1%	.2%	.2%	9.6%
	No	Count	74	21	10	5	64	93	17	2	286
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Selection process / evaluation criteria?	25.9%	7.3%	3.5%	1.7%	22.4%	32.5%	5.9%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	60.7%	65.6%	58.8%	83.3%	71.1%	71.5%	65.4%	66.7%	67.1%	
		% of Total	17.4%	4.9%	2.3%	1.2%	15.0%	21.8%	4.0%	.5%	67.1%



		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	Other Firms	Don't Know	Total
	Don't Know	Count	3	0	0	0	3	1	0	0	7
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Selection process / evaluation criteria?	42.9%	0.0%	0.0%	0.0%	42.9%	14.3%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	0.0%	0.0%	3.3%	.8%	0.0%	0.0%	1.6%
		% of Total	.7%	0.0%	0.0%	0.0%	.7%	.2%	0.0%	0.0%	1.6%
	No Response	Count	28	6	5	0	18	27	8	0	92
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Selection process / evaluation criteria?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Selection process / evaluation criteria?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Unnecessary restrictive contract specifications? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

		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	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	18	2	1	1	6	13	3	1	45
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Unnecessary restrictive contract specifications?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Unnecessary restrictive contract specifications?	40.0%	4.4%	2.2%	2.2%	13.3%	28.9%	6.7%	2.2%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	14.8%	6.3%	5.9%	16.7%	6.7%	10.0%	11.5%	33.3%	10.6%
		% of Total	4.2%	.5%	.2%	.2%	1.4%	3.1%	.7%	.2%	10.6%
	No	Count	75	23	11	5	64	89	15	2	284
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Unnecessary restrictive contract specifications?	26.4%	8.1%	3.9%	1.8%	22.5%	31.3%	5.3%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	61.5%	71.9%	64.7%	83.3%	71.1%	68.5%	57.7%	66.7%	66.7%
		% of Total	17.6%	5.4%	2.6%	1.2%	15.0%	20.9%	3.5%	.5%	66.7%



	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	Other Firms	Don't Know	Total	
Don't Know	Count	1	1	0	0	2	1	0	0	5	
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Unnecessary restrictive contract specifications?	20.0%	20.0%	0.0%	0.0%	40.0%	20.0%	0.0%	0.0%	100.0%	
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	3.1%	0.0%	0.0%	2.2%	.8%	0.0%	0.0%	1.2%	
	% of Total	.2%	.2%	0.0%	0.0%	.5%	.2%	0.0%	0.0%	1.2%	
No Response	Count	28	6	5	0	18	27	8	0	92	
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Unnecessary restrictive contract specifications?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%	
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%	
	% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%	



			Race, Ethni	city, Gender	Classification (B	usiness Ownersl	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Unnecessary restrictive contract specifications?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Slow payment or nonpayment? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethni	city, Gender	Classification (B	usiness Ownersl	nip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	5	0	0	0	3	5	0	0	13
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Slow payment or nonpayment?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Slow payment or nonpayment?	38.5%	0.0%	0.0%	0.0%	23.1%	38.5%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.1%	0.0%	0.0%	0.0%	3.3%	3.8%	0.0%	0.0%	3.1%
		% of Total	1.2%	0.0%	0.0%	0.0%	.7%	1.2%	0.0%	0.0%	3.1%
	No	Count	86	24	12	6	68	97	18	3	314
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Slow payment or nonpayment?	27.4%	7.6%	3.8%	1.9%	21.7%	30.9%	5.7%	1.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	70.5%	75.0%	70.6%	100.0%	75.6%	74.6%	69.2%	100.0%	73.7%
		% of Total	20.2%	5.6%	2.8%	1.4%	16.0%	22.8%	4.2%	.7%	73.7%



		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	Other Firms	Don't Know	Total
	Don't Know	Count	3	2	0	0	1	1	0	0	7
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Slow payment or nonpayment?	42.9%	28.6%	0.0%	0.0%	14.3%	14.3%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	6.3%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	1.6%
		% of Total	.7%	.5%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	1.6%
	No Response	Count	28	6	5	0	18	27	8	0	92
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Slow payment or nonpayment?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Slow payment or nonpayment?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Competing with large companies? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethni	city, Gender	Classification (B	usiness Ownersl	nip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	34	6	3	1	14	12	2	0	72
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Competing with large companies?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Competing with large companies?	47.2%	8.3%	4.2%	1.4%	19.4%	16.7%	2.8%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	27.9%	18.8%	17.6%	16.7%	15.6%	9.2%	7.7%	0.0%	16.9%
		% of Total	8.0%	1.4%	.7%	.2%	3.3%	2.8%	.5%	0.0%	16.9%
	No	Count	59	19	9	5	56	90	16	3	257
	No	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Competing with large companies?	23.0%	7.4%	3.5%	1.9%	21.8%	35.0%	6.2%	1.2%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	48.4%	59.4%	52.9%	83.3%	62.2%	69.2%	61.5%	100.0%	60.3%	
		% of Total	13.8%	4.5%	2.1%	1.2%	13.1%	21.1%	3.8%	.7%	60.3%



		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	Other Firms	Don't Know	Total
	Don't Know	Count	1	1	0	0	2	1	0	0	5
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Competing with large companies?	20.0%	20.0%	0.0%	0.0%	40.0%	20.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	3.1%	0.0%	0.0%	2.2%	.8%	0.0%	0.0%	1.2%
		% of Total	.2%	.2%	0.0%	0.0%	.5%	.2%	0.0%	0.0%	1.2%
	No Response	Count	28	6	5	0	18	27	8	0	92
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Competing with large companies?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Competing with large companies?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Changes in the scope of work (after work began)? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethni	city, Gender	Classification (B	usiness Ownersl	hip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	8	0	0	0	2	2	0	0	12
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Changes in the scope of work (after work began)?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Changes in the scope of work (after work began)?	66.7%	0.0%	0.0%	0.0%	16.7%	16.7%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	6.6%	0.0%	0.0%	0.0%	2.2%	1.5%	0.0%	0.0%	2.8%
		% of Total	1.9%	0.0%	0.0%	0.0%	.5%	.5%	0.0%	0.0%	2.8%
	No	Count	85	24	12	6	68	100	18	3	316
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Changes in the scope of work (after work began)?	26.9%	7.6%	3.8%	1.9%	21.5%	31.6%	5.7%	.9%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	69.7%	75.0%	70.6%	100.0%	75.6%	76.9%	69.2%	100.0%	74.2%
		% of Total	20.0%	5.6%	2.8%	1.4%	16.0%	23.5%	4.2%	.7%	74.2%



				Race, Ethni	city, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	Don't Know	Count	1	2	0	0	2	1	0	0	6
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Changes in the scope of work (after work began)?	16.7%	33.3%	0.0%	0.0%	33.3%	16.7%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	6.3%	0.0%	0.0%	2.2%	.8%	0.0%	0.0%	1.4%
		% of Total	.2%	.5%	0.0%	0.0%	.5%	.2%	0.0%	0.0%	1.4%
	No Response	Count	28	6	5	0	18	27	8	0	92
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Changes in the scope of work (after work began)?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Changes in the scope of work (after work began)?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Meeting MBE or SLBE goals or good faith effort requirements? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethni	city, Gender	Classification (B	usiness Ownersl	nip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	5	2	0	1	5	16	2	0	31
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Meeting MBE or SLBE goals or good faith effort requirements?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Meeting MBE or SLBE goals or good faith effort requirements?	16.1%	6.5%	0.0%	3.2%	16.1%	51.6%	6.5%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.1%	6.3%	0.0%	16.7%	5.6%	12.3%	7.7%	0.0%	7.3%
		% of Total	1.2%	.5%	0.0%	.2%	1.2%	3.8%	.5%	0.0%	7.3%
	No	Count	88	23	12	5	65	85	16	3	297
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Meeting MBE or SLBE goals or good faith effort requirements?	29.6%	7.7%	4.0%	1.7%	21.9%	28.6%	5.4%	1.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	72.1%	71.9%	70.6%	83.3%	72.2%	65.4%	61.5%	100.0%	69.7%
		% of Total	20.7%	5.4%	2.8%	1.2%	15.3%	20.0%	3.8%	.7%	69.7%



		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	Other Firms	Don't Know	Total	
Don't Know	Count	1	1	0	0	2	2	0	0	6	
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Meeting MBE or SLBE goals or good faith effort requirements?	16.7%	16.7%	0.0%	0.0%	33.3%	33.3%	0.0%	0.0%	100.0%	
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	3.1%	0.0%	0.0%	2.2%	1.5%	0.0%	0.0%	1.4%	
	% of Total	.2%	.2%	0.0%	0.0%	.5%	.5%	0.0%	0.0%	1.4%	
No Response	Count	28	6	5	0	18	27	8	0	92	
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Meeting MBE or SLBE goals or good faith effort requirements?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%	
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%	
	% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%	



			Race, Ethni	city, Gender	Classification (B	usiness Ownersl	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Meeting MBE or SLBE goals or good faith effort requirements?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Operating at or near capacity? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethni	city, Gender	Classification (B	usiness Owners	nip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q24 In your experience, have	Yes	Count	4	3	1	0	2	1	0	0	11
any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Operating at or near capacity?		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Operating at or near capacity?	36.4%	27.3%	9.1%	0.0%	18.2%	9.1%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	9.4%	5.9%	0.0%	2.2%	.8%	0.0%	0.0%	2.6%
		% of Total	.9%	.7%	.2%	0.0%	.5%	.2%	0.0%	0.0%	2.6%
	No	Count	89	22	11	6	69	101	18	3	319
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Operating at or near capacity?	27.9%	6.9%	3.4%	1.9%	21.6%	31.7%	5.6%	.9%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	73.0%	68.8%	64.7%	100.0%	76.7%	77.7%	69.2%	100.0%	74.9%
		% of Total	20.9%	5.2%	2.6%	1.4%	16.2%	23.7%	4.2%	.7%	74.9%



				Race, Ethni	city, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	Don't Know	Count	1	1	0	0	1	1	0	0	4
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Operating at or near capacity?	25.0%	25.0%	0.0%	0.0%	25.0%	25.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	3.1%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	.9%
		% of Total	.2%	.2%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	.9%
	No Response	Count	28	6	5	0	18	27	8	0	92
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Operating at or near capacity?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q24 In your experience, have any of the following been a barrier to attempting to do work or working on WSSC projects as a prime: Operating at or near capacity?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



#### Q25 As a prime contractor/vendor, is your company required to have bonding? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethni	city, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q25 As a prime	Yes	Count	44	8	6	1	15	48	7	1	130
contractor/vendor, is your company required to have bonding?		% within Q25 As a prime contractor/vendor, is your company required to have bonding?	33.8%	6.2%	4.6%	.8%	11.5%	36.9%	5.4%	.8%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	36.1%	25.0%	35.3%	16.7%	16.7%	36.9%	26.9%	33.3%	30.5%
		% of Total	10.3%	1.9%	1.4%	.2%	3.5%	11.3%	1.6%	.2%	30.5%
	No	Count	47	16	6	5	55	53	10	2	194
		% within Q25 As a prime contractor/vendor, is your company required to have bonding?	24.2%	8.2%	3.1%	2.6%	28.4%	27.3%	5.2%	1.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	38.5%	50.0%	35.3%	83.3%	61.1%	40.8%	38.5%	66.7%	45.5%
		% of Total	11.0%	3.8%	1.4%	1.2%	12.9%	12.4%	2.3%	.5%	45.5%
	Don't Know	Count	3	2	0	0	2	2	1	0	10
	Don't know	% within Q25 As a prime contractor/vendor, is your company required to have bonding?	30.0%	20.0%	0.0%	0.0%	20.0%	20.0%	10.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	6.3%	0.0%	0.0%	2.2%	1.5%	3.8%	0.0%	2.3%
		% of Total	.7%	.5%	0.0%	0.0%	.5%	.5%	.2%	0.0%	2.3%



				Race, Ethni	city, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	No Response	Count	28	6	5	0	18	27	8	0	92
		% within Q25 As a prime contractor/vendor, is your company required to have bonding?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q25 As a prime contractor/vendor, is your company required to have bonding?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



#### Q26 What is your company's current aggregate bonding capacity? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethni	city, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q26 What is your company's	Below \$100,000	Count	18	4	3	0	15	20	2	0	62
current aggregate bonding capacity?		% within Q26 What is your company's current aggregate bonding capacity?	29.0%	6.5%	4.8%	0.0%	24.2%	32.3%	3.2%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	14.8%	12.5%	17.6%	0.0%	16.7%	15.4%	7.7%	0.0%	14.6%
		% of Total	4.2%	.9%	.7%	0.0%	3.5%	4.7%	.5%	0.0%	14.6%
	\$100,001 to \$250,000	Count	4	0	2	0	2	3	0	1	12
		% within Q26 What is your company's current aggregate bonding capacity?	33.3%	0.0%	16.7%	0.0%	16.7%	25.0%	0.0%	8.3%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	0.0%	11.8%	0.0%	2.2%	2.3%	0.0%	33.3%	2.8%
		% of Total	.9%	0.0%	.5%	0.0%	.5%	.7%	0.0%	.2%	2.8%
	\$250,001 to \$500,000	Count	6	3	2	1	4	6	0	0	22
		% within Q26 What is your company's current aggregate bonding capacity?	27.3%	13.6%	9.1%	4.5%	18.2%	27.3%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.9%	9.4%	11.8%	16.7%	4.4%	4.6%	0.0%	0.0%	5.2%
		% of Total	1.4%	.7%	.5%	.2%	.9%	1.4%	0.0%	0.0%	5.2%



				Race, Ethni	icity, Gender	Classification (B	usiness Ownersl	hip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	\$500,001 to \$1 million	Count	13	6	2	0	8	7	4	0	40
		% within Q26 What is your company's current aggregate bonding capacity?	32.5%	15.0%	5.0%	0.0%	20.0%	17.5%	10.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	10.7%	18.8%	11.8%	0.0%	8.9%	5.4%	15.4%	0.0%	9.4%
		% of Total	3.1%	1.4%	.5%	0.0%	1.9%	1.6%	.9%	0.0%	9.4%
	\$1,000,001 to \$1.5	Count	7	1	0	1	7	5	3	0	24
	million	% within Q26 What is your company's current aggregate bonding capacity?	29.2%	4.2%	0.0%	4.2%	29.2%	20.8%	12.5%	0.0%	100.0%
	\$1,500,001 to \$3	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	5.7%	3.1%	0.0%	16.7%	7.8%	3.8%	11.5%	0.0%	5.6%
		% of Total	1.6%	.2%	0.0%	.2%	1.6%	1.2%	.7%	0.0%	5.6%
		Count	7	3	0	0	1	7	0	0	18
	million	% within Q26 What is your company's current aggregate bonding capacity?	38.9%	16.7%	0.0%	0.0%	5.6%	38.9%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	5.7%	9.4%	0.0%	0.0%	1.1%	5.4%	0.0%	0.0%	4.2%
		% of Total	1.6%	.7%	0.0%	0.0%	.2%	1.6%	0.0%	0.0%	4.2%
	\$3,000,001 to \$5	Count	4	0	0	0	5	8	0	0	17
	million 9	% within Q26 What is your company's current aggregate bonding capacity?	23.5%	0.0%	0.0%	0.0%	29.4%	47.1%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	0.0%	0.0%	0.0%	5.6%	6.2%	0.0%	0.0%	4.0%
		% of Total	.9%	0.0%	0.0%	0.0%	1.2%	1.9%	0.0%	0.0%	4.0%



				Race, Ethni	city, Gender	Classification (B	usiness Ownersl	nip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	Over \$5 million?	Count	12	1	2	1	3	16	3	1	39
		% within Q26 What is your company's current aggregate bonding capacity?	30.8%	2.6%	5.1%	2.6%	7.7%	41.0%	7.7%	2.6%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	9.8%	3.1%	11.8%	16.7%	3.3%	12.3%	11.5%	33.3%	9.2%
		% of Total	2.8%	.2%	.5%	.2%	.7%	3.8%	.7%	.2%	9.2%
	Don't Know	Count	23	8	1	3	27	31	6	1	100
		% within Q26 What is your company's current aggregate bonding capacity?	23.0%	8.0%	1.0%	3.0%	27.0%	31.0%	6.0%	1.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	18.9%	25.0%	5.9%	50.0%	30.0%	23.8%	23.1%	33.3%	23.5%
		% of Total	5.4%	1.9%	.2%	.7%	6.3%	7.3%	1.4%	.2%	23.5%
	No Response	Count	28	6	5	0	18	27	8	0	92
		% within Q26 What is your company's current aggregate bonding capacity?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q26 What is your company's current aggregate bonding capacity?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



#### Q27 What is your company's current single limit bonding capacity? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

			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	Other Firms	Don't Know	Total
Q27 What is your company's	Below \$100,000	Count	12	0	0	0	0	4	0	0	16
current single limit bonding capacity?		% within Q27 What is your company's current single limit bonding capacity?	75.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	9.8%	0.0%	0.0%	0.0%	0.0%	3.1%	0.0%	0.0%	3.8%
		% of Total	2.8%	0.0%	0.0%	0.0%	0.0%	.9%	0.0%	0.0%	3.8%
	\$100,001 to \$250,000	Count	2	0	1	0	0	2	0	0	5
		% within Q27 What is your company's current single limit bonding capacity?	40.0%	0.0%	20.0%	0.0%	0.0%	40.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	0.0%	5.9%	0.0%	0.0%	1.5%	0.0%	0.0%	1.2%
		% of Total	.5%	0.0%	.2%	0.0%	0.0%	.5%	0.0%	0.0%	1.2%
	\$250,001 to \$500,000	Count	1	1	2	0	2	2	0	0	8
		% within Q27 What is your company's current single limit bonding capacity?	12.5%	12.5%	25.0%	0.0%	25.0%	25.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	3.1%	11.8%	0.0%	2.2%	1.5%	0.0%	0.0%	1.9%
		% of Total	.2%	.2%	.5%	0.0%	.5%	.5%	0.0%	0.0%	1.9%
	\$500,001 to \$1 million	Count	7	2	1	0	4	5	2	0	21
		% within Q27 What is your company's current single limit bonding capacity?	33.3%	9.5%	4.8%	0.0%	19.0%	23.8%	9.5%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	5.7%	6.3%	5.9%	0.0%	4.4%	3.8%	7.7%	0.0%	4.9%
		% of Total	1.6%	.5%	.2%	0.0%	.9%	1.2%	.5%	0.0%	4.9%



	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	Other Firms	Don't Know	Total
\$1,000,001 to \$1.5	Count	3	1	0	0	2	2	1	1	10
million	% within Q27 What is your company's current single limit bonding capacity?	30.0%	10.0%	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	3.1%	0.0%	0.0%	2.2%	1.5%	3.8%	33.3%	2.3%
	% of Total	.7%	.2%	0.0%	0.0%	.5%	.5%	.2%	.2%	2.3%
\$1,500,001 to \$3	Count	5	1	0	0	0	2	1	0	9
million	% within Q27 What is your company's current single limit bonding capacity?	55.6%	11.1%	0.0%	0.0%	0.0%	22.2%	11.1%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.1%	3.1%	0.0%	0.0%	0.0%	1.5%	3.8%	0.0%	2.1%
	% of Total	1.2%	.2%	0.0%	0.0%	0.0%	.5%	.2%	0.0%	2.1%
\$3,000,001 to \$5	Count	3	0	0	1	0	2	0	0	6
million	% within Q27 What is your company's current single limit bonding capacity?	50.0%	0.0%	0.0%	16.7%	0.0%	33.3%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	0.0%	16.7%	0.0%	1.5%	0.0%	0.0%	1.4%
	% of Total	.7%	0.0%	0.0%	.2%	0.0%	.5%	0.0%	0.0%	1.4%
Over \$5 million?	Count	5	0	2	0	2	13	1	0	23
	% within Q27 What is your company's current single limit bonding capacity?	21.7%	0.0%	8.7%	0.0%	8.7%	56.5%	4.3%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.1%	0.0%	11.8%	0.0%	2.2%	10.0%	3.8%	0.0%	5.4%
	% of Total	1.2%	0.0%	.5%	0.0%	.5%	3.1%	.2%	0.0%	5.4%



				Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	Don't Know	Count	6	3	0	0	5	17	2	0	33
		% within Q27 What is your company's current single limit bonding capacity?	18.2%	9.1%	0.0%	0.0%	15.2%	51.5%	6.1%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.9%	9.4%	0.0%	0.0%	5.6%	13.1%	7.7%	0.0%	7.7%
		% of Total	1.4%	.7%	0.0%	0.0%	1.2%	4.0%	.5%	0.0%	7.7%
	No Response	Count	78	24	11	5	75	81	19	2	295
		% within Q27 What is your company's current single limit bonding capacity?	26.4%	8.1%	3.7%	1.7%	25.4%	27.5%	6.4%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	63.9%	75.0%	64.7%	83.3%	83.3%	62.3%	73.1%	66.7%	69.2%
		% of Total	18.3%	5.6%	2.6%	1.2%	17.6%	19.0%	4.5%	.5%	69.2%
Total	'	Count	122	32	17	6	90	130	26	3	426
		% within Q27 What is your company's current single limit bonding capacity?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q28 As a prime contractor/vendor did you experience discriminatory behavior by the WSSC when attempting to work or in working on a project between 2009 and 2014? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

		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	Other Firms	Don't Know	Total
Q28 As a prime	Yes	Count	7	0	0	0	1	1	2	0	11
contractor/vendor did you experience discriminatory behavior by the WSSC when attempting to work or in working on a project between 2009 and 2014?		% within Q28 As a prime contractor/vendor did you experience discriminatory behavior by the WSSC when attempting to work or in working on a project between 2009 and 2014?	63.6%	0.0%	0.0%	0.0%	9.1%	9.1%	18.2%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	5.7%	0.0%	0.0%	0.0%	1.1%	.8%	7.7%	0.0%	2.6%
		% of Total	1.6%	0.0%	0.0%	0.0%	.2%	.2%	.5%	0.0%	2.6%
	No	Count	56	12	8	3	39	81	11	2	212
		% within Q28 As a prime contractor/vendor did you experience discriminatory behavior by the WSSC when attempting to work or in working on a project between 2009 and 2014?	26.4%	5.7%	3.8%	1.4%	18.4%	38.2%	5.2%	.9%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	45.9%	37.5%	47.1%	50.0%	43.3%	62.3%	42.3%	66.7%	49.8%
		% of Total	13.1%	2.8%	1.9%	.7%	9.2%	19.0%	2.6%	.5%	49.8%



		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	Other Firms	Don't Know	Total		
	Not Applicable	Count	29	14	4	3	31	21	5	1	108		
		% within Q28 As a prime contractor/vendor did you experience discriminatory behavior by the WSSC when attempting to work or in working on a project between 2009 and 2014?	26.9%	13.0%	3.7%	2.8%	28.7%	19.4%	4.6%	.9%	100.0%		
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.8%	43.8%	23.5%	50.0%	34.4%	16.2%	19.2%	33.3%	25.4%		
		% of Total	6.8%	3.3%	.9%	.7%	7.3%	4.9%	1.2%	.2%	25.4%		
	Don't know	Count	2	0	0	0	1	0	0	0	3		
		% within Q28 As a prime contractor/vendor did you experience discriminatory behavior by the WSSC when attempting to work or in working on a project between 2009 and 2014?	66.7%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	100.0%		
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	.7%		
		% of Total	.5%	0.0%	0.0%	0.0%	.2%	0.0%	0.0%	0.0%	.7%		
	No Response	Count	28	6	5	0	18	27	8	0	92		
	The response	% within Q28 As a prime contractor/vendor did you experience discriminatory behavior by the WSSC when attempting to work or in working on a project between 2009 and 2014?	30.4%	6.5%	5.4%	0.0%	19.6%	29.3%	8.7%	0.0%	100.0%		
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.0%	18.8%	29.4%	0.0%	20.0%	20.8%	30.8%	0.0%	21.6%		
		% of Total	6.6%	1.4%	1.2%	0.0%	4.2%	6.3%	1.9%	0.0%	21.6%		



			Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q28 As a prime contractor/vendor did you experience discriminatory behavior by the WSSC when attempting to work or in working on a project between 2009 and 2014?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



#### Q29 How did you become aware of the discrimination against your company? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

		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	Other Firms	Don't Know	Total
Q29 How did you become	Verbal comment	Count	3	0	0	0	1	0	0	0	4
aware of the discrimination against your company?		% within Q29 How did you become aware of the discrimination against your company?	75.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	.9%
		% of Total	.7%	0.0%	0.0%	0.0%	.2%	0.0%	0.0%	0.0%	.9%
	Action taken against	Count	1	0	0	0	0	0	0	0	1
	the company	% within Q29 How did you become aware of the discrimination against your company?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.2%
		% of Total	.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.2%
	Other Action	Count	3	0	0	0	0	2	2	0	7
		% within Q29 How did you become aware of the discrimination against your company?	42.9%	0.0%	0.0%	0.0%	0.0%	28.6%	28.6%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	0.0%	0.0%	0.0%	1.5%	7.7%	0.0%	1.6%
		% of Total	.7%	0.0%	0.0%	0.0%	0.0%	.5%	.5%	0.0%	1.6%



		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	Other Firms	Don't Know	Total
	No Response	Count	115	32	17	6	89	128	24	3	414
		% within Q29 How did you become aware of the discrimination against your company?	27.8%	7.7%	4.1%	1.4%	21.5%	30.9%	5.8%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	94.3%	100.0%	100.0%	100.0%	98.9%	98.5%	92.3%	100.0%	97.2%
		% of Total	27.0%	7.5%	4.0%	1.4%	20.9%	30.0%	5.6%	.7%	97.2%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q29 How did you become aware of the discrimination against your company?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q31 Which of the following do you consider the primary reason for your company being discriminated against? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

			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	Other Firms	Don't Know	Total
Q31 Which of the following	Owner's Race or	Count	4	0	0	0	0	2	0	0	6
do you consider the primary reason for your company being discriminated against?	Ethnicity	% within Q31 Which of the following do you consider the primary reason for your company being discriminated against?	66.7%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	1.4%
		% of Total	.9%	0.0%	0.0%	0.0%	0.0%	.5%	0.0%	0.0%	1.4%
	Both race and gender	Count	3	0	0	0	0	0	0	0	3
	% within Q31 Which of the following do you consider the primary reason for your company being discriminated against?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.7%
		% of Total	.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.7%
	Other reason	Count	0	0	0	0	1	0	2	0	3
Other reason	% within Q31 Which of the following do you consider the primary reason for your company being discriminated against?	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	66.7%	0.0%	100.0%	
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	7.7%	0.0%	.7%
		% of Total	0.0%	0.0%	0.0%	0.0%	.2%	0.0%	.5%	0.0%	.7%



		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	Other Firms	Don't Know	Total
	No Response	Count	115	32	17	6	89	128	24	3	414
		% within Q31 Which of the following do you consider the primary reason for your company being discriminated against?	27.8%	7.7%	4.1%	1.4%	21.5%	30.9%	5.8%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	94.3%	100.0%	100.0%	100.0%	98.9%	98.5%	92.3%	100.0%	97.2%
		% of Total	27.0%	7.5%	4.0%	1.4%	20.9%	30.0%	5.6%	.7%	97.2%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q31 Which of the following do you consider the primary reason for your company being discriminated against?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



#### Q33 When did the discrimination first occur? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

		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	Other Firms	Don't Know	Total
Q33 When did the	During the bidding	Count	1	0	0	0	1	1	0	0	3
discrimination first occur?	process	% within Q33 When did the discrimination first occur?	33.3%	0.0%	0.0%	0.0%	33.3%	33.3%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	.7%
		% of Total	.2%	0.0%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	.7%
	During contract	Count	0	0	0	0	0	1	0	0	1
	negotiations	% within Q33 When did the discrimination first occur?	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	0.0%	0.0%	0.0%	.8%	0.0%	0.0%	.2%	
		% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	.2%	0.0%	0.0%	.2%
	After contract award	Count	3	0	0	0	0	0	0	0	3
		% within Q33 When did the discrimination first occur?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.7%
		% of Total	.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.7%
	All of the above	Count	3	0	0	0	0	0	1	0	4
	All of the above	% within Q33 When did the discrimination first occur?	75.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	3.8%	0.0%	.9%
		% of Total	.7%	0.0%	0.0%	0.0%	0.0%	0.0%	.2%	0.0%	.9%



		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	Other Firms	Don't Know	Total	
	Don't Know	Count	0	0	0	0	0	0	1	0	1	
		% within Q33 When did the discrimination first occur?	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.8%	0.0%	.2%	
		% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.2%	0.0%	.2%	
	No Response	Count	115	32	17	6	89	128	24	3	414	
		% within Q33 When did the discrimination first occur?	27.8%	7.7%	4.1%	1.4%	21.5%	30.9%	5.8%	.7%	100.0%	
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	94.3%	100.0%	100.0%	100.0%	98.9%	98.5%	92.3%	100.0%	97.2%	
		% of Total	27.0%	7.5%	4.0%	1.4%	20.9%	30.0%	5.6%	.7%	97.2%	
Total		Count	122	32	17	6	90	130	26	3	426	
		% within Q33 When did the discrimination first occur?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%	
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%	



#### Q34 Did you file a complaint? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (B	usiness Ownersl	nip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q34 Did you file a complaint?	Yes	Count	1	0	0	0	1	1	0	0	3
		% within Q34 Did you file a complaint?	33.3%	0.0%	0.0%	0.0%	33.3%	33.3%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	.7%
		% of Total	.2%	0.0%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	.7%
	No	Count	6	0	0	0	0	1	2	0	9
		% within Q34 Did you file a complaint?	66.7%	0.0%	0.0%	0.0%	0.0%	11.1%	22.2%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.9%	0.0%	0.0%	0.0%	0.0%	.8%	7.7%	0.0%	2.1%
		% of Total	1.4%	0.0%	0.0%	0.0%	0.0%	.2%	.5%	0.0%	2.1%
	No Response	Count	115	32	17	6	89	128	24	3	414
		% within Q34 Did you file a complaint?	27.8%	7.7%	4.1%	1.4%	21.5%	30.9%	5.8%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	94.3%	100.0%	100.0%	100.0%	98.9%	98.5%	92.3%	100.0%	97.2%
		% of Total	27.0%	7.5%	4.0%	1.4%	20.9%	30.0%	5.6%	.7%	97.2%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q34 Did you file a complaint?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q35 Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by the WSSC? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (B	usiness Ownersl	nip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q35 Are you willing to speak	Yes	Count	4	0	0	0	1	1	1	0	7
directly to MGT to provide more detail of the alleged discrimination your company has experienced by the WSSC?		% within Q35 Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by the WSSC?	57.1%	0.0%	0.0%	0.0%	14.3%	14.3%	14.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	0.0%	0.0%	0.0%	1.1%	.8%	3.8%	0.0%	1.6%
		% of Total	.9%	0.0%	0.0%	0.0%	.2%	.2%	.2%	0.0%	1.6%
	No	Count	3	0	0	0	0	1	1	0	5
		% within Q35 Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by the WSSC?	60.0%	0.0%	0.0%	0.0%	0.0%	20.0%	20.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	0.0%	0.0%	0.0%	.8%	3.8%	0.0%	1.2%
		% of Total	.7%	0.0%	0.0%	0.0%	0.0%	.2%	.2%	0.0%	1.2%
	No Response	Count	115	32	17	6	89	128	24	3	414
		% within Q35 Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by the WSSC?	27.8%	7.7%	4.1%	1.4%	21.5%	30.9%	5.8%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	94.3%	100.0%	100.0%	100.0%	98.9%	98.5%	92.3%	100.0%	97.2%
		% of Total	27.0%	7.5%	4.0%	1.4%	20.9%	30.0%	5.6%	.7%	97.2%



			Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q35 Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by the WSSC?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q36 In general, which of the following ranges best approximate your company's largest subcontract between July 1, 2009 and June 30, 2014 \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

			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	Other Firms	Don't Know	Total
Q36 In general, which of the	None	Count	8	1	0	0	1	1	1	0	12
following ranges best approximate your company's largest subcontract between July 1, 2009 and June 30, 2014		% within Q36 In general, which of the following ranges best approximate your company's largest subcontract between July 1, 2009 and June 30, 2014	66.7%	8.3%	0.0%	0.0%	8.3%	8.3%	8.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	6.6%	3.1%	0.0%	0.0%	1.1%	.8%	3.8%	0.0%	2.8%
		% of Total	1.9%	.2%	0.0%	0.0%	.2%	.2%	.2%	0.0%	2.8%
	Up to \$50,000?	Count	18	4	1	0	12	15	1	0	51
		% within Q36 In general, which of the following ranges best approximate your company's largest subcontract between July 1, 2009 and June 30, 2014	35.3%	7.8%	2.0%	0.0%	23.5%	29.4%	2.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	14.8%	12.5%	5.9%	0.0%	13.3%	11.5%	3.8%	0.0%	12.0%
		% of Total	4.2%	.9%	.2%	0.0%	2.8%	3.5%	.2%	0.0%	12.0%
	\$50,001 to \$100,000?	Count	12	0	2	0	3	2	0	0	19
		% within Q36 In general, which of the following ranges best approximate your company's largest subcontract between July 1, 2009 and June 30, 2014	63.2%	0.0%	10.5%	0.0%	15.8%	10.5%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	9.8%	0.0%	11.8%	0.0%	3.3%	1.5%	0.0%	0.0%	4.5%	
		% of Total	2.8%	0.0%	.5%	0.0%	.7%	.5%	0.0%	0.0%	4.5%



			Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
\$100,001 to \$200,0	0? Count	4	5	0	0	5	5	1	0	20
	% within Q36 In general, which of the following ranges best approximate your company's largest subcontract between July 1, 2009 and June 30, 2014	20.0%	25.0%	0.0%	0.0%	25.0%	25.0%	5.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	15.6%	0.0%	0.0%	5.6%	3.8%	3.8%	0.0%	4.7%
	% of Total	.9%	1.2%	0.0%	0.0%	1.2%	1.2%	.2%	0.0%	4.7%
\$200,001 to \$300,0	0? Count	7	0	1	0	4	3	0	0	15
	% within Q36 In general, which of the following ranges best approximate your company's largest subcontract between July 1, 2009 and June 30, 2014	46.7%	0.0%	6.7%	0.0%	26.7%	20.0%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	5.7%	0.0%	5.9%	0.0%	4.4%	2.3%	0.0%	0.0%	3.5%
	% of Total	1.6%	0.0%	.2%	0.0%	.9%	.7%	0.0%	0.0%	3.5%
\$300,001 to \$400,0	0? Count	3	0	1	0	1	7	0	0	12
	% within Q36 In general, which of the following ranges best approximate your company's largest subcontract between July 1, 2009 and June 30, 2014	25.0%	0.0%	8.3%	0.0%	8.3%	58.3%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	5.9%	0.0%	1.1%	5.4%	0.0%	0.0%	2.8%
	% of Total	.7%	0.0%	.2%	0.0%	.2%	1.6%	0.0%	0.0%	2.8%



			Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
\$400,001 to \$500,000?	Count	3	0	1	0	3	5	0	0	12
	% within Q36 In general, which of the following ranges best approximate your company's largest subcontract between July 1, 2009 and June 30, 2014	25.0%	0.0%	8.3%	0.0%	25.0%	41.7%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	5.9%	0.0%	3.3%	3.8%	0.0%	0.0%	2.8%
	% of Total	.7%	0.0%	.2%	0.0%	.7%	1.2%	0.0%	0.0%	2.8%
\$500,001 to \$1	Count	5	2	1	4	8	7	0	0	27
million?	% within Q36 In general, which of the following ranges best approximate your company's largest subcontract between July 1, 2009 and June 30, 2014	18.5%	7.4%	3.7%	14.8%	29.6%	25.9%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.1%	6.3%	5.9%	66.7%	8.9%	5.4%	0.0%	0.0%	6.3%
	% of Total	1.2%	.5%	.2%	.9%	1.9%	1.6%	0.0%	0.0%	6.3%
Over \$1 million?	Count	15	6	4	0	6	23	7	0	61
	% within Q36 In general, which of the following ranges best approximate your company's largest subcontract between July 1, 2009 and June 30, 2014	24.6%	9.8%	6.6%	0.0%	9.8%	37.7%	11.5%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	12.3%	18.8%	23.5%	0.0%	6.7%	17.7%	26.9%	0.0%	14.3%
	% of Total	3.5%	1.4%	.9%	0.0%	1.4%	5.4%	1.6%	0.0%	14.3%



		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	Other Firms	Don't Know	Total	
	Don't Know	Count	8	2	0	0	11	8	4	0	33	
		% within Q36 In general, which of the following ranges best approximate your company's largest subcontract between July 1, 2009 and June 30, 2014	24.2%	6.1%	0.0%	0.0%	33.3%	24.2%	12.1%	0.0%	100.0%	
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	6.6%	6.3%	0.0%	0.0%	12.2%	6.2%	15.4%	0.0%	7.7%	
		% of Total	1.9%	.5%	0.0%	0.0%	2.6%	1.9%	.9%	0.0%	7.7%	
	No Response	Count	39	12	6	2	36	54	12	3	164	
		% within Q36 In general, which of the following ranges best approximate your company's largest subcontract between July 1, 2009 and June 30, 2014	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%	
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%	
		% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%	
Total		Count	122	32	17	6	90	130	26	3	426	
		% within Q36 In general, which of the following ranges best approximate your company's largest subcontract between July 1, 2009 and June 30, 2014	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%	
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%	



### Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Performance/payment bond requirements? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (B	usiness Ownersł	nip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q37 In your experience, have	Yes	Count	10	2	3	0	2	3	1	0	21
any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Performance/payment bond requirements?		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC:  Performance/payment bond requirements?	47.6%	9.5%	14.3%	0.0%	9.5%	14.3%	4.8%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	8.2%	6.3%	17.6%	0.0%	2.2%	2.3%	3.8%	0.0%	4.9%
		% of Total	2.3%	.5%	.7%	0.0%	.5%	.7%	.2%	0.0%	4.9%
	No	Count	72	18	8	4	50	72	12	0	236
		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC:  Performance/payment bond requirements?	30.5%	7.6%	3.4%	1.7%	21.2%	30.5%	5.1%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	59.0%	56.3%	47.1%	66.7%	55.6%	55.4%	46.2%	0.0%	55.4%
		% of Total	16.9%	4.2%	1.9%	.9%	11.7%	16.9%	2.8%	0.0%	55.4%



			Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	1	0	0	0	2	1	1	0	5
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC:  Performance/payment bond requirements?	20.0%	0.0%	0.0%	0.0%	40.0%	20.0%	20.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	2.2%	.8%	3.8%	0.0%	1.2%
	% of Total	.2%	0.0%	0.0%	0.0%	.5%	.2%	.2%	0.0%	1.2%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Performance/payment bond requirements?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC:  Performance/payment bond requirements?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Cost bidding/proposing? \*

Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (B	usiness Ownersh	nip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q37 In your experience, have	Yes	Count	9	1	2	0	3	3	0	0	18
any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Cost bidding/proposing?		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Cost bidding/proposing?	50.0%	5.6%	11.1%	0.0%	16.7%	16.7%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	7.4%	3.1%	11.8%	0.0%	3.3%	2.3%	0.0%	0.0%	4.2%	
		% of Total	2.1%	.2%	.5%	0.0%	.7%	.7%	0.0%	0.0%	4.2%
	No	Count	73	19	9	4	49	72	13	0	239
		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Cost bidding/proposing?	30.5%	7.9%	3.8%	1.7%	20.5%	30.1%	5.4%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	59.8%	59.4%	52.9%	66.7%	54.4%	55.4%	50.0%	0.0%	56.1%
		% of Total	17.1%	4.5%	2.1%	.9%	11.5%	16.9%	3.1%	0.0%	56.1%



			Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	1	0	0	0	2	1	1	0	5
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Cost bidding/proposing?	20.0%	0.0%	0.0%	0.0%	40.0%	20.0%	20.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	2.2%	.8%	3.8%	0.0%	1.2%
	% of Total	.2%	0.0%	0.0%	0.0%	.5%	.2%	.2%	0.0%	1.2%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Cost bidding/proposing?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Cost bidding/proposing?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Financing? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (B	usiness Ownersl	nip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q37 In your experience, have	Yes	Count	12	1	3	0	0	2	1	0	19
any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Financing?		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Financing?	63.2%	5.3%	15.8%	0.0%	0.0%	10.5%	5.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	9.8%	3.1%	17.6%	0.0%	0.0%	1.5%	3.8%	0.0%	4.5%
		% of Total	2.8%	.2%	.7%	0.0%	0.0%	.5%	.2%	0.0%	4.5%
	No	Count	70	19	8	4	52	73	12	0	238
		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Financing?	29.4%	8.0%	3.4%	1.7%	21.8%	30.7%	5.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	57.4%	59.4%	47.1%	66.7%	57.8%	56.2%	46.2%	0.0%	55.9%
		% of Total	16.4%	4.5%	1.9%	.9%	12.2%	17.1%	2.8%	0.0%	55.9%



			Race, Ethn	icity, Gender	Classification (B	usiness Ownersl	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	1	0	0	0	2	1	1	0	5
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Financing?	20.0%	0.0%	0.0%	0.0%	40.0%	20.0%	20.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	2.2%	.8%	3.8%	0.0%	1.2%
	% of Total	.2%	0.0%	0.0%	0.0%	.5%	.2%	.2%	0.0%	1.2%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Financing?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethn	icity, Gender	Classification (B	Susiness Ownersl	nip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Financing?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Insurance (general liability, professional liability, etc.)? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (B	usiness Ownersh	nip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q37 In your experience, have	Yes	Count	3	3	0	0	3	1	0	0	10
any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Insurance (general liability, professional liability, etc.)?		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Insurance (general liability, professional liability, etc.)?	30.0%	30.0%	0.0%	0.0%	30.0%	10.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	9.4%	0.0%	0.0%	3.3%	.8%	0.0%	0.0%	2.3%
		% of Total	.7%	.7%	0.0%	0.0%	.7%	.2%	0.0%	0.0%	2.3%
	No	Count	79	17	11	4	49	74	13	0	247
		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Insurance (general liability, professional liability, etc.)?	32.0%	6.9%	4.5%	1.6%	19.8%	30.0%	5.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	64.8%	53.1%	64.7%	66.7%	54.4%	56.9%	50.0%	0.0%	58.0%
		% of Total	18.5%	4.0%	2.6%	.9%	11.5%	17.4%	3.1%	0.0%	58.0%



			Race, Ethn	icity, Gender	Classification (B	usiness Ownersł	nip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	1	0	0	0	2	1	1	0	5
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Insurance (general liability, professional liability, etc.)?	20.0%	0.0%	0.0%	0.0%	40.0%	20.0%	20.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	2.2%	.8%	3.8%	0.0%	1.2%
	% of Total	.2%	0.0%	0.0%	0.0%	.5%	.2%	.2%	0.0%	1.2%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Insurance (general liability, professional liability, etc.)?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Insurance (general liability, professional liability, etc.)?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Price of supplies/materials?

\* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (B	usiness Ownersł	nip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q37 In your experience, have	Yes	Count	7	1	0	0	1	2	1	0	12
any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Price of supplies/materials?		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Price of supplies/materials?	58.3%	8.3%	0.0%	0.0%	8.3%	16.7%	8.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	5.7%	3.1%	0.0%	0.0%	1.1%	1.5%	3.8%	0.0%	2.8%
		% of Total	1.6%	.2%	0.0%	0.0%	.2%	.5%	.2%	0.0%	2.8%
	No	Count	75	19	11	4	51	73	12	0	245
		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Price of supplies/materials?	30.6%	7.8%	4.5%	1.6%	20.8%	29.8%	4.9%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	61.5%	59.4%	64.7%	66.7%	56.7%	56.2%	46.2%	0.0%	57.5%
		% of Total	17.6%	4.5%	2.6%	.9%	12.0%	17.1%	2.8%	0.0%	57.5%



			Race, Ethn	icity, Gender	Classification (B	usiness Ownersł	nip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	1	0	0	0	2	1	1	0	5
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Price of supplies/materials?	20.0%	0.0%	0.0%	0.0%	40.0%	20.0%	20.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	2.2%	.8%	3.8%	0.0%	1.2%
	% of Total	.2%	0.0%	0.0%	0.0%	.5%	.2%	.2%	0.0%	1.2%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Price of supplies/materials?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Price of supplies/materials?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Short or limited time given to prepare bid package or quote? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (B	usiness Ownersł	nip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q37 In your experience, have	Yes	Count	6	3	1	0	2	5	1	0	18
any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Short or limited time given to prepare bid package or quote?		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Short or limited time given to prepare bid package or quote?	33.3%	16.7%	5.6%	0.0%	11.1%	27.8%	5.6%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.9%	9.4%	5.9%	0.0%	2.2%	3.8%	3.8%	0.0%	4.2%
		% of Total	1.4%	.7%	.2%	0.0%	.5%	1.2%	.2%	0.0%	4.2%
	No	Count	76	16	10	4	50	70	12	0	238
		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Short or limited time given to prepare bid package or quote?	31.9%	6.7%	4.2%	1.7%	21.0%	29.4%	5.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	62.3%	50.0%	58.8%	66.7%	55.6%	53.8%	46.2%	0.0%	55.9%
		% of Total	17.8%	3.8%	2.3%	.9%	11.7%	16.4%	2.8%	0.0%	55.9%



			Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	1	1	0	0	2	1	1	0	6
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Short or limited time given to prepare bid package or quote?	16.7%	16.7%	0.0%	0.0%	33.3%	16.7%	16.7%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	3.1%	0.0%	0.0%	2.2%	.8%	3.8%	0.0%	1.4%
	% of Total	.2%	.2%	0.0%	0.0%	.5%	.2%	.2%	0.0%	1.4%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Short or limited time given to prepare bid package or quote?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Short or limited time given to prepare bid package or quote?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Lack of experience? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (B	usiness Ownersl	nip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q37 In your experience, have	Yes	Count	7	1	1	0	3	0	0	0	12
any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Lack of experience?		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Lack of experience?	58.3%	8.3%	8.3%	0.0%	25.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	5.7%	3.1%	5.9%	0.0%	3.3%	0.0%	0.0%	0.0%	2.8%
		% of Total	1.6%	.2%	.2%	0.0%	.7%	0.0%	0.0%	0.0%	2.8%
	No	Count	75	19	10	4	49	75	13	0	245
		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Lack of experience?	30.6%	7.8%	4.1%	1.6%	20.0%	30.6%	5.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	61.5%	59.4%	58.8%	66.7%	54.4%	57.7%	50.0%	0.0%	57.5%
		% of Total	17.6%	4.5%	2.3%	.9%	11.5%	17.6%	3.1%	0.0%	57.5%



			Race, Ethn	icity, Gender	Classification (B	usiness Ownersl	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	1	0	0	0	2	1	1	0	5
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Lack of experience?	20.0%	0.0%	0.0%	0.0%	40.0%	20.0%	20.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	2.2%	.8%	3.8%	0.0%	1.2%
	% of Total	.2%	0.0%	0.0%	0.0%	.5%	.2%	.2%	0.0%	1.2%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Lack of experience?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethn	icity, Gender	Classification (B	Susiness Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Lack of experience?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



### Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Lack of personnel? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (B	usiness Ownersl	hip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q37 In your experience, have	Yes	Count	3	0	0	0	2	1	1	0	7
any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Lack of personnel?		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Lack of personnel?	42.9%	0.0%	0.0%	0.0%	28.6%	14.3%	14.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	0.0%	0.0%	2.2%	.8%	3.8%	0.0%	1.6%
		% of Total	.7%	0.0%	0.0%	0.0%	.5%	.2%	.2%	0.0%	1.6%
	No	Count	79	20	11	4	50	74	12	0	250
		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Lack of personnel?	31.6%	8.0%	4.4%	1.6%	20.0%	29.6%	4.8%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	64.8%	62.5%	64.7%	66.7%	55.6%	56.9%	46.2%	0.0%	58.7%
		% of Total	18.5%	4.7%	2.6%	.9%	11.7%	17.4%	2.8%	0.0%	58.7%



			Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Knov	Count	1	0	0	0	2	1	1	0	5
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Lack of personnel?	20.0%	0.0%	0.0%	0.0%	40.0%	20.0%	20.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	2.2%	.8%	3.8%	0.0%	1.2%
	% of Total	.2%	0.0%	0.0%	0.0%	.5%	.2%	.2%	0.0%	1.2%
No Respon	e Count	39	12	6	2	36	54	12	3	164
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Lack of personnel?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethn	icity, Gender	Classification (B	Susiness Ownersl	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Lack of personnel?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



### Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Contract too large? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (B	usiness Ownersl	hip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q37 In your experience, have	Yes	Count	6	6	2	0	1	3	1	0	19
any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Contract too large?		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Contract too large?	31.6%	31.6%	10.5%	0.0%	5.3%	15.8%	5.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.9%	18.8%	11.8%	0.0%	1.1%	2.3%	3.8%	0.0%	4.5%
		% of Total	1.4%	1.4%	.5%	0.0%	.2%	.7%	.2%	0.0%	4.5%
	No	Count	76	14	9	4	51	72	12	0	238
		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Contract too large?	31.9%	5.9%	3.8%	1.7%	21.4%	30.3%	5.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	62.3%	43.8%	52.9%	66.7%	56.7%	55.4%	46.2%	0.0%	55.9%
		% of Total	17.8%	3.3%	2.1%	.9%	12.0%	16.9%	2.8%	0.0%	55.9%



			Race, Ethn	icity, Gender	Classification (B	usiness Ownersl	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Kn	ow Count	1	0	0	0	2	1	1	0	5
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Contract too large?	20.0%	0.0%	0.0%	0.0%	40.0%	20.0%	20.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	2.2%	.8%	3.8%	0.0%	1.2%
	% of Total	.2%	0.0%	0.0%	0.0%	.5%	.2%	.2%	0.0%	1.2%
No Respo	onse Count	39	12	6	2	36	54	12	3	164
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Contract too large?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethn	icity, Gender	Classification (E	Business Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Contract too large?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Slow payment or nonpayment? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (B	usiness Ownersl	nip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q37 In your experience, have	Yes	Count	6	0	1	0	2	5	2	0	16
any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Slow payment or nonpayment?		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Slow payment or nonpayment?	37.5%	0.0%	6.3%	0.0%	12.5%	31.3%	12.5%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.9%	0.0%	5.9%	0.0%	2.2%	3.8%	7.7%	0.0%	3.8%
		% of Total	1.4%	0.0%	.2%	0.0%	.5%	1.2%	.5%	0.0%	3.8%
	No	Count	76	19	10	4	50	70	11	0	240
		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Slow payment or nonpayment?  % within Race, Ethnicity,	31.7%	7.9%	4.2%	1.7%	20.8%	29.2%	4.6%	0.0%	100.0%
		Gender Classification (Business Ownership Classification)	62.3%	59.4%	58.8%	66.7%	55.6%	53.8%	42.3%	0.0%	56.3%
		% of Total	17.8%	4.5%	2.3%	.9%	11.7%	16.4%	2.6%	0.0%	56.3%



			Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	1	1	0	0	2	1	1	0	6
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Slow payment or nonpayment?	16.7%	16.7%	0.0%	0.0%	33.3%	16.7%	16.7%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	3.1%	0.0%	0.0%	2.2%	.8%	3.8%	0.0%	1.4%
	% of Total	.2%	.2%	0.0%	0.0%	.5%	.2%	.2%	0.0%	1.4%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Slow payment or nonpayment?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Slow payment or nonpayment?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Competing with large companies? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (B	usiness Ownersl	hip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q37 In your experience, have	Yes	Count	23	5	2	0	5	11	2	0	48
any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC:  Competing with large companies?		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Competing with large companies?	47.9%	10.4%	4.2%	0.0%	10.4%	22.9%	4.2%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	18.9%	15.6%	11.8%	0.0%	5.6%	8.5%	7.7%	0.0%	11.3%
		% of Total	5.4%	1.2%	.5%	0.0%	1.2%	2.6%	.5%	0.0%	11.3%
	No	Count	59	15	9	4	47	64	11	0	209
		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Competing with large companies?	28.2%	7.2%	4.3%	1.9%	22.5%	30.6%	5.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	48.4%	46.9%	52.9%	66.7%	52.2%	49.2%	42.3%	0.0%	49.1%
		% of Total	13.8%	3.5%	2.1%	.9%	11.0%	15.0%	2.6%	0.0%	49.1%



			Race, Ethn	icity, Gender	Classification (E	Business Owners	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	1	0	0	0	2	1	1	0	5
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Competing with large companies?	20.0%	0.0%	0.0%	0.0%	40.0%	20.0%	20.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	2.2%	.8%	3.8%	0.0%	1.2%
	% of Total	.2%	0.0%	0.0%	0.0%	.5%	.2%	.2%	0.0%	1.2%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Competing with large companies?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethn	icity, Gender	· Classification (B	usiness Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Competing with large companies?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Solicitation of subcontractor bids after contract award? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

		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	Other Firms	Don't Know	Total
Q37 In your experience, have	Yes	Count	4	1	1	0	3	6	1	0	16
any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Solicitation of subcontractor bids after contract award?		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Solicitation of subcontractor bids after contract award?	25.0%	6.3%	6.3%	0.0%	18.8%	37.5%	6.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	3.1%	5.9%	0.0%	3.3%	4.6%	3.8%	0.0%	3.8%
		% of Total	.9%	.2%	.2%	0.0%	.7%	1.4%	.2%	0.0%	3.8%
	No	Count	76	18	10	4	49	69	12	0	238
		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Solicitation of subcontractor bids after contract award?	31.9%	7.6%	4.2%	1.7%	20.6%	29.0%	5.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	62.3%	56.3%	58.8%	66.7%	54.4%	53.1%	46.2%	0.0%	55.9%
		% of Total	17.8%	4.2%	2.3%	.9%	11.5%	16.2%	2.8%	0.0%	55.9%



				Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
C	Oon't Know	Count	3	1	0	0	2	1	1	0	8
		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Solicitation of subcontractor bids after contract award?	37.5%	12.5%	0.0%	0.0%	25.0%	12.5%	12.5%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	3.1%	0.0%	0.0%	2.2%	.8%	3.8%	0.0%	1.9%
		% of Total	.7%	.2%	0.0%	0.0%	.5%	.2%	.2%	0.0%	1.9%
N	No Response	Count	39	12	6	2	36	54	12	3	164
		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Solicitation of subcontractor bids after contract award?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
		% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethn	icity, Gender	Classification (E	Business Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Solicitation of subcontractor bids after contract award?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Awarded scope of work reduced or eliminated? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (B	usiness Ownersl	nip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q37 In your experience, have	Yes	Count	3	0	2	0	5	1	0	0	11
any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Awarded scope of work reduced or eliminated?		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Awarded scope of work reduced or eliminated?	27.3%	0.0%	18.2%	0.0%	45.5%	9.1%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	11.8%	0.0%	5.6%	.8%	0.0%	0.0%	2.6%
		% of Total	.7%	0.0%	.5%	0.0%	1.2%	.2%	0.0%	0.0%	2.6%
	No	Count	77	19	9	4	47	74	13	0	243
		% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Awarded scope of work reduced or eliminated?	31.7%	7.8%	3.7%	1.6%	19.3%	30.5%	5.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	63.1%	59.4%	52.9%	66.7%	52.2%	56.9%	50.0%	0.0%	57.0%
		% of Total	18.1%	4.5%	2.1%	.9%	11.0%	17.4%	3.1%	0.0%	57.0%



			Race, Ethn	icity, Gender	Classification (E	Business Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	3	1	0	0	2	1	1	0	8
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Awarded scope of work reduced or eliminated?	37.5%	12.5%	0.0%	0.0%	25.0%	12.5%	12.5%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	3.1%	0.0%	0.0%	2.2%	.8%	3.8%	0.0%	1.9%
	% of Total	.7%	.2%	0.0%	0.0%	.5%	.2%	.2%	0.0%	1.9%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Awarded scope of work reduced or eliminated?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethn	icity, Gender	· Classification (B	Business Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q37 In your experience, have any of the following been a barrier to attempting to do work or working on projects as a subcontractor with primes for the WSSC: Awarded scope of work reduced or eliminated?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q38 Between July 1, 2009 and June 30, 2014, has your company ever submitted a bid with a prime for a project with the WSSC, were informed you were the lowest bidder, and found out another sub was actually doing the work? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (B	usiness Ownersł	nip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q38 Between July 1, 2009 and	Yes	Count	3	0	0	0	1	3	0	0	7
June 30, 2014, has your company ever submitted a bid with a prime for a project with the WSSC, were informed you were the lowest bidder, and found out another sub was actually doing the work?		% within Q38 Between July 1, 2009 and June 30, 2014, has your company ever submitted a bid with a prime for a project with the WSSC, were informed you were the lowest bidder, and found out another sub was actually doing the work?	42.9%	0.0%	0.0%	0.0%	14.3%	42.9%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	0.0%	0.0%	1.1%	2.3%	0.0%	0.0%	1.6%
		% of Total	.7%	0.0%	0.0%	0.0%	.2%	.7%	0.0%	0.0%	1.6%
	No	Count	76	19	11	4	50	71	14	0	245
		% within Q38 Between July 1, 2009 and June 30, 2014, has your company ever submitted a bid with a prime for a project with the WSSC, were informed you were the lowest bidder, and found out another sub was actually doing the work?	31.0%	7.8%	4.5%	1.6%	20.4%	29.0%	5.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	62.3%	59.4%	64.7%	66.7%	55.6%	54.6%	53.8%	0.0%	57.5%
		% of Total	17.8%	4.5%	2.6%	.9%	11.7%	16.7%	3.3%	0.0%	57.5%



			Race, Ethn	icity, Gender	Classification (B	usiness Owners	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	4	1	0	0	3	2	0	0	10
	% within Q38 Between July 1, 2009 and June 30, 2014, has your company ever submitted a bid with a prime for a project with the WSSC, were informed you were the lowest bidder, and found out another sub was actually doing the work?	40.0%	10.0%	0.0%	0.0%	30.0%	20.0%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	3.1%	0.0%	0.0%	3.3%	1.5%	0.0%	0.0%	2.3%
	% of Total	.9%	.2%	0.0%	0.0%	.7%	.5%	0.0%	0.0%	2.3%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q38 Between July 1, 2009 and June 30, 2014, has your company ever submitted a bid with a prime for a project with the WSSC, were informed you were the lowest bidder, and found out another sub was actually doing the work?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



	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	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q38 Between July 1, 2009 and June 30, 2014, has your company ever submitted a bid with a prime for a project with the WSSC, were informed you were the lowest bidder, and found out another sub was actually doing the work?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q39 As a subcontractor, do prime contractors on WSSC projects require your company to have a bond for your type of work? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethr	nicity, Gender	Classification (B	Business Owners	hip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q39 As a subcontractor, do	Yes	Count	21	3	2	0	5	13	2	0	46
prime contractors on WSSC projects require your company to have a bond for your type of work?		% within Q39 As a subcontractor, do prime contractors on WSSC projects require your company to have a bond for your type of work?	45.7%	6.5%	4.3%	0.0%	10.9%	28.3%	4.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	17.2%	9.4%	11.8%	0.0%	5.6%	10.0%	7.7%	0.0%	10.8%
		% of Total	4.9%	.7%	.5%	0.0%	1.2%	3.1%	.5%	0.0%	10.8%
	No	Count	48	15	8	3	41	62	12	0	189
		% within Q39 As a subcontractor, do prime contractors on WSSC projects require your company to have a bond for your type of work?	25.4%	7.9%	4.2%	1.6%	21.7%	32.8%	6.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	39.3%	46.9%	47.1%	50.0%	45.6%	47.7%	46.2%	0.0%	44.4%
		% of Total	11.3%	3.5%	1.9%	.7%	9.6%	14.6%	2.8%	0.0%	44.4%
	Don't Know	Count	14	2	1	1	8	1	0	0	27
		% within Q39 As a subcontractor, do prime contractors on WSSC projects require your company to have a bond for your type of work?	51.9%	7.4%	3.7%	3.7%	29.6%	3.7%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	11.5%	6.3%	5.9%	16.7%	8.9%	.8%	0.0%	0.0%	6.3%
		% of Total	3.3%	.5%	.2%	.2%	1.9%	.2%	0.0%	0.0%	6.3%



		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	Other Firms	Don't Know	Total
	No Response	Count	39	12	6	2	36	54	12	3	164
		% within Q39 As a subcontractor, do prime contractors on WSSC projects require your company to have a bond for your type of work?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
		% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q39 As a subcontractor, do prime contractors on WSSC projects require your company to have a bond for your type of work?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q40 As a subcontractor, did your company experience discriminatory behavior between July 1, 2009 and June 30, 2014 from a prime contractor/vendor working or bidding/proposing on a WSSC project? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

			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	Other Firms	Don't Know	Total
Q40 As a subcontractor, did	Yes	Count	3	2	0	0	0	0	1	0	6
your company experience discriminatory behavior between July 1, 2009 and June 30, 2014 from a prime contractor/vendor working or bidding/proposing on a WSSC project?		% within Q40 As a subcontractor, did your company experience discriminatory behavior between July 1, 2009 and June 30, 2014 from a prime contractor/vendor working or bidding/proposing on a WSSC project?	50.0%	33.3%	0.0%	0.0%	0.0%	0.0%	16.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	6.3%	0.0%	0.0%	0.0%	0.0%	3.8%	0.0%	1.4%
		% of Total	.7%	.5%	0.0%	0.0%	0.0%	0.0%	.2%	0.0%	1.4%
	No	Count	49	8	6	3	28	60	8	0	162
		% within Q40 As a subcontractor, did your company experience discriminatory behavior between July 1, 2009 and June 30, 2014 from a prime contractor/vendor working or bidding/proposing on a WSSC project?	30.2%	4.9%	3.7%	1.9%	17.3%	37.0%	4.9%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	40.2%	25.0%	35.3%	50.0%	31.1%	46.2%	30.8%	0.0%	38.0%
		% of Total	11.5%	1.9%	1.4%	.7%	6.6%	14.1%	1.9%	0.0%	38.0%



	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	Other Firms	Don't Know	Total
Not Applicable	Count	29	10	5	1	25	15	5	0	90
	% within Q40 As a subcontractor, did your company experience discriminatory behavior between July 1, 2009 and June 30, 2014 from a prime contractor/vendor working or bidding/proposing on a WSSC project?	32.2%	11.1%	5.6%	1.1%	27.8%	16.7%	5.6%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	23.8%	31.3%	29.4%	16.7%	27.8%	11.5%	19.2%	0.0%	21.1%
	% of Total	6.8%	2.3%	1.2%	.2%	5.9%	3.5%	1.2%	0.0%	21.1%
Don't know	Count	2	0	0	0	1	1	0	0	4
	% within Q40 As a subcontractor, did your company experience discriminatory behavior between July 1, 2009 and June 30, 2014 from a prime contractor/vendor working or bidding/proposing on a WSSC project?	50.0%	0.0%	0.0%	0.0%	25.0%	25.0%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	0.0%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	.9%
	% of Total	.5%	0.0%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	.9%



				Race, Ethr	nicity, Gender	Classification (E	Business Owners	hip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	No Response	Count	39	12	6	2	36	54	12	3	164
		% within Q40 As a subcontractor, did your company experience discriminatory behavior between July 1, 2009 and June 30, 2014 from a prime contractor/vendor working or bidding/proposing on a WSSC project?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
		% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q40 As a subcontractor, did your company experience discriminatory behavior between July 1, 2009 and June 30, 2014 from a prime contractor/vendor working or bidding/proposing on a WSSC project?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



### Q41 How did you become aware of the discrimination against your company? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

			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	Other Firms	Don't Know	Total
Q41 How did you become	Verbal Comment	Count	3	0	0	0	0	0	0	0	3
aware of the discrimination against your company?		% within Q41 How did you become aware of the discrimination against your company?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.7%
		% of Total	.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.7%
	Other Action	Count	0	2	0	0	0	0	1	0	3
		% within Q41 How did you become aware of the discrimination against your company?	0.0%	66.7%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	6.3%	0.0%	0.0%	0.0%	0.0%	3.8%	0.0%	.7%
		% of Total	0.0%	.5%	0.0%	0.0%	0.0%	0.0%	.2%	0.0%	.7%
	No Response	Count	119	30	17	6	90	130	25	3	420
		% within Q41 How did you become aware of the discrimination against your company?	28.3%	7.1%	4.0%	1.4%	21.4%	31.0%	6.0%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	97.5%	93.8%	100.0%	100.0%	100.0%	100.0%	96.2%	100.0%	98.6%
		% of Total	27.9%	7.0%	4.0%	1.4%	21.1%	30.5%	5.9%	.7%	98.6%



		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	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q41 How did you become aware of the discrimination against your company?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q43 Which of the following do you consider the primary reason for your company being discriminated against? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	nicity, Gender	Classification (E	Business Ownersl	hip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q43 Which of the following	Owner's race or	Count	1	1	0	0	0	0	0	0	2
do you consider the primary reason for your company being discriminated against?	ethnicity	% within Q43 Which of the following do you consider the primary reason for your company being discriminated against?	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.5%
		% of Total	.2%	.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.5%
	Both race and gender	Count	2	1	0	0	0	0	0	0	3
		% within Q43 Which of the following do you consider the primary reason for your company being discriminated against?	66.7%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.7%
		% of Total	.5%	.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.7%
	Other reason	Count	0	0	0	0	0	0	1	0	1
		% within Q43 Which of the following do you consider the primary reason for your company being discriminated against?	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.8%	0.0%	.2%
		% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.2%	0.0%	.2%



				Race, Ethr	icity, Gender	· Classification (E	Business Owners	hip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	No Response	Count	119	30	17	6	90	130	25	3	420
		% within Q43 Which of the following do you consider the primary reason for your company being discriminated against?	28.3%	7.1%	4.0%	1.4%	21.4%	31.0%	6.0%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	97.5%	93.8%	100.0%	100.0%	100.0%	100.0%	96.2%	100.0%	98.6%
		% of Total	27.9%	7.0%	4.0%	1.4%	21.1%	30.5%	5.9%	.7%	98.6%
Total	·	Count	122	32	17	6	90	130	26	3	426
		% within Q43 Which of the following do you consider the primary reason for your company being discriminated against?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



### Q45 When did the discrimination first occur? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethr	nicity, Gender	Classification (I	Business Owners	hip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q45 When did the	During the bidding	Count	0	2	0	0	0	0	0	0	2
discrimination first occur?	process	% within Q45 When did the discrimination first occur?	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.5%
		% of Total	0.0%	.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.5%
	After contract award	Count	1	0	0	0	0	0	0	0	1
		% within Q45 When did the discrimination first occur?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.2%
		% of Total	.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.2%
	All of the above	Count	2	0	0	0	0	0	0	0	2
		% within Q45 When did the discrimination first occur?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.5%
		% of Total	.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.5%
	Don't Know	Count	0	0	0	0	0	0	1	0	1
		% within Q45 When did the discrimination first occur?	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.8%	0.0%	.2%
		% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.2%	0.0%	.2%



		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	Other Firms	Don't Know	Total
	No Response	Count	119	30	17	6	90	130	25	3	420
		% within Q45 When did the discrimination first occur?	28.3%	7.1%	4.0%	1.4%	21.4%	31.0%	6.0%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	97.5%	93.8%	100.0%	100.0%	100.0%	100.0%	96.2%	100.0%	98.6%
		% of Total	27.9%	7.0%	4.0%	1.4%	21.1%	30.5%	5.9%	.7%	98.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q45 When did the discrimination first occur?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



### Q46 Did you file a complaint? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethr	nicity, Gender	Classification (I	Business Owners	hip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q46 Did you file a	Yes	Count	1	0	0	0	0	0	0	0	1
complaint?		% within Q46 Did you file a complaint?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.2%
		% of Total	.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.2%
	No	Count	2	2	0	0	0	0	1	0	5
		% within Q46 Did you file a complaint?	40.0%	40.0%	0.0%	0.0%	0.0%	0.0%	20.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	6.3%	0.0%	0.0%	0.0%	0.0%	3.8%	0.0%	1.2%
		% of Total	.5%	.5%	0.0%	0.0%	0.0%	0.0%	.2%	0.0%	1.2%
	No Response	Count	119	30	17	6	90	130	25	3	420
		% within Q46 Did you file a complaint?	28.3%	7.1%	4.0%	1.4%	21.4%	31.0%	6.0%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	97.5%	93.8%	100.0%	100.0%	100.0%	100.0%	96.2%	100.0%	98.6%
		% of Total	27.9%	7.0%	4.0%	1.4%	21.1%	30.5%	5.9%	.7%	98.6%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q46 Did you file a complaint?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



# Q47 Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by WSSC? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethr	nicity, Gender	Classification (E	Business Owners	hip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q47 Are you willing to speak	Yes	Count	2	0	0	0	0	0	0	0	2
directly to MGT to provide more detail of the alleged discrimination your company has experienced by WSSC?		% within Q47 Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by WSSC?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.5%
		% of Total	.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.5%
	No	Count	1	2	0	0	0	0	1	0	4
		% within Q47 Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by WSSC?	25.0%	50.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	6.3%	0.0%	0.0%	0.0%	0.0%	3.8%	0.0%	.9%
		% of Total	.2%	.5%	0.0%	0.0%	0.0%	0.0%	.2%	0.0%	.9%
	No Response	Count	119	30	17	6	90	130	25	3	420
		% within Q47 Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by WSSC?	28.3%	7.1%	4.0%	1.4%	21.4%	31.0%	6.0%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	97.5%	93.8%	100.0%	100.0%	100.0%	100.0%	96.2%	100.0%	98.6%
		% of Total	27.9%	7.0%	4.0%	1.4%	21.1%	30.5%	5.9%	.7%	98.6%



			Race, Ethr	nicity, Gender	r Classification (E	Business Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q47 Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by WSSC?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q48 Has your company experienced or observed a prime including a M/WBE sub on a bid or proposal to satisfy the GFE requirements and then drops the sub after winning the award for no legitimate reason? WSSC project \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (E	usiness Owners	hip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q48 Has your company	Yes	Count	2	1	0	0	0	2	0	0	5
experienced or observed a prime including a M/WBE sub on a bid or proposal to satisfy the GFE requirements and then drops the sub after winning the award for no legitimate reason? WSSC project		% within Q48 Has your company experienced or observed a prime including a M/WBE sub on a bid or proposal to satisfy the GFE requirements and then drops the sub after winning the award for no legitimate reason? WSSC project	40.0%	20.0%	0.0%	0.0%	0.0%	40.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	3.1%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	1.2%
		% of Total	.5%	.2%	0.0%	0.0%	0.0%	.5%	0.0%	0.0%	1.2%
	No	Count	77	19	11	4	53	72	13	0	249
		% within Q48 Has your company experienced or observed a prime including a M/WBE sub on a bid or proposal to satisfy the GFE requirements and then drops the sub after winning the award for no legitimate reason? WSSC project	30.9%	7.6%	4.4%	1.6%	21.3%	28.9%	5.2%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	63.1%	59.4%	64.7%	66.7%	58.9%	55.4%	50.0%	0.0%	58.5%
		% of Total	18.1%	4.5%	2.6%	.9%	12.4%	16.9%	3.1%	0.0%	58.5%



			Race, Ethr	nicity, Gender	· Classification (E	Business Owners	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Kn	ow Count	4	0	0	0	1	2	1	0	8
	% within Q48 Has your company experienced or observed a prime including a M/WBE sub on a bid or proposal to satisfy the GFE requirements and then drops the sub after winning the award for no legitimate reason? WSSC project	50.0%	0.0%	0.0%	0.0%	12.5%	25.0%	12.5%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	0.0%	0.0%	0.0%	1.1%	1.5%	3.8%	0.0%	1.9%
	% of Total	.9%	0.0%	0.0%	0.0%	.2%	.5%	.2%	0.0%	1.9%
No Respo	onse Count	39	12	6	2	36	54	12	3	164
	% within Q48 Has your company experienced or observed a prime including a M/WBE sub on a bid or proposal to satisfy the GFE requirements and then drops the sub after winning the award for no legitimate reason? WSSC project	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethr	nicity, Gender	r Classification (E	Business Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q48 Has your company experienced or observed a prime including a M/WBE sub on a bid or proposal to satisfy the GFE requirements and then drops the sub after winning the award for no legitimate reason? WSSC project	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q48 Has your company experienced or observed a prime including a M/WBE sub on a bid or proposal to satisfy the GFE requirements and then drops the sub after winning the award for no legitimate reason? Non-WSSC project \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethn	icity, Gender	Classification (E	Business Owners	hip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q48 Has your company	Yes	Count	20	5	2	1	8	5	0	0	41
experienced or observed a prime including a M/WBE sub on a bid or proposal to satisfy the GFE requirements and then drops the sub after winning the award for no legitimate reason? Non-WSSC project		% within Q48 Has your company experienced or observed a prime including a M/WBE sub on a bid or proposal to satisfy the GFE requirements and then drops the sub after winning the award for no legitimate reason? Non-WSSC project	48.8%	12.2%	4.9%	2.4%	19.5%	12.2%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	16.4%	15.6%	11.8%	16.7%	8.9%	3.8%	0.0%	0.0%	9.6%
		% of Total	4.7%	1.2%	.5%	.2%	1.9%	1.2%	0.0%	0.0%	9.6%
	No	Count	58	15	9	3	45	69	14	0	213
		% within Q48 Has your company experienced or observed a prime including a M/WBE sub on a bid or proposal to satisfy the GFE requirements and then drops the sub after winning the award for no legitimate reason? Non-WSSC project	27.2%	7.0%	4.2%	1.4%	21.1%	32.4%	6.6%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	47.5%	46.9%	52.9%	50.0%	50.0%	53.1%	53.8%	0.0%	50.0%
		% of Total	13.6%	3.5%	2.1%	.7%	10.6%	16.2%	3.3%	0.0%	50.0%



			Race, Ethr	nicity, Gender	Classification (E	Business Owners	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Kr	now Count	5	0	0	0	1	2	0	0	8
	% within Q48 Has your company experienced or observed a prime including a M/WBE sub on a bid or proposal to satisfy the GFE requirements and then drops the sub after winning the award for no legitimate reason? Non-WSSC project	62.5%	0.0%	0.0%	0.0%	12.5%	25.0%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.1%	0.0%	0.0%	0.0%	1.1%	1.5%	0.0%	0.0%	1.9%
	% of Total	1.2%	0.0%	0.0%	0.0%	.2%	.5%	0.0%	0.0%	1.9%
No Resp	ponse Count	39	12	6	2	36	54	12	3	164
	% within Q48 Has your company experienced or observed a prime including a M/WBE sub on a bid or proposal to satisfy the GFE requirements and then drops the sub after winning the award for no legitimate reason? Non-WSSC project	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethr	nicity, Gender	Classification (E	Business Owners	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q48 Has your company experienced or observed a prime including a M/WBE sub on a bid or proposal to satisfy the GFE requirements and then drops the sub after winning the award for no legitimate reason? Non-WSSC project	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Harassment? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethr	nicity, Gender	· Classification (E	Business Owners	hip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q49 Still talking about	Yes	Count	9	0	0	0	1	1	0	0	11
primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Harassment?		% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Harassment?	81.8%	0.0%	0.0%	0.0%	9.1%	9.1%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	7.4%	0.0%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	2.6%
		% of Total	2.1%	0.0%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	2.6%
	No	Count	72	20	11	4	52	74	14	0	247
		% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Harassment?	29.1%	8.1%	4.5%	1.6%	21.1%	30.0%	5.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	59.0%	62.5%	64.7%	66.7%	57.8%	56.9%	53.8%	0.0%	58.0%
		% of Total	16.9%	4.7%	2.6%	.9%	12.2%	17.4%	3.3%	0.0%	58.0%



			Race, Ethr	nicity, Gender	Classification (E	Business Owners	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	2	0	0	0	1	1	0	0	4
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Harassment?	50.0%	0.0%	0.0%	0.0%	25.0%	25.0%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	0.0%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	.9%
	% of Total	.5%	0.0%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	.9%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Harassment?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethr	nicity, Gender	r Classification (E	Business Owners	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Harassment?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unequal or unfair treatment? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethr	nicity, Gender	· Classification (E	Business Owners	hip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q49 Still talking about	Yes	Count	15	3	1	0	2	1	0	0	22
primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unequal or unfair treatment?		% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unequal or unfair treatment?	68.2%	13.6%	4.5%	0.0%	9.1%	4.5%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	12.3%	9.4%	5.9%	0.0%	2.2%	.8%	0.0%	0.0%	5.2%
		% of Total	3.5%	.7%	.2%	0.0%	.5%	.2%	0.0%	0.0%	5.2%
	No	Count	65	17	10	4	51	73	14	0	234
		% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unequal or unfair treatment?	27.8%	7.3%	4.3%	1.7%	21.8%	31.2%	6.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	53.3%	53.1%	58.8%	66.7%	56.7%	56.2%	53.8%	0.0%	54.9%
		% of Total	15.3%	4.0%	2.3%	.9%	12.0%	17.1%	3.3%	0.0%	54.9%



			Race, Ethr	nicity, Gender	· Classification (E	Business Owners	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	3	0	0	0	1	2	0	0	6
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unequal or unfair treatment?	50.0%	0.0%	0.0%	0.0%	16.7%	33.3%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	0.0%	0.0%	1.1%	1.5%	0.0%	0.0%	1.4%
	% of Total	.7%	0.0%	0.0%	0.0%	.2%	.5%	0.0%	0.0%	1.4%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unequal or unfair treatment?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethr	nicity, Gender	r Classification (E	Business Owners	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unequal or unfair treatment?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Bid shopping or bid manipulation? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethr	nicity, Gender	r Classification (I	Business Owners	hip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q49 Still talking about	Yes	Count	17	2	1	1	6	5	0	0	32
primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Bid shopping or bid manipulation?		% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Bid shopping or bid manipulation?	53.1%	6.3%	3.1%	3.1%	18.8%	15.6%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	13.9%	6.3%	5.9%	16.7%	6.7%	3.8%	0.0%	0.0%	7.5%
		% of Total	4.0%	.5%	.2%	.2%	1.4%	1.2%	0.0%	0.0%	7.5%
	No	Count	64	18	10	3	47	70	14	0	226
		% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Bid shopping or bid manipulation?	28.3%	8.0%	4.4%	1.3%	20.8%	31.0%	6.2%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	52.5%	56.3%	58.8%	50.0%	52.2%	53.8%	53.8%	0.0%	53.1%
		% of Total	15.0%	4.2%	2.3%	.7%	11.0%	16.4%	3.3%	0.0%	53.1%



			Race, Ethr	nicity, Gender	· Classification (I	Business Owners	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	2	0	0	0	1	1	0	0	4
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Bid shopping or bid manipulation?	50.0%	0.0%	0.0%	0.0%	25.0%	25.0%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	0.0%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	.9%
	% of Total	.5%	0.0%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	.9%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Bid shopping or bid manipulation?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethr	nicity, Gender	r Classification (I	Business Owners	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Bid shopping or bid manipulation?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Double standards in performance? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethr	nicity, Gender	r Classification (I	Business Owners	hip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q49 Still talking about	Yes	Count	13	2	1	0	2	2	0	0	20
primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Double standards in performance?		% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Double standards in performance?	65.0%	10.0%	5.0%	0.0%	10.0%	10.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	10.7%	6.3%	5.9%	0.0%	2.2%	1.5%	0.0%	0.0%	4.7%
		% of Total	3.1%	.5%	.2%	0.0%	.5%	.5%	0.0%	0.0%	4.7%
	No	Count	67	18	10	4	51	73	14	0	237
		% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Double standards in performance?	28.3%	7.6%	4.2%	1.7%	21.5%	30.8%	5.9%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	54.9%	56.3%	58.8%	66.7%	56.7%	56.2%	53.8%	0.0%	55.6%
		% of Total	15.7%	4.2%	2.3%	.9%	12.0%	17.1%	3.3%	0.0%	55.6%



			Race, Ethr	nicity, Gender	r Classification (I	Business Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	3	0	0	0	1	1	0	0	5
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Double standards in performance?	60.0%	0.0%	0.0%	0.0%	20.0%	20.0%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	1.2%
	% of Total	.7%	0.0%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	1.2%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Double standards in performance?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethr	nicity, Gender	r Classification (I	Business Owners	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Double standards in performance?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Denial of opportunity to bid? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethi	nicity, Gender	· Classification (I	Business Owners	hip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q49 Still talking about	Yes	Count	9	1	0	0	1	1	0	0	12
primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Denial of opportunity to bid?		% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Denial of opportunity to bid?	75.0%	8.3%	0.0%	0.0%	8.3%	8.3%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	7.4%	3.1%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	2.8%
		% of Total	2.1%	.2%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	2.8%
	No	Count	71	19	11	4	52	73	14	0	244
		% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Denial of opportunity to bid?	29.1%	7.8%	4.5%	1.6%	21.3%	29.9%	5.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	58.2%	59.4%	64.7%	66.7%	57.8%	56.2%	53.8%	0.0%	57.3%
		% of Total	16.7%	4.5%	2.6%	.9%	12.2%	17.1%	3.3%	0.0%	57.3%



			Race, Ethr	nicity, Gender	· Classification (I	Business Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Kn	ow Count	3	0	0	0	1	2	0	0	6
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Denial of opportunity to bid?	50.0%	0.0%	0.0%	0.0%	16.7%	33.3%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	0.0%	0.0%	1.1%	1.5%	0.0%	0.0%	1.4%
	% of Total	.7%	0.0%	0.0%	0.0%	.2%	.5%	0.0%	0.0%	1.4%
No Resp	onse Count	39	12	6	2	36	54	12	3	164
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Denial of opportunity to bid?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethr	nicity, Gende	r Classification (E	Business Owners	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Denial of opportunity to bid?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unfair denial of contract award? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

		Race, Ethnicity, Gender Classification (Business Ownership Classification)  African Asian Hispanic Native Nonminority Non-									
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q49 Still talking about	Yes	Count	10	2	1	0	3	2	0	0	18
primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unfair denial of contract award?		% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unfair denial of contract award?	55.6%	11.1%	5.6%	0.0%	16.7%	11.1%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	8.2%	6.3%	5.9%	0.0%	3.3%	1.5%	0.0%	0.0%	4.2%
		% of Total	2.3%	.5%	.2%	0.0%	.7%	.5%	0.0%	0.0%	4.2%
	No	Count	69	18	10	4	50	72	14	0	237
		% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unfair denial of contract award?	29.1%	7.6%	4.2%	1.7%	21.1%	30.4%	5.9%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	56.6%	56.3%	58.8%	66.7%	55.6%	55.4%	53.8%	0.0%	55.6%
		% of Total	16.2%	4.2%	2.3%	.9%	11.7%	16.9%	3.3%	0.0%	55.6%



			Race, Ethr	nicity, Gender	r Classification (I	Business Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	4	0	0	0	1	2	0	0	7
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unfair denial of contract award?	57.1%	0.0%	0.0%	0.0%	14.3%	28.6%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	0.0%	0.0%	0.0%	1.1%	1.5%	0.0%	0.0%	1.6%
	% of Total	.9%	0.0%	0.0%	0.0%	.2%	.5%	0.0%	0.0%	1.6%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unfair denial of contract award?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethr	nicity, Gende	r Classification (I	Business Owners	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unfair denial of contract award?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unfair termination: \*

Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

		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	Other Firms	Don't Know	Total
Q49 Still talking about	Yes	Count	7	0	0	0	0	0	0	0	7
primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unfair termination?		% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unfair termination?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%
		% of Total	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%
	No	Count	74	20	11	4	53	75	14	0	251
		% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unfair termination?	29.5%	8.0%	4.4%	1.6%	21.1%	29.9%	5.6%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	60.7%	62.5%	64.7%	66.7%	58.9%	57.7%	53.8%	0.0%	58.9%
		% of Total	17.4%	4.7%	2.6%	.9%	12.4%	17.6%	3.3%	0.0%	58.9%



			Race, Ethi	nicity, Gende	r Classification (	Business Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	2	0	0	0	1	1	0	0	4
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unfair termination?	50.0%	0.0%	0.0%	0.0%	25.0%	25.0%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	0.0%	0.0%	0.0%	1.1%	.8%	0.0%	0.0%	.9%
	% of Total	.5%	0.0%	0.0%	0.0%	.2%	.2%	0.0%	0.0%	.9%
No Response	Count	39	12	6	2	36	54	12	3	164
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unfair termination?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethr	nicity, Gende	r Classification (I	Business Owners	hip Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unfair termination?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unequal price quotes from suppliers? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Eth	nicity, Gende	r Classification (	Business Owners	hip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q49 Still talking about	Yes	Count	7	1	1	0	0	2	0	0	11
primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unequal price quotes from suppliers?		% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unequal price quotes from suppliers?	63.6%	9.1%	9.1%	0.0%	0.0%	18.2%	0.0%	0.0%	100.0%
ирристо:		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	5.7%	3.1%	5.9%	0.0%	0.0%	1.5%	0.0%	0.0%	2.6%
		% of Total	1.6%	.2%	.2%	0.0%	0.0%	.5%	0.0%	0.0%	2.6%
	No	Count	73	18	10	3	53	73	14	0	244
		% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unequal price quotes from suppliers?	29.9%	7.4%	4.1%	1.2%	21.7%	29.9%	5.7%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	59.8%	56.3%	58.8%	50.0%	58.9%	56.2%	53.8%	0.0%	57.3%
		% of Total	17.1%	4.2%	2.3%	.7%	12.4%	17.1%	3.3%	0.0%	57.3%



			Race, Ethi	nicity, Gende	r Classification (	Business Owners	ship Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Don't Know	Count	3	1	0	1	1	1	0	0	7
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unequal price quotes from suppliers?	42.9%	14.3%	0.0%	14.3%	14.3%	14.3%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	3.1%	0.0%	16.7%	1.1%	.8%	0.0%	0.0%	1.6%
	% of Total	.7%	.2%	0.0%	.2%	.2%	.2%	0.0%	0.0%	1.6%
No Respons	Count	39	12	6	2	36	54	12	3	164
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unequal price quotes from suppliers?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
	% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%



			Race, Ethr	nicity, Gende	r Classification (I	Business Owners	hip Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q49 Still talking about primes or vendors, while doing business or attempting to do business, have you experienced any of the following as a form of discrimination: Unequal price quotes from suppliers?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



Q50 How often do prime contractors/vendors who use your company as a sub on public sector projects with M/WBE goals solicit your company on projects (private or public) without M/WBE goals? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

		Race, Ethnicity, Gender Classification (Business Ownership Classification)  African Asian Hispanic Native Nonminority Non-									
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q50 How often do prime	Very Often	Count	8	4	1	1	13	8	0	0	35
contractors/vendors who use your company as a sub on public sector projects with M/WBE goals solicit your company on projects (private or public) without M/WBE goals?		% within Q50 How often do prime contractors/vendors who use your company as a sub on public sector projects with M/WBE goals solicit your company on projects (private or public) without M/WBE goals?	22.9%	11.4%	2.9%	2.9%	37.1%	22.9%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	6.6%	12.5%	5.9%	16.7%	14.4%	6.2%	0.0%	0.0%	8.2%
		% of Total	1.9%	.9%	.2%	.2%	3.1%	1.9%	0.0%	0.0%	8.2%
	Sometimes	Count	16	4	2	1	10	2	0	0	35
		% within Q50 How often do prime contractors/vendors who use your company as a sub on public sector projects with M/WBE goals solicit your company on projects (private or public) without M/WBE goals?	45.7%	11.4%	5.7%	2.9%	28.6%	5.7%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	13.1%	12.5%	11.8%	16.7%	11.1%	1.5%	0.0%	0.0%	8.2%
		% of Total	3.8%	.9%	.5%	.2%	2.3%	.5%	0.0%	0.0%	8.2%



			Race, Ethi	nicity, Gendei	r Classification (	Business Owners	ship Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Seldom	Count	13	3	2	2	4	11	2	0	37
	% within Q50 How often do prime contractors/vendors who use your company as a sub on public sector projects with M/WBE goals solicit your company on projects (private or public) without M/WBE goals?	35.1%	8.1%	5.4%	5.4%	10.8%	29.7%	5.4%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	10.7%	9.4%	11.8%	33.3%	4.4%	8.5%	7.7%	0.0%	8.7%
	% of Total	3.1%	.7%	.5%	.5%	.9%	2.6%	.5%	0.0%	8.7%
Never	Count	31	3	3	0	14	25	5	0	81
	% within Q50 How often do prime contractors/vendors who use your company as a sub on public sector projects with M/WBE goals solicit your company on projects (private or public) without M/WBE goals?	38.3%	3.7%	3.7%	0.0%	17.3%	30.9%	6.2%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	25.4%	9.4%	17.6%	0.0%	15.6%	19.2%	19.2%	0.0%	19.0%
	% of Total	7.3%	.7%	.7%	0.0%	3.3%	5.9%	1.2%	0.0%	19.0%



			Race, Ethi	nicity, Gendei	r Classification (	Business Owners	ship Classifi	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Not Applicable	Count	14	5	3	0	9	22	5	0	58
	% within Q50 How often do prime contractors/vendors who use your company as a sub on public sector projects with M/WBE goals solicit your company on projects (private or public) without M/WBE goals?	24.1%	8.6%	5.2%	0.0%	15.5%	37.9%	8.6%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	11.5%	15.6%	17.6%	0.0%	10.0%	16.9%	19.2%	0.0%	13.6%
	% of Total	3.3%	1.2%	.7%	0.0%	2.1%	5.2%	1.2%	0.0%	13.6%
Don't Know	Count	1	1	0	0	4	8	2	0	16
	% within Q50 How often do prime contractors/vendors who use your company as a sub on public sector projects with M/WBE goals solicit your company on projects (private or public) without M/WBE goals?	6.3%	6.3%	0.0%	0.0%	25.0%	50.0%	12.5%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	3.1%	0.0%	0.0%	4.4%	6.2%	7.7%	0.0%	3.8%
	% of Total	.2%	.2%	0.0%	0.0%	.9%	1.9%	.5%	0.0%	3.8%



				Race, Ethi	nicity, Gende	r Classification (l	Business Owners	hip Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	No Response	Count	39	12	6	2	36	54	12	3	164
		% within Q50 How often do prime contractors/vendors who use your company as a sub on public sector projects with M/WBE goals solicit your company on projects (private or public) without M/WBE goals?	23.8%	7.3%	3.7%	1.2%	22.0%	32.9%	7.3%	1.8%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	32.0%	37.5%	35.3%	33.3%	40.0%	41.5%	46.2%	100.0%	38.5%
		% of Total	9.2%	2.8%	1.4%	.5%	8.5%	12.7%	2.8%	.7%	38.5%
Total	·	Count	122	32	17	6	90	130	26	3	426
		% within Q50 How often do prime contractors/vendors who use your company as a sub on public sector projects with M/WBE goals solicit your company on projects (private or public) without M/WBE goals?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q51 Has your company applied for commercial (business) bank loan or line of credit between July 1, 2009 and June 30, 2014? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Eth	nicity, Gende	r Classification (	Business Owners	ship Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q51 Has your company	Yes	Count	38	10	8	2	28	36	4	0	126
applied for commercial (business) bank loan or line of credit between July 1, 2009 and June 30, 2014?		% within Q51 Has your company applied for commercial (business) bank loan or line of credit between July 1, 2009 and June 30, 2014?	30.2%	7.9%	6.3%	1.6%	22.2%	28.6%	3.2%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	31.1%	31.3%	47.1%	33.3%	31.1%	27.7%	15.4%	0.0%	29.6%
		% of Total	8.9%	2.3%	1.9%	.5%	6.6%	8.5%	.9%	0.0%	29.6%
	No	Count	73	19	8	4	57	70	18	3	252
		% within Q51 Has your company applied for commercial (business) bank loan or line of credit between July 1, 2009 and June 30, 2014?	29.0%	7.5%	3.2%	1.6%	22.6%	27.8%	7.1%	1.2%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	59.8%	59.4%	47.1%	66.7%	63.3%	53.8%	69.2%	100.0%	59.2%
		% of Total	17.1%	4.5%	1.9%	.9%	13.4%	16.4%	4.2%	.7%	59.2%
	Don't Know	Count	11	3	1	0	5	24	4	0	48
		% within Q51 Has your company applied for commercial (business) bank loan or line of credit between July 1, 2009 and June 30, 2014?	22.9%	6.3%	2.1%	0.0%	10.4%	50.0%	8.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	9.0%	9.4%	5.9%	0.0%	5.6%	18.5%	15.4%	0.0%	11.3%
		% of Total	2.6%	.7%	.2%	0.0%	1.2%	5.6%	.9%	0.0%	11.3%



			Race, Eth	nicity, Gende	r Classification (l	Business Owners	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q51 Has your company applied for commercial (business) bank loan or line of credit between July 1, 2009 and June 30, 2014?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q52 Was your company approved or denied for a commercial (business) bank loan or line of credit? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

			Crosstab								
							Business Owners	hip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q52 Was your company	Approved	Count	18	9	6	2	29	33	3	0	100
approved or denied for a commercial (business) bank loan or line of credit?		% within Q52 Was your company approved or denied for a commercial (business) bank loan or line of credit?	18.0%	9.0%	6.0%	2.0%	29.0%	33.0%	3.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	14.8%	28.1%	35.3%	33.3%	32.2%	25.4%	11.5%	0.0%	23.5%
		% of Total	4.2%	2.1%	1.4%	.5%	6.8%	7.7%	.7%	0.0%	23.5%
	Denied	Count	19	1	2	0	0	1	0	0	23
		% within Q52 Was your company approved or denied for a commercial (business) bank loan or line of credit?	82.6%	4.3%	8.7%	0.0%	0.0%	4.3%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	15.6%	3.1%	11.8%	0.0%	0.0%	.8%	0.0%	0.0%	5.4%
		% of Total	4.5%	.2%	.5%	0.0%	0.0%	.2%	0.0%	0.0%	5.4%
	Don't Know	Count	1	0	0	0	0	2	1	0	4
		% within Q52 Was your company approved or denied for a commercial (business) bank loan or line of credit?	25.0%	0.0%	0.0%	0.0%	0.0%	50.0%	25.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	0.0%	1.5%	3.8%	0.0%	.9%
		% of Total	.2%	0.0%	0.0%	0.0%	0.0%	.5%	.2%	0.0%	.9%



				Race, Eth	nicity, Gende	r Classification (	Business Owners	ship Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	No Response	Count	84	22	9	4	61	94	22	3	299
		% within Q52 Was your company approved or denied for a commercial (business) bank loan or line of credit?	28.1%	7.4%	3.0%	1.3%	20.4%	31.4%	7.4%	1.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	68.9%	68.8%	52.9%	66.7%	67.8%	72.3%	84.6%	100.0%	70.2%
		% of Total	19.7%	5.2%	2.1%	.9%	14.3%	22.1%	5.2%	.7%	70.2%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q52 Was your company approved or denied for a commercial (business) bank loan or line of credit?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q53 What was the highest amount of commercial bank loan your company received? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Ethi	nicity, Gende	r Classification (	Business Owners	hip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q53 What was the highest	.0	Count	1	3	2	0	7	8	1	0	22
amount of commercial bank loan your company received?		% within Q53 What was the highest amount of commercial bank loan your company received?	4.5%	13.6%	9.1%	0.0%	31.8%	36.4%	4.5%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	9.4%	11.8%	0.0%	7.8%	6.2%	3.8%	0.0%	5.2%
		% of Total	.2%	.7%	.5%	0.0%	1.6%	1.9%	.2%	0.0%	5.2%
	Up to \$50,000?	Count	2	0	2	0	4	5	0	0	13
		% within Q53 What was the highest amount of commercial bank loan your company received?	15.4%	0.0%	15.4%	0.0%	30.8%	38.5%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	0.0%	11.8%	0.0%	4.4%	3.8%	0.0%	0.0%	3.1%
		% of Total	.5%	0.0%	.5%	0.0%	.9%	1.2%	0.0%	0.0%	3.1%
	\$50,001 to \$100,000?	Count	4	3	0	0	3	1	0	0	11
		% within Q53 What was the highest amount of commercial bank loan your company received?	36.4%	27.3%	0.0%	0.0%	27.3%	9.1%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	9.4%	0.0%	0.0%	3.3%	.8%	0.0%	0.0%	2.6%
		% of Total	.9%	.7%	0.0%	0.0%	.7%	.2%	0.0%	0.0%	2.6%



			Race, Eth	nicity, Gende	r Classification (	Business Owners	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
\$100,001 to \$300,000?	Count	5	0	0	0	4	2	0	0	11
	% within Q53 What was the highest amount of commercial bank loan your company received?	45.5%	0.0%	0.0%	0.0%	36.4%	18.2%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.1%	0.0%	0.0%	0.0%	4.4%	1.5%	0.0%	0.0%	2.6%
	% of Total	1.2%	0.0%	0.0%	0.0%	.9%	.5%	0.0%	0.0%	2.6%
\$300,001 to \$500,000?	Count	2	0	1	1	6	4	2	0	16
	% within Q53 What was the highest amount of commercial bank loan your company received?	12.5%	0.0%	6.3%	6.3%	37.5%	25.0%	12.5%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	0.0%	5.9%	16.7%	6.7%	3.1%	7.7%	0.0%	3.8%
	% of Total	.5%	0.0%	.2%	.2%	1.4%	.9%	.5%	0.0%	3.8%
\$500,001 to \$1	Count	3	3	1	0	3	5	0	0	15
million?	% within Q53 What was the highest amount of commercial bank loan your company received?	20.0%	20.0%	6.7%	0.0%	20.0%	33.3%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	9.4%	5.9%	0.0%	3.3%	3.8%	0.0%	0.0%	3.5%
	% of Total	.7%	.7%	.2%	0.0%	.7%	1.2%	0.0%	0.0%	3.5%



			Race, Eth	nicity, Gende	r Classification (	Business Owners	ship Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
\$1,000,001 to	\$3 Count	1	0	0	1	1	6	0	0	9
million?	% within Q53 What was the highest amount of commercial bank loan your company received?	11.1%	0.0%	0.0%	11.1%	11.1%	66.7%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	16.7%	1.1%	4.6%	0.0%	0.0%	2.1%
	% of Total	.2%	0.0%	0.0%	.2%	.2%	1.4%	0.0%	0.0%	2.1%
Over \$10 mi	ion? Count	0	0	0	0	0	2	0	0	2
	% within Q53 What was the highest amount of commercial bank loan your company received?	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	.5%
	% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	.5%	0.0%	0.0%	.5%
Not Applical	le Count	104	23	11	4	62	97	23	3	327
	% within Q53 What was the highest amount of commercial bank loan your company received?	31.8%	7.0%	3.4%	1.2%	19.0%	29.7%	7.0%	.9%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	85.2%	71.9%	64.7%	66.7%	68.9%	74.6%	88.5%	100.0%	76.8%
	% of Total	24.4%	5.4%	2.6%	.9%	14.6%	22.8%	5.4%	.7%	76.8%



			Race, Eth	nicity, Gende	r Classification (	Business Owners	ship Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
S.C.I	% within Q53 What was the highest amount of commercial bank loan your company received?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



## Q54 There is an informal network of prime contractors/vendors and subcontractors that has excluded my company from doing business in the private sector? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Eth	nicity, Gende	r Classification (l	Business Owners	hip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q54 There is an informal	Somewhat agree	Count	48	7	2	1	12	11	2	0	83
network of prime contractors/vendors and subcontractors that has excluded my company from doing business in the private sector?		% within Q54 There is an informal network of prime contractors/vendors and subcontractors that has excluded my company from doing business in the private sector?	57.8%	8.4%	2.4%	1.2%	14.5%	13.3%	2.4%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	39.3%	21.9%	11.8%	16.7%	13.3%	8.5%	7.7%	0.0%	19.5%
		% of Total	11.3%	1.6%	.5%	.2%	2.8%	2.6%	.5%	0.0%	19.5%
	Neither agree nor	Count	27	10	3	1	18	29	6	0	94
	disagree	% within Q54 There is an informal network of prime contractors/vendors and subcontractors that has excluded my company from doing business in the private sector?	28.7%	10.6%	3.2%	1.1%	19.1%	30.9%	6.4%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	22.1%	31.3%	17.6%	16.7%	20.0%	22.3%	23.1%	0.0%	22.1%
		% of Total	6.3%	2.3%	.7%	.2%	4.2%	6.8%	1.4%	0.0%	22.1%



			Race, Eth	nicity, Gende	r Classification (	Business Owners	ship Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Strongly disagree	Count	36	14	11	2	55	78	17	3	216
	% within Q54 There is an informal network of prime contractors/vendors and subcontractors that has excluded my company from doing business in the private sector?	16.7%	6.5%	5.1%	.9%	25.5%	36.1%	7.9%	1.4%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	29.5%	43.8%	64.7%	33.3%	61.1%	60.0%	65.4%	100.0%	50.7%
	% of Total	8.5%	3.3%	2.6%	.5%	12.9%	18.3%	4.0%	.7%	50.7%
Don't know	Count	11	1	1	2	5	12	1	0	33
	% within Q54 There is an informal network of prime contractors/vendors and subcontractors that has excluded my company from doing business in the private sector?	33.3%	3.0%	3.0%	6.1%	15.2%	36.4%	3.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	9.0%	3.1%	5.9%	33.3%	5.6%	9.2%	3.8%	0.0%	7.7%
	% of Total	2.6%	.2%	.2%	.5%	1.2%	2.8%	.2%	0.0%	7.7%



			Race, Eth	nicity, Gende	er Classification (	Business Owners	ship Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q54 There is an informal network of prime contractors/vendors and subcontractors that has excluded my company from doing business in the private sector?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



### Q55 Have you or your company experienced discriminatory behavior when attempting to do work or working in the private sector between 2009 and 2014? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Eth	nicity, Gende	r Classification (	Business Owners	hip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q55 Have you or your	Yes	Count	33	3	2	0	7	3	1	0	49
company experienced discriminatory behavior when attempting to do work or working in the private sector between 2009 and 2014?		% within Q55 Have you or your company experienced discriminatory behavior when attempting to do work or working in the private sector between 2009 and 2014?	67.3%	6.1%	4.1%	0.0%	14.3%	6.1%	2.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	27.0%	9.4%	11.8%	0.0%	7.8%	2.3%	3.8%	0.0%	11.5%
		% of Total	7.7%	.7%	.5%	0.0%	1.6%	.7%	.2%	0.0%	11.5%
	No	Count	79	23	14	5	81	121	25	3	351
		% within Q55 Have you or your company experienced discriminatory behavior when attempting to do work or working in the private sector between 2009 and 2014?	22.5%	6.6%	4.0%	1.4%	23.1%	34.5%	7.1%	.9%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	64.8%	71.9%	82.4%	83.3%	90.0%	93.1%	96.2%	100.0%	82.4%
		% of Total	18.5%	5.4%	3.3%	1.2%	19.0%	28.4%	5.9%	.7%	82.4%
	Do not work in the	Count	4	4	0	1	0	4	0	0	13
	private sector	% within Q55 Have you or your company experienced discriminatory behavior when attempting to do work or working in the private sector between 2009 and 2014?	30.8%	30.8%	0.0%	7.7%	0.0%	30.8%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	12.5%	0.0%	16.7%	0.0%	3.1%	0.0%	0.0%	3.1%
		% of Total	.9%	.9%	0.0%	.2%	0.0%	.9%	0.0%	0.0%	3.1%



				Race, Eth	nicity, Gende	r Classification (	Business Owners	ship Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	Don't Know	Count	6	2	1	0	2	2	0	0	13
		% within Q55 Have you or your company experienced discriminatory behavior when attempting to do work or working in the private sector between 2009 and 2014?	46.2%	15.4%	7.7%	0.0%	15.4%	15.4%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.9%	6.3%	5.9%	0.0%	2.2%	1.5%	0.0%	0.0%	3.1%
		% of Total	1.4%	.5%	.2%	0.0%	.5%	.5%	0.0%	0.0%	3.1%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q55 Have you or your company experienced discriminatory behavior when attempting to do work or working in the private sector between 2009 and 2014?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



#### Q56 How did you become aware of the discrimination against your company? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Eth	nicity, Gende	r Classification (	Business Owners	hip Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q56 How did you become	Verbal comment	Count	10	2	0	0	6	2	0	0	20
aware of the discrimination against your company?		% within Q56 How did you become aware of the discrimination against your company?	50.0%	10.0%	0.0%	0.0%	30.0%	10.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	8.2%	6.3%	0.0%	0.0%	6.7%	1.5%	0.0%	0.0%	4.7%
		% of Total	2.3%	.5%	0.0%	0.0%	1.4%	.5%	0.0%	0.0%	4.7%
	Written	Count	1	0	0	0	0	0	0	0	1
	statement/documents	% within Q56 How did you become aware of the discrimination against your company?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.2%
		% of Total	.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.2%
	Action taken against	Count	4	0	1	0	1	0	0	0	6
	the company	% within Q56 How did you become aware of the discrimination against your company?	66.7%	0.0%	16.7%	0.0%	16.7%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	3.3%	0.0%	5.9%	0.0%	1.1%	0.0%	0.0%	0.0%	1.4%
		% of Total	.9%	0.0%	.2%	0.0%	.2%	0.0%	0.0%	0.0%	1.4%



			Race, Eth	nicity, Gende	r Classification (	Business Owners	ship Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Other action	Count	18	1	1	0	0	1	1	0	22
	% within Q56 How did you become aware of the discrimination against your company?	81.8%	4.5%	4.5%	0.0%	0.0%	4.5%	4.5%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	14.8%	3.1%	5.9%	0.0%	0.0%	.8%	3.8%	0.0%	5.2%
	% of Total	4.2%	.2%	.2%	0.0%	0.0%	.2%	.2%	0.0%	5.2%
Don't know	Count	3	0	0	0	0	0	0	0	3
	% within Q56 How did you become aware of the discrimination against your company?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.7%
	% of Total	.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	.7%
No Response	Count	86	29	15	6	83	127	25	3	374
	% within Q56 How did you become aware of the discrimination against your company?	23.0%	7.8%	4.0%	1.6%	22.2%	34.0%	6.7%	.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	70.5%	90.6%	88.2%	100.0%	92.2%	97.7%	96.2%	100.0%	87.8%
	% of Total	20.2%	6.8%	3.5%	1.4%	19.5%	29.8%	5.9%	.7%	87.8%



			Race, Eth	nicity, Gende	r Classification (	Business Owners	ship Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q56 How did you become aware of the discrimination against your company?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



### Q58 Which of the following do you consider the primary reason for your company being discriminated against (private sector)? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

			Race, Et	hnicity, Geno	der Classifica	tion (Business O	wnership Classifi	cation)	
			African American	Asian American	Hispanic American	Nonminority Female	Non-M/WBE	Other	Takal
Q58 Which of the following	Owner's race or	Count	Firms	Firms	Firms	Firms	Firms	Firms	Total
do you consider the	ethnicity		20	3	1	1	1	0	26
primary reason for your company being discriminated against (private sector)?	,	% within Q58 Which of the following do you consider the primary reason for your company being discriminated against (private sector)?	76.9%	11.5%	3.8%	3.8%	3.8%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	57.1%	100.0%	50.0%	14.3%	33.3%	0.0%	51.0%
		% of Total	39.2%	5.9%	2.0%	2.0%	2.0%	0.0%	51.0%
	Owner's gender	Count	0	0	0	1	0	0	1
		% within Q58 Which of the following do you consider the primary reason for your company being discriminated against (private sector)?	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	0.0%	0.0%	0.0%	14.3%	0.0%	0.0%	2.0%
		% of Total	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	2.0%
	Both race and gender	Count	9	0	1	1	1	1	13
		% within Q58 Which of the following do you consider the primary reason for your company being discriminated against (private sector)?	69.2%	0.0%	7.7%	7.7%	7.7%	7.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	25.7%	0.0%	50.0%	14.3%	33.3%	100.0%	25.5%
		% of Total	17.6%	0.0%	2.0%	2.0%	2.0%	2.0%	25.5%



			Race, Et	hnicity, Geno	der Classifica	tion (Business O	wnership Classifi	cation)	
			African American Firms	Asian American Firms	Hispanic American Firms	Nonminority Female Firms	Non-M/WBE Firms	Other Firms	Total
	Other reason	Count	4	0	0	4	0	0	8
		% within Q58 Which of the following do you consider the primary reason for your company being discriminated against (private sector)?	50.0%	0.0%	0.0%	50.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	11.4%	0.0%	0.0%	57.1%	0.0%	0.0%	15.7%
		% of Total	7.8%	0.0%	0.0%	7.8%	0.0%	0.0%	15.7%
	Don't know	Count	2	0	0	0	1	0	3
		% within Q58 Which of the following do you consider the primary reason for your company being discriminated against (private sector)?	66.7%	0.0%	0.0%	0.0%	33.3%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	5.7%	0.0%	0.0%	0.0%	33.3%	0.0%	5.9%
		% of Total	3.9%	0.0%	0.0%	0.0%	2.0%	0.0%	5.9%
Total		Count	35	3	2	7	3	1	51
		% within Q58 Which of the following do you consider the primary reason for your company being discriminated against (private sector)?	68.6%	5.9%	3.9%	13.7%	5.9%	2.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	68.6%	5.9%	3.9%	13.7%	5.9%	2.0%	100.0%



#### Q60 When did the discrimination first occur (private sector)? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Eth	nicity, Gende	er Classification (	Business Owners	ship Classific	ation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q60 When did the	During the bidding	Count	6	0	0	0	3	3	0	0	12
discrimination first occur (private sector)?	process	% within Q60 When did the discrimination first occur (private sector)?	50.0%	0.0%	0.0%	0.0%	25.0%	25.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.9%	0.0%	0.0%	0.0%	3.3%	2.3%	0.0%	0.0%	2.8%
		% of Total	1.4%	0.0%	0.0%	0.0%	.7%	.7%	0.0%	0.0%	2.8%
	During contract	Count	2	1	0	0	1	0	0	0	4
	negotiations	% within Q60 When did the discrimination first occur (private sector)?	50.0%	25.0%	0.0%	0.0%	25.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	1.6%	3.1%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	.9%
		% of Total	.5%	.2%	0.0%	0.0%	.2%	0.0%	0.0%	0.0%	.9%
	After contract award	Count	9	0	0	0	0	0	0	0	9
		% within Q60 When did the discrimination first occur (private sector)?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	7.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%
		% of Total	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%



			Race, Eth	nicity, Gende	r Classification (	Business Owners	ship Classific	cation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
All of the above	Count	12	1	1	0	3	0	1	0	18
	% within Q60 When did the discrimination first occur (private sector)?	66.7%	5.6%	5.6%	0.0%	16.7%	0.0%	5.6%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	9.8%	3.1%	5.9%	0.0%	3.3%	0.0%	3.8%	0.0%	4.2%
	% of Total	2.8%	.2%	.2%	0.0%	.7%	0.0%	.2%	0.0%	4.2%
Don't Know	Count	5	1	1	0	0	0	0	0	7
	% within Q60 When did the discrimination first occur (private sector)?	71.4%	14.3%	14.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	4.1%	3.1%	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%
	% of Total	1.2%	.2%	.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%
No Response	Count	88	29	15	6	83	127	25	3	376
	% within Q60 When did the discrimination first occur (private sector)?	23.4%	7.7%	4.0%	1.6%	22.1%	33.8%	6.6%	.8%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	72.1%	90.6%	88.2%	100.0%	92.2%	97.7%	96.2%	100.0%	88.3%
	% of Total	20.7%	6.8%	3.5%	1.4%	19.5%	29.8%	5.9%	.7%	88.3%



			Race, Eth	nicity, Gende	r Classification (	Business Owners	hip Classific	ation)		
		African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Total	Count	122	32	17	6	90	130	26	3	426
	% within Q60 When did the discrimination first occur (private sector)?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
	% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



### Q61 Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by the WSSC or their primes? \* Race, Ethnicity, Gender Classification (Business Ownership Classification) Crosstabulation

				Race, Eth	nicity, Gende	r Classification (	Business Owners	ship Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
Q61 Are you willing to	Yes	Count	10	1	0	0	1	0	0	0	12
speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by the WSSC or their primes?		% within Q61 Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by the WSSC or their primes?	83.3%	8.3%	0.0%	0.0%	8.3%	0.0%	0.0%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	8.2%	3.1%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	2.8%
		% of Total	2.3%	.2%	0.0%	0.0%	.2%	0.0%	0.0%	0.0%	2.8%
	No	Count	24	2	2	0	6	3	1	0	38
		% within Q61 Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by the WSSC or their primes?	63.2%	5.3%	5.3%	0.0%	15.8%	7.9%	2.6%	0.0%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	19.7%	6.3%	11.8%	0.0%	6.7%	2.3%	3.8%	0.0%	8.9%
		% of Total	5.6%	.5%	.5%	0.0%	1.4%	.7%	.2%	0.0%	8.9%



				Race, Eth	nicity, Gende	r Classification (	Business Owners	ship Classific	cation)		
			African American Firms	Asian American Firms	Hispanic American Firms	Native American Firms	Nonminority Female Firms	Non- M/WBE Firms	Other Firms	Don't Know	Total
	No Response	Count	88	29	15	6	83	127	25	3	376
		% within Q61 Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by the WSSC or their primes?	23.4%	7.7%	4.0%	1.6%	22.1%	33.8%	6.6%	.8%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	72.1%	90.6%	88.2%	100.0%	92.2%	97.7%	96.2%	100.0%	88.3%
		% of Total	20.7%	6.8%	3.5%	1.4%	19.5%	29.8%	5.9%	.7%	88.3%
Total		Count	122	32	17	6	90	130	26	3	426
		% within Q61 Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by the WSSC or their primes?	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%
		% within Race, Ethnicity, Gender Classification (Business Ownership Classification)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	7.5%	4.0%	1.4%	21.1%	30.5%	6.1%	.7%	100.0%



### APPENDIX J

### IN-DEPTH INTERVIEW GUIDE



#### APPENDIX J: IN-DEPTH 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 Washington Suburban Sanitary Commission (WSSC), its prime contractors/vendors, and the private sector. Your responses and comments should focus on the period between 2009 and 2014. At the conclusion of the interview you will be asked to sign an Affidavit attesting to the fact the information you have provided was given freely and represents an accurate reflection of your experiences doing business or attempting to do business with WSSC or its primes. **Please note that all interviews are confidential—responses to the interviews will be aggregated and summarized and any remarks or comments made during the interview will not attributed to any individual respondent.** 

WSSC manages two business inclusion programs: the MBE Program includes African American, Asian American, Hispanic American, Native American, and Nonminority Women, and the SLBE Program includes any firm that meets WSSC's local and size requirements.

The reference to "primes" in this interview refers to firms that have received, bid on, or submitted proposals directly to WSSC.

**Q1.** Please **specify** your company's primary line of business? (*Try to get a good feel for what they do.*)

1.	Construction (water and sewer line construction, excavating, general contracting, construction management, carpentry, site work, electrical, etc.) Specify
2.	<b>Architecture and Engineering</b> (architecture, engineering, civil engineering, environmenta engineering, mechanical engineering, etc.) Specify
3.	Professional Services (accounting, legal services, IT consulting, etc.) Specify
4.	Non-Professional Services (security, janitorial services, auto repair, maintenance services, landscaping, etc.) Specify
5.	Goods, Equipment, Supplies (commodities, computers, vehicles, furniture, etc.) Specify
6.	Other: Specify



Q2.	How many combined years of experiency your primary line of business?	nce do you or the primary owner(s) of your firm have in
	<b>O</b> 0 – 5 years 1	
	O 6 – 10 years 2	
	O 11 - 15 years 3	
	O 16 - 20 years 4	
	O 20 + years 5	
Q3.	Between <b>2009</b> and <b>2014</b> , what was the payroll, including full-time and part-time	e average number of employees on your company's me staff?
	O 0-10 1	
	O 11 - 20 2	
	O 21 - 30 3	
	O 31 - 40 4	
	O 41+ 5	
<b>Q4</b> .	Is <b>more than 50 percent</b> of your comp	pany woman-owned and controlled?
	O Yes 1	
	O No 2	
	O Don't Know 3	
Q5.	Is <b>more than 50 percent</b> of the compethnic groups? <i>[Get as much detail as p</i>	any owned and controlled by one of the following racial or ossible.]
	O Anglo/Caucasian/White	1
	O Black / African American	2
	O American Indian/Alaskan Native	3
	O Asian	4
	O Hispanic or Latino	5
	O Native Hawaiian/ Pacific Islander	6
	O Don't Know	7 Specify:
	O Other	8
Q6.	In what year was your business establi	ished or purchased by the most recent owner(s)?



<b>Q</b> 7.	Does your company bid/quote/ Subcontractor? OR both?	propose primar	rily as a	prime coi	ntractor/con	nsultant or ve	endor?
	<ul><li>O Prime Contractor/Consultar</li><li>O Subcontractor or subconsult</li><li>O Both</li></ul>		1 2 3				
Q8.	How do you find out about oppodo you use their website, attend P						xample,
	<b>Q8a</b> . Give specifics on the effects	iveness of the m	ethods	you indica	ated.		
Q9.	Which of the following categoric calendar year <b>2014</b> ?	es best approxir	nates y	our compa	any's gross r	evenues for	
	<ul> <li>Up to \$50,000?</li> <li>\$50,001 to \$100,000?</li> <li>\$100,001 to \$300,000?</li> <li>\$300,001 to \$500,000?</li> <li>\$500,001 to \$1 million?</li> <li>\$1,000,001 to \$3 million?</li> <li>\$3,000,001 to \$5 million?</li> <li>\$5,000,001 to \$10 million?</li> <li>Over \$10 million?</li> <li>Don't Know</li> </ul>	1 2 3 4 5 6 7 8 9					
Q10.	What percentage of these gross public government sector project		arned f total 10		C, the private	e sector, and	other
011	O WSSC% O Private Sector% O Other Public Sector% Does your company hold any of	f the following c	ertifica	tions with	n WSSC? ( <b>C</b> h	neck all that	annly )
<b>~-1</b> ·	2000 your company note they of			Yes(1)	No (2)	Don't Know(3)	

	Yes(1)	No (2)	Don't Know(3)
1. Minority Business Enterprise (MBE)			
2. Small Business Enterprise (SBE)			
3. Woman Business Enterprise (WBE)			
4. Disadvantaged Business Enterprise (DBE)			
5. Small Local Business Enterprise (SLBE)			
6. Don't Know			
7. None			



#### IF INTERVIEWEE IS A PRIME:

**Q12.** Has your MBE or SLBE certification assisted your firm in winning contracts?

**Q12a.** If so, how has certification assisted your firm?

**Q13**. Between **2009** and **2014**, indicate a range of the number of times you have been awarded a contract or purchase order with the WSSC as a prime contractor/consultant or vendor?

O	None	1
$\mathbf{O}$	1-10 times	2
$\mathbf{O}$	11-25 times	3
$\mathbf{O}$	26-50 times	4
$\mathbf{O}$	51-100 times	5
O	Over 100 times	6
O	Don't Know	7

**Q14**. Have you ever protested a bid, proposal, or contract awarded by any of the WSSC?

0	Yes	1
O	No	2
$\mathbf{C}$	Don't Know	3

**14a**. If yes, please provide as much detail as possible on why and the results.



**Q15**. In your experience, have any of the following been a barrier to attempting to do work or working on any of the WSSC projects as a **prime contractor/consultant or vendor**:

	Yes (1)	No (2)	Don't Know (3)	Not Applicable (4)
21. Prequalification requirements				
22. Bid bond requirement				
23. Performance/payment bond requirement				
24. Cost of bidding/proposing				
25. Financing				
26. Insurance (general liability, professional liability, etc.)				
27. Price of supplies/materials				
28. Proposal/Bid specifications				
29. Short or limited time given to prepare bid package or quote				
30. Limited knowledge of purchasing contracting policies and procedures				
31. Lack of experience				
32. Lack of personnel				
33. Contract too large				
34. Selection process/evaluation criteria				
35. Unnecessary restrictive contract specifications				
36. Slow payment or nonpayment				
37. Competing with large companies				
38. Changes in the scope of work (after work began)				
39. Meeting MBE or SLBE goals or good faith effort requirements				
40. Ease of identifying MBE or SLBE firms through WSSC website/online directory				

**Q15a.** Please explain why the items you selected are barriers.



Q16.			d-SLBE) prime, do you believe you are receiving fair treatment once you ct/purchase order and performing at the approved worksite?
Q17.	of t	= -	onsultant or vendor did you experience discriminatory behavior by any attempting to do work or working on their projects between <b>2009</b> and
	0	Yes	1
	0	No	2
	O	Don't Know	3
	Q1		ow you felt you were discriminated against and why? (Ask if they have to support their response)
	Q1	<b>7b</b> . Did you file a cor	mplaint? If so, what was the result?
	Q1	<b>7c</b> . If not why?	
Q18.	Has	s the WSSC's MBE and	d/or SLBE Programs impacted your firm's ability to win contracts?
	O	Yes	1
	0	No	2
	0	Don't Know	3
	Q	<b>18a.</b> If so, how have	the Programs impacted your business?
		II	F INTERVIEWEE IS A SUBCONTRACTOR
Q19.			4, indicate a range of the number of times you have been awarded a corder with primes on WSSC projects or contracts.
	O	None	
	$\mathbf{O}$	1-10 times	
	$\mathbf{O}$	11-25 times	
	0	26-50 times	
	0	51-100 times	
	$\mathbf{O}$	Over 100 times	
	O	Don't Know	



Q20.	trea	•		d-SLBE) prime or subcontractor, do you believe you are receiving fair awarded a contract/purchase order and are performing at the approved
	0	Yes		1
	O	No		2
	0	Don't Know	,	3
Q21.				tractors/consultants or vendors use your firm to satisfy WSSC's bid or then not utilize your services once their contract has been awarded?
	0	Very Often	1	
		Sometimes	2	
	O	Seldom	3	
	O	Never	4	
	O	Don't know	5	
Q22.	wit	h WSSC, were	e inform	4, have you ever submitted a bid with a prime contractor for a project ed that you were the lowest bidder, and then found out that another ally doing the work?
	C	Yes	1	
	O	No	2	
	O	Don't Know	3	
	Q22	<b>2a</b> . If yes, ple	ase pro	vide details on what happened.
Q23.	prii		-	ou experience discriminatory behavior between <b>2009 and 2014</b> from a ltant or vendor when attempting to do work or working on any of the
	) )	Yes No Don't Know	2	
	_	<b>3a.</b> If yes, exp lence to suppor		w you felt you were discriminated and why? (Ask if they have documented isponse)
	Q2:	<b>3b.</b> Did you f	ile a cor	nplaint? If so, what was the result?
	Q2:	<b>3c.</b> If not why	y?	



**Q24.** In your experience, have any of the following been a barrier to attempting to work or working on projects as a subcontractor with <u>primes</u> on any the WSSC projects:

	Yes (1)	No (2)	Don't Know (3)	Not Applicable (4)
15. Performance/payment bond requirement				
16. Cost of bidding/proposing				
17. Financing				
18. Insurance (general liability, professional liability, etc.)				
19. Price of supplies/materials				
20. Short or limited time given to prepare bid estimate or quote				
21. Lack of experience				
22. Lack of personnel				
23. Contract too large				
24. Slow payment or nonpayment				
25. Competing with large companies				
26. Solicitation of subcontractor bids after contract award (i.e. bid shopping)				
27. Awarded scope of work changed, reduced, or eliminated				

**Q24a.** Please explain why you think the items you selected are barriers.

Q25.	Do you feel there is an informal network of prime contractors or vendors that has excluded your
	company from doing business in the <u>private sector</u> ?

- O Very Often 1
- O Sometimes 2
- O Seldom 3
- O Never 4
- O Don't know 5



**O** No 2

**Q26.** How often do prime contractors/consultants or 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?

	sector?		
	O	Yes No Don't Know	1 2 3
	Q27a.	If yes, explain	how you felt you were discriminated and why?
			ALL INTERVIEWEES
Q28.	includes requiren	minority or wo	or observed a situation in which a prime contractor/consultant or vendor oman subcontractors on a bid or proposal to satisfy the "good faith effort" drops the company as a subcontractor after winning the award for no
	O Yes O No	1 2	
	<b>Q28a.</b> If	f yes, please pro	ovide details on what you experienced or observed.
Q29.	-	-	mendations on how the WSSC can improve the tracking and utilization of SSC projects and purchases?
Q30.	In your o any of th WSSC.	opinion, what ar ne WSSC or the	re the biggest obstacles faced by MBE businesses in securing contracts with WSSC' prime contractors/vendors? Please specify the obstacles for each
Q31.			access to capital as being an impediment to securing contracts with the on the WSSC' projects?
	O Yes O No	1 2	
	<b>Q31a</b> . If	yes, describe h	now?
Q32.		u experienced l racts on the WS	bonding as being an impediment to securing contracts with the WSSC or SC' projects?
	O Yes O No	1 2	
	<b>Q32a</b> . If	yes, describe h	now?

**Q27.** As a subcontractor did you experience discriminatory behavior between **2009 and 2014** from a prime contractor/consultant or vendor when attempting to do work or working in the private



**Q33**. Is there anything that we have not covered that you feel will be helpful to this study?

O Yes 1

O No

**Q33a**. If yes, please explain.

2



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 WASHINGTON SUBURBAN
SANITARY COMMISSION. 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 K

#### SURVEY OF VENDORS REGRESSION



#### APPENDIX K: SURVEY OF VENDOR REGRESSION

Revenue with original ordinal categories in the questionnaire.

#### PLUM – Ordinal Regression

TABLE K-1 CASE PROCESSING SUMMARY

	ROCESSING SUMMARY	N	Marginal Percentage
Revenue-Q18 Which of the following categories	Up to \$50,000?	21	.1
best approximate your company's gross	\$50,001 to \$100,000?	21	.1
revenues for calendar year 2014?	\$100,001 to \$300,000?	37	.1
	\$300,001 to \$500,000?	28	.1
	\$500,001 to \$1 million?	43	.1
	\$1,000,001 to \$3 million?	68	.2
	\$3,000,001 to \$5 million?	28	.1
	\$5,000,001 to \$10 million?	32	.1
	Over \$10 million?	47	.1
Q4 Please specify your company's primary line of	Construction	67	.2
business?	Architecture & Engineering	28	.1
	Professional Services	68	.2
	Non-Professional Services	67	.2
	Goods and commodities	95	.3
Race, Ethnicity, and Gender Categories	African American Firms	102	.3
	Asian American Firms	28	.1
	Hispanic American Firms	16	.0
	Native American Firms	6	.0
	Nonminority Female Firms	76	.2
	Non-M/WBE Firms	97	.3
Education-Q14 What is the highest level of	Some High School	4	.0
education completed by the primary owner of	High School Graduate	28	.1
your company?	Trade or Technical Education	12	.0
	Some College	48	.1
	College Degree	117	.4
	Post Graduate Degree	116	.4
Number of Employees-Q17 In the last three	0-10 employees	152	.5
years, what was the average number of	11-20 employees	56	.2
employees on your company's payroll, including	21-30 employees	34	.1
full-time and part-time staff?	31-40 employees	17	.1
	41+ employees	66	.2
MBE Certificate	No	166	.5
	Yes	159	.5



### TABLE K-1 (cont.) CASE PROCESSING SUMMARY

		N	Marginal Percentage
SBE Certificate	No	181	.6
	Yes	144	.4
WBE Certificate	No	240	.7
	Yes	85	.3
DBE Certificate	No	235	.7
	Yes	90	.3
SLBE Certificate	No	253	.8
	Yes	72	.2
Q22 Does your company bid primarily as a prime contractor/consultant or vendor,	Prime contractor/consultant or vendor	124	.4
subcontractor/subconsultant/supplier or both?	Subcontractor/subconsultant or supplier	72	.2
	Both	129	.4
Valid		325	1.0
Missing		101	
Total		426	

TABLE K-2 MODEL FITTING INFORMATION

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	1380.908			
Final	1121.768	259.140	26	.000

TABLE K-3 GOODNESS-OF-FIT

	Chi-Square	df	Sig.
Pearson	3732.215	2558	.000
Deviance	1120.382	2558	1.000

TABLE K-4 PSEUDO R-SQUARE

Cox and Snell	.549
Nagelkerke	.557
McFadden	.187



TABLE K-5
PARAMETER ESTIMATES

		PARAIVIE	LIX ESTIM	AILS				
		Estimate	Std.	Wald	df	Sig.	Inter	
		Latimate	Error	vvalu	- ui	Jig.	Lower Bound	Upper Bound
Threshold	[GrossRevenue1 = 1]	2.373	11.732	.041	1	.840	-20.621	25.367
	[GrossRevenue1 = 2]	3.271	11.733	.078	1	.780	-19.725	26.266
	[GrossRevenue1 = 3]	4.262	11.735	.132	1	.716	-18.739	27.263
	[GrossRevenue1 = 4]	4.893	11.737	.174	1	.677	-18.112	27.897
	[GrossRevenue1 = 5]	5.836	11.739	.247	1	.619	-17.172	28.844
	[GrossRevenue1 = 6]	7.530	11.739	.411	1	.521	-15.477	30.537
	[GrossRevenue1 = 7]	8.337	11.739	.504	1	.478	-14.670	31.345
	[GrossRevenue1 = 8]	9.384	11.739	.639	1	.424	-13.625	32.393
Location	YrEstablished	.005	.006	.832	1	.362	006	.017
	[Q4=1.0]	310	.317	.958	1	.328	930	.311
	[Q4=2.0] A&E	872	.418	4.350	1	.037	-1.691	053
	[Q4=3.0]	562	.338	2.759	1	.097	-1.225	.101
	[Q4=4.0] Non-Prof Services	932	.311	8.980	1	.003	-1.541	322
	[Q4=5.0]	0			0			
	[RaceEthnicity=1.00] African-Am	949	.383	6.123	1	.013	-1.700	197
	[RaceEthnicity=2.00]	472	.489	.929	1	.335	-1.430	.487
	[RaceEthnicity=3.00]	.075	.555	.018	1	.893	-1.013	1.163
	[RaceEthnicity=4.00]	.225	.855	.069	1	.793	-1.451	1.901
	[RaceEthnicity=5.00]	421	.357	1.391	1	.238	-1.122	.279
	[RaceEthnicity=6.00]	0			0			
	[Education=1]	.208	.968	.046	1	.830	-1.690	2.105
	[Education=2]	353	.424	.694	1	.405	-1.184	.477
	[Education=3]	.405	.599	.458	1	.499	768	1.578
	[Education=4]	341	.344	.983	1	.321	-1.016	.333
	[Education=5]	071	.264	.072	1	.789	589	.447
	[Education=6]	0			0			
	[NofEmpl=1]	-4.632	.390	141.10	1	.000	-5.396	-3.868
	·			1				
	[NofEmpl=2]	-3.087	.399	59.807	1	.000	-3.870	-2.305
	[NofEmpl=3]	-1.592	.415	14.694	1	.000	-2.407	778
	[NofEmpl=4]	-1.570	.515	9.277	1	.002	-2.580	560
	[NofEmpl=5]	0			0			
	[MBE=.00]	.260	.296	.771	1	.380	320	.840
	[MBE=1.00]	0			0			
	[SBE=.00]	184	.229	.648	1	.421	632	.264



TABLE K-5 (cont.)
PARAMETER ESTIMATES

	1 / (I V (I V I L I	LIV LOTTIVI	/				
		Std.				Inter	val
	Estimate	Error	Wald	df	Sig.	Lower Bound	Upper Bound
[SBE=1.00]	0			0			
[WBE=.00]	395	.286	1.910	1	.167	954	.165
[WBE=1.00]	0	•		0		•	
[DBE=.00]	.114	.298	.146	1	.702	470	.698
[DBE=1.00]	0	•		0		•	
[SLBE=.00]	398	.280	2.016	1	.156	948	.152
[SLBE=1.00]	0			0			
[Q22=1.0]	.083	.240	.121	1	.728	386	.553
[Q22=2.0]	470	.282	2.772	1	.096	-1.023	.083
[Q22=3.0]	0			0			

TABLE K-6
TEST OF PARALLEL LINESC

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	1121.768			
General	585.866	535.902	182	.000



### APPENDIX L

#### STANDARD DEVIATION TESTS



#### APPENDIX L: SIGNIFICANCE TESTS

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.

The hypothesis being tested is whether or not an observed disparity is statistically significant. Significance testing 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 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 644 <sup>3</sup> (a report written for the Transportation Research Board of the National Academy of Sciences) notes that:

- ". . . for statistical disparities to be taken as legally dispositive in the discrimination context, they should be (a) statistically significant and (b) "substantively" significant. Substantive significance is taken to mean, for example, a DBE utilization measure that is less than or equal to 80% of the corresponding DBE availability measure."
- ► The t-statistic used in this report (in the box on this page) used for statistical significance comes from the National Cooperative Highway Research Program Report 644. <sup>5</sup>
- ▶ The t-statistic from this formula is then compared against a table of critical values of the Student t distribution to determine statistical significance. "In discrimination cases, the courts have usually required p-values of 5% or less to establish statistical significance in a two-sided case." <sup>6</sup>

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

<sup>&</sup>lt;sup>6</sup> Id.



 $t = \frac{u - a}{\sqrt{\frac{a*(1-a)*\sum c_i^2}{(\sum c_i)^2}}}$  t = the t-statistic u = the ratio of minority- and women-owned firms dollars to total dollars a = the ratio of M/W/DBE firms to all firms  $c_i = \text{the dollar amount.}$ 

t-statistic Formula

<sup>&</sup>lt;sup>3</sup> National Academy of Sciences, NCHRP Report 644 *Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program*.

<sup>&</sup>lt;sup>4</sup> Id at 49.

<sup>&</sup>lt;sup>5</sup> Id. at 50.

#### APPENDIX M

# PROCUREMENT CARD (P-CARD) TRANSACTIONS ANALYSIS



## APPENDIX M: PROCUREMENT CARD (P-CARD) TRANSACTIONS ANALYSIS

#### TABLE M-1 WASHINGTON SUBURBAN SANITARY COMMISSION PROCUREMENT CARD ANALYSIS

FY 2010-2014

		1 1 2010 20				
BUSINESS OWNERSHIP	2009-10	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
African American Firms	\$145,371	\$144,739	\$88,392	\$129,756	\$180,634	\$688,892
Asian American Firms	\$11,911	\$16,229	\$17,456	\$21,446	\$7,865	\$74,906
Hispanic American Firms	\$0	\$5,897	\$0	\$24,066	\$1,884	\$31,847
Native American Firms	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL MINORITY FIRMS	\$157,281	\$166,865	\$105,848	\$175,268	\$190,382	\$795,645
Nonminority Women Firms	\$74,287	\$97,513	\$153,701	\$294,636	\$210,047	\$830,184
TOTAL M/WBE FIRMS	\$231,568	\$264,378	\$259,550	\$469,904	\$400,429	\$1,625,829
TOTAL NON-M/WBE FIRMS	\$4,263,871	\$4,362,697	\$4,117,905	\$5,393,554	\$5,383,567	\$23,521,595
TOTAL FIRMS	\$4,495,439	\$4,627,075	\$4,377,455	\$5,863,458	\$5,783,997	\$25,147,423
BUSINESS OWNERSHIP	2009-10	2010-11	2011-12	2012-13	2013-14	TOTAL
CLASSIFICATION	(%)	(%)	(%)	(%)	(%)	(%)
African American Firms	3.23%	3.13%	2.02%	2.21%	3.12%	2.74%
Asian American Firms	0.26%	0.35%	0.40%	0.37%	0.14%	0.30%
Hispanic American Firms	0.00%	0.13%	0.00%	0.41%	0.03%	0.13%
Native American Firms	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL MINORITY FIRMS	3.50%	3.61%	2.42%	2.99%	3.29%	3.16%
Nonminority Women Firms	1.65%	2.11%	3.51%	5.02%	3.63%	3.30%
TOTAL M/WBE FIRMS	5.15%	5.71%	5.93%	8.01%	6.92%	6.47%
TOTAL NON-M/WBE FIRMS	94.85%	94.29%	94.07%	91.99%	93.08%	93.53%
TOTAL FIRMS				100.00%	100.00%	100.00%

Source: MGT developed a Master Procurement Card database based on data retrieved from WSSC's procurement card vendors for the period between 07/01/2009 through 06/30/2014.



### APPENDIX N

#### PRIVATE SECTOR DISPARITIES



#### APPENDIX N: PRIVATE SECTOR DISPARITIES

The following present measures of private sector disparities based on 2012 SBO data. MGT calculated private sector disparity indices to examine whether minority- and women-owned firms received a proportional share of firm sales based on the availability of minority- and women-owned firms. Disparity indices were examined for all firms and employer firms. All firms were examined since it is plausible nonemployer firms can provide services at the subcontractor/subconsultant level, as well hire independent contractors to increase capacity. **Chapter 6**, **Private Sector and Non-Goal Analyses** presents the results by NAICS codes at the two-digit level for the State of Maryland and Washington-Arlington-Alexandria, DC-VA-MD-WV MSA marketplaces.

The following NAICS codes were analyzed and thus presented in the following section:

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

The results based on the Baltimore-Columbia-Towson, Maryland metro area are presented first followed by Silver Spring-Frederick-Rockville, Maryland metro area and District of Columbia.



#### BALTIMORE-COLUMBIA-TOWSON, MARYLAND METRO MARKETPLACE

## TABLE N-1 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 23, CONSTRUCTION

### U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, BALTIMORE-COLUMBIA-TOWSON MARKETPLACE

BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)
All Firms	22,468	\$18,291,808	6,926	\$17,482,700
African American Firms	2,473	\$292,537	157	\$247,608
Native American Firms <sup>1</sup>	143	\$16,641	15	\$14,055
Asian American Firms <sup>2</sup>	719	\$115,238	82	\$86,404
Hispanic American Firms	1,369	\$274,424	250	\$238,556
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A
	PERCEN	TAGE OF MARKETPLA	CE	
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	11.01%	1.60%	2.27%	1.42%
Native American Firms <sup>1</sup>	0.64%	0.09%	0.22%	0.08%
Asian American Firms <sup>2</sup>	3.20%	0.63%	1.18%	0.49%
Hispanic American Firms	6.09%	1.50%	3.61%	1.36%
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A
	[	DISPARITY INDEX		
		ALL FIRMS		EMPLOYER FIRMS
All Firms		100.00		100.00
African American Firms		14.53		62.48
Native American Firms <sup>1</sup>		14.29		37.12
Asian American Firms <sup>2</sup>		19.69		41.74
Hispanic American Firms		24.62		37.80
Nonminority Female Firms <sup>3</sup>		N/A		N/A

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

N/A denotes data on business ownership classification group was not available.

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

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

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

### U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, BALTIMORE-COLUMBIA-TOWSON MARKETPLACE

BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS	
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)	
All Firms	5,597	\$53,737,584	2,930	\$53,570,636	
African American Firms	485	\$246,970	61	\$240,815	
Native American Firms <sup>1</sup>	N/A	N/A	N/A	N/A	
Asian American Firms <sup>2</sup>	307	\$866,390	157	\$848,375	
Hispanic American Firms	119	\$303,618	34	\$293,372	
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A	
	PERCEN	TAGE OF MARKETPLAG	CE		
All Firms	100.00%	100.00%	100.00%	100.00%	
African American Firms	8.67%	0.46%	2.08%	0.45%	
Native American Firms <sup>1</sup>	N/A	N/A	N/A	N/A	
Asian American Firms <sup>2</sup>	5.49%	1.61%	5.36%	1.58%	
Hispanic American Firms	2.13%	0.57%	1.16%	0.55%	
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A	
DISPARITY INDEX					
		ALL FIRMS		EMPLOYER FIRMS	
All Firms		100.00		100.00	
African American Firms		5.30		21.59	
Native American Firms <sup>1</sup>		N/A		N/A	
Asian American Firms <sup>2</sup>		29.39		29.55	
Hispanic American Firms		26.57		47.19	
Nonminority Female Firms <sup>3</sup>		N/A		N/A	

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

N/A denotes data on business ownership classification group was not available.

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

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

DUCINIECE OWNEDCHID	ALL FIDMC	ALL FIDME CALEC	ENADL OVED	ENADLOVED FIDMS	
BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS	
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)	
All Firms	39,402	\$28,172,562	8,671	\$26,312,388	
African American Firms	4,831	\$550,459	377	\$441,920	
Native American Firms <sup>1</sup>	198	\$13,640	26	S	
Asian American Firms <sup>2</sup>	2,378	\$1,096,386	548	\$1,005,469	
Hispanic American Firms	984	\$325,466	148	\$285,762	
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A	
	PERCEN	TAGE OF MARKETPLAG	CE		
All Firms	100.00%	100.00%	100.00%	100.00%	
African American Firms	12.26%	1.95%	4.35%	1.68%	
Native American Firms <sup>1</sup>	0.50%	0.05%	0.30%	S	
Asian American Firms <sup>2</sup>	6.04%	3.89%	6.32%	3.82%	
Hispanic American Firms	2.50%	1.16%	1.71%	1.09%	
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A	
DISPARITY INDEX					
		ALL FIRMS		EMPLOYER FIRMS	
All Firms		100.00		100.00	
African American Firms		15.94		38.63	
Native American Firms <sup>1</sup>		9.63		S	
Asian American Firms <sup>2</sup>		64.48		60.46	
Hispanic American Firms		46.26		63.63	
Nonminority Female Firms <sup>3</sup>		N/A		N/A	

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

N/A denotes data on business ownership classification group was not available.

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

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

## TABLE N-4 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 56, ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT AND REMEDIATION SERVICES

### U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, BALTIMORE-COLUMBIA-TOWSON MARKETPLACE

BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)
All Firms	18,507	\$6,965,369	3,394	\$6,614,946
African American Firms	4,848	\$237,635	262	\$176,186
Native American Firms <sup>1</sup>	131	\$66,856	32	\$65,176
Asian American Firms <sup>2</sup>	539	\$190,878	109	\$183,467
Hispanic American Firms	1,269	\$82,262	113	\$61,407
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A
	PERCEN <sup>®</sup>	TAGE OF MARKETPLA	CE	
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	26.20%	3.41%	7.72%	2.66%
Native American Firms <sup>1</sup>	0.71%	0.96%	0.94%	0.99%
Asian American Firms <sup>2</sup>	2.91%	2.74%	3.21%	2.77%
Hispanic American Firms	6.86%	1.18%	3.33%	0.93%
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A
		DISPARITY INDEX		
		ALL FIRMS		EMPLOYER FIRMS
All Firms		100.00		100.00
African American Firms		13.02		34.50
Native American Firms <sup>1</sup>		135.60		104.50
Asian American Firms <sup>2</sup>		94.09		86.36
Hispanic American Firms		17.22		27.88
Nonminority Female Firms <sup>3</sup>		N/A		N/A

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

N/A denotes data on business ownership classification group was not available.

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

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

# TABLE N-5 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 81, OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION) U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, BALTIMORE-COLUMBIATOWSON MARKETPI ACE

	1000	SON WARKETPLACE		
BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)
All Firms	28,994	\$3,421,113	3,520	\$2,804,218
African American Firms	10,826	\$224,279	152	\$67,723
Native American Firms <sup>1</sup>	191	\$3,473	4	S
Asian American Firms <sup>2</sup>	3,336	\$314,346	631	\$219,255
Hispanic American Firms	932	\$55,217	40	\$32,186
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A
	PERCEN <sup>®</sup>	TAGE OF MARKETPLAC	CE	
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	37.34%	6.56%	4.32%	2.42%
Native American Firms <sup>1</sup>	0.66%	0.10%	0.11%	S
Asian American Firms <sup>2</sup>	11.51%	9.19%	17.93%	7.82%
Hispanic American Firms	3.21%	1.61%	1.14%	1.15%
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A
		DISPARITY INDEX		
		ALL FIRMS		EMPLOYER FIRMS
All Firms		100.00		100.00
African American Firms		17.56		55.93
Native American Firms <sup>1</sup>		15.41		S
Asian American Firms <sup>2</sup>		79.86		43.62
Hispanic American Firms		50.21		101.00
Nonminority Female Firms <sup>3</sup>		N/A		N/A

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

N/A denotes data on business ownership classification group was not available.

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

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

#### SILVER SPRING-FREDERICK-ROCKVILLE, MARYLAND METRO MARKETPLACE

### TABLE N-6 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 23, CONSTRUCTION

U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, SILVER SPRING-FREDERICK-

#### ROCKVILLE MARYLAND MARKETPLACE

BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS		
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)		
All Firms	12,688	\$12,403,487	3,076	\$11,822,968		
African American Firms	885	\$148,048	50	\$129,340		
Native American Firms <sup>1</sup>	89	\$37,093	7	\$34,526		
Asian American Firms <sup>2</sup>	801	\$188,905	171	\$166,627		
Hispanic American Firms	4,390	\$418,756	346	\$234,643		
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A		
	PERCEN	TAGE OF MARKETPLA	CE			
All Firms	100.00%	100.00%	100.00%	100.00%		
African American Firms	6.98%	1.19%	1.63%	1.09%		
Native American Firms <sup>1</sup>	0.70%	0.30%	0.23%	0.29%		
Asian American Firms <sup>2</sup>	6.31%	1.52%	5.56%	1.41%		
Hispanic American Firms	34.60%	3.38%	11.25%	1.98%		
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A		
DISPARITY INDEX						
		ALL FIRMS		EMPLOYER FIRMS		
All Firms		100.00		100.00		
African American Firms		17.11		67.30		
Native American Firms <sup>1</sup>		42.63		128.32		
Asian American Firms <sup>2</sup>		24.12		25.35		
Hispanic American Firms		9.76		17.64		
Nonminority Female Firms <sup>3</sup>		N/A		N/A		

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

N/A denotes data on business ownership classification group was not available.

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

### TABLE N-7 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 42, WHOLESALE TRADE

### U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, SILVER SPRING-FREDERICK-

	NOCKVILLE	VIARTLAIND IVIARRE	II LACL			
BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS		
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)		
All Firms	2,393	\$13,496,468	959	\$13,343,196		
African American Firms	267	\$146,685	26	\$138,995		
Native American Firms <sup>1</sup>	N/A	N/A	N/A	N/A		
Asian American Firms <sup>2</sup>	318	\$408,283	116	\$389,149		
Hispanic American Firms	110	\$124,067	23	\$119,654		
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A		
	PERCEN	TAGE OF MARKETPLAC	CE			
All Firms	100.00%	100.00%	100.00%	100.00%		
African American Firms	11.16%	1.09%	2.71%	1.04%		
Native American Firms <sup>1</sup>	N/A	N/A	N/A	N/A		
Asian American Firms <sup>2</sup>	13.29%	3.03%	12.10%	2.92%		
Hispanic American Firms	4.60%	0.92%	2.40%	0.90%		
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A		
	DISPARITY INDEX					
		ALL FIRMS		EMPLOYER FIRMS		
All Firms		100.00		100.00		
African American Firms		9.74		38.42		
Native American Firms <sup>1</sup>		N/A		N/A		
Asian American Firms <sup>2</sup>		22.76		24.11		
Hispanic American Firms		20.00		37.39		
Nonminority Female Firms <sup>3</sup>		N/A		N/A		

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

N/A denotes data on business ownership classification group was not available.

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

# TABLE N-8 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 54, PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, SILVER SPRING-FREDERICK ROCKVILLE MARYLAND MARKETPLACE

	KOCKVILLE	VIARYLAND WARKE	IPLACE	
BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)
All Firms	31,328	\$19,285,109	6,153	\$17,976,029
African American Firms	3,161	\$577,897	274	\$480,522
Native American Firms <sup>1</sup>	130	\$41,763	12	\$38,046
Asian American Firms <sup>2</sup>	3,863	\$1,612,610	968	\$1,460,638
Hispanic American Firms	1,877	\$359,950	193	\$311,793
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A
	PERCEN	TAGE OF MARKETPLA	CE	
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	10.09%	3.00%	4.45%	2.67%
Native American Firms <sup>1</sup>	0.41%	0.22%	0.20%	0.21%
Asian American Firms <sup>2</sup>	12.33%	8.36%	15.73%	8.13%
Hispanic American Firms	5.99%	1.87%	3.14%	1.73%
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A
	[	DISPARITY INDEX		
		ALL FIRMS		EMPLOYER FIRMS
All Firms		100.00		100.00
African American Firms		29.70		60.03
Native American Firms <sup>1</sup>		52.19		108.52
Asian American Firms <sup>2</sup>		67.81		51.65
Hispanic American Firms		31.15		55.30
Nonminority Female Firms <sup>3</sup>		N/A		N/A

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

 $\ensuremath{\text{N/A}}$  denotes data on business ownership classification group was not available.

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

## TABLE N-9 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 56, ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT AND REMEDIATION SERVICES

U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, SILVER SPRING-FREDERICK-ROCKVILLE MARYLAND MARKETPLACE

BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)
All Firms	11,393	\$4,922,717	2,044	\$4,705,403
African American Firms	1,531	\$256,358	139	\$234,510
Native American Firms <sup>1</sup>	129	\$11,737	15	\$10,487
Asian American Firms <sup>2</sup>	1,018	\$130,702	89	\$106,721
Hispanic American Firms	4,163	\$289,230	258	\$233,033
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A
	PERCEN <sup>®</sup>	TAGE OF MARKETPLAC	CE	
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	13.44%	5.21%	6.80%	4.98%
Native American Firms <sup>1</sup>	1.13%	0.24%	0.73%	0.22%
Asian American Firms <sup>2</sup>	8.94%	2.66%	4.35%	2.27%
Hispanic American Firms	36.54%	5.88%	12.62%	4.95%
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A
		DISPARITY INDEX		
		ALL FIRMS		EMPLOYER FIRMS
All Firms		100.00		100.00
African American Firms		38.75		73.29
Native American Firms <sup>1</sup>		21.06		30.37
Asian American Firms <sup>2</sup>		29.71		52.09
Hispanic American Firms		16.08		39.24
Nonminority Female Firms <sup>3</sup>		N/A		N/A

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

N/A denotes data on business ownership classification group was not available.

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

## TABLE N-10 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 81, OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION) U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, SILVER SPRING-FREDERICK-

ROCKVILLE MARYLAND MARKETPLACE

			=	
BUSINESS OWNERSHIP CLASSIFICATION	ALL FIRMS (#)	ALL FIRMS, SALES (\$1,000)	EMPLOYER FIRMS (#)	EMPLOYER FIRMS SALES (\$1,000)
All Firms	13,881	\$1,332,613	1,480	\$988,852
African American Firms	2,620	\$66,838	54	\$16,396
Native American Firms <sup>1</sup>	169	\$4,123	0	\$0
Asian American Firms <sup>2</sup>	3,080	\$195,188	315	\$115,731
Hispanic American Firms	2,507	\$95,220	132	\$41,409
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A
Tronimioney remaie rimis		TAGE OF MARKETPLA		14/71
All Firms	100.00%	100.00%	100.00%	100.00%
African American Firms	18.87%	5.02%	3.65%	1.66%
Native American Firms <sup>1</sup>	1.22%	0.31%	0.00%	0.00%
Asian American Firms <sup>2</sup>	22.19%	14.65%	21.28%	11.70%
Hispanic American Firms	18.06%	7.15%	8.92%	4.19%
Nonminority Female Firms <sup>3</sup>	N/A	N/A	N/A	N/A
,		DISPARITY INDEX		·
		ALL FIRMS		EMPLOYER FIRMS
All Firms		100.00		100.00
African American Firms		26.57		45.44
Native American Firms <sup>1</sup>		25.41		N/A
Asian American Firms <sup>2</sup>		66.01		54.99
Hispanic American Firms		39.56		46.95
Nonminority Female Firms <sup>3</sup>		N/A		N/A

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

 $\ensuremath{\mathsf{N/A}}$  denotes data on business ownership classification group was not available.

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

#### DISTRICT OF COLUMBIA MARKETPLACE

### TABLE N-11 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 23, CONSTRUCTION

### U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, DISTRICT OF COLUMBIA

#### **MARKETPLACE**

BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS			
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)			
All Firms	2,282	\$2,795,504	394	\$2,701,396			
African American Firms	1,112	\$327,924	144	\$292,029			
Native American Firms <sup>1</sup>	17	\$804	0	\$0			
Asian American Firms <sup>2</sup>	64	\$61,527	24	\$60,804			
Hispanic American Firms	563	\$388,651	48	\$378,654			
Nonminority Female Firms <sup>3</sup>	119	\$367,615	28	\$360,717			
	PERCEN	TAGE OF MARKETPLA	CE				
All Firms	100.00%	100.00%	100.00%	100.00%			
African American Firms	48.73%	11.73%	36.55%	10.81%			
Native American Firms <sup>1</sup>	0.74%	0.03%	0.00%	0.00%			
Asian American Firms <sup>2</sup>	2.80%	2.20%	6.09%	2.25%			
Hispanic American Firms	24.67%	13.90%	12.18%	14.02%			
Nonminority Female Firms <sup>3</sup>	5.21%	13.15%	7.11%	13.35%			
	DISPARITY INDEX						
		ALL FIRMS		EMPLOYER FIRMS			
All Firms		100.00		100.00			
African American Firms		24.07		29.58			
Native American Firms <sup>1</sup>		3.86		N/A			
Asian American Firms <sup>2</sup>		78.48		36.95			
Hispanic American Firms		56.35		115.06			
Nonminority Female Firms <sup>3</sup>		252.17		187.90			

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

N/A denotes data on business ownership classification group was not available.

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

### TABLE N-12 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 42, WHOLESALE TRADE

### U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, DISTRICT OF COLUMBIA $\mathsf{MARKETPLACE}$

BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS	
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)	
All Firms	639	\$4,435,459	356	\$4,409,170	
African American Firms	147	\$112,114	24	\$108,520	
Native American Firms <sup>1</sup>	8	S	3	S	
Asian American Firms <sup>2</sup>	79	\$270,891	60	\$266,502	
Hispanic American Firms	36	\$111,993	13	\$109,854	
Nonminority Female Firms <sup>3</sup>	105	\$246,900	39	\$240,211	
	PERCEN <sup>®</sup>	TAGE OF MARKETPLA	CE		
All Firms	100.00%	100.00%	100.00%	100.00%	
African American Firms	23.00%	2.53%	6.74%	2.46%	
Native American Firms <sup>1</sup>	1.25%	S	0.84%	S	
Asian American Firms <sup>2</sup>	12.36%	6.11%	16.85%	6.04%	
Hispanic American Firms	5.63%	2.52%	3.65%	2.49%	
Nonminority Female Firms <sup>3</sup>	16.43%	5.57%	10.96%	5.45%	
DISPARITY INDEX					
		ALL FIRMS		EMPLOYER FIRMS	
All Firms		100.00		100.00	
African American Firms		10.99		36.51	
Native American Firms <sup>1</sup>		S		S	
Asian American Firms <sup>2</sup>		49.40		35.86	
Hispanic American Firms		44.82		68.23	
Nonminority Female Firms <sup>3</sup>		33.88		49.73	

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

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

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

# TABLE N-13 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 54, PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, DISTRICT OF COLUMBIA MARKETPLACE

BUSINESS OWNERSHIP CLASSIFICATION         ALL FIRMS (#)         ALL FIRMS, SALES (\$1,000)         EMPLOYER FIRMS (#)         EMPLOYER SALES (\$1,000)         EMPLOYER FIRMS (#)         EMPLOYER SALES (\$1,000)         EMPLOYER FIRMS (#)         EMPLOYER SALES (\$1,000)         SALES (\$1,000)         \$1,000	\$1,000) 7,021 929 222 624 064				
All Firms       17,935       \$33,369,712       4,205       \$32,58°         African American Firms       3,286       \$639,722       314       \$554,         Native American Firms¹       125       \$56,133       19       \$51,2         Asian American Firms²       913       \$551,359       184       \$516,         Hispanic American Firms       919       \$267,651       85       \$231,         Nonminority Female Firms³       5,191       \$1,966,180       771       \$1,721         PERCENTAGE OF MARKETPLACE	7,021 929 222 624 064				
African American Firms       3,286       \$639,722       314       \$554,         Native American Firms¹       125       \$56,133       19       \$51,2         Asian American Firms²       913       \$551,359       184       \$516,         Hispanic American Firms       919       \$267,651       85       \$231,         Nonminority Female Firms³       5,191       \$1,966,180       771       \$1,721         PERCENTAGE OF MARKETPLACE	929 222 624 064				
Native American Firms¹       125       \$56,133       19       \$51,2         Asian American Firms²       913       \$551,359       184       \$516,         Hispanic American Firms       919       \$267,651       85       \$231,         Nonminority Female Firms³       5,191       \$1,966,180       771       \$1,721         PERCENTAGE OF MARKETPLACE	222 624 064				
Asian American Firms²       913       \$551,359       184       \$516,         Hispanic American Firms       919       \$267,651       85       \$231,         Nonminority Female Firms³       5,191       \$1,966,180       771       \$1,721         PERCENTAGE OF MARKETPLACE	624 064				
Hispanic American Firms         919         \$267,651         85         \$231,           Nonminority Female Firms³         5,191         \$1,966,180         771         \$1,721           PERCENTAGE OF MARKETPLACE	064				
Nonminority Female Firms <sup>3</sup> 5,191 \$1,966,180 771 \$1,721  PERCENTAGE OF MARKETPLACE					
PERCENTAGE OF MARKETPLACE	374				
	., 5 / ¬				
All Firms 100.00% 100.00% 100.00% 100.00%	0%				
African American Firms 18.32% 1.92% 7.47% 1.70	1%				
Native American Firms <sup>1</sup> 0.70% 0.17% 0.45% 0.16	5%				
Asian American Firms <sup>2</sup> 5.09% 1.65% 4.38% 1.59	1%				
Hispanic American Firms 5.12% 0.80% 2.02% 0.71	.%				
Nonminority Female Firms <sup>3</sup> 28.94% 5.89% 18.34% 5.28	%				
DISPARITY INDEX					
ALL FIRMS EMPLOYE	R FIRMS				
All Firms 100.00	00				
African American Firms 10.46	30				
Native American Firms <sup>1</sup> 24.14 34.7	79				
Asian American Firms <sup>2</sup> 32.46	23				
Hispanic American Firms 15.65	)8				
Nonminority Female Firms <sup>3</sup> 20.36 28.8	34				

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

N/A denotes data on business ownership classification group was not available.

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

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

## TABLE N-14 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 56, ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT AND REMEDIATION SERVICES

### U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, DISTRICT OF COLUMBIA MARKETPLACE

BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS		
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)		
All Firms	4,185	\$2,922,454	760	\$2,841,653		
African American Firms	1,860	\$171,037	80	\$146,656		
Native American Firms <sup>1</sup>	42	S	3	S		
Asian American Firms <sup>2</sup>	186	\$49,872	34	\$47,364		
Hispanic American Firms	682	\$72,465	28	\$63,173		
Nonminority Female Firms <sup>3</sup>	1,060	\$330,208	156	\$312,728		
PERCENTAGE OF MARKETPLACE						
All Firms	100.00%	100.00%	100.00%	100.00%		
African American Firms	44.44%	5.85%	10.53%	5.16%		
Native American Firms <sup>1</sup>	1.00%	S	0.39%	S		
Asian American Firms <sup>2</sup>	4.44%	1.71%	4.47%	1.67%		
Hispanic American Firms	16.30%	2.48%	3.68%	2.22%		
Nonminority Female Firms <sup>3</sup>	25.33%	11.30%	20.53%	11.01%		
DISPARITY INDEX						
		ALL FIRMS		EMPLOYER FIRMS		
All Firms		100.00		100.00		
African American Firms		13.17		49.03		
Native American Firms <sup>1</sup>		S		S		
Asian American Firms <sup>2</sup>		38.40		37.26		
Hispanic American Firms		15.22		60.34		
Nonminority Female Firms <sup>3</sup>		44.61		53.61		

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

N/A denotes data on business ownership classification group was not available.

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

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

# TABLE N-15 PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 81, OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION) U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, DISTRICT OF COLUMBIA MARKETPLACE

WARREIT LACE							
BUSINESS OWNERSHIP	ALL FIRMS	ALL FIRMS, SALES	EMPLOYER	EMPLOYER FIRMS			
CLASSIFICATION	(#)	(\$1,000)	FIRMS (#)	SALES (\$1,000)			
All Firms	7,041	\$770,035	579	\$639,737			
African American Firms	4,949	\$113,853	72	\$43,846			
Native American Firms <sup>1</sup>	61	\$2,744	9	S			
Asian American Firms <sup>2</sup>	467	\$75,937	192	\$69,279			
Hispanic American Firms	365	\$34,616	37	S			
Nonminority Female Firms <sup>3</sup>	779	86,226	97	60,026			
PERCENTAGE OF MARKETPLACE							
All Firms	100.00%	100.00%	100.00%	100.00%			
African American Firms	70.29%	14.79%	12.44%	6.85%			
Native American Firms <sup>1</sup>	0.87%	S	1.55%	S			
Asian American Firms <sup>2</sup>	6.63%	9.86%	33.16%	10.83%			
Hispanic American Firms	5.18%	4.50%	6.39%	S			
Nonminority Female Firms <sup>3</sup>	11.06%	11.20%	16.75%	9.38%			
DISPARITY INDEX							
		ALL FIRMS		EMPLOYER FIRMS			
All Firms		100.00		100.00			
African American Firms		21.04		55.12			
Native American Firms <sup>1</sup>		S		S			
Asian American Firms <sup>2</sup>		148.68		32.66			
Hispanic American Firms		86.72		S			
Nonminority Female Firms <sup>3</sup>		101.21		56.01			

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



<sup>&</sup>lt;sup>1</sup> Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.

<sup>&</sup>lt;sup>2</sup> Native American consists of American Indian- and Alaska Native-owned firms.

<sup>&</sup>lt;sup>3</sup> Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.

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

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