



Broward County Public Schools



DISPARITY STUDY

Final Report
October 2015



MASON TILLMAN
ASSOCIATES, LTD

[REDACTED]

Table of Contents

CHAPTER 1: LEGAL ANALYSIS	1-1
I. INTRODUCTION.....	1-1
II. STANDARD OF REVIEW	1-1
III. BURDEN OF PROOF	1-6
A. INITIAL BURDEN OF PROOF	1-6
B. ULTIMATE BURDEN OF PROOF	1-7
IV. CROSON EVIDENTIARY FRAMEWORK.....	1-9
A. ACTIVE OR PASSIVE PARTICIPATION	1-9
B. SYSTEMIC DISCRIMINATORY EXCLUSION	1-12
C. ANECDOTAL EVIDENCE	1-20
D. REMEDIAL STATUTORY SCHEME	1-25
V. CONSIDERATION OF RACE NEUTRAL OPTIONS.....	1-28
VI. CONCLUSION	1-29
VII. LIST OF AUTHORITIES	1-30
CHAPTER 2: PROCUREMENT AND CONTRACTING POLICY REVIEW.....	2-1
I. INTRODUCTION.....	2-1
II. GOVERNING LAWS AND REGULATIONS	2-2
A. FLORIDA STATUTES	2-2
B. FLORIDA STATE REQUIREMENTS FOR EDUCATIONAL FACILITIES	2-3
C. SCHOOL BOARD OF BROWARD COUNTY	2-4
D. FACILITIES AND CONSTRUCTION MANAGEMENT DIVISION POLICIES.....	2-6
III. PROCUREMENT CATEGORIES	2-6



Table of Contents

IV. PROCUREMENT PROCESS OVERVIEW	2-8
A. COMMODITIES AND CONTRACTUAL SERVICES	2-8
B. MAINTENANCE AND REPAIR CONTRACTS	2-11
C. CONSTRUCTION CONTRACTS	2-13
D. PROFESSIONAL SERVICES	2-20
E. TECHNOLOGY	2-23
V. SUPPLIER DIVERSITY AND OUTREACH PROGRAM	2-23
A. ELIGIBILITY CRITERIA	2-25
B. CERTIFICATION CRITERIA	2-27
C. RE-CERTIFICATION CRITERIA	2-28
D. RECIPROCAL CERTIFICATION	2-29
CHAPTER 3: PRIME CONTRACTOR UTILIZATION ANALYSIS	3-1
I. INTRODUCTION.....	3-1
II. PRIME PURCHASE ORDER DATA SOURCES	3-3
III. PRIME CONTRACTOR UTILIZATION THRESHOLDS	3-3
IV. PRIME CONTRACTOR UTILIZATION.....	3-4
A. ALL PRIME CONTRACTORS	3-4
B. HIGHLY USED PRIME CONTRACTORS.....	3-5
C. HIGHLY USED CONSTRUCTION PRIME CONTRACTORS.....	3-6
D. HIGHLY USED PROFESSIONAL SERVICES PRIME CONTRACTORS	3-8
E. HIGHLY USED CONTRACTUAL SERVICES PRIME CONTRACTORS	3-9
F. HIGHLY USED COMMODITIES PRIME CONTRACTORS.....	3-10
G. ALL PRIME PURCHASE ORDERS BY INDUSTRY	3-12
H. FORMAL PURCHASE ORDERS BY INDUSTRY	3-20
I. INFORMAL PRIME CONTRACTS, BY INDUSTRY	3-34
V. SUMMARY	3-44



Table of Contents

CHAPTER 4: SUBCONTRACTOR UTILIZATION ANALYSIS.....	4-1
I. INTRODUCTION.....	4-1
II. PROFESSIONAL SERVICES AND CONSTRUCTION SUBCONTRACT DATA SOURCES.....	4-1
III. SUBCONTRACTOR UTILIZATION	4-2
A. ALL SUBCONTRACTS.....	4-2
B. ALL SUBCONTRACTS BY INDUSTRY	4-2
IV. SUMMARY	4-7
CHAPTER 5: MARKET AREA ANALYSIS	5-1
I. INTRODUCTION.....	5-1
A. LEGAL CRITERIA FOR GEOGRAPHIC MARKET AREA	5-1
B. APPLICATION OF THE CROSON STANDARD.....	5-1
II. MARKET AREA ANALYSIS	5-4
III. SUMMARY	5-9
CHAPTER 6: COMPARATIVE ANALYSIS OF AVAILABILITY MEASURES	6-1
I. INTRODUCTION.....	6-1
II. LEGAL STANDARDS FOR DETERMINING APPROPRIATE MEASURES OF AVAILABILITY	6-1
A. CASE LAW	6-2
III. COMPARISON STUDIES.....	6-6
A. 2010 BROWARD COUNTY, FLORIDA’S STATE OF MINORITY- AND WOMEN- OWNED BUSINESS ENTERPRISE DISPARITY STUDY	6-6
B. 2013 MIAMI DADE PUBLIC SCHOOLS DISPARITY STUDY	6-7
C. 2015 SCHOOL BOARD OF BROWARD COUNTY DISPARITY STUDY.....	6-7



Table of Contents

IV. SUMMARY	6-8
CHAPTER 7: PRIME CONTRACTOR AND SUBCONTRACTOR AVAILABILITY ANALYSIS	7-1
I. INTRODUCTION.....	7-1
II. PRIME CONTRACTOR AVAILABILITY DATA SOURCES	7-1
A. IDENTIFICATION OF WILLING BUSINESSES WITHIN THE MARKET AREA.....	7-1
B. PRIME CONTRACTOR AVAILABILITY SOURCES	7-2
C. DETERMINATION OF WILLINGNESS	7-6
D. DISTRIBUTION OF AVAILABLE PRIME CONTRACTORS BY SOURCE, ETHNICITY, AND GENDER	7-6
III. CAPACITY	7-9
A. SIZE OF CONTRACTS ANALYZED.....	7-10
B. BUSINESS CAPACITY ASSESSMENT	7-16
C. LARGEST M/WBE PURCHASE ORDERS AWARDED BY INDUSTRY	7-27
IV. PRIME CONTRACTOR AVAILABILITY ANALYSIS.....	7-28
A. ALL INDUSTRY PRIME CONTRACTOR AVAILABILITY	7-28
B. CONSTRUCTION PRIME CONTRACTOR AVAILABILITY	7-30
C. PROFESSIONAL SERVICES PRIME CONTRACTOR AVAILABILITY	7-32
D. CONTRACTUAL SERVICES PRIME CONTRACTOR AVAILABILITY.....	7-34
E. COMMODITIES PRIME CONTRACTOR AVAILABILITY	7-36
V. SUBCONTRACTOR AVAILABILITY ANALYSIS	7-38
A. SOURCE OF WILLING AND ABLE SUBCONTRACTORS.....	7-38
B. DETERMINATION OF WILLINGNESS AND CAPACITY	7-38
C. ALL INDUSTRY SUBCONTRACTOR AVAILABILITY	7-39
D. CONSTRUCTION SUBCONTRACTOR AVAILABILITY.....	7-41
E. PROFESSIONAL SERVICES SUBCONTRACTOR AVAILABILITY	7-43
VI. SUMMARY	7-45



Table of Contents

CHAPTER 8: ANECDOTAL ANALYSIS	8-1
I. INTRODUCTION	8-1
A. ANECDOTAL EVIDENCE OF ACTIVE OR PASSIVE PARTICIPATION	8-2
II. BUSINESS OWNER RESPONSE CATEGORIES	8-3
A. DIFFICULTY BREAKING INTO THE CONTRACTOR COMMUNITY	8-4
B. GOOD OLD BOYS NETWORK	8-5
C. DIFFICULTY NAVIGATING THE BID PROCESS	8-7
D. INSUFFICIENT TIME TO RESPOND TO A BID OR PROPOSAL.....	8-8
E. BARRIERS TO FINANCIAL RESOURCES	8-8
F. LATE PAYMENTS.....	8-10
G. EXEMPLARY PRACTICES BY THE SCHOOL BOARD OF BROWARD COUNTY’ ...	8-11
H. SUPPLIER DIVERSITY AND OUTREACH PROGRAM	8-11
I. RECOMMENDATIONS TO INCREASE THE M/WBE PARTICIPATION ON SCHOOL BOARD OF BROWARD COUNTY’ CONTRACTS	8-12
III. JUDICIAL REVIEW	8-14
A. METHODOLOGY	8-14
B. RESEARCH FINDINGS	8-17
IV. SUMMARY	8-17
CHAPTER 9: PRIME CONTRACT DISPARITY ANALYSIS	9-1
I. INTRODUCTION	9-1
II. DISPARITY ANALYSIS	9-2
A. DISPARITY ANALYSIS: ALL PRIME PURCHASE ORDERS, BY INDUSTRY	9-4
B. DISPARITY ANALYSIS: ALL FORMAL PRIME PURCHASE ORDERS, BY INDUSTRY	9-19
C. DISPARITY ANALYSIS: ALL INFORMAL PRIME PURCHASE ORDERS, BY INDUSTRY	9-58
III. DISPARITY ANALYSIS SUMMARY	9-76



Table of Contents

A. ALL INDUSTRIES PRIME PURCHASE ORDERS.....	9-76
B. CONSTRUCTION PRIME PURCHASE ORDERS.....	9-77
C. PROFESSIONAL SERVICES PRIME PURCHASE ORDERS.....	9-78
D. CONTRACTUAL SERVICES PRIME PURCHASE ORDERS.....	9-79
E. COMMODITIES PRIME PURCHASE ORDERS.....	9-80
CHAPTER 10: SUBCONTRACT DISPARITY ANALYSIS.....	10-1
I. INTRODUCTION.....	10-1
II. DISPARITY ANALYSIS.....	10-1
III. DISPARITY ANALYSIS: ALL SUBCONTRACTS, BY INDUSTRY.....	10-2
A. CONSTRUCTION SUBCONTRACTS.....	10-2
B. PROFESSIONAL SERVICES SUBCONTRACTS.....	10-6
IV. SUBCONTRACT DISPARITY SUMMARY.....	10-9
CHAPTER 11: REGRESSION AND PRIVATE SECTOR ANALYSIS.....	11-1
I. INTRODUCTION.....	11-1
II. LEGAL ANALYSIS.....	11-2
A. PASSIVE DISCRIMINATION.....	11-2
B. NARROW TAILORING.....	11-3
C. CAPACITY TO PERFORM CONTRACTS.....	11-4
D. CONCLUSION.....	11-5
III. REGRESSION ANALYSIS METHODOLOGY.....	11-5
IV. DATASETS ANALYZED.....	11-5
V. REGRESSION MODELS DEFINED.....	11-6
A. BUSINESS OWNERSHIP ANALYSIS.....	11-6
B. THE EARNINGS DISPARITY ANALYSIS.....	11-7
C. THE BUSINESS LOAN APPROVAL ANALYSIS.....	11-8



Table of Contents

VI. FINDINGS.....	11-9
A. BUSINESS OWNERSHIP ANALYSIS	11-9
B. BUSINESS EARNINGS ANALYSIS.....	11-16
C. BUSINESS LOAN APPROVAL ANALYSIS.....	11-22
VII. CONCLUSION	11-27
A. BUSINESS OWNERSHIP ANALYSIS CONCLUSIONS.....	11-27
B. BUSINESS EARNINGS ANALYSIS CONCLUSIONS	11-28
C. BUSINESS LOAN APPROVAL ANALYSIS CONCLUSIONS	11-29
D. REGRESSION FINDINGS	11-30
CHAPTER 12: RECOMMENDATIONS.....	12-1
I. INTRODUCTION.....	12-1
II. SUPPLIER DIVERSITY AND OUTREACH PROGRAM ASSESSMENT	12-1
A. SUPPLIER DIVERSITY AND OUTREACH PROGRAM STANDARDS	12-2
B. SUPPLIER DIVERSITY AND OUTREACH PROGRAM EFFECTIVENESS	12-8
III. SUMMARY OF STATISTICAL DISPARITY FINDINGS	12-14
A. PRIME CONTRACTS	12-15
B. SUBCONTRACTS	12-15
C. PRIME CONTRACTOR DISPARITY FINDINGS.....	12-16
D. SUBCONTRACTOR DISPARITY FINDINGS	12-22
IV. RACE AND GENDER-SPECIFIC RECOMMENDATIONS	12-23
A. PRIME CONTRACT REMEDIES.....	12-23
B. SUBCONTRACT REMEDIES.....	12-25
V. RACE AND GENDER-NEUTRAL RECOMMENDATIONS	12-30
A. DATA EXTRACTION PROCESS.....	12-30
B. DATA MANAGEMENT ENHANCEMENTS.....	12-34



Table of Contents

C. ADMINISTRATIVE STRATEGIES.....	12-37
D. SUPPORTIVE SERVICES STRATEGIES	12-43
E. SUBCONTRACT REMEDIES.....	12-45
F. CONTRACT MONITORING AND REPORTING	12-46
G. WEBSITE ENHANCEMENT STRATEGIES	12-47
VI. SUMMARY	12-59



List of Tables

TABLE 2.01: GOVERNING LAWS AND REGULATIONS	2-2
TABLE 3.01: BUSINESS ETHNIC AND GENDER GROUPS	3-2
TABLE 3.02: INFORMAL DOLLAR THRESHOLDS	3-4
TABLE 3.03: TOTAL PRIME PURCHASE ORDERS AND DOLLARS EXPENDED: ALL INDUSTRIES, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	3-5
TABLE 3.04: TOTAL PRIME PURCHASE ORDERS.....	3-5
TABLE 3.05: ALL PRIME PURCHASE ORDERS DISTRIBUTED BY NUMBER OF VENDORS	3-6
TABLE 3.06: TOP 47 HIGHLY USED PRIME CONTRACTORS	3-6
TABLE 3.07: CONSTRUCTION PRIME PURCHASE ORDERS	3-7
TABLE 3.08: CONSTRUCTION PRIME PURCHASE ORDERS DISTRIBUTED BY NUMBER OF VENDORS	3-7
TABLE 3.09: TOP 9 HIGHLY USED CONSTRUCTION PRIME CONTRACTORS	3-7
TABLE 3.10: PROFESSIONAL SERVICES PRIME PURCHASE ORDERS.....	3-8
TABLE 3.11: PROFESSIONAL SERVICES PRIME PURCHASE ORDERS DISTRIBUTED BY NUMBER OF VENDORS.....	3-8
TABLE 3.12: TOP 5 HIGHLY USED PROFESSIONAL SERVICES PRIME CONTRACTORS	3-9
TABLE 3.13: CONTRACTUAL SERVICES PRIME PURCHASE ORDERS.....	3-9
TABLE 3.14: CONTRACTUAL SERVICES PRIME PURCHASE ORDERS DISTRIBUTED BY NUMBER OF VENDORS.....	3-9
TABLE 3.15: TOP 25 HIGHLY USED CONTRACTUAL SERVICES PRIME CONTRACTORS	3-10
TABLE 3.16: COMMODITIES PRIME PURCHASE ORDERS.....	3-10



TABLE 3.17: COMMODITIES PRIME PURCHASE ORDERS DISTRIBUTED BY NUMBER OF VENDORS	3-11
TABLE 3.18: TOP 25 HIGHLY USED COMMODITIES PRIME CONTRACTORS	3-11
TABLE 3.19: CONSTRUCTION PRIME CONTRACTOR UTILIZATION: ALL PURCHASE ORDERS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	3-13
TABLE 3.20: PROFESSIONAL SERVICES PRIME CONTRACTOR UTILIZATION: ALL PURCHASE ORDERS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	3-15
TABLE 3.21: CONTRACTUAL SERVICES PRIME CONTRACTOR UTILIZATION: ALL PURCHASE ORDERS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	3-17
TABLE 3.22: COMMODITIES PRIME CONTRACTOR UTILIZATION: ALL PURCHASE ORDERS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	3-19
TABLE 3.23: CONSTRUCTION PRIME CONTRACTOR UTILIZATION: FORMAL PURCHASE ORDERS VALUED \$50,000 AND OVER, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	3-21
TABLE 3.24: PROFESSIONAL SERVICES PRIME CONTRACTOR UTILIZATION: PURCHASE ORDERS VALUED \$325,000 AND OVER, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	3-23
TABLE 3.25: PROFESSIONAL SERVICES PRIME CONTRACTOR UTILIZATION: PURCHASE ORDERS VALUED \$195,000 AND OVER, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	3-25
TABLE 3.26: CONTRACTUAL SERVICES PRIME CONTRACTOR UTILIZATION: FORMAL PURCHASE ORDERS VALUED \$500,000 AND OVER, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013.....	3-27
TABLE 3.27: CONTRACTUAL SERVICES PRIME CONTRACTOR UTILIZATION: FORMAL PURCHASE ORDERS VALUED \$50,000 TO \$499,999, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013.....	3-29
TABLE 3.28: COMMODITIES PRIME CONTRACTOR UTILIZATION: FORMAL PURCHASE ORDERS VALUED \$500,000 AND OVER, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	3-31



TABLE 3.29: COMMODITIES PRIME CONTRACTOR UTILIZATION: FORMAL PURCHASE ORDERS VALUED \$50,000 TO \$499,999, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	3-33
TABLE 3.30: CONSTRUCTION PRIME CONTRACTOR UTILIZATION: INFORMAL PURCHASE ORDERS VALUED LESS THAN \$50,000, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	3-35
TABLE 3.31: PROFESSIONAL SERVICES PRIME CONTRACTOR UTILIZATION: INFORMAL PURCHASE ORDERS VALUED \$50,001 TO \$194,999, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013.....	3-37
TABLE 3.32: PROFESSIONAL SERVICES PRIME CONTRACTOR UTILIZATION: INFORMAL PURCHASE ORDERS VALUED LESS THAN \$50,000, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013.....	3-39
TABLE 3.33: CONTRACTUAL SERVICES PRIME CONTRACTOR UTILIZATION: PURCHASE ORDERS VALUED LESS THAN \$5,000, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	3-41
TABLE 3.34: COMMODITIES PRIME CONTRACTOR UTILIZATION: PURCHASE ORDERS VALUED LESS THAN \$5,000, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	3-43
TABLE 4.01: TOTAL SUBCONTRACTS AWARDED AND DOLLARS EXPENDED, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	4-2
TABLE 4.02: CONSTRUCTION SUBCONTRACTOR UTILIZATION, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	4-4
TABLE 4.03: PROFESSIONAL SERVICES SUBCONTRACTOR UTILIZATION, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	4-6
TABLE 5.01: DISTRIBUTION OF ALL PURCHASE ORDERS AWARDED.....	5-5
TABLE 5.02: DISTRIBUTION OF CONSTRUCTION PURCHASE ORDERS	5-6
TABLE 5.03: DISTRIBUTION OF PROFESSIONAL SERVICES PURCHASE ORDERS	5-6
TABLE 5.04: DISTRIBUTION OF CONTRACTUAL SERVICES PURCHASE ORDERS.....	5-7
TABLE 5.05: DISTRIBUTION OF COMMODITIES PURCHASE ORDERS	5-8



TABLE 5.06: MARKET AREA CONTRACT DISTRIBUTION, ALL INDUSTRIES	5-10
TABLE 7.01: PRIME CONTRACTOR AVAILABILITY DATA SOURCES.....	7-3
TABLE 7.02: DISTRIBUTION OF PRIME CONTRACTOR AVAILABILITY DATA SOURCES, ALL INDUSTRIES	7-7
TABLE 7.03: DISTRIBUTION OF PRIME CONTRACTOR AVAILABILITY DATA SOURCES, CONSTRUCTION.....	7-7
TABLE 7.04: DISTRIBUTION OF PRIME CONTRACTOR AVAILABILITY DATA SOURCES, PROFESSIONAL SERVICES.....	7-8
TABLE 7.05: DISTRIBUTION OF PRIME CONTRACTOR AVAILABILITY DATA SOURCES, CONTRACTUAL SERVICES.....	7-8
TABLE 7.06: DISTRIBUTION OF PRIME CONTRACTOR AVAILABILITY DATA SOURCES, COMMODITIES	7-9
TABLE 7.07: ALL INDUSTRY PURCHASE ORDERS BY SIZE, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	7-11
TABLE 7.08: CONSTRUCTION PURCHASE ORDERS BY SIZE, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	7-12
TABLE 7.09: PROFESSIONAL SERVICES PURCHASE ORDERS BY SIZE, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013.....	7-13
TABLE 7.10: CONTRACTUAL SERVICES PURCHASE ORDERS BY SIZE, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013.....	7-14
TABLE 7.11: COMMODITIES PURCHASE ORDERS BY SIZE, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	7-15
TABLE 7.12: ETHNICITY AND GENDER OF BUSINESSES	7-17
TABLE 7.13: PRIMARY INDUSTRY	7-18
TABLE 7.14: ANNUAL GROSS REVENUE: ALL INDUSTRIES	7-19
TABLE 7.15: ANNUAL GROSS REVENUE ORDERED LOGISTIC REGRESSION: ALL INDUSTRIES	7-20



TABLE 7.16: ANNUAL GROSS REVENUE ORDERED LOGISTIC REGRESSION: CONSTRUCTION	7-21
TABLE 7.17: ANNUAL GROSS REVENUE ORDERED LOGISTIC REGRESSION: PROFESSIONAL SERVICES.....	7-22
TABLE 7.18: ANNUAL GROSS REVENUE ORDERED LOGISTIC REGRESSION: NON-MBE .	7-23
TABLE 7.19: ANNUAL GROSS REVENUE ORDERED LOGISTIC REGRESSION: WBES	7-23
TABLE 7.20: ANNUAL GROSS REVENUE ORDERED LOGISTIC REGRESSION: MBES	7-24
TABLE 7.21: CURRENT NUMBER OF EMPLOYEES	7-25
TABLE 7.22: NUMBER OF ANNUAL CONTRACTS	7-26
TABLE 7.23: SUBMITTED A BID OR QUALIFICATIONS TO SBBC.....	7-26
TABLE 7.24: LARGEST M/WBE PURCHASE ORDERS AWARDED BY SBBC.....	7-27
TABLE 7.25: AVAILABLE ALL INDUSTRY PRIME CONTRACTORS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013.....	7-29
TABLE 7.26: AVAILABLE CONSTRUCTION PRIME CONTRACTORS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013.....	7-31
TABLE 7.27: AVAILABLE PROFESSIONAL SERVICES PRIME CONTRACTORS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	7-33
TABLE 7.28: AVAILABLE CONTRACTUAL SERVICES PRIME CONTRACTORS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	7-35
TABLE 7.29: AVAILABLE COMMODITIES PRIME CONTRACTORS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013.....	7-37
TABLE 7.30: UNIQUE SUBCONTRACTOR AVAILABILITY DATA SOURCE.....	7-38
TABLE 7.31: AVAILABLE ALL INDUSTRY SUBCONTRACTORS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	7-40
TABLE 7.32: AVAILABLE CONSTRUCTION SUBCONTRACTORS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	7-42



TABLE 7.33: AVAILABLE PROFESSIONAL SERVICES SUBCONTRACTORS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	7-44
TABLE 8.01: SIZE OF MARKET AREA BUSINESSES	8-4
TABLE 9.01: STATISTICAL OUTCOME DESCRIPTIONS	9-3
TABLE 9.02: DISPARITY ANALYSIS: ALL INDUSTRIES PRIME PURCHASE ORDERS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-5
TABLE 9.03: DISPARITY ANALYSIS: ALL CONSTRUCTION PRIME PURCHASE ORDERS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-8
TABLE 9.04: DISPARITY ANALYSIS: ALL PROFESSIONAL SERVICES PRIME PURCHASE ORDERS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-11
TABLE 9.05: DISPARITY ANALYSIS: ALL CONTRACTUAL SERVICES PRIME PURCHASE ORDERS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-14
TABLE 9.06: DISPARITY ANALYSIS: ALL COMMODITIES PRIME PURCHASE ORDERS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-17
TABLE 9.07: DISPARITY ANALYSIS: FORMAL CONSTRUCTION PRIME PURCHASE ORDERS VALUED \$50,000 AND OVER, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-21
TABLE 9.08: DISPARITY ANALYSIS: FORMAL PROFESSIONAL SERVICES PRIME PURCHASE ORDERS VALUED \$325,000 AND OVER, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-25
TABLE 9.09: DISPARITY ANALYSIS: FORMAL PROFESSIONAL SERVICES PRIME PURCHASE ORDERS VALUED \$195,000 AND OVER, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-29
TABLE 9.10: DISPARITY ANALYSIS: FORMAL CONTRACTUAL SERVICES PRIME PURCHASE ORDERS VALUED \$500,000 AND OVER, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-33
TABLE 9.11: DISPARITY ANALYSIS: FORMAL CONTRACTUAL SERVICES PRIME PURCHASE ORDERS VALUED \$50,000 TO \$499,999, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-37



TABLE 9.12: DISPARITY ANALYSIS: FORMAL CONTRACTUAL SERVICES PRIME PURCHASE ORDERS VALUED \$5,000 TO \$49,999, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-45
TABLE 9.13: DISPARITY ANALYSIS: FORMAL COMMODITIES PRIME PURCHASE ORDERS VALUED \$500,000 AND OVER, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-49
TABLE 9.14: DISPARITY ANALYSIS: FORMAL COMMODITIES PRIME PURCHASE ORDERS VALUED \$50,000 TO \$499,999, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-52
TABLE 9.15: DISPARITY ANALYSIS: FORMAL COMMODITIES PRIME PURCHASE ORDERS VALUED \$5,000 TO \$49,999, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-56
TABLE 9.16: DISPARITY ANALYSIS: INFORMAL CONSTRUCTION PRIME PURCHASE ORDERS VALUED LESS THAN \$50,000, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-60
TABLE 9.17: DISPARITY ANALYSIS: INFORMAL PROFESSIONAL SERVICES PRIME PURCHASE ORDERS VALUED \$50,000 TO \$194,999, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-64
TABLE 9.18: DISPARITY ANALYSIS: INFORMAL PROFESSIONAL SERVICES PRIME PURCHASE ORDERS VALUED LESS THAN \$50,000, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-68
TABLE 9.19: DISPARITY ANALYSIS: INFORMAL CONTRACTUAL SERVICES PRIME PURCHASE ORDERS VALUED LESS THAN \$5,000 FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-71
TABLE 9.20: DISPARITY ANALYSIS: INFORMAL COMMODITIES PRIME PURCHASE ORDERS VALUED LESS THAN \$5,000 FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-74
TABLE 9.21: DISPARITY SUMMARY: ALL INDUSTRIES PRIME PURCHASE ORDER DOLLARS,	9-76
TABLE 9.22: DISPARITY SUMMARY: CONSTRUCTION PRIME PURCHASE ORDER DOLLARS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-77



TABLE 9.23: DISPARITY SUMMARY: PROFESSIONAL SERVICES PRIME PURCHASE ORDER DOLLARS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-78
TABLE 9.24: DISPARITY SUMMARY: CONTRACTUAL SERVICES PRIME PURCHASE ORDER DOLLARS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-80
TABLE 9.25: DISPARITY SUMMARY: COMMODITIES PRIME PURCHASE ORDER DOLLARS, JULY 1, 2008, TO JUNE 30, 2013	9-81
TABLE 10.01: STATISTICAL OUTCOME DESCRIPTIONS	10-2
TABLE 10.02: DISPARITY ANALYSIS: CONSTRUCTION SUBCONTRACTS, FISCAL YEARS JULY 1, 2008, AND JUNE 30, 2013	10-4
TABLE 10.03: DISPARITY ANALYSIS: PROFESSIONAL SERVICES SUBCONTRACTS, FISCAL YEARS JULY 1, 2008, AND JUNE 30, 2013.....	10-7
TABLE 10.04: SUBCONTRACT DISPARITY SUMMARY, FISCAL YEARS JULY 1, 2008, AND JUNE 30, 2013	10-9
TABLE 11.01: INDEPENDENT VARIABLES USED IN THE BUSINESS OWNERSHIP ANALYSIS	11-7
TABLE 11.02: INDEPENDENT VARIABLES USED FOR THE EARNINGS DISPARITY ANALYSIS	11-8
TABLE 11.03: INDEPENDENT VARIABLES USED FOR BUSINESS LOAN APPROVAL ANALYSIS	11-9
TABLE 11.04: CONSTRUCTION LOGISTIC MODEL.....	11-10
TABLE 11.05: COMMODITIES LOGISTIC MODEL.....	11-11
TABLE 11.06: CONTRACTUAL SERVICES LOGISTIC MODEL	11-13
TABLE 11.07: PROFESSIONAL SERVICES LOGISTIC MODEL.....	11-14
TABLE 11.08: CONSTRUCTION INDUSTRY OLS REGRESSION.....	11-16
TABLE 11.09: COMMODITIES ORDINARY LEAST SQUARES REGRESSION	11-18
TABLE 11.10: CONTRACTUAL SERVICES ORDINARY LEAST SQUARES REGRESSION	11-19



TABLE 11.11: PROFESSIONAL SERVICES ORDINARY LEAST SQUARES REGRESSION	11-21
TABLE 11.12: BINARY LOGISTIC MODEL FOR THE BUSINESS LOAN APPROVAL ANALYSIS IN THE CONSTRUCTION INDUSTRY	11-23
TABLE 11.13: BINARY LOGISTIC MODEL FOR THE BUSINESS LOAN APPROVAL ANALYSIS IN THE COMMODITIES INDUSTRY	11-24
TABLE 11.14: BINARY LOGISTIC MODEL FOR THE BUSINESS LOAN APPROVAL ANALYSIS IN THE CONTRACTUAL SERVICES INDUSTRY	11-25
TABLE 11.15: BINARY LOGISTIC MODEL FOR THE BUSINESS LOAN APPROVAL ANALYSIS IN THE PROFESSIONAL SERVICES INDUSTRY	11-26
TABLE 11.16: STATISTICALLY SIGNIFICANT BUSINESS OWNERSHIP DISPARITIES.....	11-28
TABLE 11.17: STATISTICALLY SIGNIFICANT BUSINESS EARNINGS DISPARITIES	11-29
TABLE 11.18: STATISTICALLY SIGNIFICANT BUSINESS LOAN APPROVAL DISPARITIES	11-30
TABLE 12.01: SDOP CERTIFIED M/WBE PRIME CONTRACTOR UTILIZATION BY ETHNICITY: ALL INDUSTRIES, JULY 1, 2009 TO JUNE 30, 2013.....	12-8
TABLE 12.02: SDOP CERTIFIED FIRMS UTILIZATION BY THRESHOLD:.....	12-9
TABLE 12.03: SDOP CERTIFIED M/WBE UTILIZATION BY THRESHOLD AND ETHNICITY: ALL INDUSTRIES, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	12-10
TABLE 12.04: IMPLEMENTATION OF THE SUPPLIER DIVERSITY AND OUTREACH PROGRAM ADMINISTRATIVE GUIDELINES	12-12
TABLE 12.05: TOTAL PRIME PURCHASE ORDERS AND DOLLARS EXPENDED:.....	12-15
TABLE 12.06: TOTAL SUBCONTRACTS AWARDED AND DOLLARS EXPENDED: ALL INDUSTRIES, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	12-16
TABLE 12.07: DISPARITY SUMMARY: ALL INDUSTRIES PRIME PURCHASE ORDERS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	12-16
TABLE 12.08: DISPARITY SUMMARY: CONSTRUCTION PRIME PURCHASE ORDERS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	12-17



TABLE 12.09: DISPARITY SUMMARY: PROFESSIONAL SERVICES PRIME PURCHASE ORDER,
FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013 12-18

TABLE 12.10: DISPARITY SUMMARY: CONTRACTUAL SERVICES PRIME PURCHASE ORDERS,
FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013 12-20

TABLE 12.11: DISPARITY SUMMARY: COMMODITIES PRIME PURCHASE ORDERS, FISCAL
YEARS JULY 1, 2008, TO JUNE 30, 2013 12-22

TABLE 12.12: SUBCONTRACTOR DISPARITY SUMMARY, FISCAL YEARS JULY 1, 2008, TO
JUNE 30, 2013 12-23

TABLE 12.13: GROUPS ELIGIBLE FOR PROFESSIONAL SERVICES PRIME INCENTIVE CREDITS
..... 12-24

TABLE 12.14: GROUPS ELIGIBLE FOR CONSTRUCTION, CONTRACTUAL SERVICES, AND
COMMODITIES PRIME CONTRACTS BID DISCOUNTS 12-25

TABLE 12.15: SUBCONTRACTOR AVAILABILITY 12-25

TABLE 12.16: CONSTRUCTION CONTRACTS VALUED OVER \$1,000,000..... 12-38



List of Charts

CHART 7.01: ANNUAL GROSS REVENUE: ALL INDUSTRIES.....	7-19
CHART 7.02: CURRENT NUMBER OF EMPLOYEES	7-25
CHART 9.01: DISPARITY ANALYSIS: ALL INDUSTRIES PRIME PURCHASE ORDERS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013.....	9-6
CHART 9.02: DISPARITY ANALYSIS: ALL CONSTRUCTION PRIME PURCHASE ORDERS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-9
CHART 9.03: DISPARITY ANALYSIS: ALL PROFESSIONAL SERVICES PRIME PURCHASE ORDERS ALL PURCHASE ORDERS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013.....	9-12
CHART 9.04: DISPARITY ANALYSIS: ALL CONTRACTUAL SERVICES PRIME PURCHASE ORDERS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-15
CHART 9.05: DISPARITY ANALYSIS: ALL COMMODITIES PRIME PURCHASE ORDERS, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-18
CHART 9.06: DISPARITY ANALYSIS: FORMAL CONSTRUCTION PRIME PURCHASE ORDERS VALUED \$50,000 AND OVER, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-22
CHART 9.07: DISPARITY ANALYSIS: FORMAL PROFESSIONAL SERVICES PRIME PURCHASE ORDERS VALUED \$325,000 AND OVER, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-26
CHART 9.08: DISPARITY ANALYSIS: FORMAL PROFESSIONAL SERVICES PRIME PURCHASE ORDERS VALUED \$195,000 AND OVER, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-30
CHART 9.09: DISPARITY ANALYSIS: FORMAL CONTRACTUAL SERVICES PRIME PURCHASE ORDERS VALUED \$500,000 AND OVER, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013.....	9-34
CHART 9.10: DISPARITY ANALYSIS: FORMAL CONTRACTUAL SERVICES PRIME PURCHASE ORDERS VALUED \$50,000 TO \$499,999, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-43



CHART 9.11: DISPARITY ANALYSIS: FORMAL CONTRACTUAL SERVICE PRIME PURCHASE ORDERS VALUED \$5,000 TO \$49,999, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013.....	9-46
CHART 9.12: DISPARITY ANALYSIS: FORMAL COMMODITIES PRIME PURCHASE ORDERS VALUED \$500,000 AND OVER, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-50
CHART 9.13: DISPARITY ANALYSIS: FORMAL COMMODITIES PRIME PURCHASE ORDERS VALUED \$50,000 TO \$499,999, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013.....	9-53
CHART 9.14: DISPARITY ANALYSIS: FORMAL COMMODITIES PRIME PURCHASE ORDERS VALUED \$5,000 TO \$49,999, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-57
CHART 9.15: DISPARITY ANALYSIS: INFORMAL CONSTRUCTION PRIME PURCHASE ORDERS VALUED LESS THAN \$50,000, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-61
CHART 9.16: DISPARITY ANALYSIS: INFORMAL PROFESSIONAL SERVICES PRIME PURCHASE ORDERS VALUED \$50,000 TO \$194,999, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-65
CHART 9.17: DISPARITY ANALYSIS: INFORMAL PROFESSIONAL SERVICES PRIME PURCHASE ORDERS VALUED LESS THAN \$50,000, FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013.....	9-69
CHART 9.18: DISPARITY ANALYSIS: INFORMAL CONTRACTUAL SERVICES PRIME PURCHASE ORDERS VALUED LESS THAN \$5,000 FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013.....	9-72
CHART 9.19: DISPARITY ANALYSIS: INFORMAL COMMODITIES PRIME PURCHASE ORDERS VALUED LESS THAN \$5,000 FISCAL YEARS JULY 1, 2008, TO JUNE 30, 2013	9-75
CHART 10.01: DISPARITY ANALYSIS: CONSTRUCTION SUBCONTRACTS, FISCAL YEARS JULY 1, 2008, AND JUNE 30, 2013.....	10-5
CHART 10.02: DISPARITY ANALYSIS: PROFESSIONAL SERVICES SUBCONTRACTS, FISCAL YEARS JULY 1, 2008, AND JUNE 30, 2013	10-8
CHART 12.01: SBBC PROCEDURE FOR PROFESSIONAL SERVICES AGREEMENTS	12-35



CHAPTER 1: LEGAL ANALYSIS

I. INTRODUCTION

This chapter presents the constitutional standard utilized by federal courts to review local governments' minority business enterprise contracting programs. The standard is set forth in the 1989 United States Supreme Court decision of *City of Richmond v. J.A. Croson Co.*¹ and its progeny. *Croson* dealt with the City of Richmond's locally funded Minority Business Enterprise (MBE) Program and established the most stringent evidentiary standard of review for race-based programs. *Croson* announced that programs employing racial classification would be subject to "strict scrutiny," the highest legal standard. Broad notions of equity or general allegations of historical and societal discrimination against minorities fail to meet the requirements of strict scrutiny. Where there are identified statistical findings of discrimination sufficient to warrant remediation, the remedy also must impose a minimal burden upon unprotected classes.

The Broward County Public Schools has a Supplier Diversity and Outreach Program. The Supplier Diversity and Outreach Program was adopted in 1998 under Policy 7007.² Policy 7007 commits the Broward County Public Schools to make every effort to provide contracting opportunities for M/WBEs. If there is evidence of statistically significant underutilization of available minority and woman-owned businesses, the Broward County Public School's Supplier Diversity and Outreach Program (SDOP) may be amended to employ race and gender-conscious remedies to address the disparities. Those race and gender-conscious measures would be subject to the strict scrutiny standard set forth in *Croson*.

II. STANDARD OF REVIEW

In this context, the standard of review refers to the level of scrutiny a court applies during its analysis of whether a particular law is constitutional. This chapter discusses the standards of review applied to remedial programs based on various classifications, including the heightened standard of review that the United States Supreme Court set forth in *Croson* for race-conscious programs.



¹ *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 495-96 (1989).

² Administrative Procedure School Board of Broward County, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007-A (2014).

2. Minority Business Enterprise Programs

In *Croson*, the United States Supreme Court affirmed that, pursuant to the Fourteenth Amendment, the proper standard of review for state and local race-based MBE programs is strict scrutiny.³ Specifically, the government must show that the race-conscious remedies are narrowly tailored to achieve a compelling state interest.⁴ The Court recognized that a state or local entity may take action, in the form of an MBE program, to rectify the effects of *identified, systemic racial discrimination* within its jurisdiction.⁵ Justice O'Connor, speaking for the majority, articulated various methods of demonstrating discrimination and set forth guidelines for crafting MBE programs that are “narrowly tailored” to address systemic racial discrimination.⁶

3. Women Business Enterprise Programs

Since *Croson*, which dealt exclusively with the review of a race-conscious plan, the United States Supreme Court has remained silent with respect to the appropriate standard of review for geographically based Women Business Enterprise (WBE) programs and Local Business Enterprise (LBE) programs. In other contexts, however, the United States Supreme Court has ruled that gender classifications are not subject to the rigorous strict scrutiny standard applied to racial classifications. Instead, gender classifications have been subject only to an “intermediate” standard of review, regardless of which gender is favored.

Notwithstanding the fact that the United States Supreme Court has not ruled on a WBE program, the consensus among the federal circuit courts of appeals is that WBE programs are subject to intermediate scrutiny, rather than the more exacting strict scrutiny standard to which race-conscious programs are subject.⁷ Intermediate review requires the governmental entity to demonstrate that the action taken furthers an “important governmental objective” employing a method that bears a fair and substantial relation to the goal.⁸ The courts have also described the test as requiring an “exceedingly

³ *Croson*, 488 U.S. at 493-95.

⁴ *Id.* at 493.

⁵ *Id.* at 509.

⁶ *Id.* at 501-2. Cases involving education and employment frequently refer to the principal concepts applicable to the use of race in government contracting: compelling interest and narrowly tailored remedies. The Supreme Court in *Croson* and subsequent cases provides fairly detailed guidance on how those concepts are to be treated in contracting. In education and employment, the concepts are not explicated to nearly the same extent. Therefore, references in those cases to “compelling governmental interest” and “narrow tailoring” for purposes of contracting are essentially generic and of little value in determining the appropriate methodology for disparity studies.

⁷ *See Coral Constr. Co. v. King Cnty.*, 941 F.2d 910, 930 (9th Cir. 1991); *Contractors Ass’n of E. Pa. v. City of Philadelphia (“Philadelphia VI”)*, 91 F.3d 586, 596-98 (3d Cir. 1996); *Eng’g Constr. Ass’n v. Metro. Dade Cnty. (“Dade County II”)*, 122 F.3d 895, 907-08 (11th Cir. 1997); *see also Concrete Works of Colo. v. City & Cnty. of Denver*, 321 F.3d 950, 960 (10th Cir. 2003) (“*Concrete Works IV*”); and *H.B. Rowe Co. v. Tippett*, 615 F.3d 233, 236 (4th Cir. 2010) (“*Rowe*”).

⁸ *Miss. Univ. for Women v. Hogan*, 458 U.S. 718, 726 (1982); *see also United States v. Virginia*, 518 U.S. 515, 524 (1996) (“*Virginia*”).



persuasive justification” for classifications based on gender.⁹ The United States Supreme Court acknowledged that in “limited circumstances a gender-based classification favoring one sex can be justified if it intentionally and directly assists the members of that sex who are disproportionately burdened.”¹⁰

Consistent with the United States Supreme Court’s finding with regard to gender classification, the Third Circuit in *Contractors Association of Eastern Pennsylvania v. City of Philadelphia* (“*Philadelphia IV*”) ruled in 1993 that the standard of review governing WBE programs is different from the standard imposed upon MBE programs.¹¹ The Third Circuit held that, whereas MBE programs must be “narrowly tailored” to a “compelling state interest,” WBE programs must be “substantially related” to “important governmental objectives.”¹² In contrast, an MBE program would survive constitutional scrutiny only by demonstrating a pattern and practice of systemic racial exclusion or discrimination in which a state or local government was an active or passive participant.¹³

The Ninth Circuit in *Associated General Contractors of California v. City and County of San Francisco* (“*AGCC I*”) held that classifications based on gender require an “exceedingly persuasive justification.”¹⁴ The justification is valid only if members of the gender benefited by the classification actually suffer a disadvantage related to the classification, and the classification does not reflect or reinforce archaic and stereotyped notions of the roles and abilities of women.¹⁵

The Eleventh Circuit also applied intermediate scrutiny.¹⁶ In its review and affirmation of the district court’s holding, in *Engineering Contractors Association of South Florida v. Metropolitan Dade County* (“*Dade County II*”), the Eleventh Circuit United States Court of Appeals cited the Third Circuit’s 1993 formulation in *Philadelphia*: “[T]his standard requires the [County] to present probative evidence in support of its stated rationale for the gender preference, discrimination against women-owned contractors.”¹⁷ Although the *Dade County II* appellate court ultimately applied the intermediate scrutiny standard, it queried whether the United States Supreme Court decision in *United States*

⁹ *Hogan*, 458 U.S. at 751; see also *Mich. Rd. Builders Ass’n, Inc. v. Milliken*, 834 F.2d 583, 595 (6th Cir. 1987).

¹⁰ *Hogan*, 458 U.S. at 728; see also *Schlesinger v. Ballard*, 419 U.S. 498, 508 (1975) (“*Ballard*”).

¹¹ *Contractors Ass’n of E. Pa. v. City of Philadelphia* (“*Philadelphia IV*”), 6 F.3d 990, 1001 (3d Cir. 1993).

¹² *Philadelphia IV*, 6 F.3d at 1009-10.

¹³ *Id.* at 1002.

¹⁴ *Associated Gen. Contractors of Cal. V. City & Cnty. of San Francisco* (“*AGCC I*”), 813 F. 2d 922, 940 (9th Cir. 1991).

¹⁵ *Ballard*, 419 U.S. at 508.

¹⁶ *Ensley Branch N.A.A.C.P. v. Seibels*, 31 F.3d 1548, 1579-80 (11th Cir. 1994).

¹⁷ *Dade County II*, 122 F.3d at 909 (citing *Philadelphia IV*, 6 F.3d at 1010; see also *Saunders v. White*, 191 F. Supp. 2d 95, 134 (D.D.C. 2002) (stating “[g]iven the gender classifications explained above, the initial evaluation procedure must satisfy intermediate scrutiny to be constitutional.”).



v. Virginia,¹⁸ finding the all-male program at Virginia Military Institute unconstitutional, signaled a heightened level of scrutiny.¹⁹ In the case of *United States v. Virginia*, the U.S. Supreme Court held that parties who seek to defend gender-based government action must demonstrate an “exceedingly persuasive justification” for that action.²⁰ While the Eleventh Circuit United States Court of Appeals echoed that speculation, it concluded that “[u]nless and until the U.S. Supreme Court tells us otherwise, intermediate scrutiny remains the applicable constitutional standard in gender discrimination cases, and a gender preference may be upheld so long as it is substantially related to an important governmental objective.”²¹

In *Dade County II*, the Eleventh Circuit court noted that the Third Circuit in *Philadelphia* was the only federal appellate court that explicitly attempted to clarify the evidentiary requirement applicable to WBE programs.²² *Dade County II* interpreted that standard to mean that “evidence offered in support of a gender preference must not only be ‘probative’ [but] must also be ‘sufficient.’”²³

It also reiterated two principal guidelines of intermediate scrutiny evidentiary analysis: (1) under this test a local government must demonstrate some past discrimination against women, but not necessarily discrimination by the government itself,²⁴ and (2) the intermediate scrutiny evidentiary review is not to be directed toward mandating that gender-conscious affirmative action is used only as a “last resort”²⁵ but instead ensuring that the affirmative action is “a product of analysis rather than a stereotyped reaction based on habit.”²⁶

This determination requires “evidence of past discrimination in the economic sphere at which the affirmative action program is directed.”²⁷ The court also stated that “a gender-conscious program need not closely tie its numerical goals to the proportion of qualified women in the market.”²⁸

¹⁸ *Virginia*, 518 U.S. at 534.

¹⁹ *Dade County II*, 122 F.3d at 907-08.

²⁰ *Virginia*, 518 U.S. at 534.

²¹ *Dade County II*, 122 F.3d at 908.

²² *Id.* at 909.

²³ *Id.* at 910.

²⁴ *Id.* (quoting *Ensley Branch*, 31 F.3d at 1580).

²⁵ *Id.* (quoting *Hayes v. N. State Law Enforcement Officers Ass’n.*, 10 F.3d 207, 217 (4th Cir. 1993) (racial discrimination case)).

²⁶ *Dade County II*, 122 F.3d. (quoting *Philadelphia IV*, 6 F.3d at 1010).

²⁷ *Id.* (quoting *Ensley Branch*, 31 F.3d at 1581).

²⁸ *Dade County II*, 122 F.3d at 929; cf. *Builders Ass’n of Greater Chi. v. Cnty. of Cook*, 256 F.3d 642, 644 (7th Cir. 2001) (questioned why there should be a lesser standard where the discrimination was against women rather than minorities.).



4. Local Business Enterprise Programs

In *AGCC I*, a pre-*Croson* case, the Ninth Circuit Court of Appeals applied the rational basis standard when evaluating the City and County of San Francisco's Local Business Enterprise (LBE) program, holding that a local government may give a preference to local businesses to address the economic disadvantages those businesses face in doing business within the City and County of San Francisco.²⁹

To survive a constitutional challenge under a "rational basis" review, the government entity need only demonstrate that the governmental action or program is "rationally related" to a "legitimate" government interest.³⁰ The Supreme Court cautioned government agencies seeking to meet the rational basis standard by advising that, if a race and gender-neutral program is subjected to a constitutional attack, the facts upon which the program is predicated will be subject to judicial review.³¹ The rational basis standard of review does not have to be the government's actual interest. Rather, if the court can merely hypothesize a "legitimate" interest served by the challenged action, it will withstand the rational basis review.³² The term "rational" must convince an impartial lawmaker that the classification would serve a legitimate public purpose that transcends the harm to the members of the disadvantaged class.³³

San Francisco conducted a detailed study of the economic disadvantages faced by San Francisco-based businesses as compared to businesses located in other jurisdictions. The study showed a competitive disadvantage in public contracting for businesses located within the City as compared to businesses from other jurisdictions.

San Francisco-based businesses incurred higher administrative costs in doing business within the City. Such costs included higher taxes, rents, wages, insurance rates, and benefits for labor. In upholding the LBE Ordinance, the Ninth Circuit held ". . . the city may rationally allocate its own funds to ameliorate disadvantages suffered by local businesses, particularly where the city itself creates some of the disadvantages."³⁴

²⁹ *AGCC I*, 813 F.2d at 943; *Lakeside Roofing Company v. State of Missouri, et al.*, 2012 WL 709276 (E.D. Mo. Mar. 5, 2012) (Note that federal judges will generally rule the way that a previous court ruled on the same issue following the doctrine of *stare decisis* – the policy of courts to abide by or adhere to principles established by decisions in earlier cases; however, a decision reached by a different circuit is not legally binding on another circuit court, it is merely persuasive and instructional on the issue).

³⁰ *Armour v. City of Indianapolis, Ind.*, 132 S. Ct. 2073, 2080 (2012) (quoting *Heller v. Doe*, 509 U.S. 312, 319–320 (1993)).

³¹ *Id.*

³² *Lakeside Roofing*, 2012 WL 709276; see KATHLEEN M. SULLIVAN & GERALD GUNTHER, CONSTITUTIONAL LAW FOUNDATION PRESS Chapter 9 (16th ed. 2007).

³³ *Croson*, 488 U.S. at 515.

³⁴ *AGCC I*, 813 F.2d at 943.



5. Small Business Enterprise Programs

A government entity may implement a Small Business Enterprise (SBE) program predicated upon a rational basis to ensure adequate small business participation in government contracting. Rational basis is the lowest level of scrutiny and the standard the courts apply to race and gender-neutral public contracting programs.³⁵

III. **BURDEN OF PROOF**

The procedural protocol established by *Croson* imposes an initial burden of proof upon the government to demonstrate that the challenged MBE program is supported by a strong factual predicate, i.e., documented evidence of past discrimination. Notwithstanding this requirement, the plaintiff bears the ultimate burden of proof to persuade the court that the MBE program is unconstitutional. The plaintiff may challenge a government's factual predicate on any of the following grounds:³⁶

- Disparity exists due to race-neutral reasons
- Methodology is flawed
- Data are statistically insignificant
- Controverting data exist

A. **Initial Burden of Proof**

Croson requires defendant jurisdictions to produce a “strong basis in evidence” that the objective of the challenged MBE program is to rectify the effects of past identified discrimination.³⁷ Whether the government has produced a strong basis in evidence is a question of law.³⁸ The defendant in a constitutional claim against a disparity study has the initial burden of proof to show that there was past discrimination.³⁹ Once the defendant meets this initial burden, the burden shifts to the plaintiff to prove that the program is unconstitutional. Because the sufficiency of the factual predicate supporting the MBE program is at issue, factual determinations relating to the accuracy and validity of the proffered evidence underlie the initial legal conclusion to be drawn.⁴⁰

³⁵ *Doe I v. Lower Merion Sch. Dist.*, 689 F. Supp. 2d 742, 748 (E.D. Pa. 2010).

³⁶ *Contractors Ass'n v. City of Philadelphia*, 893 F. Supp. 419, 430, 431, 433, 437 (E.D. Pa.1995) (“*Philadelphia V*”) (These were the issues on which the district court in Philadelphia reviewed the disparity study before it).

³⁷ *Philadelphia VI*, 91 F.3d at 586 (citing *Concrete Works of Colo. v. Denver*, 36 F.3d 1513, 1522 (10th Cir. 1994) (“*Concrete Works II*”)); see *Croson*, 488 U.S. at 510.

³⁸ *Id.* (citing *Associated Gen. Contractors v. New Haven*, 791 F. Supp. 941, 944 (D. Conn. 1992)).

³⁹ *Concrete Works II*, 36 F.3d at 1521-22 (citing *Wygant v. Jackson Bd. of Educ.*, 476 U.S. 267, 292 (1986)).

⁴⁰ *Concrete Works II*, 36 F.3d at 1522.



The adequacy of the government’s evidence is “evaluated in the context of the breadth of the remedial program advanced by the [jurisdiction].”⁴¹ The onus is upon the jurisdiction to provide a factual predicate that is sufficient in scope and precision to demonstrate that contemporaneous discrimination necessitated the adoption of the MBE program.⁴²

B. Ultimate Burden of Proof

The party challenging an MBE program will bear the ultimate burden of proof throughout the course of the litigation—despite the government’s obligation to produce a strong factual predicate to support its program.⁴³ The plaintiff must persuade the court that the program is constitutionally flawed either by challenging the government’s factual predicate for the program or by demonstrating that the program is overly broad.

Joining the majority in stating that the ultimate burden rests with the plaintiff, Justice O’Connor explained the nature of the plaintiff’s burden of proof in her concurring opinion in *Wygant v. Jackson Board of Education* (“*Wygant*”):⁴⁴

[I]t is incumbent upon the nonminority [plaintiffs] to prove their case; they continue to bear the ultimate burden of persuading the court that the [government’s] evidence did not support an inference of prior discrimination and thus a remedial purpose, or that the plan instituted on the basis of this evidence was not sufficiently “narrowly tailored.”⁴⁵

In *Philadelphia VI*, the Third Circuit Court of Appeals clarified this allocation of the burden of proof and the constitutional issue of whether facts constitute a “strong basis” in evidence for race-based remedies.⁴⁶ That Court wrote that the allocation of the burden of persuasion is dependent upon the plaintiff’s argument against the constitutionality of the program. If the plaintiff’s theory is that an agency has adopted race-based preferences with a purpose other than remedying past discrimination, the plaintiff has the burden of convincing the court that the identified remedial motivation is a pretext and that the real motivation was something else.⁴⁷ If, on the other hand, the plaintiff argues there is no existence of past discrimination within the agency, the plaintiff must successfully rebut the agency’s evidentiary facts and prove their inaccuracy.⁴⁸

⁴¹ *Id.* (citing *Croson*, 488 U.S. at 498).

⁴² *See Croson*, 488 U.S. at 488.

⁴³ *See Wygant*, 476 U.S. at 277-78, 293.

⁴⁴ *Id.* (O’Connor, S., concurrence).

⁴⁵ *Wygant*, 476 U.S. at 277-78.

⁴⁶ *Philadelphia VI*, 91 F.3d at 597.

⁴⁷ *Id.* at 597.

⁴⁸ *Philadelphia VI*, 91 F.3d at 597-598.



However, the ultimate issue of whether sufficient evidence exists to prove past discrimination is a question of law. The burden of persuasion in the traditional sense plays no role in the court's resolution of that ultimate issue.⁴⁹

Concrete Works VI made clear that the plaintiff's burden is an evidentiary one; it cannot be discharged simply by argument. The court cited its opinion in *Adarand Constructors Inc. v. Slater*, 228 F.3d 1147, 1173 (10th Cir. 2000): “[g]eneral criticism of disparity studies, as opposed to particular evidence undermining the reliability of the particular disparity study, is of little persuasive value.”⁵⁰ The requisite burden of proof needed to establish a factual predicate for race and gender-conscious goals as set forth by *Croson* and its progeny is described below in Section IV.

The Tenth Circuit and the Eleventh Circuit present alternative approaches to the legal evidentiary requirements of the shifting burden of proof in racial classification cases. This split among the circuits pertains to the allocation of the burden of proof once the initial burden of persuading the court that persisting vestiges of discrimination exist is met.⁵¹

The Tenth Circuit's opinion in *Concrete Works VI* states that the burden of proof remains with the plaintiff to demonstrate that an ordinance is unconstitutional.⁵² On the other hand, the Eleventh Circuit in *Hershell* contends that the government as the proponent of the classification bears the burden of proving that its consideration of race is narrowly tailored to serve a compelling state interest, and that the government must always maintain a “strong basis in evidence” for undertaking affirmative action programs.⁵³ Therefore, the proponent of the classification must meet a substantial burden of proof, a standard largely allocated to the government to prove that sufficient vestiges of discrimination exist to support the conclusion that remedial action is necessary. Within the Eleventh Circuit, judicial review of a challenged affirmative action program focuses primarily on whether the government entity can meet the burden of proof.

⁴⁹ At first glance, the Third Circuit and the Eleventh Circuit positions appear to be inconsistent as to whether the issue at hand is a legal issue or a factual issue. However, the two courts were examining the issues in different scenarios. For instance, the Third Circuit was examining whether enough facts existed to determine if past discrimination existed, and the Eleventh Circuit was examining whether the remedy the agency utilized was the appropriate response to the determined past discrimination. Therefore, depending upon the Plaintiff's arguments, a court reviewing an MBE program is likely to be presented with questions of law and fact.

⁵⁰ *Concrete Works VI*, 321 F.3d at 979.

⁵¹ *Hershell Gill Consulting Eng'rs, Inc. v. Miami-Dade Cnty.*, 333 F. Supp. 2d 1305, 1325 (S.D. Fla. 2004).

⁵² *Concrete Works VI*, 321 F.3d at 959 (quoting *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147, 1176 (10th Cir. 2000) (“We reiterate that the ultimate burden of proof remains with the challenging party to demonstrate the unconstitutionality of an affirmative-action program.”)).

⁵³ *Hershell*, 333 F. Supp. 2d at 1305 (stating that *Concrete Works* is not persuasive because it conflicts with the allocation of the burden of proof stated by Eleventh Circuit precedent in *Johnson v. Board of Regents of the University of Georgia*, 263 F.3d 1234, 1244 (11th Cir. 2001)).



In practice, the standards prescribed in the Eleventh Circuit for proving the constitutionality of a proposed M/WBE framework are rooted in *Engineering Contractors Ass'n v. Metropolitan Dade County*, the same Eleventh Circuit case that was cited to in the Tenth Circuit.⁵⁴ In *Dade County I*, the court found that a municipality can justify affirmative action by demonstrating “gross statistical disparities” between the proportion of minorities awarded contracts and the proportion of minorities willing and able to do the work, or by presenting anecdotal evidence – especially if buttressed by statistical data.⁵⁵

IV. CROSON EVIDENTIARY FRAMEWORK

Government entities must construct a strong evidentiary framework to stave off legal challenges and ensure that the adopted MBE program comports with the requirements of the Equal Protection Clause of the United States Constitution. The framework must comply with the stringent requirements of the strict scrutiny standard. Accordingly, there must be a strong basis in evidence that tends to show past discrimination, and the race-conscious remedy must be “narrowly tailored,” as set forth in *Croson*.⁵⁶ A summary of the appropriate types of evidence to satisfy the first element of the *Croson* standard follows.

A. Active or Passive Participation

Croson requires that the local entity seeking to adopt an MBE program must have perpetuated the discrimination to be remedied by the program.⁵⁷ However, the local entity need not have been an active perpetrator of such discrimination. Passive participation will satisfy this part of the Court’s strict scrutiny review.⁵⁸ An entity will be considered an “active” participant if the evidence shows it has created barriers that actively exclude MBEs from its contracting opportunities. An entity will be considered to be a “passive” participant in private sector discriminatory practices if it has infused tax dollars into that discriminatory industry.⁵⁹

Until *Concrete Works I*, the inquiry regarding passive discrimination was limited to the subcontracting practices of government prime contractors. The Tenth Circuit, in *Concrete Works I*, considered a purely private sector definition of passive

⁵⁴ 943 F. Supp. 1546 (S.D. Fla. 1996) (“*Dade County I*”).

⁵⁵ *Id.* at 907.

⁵⁶ *Croson*, 488 U.S. at 486.

⁵⁷ *Id.* at 488.

⁵⁸ *Id.* at 509.

⁵⁹ *Id.* at 492, accord *Coral Constr.*, 941 F.2d at 916.



discrimination, holding that evidence of a government entity infusing its tax dollars into a discriminatory system can satisfy passive discrimination.⁶⁰

In *Concrete Works I*, the district court granted summary judgment in favor of the City of Denver in 1993.⁶¹ *Concrete Works* appealed to the Tenth Circuit, in *Concrete Works II*, in which the summary judgment in favor of the City of Denver was reversed and the case was remanded to the district court for trial.⁶² The case was remanded with specific instructions permitting the parties “to develop a factual record to support their competing interpretations of the empirical data.”⁶³ On remand, the district court entered a judgment in favor of the plaintiff holding that the City’s ordinances violated the Fourteenth Amendment.⁶⁴

The district court in *Concrete III* rejected the four disparity studies the city offered to support the continuation of Denver’s M/WBE program.⁶⁵ The court surmised that (1) the methodology employed in the statistical studies was not “designed to answer the relevant questions,”⁶⁶ (2) the collection of data was flawed, (3) important variables were not accounted for in the analyses, and (4) the conclusions were based on unreasonable assumptions.⁶⁷ The court deemed that the “most fundamental flaw” in the statistical evidence was the lack of “objective criteria [to] define who is entitled to the benefits of the program and [which groups should be] excluded from those benefits.”⁶⁸ The statistical analysis relied upon by the City to support its M/WBE program was conducted as a result of the ensuing litigation. The statistical evidence proffered by the City to the court was not objective in that it lacked a correlation to the current M/WBE program goals.

The Tenth Circuit on appeal rejected the district court’s analysis because the district court’s queries required Denver to prove the existence of discrimination. Moreover, the Tenth Circuit explicitly held that “passive” participation included private sector discrimination in the marketplace. The court found that marketplace discrimination is relevant where the agency’s prime contractors’ practices are discriminatory against their subcontractors:

⁶⁰ *Concrete Works of Colo., Inc. v. City & Cnty. of Denver*, 823 F. Supp. 821, 824 (D. Colo. 1993) (“*Concrete Works I*”), *rev’d*, 36 F.3d 1513 (10th Cir. 1994), *rev’d*, 86 F. Supp. 2d 1042 (D. Colo. 2000), *rev’d*, 321 F.3d 950 (10th Cir. 2003).

⁶¹ *Concrete Works I*, 823 F. Supp. at 994.

⁶² *Concrete Works II*, 36 F.3d at 1530-31.

⁶³ *Id.*

⁶⁴ *Concrete Works of Colo., Inc. v. City & Cnty. of Denver*, 86 F. Supp. 2d 1042, 1079 (D. Colo. 2000) (“*Concrete Works III*”).

⁶⁵ *Concrete Works of Colo., Inc. v. City & Cnty. of Denver*, 86 F. Supp. 2d 1065-68.

⁶⁶ *Id.* at 1067.

⁶⁷ *Id.* at 1057-58, 1071.

⁶⁸ *Id.* at 1068.



The Court, however, did set out two conditions which must be met for the governmental entity to show a compelling interest. “First, the discrimination must be identified discrimination.” (citation omitted). The City can satisfy this condition by identifying the discrimination “*public or private*, with some specificity.” (internal quotes and citation omitted).⁶⁹

In *Concrete Works IV*, the Tenth Circuit held that the governmental entity must also have a “strong basis in evidence to conclude that remedial action was necessary.”⁷⁰ The Tenth Circuit further held that the city was correct in its attempt to show that it “indirectly contributed to private discrimination by awarding public contracts to firms that in turn discriminated against MBE and/or WBE subcontractors in other private portions of their business.”⁷¹ While the Tenth Circuit noted that the record contained “extensive evidence” of private sector discrimination, the question of the adequacy of private sector discrimination as the factual predicate for a race-based remedy was not before the court.⁷²

Ten months after *Concrete Works IV* the question of whether a particular public sector race-based remedy is narrowly tailored when it is based solely on business practices within the private sector was at issue in *Builders Association of Greater Chicago v. City of Chicago*.⁷³ The plaintiff in *Builders Association of Greater Chicago* challenged the City’s construction set-aside program. The court considered pre-enactment and post-enactment evidence in support of the six-year-old M/WBE program.⁷⁴ The challenged program consisted of a 16.9 percent MBE subcontracting goal, a 10-percent MBE prime contracting goal, a 4.5 percent WBE subcontracting goal and a 1 percent WBE prime contracting goal.⁷⁵

The district court found that private sector business practices offered by the city, which were based on United States Census data and surveys, constituted discrimination against minorities in the Chicago market area.⁷⁶ However, the district court did not find the City’s M/WBE subcontracting goal to be a narrowly tailored remedy given the factual predicate. The court found that the study did not provide a meaningful individualized review of

⁶⁹ *Concrete Works IV*, 321 F.3d at 975-76.

⁷⁰ *Id.* at 976 (quoting *Shaw v. Hunt*, 517 U.S. 804, 909 (1996)).

⁷¹ *Id.* at 976.

⁷² *Concrete Works IV*, 321 F.3d at 959, 977, 990.

⁷³ *Builders Ass’n of Greater Chi. v. City of Chi.*, 298 F. Supp. 2d 725, 732 (N.D. Ill. 2003).

⁷⁴ *Id.* at 726, 729, 733-34.

⁷⁵ *Id.* at 729.

⁷⁶ *Id.* at 735-37.



M/WBEs in order to formulate remedies “more akin to a laser beam than a baseball bat.”⁷⁷ The City was ordered to suspend its M/WBE goals program.

As recently as 2010, the Fourth Circuit in *H.B. Rowe Co. v. Tippett* ruled that the State of North Carolina could not rely on private-sector data to demonstrate that prime contractors underutilized women subcontractors in the general construction industry.⁷⁸ The court found that the private sector data did not test whether the underutilization was statistically significant or just mere chance.⁷⁹

B. Systemic Discriminatory Exclusion

Croson established that a local government enacting a race-conscious contracting program must demonstrate identified systemic discriminatory exclusion on the basis of race or any other illegitimate criteria (arguably gender).⁸⁰ Thus, it is essential to demonstrate a pattern and practice of such discriminatory exclusion in the relevant market area.⁸¹ Using appropriate evidence of the entity’s active or passive participation in the discrimination, as discussed above, past discriminatory exclusion must be identified for each racial group to which a remedy would apply.⁸² Mere statistics and broad assertions of purely societal discrimination will not suffice to support a race or gender-conscious program.

Croson enumerates two ways an entity may establish the requisite factual predicate of discrimination. First, 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 an entity or by the entity’s prime contractors may support an inference of discriminatory exclusion.⁸³ In other words, when the relevant statistical pool is used, a showing of statistically significant underutilization “may constitute prima facie proof of a pattern or practice of discrimination[.]”⁸⁴

⁷⁷ *Builders Ass’n of Greater Chi.*, 298 F. Supp. 2d at 737-39, 742.

⁷⁸ *Rowe*, 615 F.3d at 236.

⁷⁹ *Id.*

⁸⁰ *Croson*, 488 U.S. at 492; see *Monterey Mech. Co. v. Pete Wilson*, 125 F.3d 702, 713 (9th Cir. 1997); see also *W.H. Scott Constr. Co. v. City of Jackson*, 199 F.3d 206, 218-20 (1999) (held the City’s MBE program was unconstitutional for construction contracts because minority participation goals were arbitrarily set and not based on any objective data. Moreover, the Court noted that had the City implemented the recommendations from the disparity study it commissioned, the MBE program may have withstood judicial scrutiny (the City was not satisfied with the study and chose not to adopt its conclusions)).

⁸¹ *Croson*, 488 U.S. at 509.

⁸² *Id.* at 506. (The Court stated in *Croson*, “[t]he random inclusion of racial groups that, as a practical matter, may never have suffered from discrimination in the construction industry in Richmond suggests that perhaps the city’s purpose was not in fact to remedy past discrimination”); See *N. Shore Concrete & Assoc. v. City of New York*, 1998 U.S. Dist. LEXIS 6785 * 55 (E.D.N.Y. April 12, 1998) (rejected the inclusion of Native Americans and Alaskan Natives in the City’s program).

⁸³ *Croson*, 488 U.S. at 509.

⁸⁴ *Id.* at 501 (citing *Hazelwood Sch. Dist. v. United States*, 433 U.S. 299, 307-08 (1977)).



The *Croson* Court made clear that both prime contract and subcontracting data were relevant.⁸⁵ The Court observed that “[w]ithout any information on minority participation in subcontracting, it is quite simply impossible to evaluate overall minority representation in the city’s construction expenditures.”⁸⁶ Subcontracting data is also an important means by which to assess suggested future remedial actions. Because the decision makers are different for the awarding of prime contracts and subcontracts, the remedies for discrimination identified at a prime contractor versus subcontractor level might also be different.

Second, “evidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government’s determination that broader remedial relief is justified.”⁸⁷ Thus, if a local government has statistical evidence that non-minority contractors are systematically excluding minority businesses from subcontracting opportunities, it may act to end the discriminatory exclusion.⁸⁸ Once an inference of discriminatory exclusion arises, the entity may act to dismantle the closed business system “**by taking appropriate measures against those who discriminate** on the basis of race or other illegitimate criteria.”⁸⁹ *Croson* further states, “**In the extreme case**, some form of narrowly tailored racial preference might be necessary to break down patterns of deliberate exclusion.”⁹⁰

In *Coral Construction*, the Ninth Circuit Court of Appeals further elaborated upon the type of evidence needed to establish the factual predicate that justifies a race-conscious remedy.⁹¹ The Court held that both statistical and anecdotal evidence should be relied upon in establishing systemic discriminatory exclusion in the relevant marketplace as the factual predicate for an MBE program.⁹² The court explained that statistical evidence, standing alone, often does not account for the complex factors and motivations guiding contracting decisions, many of which may be entirely race-neutral.⁹³

Likewise, anecdotal evidence, standing alone, is unlikely to establish a systemic pattern of discrimination.⁹⁴ Nonetheless, anecdotal evidence is important because the individuals

⁸⁵ *Croson*, 488 U.S. at 502-03.

⁸⁶ *Id.*

⁸⁷ *Id.* at 509.

⁸⁸ *Croson*, 488 U.S. at 509.

⁸⁹ *Id.* (emphasis added).

⁹⁰ *Id.* (emphasis added).

⁹¹ *Coral Constr.*, 941 F.2d at 917-18, 920-26.

⁹² *Id.* at 919.

⁹³ *Id.*

⁹⁴ *Id.*



who testify about their personal experiences bring “the cold numbers convincingly to life.”⁹⁵

1. Geographic Market

Croson did not speak directly to how the geographic market is to be determined. In *Coral Construction*, the Ninth Circuit Court of Appeals held that “an MBE program must limit its geographical scope to the boundaries of the enacting jurisdiction.”⁹⁶ Conversely, in *Concrete Works I*, the district court specifically approved the Denver Metropolitan Statistical Area (MSA) as the appropriate market area since 80 percent of the construction contracts were let there.⁹⁷

Read together, these cases support a definition of market area that is reasonable rather than dictated by a specific formula. Because *Croson* and its progeny did not provide a bright line rule for local market area, the determination should be fact-based. An entity may include consideration of evidence of discrimination within its own jurisdiction.⁹⁸ Extra-jurisdictional evidence may be permitted, when it is reasonably related to where the jurisdiction contracts.⁹⁹

2. Current Versus Historical Evidence

In assessing the existence of identified discrimination through demonstration of a disparity between MBE utilization and availability, the entity should examine disparity data both prior to and after the entity’s current MBE program was enacted. This is referred to as “pre-program” versus “post-program” data.

Croson requires that an MBE program be “narrowly tailored” to remedy current evidence of discrimination.¹⁰⁰ Thus, goals must be set according to the evidence of disparity found. For example, if there is a current disparity between the percentage of an entity’s utilization of Hispanic construction contractors and the availability of Hispanic construction contractors in that entity’s marketplace, then that entity can set a goal to bridge that disparity.

⁹⁵ *Coral Constr.*, 941 F.2d at 919 (quoting *Int’l Bhd. of Teamsters v. United States*, 431 U.S. 324, 339 (1977) (“*Teamster*”).

⁹⁶ *Id.* at 925.

⁹⁷ *Concrete Works I*, 823 F. Supp. at 835-36 (D. Colo. 1993); *rev’d on other grounds*, 36 F.3d 1513 (10th Cir. 1994).

⁹⁸ *Cone Corp. v. Hillsborough Cnty.*, 908 F.2d 908, 915 (11th Cir. 1990); *Associated Gen. Contractors v. Coal. for Econ. Equity*, 950 F.2d 1401, 1415 (9th Cir. 1991) (“*AGCC II*”).

⁹⁹ There is a related question of which firms can participate in a remedial program. In *Coral Construction*, the Court held that the definition of “minority business” used in King County’s MBE program was over-inclusive. The Court reasoned that the definition was overbroad because it included businesses other than those who were discriminated against in the King County business community. The program would have allowed, for instance, participation by MBEs who had no prior contact with the County. Hence, location within the geographic area is not enough. An MBE had to have shown that it previously sought business or is currently doing business in the market area.

¹⁰⁰ *See Croson*, 488 U.S. at 509-10.



It is not mandatory to examine a long history of an entity's utilization to assess current evidence of discrimination. In fact, *Croson* indicates that it may be legally fatal to justify an MBE program based upon outdated evidence.¹⁰¹ Therefore, the most recent two or three years of an entity's utilization data would suffice to determine whether a statistical disparity exists between current M/WBE utilization and availability.¹⁰²

3. Statistical Evidence

To determine whether statistical evidence is adequate to give rise to an inference of discrimination, courts have looked to the “disparity index,” which consists of the percentage of minority or women contractor participation in local contracts divided by the percentage of minority or women contractor availability or composition in the population of available firms in the local market area.¹⁰³ Disparity indexes have been found highly probative evidence of discrimination where they ensure that the “relevant statistical pool” of minority or women contractors is being considered.¹⁰⁴

The Third Circuit Court of Appeals, in *Philadelphia VI*, ruled that the “relevant statistical pool” includes those businesses that not only exist in the marketplace but also are qualified and interested in performing the public agency's work. In that case, the Third Circuit rejected a statistical disparity finding where the pool of minority businesses used in comparing utilization to availability was composed of those merely licensed to operate in the City of Philadelphia. A license to do business with the City, standing alone, does not indicate either willingness or capability to do work for the City. The Court concluded that this particular statistical disparity did not satisfy *Croson*.¹⁰⁵

When using a pool of relevant statistical evidence, a disparity between the utilization and availability of M/WBEs can be shown in more than one way. First, the number of M/WBEs utilized by an entity can be compared to the number of available M/WBEs. This is a strict *Croson* “disparity” formula. A significant statistical disparity between the

¹⁰¹ *Croson*, 488 U.S. at 499 (stating, “[i]t is sheer speculation how many minority firms there would be in Richmond absent past societal discrimination”).

¹⁰² See *AGCC II*, 950 F.2d at 1414 (consultant study looked at City's MBE utilization over a one-year period).

¹⁰³ Although the disparity index is a common category of statistical evidence considered, other types of statistical evidence have been taken into account. In addition to looking at Dade County's contracting and subcontracting statistics, the district court also considered marketplace data statistics (which looked at the relationship between the race, ethnicity, and gender of surveyed firm owners and the reported sales and receipts of those firms), the County's Wainwright study (which compared construction business ownership rates of M/WBEs to those of non-M/WBEs and analyzed disparities in personal income between M/WBE and non-M/WBE business owners), and the County's Brimmer Study (which focused only on Black-owned construction firms and looked at whether disparities existed when the sales and receipts of Black-owned construction firms in Dade County were compared with the sales and receipts of all Dade County construction firms). The court affirmed the judgment that declared appellant's affirmative action plan for awarding county construction contracts unconstitutional and enjoined the plan's operation because there was no statistical evidence of past discrimination and appellant failed to consider race and ethnic-neutral alternatives to the plan.

¹⁰⁴ *Rowe*, 615 F.3d at 236; see *Dade County I*, 943 F. Supp. at 1546, *aff'd*, 122 F.3d 895 (11th Cir. 1997); see also *Concrete Works II*, 36 F.3d at 1513.

¹⁰⁵ *Philadelphia VI*, 91 F.3d at 601-602. The courts have not spoken to the non-M/WBE component of the disparity index. However, if only as a matter of logic, the “availability” of non-M/WBEs requires that their willingness to be government contractors be established. The same measures used to establish the interest of M/WBEs should be applied to non-M/WBEs.



number of M/WBEs that an entity utilizes in a given industry and the number of available M/WBEs in the relevant market area specializing in the specified product/service category would give rise to an inference of discriminatory exclusion.

Second, M/WBE dollar participation can be compared to M/WBE availability. This comparison could show a disparity between an entity's award of contracts to available market area non-minority male businesses and the award of contracts to M/WBEs. Thus, in *AGCC II*, an independent consultant's study "compared the number of available MBE prime construction contractors in San Francisco with the amount of contract dollars awarded by the City to San Francisco-based MBEs" over a one-year period.¹⁰⁶ The study found that available MBEs received far fewer construction contract dollars in proportion to their numbers than their available non-minority counterparts.¹⁰⁷ AGCC argued to the Ninth Circuit that the preferences given to MBEs violated the equal protection clause of the Fourteenth Amendment of the United States Constitution. The district court determined that AGCC only demonstrated a possibility of irreparable injury on the ground that such injury is assumed where constitutional rights have been alleged to be violated, but failed to demonstrate a likelihood of success on the merits. On appeal, The Ninth Circuit affirmed the district court's ruling.¹⁰⁸

Whether a disparity index supports an inference that there is discrimination in the market area turns not only on what is being compared but also on the statistical significance of any such disparity. In *Croson*, Justice O'Connor opined, "[w]here the gross statistical disparities can be shown, they alone, in a proper case, may constitute a *prima facie* proof of a pattern or practice of discrimination."¹⁰⁹ However, the Court has not assessed or attempted to cast bright lines for determining if a disparity index is sufficient to support an inference of discrimination. In the absence of such a formula, the Tenth Circuit determined that the analysis of the disparity index and the findings of its significance are to be judged on a case-by-case basis.¹¹⁰

Following the dictates of *Croson*, courts may carefully examine whether there are data that show MBEs are qualified, ready, willing, and able to perform.¹¹¹ *Concrete Works II* made the same point: capacity—i.e., whether the firm is "able to perform"—is a ripe issue when a disparity study is examined on the merits:

¹⁰⁶ *AGCC II*, 950 F.2d at 1414.

¹⁰⁷ *Id.* at 1414. Specifically, the study found that MBE availability was 49.5 percent for prime construction, but MBE dollar participation was only 11.1 percent; that MBE availability was 36 percent prime equipment and supplies, but MBE dollar participation was 17 percent; and that MBE availability for prime general services was 49 percent, but dollar participation was 6.2 percent.

¹⁰⁸ *Id.* at 1401.

¹⁰⁹ *Croson*, 488 U.S. at 501 (quoting *Hazelwood Sch. Dist.*, 433 U.S. at 307-308).

¹¹⁰ *Concrete Works II*, 36 F.3d at 1522.

¹¹¹ The *Philadelphia* study was vulnerable on this issue.



[Plaintiff] has identified a legitimate factual dispute about the accuracy of Denver’s data and questioned whether Denver’s reliance on the percentage of MBEs and WBEs available in the marketplace overstates “the ability of MBEs or WBEs to conduct business relative to the industry as a whole because M/WBEs tend to be smaller and less experienced than non-minority owned firms.” In other words, a disparity index calculated on the basis of the absolute number of MBEs in the local market may show greater underutilization than does data that takes into consideration the size of MBEs and WBEs.¹¹²

Notwithstanding that appellate concern, the disparity studies before the district court on remand did not examine the issue of M/WBE capacity to perform Denver’s public sector contracts.

The Sixth Circuit Court of Appeals, in *Associated General Contractors of Ohio, Inc. v. Drabik*, concluded that for statistical evidence to meet the legal standard of *Croson*, it must consider the issue of capacity.¹¹³ The State’s factual predicate study based its statistical evidence on the percentage of MBE businesses in the population. The statistical evidence “did not take into account the number of minority businesses that were construction firms, let alone how many were qualified, willing, and able to perform state contracts.”¹¹⁴ The court reasoned as follows:

Even statistical comparisons that might be apparently more pertinent, such as with the percentage of all firms qualified in some minimal sense, to perform the work in question, would also fail to satisfy the Court’s criteria. If MBEs comprise 10 percent of the total number of contracting firms in the State, but only get 3 percent of the dollar value of certain contracts that does not alone show discrimination, or even disparity. It does not account for the relative size of the firms, either in terms of their ability to do particular work or in terms of the number of tasks they have resources to complete.¹¹⁵

Drabik also pointed out that the State not only relied upon the wrong type of statistical data, but also the data were more than twenty years old. Therefore, an entity must study current data that indicate the availability and qualifications of the MBEs.

¹¹² *Concrete Works II*, 36 F.3d at 1528.

¹¹³ *Associated Gen. Contractors of Ohio, Inc. v. Drabik*, 214 F.3d 730, 734-38 (6th Cir. 2000) (“*Drabik*”). The Court reviewed Ohio’s 1980, pre-*Croson*, program, which the Sixth Circuit found constitutional in *Ohio Contractors Ass’n v. Keip*, 713 F.2d 167, 176 (6th Cir. 1983), finding the program unconstitutional under *Croson*.

¹¹⁴ *Drabik*, 214 F.3d at 736.

¹¹⁵ *Id.*



The opinions in *Philadelphia VI*¹¹⁶ and *Dade County I*,¹¹⁷ regarding disparity studies involving public sector contracting, are particularly instructive in defining availability. In *Philadelphia VI*, the earlier of the two decisions, contractors' associations challenged a city ordinance that created set-asides for minority subcontractors on city public works contracts. A summary judgment was granted for the contractors.¹¹⁸ The Third Circuit upheld the third appeal, affirming that there was no firm basis in evidence for finding that race-based discrimination existed to justify a race-based program and that the program was not narrowly tailored to address past discrimination by the City.¹¹⁹

The Third Circuit reviewed the evidence of discrimination in prime contracting and stated that whether it is strong enough to infer discrimination is a "close call" which the court "chose not to make."¹²⁰ It was unnecessary to make this determination because the court found that even if there was a strong basis in evidence for the program, a subcontracting program was not narrowly tailored to remedy prime contracting discrimination.¹²¹

When the court looked at subcontracting, it found that a firm basis in evidence did not exist. The only subcontracting evidence presented was a review of a random 25 to 30 percent of project engineer logs on projects valued at more than \$30,000.¹²² The consultant determined that no MBEs were used during the study period based upon recollections of the former general counsel to the General and Specialty Contractors Association of Philadelphia regarding whether the owners of the utilized firms were MBEs. The court found this evidence insufficient as a basis for finding that prime contractors in the market area were discriminating against subcontractors.¹²³

The Third Circuit has recognized that consideration of qualifications can be approached at different levels of specificity, and the practicality of the approach also should be weighed. The Court of Appeals found that "[i]t would be highly impractical to review the hundreds of contracts awarded each year and compare them to each and every MBE" and that it was a "reasonable choice" under the circumstances to use a list of M/WBE certified contractors as a source for available firms.¹²⁴ Although theoretically it may

¹¹⁶ *Philadelphia VI*, 91 F.3d at 604-605.

¹¹⁷ *Dade County I*, 943 F. Supp. at 1582-83.

¹¹⁸ *Philadelphia VI*, 91 F.3d at 590.

¹¹⁹ *Id.* at 609-10.

¹²⁰ *Id.* at 605.

¹²¹ *Id.*

¹²² *Id.* at 600.

¹²³ Another problem with the program was that the 15 percent goal was not based on data indicating that minority businesses in the market area were available to perform 15 percent of the City's contracts. The court noted, however, that "we do not suggest that the percentage of the preferred group in the universe of qualified contractors is necessarily the ceiling for all set-asides." The court also found the program flawed because it did not provide sufficient waivers and exemptions, as well as consideration of race-neutral alternatives.

¹²⁴ *Philadelphia VI*, 91 F.3d at 603.



have been possible to adopt a more refined approach, the court found that using the list of certified contractors was a rational approach to identifying qualified firms.¹²⁵

In order to qualify for certification, the federal certification program required firms to detail their bonding capacity, size of prior contracts, number of employees, financial integrity, and equipment owned. According to the court, “the process by which the firms were certified [suggests that] those firms were both qualified and willing to participate in public works projects.”¹²⁶ The court found certification to be an adequate process of identifying capable firms, recognizing that the process may even understate the availability of MBE firms.¹²⁷ Therefore, the court was somewhat flexible in evaluating the appropriate method of determining the availability of MBE firms in the statistical analysis of a disparity.

Furthermore, the court discussed whether bidding was required in prime construction contracts as the measure of “willingness” and stated, “[p]ast discrimination in a marketplace may provide reason to believe the minorities who would otherwise be willing are discouraged from trying to secure work.”¹²⁸

In *Dade County I*, the district court held that the County had not shown the compelling interest required to institute a race-conscious program, because the statistically significant disparities upon which the County relied disappeared when the size of the M/WBEs was taken into account.¹²⁹ The *Dade County* district court accepted the disparity study’s limiting of “available” prime construction contractors to those that had bid at least once in the study period. However, it must be noted that relying solely on bidders to identify available firms may have limitations. If the solicitation of bidders is biased, then the results of the bidding process will be biased.¹³⁰ In addition, a comprehensive count of bidders is dependent on the adequacy of the agency’s record-keeping.¹³¹

The appellate court in *Dade County* did not determine whether the County presented sufficient evidence to justify the M/WBE program. It merely ascertained that the lower court was not clearly erroneous in concluding that the County lacked a strong basis in

¹²⁵ *Philadelphia VI*, 91 F.3d at 603-605, 609.

¹²⁶ *Id.* at 603.

¹²⁷ *Id.*

¹²⁸ *Id.*

¹²⁹ *Dade County I*, 943 F. Supp. at 1560.

¹³⁰ *Cf. League of United Latin Am. Citizens v. Santa Ana*, 410 F. Supp. 873, 897 (C.D. Cal. 1976); *Reynolds v. Sheet Metal Workers, Local 102*, 498 F. Supp. 952, 964 n. 12 (D. D.C. 1980), *aff’d*, 702 F.2d 221 (D.C. Cir. 1981) (involving the analysis of available applicants in the employment context).

¹³¹ *Cf. EEOC v. Am. Nat’l Bank*, 652 F.2d 1176, 1196-1197 (4th Cir. 1981), *cert. denied*, 459 U.S. 923 (1981) (in the employment context, actual applicant flow data may be rejected where race coding is speculative or nonexistent).



evidence to justify race-conscious affirmative action.¹³² The appellate court did not prescribe the district court’s analysis or any other specific analysis for future cases.

C. Anecdotal Evidence

In *Croson*, Justice O’Connor opined that “evidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government’s determination that broader remedial relief is justified.”¹³³ Anecdotal evidence should be gathered to determine if minority contractors are systematically being excluded from contracting opportunities in the relevant market area. Remedial measures fall along a sliding scale determined by their intrusiveness on non-targeted groups. At one end of the spectrum are race-neutral measures and policies, such as outreach to all segments of the business community regardless of race. They are not intrusive and, in fact, require no evidence of discrimination before implementation. Conversely, race-conscious measures, such as set-asides, fall at the other end of the spectrum and require a larger amount of evidence.¹³⁴

As discussed below, anecdotal evidence alone is insufficient to establish the requisite predicate for a race-conscious program. Its great value lies in pointing to remedies that are “narrowly tailored,” the second prong of a *Croson* study. The following types of anecdotal evidence have been presented to and relied upon by the Ninth Circuit in both *Coral Construction* and *AGCC II*, to justify the existence of an M/WBE program:

- M/WBEs denied contracts despite being the low bidders — *Philadelphia*¹³⁵
- Prime contractors showing MBE bids to non-minority subcontractors to find a non-minority firm to underbid the MBEs — *Cone Corporation v. Hillsborough County*¹³⁶
- M/WBEs’ inability to obtain contracts for private sector work — *Coral Construction*¹³⁷
- M/WBEs told that they were not qualified, although they were later found to be qualified when evaluated by outside parties — *AGCC II*¹³⁸

¹³² *Dade County I*, 943 F. Supp. at 1557.

¹³³ *Croson*, 488 U.S. at 509; see *Teamsters*, 431 U.S. at 338.

¹³⁴ Cf. *AGCC II*, 950 F.2d at 1417-18 (in finding that an ordinance providing for bid preferences was narrowly tailored, the Ninth Circuit stated that the program encompassed the required flexibility and stated that “the burdens of the bid preferences on those not entitled to them appear relatively light and well distributed. . . . In addition, in contrast to remedial measures struck down in other cases, those bidding have no settled expectation of receiving a contract. [Citations omitted.]”).

¹³⁵ *Philadelphia IV*, 6 F.3d at 1002.

¹³⁶ *Cone Corp.*, 908 F.2d at 916.

¹³⁷ For instance, where a small percentage of an MBE or WBE’s business comes from private contracts and most of its business comes from race or gender-based set-asides, this would demonstrate exclusion in the private industry. *Coral Constr.*, 941 F.2d at 933 (WBE’s affidavit indicated that less than 7 percent of the firm’s business came from private contracts and that most of its business resulted from gender-based set-asides).

¹³⁸ *AGCC II*, 950 F.2d at 1415.



- Attempts to circumvent M/WBE project goals — *Concrete Works II*¹³⁹
- Harassment of M/WBEs by an entity's personnel to discourage them from bidding on an entity's contracts — *AGCC II*¹⁴⁰

Courts must assess the extent to which relief measures disrupt settled “rights and expectations” when determining the appropriate corrective measures.¹⁴¹ Presumably, courts would look more favorably upon anecdotal evidence in support of a less intrusive program than it would in support of a more intrusive one. For example, if anecdotal accounts related experiences of discrimination in obtaining bonds, they may be sufficient evidence to support a bonding program that assists M/WBEs.¹⁴² However, these accounts would not be evidence of a statistical availability that would justify a racially limited program such as a set-aside.

As noted above, the *Croson* Court found that the City of Richmond’s MBE program was unconstitutional, because the City failed to provide a factual basis to support its MBE program. However, the Court opined that “evidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government’s determination that broader remedial relief is justified.”¹⁴³

In part, it was the absence of statistical evidence that proved fatal to the program. The Supreme Court stated that “[t]here was no direct evidence of race discrimination on the part of the city in letting contracts or any evidence that the city’s prime contractors had discriminated against minority owned subcontractors.”¹⁴⁴

This was not the situation confronting the Ninth Circuit in *Coral Construction*. There, the 700-plus page appellate records contained the affidavits of “at least 57 minority or women contractors, each of whom complain in varying degree of specificity about discrimination within the local construction industry . . . These affidavits certainly suggest that ongoing discrimination may be occurring in much of the King County business community.”¹⁴⁵

Nonetheless, this anecdotal evidence standing alone was insufficient to justify King County’s MBE program since “[n]otably absent from the record, however, is *any* statistical data in support of the County’s MBE program.”¹⁴⁶ After noting the Supreme

¹³⁹ *Concrete Works II*, 36 F.3d at 1530.

¹⁴⁰ *AGCC II*, 950 F.2d at 1415.

¹⁴¹ *Wygant*, 476 U.S. at 283.

¹⁴² *Teamsters*, 431 U.S. at 339; *Coral Constr.*, 941 F.2d at 919.

¹⁴³ *Croson*, 488 U.S. at 509 (citing *Teamsters*, 431 U.S. at 338).

¹⁴⁴ *Croson*, 488 U.S. at 480.

¹⁴⁵ *Coral Constr.*, 941 F.2d at 917-18.

¹⁴⁶ *Id.* at 918 (emphasis added) (additional statistical evidence gathered after the program had been implemented was also considered by the court and the case was remanded to the lower court for an examination of the factual predicate).



Court's reliance on statistical data in Title VII employment discrimination cases and cautioning that statistical data must be carefully used, the court elaborated on its mistrust of purely anecdotal evidence:

Unlike the cases resting exclusively upon statistical deviations to prove an equal protection violation, the record here contains a plethora of anecdotal evidence. However, anecdotal evidence, standing alone, suffers the same flaws as statistical evidence. Indeed, anecdotal evidence may even be less probative than statistical evidence in the context of proving discriminatory patterns or practices.¹⁴⁷

The court concluded its discourse on the potency of anecdotal evidence in the absence of a statistical showing of disparity by observing that “rarely, if ever, can such evidence show a systemic pattern of discrimination necessary for the adoption of an affirmative action plan.”¹⁴⁸

Two other circuit courts also suggested that anecdotal evidence might be dispositive in rare and exceptional cases, if ever, while rejecting it in the specific case before them. For example, in *Philadelphia IV*, the Third Circuit Court of Appeals noted that the Philadelphia City Council had “received testimony from at least fourteen minority contractors who recounted personal experiences with racial discrimination,” which the district court had “discounted” because it deemed this evidence to be “impermissible” for consideration under *Croson*.¹⁴⁹ The Third Circuit Court disapproved of the district court's actions, because in its view the court's rejection of this evidence betrayed the court's role in disposing of a motion for summary judgment.¹⁵⁰ “Yet,” the court stated:

Given *Croson's* emphasis on statistical evidence, even had the district court credited the City's anecdotal evidence, we do not believe this amount of anecdotal evidence is sufficient to satisfy strict scrutiny [quoting *Coral*, supra]. Although anecdotal evidence alone may, in an exceptional case, be so dominant or pervasive that it passes muster under *Croson*, it is insufficient here.¹⁵¹

The District of Columbia Circuit Court echoed the Ninth Circuit's acknowledgment of the rare case in which anecdotal evidence is singularly potent in *O'Donnell Construction*

¹⁴⁷ *Coral Constr.*, 941 F.2d at 919.

¹⁴⁸ *Id.*

¹⁴⁹ *Philadelphia IV*, 6 F.3d at 1002.

¹⁵⁰ *Id.* at 1003.

¹⁵¹ *Id.*



v. District of Columbia.¹⁵² The court found that, in the face of conflicting statistical evidence, the anecdotal evidence there was not sufficient:

It is true that in addition to statistical information, the Committee received testimony from several witnesses attesting to problems they faced as minority contractors. Much of the testimony related to bonding requirements and other structural impediments any firm would have to overcome, no matter what the race of its owners. (internal citation omitted.) The more specific testimony about discrimination by white firms could not in itself support an industry-wide remedy (internal quotes and citation omitted). Anecdotal evidence is most useful as a supplement to strong statistical evidence—which the Council did not produce in this case.¹⁵³

The Eleventh Circuit in *Dade County II* is also in accord. In applying the “clearly erroneous” standard to its review of the district court’s decision in *Dade County II*, it commented that “[t]he picture painted by the anecdotal evidence is not a good one.”¹⁵⁴ However, it held that this was not the “exceptional case” where, unreinforced by statistics, the anecdotal evidence was enough.¹⁵⁵

In *Concrete Works II*, the Tenth Circuit Court of Appeals described the anecdotal evidence that is most compelling as evidence within a statistical context. In approving of the anecdotal evidence marshaled by the City of Denver in the proceedings below, the court recognized that “[w]hile a fact finder should accord less weight to personal accounts of discrimination that reflect isolated incidents, anecdotal evidence of a municipality’s institutional practices carries more weight due to the systemic impact that such institutional practices have on market conditions.”¹⁵⁶ The court noted that the City had provided such systemic evidence.

The Ninth Circuit Court of Appeals has articulated what it deems to be permissible anecdotal evidence in *AGCC II*.¹⁵⁷ There, the court approved a “vast number of individual accounts of discrimination,” which included (1) numerous reports of MBEs denied contracts despite being the low bidder, (2) MBEs told that they were not qualified although they were later found to be qualified when evaluated by outside parties, (3) MBEs refused work even after they were awarded the contracts as low bidder, and (4) MBEs being harassed by city personnel to discourage them from bidding on city contracts. On appeal, the City pointed to numerous individual accounts of discrimination

¹⁵² 963 F.2d 420, 427 (D.C. Cir. 1992).

¹⁵³ *O’Donnell*, 963 F.2d at 427.

¹⁵⁴ *Dade County II*, 122 F.3d at 925.

¹⁵⁵ *Id.* at 926.

¹⁵⁶ *Concrete Works II*, 36 F.3d at 1530.

¹⁵⁷ *AGCC II*, 950 F.2d at 1401.



to substantiate its findings that discrimination exists in the city’s procurement processes, an “old boy’s network” still exists, and racial discrimination is still prevalent within the San Francisco construction industry.¹⁵⁸ Based on *AGCC II*, it would appear that the Ninth Circuit’s standard for acceptable anecdotal evidence is more lenient than other Circuits that have considered the issue.

Taken together, these statements constitute a taxonomy of appropriate anecdotal evidence. Anecdotal evidence alone may, in exceptional cases, show a systemic pattern of discrimination necessary for the adoption of an affirmative action plan, but it must be so dominant and pervasive that it passes muster under the *Croson* standards.¹⁵⁹ Pursuant to *Croson* and its progeny, case law suggests that, to be optimally persuasive, anecdotal evidence collectively should satisfy six particular requirements. These requirements are that the accounts:

- Are gathered from minority contractors, preferably those that are “qualified”¹⁶⁰
- Concern specific, verifiable instances of discrimination¹⁶¹
- Involve the actions of governmental officials¹⁶²
- Involve events within the relevant jurisdiction’s market area¹⁶³
- Discuss the harm that the improper conduct has inflicted on the businesses in question¹⁶⁴
- Collectively reveal that discriminatory exclusion and impaired contracting opportunities are systemic rather than isolated or sporadic¹⁶⁵

Given that neither *Croson*, nor its progeny identify the circumstances under which anecdotal evidence alone will carry the day, it is not surprising that none of these cases explicate bright line rules specifying the quantity of anecdotal evidence needed to support an MBE program. However, the foregoing cases provide some guidance by implication. *Philadelphia IV* makes clear that 14 anecdotal accounts standing alone will not suffice.¹⁶⁶ The court then turned to the statistical data.¹⁶⁷ While the matter is not free of countervailing considerations, 57 accounts, many of which appeared to be of the type

¹⁵⁸ *AGCC II*, 950 F.2d at 1415.

¹⁵⁹ *Philadelphia IV*, 6 F.3d at 1003. The anecdotal evidence must be “dominant or pervasive.”

¹⁶⁰ *Philadelphia VI*, 91 F.3d at 603.

¹⁶¹ *Coral Constr.*, 941 F.2d at 917-18; *but see Concrete Works IV*, 321 F.3d at 989 (“There is no merit to [plaintiff’s] argument that the witnesses’ accounts must be verified to provide support for Denver’s burden.”).

¹⁶² *Croson*, 488 U.S. at 509.

¹⁶³ *Coral Constr.*, 941 F.2d at 925.

¹⁶⁴ *O’Donnell*, 963 F.2d at 427.

¹⁶⁵ *Coral Constr.*, 941 F.2d at 919.

¹⁶⁶ *Philadelphia IV*, 6 F.3d. at 1002-03.

¹⁶⁷ *Id.*



referenced above, were insufficient without statistical data to justify the program in *Coral Construction*. Therefore, no court has provided rules on the number of anecdotal evidence that is needed in conjunction with statistical evidence to pass constitutional muster.

The quantum of anecdotal evidence that a court would likely find acceptable will depend on the proposed remedy. The remedies that are least burdensome to non-targeted groups would likely require a lesser degree of evidence. Those remedies that are more burdensome on the non-targeted groups would require a stronger factual basis likely extending to verification.

D. Remedial Statutory Scheme

H.B. Rowe Company v. Tippett, (“Rowe”) challenged the constitutionality of the North Carolina General Assembly’s Statute 136-28.4 (Statute), promulgated in 1983.¹⁶⁸ The Statute set forth a general policy to promote the use of small, minority, physically handicapped, and women contractors in non-federally funded State construction projects.¹⁶⁹ The 1983 Statute directed North Carolina Department of Transportation (NCDOT) to encourage and promote the policy.¹⁷⁰ Seven years later, in 1990, the Statute was amended to include specific participation goals on state funded transportation construction contracts for minority and women-owned businesses.¹⁷¹

As a result of the amendment, NCDOT created a Minority Business Enterprise and Women Business Enterprise Program (M/WBE Program) for non-federally funded highway and bridge construction contracts.¹⁷² In 1991, the constitutionality of the statute was challenged.¹⁷³ The court ruled in favor of the plaintiff stating that, in order to implement race-conscious measures to remedy discrimination, the governmental entity must identify with “some specificity” the racial discrimination it seeks to remedy.¹⁷⁴ As a result of the challenge, NCDOT suspended its M/WBE program in 1991.¹⁷⁵

In 1993, NCDOT commissioned a disparity study on state-funded transportation construction contracts.¹⁷⁶ The study determined that minority and women subcontractors were underutilized at a statistically significant level and the M/WBE Program was re-

¹⁶⁸ *Rowe*, 615 F.3d at 236.

¹⁶⁹ *Id.*

¹⁷⁰ *Rowe*, 615 F.3d at 236.

¹⁷¹ *Id.*

¹⁷² *Id.*

¹⁷³ *Id.* at 237; see *Dickerson Carolina, Inc. v. Harrelson*, 114 N.C. App. 693 (1994).

¹⁷⁴ *Rowe*, 615 F.3d at 237 (citing *Croson*, 488 U.S. at 504).

¹⁷⁵ *Id.*

¹⁷⁶ *Id.*



implemented.¹⁷⁷ In 1998, the North Carolina General Assembly again commissioned an update to the 1993 study.¹⁷⁸ The 1998 update study concluded that minority and women-owned businesses continued to be underutilized in State-funded road construction contracts.¹⁷⁹

In 2002, Rowe was denied a NCDOT contract because the company's bid included 6.6 percent women subcontractor participation and no minority subcontractor participation.¹⁸⁰ NCDOT claimed that Rowe failed to meet the good faith effort requirements of the M/WBE program.¹⁸¹ A third study was commissioned in 2004 to again study minority and women contractor participation in the State's highway construction industry.¹⁸² In 2006, relying on the 2004 study, the North Carolina General Assembly amended Statute 136-28.4.¹⁸³ The principal modifications were:

- Remedial action should be taken only when there is a strong basis in evidence of ongoing effects of past or present discrimination that prevents or limits disadvantaged minority and women-owned businesses from participating as subcontractors in State-funded projects
- The minority/women classification was limited to those groups that suffered discrimination
- A disparity study should be performed every five years to respond to changing conditions
- Inclusion of a sunset provision¹⁸⁴

First, the court considered whether the statutory scheme as it relates to minorities survives the strict scrutiny standard. The Fourth Circuit Court of Appeals reviewed the statistical evidence detailed in the 2004 disparity study to determine if the statutory scheme was based on strong statistical evidence to implement race-conscious subcontractor goals.¹⁸⁵ The statistical evidence was also examined to determine if the statute's definition of minorities was over-inclusive by including minority groups that did not suffer discrimination pursuant to the statistical results of the 2004 disparity study.¹⁸⁶

¹⁷⁷ *Rowe*, 615 F.3d at 237.

¹⁷⁸ *Id.*

¹⁷⁹ *Id.*

¹⁸⁰ *Id.*

¹⁸¹ *Id.*

¹⁸² *Rowe*, 615 F.3d at 238.

¹⁸³ *Id.*

¹⁸⁴ *Id.* at 238-39.

¹⁸⁵ *Id.* at 238.

¹⁸⁶ *Rowe*, 615 F.3d at 239.



The court did not consider whether the statistical methodology employed in the 2004 disparity study was sufficient to support a compelling state interest. Rather, the court accepted the disparity index as the measure by which to determine the statistical significance of the underutilization of minorities in the State's subcontracts.¹⁸⁷ The methodology used in the 2004 disparity study calculated a disparity at .05 confidence level.¹⁸⁸ A statistical calculation is significant at the .05 confidence level because the probability of that result occurring by chance is 5 percent or less.¹⁸⁹ The .05 confidence level is used in social sciences as a marker of when a result is a product of some external influence, rather than ordinary variation or sampling error.¹⁹⁰

While the circuit court found that “*the study itself* sets out the standard by which one could confidently conclude that discrimination was at work[,]” the standard was not followed in the State's statutory scheme.¹⁹¹ The statistical evidence in the 2004 disparity study demonstrated that African American and Native American subcontractors were underutilized at a disparity index of less than 80 and that Hispanic American and Asian American subcontractors also were underutilized, but not at a .05 confidence level.¹⁹² The 2004 Study determined that the underutilization of Hispanic American and Asian American contractors was not statistically significant.

Therefore, the only statutory scheme ruled narrowly tailored to achieve the State's compelling interest was the one related to African American and Native American subcontractors. The statutory scheme pertaining to Hispanic American and Asian American subcontractors was deemed unconstitutional.¹⁹³ Thus, the State only provided a strong basis in evidence for the minority subcontractor participation goals pertaining to African American and Native American subcontractors.

Second, the court considered whether the statutory scheme as it relates to women survives the intermediate scrutiny standard. The evidence demonstrated that the State's prime contractors “substantially over-utilized” women-owned businesses on public road construction projects.¹⁹⁴ The 2004 disparity study calculated the overutilization of women subcontractors as statistically significant at a .05 confidence level.¹⁹⁵ The circuit court

¹⁸⁷ *Id.* at 243-44.

¹⁸⁸ *Id.* at 244.

¹⁸⁹ *Id.* at 261 n.12 (citing SHERRI L. JACKSON, RESEARCH METHODS AND STATISTICS: A CRITICAL THINKING APPROACH 168-69 (3d ed. 2006) (noting that the .05 confidence level is generally used in the social sciences as indication that the result was produced as a consequence of an external influence)).

¹⁹⁰ *Rowe*, 615 F.3d at 261 n. 12 (citing EARL BABBIE, THE PRACTICE OF SOCIAL RESEARCH 483 (11th ed. 2007)).

¹⁹¹ *Id.* at 261.

¹⁹² *Id.* at 245.

¹⁹³ *Id.* at 254.

¹⁹⁴ *Rowe*, 615 F.3d at 254.

¹⁹⁵ *Id.* at 254-55.



further noted that the private sector evidence was insufficient to overcome the strong evidence of overutilization.¹⁹⁶ Consequently, the circuit court determined that the evidence in the 2004 disparity study did not provide “exceedingly persuasive justification” to include women-owned businesses in gender-based remedies.¹⁹⁷

In light of the *Rowe* decision, caution should be exercised when determining which minority or gender group is appropriate for race-conscious or gender-conscious remedies. For an MBE program to be narrowly tailored there must be a statistical finding of underutilization of minority subcontractors. Where the underutilization of a minority group is not found to be statistically significant the minority group should not be included in race-conscious remedies.

The intermediate scrutiny standard for gender classifications can be met with statistical evidence of underutilization that is not statistically significant. However, this does not apply when there is demonstrated overutilization. Women-owned businesses should be considered for gender-based remedies when the statistical evidence demonstrates that the overutilization is not statistically significant.

V. CONSIDERATION OF RACE-NEUTRAL OPTIONS

A remedial program must address the source of the disadvantage faced by minority businesses. If it is found that race discrimination places MBEs at a competitive disadvantage, an MBE program may seek to counteract the situation by providing MBEs with a counterbalancing advantage.¹⁹⁸ An MBE program cannot stand if the sole barrier to M/WBE participation is a barrier that is faced by all new businesses, regardless of ownership.¹⁹⁹ If the evidence demonstrates that the sole barrier to M/WBE participation is that M/WBEs disproportionately lack capital or cannot meet bonding requirements, then only a race-neutral program of financing for all small firms would be justified.²⁰⁰ In other words, if the barriers to minority participation are race-neutral, then the program must be race-neutral.

The requirement that race-neutral measures be considered does not mean that they must be exhausted before race-conscious remedies can be employed. The Supreme Court explained that although “narrow tailoring does not require exhaustion of every conceivable race-neutral alternative” it “does require serious, good faith consideration of workable race-neutral alternatives that will achieve ... diversity[.]”²⁰¹

¹⁹⁶ *Id.* at 255.

¹⁹⁷ *Id.*

¹⁹⁸ *AGCC II*, 950 F.2d at 1404.

¹⁹⁹ *Croson*, 488 U.S. at 508.

²⁰⁰ *Id.* at 507.

²⁰¹ *Grutter v. Bollinger*, 539 U.S. 306, 339 (2003).



If the barriers appear race-related but are not systemic, then the remedy should be aimed at the specific arena in which exclusion or disparate impact has been found as detailed above in Section IV. If the evidence shows that in addition to capital and bonding requirements, which are race-neutral, MBEs also face race discrimination in the awarding of contracts, then a race-conscious program will stand, so long as it also includes race-neutral measures to address the capital and bonding barriers.²⁰²

The Ninth Circuit Court of Appeals in *Coral Construction* ruled that there is no requirement that an entity exhaust every possible race-neutral alternative.²⁰³ Instead, an entity must make a serious, good faith consideration of race-neutral measures in enacting an MBE program. Thus, in assessing MBE utilization, it is imperative to examine barriers to MBE participation that go beyond “small business problems.” The impact on the distribution of contract programs that have been implemented to improve MBE utilization should also be measured.²⁰⁴

VI. CONCLUSION

The decision of the United States Supreme Court in the *Croson* case changed the legal landscape for business affirmative action programs. The United States Supreme Court altered the authority of a local government to use local and federal funds to institute remedial race-conscious public contracting programs. This chapter has examined what *Croson* and its progeny require for a local or state government agency to institute a constitutional race and/or gender-conscious public contracting program.

Depending on the statistical findings of the Disparity Study, the Broward County Public Schools may consider race and gender-based remedies for its contracts. Given the case law discussed in this chapter, any race or gender-conscious affirmative action contracting program recommended in this Disparity Study will be based on a constitutionally sound factual predicate.

²⁰² *Croson*, 488 U.S. at 507 (upholding MBE program where it operated in conjunction with race-neutral measures aimed at assisting all small businesses).

²⁰³ *Coral Constr.*, 941 F.2d at 910.

²⁰⁴ *Dade County II*, 122 F.3d at 927. At the same time, the Eleventh Circuit’s caveat in *Dade County* should be kept in mind: “Supreme Court decisions teach that a race-conscious remedy is not merely one of many equally acceptable medications that a government may use to treat race-based problems. Instead, it is the strongest of medicines, with many potentially harmful side-effects, and must be reserved to those severe cases that are highly resistant to conventional treatment.” For additional guidance, see *supra* section II, Standard of Review for the discussion of narrow tailoring in *Concrete Works IV*, *Adarand*, *County of Cook*, and *City of Chicago*.



VII. LIST OF AUTHORITIES

Cases	Pages
<i>Adarand Constructors, Inc. v. Slater</i> , 228 F.3d 1147 (10th Cir. 2000)	8, 29
<i>Armour v. City of Indianapolis, Ind.</i> , 132 S. Ct. 2073 (2012)	5
<i>Associated Gen. Contractors of Cal. v. City & Cnty. of San Francisco (“AGCC I”)</i> , 813 F.2d 922 (9th Cir. 1987)	3, 5
<i>Associated Gen. Contractors v. Coal. for Econ. Equity (“AGCC II”)</i> , 950 F.2d 1401 (9th Cir. 1991)	<i>passim</i>
<i>Associated Gen. Contractors of Ohio, Inc. v. Drabik (“Drabik”)</i> , 214 F.3d 730 (6th Cir. 2000)	17
<i>Associated Gen. Contractors v. New Haven</i> , 791 F. Supp. 941 (D. Conn. 1992)	6
<i>Builders Ass’n of Greater Chi. v. City of Chi.</i> , 298 F. Supp. 2d 725 (N.D. Ill. 2003)	11, 12
<i>Builders Ass’n of Greater Chicago v. Cnty. of Cook</i> , 256 F.3d 642 (7th Cir. 2001)	4
<i>City of Richmond v. J.A. Croson Co. (“Croson”)</i> , 488 U.S. 469 (1989)	<i>passim</i>
<i>Concrete Works of Colo., Inc. v. City & Cnty. of Denver (“Concrete Works I”)</i> , 823 F. Supp. 821 (D. Colo. 1993)	10, 14
<i>Concrete Works of Colo., Inc. v. City & Cnty. of Denver (“Concrete Works II”)</i> , 36 F.3d 1513 (10th Cir. 1994)	<i>passim</i>
<i>Concrete Works of Colo., Inc. v. City & Cnty. of Denver (“Concrete Works III”)</i> , 86 F. Supp. 2d 1042 (D. Colo. 2000)	10
<i>Concrete Works of Colo., Inc. v. City & Cnty. of Denver (“Concrete Works IV”)</i> , 321 F.3d 950 (10th Cir. 2003)	4, 8, 10, 11, 24
<i>Cone Corp. v. Hillsborough Cnty.</i> , 908 F.2d 908 (11th Cir. 1990)	14, 20



<i>Contractors Ass’n of E. Pa. v. City of Philadelphia (“Philadelphia IV”),</i> 6 F.3d 990 (3d Cir. 1993)	3, 4, 20, 24, 25
<i>Contractors Ass’n of E. Pa. v. City of Philadelphia (“Philadelphia V”),</i> 893 F. Supp. 419 (E.D. Pa.1995)	6
<i>Contractors Ass’n of E. Pa. v. City of Philadelphia (“Philadelphia VI”),</i> 91 F.3d 586 (3rd Cir. 1996)	<i>passim</i>
<i>Coral Constr. Co. v. King Cnty.,</i> 941 F.2d 910 (9th Cir. 1991)	<i>passim</i>
<i>Dickerson Carolina v. Harrelson,</i> 114 N.C. App. 693 (1994)	25
<i>Doe I v. Lower Merion Sch. Dist.,</i> 689 F. Supp. 2d 742, 748 (E.D. Pa. 2010)	6
<i>EEOC v. Am. Nat’l Bank,</i> 652 F.2d 1176 (4th Cir. 1981)	19
<i>Eng’g Contractors Ass’n v. Metro. Dade Cnty. (“Dade County I”),</i> 943 F. Supp. 1546 (S.D. Fla. 1996)	9, 15, 18, 19, 20
<i>Eng’g Contractors Ass’n v. Metro. Dade Cnty. (“Dade County II”),</i> 122 F.3d 895 (11th Cir. 1997)	<i>passim</i>
<i>Ensley Branch N.A.A.C.P. v. Seibels,</i> 31 F.3d 1548 (11th Cir. 1994)	3, 4
<i>Grutter v. Bollinger,</i> 539 U.S. 306 (2003)	29
<i>Hayes v. N. State Law Enforcement Officers Ass’n,</i> 10 F.3d 207 (4th Cir. 1993)	4
<i>Hazelwood Sch. Dist. v. United States,</i> 433 U.S. 299 (1977)	12, 16
<i>H.B. Rowe Co. v. N.C. Dep’t of Transp.,</i> 615 F.3d 233 (4th Cir. 2010)	<i>passim</i>
<i>Heller v. Doe,</i> 509 U.S. 312 (1993)	5



<i>Hershell Gill Consulting Eng’rs, Inc. v. Miami-Dade Cnty.</i> , 333 F. Supp. 2d 1305 (S.D. Fla. 2004)	8
<i>Int’l Bhd. of Teamsters v. United States</i> , 431 U.S. 324 (1977)	14, 20, 21
<i>Lakeside Roofing Co. v. State of Missouri, et al</i> , 2012 WL 709276 (E.D. Mo.)	5
<i>League of United Latin Am. Citizens v. Santa Ana</i> , 410 F. Supp. 873 (C.D. Cal. 1976)	19
<i>Mich. Rd. Builders Ass’n v. Milliken</i> , 834 F.2d 583 (6th Cir. 1987)	3
<i>Miss. Univ. for Women v. Hogan</i> , 458 U.S. 718 (1982)	2, 3
<i>Monterey Mech. Co. v. Pete Wilson et al.</i> , 125 F.3d 702 (9th Cir. 1997)	12
<i>N. Shore Concrete & Ass’n v. City of N.Y.</i> , 1998 U.S. Dist. LEXIS 6785 (EDNY 1998)	12
<i>O’Donnell Constr. Co. v. D.C.</i> , 963 F.2d 420 (D.C. Cir. 1992).....	23, 24
<i>Reynolds v. Sheet Metal Workers, Local 102</i> , 498 F. Supp. 952 (D. D.C. 1980).....	19
<i>Schlesinger v. Ballard</i> , 419 U.S. 498, 508 (1975).....	3
<i>Shaw v. Hunt</i> , 517 U.S. 899 (1996).....	11
<i>United States v. Virginia</i> , 518 U.S. 515 (1996)	2, 3, 4
<i>W.H. Scott Constr. Co. v. City of Jackson</i> , 199 F.3d 206 (5th Cir. 1999)	12
<i>Wygant v. Jackson Bd. of Educ.</i> , 476 U.S. 267 (1986)	6, 7, 21



CHAPTER 2: PROCUREMENT AND CONTRACTING POLICY REVIEW

I. INTRODUCTION

This chapter is an overview of the policies which governed the School Board of Broward County's (SBBC) procurement and contracting during the Study Period, which includes Fiscal Years July 1, 2008, to June 30, 2013. The Disparity Study (Study) will include utilization and disparity analyses of Minority and Woman-owned Business Enterprises, hereinafter referred to as Minority and Caucasian Female-owned Businesses (M/WBEs) and Non-minority Male-owned Businesses (Non-M/WBEs) on commodities, construction, contractual services, maintenance and repair, professional services, and technology contracts awarded by SBBC.

For purposes of the utilization and disparity analyses, each relevant procurement category will be analyzed separately, with the exemption of construction, maintenance and repair, commodities, technological commodities, contractual services, and services related to technology. Construction and maintenance and repair will be analyzed jointly as "construction." Commodities and technological commodities will be analyzed jointly as "commodities," and contractual services and services related to technology will be analyzed jointly as "contractual services." The SBBC codes and regulations relevant to commodities, construction, contractual services, maintenance and repair, professional services, and technology are addressed herein.

Several procurement categories included in the SBBC procurement policies are outside of the scope of the Study. The excluded procurement categories are food and nutrition services, risk management and benefits, field trips, instructional materials, educational services, and Title I and Head Start refreshments. Therefore, an overview of the procurement policies concerning these industries is not presented in this review.

SBBC is the sixth largest public school system in the United States¹ and the second largest public school system in the State of Florida (State).² SBBC procurement is governed by the School Board of Broward County (School Board). The School Board is comprised of a member from each of the nine districts in the school system.



¹ "About BCPS," *Broward County Public Schools*, accessed October 17, 2014, <http://www.browardschools.com/About-BCPS>.

² *Id.*

The documents reviewed in preparation of this chapter include:

- Florida Statutes
- Florida State Requirements for Educational Facilities
- School Board of Broward County Purchasing Policies
- School Board of Broward County Facilities and Construction Management Division Policies

II. GOVERNING LAWS AND REGULATIONS

The applicable laws governing SBBC’s purchase of construction, professional services, contractual services, and commodities include:

Table 2.01: Governing Laws and Regulations

FLORIDA STATUTES
Title XLVIII, Chapter 1013 Title XIX, Chapter 287 Title XVIII, Chapter 255
FLORIDA STATE REQUIREMENTS FOR EDUCATIONAL FACILITIES
Chapter 4, Sections 4.1 and 4.2
SCHOOL BOARD OF BROWARD COUNTY
Section 3320
Section 7001
Section 7003
Section 7007 and 7007-A
FACILITIES AND CONSTRUCTION MANAGEMENT DIVISION POLICIES
Section 01295

A. Florida Statutes

1. Title XIX, Chapter 287

Title XIX, Chapter 287 of the Florida Statutes, also called the Consultants’ Competitive Negotiation Act (CCNA), defines the solicitation standards for the procurement of construction-related professional services and commodities and establishes standards for the negotiation, solicitation, and selection processes. Section 287.055 applies to the procurement of architecture and engineering, design-build, landscape architecture, and registered surveying and mapping. CCNA requires that a contract is negotiated with the most qualified business for compensation that is fair, competitive, and reasonable. Therefore, proposals and statements of qualifications must be examined to determine the qualifications of the firm in addition to the price for services to be rendered.³ Section

³ FLA. STAT. tit. XIX, § 287.055(5)(A) (2014).



287.057 of the Statute establishes standards for procurement of commodities and contractual services.⁴

2. Title XLVIII, Chapter 1013

Title XLVIII, Chapter 1013 of the Florida Statutes, operating under the K-20 Education Code, governs the planning and construction of educational facilities. Section 1013.45 authorizes school boards to establish and employ procedures for the solicitation of contracts for the construction of new facilities or for additions, remodeling, renovation, maintenance, or repairs to existing facilities.⁵ Section 1013.46 establishes the standards for advertising and awarding contracts solicited under Section 1013.45, in addition to the processes required for the pre-qualification of contractors.⁶

3. Title XVIII, Chapter 255

Title XVIII, Chapter 255 of the Florida Statutes, operating under the Public Lands and Property Code, governs the construction or improvement of public property and publicly owned buildings. Section 255.20 establishes standards for the procurement of contracts for public construction works and requires that local governments employ competitive solicitation processes to award contracts to an appropriately licensed contractor for each project that falls within its jurisdiction.⁷

B. Florida State Requirements for Educational Facilities

1. Chapter 4, Sections 4.1 and 4.2

Chapter 4, Section 4.1 of the Florida State Requirements for Educational Facilities (SREF) governs the procurement of construction and construction-related professional services.⁸ Section 4.2 establishes procedures for advertising, bidding, and awarding contracts for construction and construction-related professional services.⁹

⁴ FLA. STAT. tit. XIX, § 287.055 (2014).

⁵ FLA. STAT. tit. XLVIII, § 1013.45 (2014).

⁶ *Id.* at § 1013.46.

⁷ FLA. STAT. tit. XVIII, § 255.20 (2014).

⁸ Florida State Requirements for Educational Facilities, FLA. ADMIN. CODE r. 6A-2.0010 ch. 4, § 4.1 (2012).

⁹ *Id.* at § 4.2.



C. School Board of Broward County

1. Section 3320

Section 3320 of the School Board Policies establishes the procedures for the procurement of commodities, construction, contractual services, maintenance and repair, professional services, and technology. This policy also establishes procedures for the resolution of protests arising from the contract solicitation or award process.

2. Section 7001

Section 7001 of the School Board Policies establishes the procedures that SBBC must follow in order to meet the responsibilities conferred by Florida State Statute.¹⁰ Section 7001 requires SBBC to comply with all state requirements pertaining to the construction and maintenance and repair of educational facilities. It is the responsibility of the SBBC to ensure that all plans for the construction, renovation, remodeling, or demolition of any educational or ancillary building meets the standards of the Florida Building Code and the Florida Fire Prevention Code.¹¹

Furthermore, it is the school board's responsibility to establish proper enforcement procedures to ensure compliance with these codes within its jurisdiction. The school board must provide for proper supervision and inspection of the work, such that the proper oversight capacity is maintained. Florida State Statute designates several administrative rules that the school board may adopt in order to perform the oversight function.¹² In conformance with these State-sanctioned rules, the SBBC adopted the administrative rules and guidelines for plan review, permit approval, inspection, and appeals as set forth in Section 7001. The rules and guidelines are as follows:¹³

a. Plan Review

Regardless of the project cost or the funding source, when SBBC undertakes new construction, remodeling, or renovation to any educational building or ancillary facility project, a design professional registered in compliance with Chapters 481 and 471 of the Florida State Statute must prepare the plans and specifications.¹⁴

¹⁰ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7001 (2014).

¹¹ FLA. STAT. tit. XLVIII, § 1013.371(1)-(3) (2012).

¹² *Id.* at § 1013.371(2) ("Each board may employ a chief building official and such other inspectors, who have been certified pursuant to chapter 468, and a fire official and such other inspectors, who have been certified pursuant to chapter 633, and such personnel as necessary to administer and enforce the provision of such codes. Boards may also use local building department inspectors who are certified by the department to enforce the Florida Building Code and the State Requirements for Educational Facilities. Boards may also use local county, municipal, or independent special fire control District fire safety inspectors who are certified by the State Fire Marshal to conduct reviews of site plans and inspections and to enforce the Florida Fire Prevention Code").

¹³ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7001(I)-(IV) (2014).

¹⁴ *Id.* at § 7001(I).



b. Permit Approval

To commence a construction or construction-related project, the SBBC is required to obtain a building permit from the Chief Building Official designated by the school board.¹⁵

c. Inspection

The Chief Building Official is required to inspect all construction and work for which a permit is required. The Chief Building Official also performs a final inspection of every project issued prior to the issuance of a Certificate of Occupancy, a Certificate of Completion, or any occupancy or use of the permitted work.

d. Appeals

Section 7001 designates appeal procedures, where an interested party disagrees with the final interpretation of the Chief Building Official. An appeal made pursuant to Section 7001 must be filed with the Florida Building Commission. On appeal, the Florida Building Commission will rely upon the finding of a Technical Advisory Committee. The Committee will render a final ruling by majority vote.¹⁶

3. Section 7003

Section 7003 of the School Board Policies establishes the pre-qualification procedures for contractors and the selection processes for architects, engineers, design builders, construction managers, and total program managers. This section sets forth the administrative procedures wherein the school board is required to pre-qualify bidders for construction contracts and publicly announce each occasion that construction or professional services contracts are required to be purchased in compliance with governing statutes and regulations. Additionally, this section requires that the superintendent establish procedures for the pre-qualification of contractors and procedures for the selection of professional services contracts that are consistent with applicable statutes and SREF.

4. Section 7007 and 7007-A

Section 7007 of the School Board Policies establishes the rules for the Supplier Diversity and Outreach Program (SDOP). The intent of this policy is to have a diverse group, including M/WBEs, compete for the award of construction and purchasing contracts.¹⁷

¹⁵ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7001(II) (2014) (pertains to all projects entered into by the School Board, or any volunteer or service organization, that “intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done”).

¹⁶ *Id.* at § 7001(IV).

¹⁷ *Id.* at § 7007.



Section 7007-A sets forth the administrative procedures that provide uniform guidelines for the implementation of the SDOP.¹⁸

D. Facilities and Construction Management Division Policies

1. Section 01295

Section 01295 of the School Board Facilities and Construction Management Division Policies establishes the Direct Owner Purchasing Program (DOPP). The DOPP contracting requirements must be included in the terms of all contracts where the cost of materials and equipment exceeds \$200,000.¹⁹ Any equipment, materials, or supplies directly purchased by the prime contractor that are included in the subcontractor's contract is referred to as owner-purchased materials.²⁰ Upon request from the prime contractor, the subcontractor must prepare a standard Purchase Order Requisition Form to specifically identify the materials which the prime contractor has, as its sole option, elected to purchase directly. After receipt of the Purchase Order Requisition Form, the prime contractor must prepare its purchase order for equipment, materials, or supplies. At the end of the project, any refund for surplus materials returned to suppliers plus all applicable sales tax savings are accounted for in an additional change order to the subcontractor agreement.²¹

III. PROCUREMENT CATEGORIES

Services procured by SBBC are defined below pursuant to Florida State Statutes and State Board of Education Administrative Rules.

Commodities: Supplies, materials, goods, merchandise, food, equipment, information technology, and other personal property, including a mobile home, trailer, or other portable structure with less than 5,000 square feet of floor space, purchased, leased, or otherwise secured by contract.²²

Contractual Services: Services rendered by individuals and firms who are independent contractors, which may include evaluations, consultations, maintenance, accounting, security, management systems, management consulting, educational training programs, research and development studies or reports on the findings of consultants engaged there under, and professional, technical, and social services.²³

¹⁸ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007-A (2014).

¹⁹ Facilities and Construction Management Division Policies, State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 01295 (2007).

²⁰ *Id.* at § 01295, Part 1, section 1.01(B).

²¹ *Id.* at § 01295, Part 1, section 1.01(B)(19).

²² FLA. STAT. tit. XIX § 287.012 (2014).

²³ FLA. STAT. tit. XIX § 287.012 (2014).



Construction: New construction, remodeling, renovations, leasing, lease-purchasing, day labor projects, additions to any educational building, or ancillary facility projects.²⁴

Maintenance and Repair Projects: Repainting of interior or exterior surfaces, resurfacing of floors, repair or replacement of glass, repair of hardware, furniture, equipment, electrical fixtures, and plumbing fixtures; repair or resurfacing of parking lots, roads, and walkways; or the replacement and hookup of relocatables (mobile classrooms or educational buildings used in a temporary capacity).²⁵

Professional Services: Services within the scope of architecture, professional engineering, landscape architecture, or registered surveying and mapping, as defined by the laws of the State of Florida, or those performed by any architect, professional engineer, landscape architect, or registered surveyor and mapper in connection with his or her professional employment practice.²⁶

Technology: Instructional and staff workstations (both desktop and portable); printers, scanners, and other peripherals; administrative staff workstations (both desktop and portable), printers, scanners, and other peripherals, campus and departmental local area networks (both wired and wireless), including wiring, hubs, routers, transmitters/receivers, and other devices; servers, including instructional lab servers, CD-ROM servers, video servers, file and print servers, database servers, and Internet proxy caching servers; Wide Area Network linking all SBBC sites into one countywide Intranet; telephone systems, including primary systems, integrated voice response/management systems, including library automation systems, distance learning systems, video capturing, broadcast, receiving, and distribution systems; teleconferencing systems; application software packages which result in the creation and maintenance of an operational database; energy management and security monitoring systems; radio systems; office copier, imaging, and document management systems paging systems; intercom systems; facsimile systems; consultants, support, or maintenance services; related training;²⁷ software applications; web-based applications,; classroom technology; or subscriptions.

²⁴ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7001 (2014).

²⁵ *Id.*

²⁶ FLA. STAT. tit. XIX, § 287.055() (2014).

²⁷ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 3320 (2014).



IV. PROCUREMENT PROCESS OVERVIEW

The procurement methods utilized by SBBC vary based on the value and the type of purchase. Competitively solicited procurements are permitted for the purchase of commodities and contractual services. Competitive solicitations include: (1) commodities and contractual services valued at \$50,000 to \$500,000 and above; (2) maintenance and repair projects valued at \$300,000 and over; (3) construction contracts valued at \$50,000 and over; (4) CCNA-governed professional services included in a construction project valued at over \$325,000 or professional services for a planning or study activity valued at over \$35,000; and (5) professional contracted services valued at \$50,000 and over. Technology services are procured through competitive direct negotiations. These purchases, depending on the amount, must always be approved by the superintendent, the Director of Procurement and Warehousing Services, the school board, or the Department of Insurance. Certain solicitations are exempt from the competitive procurement process.

Exempt solicitations include: (1) contracted maintenance services valued at \$1,000 and under; (2) professional services in construction contracts valued under \$50,000; (3) construction-building materials and equipment procurements; and (4) emergency commodities or contractual services.

These purchases must always be approved by the superintendent or the school board. The approval authority is dependent upon the amount of the purchase and the circumstances surrounding the procurement.

A. Commodities and Contractual Services

1. Commodities and Contractual Services Competitive Contracts

a. Commodities and Contractual Services Valued at \$5,000 to \$50,000

Purchases valued at \$5,000 to \$50,000 require a written solicitation process with a minimum of three written quotations. The superintendent is required to use a requisition or an approved purchasing card for purchases of goods and services included in a contract awarded or approved by SBBC and for any expenditure approved by an agenda item.²⁸

SBBC is required to contact at least three suppliers in order to obtain written quotations. At least two certified M/WBEs must be contacted where certified M/WBE vendors have been identified by SBBC as offering the product or service being purchased. When necessary, the Supply Management and Logistics Department is required to place a confirming purchase order with the vendor after receiving an approved requisition.²⁹

²⁸ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 3320(II)(C).

²⁹ *Id.* Note that only the Superintendent may waive this requirement, unless the Superintendent is absent and has named a predetermined designee to include the Chief of Staff and/or Chief Strategy and Operations Officer.



The superintendent also has the authority to approve several types of agreements pursuant to the State Board of Education Administrative Rules. The superintendent may execute agreements for purchases up to \$50,000, when the School Board’s attorney has reviewed the legal content and approved such contracts. Additionally, the superintendent may execute amendments to agreements for purchases up to \$50,000 which do not materially change the original scope. These agreements must take vendor performance, market considerations, and other procurement alternatives into consideration.³⁰

b. Commodities and Contractual Services Valued at \$50,000 and Over

Under the purchasing policy guidelines enacted by the State Board of Education, competitive solicitation is required for all commodities and contractual services valued at \$50,000 and over—this threshold amount cannot be met by dividing the procurement of commodities or contractual services.³¹ Solicitations should be requested from at least three vendors. The school board must authorize the award.³² Commodities and contractual services over \$500,000, which are procured through competitive bidding, also must be authorized by the school board.³³

c. Bidding Process

In acceptance of responses to invitations to bid, SBBC may accept the proposal of the lowest responsive, responsible bidder. Alternatively, SBBC may also choose to award contracts to the lowest responsive, responsible bidder as the primary awardee of a contract and to the next lowest responsive, responsible bidder(s) as an alternate awardee. SBBC will purchase the commodities or contractual services from alternate awardees should the primary awardee become unable to provide all of the commodities or contractual services required by SBBC during the term of the contract.³⁴ SBBC may award multiple awards to the lowest responsive and responsible bidders when such multiple awards are clearly stated in the bid solicitation documents.

³⁰ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 3320(II)(C) (2014).

³¹ *Id.* at § 3320(II)(D).

³² *Id.*

³³ *Id.*

³⁴ *Id.* at § 3320(II)(D)(2)-(3) (When a bid has both a primary and an alternate awardee, and the primary is awardee is unable to perform during the term of the contract, Supply Management & Logistics will negotiate with the alternate awardee for the same or lower unit prices as those submitted by the primary awardee).



2. Commodities and Contractual Services Exempt From Competitive Solicitation

a. Commodities and Contractual Services Valued at \$5,000 or Under

Purchases of goods or services valued at \$5,000 or under that are not available from a contract awarded or approved by SBBC do not require quotations or solicitations.³⁵

For awarded contracts, the user department is required to use a requisition or purchasing card for purchases of goods or services included in a contract that was previously awarded or approved by SBBC and for any expenditure approved by an agenda item.³⁶

b. Emergency Commodities and Contractual Services

Emergency commodities and contractual services are procured after pricing information has been obtained from at least two vendors, unless the time required to do so could potentially increase the risk of danger. The superintendent must authorize the award.³⁷

c. Contracts of the Department of Management Services

SBBC is not required to issue a solicitation for purchases made from contracts of the State of Florida Department of Management Services. The superintendent is authorized to purchase commodities or contractual services under the Department of Management Services state-term contracts.³⁸ Assistants functioning under the superintendent's discretion may be authorized to perform these purchasing tasks.

d. Broward County Public Schools Discretion

The requirements for requesting competitive solicitations and making purchases for commodities and contractual services are waived when two conditions are met: (1) competitive solicitations have been requested in the manner prescribed by the school board policies; and (2) SBBC has made a finding that no valid or acceptable bid has been received within the prescribed time limits.

When such a determination has been consistent with these two requirements, SBBC may enter into negotiations with suppliers of such commodities and contractual services and may execute contracts with such vendors under the terms and conditions SBBC determines to be in its best interest.³⁹

³⁵ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 3320(II)(B) (2014).

³⁶ *Id.*

³⁷ *Id.* at § 3320(II)(G).

³⁸ *Id.* at § 3320(II)(P).

³⁹ *Id.* at § 3320(II)(E)(1)-(2).



e. Commodities and Contractual Services Awards by Other Jurisdictions

In lieu of requesting competitive solicitations from three or more vendors, SBBC may make purchases at or below the specified prices from contracts awarded by other municipalities. These may include contracts awarded by other city or county governmental agencies, district school boards, community colleges, federal agencies, or from state university system cooperative bid agreements.⁴⁰

f. Sole Source Procurement

Commodities and contractual services can be procured from a single source without competition. A description of the solicitation must be posted publicly for at least seven business days, and a selection is made after the best terms and conditions have been negotiated. The superintendent must authorize awards for procurements valued at \$50,000 or under. The school board must authorize awards for procurements over \$50,000.⁴¹

B. Maintenance and Repair Contracts

1. Florida State Law Requirement

Pursuant to State law, SBBC may use annual facility maintenance permits to facilitate routine maintenance, emergency repairs, building refurbishment, and minor renovations of systems or equipment. Pursuant to annual facility maintenance permits, the amount expended for maintenance projects may not exceed \$300,000 per project. Electrical work may be included in the total value of the \$300,000 limitation, but may not exceed \$75,000.⁴²

A permit is subject to several State-enumerated requirements, including: (1) a facility maintenance project valid for one year; (2) a detailed log of alterations and inspections maintained and annually submitted to the building official; and (3) the right of the Chief Building Inspector to make inspections at the facility site. Furthermore, the building official may request code compliance documentation, which must be provided upon notification.⁴³

⁴⁰ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 3320(II)(M) (Note that for purchases of \$500,000 or more under this section, the contracts must have prior Board approval).

⁴¹ *Id.* at § 3320.

⁴² FLA. STAT. tit. XXXIII, § 553.80(6)(d) (2014).

⁴³ *Id.*



2. Annual Facility Maintenance Permits

Maintenance and repair projects, defined as all upkeep of facilities excluding renovation of facilities, are subject to Section 7001 of the Building Code. When SBBC intends to perform maintenance and repair projects at a school, it is required to first make an application to the Chief Building Inspector and obtain the requisite permit.⁴⁴ SBBC is authorized to use annual facility maintenance permits to facilitate routine maintenance, emergency repairs, building refurbishment, and minor renovations of systems or equipment.⁴⁵

A facility maintenance project is valid for one year, and the amount expended per maintenance project may not exceed \$200,000, as adjusted by the *Consumer Price Index*.⁴⁶ Additional permit requirements establish that a detailed log of alterations and inspections must be submitted and maintained by the Physical Plant Operations Division, and semi-annual reports must be submitted to SBBC's Building Department.

Maintenance and repair does not include any substantial addition, extension, or upgrade to an existing public facility. Additions, extensions, or upgrades are considered substantial if the estimated costs are valued at more than \$300,000 and exceed 20 percent of the estimated total repair or maintenance project using generally accepted cost-accounting principles that fully account for all costs associated with performing and completing the work.⁴⁷ Repair and maintenance projects and any related additions, extensions, or upgrades may not be divided into multiple projects for the purpose of evading the requirements of this subparagraph.

Maintenance and repair contracts are classified as an exemption in the SBBC Building Codes. For maintenance and repair contracts under \$50,000, the services of a registered architect are not required.⁴⁸ However, maintenance and repair projects must be reviewed and approved for compliance with applicable building and life-safety codes.⁴⁹ The Chief Building Official establishes the formal permit application and submittal requirements necessary to ensure compliance with the Florida Building Code.

⁴⁴ State Board of Education Administrative Rules, Building Codes, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7001(II)(A) (2014) (the \$200,000 maximum threshold “must be adjusted by the percentage change in the Consumer Price Index from January 1, 1994 to January 1 of the year in which the project is scheduled to begin).

⁴⁵ FLA. STAT. tit. XXXIII, § 553.80(6)(d) (2014) (authorizing school boards to implement annual maintenance permits into construction guidelines that do not exceed \$200,000 per project).

⁴⁶ State Board of Education Administrative Rules, Building Codes, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7001(II)(A) (2014).

⁴⁷ *Id.* (note that the costs associated with the project must include “employee compensation and benefits, equipment cost and maintenance, insurance costs, and materials”).

⁴⁸ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7001(I) (2014); FLA. STAT. tit. XLVIII, § 1013.45(4) (2014) (note that State law still requires the services of a registered architect for minor renovation contracts valued at \$50,000 or greater).

⁴⁹ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7001(I) (2014).



3. Contracted Maintenance Services Exemptions

Contracted maintenance services valued at \$1,000 and under are procured without competition. The superintendent must authorize the award.⁵⁰ Annual maintenance permits may be granted at the discretion of the school board if the maintenance does not exceed \$200,000.

C. Construction Contracts

1. Competitive Construction Contracts

According to Florida State Statute, the SBBC procurement process must conform to strict competitive solicitation guidelines as set forth in the CCNA when the project requires the use of a professional design consultant.⁵¹ SBBC must employ procedures consistent with the CCNA, the SREF, and other applicable statutorily defined requirements.⁵²

The rules adopted by SBBC must conform with the negotiation procedures designated by Florida State law when the construction project is for a new facility or addition, or for remodeling, renovation, maintenance, or repairs to existing facilities. The guidelines are applicable to construction management design-build contracts.⁵³

The SBBC purchasing code requires competitive solicitation for all construction projects valued at \$50,000 and over.⁵⁴ SBBC is required to pre-qualify bidders within the thresholds enumerated in the governing statutes and regulations, such as the SREF.

SBBC must adhere to the solicitation standards set forth in the SREF when awarding construction contracts. The two standards are: (1) competitive proposal selection, or (2) qualifications-based selection.⁵⁵

a. Pre-qualification Process

SBBC must pre-qualify bidders for construction, including construction contracts governed by CCNA, construction management, design-build, and any other construction services project. The superintendent must establish the pre-qualification procedures in

⁵⁰ Florida State Requirements for Educational Facilities, FLA. ADMIN. CODE r. 6A-2.0010 ch. 4, § 4.2 (2012).

⁵¹ FLA. STAT. tit. XIX, § 287.103(1)-(2) (2014) (this process shall conform to the competitive solicitation process provided by section 287.055).

⁵² FLA. STAT. tit. XLVIII, § 1013.45(1)-(4) (2014).

⁵³ *Id.* at § 1013.45(4) (Statute specifically states that “except as otherwise provided in this section, the negotiation procedures applicable to construction management contracts and the design-build process must conform to the requirements of s. 287.055”).

⁵⁴ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 3320(II)(D) (2014).

⁵⁵ Florida State Requirements for Educational Facilities, FLA. ADMIN. CODE r. 6A-2.0010 ch. 4, § 4.2 (2012) (citing FLA. STAT. tit. XIX, § 287.055(9)(c) (2014)).



compliance with SREF.⁵⁶ The superintendent is authorized to receive applications for contractor pre-qualification in compliance with Florida State law. SBBC is required to verify that all construction or capital improvement bids are accompanied by documentation demonstrating that the bidder holds an appropriate certificate or license, or that the prime contractor has a current valid license.⁵⁷ SBBC must pre-qualify contractors for either a one-year period or a specific project.⁵⁸ The pre-qualification criteria enumerated in SREF and reflected in the additional criteria that the school board adopts, are listed as follows.

i. Criteria

SREF requires that the contractor hold a valid contractor's license. Additionally, contractors must demonstrate that they have the financial resources to start and complete projects. The contractor must provide verification of bonding capacity equal to or greater than the value of the project for which the contractor seeks pre-qualification. The contractor must also demonstrate their experience with all required construction techniques.⁵⁹ Finally, the contractor must show evidence of a satisfactory resolution of any and all claims filed by or against the contractor within five years preceding submission of the application on projects of similar size.⁶⁰

In addition to the SREF requirements, SBBC requires that the contractor submit a Dun and Bradstreet (D&B) report along with an application for pre-qualification.⁶¹ A D&B report summary is required for contractors requesting pre-qualification on projects valued \$1,000,000 and under. A full D&B report is required for contractors requesting pre-qualification on projects over \$1,000,000.⁶²

ii. Procedures

SREF requires that SBBC hold a public hearing to discuss its intent to pre-qualify contractors and the proposed policies, procedures, and rules used to evaluate applications. SBBC must publish two public hearing notices in a local newspaper with general

⁵⁶ *Id.* (the procedures that the Superintendent establishes for the pre-qualification of contractors must be consistent with “this policy, applicable statutes, and the State Requirements for Educational Facilities (SREF)”).

⁵⁷ FLA. STAT. tit. XLVIII, § 1013.46(2) (2014).

⁵⁸ Florida State Requirements for Educational Facilities, FLA. ADMIN. CODE r. 6A-2.0010 ch. 4, § 4.1 (2012).

⁵⁹ *Id.* at § 4.1(1)(a)(3) (must demonstrate experience with construction techniques, trade standards, quality workmanship, project scheduling, cost control, management of projects, and building codes for similar or lower cost or scope projects as shown by the successful completion within the past five years of at least two other projects of similar size).

⁶⁰ *Id.* at § 4.1(1)(a)(4).

⁶¹ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7003(1) (2010).

⁶² *Id.* at § 7003(1)(a)-(b).



circulation throughout the service area: the first must be at least 30 days prior to the hearing, and the second must be published seven days prior to the hearing.⁶³

SBBC is required to designate an evaluation and recommendation committee, the Qualification Selection Evaluation Committee (QSEC). The QSEC provides evaluations and recommendations for pre-qualified construction management contractors.⁶⁴

iii. Issuance of Certificate

SREF requires the school board to issue a certificate of pre-qualification to the contractor. The certificate is valid for one year or for the duration of the specific project.⁶⁵ At a minimum, this certificate must contain a statement indicating that the contractor is authorized to bid for projects during the specified time period⁶⁶ and the total dollar volume of work that the contractor will be permitted to have under contract at any one time as determined by the contractor's bonding capacity or 10 times the net quick assets (a measurement of a company's liquidity, calculated by taking all current assets—including cash, marketable securities, and accounts receivable—and subtracting inventories and current liabilities).⁶⁷ The maximum dollar value of each individual project the contractor will be permitted to have under contract with the school board at any one time,⁶⁸ the type of work the contractor is permitted to provide,⁶⁹ and the expiration date of the certificate should be enumerated.⁷⁰

b. Qualifications-based Selection Process

Qualifications-based selection process requirements may apply to construction contracts. The process is used as a procedural guideline in the K-20 Educational Code and in SBBC's corresponding administrative policies and guidelines.

i. Bidding Requirements

Unless otherwise authorized, the bidding process utilized by SBBC should follow the general guidelines specified by SREF and the Florida Statute pertaining to local bids and contracts for public construction works. Under these general contract procedures, the

⁶³ Florida State Requirements for Educational Facilities, FLA. ADMIN. CODE r. 6A-2.0010 ch. 4, § 4.1(1)(b)(1) (2012) (the notice shall contain the purpose, date, time, and place of the hearing, at a minimum).

⁶⁴ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7003(4)(a)-(d) (2010) (this section designates the makeup of the ZSEC board and the voting procedures for recommendation for contract award).

⁶⁵ Florida State Requirements for Educational Facilities, FLA. ADMIN. CODE r. 6A-2.0010 ch. 4, § 4.1(1)(d) (2012).

⁶⁶ *Id.* at § 4.1(1)(d)(1).

⁶⁷ *Id.* at § 4.1(1)(d)(2).

⁶⁸ *Id.* at § 4.1(1)(d)(3).

⁶⁹ *Id.* at § 4.1(1)(d)(4).

⁷⁰ *Id.* at § 4.1(1)(d)(5).



bidding process is used to award all construction projects valued at \$300,000 and over and electrical projects valued at \$75,000 and over.⁷¹

ii. Advertising Requirements

SREF requires that construction projects be subject to specific legal notice requirements. Construction projects that the school board will complete using contracted services require different legal notice requirements, dependent upon the amount of the purchase. SREF requires that SBBC publish a legal notice in accordance with the identified informational standards for all contracts that meet the minimum thresholds.

Contracts under \$300,000 must be advertised for a minimum of one week. Contracts valued at \$300,000 and over and electrical projects estimated to cost \$75,000 and over are subject to the minimum requirements enumerated in SREF, which are listed below.

SBBC must publish a legal notice that contains, at a minimum: (1) the project name; (2) the location of the project; (3) a brief statement describing the work to be performed; (4) the date, time, and place of the bid opening; (5) identification of when and from whom contract documents are available—including deposit or charge information; and (6) other information for bidders including, but not limited to, pre-qualification of bidders, notice of pre-bid conference(s), bid security, insurance requirements, plan deposit, and whether SBBC intends to waive technicalities.⁷²

This notice is also subject to timing guidelines. To meet the minimal notification standards, the notice must be published a minimum of once a week for three consecutive weeks in a local newspaper with general circulation throughout SBBC's district. The last notice must appear at least seven days prior to the date set for the bid opening.⁷³

iii. Competitive Negotiation Requirements

The scope of requirements imposed upon the competitive negotiation process is dependent upon the applicable contract. Pursuant to Florida State law, different competitive negotiation processes apply to the selection of a construction management entity, a program management entity, or a design-build firm.⁷⁴

The selection of a construction management entity or a program management entity must be done pursuant to the qualifications-based selection process enumerated in Section 287.055.⁷⁵ For each proposed project, SBBC must evaluate firm qualifications using two

⁷¹ *Id.* at § 4.2(2) (2012); FLA. STAT. tit. XVIII, § 255.20(9)(a) (2014).

⁷² Florida State Requirements for Educational Facilities, FLA. ADMIN. CODE r. 6A-2.0010 ch. 4, § 4.2(2)(a) (2012).

⁷³ *Id.* at § 4.2(2)(b) (this section includes additional notice requirements for corrections or changes to the bid, or amended bid opening dates).

⁷⁴ *See generally* K-20 Education Code, FLA. STAT. tit. XLVIII, § 1013.45(1)-(4) (2014).

⁷⁵ FLA. STAT. tit. XLVIII, § 1013.45(1)(c)-(d) (2014); FLA. STAT. tit. XIX, § 287.055(3)-(5) (2014).



guidelines: (1) the firms must be evaluated based upon Statements of Qualification and performance data; and (2) the competitive negotiation process requires the negotiated contract compensation to be fair, competitive, and reasonable.

The selection of a design-build firm is subject to the competitive proposal selection process identified in Section 287.055 as well.

- Qualifications and Performance Data

SBBC is required to evaluate current Statements of Qualifications and performance data that are on file, in addition to information submitted by other firms regarding the proposed project. SBBC is required to conduct discussions with, and may require public presentations by, no fewer than three firms regarding their qualifications, approach to the project, and ability to furnish the required services.⁷⁶ SBBC must then select no fewer than three firms deemed to be the most highly qualified to perform the required services.⁷⁷

In determining whether a firm is qualified, SBBC must consider the following factors as detailed in the Florida State Statutes: (1) the ability of the professional personnel; (2) whether a firm is a certified Minority-owned Business (MBE); (3) past performance; (4) willingness to meet time and budget requirements; (5) location; (5) recent, current, and projected workloads of the firm; and (6) the volume of work previously awarded to each firm. The objective is to ensure equitable distribution of contracts among qualified firms, provided that such distribution is amongst equally qualified firms.⁷⁸ Furthermore, the construction manager or program manager must retain or contract with licensed or registered professionals for the specific fields or areas of construction and/or design, as required by law.⁷⁹ Once this initial qualifications-based analysis has been performed and the most qualified firm is selected, SBBC may negotiate the compensation for the contract.

- Fair, Competitive, and Reasonable Compensation

SBBC must negotiate a contract that it determines is fair, competitive, and reasonable with the most qualified firm.⁸⁰ When making this determination, SBBC conducts a detailed cost analysis of the services required, in addition to the scope and complexity of the project, which must be considered in order to make this determination.

⁷⁶ FLA. STAT. tit. XIX, § 287.055(4) (2014).

⁷⁷ *Id.* at § 287.055(4)(b).

⁷⁸ *Id.*

⁷⁹ FLA. STAT. tit. XLVIII, § 1013.45(1)(c)-(d) (2014).

⁸⁰ FLA. STAT. tit. XIX, § 287.055(5) (2014).



At the option of SBBC, the construction manager or program manager, after having been selected, may be required to offer a guaranteed maximum price or a guaranteed completion date. After the construction manager or program manager offers a guaranteed maximum price or guaranteed maximum completion date, the firm must secure an appropriate surety bond pursuant to Section 255.05 and must retain a construction and/or design subcontractor.⁸¹

c. Competitive Proposal Selection Process

The competitive proposal selection process requirements apply to design-build projects.⁸² Design-build contracts are any for the design and construction of a public construction project. In practice, this classification is generally designated for substantial construction projects that require the expertise and resources of a design-build firm.⁸³ SBBC is required to award design-build projects in one of two ways: (1) by the use of the qualifications-based selection process – a process whereby guaranteed maximum price and guaranteed completion date will be established; or (2) by the use of a competitive proposal selection process.⁸⁴

The school board is authorized to enact applicable procurement laws, rules, and ordinances allowing the formulation of a competitive proposal selection process conducive to the provision of education.⁸⁵ However, Florida State law identifies several procedures that the school board must include in the guidelines for a competitive proposal selection process.⁸⁶

The minimum procedural requirements for a construction project as listed by State Statute include:

1. Preparation of a design criteria package for the design and construction of the project
2. The qualifications and selection procedures of no fewer than three design-build firms as the most qualified based on the qualifications, availability, and past work of the firms, including the partners or members thereof
3. The criteria, procedures, and standards for the evaluation of design-build contract proposals or bids based on price, technical, and design aspects of the public construction project and weighted for the project
4. The solicitation of competitive proposals, pursuant to a design criteria package, from pre-qualified firms and subsequent evaluation of the responses or bids

⁸¹ FLA. STAT. tit. XLVIII, § 1013.45(1)(c)-(d) (2014).

⁸² FLA. STAT. tit. XIX, § 287.055(9)(a) (2014).

⁸³ *Id.* at § 287.055(2)(i).

⁸⁴ *Id.* at § 287.055(9)(c).

⁸⁵ FLA. STAT. tit. XIX, § 287.055(9)(a) (2014) ADD SCHOOL BOARD STATUTE

⁸⁶ *See Id.* § 287.055(a)(1)-(6).



subject to evaluation criteria and using procedures established prior to the issuance of the solicitation

5. Procedures for consultation with the employed or retained design professionals concerning the evaluation of the responses or bids submitted by the design-build firms
6. Procedures regarding the supervision of SBBC over the detailed working drawings of the project

d. Advertising Requirements

Construction valued at \$750,000 and under must be advertised for a minimum of one week.⁸⁷ The superintendent must authorize the award.⁸⁸ Construction valued at over \$750,000 must be advertised in a Broward County newspaper with general circulation at least once per week for three consecutive weeks, and procured through competitive bidding.⁸⁹ The SBBC Office of Facilities and Construction must authorize the award.⁹⁰

2. Construction Contract Exemptions

a. Construction-building Materials and Equipment

Building materials and equipment may be procured through the Direct Owner Purchase Program. The SBBC Office of Facilities and Construction must authorize the award.⁹¹

b. Minor Renovations

Minor renovation projects, where the construction cost is under \$50,000 or the placement of relocatable educational facilities conforms to standards adopted under Section 1013.37,⁹² do not require the services of a registered architect. Construction and development plans for the erection, enlargement, or alteration of any educational facility within this threshold qualify for a professional services exemption under Florida State Statute. Notwithstanding this exemption, SBBC must comply with building code requirements, ensuring that the structures are adequately anchored for wind resistance as required by law.

⁸⁷ Florida State Requirements for Educational Facilities, FLA. ADMIN. CODE r. 6A-2.0010 ch. 4, § 4.1 (2012).

⁸⁸ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7001 (2014).

⁸⁹ Florida State Requirements for Educational Facilities, FLA. ADMIN. CODE r. 6A-2.0010 ch. 4, § 4.1 (2012).

⁹⁰ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7001 (2014).

⁹¹ Florida State Requirements for Educational Facilities, FLA. ADMIN. CODE r. 6A-2.0010 ch. 4, § 4.2 (2012).

⁹² FLA. STAT. tit. XLVIII, § 1013.45(4) (2014).



D. Professional Services

1. Competitive Professional Services Contracts

The acquisition of professional services is governed by CCNA.⁹³ The required acquisition process is broken down into three statutorily defined steps: (1) Public Announcement and Qualification Procedures;⁹⁴ (2) the Competitive Selection process;⁹⁵ and (3) the Competitive Negotiation Process.⁹⁶ For each proposed project, SBBC must evaluate firm qualifications utilizing two guidelines: first, the competitive selection process requires SBBC to evaluate firms based upon Statements of Qualifications and performance data; and second, the competitive negotiation process requires the negotiated contract to be entered into in return for the compensation that SBBC determines is fair, competitive, and reasonable.

a. Public Announcement and Qualification Procedures

SBBC is required to publicly announce, in a uniform and consistent manner, each occasion when a contract meets one of two minimum thresholds. The application of the minimum threshold amount is dependent upon the characteristics of the proposed contract. Public announcement procedures are required for: (1) all construction contracts that require the purchase of professional services, and are valued at \$325,000 and over; and (2) planning or study activity when the fee for professional services is valued at \$35,000 and over.

SBBC must perform community outreach efforts to encourage qualified firms to submit annual performance data. This data allows the agency to evaluate the capacity and minimum qualifications of local firms engaged in the lawful practice of their professions. The CCNA enumerates steps that an agency must take to evaluate and certify firms or professionals willing to provide professional services to the agency.⁹⁷ SBBC must encourage local firms to submit annual Statements of Qualifications and performance data. Additionally, SBBC must ensure that each firm that submits these annual statements is fully qualified to render the required service pursuant to State law and regulations pertaining to the required professional service, with special consideration of the adequacy of the personnel, the past records and experience of the firm or individual, and the capabilities of the firm or individual. Finally, SBBC must determine whether the firm is a certified MBE as defined by the Florida Small and Minority Business Assistance Act, and

⁹³ FLA. STAT. tit. XIX, § 287.055 (2014) (governing the “Acquisition of professional architectural, engineering, landscape architectural, or surveying and mapping services” and including “definitions; procedures; contingent fees prohibited; penalties”).

⁹⁴ FLA. STAT. tit. XIX, § 287.055(3) (2014)

⁹⁵ *Id.* at § 287.055(4).

⁹⁶ *Id.* at § 287.055(5).

⁹⁷ *Id.* at § 287.055(3).



endeavor to meet the Minority Business Enterprise procurement goals under Section 287.09451.⁹⁸ The public must not be excluded from the proceedings under this Section.

b. Competitive Selection Process

For each proposed project that meets the minimum threshold requirements, SBBC is required to evaluate current Statements of Qualifications and performance data on file, together with those that may be submitted by other firms regarding the proposed project. SBBC is required to conduct discussions with, and potentially require public presentations by, no fewer than three firms regarding their qualifications, proposed approach to the project, and ability to furnish the required services.⁹⁹

In determining whether a firm is qualified, SBBC must consider the following factors which are dictated by Florida State Statute: (1) the ability of professional personnel; (2) whether a firm is a certified MBE; (3) past performance; (4) willingness to meet time and budget requirements; (4) location; (5) recent, current, and projected workloads of the firms and (6) the volume of work previously awarded to each firm by the agency, with the object of effecting an equitable distribution of contracts among qualified firms, provided that such distribution is amongst equally qualified firms.¹⁰⁰

c. Competitive Negotiation Process

After the most qualified firm is selected, SBBC must negotiate a contract fee that is fair, competitive, and reasonable.¹⁰¹ SBBC will conduct a detailed cost analysis of the services required, in addition to considering the scope of services and complexity in order to make this determination.

SBBC requires any firm receiving the award to execute a truth-in-negotiation certificate for any lump-sum or cost-plus-a-fixed-fee professional service contract that exceeds the minimum threshold amount of \$195,000. This certificate should state that the proposed wage rates and other factual unit costs supporting the compensation are accurate, complete, and current at the time of contracting.¹⁰²

If SBBC is unable to negotiate a satisfactory contract with the firm considered to be the most qualified at a price determined to be fair, competitive, and reasonable, SBBC is

⁹⁸ FLA. STAT. tit. XIX, § 287.055(3)(a)-(d).

⁹⁹ FLA. STAT. tit. XIX, at § 287.055(4)(a).

¹⁰⁰ *Id.*

¹⁰¹ *Id.* at § 287.055(5).

¹⁰² *Id.* at § 287.055(5)(a) (note that any professional service contract under which such a certificate is required must contain a provision that the original contract price and any additions thereto will be adjusted to exclude any significant sums that the School Board determines increases the contract price due to inaccurate, incomplete, or noncurrent wage rates and other factual unit costs. All such contract adjustments must be made within one (1) year following the contract).



required to formally terminate the negotiations and undertake negotiations with the second-most qualified firm.¹⁰³

d. Advertising Requirement

Professional services valued at \$750,000 and under must be advertised for a minimum of one week, and are procured through competitive bidding.¹⁰⁴ The superintendent must authorize the award.¹⁰⁵ Professional services over \$750,000 must be advertised in a Broward County newspaper with general circulation at least once per week for three consecutive weeks, and procured through competitive bidding.¹⁰⁶ The SBBC Office of Facilities and Construction must authorize the award.¹⁰⁷

2. Professional Contracted Services Exemptions

Florida State law and the State Board of Education administrative rules recognize several exemptions from the competitive solicitation requirements.¹⁰⁸ The exemptions are not otherwise subject to competitive-solicitation requirements, unless specifically required by Florida State Statute.

The professional services identified as exemptions include: artistic services; academic program reviews; lectures by individuals; auditing services not subject to Section 218.391; legal services, including attorney, paralegal, expert witness, court reporting, appraisal, and mediator services; and health services involving examination, diagnosis, treatment, prevention, medical consultation, and administration.¹⁰⁹ These exempt professional services valued at \$50,000 and under can be procured without competition on the condition that the superintendent authorizes the award. However, contracts for exempt professional services with purchases over \$50,000 require school board approval.¹¹⁰

Despite the competitive selection requirements imposed on professional contracted services contracts in Section 287.055, SBBC may purchase architectural services for the design of educational or ancillary facilities under an existing professional services contract held by another district school board in the State. This exemption is allowed

¹⁰³ FLA. STAT. tit. XIX, § 287.055(5)(b) (2014).

¹⁰⁴ Florida State Requirements for Educational Facilities, FLA. ADMIN. CODE r. 6A-2.0010 ch. 4, § 4.1(2012).

¹⁰⁵ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7001 (2014).

¹⁰⁶ Florida State Requirements for Educational Facilities, FLA. ADMIN. CODE r. 6A-2.0010 ch. 4, § 4.1 (2012).

¹⁰⁷ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7001 (2014).

¹⁰⁸ FLA. STAT. tit. XIX, § 287.057(3)(a)-(e) (2014); State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7001(II)(F)-(K) (2014).

¹⁰⁹ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 3320(II)(G) (2014).

¹¹⁰ *Id.*



subject to three conditions: (1) the purchase is economically advantageous; (2) the services conform to the standards prescribed by rules of the State Board of Education; and (3) the architect of record is notified of, and gives permission for, the use of the plans and designs in connection with the existing project.¹¹¹

E. Technology

The purchasing policies for the procurement of technology were developed with the unique purpose of transforming the traditional approach to teaching, learning, and education management to a technology-based model. This technical-based model intends to meet the needs of the broad range of abilities, disabilities, cultural backgrounds, and ethnic populations represented in SBBC.¹¹²

Technology procurement is designed to minimize the total cost of ownership over the intended useful life of five to seven years.¹¹³ SBBC may procure technology contracts through one of several options: direct negotiation, competitive bidding, Requests for Proposals (RFPs), special pricing, or another government contract may be used.¹¹⁴ The school board must authorize the award.¹¹⁵ Technology purchases requiring school board approval must comply with the District's Strategic Plan for technology. All technology procurements shall be consistent with the Strategic Plan and Policy 5306.¹¹⁶

V. SUPPLIER DIVERSITY AND OUTREACH PROGRAM

SBBC adopted Policy 7007 Supplier Diversity and Outreach Program (SDOP) in 1988.¹¹⁷ Policy 7007 commits SBBC to make every effort to provide contracting opportunities for M/WBEs. The SDOP procedures include the following standards:

1. Identify competitive contracting opportunities within SBBC budget
2. Analyze M/WBE availability to provide the products and services identified for contracting at the prime contract and subcontract levels

¹¹¹ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 3320(II)(G) (2014).

¹¹² State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 5306.

¹¹³ *Id.* at § 3320(VI)(C)(1) (2014) (Technology acquisition considerations include, but are not limited to the following: Purchase Options (Direct Purchase vs. Lease Purchase), Acquisitions costs, additional work space requirements, hardware, software, supplies, ongoing Maintenance & Support, Staff (FTE), additional staffing requirements, consulting services, professional development, peripheral requirements, upgrades, software, equipment upgrades/replacement, and project management); State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 3320(VI)(C)(4) (2014).

¹¹⁴ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 3320(VI)(C)(5)(a)-(d).

¹¹⁵ *Id.* at § 3320(VI)(C)(4).

¹¹⁶ *Id.*

¹¹⁷ Administrative Procedure School Board of Broward County, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007-A (2014).



3. Monitor and maintain records sufficient to verify good faith efforts and M/WBE participation
4. Coordinate outreach with the Supply Management and Logistics Department and Facilities and Management Department to offer instructions and clarify bid/proposal specifications, procurement policies, procedures, and general bidding requirements
5. Maintain a database of M/WBEs and encourage M/WBEs to participate in training programs offered by SBBC and its third-party business development assistance providers
6. Encourage the development of M/WBEs by using the services provided by the Small Business Administration and other third-party business development assistance providers
7. Refer M/WBEs to third-party development assistance providers for bonding, financial, and technical assistance
8. Promote the SDOP internally and externally through the dissemination of an annual marketing and communication plan
9. Collect and maintain information and submit reports to the Advisory Committee and the superintendent on the status of the SDOP
10. Schedule pre-bid and pre-proposal meetings, where appropriate, to inform potential contractors of the SDOP requirements and bid/proposal requirements
11. Provide information and assistance on certification procedures, subcontracting practices, and bonding requirements
12. Provide supplier diversity training to school district employees
13. Review multi-year contracts, amendments, and change orders for opportunities for M/WBE participation
14. Review upcoming bids to determine if restructuring a bid to multi-bid awards; primary, first and second alternate bid award; or reduction of large contracts would enhance M/WBE participation
15. Investigate race, ethnic, and gender-neutral provisions to lessen barriers to participation by businesses wishing to contract with SBBC
16. Plan and participate in vendor training seminars for the purpose of informing potential bidders/proposers/vendors of the SDOP and business opportunities



17. Partner with professional organizations and private corporations to develop a mentorship/partnership plan designed to broaden the base of emerging M/WBEs
18. Serve as a liaison to economic development organizations and agencies that work in support of economic development in the minority communities
19. Provide notices of bids/business proposals to foster the participation of M/WBEs
20. Create online M/WBE directories for vendors and school district employees to identify subcontractors and suppliers

A. Eligibility Criteria

To qualify as an MBE, the business must be at least 51-percent owned, managed, and operated by minority person(s).¹¹⁸ The minority person(s) must be a citizen or lawful permanent resident of the United States who is:

- a) An African American, having origins in any of the Black racial groups of Africa
- b) A Native American, including persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians
- c) An Asian-Pacific American, including persons with origins in Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the United States Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kiribati, Javalu, Nauru, Federated States of Micronesia, or Hong Kong
- d) A Subcontinent Asian American, including persons with origins in India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal, or Sri Lanka
- e) A Hispanic American, a person of Spanish or Portuguese origin which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese descent, regardless of race

To qualify as a WBE, the business must be at least 51-percent owned, managed, and operated by a woman. The 51-percent threshold for M/WBE ownership must comply with the following:

- a) The ownership by the minority/woman shall be real, substantial, and continuing, and shall go beyond mere pro forma ownership of the firm as reflected in its percentage, with no exchange of capital at fair market value. The minority and

¹¹⁸ Administrative Procedure School Board of Broward County, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007(II)(A)(1)-(4) (2014).



woman owner(s) must demonstrate that they manage and control the daily operations of the business.

- b) The minority/woman owner shares in all risk and profits commensurate with the ownership interest as demonstrated by a detailed examination of the substance of business arrangements with others.
- c) The salary/profits of the minority/woman owner must commensurate with their ownership interest.
- d) The minority/woman acquired or established the firm from independently owned holdings.
- e) If ownership was obtained by transfer of stock with no exchange of capital at fair market value, the minority/woman on whom eligibility is based must own 51 percent of the firm for a minimum of one year, when any previous majority ownership interest in the firm was by a non-minority. This requirement shall not apply to minority/woman owners who take a 51 percent or greater interest in a firm due to an inheritance or divorce statement.
- f) In a corporate form of organization, the minority/woman principal(s) must own at least 51 percent of all voting stock of the corporation. Any voting agreements among the shareholders must not dilute the beneficial ownership, rights or influence the minority or woman owners of the stock or classes of stock of the corporation.
- g) The minority/woman partner(s) in a partnership organization must own at least 51 percent of the partnership, profits, voting control, assets, and/or dividends.
- h) The sole proprietorship must be minority or woman-owned.
- i) In any other form of organization, the minority/woman owner must own at least 51 percent of the business interest of the organization, including, but not limited to, 51 percent of the business's assets, dividends, and intangible assets.



The M/WBE must demonstrate average gross receipts over three years within the following thresholds:

- Goods and Services: \$6 million
- Professional Services: \$6 million
- Construction Trade and/or General Contracting: \$12 million

M/WBE manufacturers, wholesalers, and retailers must have 25 or fewer employees.

B. Certification Criteria

1. An applicant must complete and submit an M/WBE certification application with the required documentation.
2. Upon receipt, the certification application shall be reviewed to ensure appropriate documentation, signature, completeness, and accuracy.
3. Within 30 days following the initial receipt of application, the SDOP staff shall request that the applicant furnish omitted items or additional information. If requested items are not received within 30 days from the date of the request, the applicant's M/WBE certification application file will be deemed closed. An applicant whose application has been closed under this Section shall have the right to submit a new application within 30 days from receipt of the notice to close the applicant's M/WBE certification file.
4. An on-site review, when deemed appropriate, shall be conducted with the M/WBE applicant to discuss the documentation submitted and to determine if the applicant meets the criteria for ownership and control. Failure to cooperate with the scheduling of an on-site review shall result in the denial of the application.
5. Applicants who have been determined eligible for certification shall receive a certificate and certification letter stating the term for which the business has been certified, the specialty area(s) of the business, and the minority status categories in which the business is certified. Once certified, an applicant's certification shall be valid for a three-year period from the date of issue unless certification is suspended or revoked.
6. Applicants who are determined to be ineligible shall receive a letter stating the basis for their denial of certification, citing applicable rules. If denied, a business shall not be eligible to submit a new application for one year.
7. The ethnic and gender status of the business provided on the M/WBE certification application will also be retained in the M/WBE Office's database with all other relevant data. The original M/WBE certification application will be on file in the M/WBE Office.



8. To assure the truthfulness of any statements made during the certification application process to the M/WBE Office, as required by these regulations, the statements must be submitted in writing. Such written statements will be in the form of a sworn affidavit. Submission of such an affidavit will be a requirement for M/WBE certification. Failure to submit such a sworn affidavit upon request will be grounds for denial of an M/WBE certification.¹¹⁹

C. Re-certification Criteria

To recertify as an M/WBE with SBBC, the M/WBE must follow the standards enumerated in the Administrative Procedures for the SDOP.¹²⁰ The M/WBE Office will notify the M/WBE no later than 60 days prior to the expiration date of the relevant certification period. Following this notification, the M/WBE applicant must follow the recertification procedures. Recertification will be granted when the applicant has substantiated their eligibility as an M/WBE by following the recertification procedures, listed as follows:

1. The M/WBE applicant must submit the application for renewal of certification to the M/WBE Office no less than 30 days prior to the date of expiration of the existing certification.
2. All applications for renewal of certification must contain an affidavit attesting to the accuracy of the statements and information provided; a declaration that ownership and operational control of the firm has not changed during the time period since M/WBE certification was granted; and copies or verification of the applicant M/WBE's current financial statement, tax returns from the previous two years and the current license to do business.
3. The M/WBE Office staff must review the application to ensure appropriate documentation, signature, completeness, and accuracy upon receipt.
4. The M/WBE Office staff must request that the applicant M/WBE supply or furnish omitted items or additional information within 30 days following the initial receipt of the information. If the requested items are not received by the M/WBE Office within 30 days of the request, then the applicant's recertification application will be denied.¹²¹

Applicants determined to be eligible will receive a recertification certificate and a recertification letter stating the length of time for which the business has been certified,

¹¹⁹ Administrative Procedure School Board of Broward County, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007(II)(B)(1)-(8) (2014).

¹²⁰ See generally Administrative Procedure School Board of Broward County, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007(II)(C) (2014).

¹²¹ Administrative Procedure School Board of Broward County, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007(II)(C)(2)-(5) (2014).



the specialty area of the business, and the minority status categories in which the M/WBE is certified.¹²² Applicants deemed ineligible shall receive a letter stating the basis for denial of certification with an explanation that cites to applicable rules; the applicant will not be eligible to submit a new application for the duration of one year from the date of the notice of denial of certification or the SBBC final order of denial.¹²³

D. Reciprocal Certification

Reciprocal certification may be granted to applicants that have been previously certified as M/WBEs by other governmental entities.¹²⁴ A list of governmental entities that meet the SBBC's M/WBE certification standard is maintained after SDOP staff evaluates certification standards of the other governmental entities that certified the applicant.¹²⁵



¹²² *Id.* at § 7007(II)(C)(7).

¹²³ *Id.* at § 7007(II)(C)(8).

¹²⁴ *Id.* at § 7007(II)(D).

¹²⁵ *Id.* at § 7007(II)(D)(1)-(2).

CHAPTER 3: PRIME CONTRACTOR UTILIZATION ANALYSIS

I. INTRODUCTION

This chapter documents the School Board of Broward County's (SBBC) utilization of Minority and Woman-owned Business Enterprises, hereinafter referred to as Minority and Caucasian Female-owned Businesses (M/WBE). The utilization for the study period Fiscal Years July 1, 2008, to June 30, 2013 is reported by ethnicity, gender, and industry. The nine ethnic and gender categories, into which each prime contractor was classified, are set forth below in Table 3.01.

SBBC provided purchase order records of its expenditures for the study period. The four industries into which the purchase orders were classified are construction, professional services, contractual services, and commodities.

Construction includes new construction, remodeling, renovations, leasing, lease-purchasing, day labor projects, additions to any educational building, or ancillary facility projects, repainting of interior or exterior surfaces, resurfacing of floors, repair or replacement of glass, repair of hardware, furniture, equipment, electrical fixtures, and plumbing fixtures, repair or resurfacing of parking lots, roads, and walkways, or the replacement and hookup of relocatables (or mobile classrooms or educational buildings used in a temporary capacity).¹

Professional services include architecture, professional engineering, landscape architecture, or registered surveying and mapping, as defined by the laws of the State of Florida, or those performed by any architect, professional engineer, landscape architect, or registered surveyor and mapper in connection with his or her professional employment practice.²

Contractual services include services rendered by individuals and firms who are independent contractors, and may include evaluations, consultations, maintenance, accounting, security, management systems, management consulting, educational training programs, research and development studies or reports on the findings of consultants engaged there under, and professional, technical, and social services.³



¹ State Board of Education Administrative Rules, FLA. Admin. Code Ann. R. 6A-1.0 § 7001 (2014).

² FLA. STAT. tit. XIX § 287.055 (2014).

³ FLA. STAT. tit. XIX § 287.012 (2014).

Commodities include supplies, materials, goods, merchandise, food, equipment, information technology, and other personal property, including a mobile home, trailer, or other portable structure with less than 5,000 square feet of floor space, purchased, leased, or otherwise secured by contract.⁴

Table 3.01: Business Ethnic and Gender Groups

Ethnicity and Gender Category	Definition
African Americans	Businesses owned by male and female African Americans
Asian-Pacific Americans	Businesses owned by male and female Asian-Pacific Americans
Subcontinent Asian Americans	Businesses owned by male and female Subcontinent Asian Americans
Hispanic Americans	Businesses owned by male and female Hispanic Americans
Native Americans	Businesses owned by male and female Native Americans
Minority-owned Businesses	Businesses owned by male and female African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, and Native Americans
Caucasian Female-owned Businesses	Businesses owned by Caucasian females
Minority and Caucasian Female-owned Businesses	Businesses owned by minority males, minority females, and Caucasian females
Non-minority Male-owned Businesses	Businesses owned by Caucasian males, and businesses that could not be identified as minority or female-owned ⁵



⁴ FLA. STAT. tit. XIX § 287.012 (2014).

⁵ See *Section II: Prime Purchase Order Data Sources* for the methodology employed to identify the ethnicity and gender of the SBBC's utilized prime contractors.

II. PRIME PURCHASE ORDER DATA SOURCES

The purchase orders issued during the Fiscal Years July 1, 2008, to June 30, 2013, study period were extracted by the Warehousing and Procurement Services Department from SBBC's financial system. Contract award data for the study period was not available, therefore the purchase order data was analyzed.⁶ Each purchase order was classified into one of the four industries. The industry classifications were reviewed and approved by SBBC.

The ethnicity and gender of the prime contractors were researched by cross-referencing the names with certification lists, chambers of commerce directories, and trade organization membership directories. Prime contractors whose ethnicity and gender could not be verified through published sources were surveyed. Once the ethnicity and gender research was completed and the purchase order data were cleaned, the data for each industry were reviewed for sufficiency to perform the utilization analysis.

III. PRIME CONTRACTOR UTILIZATION THRESHOLDS

Purchase orders were analyzed at the formal and informal dollar thresholds defined in SBBC's procurement policy. The formal purchase order threshold for construction purchase orders is \$50,000 and over. For professional services the two formal dollar thresholds are \$325,000 and over and \$195,000 and over. For contractual services they are \$500,000 and over, \$50,000 to \$499,999, and \$5,000 to \$49,999. For commodities the three formal dollar thresholds are \$500,000 and over, \$50,000 to \$499,999 and \$5,000 to \$49,999.

As depicted in Table 3.02, the informal dollar thresholds are less than \$50,000 for construction, \$50,001 to \$194,999 and less than \$50,000 for professional services, less than \$5,000 for contractual services, and less than \$5,000 for commodities.

Purchase orders within each of the three industries were analyzed at three contract levels. One level included all purchase orders regardless of award amount. The second level included informal purchase order levels as set forth in SBBC's procurement standards. And the third level included formal purchase orders set forth in SBBC's procurement standards. As depicted in Table 3.02, the informal purchase order thresholds are less than \$50,000 for construction, \$50,000 to \$194,999 and less than \$50,000 for professional services, less than \$5,000 for contractual services, and less than \$5,000 for commodities.



⁶ The detailed process undertaken to compile the prime utilization data is presented in *Chapter 12: Recommendations, Section V. Race and Gender-neutral recommendations, Subpart A: Data Extraction Process.*

Table 3.02: Informal Dollar Thresholds

Industry	Informal Dollar Thresholds
Construction	Less than \$50,000
Professional Services	\$50,000 to \$194,999 Less than \$50,000
Contractual Services	Less than \$5,000
Commodities	Less than \$5,000

IV. PRIME CONTRACTOR UTILIZATION

A. All Prime Contractors

As depicted in Table 3.03, SBBC issued 111,107 prime purchase orders during the Fiscal Years July 1, 2008, to June 30, 2013 study period. The 111,107 prime purchase orders included 1,828 for construction, 133 for professional services, 13,132 contractual services, and 96,014 for commodities.

The payments made by SBBC during the study period totaled \$837,838,957 for all 111,107 prime purchase orders. Payments included \$248,176,703 for construction, \$12,717,210 for professional services, \$149,333,758 for contractual services, and \$427,611,285 for commodities.



**Table 3.03: Total Prime Purchase Orders and Dollars Expended:
All Industries, Fiscal Years July 1, 2008, to June 30, 2013**

Industry	Total Number of Purchase Orders	Total Dollars Expended
Construction	1,828	\$248,176,703
Professional Services	133	\$12,717,210
Contractual Services	13,132	\$149,333,758
Commodities	96,014	\$427,611,285
Total Expenditures	111,107	\$837,838,957

B. Highly Used Prime Contractors

SBBC awarded a total of 111,107 construction, professional services, contractual services, and commodities prime purchase orders during the study period. As depicted in Table 3.04, SBBC's 111,107 prime purchase orders were received by 3,584 unique vendors.

Table 3.04: Total Prime Purchase Orders

Total Prime Purchase Orders	111,107
Total Utilized Vendors	3,584
Total Expenditures	\$837,838,957

An analysis was performed to determine the number of the vendors that received approximately 70% of the dollars SBBC awarded. The analysis determined that 126 vendors received 70% of the total prime purchase order dollars. The 126 vendors represented 3.52% of the 3,584 vendors.

Table 3.05 below presents the distribution of SBBC's prime purchase orders by the number of vendors. There were 126 vendors that received \$586,585,522 or 70% of the total prime purchase order dollars. The findings illustrate that a small group of prime contractors received the majority of the dollars spent by SBBC.



Table 3.05: All Prime Purchase Orders Distributed by Number of Vendors

Vendors	Total Dollars	Percent of Dollars ⁷	Number of Purchase Orders	Percent of Purchase Orders ⁸
126 Highly Used Vendors	\$586,585,522	70%	52,842	48%
3,584 Total Vendors	\$837,838,957	100%	111,107	100%

Table 3.06 presents the ethnicity and gender of 47 of the 126 most highly used prime contractors, who received approximately 50% of total prime purchase order dollars. The 47 most highly used prime contractors were African Americans, Hispanic Americans, Caucasian Female, and Non-minority Male-owned businesses. The purchase orders received by these 47 businesses ranged from \$100 to \$19,953,897.

Table 3.06: Top 47 Highly Used Prime Contractors

Ethnicity/ Gender ⁹	Total Dollars	Percent of Dollars	Number of Purchase Orders	Percent of Purchase Orders
African Americans	\$4,625,524	0.55%	5	0.00%
Hispanic Americans	\$69,652,575	8.31%	1082	0.97%
Caucasian Females	\$22,427,321	2.68%	58	0.05%
Non-minority Males	\$322,293,569	38.47%	28,791	25.91%

This pattern of highly used vendors was evident in each industry.

C. Highly Used Construction Prime Contractors

SBBC awarded a total of 1,828 construction purchase orders during the study period. As depicted in Table 3.07, SBBC’s 1,828 construction prime purchase orders were received by 146 unique vendors.



⁷ Percentages are rounded to the nearest whole number.

⁸ Percentages are rounded to the nearest whole number.

⁹ Asian-Pacific Americans, Subcontinent Asian Americans, and Native Americans were omitted from the table because they were not highly used.

Table 3.07: Construction Prime Purchase Orders

Total Prime Purchase Orders	1,828
Total Utilized Vendors	146
Total Expenditures	\$248,176,703

An analysis was performed to determine the number of the vendors that received approximately 70% of the construction prime purchase order dollars SBBC awarded. As illustrated in Table 3.08 below, 17 of the 146 vendors received \$173,118,810 or 70% of the total construction prime purchase order dollars. The findings illustrate that a small group of prime contractors received the majority of the construction dollars spent by SBBC.

Table 3.08: Construction Prime Purchase Orders Distributed by Number of Vendors

Vendors	Total Dollars	Percent of Dollars ¹⁰	Number of Purchase Orders	Percent of Purchase Orders ¹¹
17 Highly Used Vendors	\$173,118,810	70%	369	20%
146 Total Vendors	\$248,176,703	100%	1,828	100%

Table 3.09 presents the ethnicity and gender of 9 of the 17 most highly used construction prime contractors, who received approximately 50% of construction prime purchase order dollars. The 9 most highly used prime contractors were Hispanic American, Caucasian Female-owned, and Non-minority Male-owned Businesses. The purchase orders received by these 9 businesses ranged from \$152 to \$19,953,897.

Table 3.09: Top 9 Highly Used Construction Prime Contractors

Ethnicity/ Gender ¹²	Total Dollars	Percent of Dollars	Number of Purchase Orders	Percent of Purchase Orders
Hispanic Americans	\$21,145,716	8.52%	58	3.17%
Caucasian Females	\$17,489,618	7.05%	38	2.08%
Non-minority Males	\$86,850,749	35.00%	161	8.81%

¹⁰ Percentages are rounded to the nearest whole number.

¹¹ Percentages are rounded to the nearest whole number.

¹² African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, and Native Americans were omitted from the table because they were not highly used.



D. Highly Used Professional Services Prime Contractors

BCPS awarded a total of 133 professional services prime purchase orders during the study period. As depicted in Table 3.10, BCPS’s 133 professional services prime purchase orders were received by 48 unique vendors.

Table 3.10: Professional Services Prime Purchase Orders

Total Prime Purchase Orders	133
Total Utilized Vendors	48
Total Expenditures	\$12,717,210

An analysis was performed to determine the number of the vendors that received approximately 70% of the professional services prime purchase order dollars BCPS awarded. As illustrated in Table 3.11 below, 10 of the 48 vendors received \$9,033,490 or 71% of the total professional services prime purchase order dollars. The findings illustrate that a small group of prime contractors received the majority of the professional services dollars spent by BCPS.

Table 3.11: Professional Services Prime Purchase Orders Distributed by Number of Vendors

Vendors	Total Dollars	Percent of Dollars ¹³	Number of Purchase Orders	Percent of Purchase Orders ¹⁴
10 Highly Used Vendors	\$9,033,490	71%	32	24%
48 Total Vendors	\$12,717,210	100%	133	100%

Table 3.12 presents the ethnicity and gender of 5 of the 10 most highly used professional services prime contractors, who received approximately 50% of professional services prime purchase order dollars. The 5 most highly used prime contractors were Asian-Pacific American, Hispanic American, and Non-minority Male-owned Businesses. The purchase orders received by these 5 businesses ranged from \$24,000 to \$1,683,650.



¹³ Percentages are rounded to the nearest whole number.

¹⁴ Percentages are rounded to the nearest whole number.

Table 3.12: Top 5 Highly Used Professional Services Prime Contractors

Ethnicity/ Gender¹⁵	Total Dollars	Percent of Dollars	Number of Purchase Orders	Percent of Purchase Orders
Asian-Pacific Americans	\$1,285,000	10.10%	1	0.75%
Hispanic Americans	\$2,227,206	17.51%	3	2.26%
Non-minority Males	\$2,939,628	23.12%	5	3.76%

E. Highly Used Contractual Services Prime Contractors

SBBC awarded a total of 13,132 contractual services purchase orders during the study period. As depicted in Table 3.13, SBBC’s 13,132 contractual services prime purchase orders were received by 1,058 unique vendors.

Table 3.13: Contractual services Prime Purchase Orders

Total Prime Purchase Orders	13,132
Total Utilized Vendors	1,058
Total Expenditures	\$149,333,758

An analysis was performed to determine the number of the vendors that received approximately 70% of the contractual services prime purchase order dollars SBBC awarded. As illustrated in Table 3.14 below, 57 of the 1,058 vendors received \$104,371,361 or 70% of the total contractual services prime purchase order dollars. The findings illustrate that a small group of prime contractors received the majority of the contractual services dollars spent by SBBC.

Table 3.14: Contractual Services Prime Purchase Orders Distributed by Number of Vendors

Vendors	Total Dollars	Percent of Dollars¹⁶	Number of Purchase Orders	Percent of Purchase Orders¹⁷
57 Highly Used Vendors	\$104,371,361	70%	6,314	48%
1,058 Total Vendors	\$149,333,758	100%	13,132	100%

¹⁵ African Americans, Subcontinent Asian Americans, Native Americans, and Caucasian Females were omitted from the table because they were not highly used.

¹⁶ Percentages are rounded to the nearest whole number.

¹⁷ Percentages are rounded to the nearest whole number.



Table 3.15 presents the ethnicity and gender of 25 of the 57 most highly used contractual services prime contractors, who received approximately 50% of contractual services prime purchase order dollars. The 25 most highly used prime contractors were Hispanic American, Caucasian Female, and Non-minority Males-owned Businesses. The purchase orders received by these 25 businesses ranged from \$100 to \$1,526,827.

Table 3.15: Top 25 Highly Used Contractual Services Prime Contractors

Ethnicity/ Gender¹⁸	Total Dollars	Percent of Dollars	Number of Purchase Orders	Percent of Purchase Orders
Hispanic Americans	\$6,367,632	4.26%	151	1.15%
Caucasian Females	\$4,937,703	3.31%	20	0.15%
Non-minority Males	\$62,816,047	42.06%	4,388	33.41%

F. Highly Used Commodities Prime Contractors

SBBC awarded a total of 96,014 commodities prime purchase orders during the study period. As depicted in Table 3.16, SBBC’s 96,014 commodities prime purchase orders were received by 2,349 unique vendors.

Table 3.16: Commodities Prime Purchase Orders

Total Prime Purchase Orders	96,014
Total Utilized Vendors	2,349
Total Expenditures	\$427,611,285

An analysis was performed to determine the number of the vendors that received approximately 70% of the commodities prime purchase order dollars SBBC awarded. As illustrated in Table 3.17 below, 72 of the 2,349 vendors received \$299,371,543 or 70% of the total commodities prime purchase order dollars. The findings illustrate that a small group of prime contractors received the majority of the commodities dollars spent by SBBC.



¹⁸ African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, and Native Americans were omitted from the table because they were not highly used.

Table 3.17: Commodities Prime Purchase Orders Distributed by Number of Vendors

Vendors	Total Dollars	Percent of Dollars¹⁹	Number of Purchase Orders	Percent of Purchase Orders²⁰
72 Highly Used Vendors	\$299,371,543	70%	49,877	52%
2,349 Total Vendors	\$427,611,285	100%	96,014	100%

Table 3.18 presents the ethnicity and gender of 25 of the 72 most highly used commodities prime contractors, who received approximately 50% of commodities prime purchase order dollars. The 25 most highly used prime contractors were Hispanic American and Non-minority Male-owned Businesses. The purchase orders received by these 25 businesses ranged from \$100 to \$2,700,000.

Table 3.18: Top 25 Highly Used Commodities Prime Contractors

Ethnicity/ Gender²¹	Total Dollars	Percent of Dollars	Number of Purchase Orders	Percent of Purchase Orders
Hispanic Americans	\$29,242,967	6.84%	869	0.91%
Non-minority Males	\$184,408,991	43.13%	30,808	32.09%



¹⁹ Percentages are rounded to the nearest whole number.

²⁰ Percentages are rounded to the nearest whole number.

²¹ African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Native Americans, and Caucasian Females were omitted from the table because they were not highly used.

G. All Prime Purchase Orders by Industry

1. Construction Prime Contractor Utilization: All Purchase Orders

Table 3.19 summarizes all expenditures by SBBC on construction prime purchase orders. Minority-owned Businesses received 24.11% of the construction prime purchase order dollars; Caucasian Female-owned Businesses received 10.42%; and Non-minority Male-owned Businesses received 65.47%.

African Americans received 10 or 0.55% of all construction prime purchase orders awarded during the study period, representing \$6,462,648 or 2.60% of all construction expenditures.

Asian-Pacific Americans received 2 or 0.11% of all construction prime purchase orders awarded during the study period, representing \$2,056,259 or 0.83% of all construction expenditures.

Subcontinent Asian Americans received 0 or 0.00% of all construction prime purchase orders awarded during the study period, representing \$0 or 0.00% of all construction expenditures.

Hispanic Americans received 143 or 7.82% of all construction prime purchase orders awarded during the study period, representing \$51,316,166 or 20.68% of all construction expenditures.

Native Americans received 0 or 0.00% of all construction prime purchase orders awarded during the study period, representing \$0 or 0.00% of all construction expenditures.

Minority-owned Businesses received 155 or 8.48% of all construction prime purchase orders awarded during the study period, representing \$59,835,072 or 24.11% of all construction expenditures.

Caucasian Female-owned Businesses received 127 or 6.95% of all construction prime purchase orders awarded during the study period, representing \$25,852,138 or 10.42% of all construction expenditures.

Minority and Caucasian Female-owned Businesses received 282 or 15.43% of all construction prime purchase orders awarded during the study period, representing \$85,687,210 or 34.53% of all construction expenditures.

Non-minority Male-owned Businesses received 1,546 or 84.57% of all construction prime purchase orders awarded during the study period, representing \$162,489,493 or 65.47% of all construction expenditures.



**Table 3.19: Construction Prime Contractor Utilization:
All Purchase Orders, Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African Americans	10	0.55%	\$6,462,648	2.60%
Asian-Pacific Americans	2	0.11%	\$2,056,259	0.83%
Subcontinent Asian Americans	0	0.00%	\$0	0.00%
Hispanic Americans	143	7.82%	\$51,316,166	20.68%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	127	6.95%	\$25,852,138	10.42%
Non-minority Males	1,546	84.57%	\$162,489,493	65.47%
TOTAL	1,828	100.00%	\$248,176,703	100.00%
Ethnicity and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African American Females	0	0.00%	\$0	0.00%
African American Males	10	0.55%	\$6,462,648	2.60%
Asian-Pacific American Females	0	0.00%	\$0	0.00%
Asian-Pacific American Males	2	0.11%	\$2,056,259	0.83%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	0	0.00%	\$0	0.00%
Hispanic American Females	66	3.61%	\$19,540,919	7.87%
Hispanic American Males	77	4.21%	\$31,775,246	12.80%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	127	6.95%	\$25,852,138	10.42%
Non-minority Males	1,546	84.57%	\$162,489,493	65.47%
TOTAL	1,828	100.00%	\$248,176,703	100.00%
Minority and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority Females	66	3.61%	\$19,540,919	7.87%
Minority Males	89	4.87%	\$40,294,153	16.24%
Caucasian Females	127	6.95%	\$25,852,138	10.42%
Non-minority Males	1,546	84.57%	\$162,489,493	65.47%
TOTAL	1,828	100.00%	\$248,176,703	100.00%
Minority and Women	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority-owned Businesses	155	8.48%	\$59,835,072	24.11%
Caucasian Female-owned Businesses	127	6.95%	\$25,852,138	10.42%
Minority and Caucasian Female-owned Businesses	282	15.43%	\$85,687,210	34.53%
Non-minority Male-owned Businesses	1,546	84.57%	\$162,489,493	65.47%
TOTAL	1,828	100.00%	\$248,176,703	100.00%



2. Professional Services Prime Contractor Utilization: All Purchase Orders

Table 3.20 summarizes all expenditures by SBBC on professional services prime purchase orders. Minority-owned Businesses received 39.64% of the professional services prime purchase order dollars; Caucasian Female-owned Businesses received 0.89%; and Non-minority Male-owned Businesses received 59.47%.

African Americans received 3 or 2.26% of all professional services prime purchase orders awarded during the study period, representing \$515,709 or 4.06% of the professional services expenditures.

Asian-Pacific Americans received 1 or 0.75% of all professional services prime purchase orders awarded during the study period, representing \$1,285,000 or 10.10% of the professional services expenditures.

Subcontinent Asian Americans received 3 or 2.26% of all professional services prime purchase orders awarded during the study period, representing \$383,391 or 3.01% of the professional services expenditures.

Hispanic Americans received 10 or 7.52% of all professional services prime purchase orders awarded during the study period, representing \$2,856,380 or 22.46% of the professional services expenditures.

Native Americans received 0 or 0.00% of all professional services prime purchase orders awarded during the study period, representing \$0 or 0.00% of the professional services expenditures.

Minority-owned Businesses received 17 or 12.78% of all professional services prime purchase orders awarded during the study period, representing \$5,040,480 or 39.64% of the professional services expenditures.

Caucasian Female-owned Businesses received 14 or 10.53% of all professional services prime purchase orders awarded during the study period, representing \$113,645 or 0.89% of the professional services expenditures.

Minority and Caucasian Female-owned Businesses received 31 or 23.31% of all professional services prime purchase orders awarded during the study period, representing \$5,154,125 or 40.53% of the professional services expenditures.

Non-minority Male-owned Businesses received 102 or 76.69% of all professional services prime purchase orders awarded during the study period, representing \$7,563,085 or 59.47% of the professional services expenditures.



**Table 3.20: Professional Services Prime Contractor Utilization:
All Purchase Orders, Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African Americans	3	2.26%	\$515,709	4.06%
Asian-Pacific Americans	1	0.75%	\$1,285,000	10.10%
Subcontinent Asian Americans	3	2.26%	\$383,391	3.01%
Hispanic Americans	10	7.52%	\$2,856,380	22.46%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	14	10.53%	\$113,645	0.89%
Non-minority Males	102	76.69%	\$7,563,085	59.47%
TOTAL	133	100.00%	\$12,717,210	100.00%
Ethnicity and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African American Females	0	0.00%	\$0	0.00%
African American Males	3	2.26%	\$515,709	4.06%
Asian-Pacific American Females	1	0.75%	\$1,285,000	10.10%
Asian-Pacific American Males	0	0.00%	\$0	0.00%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	3	2.26%	\$383,391	3.01%
Hispanic American Females	4	3.01%	\$475,108	3.74%
Hispanic American Males	6	4.51%	\$2,381,272	18.72%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	14	10.53%	\$113,645	0.89%
Non-minority Males	102	76.69%	\$7,563,085	59.47%
TOTAL	133	100.00%	\$12,717,210	100.00%
Minority and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority Females	5	3.76%	\$1,760,108	13.84%
Minority Males	12	9.02%	\$3,280,372	25.79%
Caucasian Females	14	10.53%	\$113,645	0.89%
Non-minority Males	102	76.69%	\$7,563,085	59.47%
TOTAL	133	100.00%	\$12,717,210	100.00%
Minority and Women	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority-owned Businesses	17	12.78%	\$5,040,480	39.64%
Caucasian Female-owned Businesses	14	10.53%	\$113,645	0.89%
Minority and Caucasian Female-owned Businesses	31	23.31%	\$5,154,125	40.53%
Non-minority Male-owned Businesses	102	76.69%	\$7,563,085	59.47%
TOTAL	133	100.00%	\$12,717,210	100.00%



3. Contractual Services Prime Contractor Utilization: All Purchase Orders

Table 3.21 summarizes all expenditures by SBBC on contractual services prime purchase orders. Minority-owned Businesses received 9.56% of the contractual services prime purchase order dollars; Caucasian Female-owned Businesses received 10.83%; and Non-minority Male-owned Businesses received 79.61%.

African Americans received 174 or 1.33% of all contractual services prime purchase orders awarded during the study period, representing \$5,050,462 or 3.38% of the contractual services expenditures.

Asian-Pacific Americans received 7 or 0.05% of all contractual services prime purchase orders awarded during the study period, representing \$49,659 or 0.03% of the contractual services expenditures.

Subcontinent Asian Americans received 22 or 0.17% of all contractual services prime purchase orders awarded during the study period, representing \$37,831 or 0.03% of the contractual services expenditures.

Hispanic Americans received 980 or 7.46% of all contractual services prime purchase orders awarded during the study period, representing \$9,135,394 or 6.12% of the contractual services prime contract dollars.

Native Americans received 0 or 0.00% of all contractual services prime purchase orders awarded during the study period, representing \$0 or 0.00% of the contractual services expenditures.

Minority-owned Businesses received 1,183 or 9.01% of all contractual services prime purchase orders awarded during the study period, representing \$14,273,345 or 9.56% of the contractual services expenditures.

Caucasian Female-owned Businesses received 1,679 or 12.79% of all contractual services prime purchase orders awarded during the study period, representing \$16,171,960 or 10.83% of the contractual services expenditures.

Minority and Caucasian Female-owned Businesses received 2,862 or 21.79% of all contractual services prime purchase orders awarded during the study period, representing \$30,445,305 or 20.39% of the contractual services expenditures.

Non-minority Male-owned Businesses received 10,270 or 78.21% of all contractual services prime purchase orders awarded during the study period, representing \$118,888,453 or 79.61% of the contractual services expenditures.



**Table 3.21: Contractual Services Prime Contractor Utilization:
All Purchase Orders, Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African Americans	174	1.33%	\$5,050,462	3.38%
Asian-Pacific Americans	7	0.05%	\$49,659	0.03%
Subcontinent Asian Americans	22	0.17%	\$37,831	0.03%
Hispanic Americans	980	7.46%	\$9,135,394	6.12%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	1,679	12.79%	\$16,171,960	10.83%
Non-minority Males	10,270	78.21%	\$118,888,453	79.61%
TOTAL	13,132	100.00%	\$149,333,758	100.00%
Ethnicity and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African American Females	56	0.43%	\$1,154,097	0.77%
African American Males	118	0.90%	\$3,896,365	2.61%
Asian-Pacific American Females	5	0.04%	\$47,500	0.03%
Asian-Pacific American Males	2	0.02%	\$2,159	0.00%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	22	0.17%	\$37,831	0.03%
Hispanic American Females	25	0.19%	\$708,363	0.47%
Hispanic American Males	955	7.27%	\$8,427,031	5.64%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	1,679	12.79%	\$16,171,960	10.83%
Non-minority Males	10,270	78.21%	\$118,888,453	79.61%
TOTAL	13,132	100.00%	\$149,333,758	100.00%
Minority and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority Females	86	0.65%	\$1,909,960	1.28%
Minority Males	1,097	8.35%	\$12,363,386	8.28%
Caucasian Females	1,679	12.79%	\$16,171,960	10.83%
Non-minority Males	10,270	78.21%	\$118,888,453	79.61%
TOTAL	13,132	100.00%	\$149,333,758	100.00%
Minority and Women	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority-owned Businesses	1,183	9.01%	\$14,273,345	9.56%
Caucasian Female-owned Businesses	1,679	12.79%	\$16,171,960	10.83%
Minority and Caucasian Female-owned Businesses	2,862	21.79%	\$30,445,305	20.39%
Non-minority Male-owned Businesses	10,270	78.21%	\$118,888,453	79.61%
TOTAL	13,132	100.00%	\$149,333,758	100.00%



4. Commodities Prime Contractor Utilization: All Purchase Orders

Table 3.22 summarizes all expenditures by SBBC on commodities prime purchase orders. Minority-owned Businesses received 10.31% of the commodities prime purchase order dollars; Caucasian Female-owned Businesses received 3.21%; and Non-minority Male-owned Businesses received 86.48%.

African Americans received 665 or 0.69% of all commodities prime purchase orders awarded during the study period, representing \$3,976,729 or 0.93% of the commodities expenditures.

Asian-Pacific Americans received 96 or 0.10% of all commodities prime purchase orders awarded during the study period, representing \$631,533 or 0.15% of the commodities expenditures.

Subcontinent Asian Americans received 531 or 0.55% of all commodities prime purchase orders awarded during the study period, representing \$355,392 or 0.08% of the commodities expenditures.

Hispanic Americans received 3,665 or 3.82% of all commodities prime purchase orders awarded during the study period, representing \$38,406,372 or 8.98% of the commodities expenditures.

Native Americans received 122 or 0.13% of all commodities prime purchase orders awarded during the study period, representing \$718,515 or 0.17% of the commodities expenditures.

Minority-owned Businesses received 5,079 or 5.29% of all commodities prime purchase orders awarded during the study period, representing \$44,088,542 or 10.31% of the commodities expenditures.

Caucasian Female-owned Businesses received 3,792 or 3.95% of all commodities prime purchase orders awarded during the study period, representing \$13,708,626 or 3.21% of the commodities expenditures.

Minority and Caucasian Female-owned Businesses received 8,871 or 9.24% of all commodities prime purchase orders awarded during the study period, representing \$57,797,168 or 13.52% of the commodities expenditures.

Non-minority Male-owned Businesses received 87,143 or 90.76% of all commodities prime purchase orders awarded during the study period, representing \$369,814,117 or 86.48% of the commodities expenditures.



**Table 3.22: Commodities Prime Contractor Utilization:
All Purchase Orders, Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African Americans	665	0.69%	\$3,976,729	0.93%
Asian-Pacific Americans	96	0.10%	\$631,533	0.15%
Subcontinent Asian Americans	531	0.55%	\$355,392	0.08%
Hispanic Americans	3,665	3.82%	\$38,406,372	8.98%
Native Americans	122	0.13%	\$718,515	0.17%
Caucasian Females	3,792	3.95%	\$13,708,626	3.21%
Non-minority Males	87,143	90.76%	\$369,814,117	86.48%
TOTAL	96,014	100.00%	\$427,611,285	100.00%
Ethnicity and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African American Females	487	0.51%	\$3,125,872	0.73%
African American Males	178	0.19%	\$850,857	0.20%
Asian-Pacific American Females	24	0.02%	\$15,908	0.00%
Asian-Pacific American Males	72	0.07%	\$615,626	0.14%
Subcontinent Asian American Females	498	0.52%	\$324,462	0.08%
Subcontinent Asian American Males	33	0.03%	\$30,931	0.01%
Hispanic American Females	983	1.02%	\$2,673,700	0.63%
Hispanic American Males	2,682	2.79%	\$35,732,672	8.36%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	122	0.13%	\$718,515	0.17%
Caucasian Females	3,792	3.95%	\$13,708,626	3.21%
Non-minority Males	87,143	90.76%	\$369,814,117	86.48%
TOTAL	96,014	100.00%	\$427,611,285	100.00%
Minority and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority Females	1,992	2.07%	\$6,139,941	1.44%
Minority Males	3,087	3.22%	\$37,948,600	8.87%
Caucasian Females	3,792	3.95%	\$13,708,626	3.21%
Non-minority Males	87,143	90.76%	\$369,814,117	86.48%
TOTAL	96,014	100.00%	\$427,611,285	100.00%
Minority and Women	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority-owned Businesses	5,079	5.29%	\$44,088,542	10.31%
Caucasian Female-owned Businesses	3,792	3.95%	\$13,708,626	3.21%
Minority and Caucasian Female-owned Businesses	8,871	9.24%	\$57,797,168	13.52%
Non-minority Male-owned Businesses	87,143	90.76%	\$369,814,117	86.48%
TOTAL	96,014	100.00%	\$427,611,285	100.00%



H. Formal Purchase Orders by Industry

1. Construction Prime Contractor Utilization: Formal Purchase Orders Valued \$50,000 and Over

Table 3.23 summarizes all expenditures by SBBC on formal construction prime purchase orders valued \$50,000 and over. Minority-owned Businesses received 24.89% of the formal construction prime purchase order dollars; Caucasian Female-owned Businesses received 10.49%; and Non-minority Male-owned Businesses received 64.62%.

African Americans received 9 or 1.79% of the formal construction prime purchase orders valued \$50,000 and over during the study period, representing \$6,460,999 or 2.71% of the formal construction expenditures.

Asian-Pacific Americans received 2 or 0.40% of the formal construction prime purchase orders valued \$50,000 and over during the study period, representing \$2,056,259 or 0.86% of the formal construction expenditures.

Subcontinent Asian Americans received 0 or 0.00% of the formal construction purchase orders contracts valued \$50,000 and over during the study period, representing \$0 or 0.00% of the formal construction expenditures.

Hispanic Americans received 99 or 19.72% of the formal construction prime purchase orders valued \$50,000 and over during the study period, representing \$50,772,801 or 21.31% of the formal construction expenditures.

Native Americans received 0 or 0.00% of the formal construction prime purchase orders valued \$50,000 and over during the study period, representing \$0 or 0.00% of the formal construction expenditures.

Minority-owned Businesses received 110 or 21.91% of the formal construction prime purchase orders valued \$50,000 and over during the study period, representing \$59,290,059 or 24.89% of the formal construction expenditures.

Caucasian Female-owned Businesses received 53 or 10.56% of the formal construction prime purchase orders valued \$50,000 and over during the study period, representing \$25,002,947 or 10.49% of the formal construction expenditures.

Minority and Caucasian Female-owned Businesses received 163 or 32.47% of the formal construction prime purchase orders valued \$50,000 and over during the study period, representing \$84,293,006 or 35.38% of the formal construction expenditures.

Non-minority Male-owned Businesses received 339 or 67.53% of the formal construction prime purchase orders valued \$50,000 and over during the study period, representing \$153,960,657 or 64.62% of the formal construction expenditures.



**Table 3.23: Construction Prime Contractor Utilization:
Formal Purchase Orders Valued \$50,000 and Over,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African Americans	9	1.79%	\$6,460,999	2.71%
Asian-Pacific Americans	2	0.40%	\$2,056,259	0.86%
Subcontinent Asian Americans	0	0.00%	\$0	0.00%
Hispanic Americans	99	19.72%	\$50,772,801	21.31%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	53	10.56%	\$25,002,947	10.49%
Non-minority Males	339	67.53%	\$153,960,657	64.62%
TOTAL	502	100.00%	\$238,253,663	100.00%
Ethnicity and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African American Females	0	0.00%	\$0	0.00%
African American Males	9	1.79%	\$6,460,999	2.71%
Asian-Pacific American Females	0	0.00%	\$0	0.00%
Asian-Pacific American Males	2	0.40%	\$2,056,259	0.86%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	0	0.00%	\$0	0.00%
Hispanic American Females	55	10.96%	\$19,417,329	8.15%
Hispanic American Males	44	8.76%	\$31,355,472	13.16%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	53	10.56%	\$25,002,947	10.49%
Non-minority Males	339	67.53%	\$153,960,657	64.62%
TOTAL	502	100.00%	\$238,253,663	100.00%
Minority and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority Females	55	10.96%	\$19,417,329	8.15%
Minority Males	55	10.96%	\$39,872,730	16.74%
Caucasian Females	53	10.56%	\$25,002,947	10.49%
Non-minority Males	339	67.53%	\$153,960,657	64.62%
TOTAL	502	100.00%	\$238,253,663	100.00%
Minority and Women	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority-owned Businesses	110	21.91%	\$59,290,059	24.89%
Caucasian Female-owned Businesses	53	10.56%	\$25,002,947	10.49%
Minority and Caucasian Female-owned Businesses	163	32.47%	\$84,293,006	35.38%
Non-minority Male-owned Businesses	339	67.53%	\$153,960,657	64.62%
TOTAL	502	100.00%	\$238,253,663	100.00%



2. Professional Services Prime Contractor Utilization: Formal Purchase Orders Valued \$325,000 and Over

Table 3.24 summarizes all expenditures by SBBC on formal professional services prime purchase orders valued \$325,000 and over. Minority-owned Businesses received 51.92% of the formal professional services prime purchase order dollars; Caucasian Female-owned Businesses received 0.00%; and Non-minority Male-owned Businesses received 48.08%.

African Americans received 1 or 10.00% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$500,659 or 6.48% of the formal professional services expenditures.

Asian-Pacific Americans received 1 or 10.00% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$1,285,000 or 16.62% of the formal professional services expenditures.

Subcontinent Asian Americans received 0 or 0.00% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$0 or 0.00% of the formal professional services expenditures.

Hispanic Americans received 3 or 30.00% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$2,227,206 or 28.81% of the formal professional services expenditures.

Native Americans received 0 or 0.00% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$0 or 0.00% of the formal professional services expenditures.

Minority-owned Businesses received 5 or 50.00% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$4,012,865 or 51.92% of the formal professional services prime contract dollars.

Caucasian Female-owned Businesses received 0 or 0.00% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$0 or 0.00% of the formal professional services expenditures.

Minority and Caucasian Female-owned Businesses received 5 or 50.00% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$4,012,865 or 51.92% of the formal professional services expenditures.

Non-minority Male-owned Businesses received 5 or 50.00% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$3,716,727 or 48.08% of the formal professional services expenditures.



**Table 3.24: Professional Services Prime Contractor Utilization:
Purchase Orders Valued \$325,000 and Over,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African Americans	1	10.00%	\$500,659	6.48%
Asian-Pacific Americans	1	10.00%	\$1,285,000	16.62%
Subcontinent Asian Americans	0	0.00%	\$0	0.00%
Hispanic Americans	3	30.00%	\$2,227,206	28.81%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	5	50.00%	\$3,716,727	48.08%
TOTAL	10	100.00%	\$7,729,592	100.00%
Ethnicity and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African American Females	0	0.00%	\$0	0.00%
African American Males	1	10.00%	\$500,659	6.48%
Asian-Pacific American Females	1	10.00%	\$1,285,000	16.62%
Asian-Pacific American Males	0	0.00%	\$0	0.00%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	0	0.00%	\$0	0.00%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	3	30.00%	\$2,227,206	28.81%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	5	50.00%	\$3,716,727	48.08%
TOTAL	10	100.00%	\$7,729,592	100.00%
Minority and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority Females	1	10.00%	\$1,285,000	16.62%
Minority Males	4	40.00%	\$2,727,865	35.29%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	5	50.00%	\$3,716,727	48.08%
TOTAL	10	100.00%	\$7,729,592	100.00%
Minority and Women	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority-owned Businesses	5	50.00%	\$4,012,865	51.92%
Caucasian Female-owned Businesses	0	0.00%	\$0	0.00%
Minority and Caucasian Female-owned Businesses	5	50.00%	\$4,012,865	51.92%
Non-minority Male-owned Businesses	5	50.00%	\$3,716,727	48.08%
TOTAL	10	100.00%	\$7,729,592	100.00%



3. Professional Services Prime Contractor Utilization: Formal Purchase Orders Valued \$195,000 and Over

Table 3.25 summarizes all expenditures by SBBC on formal professional services prime purchase orders valued \$195,000 and over. Minority-owned Businesses received 44.65% of the formal professional services prime purchase order dollars; Caucasian Female-owned Businesses received 0.00%; and Non-minority Male-owned Businesses received 55.35%.

African Americans received 1 or 6.67% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$500,659 or 5.57% of the formal professional services expenditures.

Asian-Pacific Americans received 1 or 6.67% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$1,285,000 or 14.30% of the formal professional services expenditures.

Subcontinent Asian Americans received 0 or 0.00% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$0 or 0.00% of the formal professional services expenditures.

Hispanic Americans received 3 or 20.00% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$2,227,206 or 24.78% of the formal professional services expenditures.

Native Americans received 0 or 0.00% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$0 or 0.00% of the formal professional services expenditures.

Minority-owned Businesses received 5 or 33.33% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$0 or 44.65% of the formal professional services prime contract dollars.

Caucasian Female-owned Businesses received 0 or 0.00% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$0 or 0.00% of the formal professional services expenditures.

Minority and Caucasian Female-owned Businesses received 5 or 33.33% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$4,012,865 or 44.65% of the formal professional services expenditures.

Non-minority Male-owned Businesses received 10 or 66.67% of the formal professional services prime purchase orders valued \$325,000 and over during the study period, representing \$4,974,241 or 55.35% of the formal professional services expenditures.



**Table 3.25: Professional Services Prime Contractor Utilization:
Purchase Orders Valued \$195,000 and Over,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African Americans	1	6.67%	\$500,659	5.57%
Asian-Pacific Americans	1	6.67%	\$1,285,000	14.30%
Subcontinent Asian Americans	0	0.00%	\$0	0.00%
Hispanic Americans	3	20.00%	\$2,227,206	24.78%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	10	66.67%	\$4,974,241	55.35%
TOTAL	15	100.00%	\$8,987,106	100.00%
Ethnicity and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African American Females	0	0.00%	\$0	0.00%
African American Males	1	6.67%	\$500,659	5.57%
Asian-Pacific American Females	1	6.67%	\$1,285,000	14.30%
Asian-Pacific American Males	0	0.00%	\$0	0.00%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	0	0.00%	\$0	0.00%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	3	20.00%	\$2,227,206	24.78%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	10	66.67%	\$4,974,241	55.35%
TOTAL	15	100.00%	\$8,987,106	100.00%
Minority and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority Females	1	6.67%	\$1,285,000	14.30%
Minority Males	4	26.67%	\$2,727,865	30.35%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	10	66.67%	\$4,974,241	55.35%
TOTAL	15	100.00%	\$8,987,106	100.00%
Minority and Women	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority-owned Businesses	5	33.33%	\$4,012,865	44.65%
Caucasian Female-owned Businesses	0	0.00%	\$0	0.00%
Minority and Caucasian Female-owned Businesses	5	33.33%	\$4,012,865	44.65%
Non-minority Male-owned Businesses	10	66.67%	\$4,974,241	55.35%
TOTAL	15	100.00%	\$8,987,106	100.00%



4. Contractual Services Prime Contractor Utilization: Formal Purchase Orders Valued \$500,000 and Over

Table 3.26 summarizes all expenditures by SBBC on formal contractual services purchase orders valued \$500,000 and over. Minority-owned Businesses received 0.00% of the formal contractual services prime purchase order dollars; Caucasian Female-owned Businesses received 12.76%; and Non-minority Male-owned Businesses received 87.24%.

African Americans received 0 or 0.00% of the formal contractual services prime purchase orders valued \$500,000 and over during the study period, representing \$0 or 0.00% of the formal contractual services expenditures.

Asian-Pacific Americans received 0 or 0.00% of the formal contractual services prime purchase orders valued \$500,000 and over during the study period, representing \$0 or 0.00% of the formal contractual services expenditures.

Subcontinent Asian Americans received 0 or 0.00% of the formal contractual services prime purchase orders valued \$500,000 and over during the study period, representing \$0 or 0.00% of the formal contractual services expenditures.

Hispanic Americans received 0 or 0.00% of the formal contractual services prime purchase orders valued \$500,000 and over during the study period, representing \$0 or 0.00% of the formal contractual services expenditures.

Native Americans received 0 or 0.00% of the formal contractual services prime purchase orders valued \$500,000 and over during the study period, representing \$0 or 0.00% of the formal contractual services expenditures.

Minority-owned Businesses received 0 or 0.00% of the formal contractual services prime purchase orders valued \$500,000 and over during the study period, representing \$0 or 0.00% of the formal contractual services expenditures.

Caucasian Female-owned Businesses received 7 or 13.73% of the formal contractual services prime purchase orders valued \$500,000 and over during the study period, representing \$5,420,205 or 12.76% of the formal contractual services expenditures.

Minority and Caucasian Female-owned Businesses received 7 or 13.73% of the formal contractual services prime purchase orders valued \$500,000 and over during the study period, representing \$5,420,205 or 12.76% of the formal contractual services expenditures.

Non-minority Male-owned Businesses received 44 or 86.27% of the formal contractual services purchase orders contracts valued \$500,000 and over during the study period, representing \$37,063,225 or 87.24% of the formal contractual services expenditures.



**Table 3.26: Contractual Services Prime Contractor Utilization:
Formal Purchase Orders Valued \$500,000 and Over,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African Americans	0	0.00%	\$0	0.00%
Asian-Pacific Americans	0	0.00%	\$0	0.00%
Subcontinent Asian Americans	0	0.00%	\$0	0.00%
Hispanic Americans	0	0.00%	\$0	0.00%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	7	13.73%	\$5,420,205	12.76%
Non-minority Males	44	86.27%	\$37,063,225	87.24%
TOTAL	51	100.00%	\$42,483,430	100.00%
Ethnicity and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African American Females	0	0.00%	\$0	0.00%
African American Males	0	0.00%	\$0	0.00%
Asian-Pacific American Females	0	0.00%	\$0	0.00%
Asian-Pacific American Males	0	0.00%	\$0	0.00%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	0	0.00%	\$0	0.00%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	0	0.00%	\$0	0.00%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	7	13.73%	\$5,420,205	12.76%
Non-minority Males	44	86.27%	\$37,063,225	87.24%
TOTAL	51	100.00%	\$42,483,430	100.00%
Minority and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority Females	0	0.00%	\$0	0.00%
Minority Males	0	0.00%	\$0	0.00%
Caucasian Females	7	13.73%	\$5,420,205	12.76%
Non-minority Males	44	86.27%	\$37,063,225	87.24%
TOTAL	51	100.00%	\$42,483,430	100.00%
Minority and Women	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority-owned Businesses	0	0.00%	\$0	0.00%
Caucasian Female-owned Businesses	7	13.73%	\$5,420,205	12.76%
Minority and Caucasian Female-owned Businesses	7	13.73%	\$5,420,205	12.76%
Non-minority Male-owned Businesses	44	86.27%	\$37,063,225	87.24%
TOTAL	51	100.00%	\$42,483,430	100.00%



5. Contractual Services Prime Contractor Utilization: Formal Purchase Orders Valued \$50,000 to \$499,999

Table 3.27 summarizes all expenditures by SBBC on formal contractual services prime purchase orders valued \$50,000 to \$499,999. Minority-owned Businesses received 14.55% of the formal contractual services prime purchase order dollars; Caucasian Female-owned Businesses received 10.16%; and Non-minority Male-owned Businesses received 75.28%.

African Americans received 30 or 5.92% of the formal contractual services prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$3,893,914 or 6.06% of the formal contractual services expenditures.

Asian-Pacific Americans received 0 or 0.00% of the formal contractual services prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$0 or 0.00% of the formal contractual services expenditures.

Subcontinent Asian Americans received 0 or 0.00% of the formal contractual services prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$0 or 0.00% of the formal contractual services expenditures.

Hispanic Americans received 62 or 12.23% of the formal contractual services prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$5,458,405 or 8.49% of the formal contractual services expenditures.

Native Americans received 0 or 0.00% of the formal contractual services prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$0 or 0.00% of the formal contractual services expenditures.

Minority-owned Businesses received 92 or 18.15% of the formal contractual services prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$9,352,319 or 14.55% of the formal contractual services expenditures.

Caucasian Female-owned Businesses received 42 or 8.28% of the formal contractual services prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$6,531,562 or 10.16% of the formal contractual services expenditures.

Minority and Caucasian Female-owned Businesses received 134 or 26.43% of the formal contractual services prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$15,883,881 or 24.72% of the formal contractual services expenditures.

Non-minority Male-owned Businesses received 373 or 73.57% of the formal contractual services prime contracts valued \$50,000 to \$499,999 during the study period, representing \$48,384,239 or 75.28% of the formal contractual services expenditures.



**Table 3.27: Contractual Services Prime Contractor Utilization:
Formal Purchase Orders Valued \$50,000 to \$499,999,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African Americans	30	5.92%	\$3,893,914	6.06%
Asian-Pacific Americans	0	0.00%	\$0	0.00%
Subcontinent Asian Americans	0	0.00%	\$0	0.00%
Hispanic Americans	62	12.23%	\$5,458,405	8.49%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	42	8.28%	\$6,531,562	10.16%
Non-minority Males	373	73.57%	\$48,384,239	75.28%
TOTAL	507	100.00%	\$64,268,120	100.00%
Ethnicity and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African American Females	8	1.58%	\$787,778	1.23%
African American Males	22	4.34%	\$3,106,136	4.83%
Asian-Pacific American Females	0	0.00%	\$0	0.00%
Asian-Pacific American Males	0	0.00%	\$0	0.00%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	0	0.00%	\$0	0.00%
Hispanic American Females	5	0.99%	\$600,303	0.93%
Hispanic American Males	57	11.24%	\$4,858,102	7.56%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	42	8.28%	\$6,531,562	10.16%
Non-minority Males	373	73.57%	\$48,384,239	75.28%
TOTAL	507	100.00%	\$64,268,120	100.00%
Minority and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority Females	13	2.56%	\$1,388,081	2.16%
Minority Males	79	15.58%	\$7,964,238	12.39%
Caucasian Females	42	8.28%	\$6,531,562	10.16%
Non-minority Males	373	73.57%	\$48,384,239	75.28%
TOTAL	507	100.00%	\$64,268,120	100.00%
Minority and Women	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority-owned Businesses	92	18.15%	\$9,352,319	14.55%
Caucasian Female-owned Businesses	42	8.28%	\$6,531,562	10.16%
Minority and Caucasian Female-owned Businesses	134	26.43%	\$15,883,881	24.72%
Non-minority Male-owned Businesses	373	73.57%	\$48,384,239	75.28%
TOTAL	507	100.00%	\$64,268,120	100.00%



6. Commodities Prime Contractor Utilization: Formal Purchase Orders Valued \$500,000 and Over

Table 3.28 summarizes all expenditures by SBBC on formal commodities prime purchase orders valued \$500,000 and over. Minority-owned Businesses received 18.46% of the formal commodities prime purchase orders dollars; Caucasian Female-owned Businesses received 3.00%; and Non-minority Male-owned Businesses received 78.54%.

African Americans received 0 or 0.00% of the formal commodities prime purchase orders valued \$500,000 and over during the study period, representing \$0 or 0.00% of the formal commodities expenditures.

Asian-Pacific Americans received 0 or 0.00% of the formal commodities prime purchase orders valued \$500,000 and over during the study period, representing \$0 or 0.00% of the formal commodities expenditures.

Subcontinent Asian Americans received 0 or 0.00% of the formal commodities prime purchase orders valued \$500,000 and over during the study period, representing \$0 or 0.00% of the formal commodities expenditures.

Hispanic Americans received 8 or 16.33% of the formal commodities prime purchase orders valued \$500,000 and over during the study period, representing \$8,214,786 or 18.46% of the formal commodities expenditures.

Native Americans received 0 or 0.00% of the formal commodities prime purchase orders valued \$500,000 and over during the study period, representing \$0 or 0.00% of the formal commodities expenditures.

Minority-owned Businesses received 8 or 16.33% of the formal commodities prime purchase orders valued \$500,000 and over during the study period, representing \$8,214,786 or 18.46% of the formal commodities expenditures.

Caucasian Female-owned Businesses received 2 or 4.08% of the formal commodities prime purchase orders valued \$500,000 and over during the study period, representing \$1,336,101 or 3.00% of the formal commodities expenditures.

Minority and Caucasian Female-owned Businesses received 10 or 20.41% of the formal commodities prime purchase orders valued \$500,000 and over during the study period, representing \$9,550,887 or 21.46% of the formal commodities expenditures.

Non-minority Male-owned Businesses received 39 or 79.59% of the formal commodities prime purchase orders valued \$500,000 and over during the study period, representing \$34,947,793 or 78.54% of the formal commodities expenditures.



**Table 3.28: Commodities Prime Contractor Utilization:
Formal Purchase Orders Valued \$500,000 and Over,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African Americans	0	0.00%	\$0	0.00%
Asian-Pacific Americans	0	0.00%	\$0	0.00%
Subcontinent Asian Americans	0	0.00%	\$0	0.00%
Hispanic Americans	8	16.33%	\$8,214,786	18.46%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	2	4.08%	\$1,336,101	3.00%
Non-minority Males	39	79.59%	\$34,947,793	78.54%
TOTAL	49	100.00%	\$44,498,680	100.00%
Ethnicity and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African American Females	0	0.00%	\$0	0.00%
African American Males	0	0.00%	\$0	0.00%
Asian-Pacific American Females	0	0.00%	\$0	0.00%
Asian-Pacific American Males	0	0.00%	\$0	0.00%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	0	0.00%	\$0	0.00%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	8	16.33%	\$8,214,786	18.46%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	2	4.08%	\$1,336,101	3.00%
Non-minority Males	39	79.59%	\$34,947,793	78.54%
TOTAL	49	100.00%	\$44,498,680	100.00%
Minority and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority Females	0	0.00%	\$0	0.00%
Minority Males	8	16.33%	\$8,214,786	18.46%
Caucasian Females	2	4.08%	\$1,336,101	3.00%
Non-minority Males	39	79.59%	\$34,947,793	78.54%
TOTAL	49	100.00%	\$44,498,680	100.00%
Minority and Women	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority-owned Businesses	8	16.33%	\$8,214,786	18.46%
Caucasian Female-owned Businesses	2	4.08%	\$1,336,101	3.00%
Minority and Caucasian Female-owned Businesses	10	20.41%	\$9,550,887	21.46%
Non-minority Male-owned Businesses	39	79.59%	\$34,947,793	78.54%
TOTAL	49	100.00%	\$44,498,680	100.00%



7. Commodities Prime Contractor Utilization: Formal Purchase Orders Valued \$50,000 to \$499,999

Table 3.29 summarizes all expenditures by SBBC on formal commodities prime purchase orders valued \$50,000 to \$499,999. Minority-owned Businesses received 15.83% of the formal commodities prime purchase order dollars; Caucasian Female-owned Businesses received 3.70%; and Non-minority Male-owned Businesses received 80.46%.

African Americans received 19 or 2.02% of the formal commodities prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$1,676,339 or 1.44% of the formal commodities expenditures.

Asian-Pacific Americans received 0 or 0.00% of the formal commodities prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$0 or 0.00% of the formal commodities expenditures.

Subcontinent Asian Americans received 0 or 0.00% of the formal commodities prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$0 or 0.00% of the formal commodities expenditures.

Hispanic Americans received 94 or 9.98% of the formal commodities prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$16,451,828 or 14.16% of the formal commodities expenditures.

Native Americans received 3 or 0.32% of the formal commodities prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$261,458 or 0.23% of the formal commodities expenditures.

Minority-owned Businesses received 116 or 12.31% of the formal commodities prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$18,389,625 or 15.83% of the formal commodities expenditures.

Caucasian Female-owned Businesses received 38 or 4.03% of the formal commodities prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$4,303,294 or 3.70% of the formal commodities expenditures.

Minority and Caucasian Female-owned Businesses received 154 or 16.35% of the formal commodities prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$22,692,919 or 19.54% of the formal commodities expenditures.

Non-minority Male-owned Businesses received 788 or 83.65% of the formal commodities prime purchase orders valued \$50,000 to \$499,999 during the study period, representing \$93,472,430 or 80.46% of the formal commodities expenditures.



**Table 3.29: Commodities Prime Contractor Utilization:
Formal Purchase Orders Valued \$50,000 to \$499,999,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African Americans	19	2.02%	\$1,676,339	1.44%
Asian-Pacific Americans	0	0.00%	\$0	0.00%
Subcontinent Asian Americans	0	0.00%	\$0	0.00%
Hispanic Americans	94	9.98%	\$16,451,828	14.16%
Native Americans	3	0.32%	\$261,458	0.23%
Caucasian Females	38	4.03%	\$4,303,294	3.70%
Non-minority Males	788	83.65%	\$93,472,430	80.46%
TOTAL	942	100.00%	\$116,165,349	100.00%
Ethnicity and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African American Females	13	1.38%	\$1,172,576	1.01%
African American Males	6	0.64%	\$503,763	0.43%
Asian-Pacific American Females	0	0.00%	\$0	0.00%
Asian-Pacific American Males	0	0.00%	\$0	0.00%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	0	0.00%	\$0	0.00%
Hispanic American Females	4	0.42%	\$329,468	0.28%
Hispanic American Males	90	9.55%	\$16,122,361	13.88%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	3	0.32%	\$261,458	0.23%
Caucasian Females	38	4.03%	\$4,303,294	3.70%
Non-minority Males	788	83.65%	\$93,472,430	80.46%
TOTAL	942	100.00%	\$116,165,349	100.00%
Minority and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority Females	17	1.80%	\$1,502,043	1.29%
Minority Males	99	10.51%	\$16,887,581	14.54%
Caucasian Females	38	4.03%	\$4,303,294	3.70%
Non-minority Males	788	83.65%	\$93,472,430	80.46%
TOTAL	942	100.00%	\$116,165,349	100.00%
Minority and Women	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority-owned Businesses	116	12.31%	\$18,389,625	15.83%
Caucasian Female-owned Businesses	38	4.03%	\$4,303,294	3.70%
Minority and Caucasian Female-owned Businesses	154	16.35%	\$22,692,919	19.54%
Non-minority Male-owned Businesses	788	83.65%	\$93,472,430	80.46%
TOTAL	942	100.00%	\$116,165,349	100.00%



I. Informal Prime Contracts, by Industry

1. Construction Prime Contractor Utilization: Informal Purchase Orders Valued Less Than \$50,000

Table 3.30 summarizes all expenditures by SBBC on informal construction prime purchase orders valued less than \$50,000. Minority-owned Businesses received 5.49% of the informal construction prime purchase order dollars; Caucasian Female-owned Businesses received 8.56%; and Non-minority Male-owned Businesses received 85.95%.

African Americans received 1 or 0.08% of the informal construction prime purchase orders valued less than \$50,000 awarded during the study period, representing \$1,649 or 0.02% of the informal construction expenditures.

Asian-Pacific Americans received 0 or 0.00% of the informal construction prime purchase orders valued less than \$50,000 awarded during the study period, representing \$0 or 0.00% of the informal construction expenditures.

Subcontinent Asian Americans received 0 or 0.00% of the informal construction prime purchase orders valued less than \$50,000 awarded during the study period, representing \$0 or 0.00% of the informal construction expenditures.

Hispanic Americans received 44 or 3.32% of the informal construction prime purchase orders valued less than \$50,000 awarded during the study period, representing \$543,364 or 5.48% of the informal construction expenditures.

Native Americans received 0 or 0.00% of the informal construction prime purchase orders valued less than \$50,000 awarded during the study period, representing \$0 or 0.00% of the informal construction expenditures.

Minority-owned Businesses received 45 or 3.39% of the informal construction prime purchase orders valued less than \$50,000 awarded during the study period, representing \$545,013 or 5.49% of the informal construction expenditures.

Caucasian Female-owned Businesses received 74 or 5.58% of the informal construction prime purchase orders valued less than \$50,000 awarded during the study period, representing \$849,191 or 8.56% of the informal construction expenditures.

Minority and Caucasian Female-owned Businesses received 119 or 8.97% of the informal construction prime purchase orders valued less than \$50,000 awarded during the study period, representing \$1,394,204 or 14.05% of the informal construction expenditures.

Non-minority Male-owned Businesses received 1,207 or 91.03% of the informal construction prime purchase orders valued less than \$50,000 awarded during the study period, representing \$8,528,837 or 85.95% of the informal construction expenditures.



**Table 3.30: Construction Prime Contractor Utilization:
Informal Purchase Orders Valued Less Than \$50,000,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African Americans	1	0.08%	\$1,649	0.02%
Asian-Pacific Americans	0	0.00%	\$0	0.00%
Subcontinent Asian Americans	0	0.00%	\$0	0.00%
Hispanic Americans	44	3.32%	\$543,364	5.48%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	74	5.58%	\$849,191	8.56%
Non-minority Males	1,207	91.03%	\$8,528,837	85.95%
TOTAL	1,326	100.00%	\$9,923,040	100.00%
Ethnicity and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African American Females	0	0.00%	\$0	0.00%
African American Males	1	0.08%	\$1,649	0.02%
Asian-Pacific American Females	0	0.00%	\$0	0.00%
Asian-Pacific American Males	0	0.00%	\$0	0.00%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	0	0.00%	\$0	0.00%
Hispanic American Females	11	0.83%	\$123,590	1.25%
Hispanic American Males	33	2.49%	\$419,774	4.23%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	74	5.58%	\$849,191	8.56%
Non-minority Males	1,207	91.03%	\$8,528,837	85.95%
TOTAL	1,326	100.00%	\$9,923,040	100.00%
Minority and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority Females	11	0.83%	\$123,590	1.25%
Minority Males	34	2.56%	\$421,423	4.25%
Caucasian Females	74	5.58%	\$849,191	8.56%
Non-minority Males	1,207	91.03%	\$8,528,837	85.95%
TOTAL	1,326	100.00%	\$9,923,040	100.00%
Minority and Women	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority-owned Businesses	45	3.39%	\$545,013	5.49%
Caucasian Female-owned Businesses	74	5.58%	\$849,191	8.56%
Minority and Caucasian Female-owned Businesses	119	8.97%	\$1,394,204	14.05%
Non-minority Male-owned Businesses	1,207	91.03%	\$8,528,837	85.95%
TOTAL	1,326	100.00%	\$9,923,040	100.00%



2. Professional Services Prime Contractor Utilization: Informal Contracts Valued \$50,001 to \$194,999

Table 3.31 summarizes all expenditures by SBBC on informal professional services prime purchase orders valued \$50,001 to \$194,999. Minority-owned Businesses received 33.56% of the informal professional services prime purchase order dollars; Caucasian Female-owned Businesses received 0.00%; and Non-minority owned Businesses received 66.44%.

African Americans received 0 or 0.00% of the informal professional services prime purchase orders valued \$50,001 to \$194,999 during the study period, representing \$0 or 0.00% of the informal professional services expenditures.

Asian-Pacific Americans received 0 or 0.00% of the informal professional services prime purchase orders valued \$50,001 to \$194,999 during the study period, representing \$0 or 0.00% of the informal professional services expenditures.

Subcontinent Asian Americans received 3 or 10.34% of the informal professional services prime purchase orders valued \$50,001 to \$194,999 during the study period, representing \$383,391 or 12.96% of the informal professional services expenditures.

Hispanic Americans received 5 or 17.24% of the informal professional services prime purchase orders valued \$50,001 to \$194,999 during the study period, representing \$609,573 or 20.60% of the informal professional services expenditures.

Native Americans received 0 or 0.00% of the informal professional services prime purchase orders valued \$50,001 to \$194,999 during the study period, representing \$0 or 0.00% of the informal professional services expenditures.

Minority-owned Businesses received 8 or 27.59% of the informal professional services prime purchase orders valued \$50,001 to \$194,999 during the study period, representing \$992,965 or 33.56% of the informal professional services expenditures.

Caucasian Female-owned Businesses received 0 or 0.00% of the informal professional services prime purchase orders valued \$50,001 to \$194,999 during the study period, representing \$0 or 0.00% of the informal professional services expenditures.

Minority and Caucasian Female-owned Businesses received 8 or 27.59% of the informal professional services prime purchase orders valued \$50,001 to \$194,999 during the study period, representing \$992,965 or 33.56% of the informal professional services expenditures.

Non-minority Male-owned Businesses received 21 or 72.41% of the informal professional services prime purchase orders valued \$50,001 to \$194,999 during the study period, representing \$1,965,579 or 66.44% of the informal professional services expenditures.



**Table 3.31: Professional Services Prime Contractor Utilization:
Informal Purchase Orders Valued \$50,001 to \$194,999,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African Americans	0	0.00%	\$0	0.00%
Asian-Pacific Americans	0	0.00%	\$0	0.00%
Subcontinent Asian Americans	3	10.34%	\$383,391	12.96%
Hispanic Americans	5	17.24%	\$609,573	20.60%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	21	72.41%	\$1,965,579	66.44%
TOTAL	29	100.00%	\$2,958,544	100.00%
Ethnicity and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African American Females	0	0.00%	\$0	0.00%
African American Males	0	0.00%	\$0	0.00%
Asian-Pacific American Females	0	0.00%	\$0	0.00%
Asian-Pacific American Males	0	0.00%	\$0	0.00%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	3	10.34%	\$383,391	12.96%
Hispanic American Females	3	10.34%	\$465,108	15.72%
Hispanic American Males	2	6.90%	\$144,466	4.88%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	21	72.41%	\$1,965,579	66.44%
TOTAL	29	100.00%	\$2,958,544	100.00%
Minority and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority Females	3	10.34%	\$465,108	15.72%
Minority Males	5	17.24%	\$527,857	17.84%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	21	72.41%	\$1,965,579	66.44%
TOTAL	29	100.00%	\$2,958,544	100.00%
Minority and Women	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority-owned Businesses	8	27.59%	\$992,965	33.56%
Caucasian Female-owned Businesses	0	0.00%	\$0	0.00%
Minority and Caucasian Female-owned Businesses	8	27.59%	\$992,965	33.56%
Non-minority Male-owned Businesses	21	72.41%	\$1,965,579	66.44%
TOTAL	29	100.00%	\$2,958,544	100.00%



3. Professional Services Prime Contractor Utilization: Informal Purchase Orders Valued Less Than \$50,000

Table 3.32 summarizes all expenditures by SBBC on informal professional services prime purchase orders valued \$50,000 and less. Minority-owned Businesses received 4.49% of the informal professional services prime purchase order dollars.

African Americans received 2 or 2.25% of the informal professional services prime purchase orders valued less than \$50,000 during the study period, representing \$15,050 or 1.95% of the informal professional services expenditures.

Asian-Pacific Americans received 0 or 0.00% of the informal professional services prime purchase orders valued less than \$50,000 during the study period, representing \$0 or 0.00% of the informal professional services expenditures.

Subcontinent Asian Americans received 0 or 0.00% of the informal professional services prime purchase orders valued less than \$50,000 during the study period, representing \$0 or 0.00% of the informal professional services expenditures.

Hispanic Americans received 2 or 2.25% of the informal professional services prime purchase orders valued less than \$50,000 during the study period, representing \$19,600 or 2.54% of the informal professional services expenditures.

Native Americans received 0 or 0.00% of the informal professional services prime purchase orders valued less than \$50,000 during the study period, representing \$0 or 0.00% of the informal professional services expenditures.

Minority-owned Businesses received 4 or 4.49% of the informal professional services prime purchase orders valued less than \$50,000 during the study period, representing \$34,650 or 4.49% of the informal professional services expenditures.

Caucasian Female-owned Businesses received 14 or 15.73% of the informal professional services prime purchase orders valued less than \$50,000 during the study period, representing \$113,645 or 14.73% of the informal professional services expenditures.

Minority and Caucasian Female-owned Businesses received 18 or 20.22% of the informal professional services prime purchase orders valued less than \$50,000 during the study period, representing \$148,295 or 19.22% of the informal professional services expenditures.

Non-minority Male-owned Businesses received 71 or 79.78% of the informal professional services prime purchase orders valued less than \$50,000 during the study period, representing \$623,265 or 80.78% of the informal professional services expenditures.



**Table 3.32: Professional Services Prime Contractor Utilization:
Informal Purchase Orders Valued Less Than \$50,000,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African Americans	2	2.25%	\$15,050	1.95%
Asian-Pacific Americans	0	0.00%	\$0	0.00%
Subcontinent Asian Americans	0	0.00%	\$0	0.00%
Hispanic Americans	2	2.25%	\$19,600	2.54%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	14	15.73%	\$113,645	14.73%
Non-minority Males	71	79.78%	\$623,265	80.78%
TOTAL	89	100.00%	\$771,560	100.00%
Ethnicity and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African American Females	0	0.00%	\$0	0.00%
African American Males	2	2.25%	\$15,050	1.95%
Asian-Pacific American Females	0	0.00%	\$0	0.00%
Asian-Pacific American Males	0	0.00%	\$0	0.00%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	0	0.00%	\$0	0.00%
Hispanic American Females	1	1.12%	\$10,000	1.30%
Hispanic American Males	1	1.12%	\$9,600	1.24%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	14	15.73%	\$113,645	14.73%
Non-minority Males	71	79.78%	\$623,265	80.78%
TOTAL	89	100.00%	\$771,560	100.00%
Minority and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority Females	1	1.12%	\$10,000	1.30%
Minority Males	3	3.37%	\$24,650	3.19%
Caucasian Females	14	15.73%	\$113,645	14.73%
Non-minority Males	71	79.78%	\$623,265	80.78%
TOTAL	89	100.00%	\$771,560	100.00%
Minority and Women	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority-owned Businesses	4	4.49%	\$34,650	4.49%
Caucasian Female-owned Businesses	14	15.73%	\$113,645	14.73%
Minority and Caucasian Female-owned Businesses	18	20.22%	\$148,295	19.22%
Non-minority Male-owned Businesses	71	79.78%	\$623,265	80.78%
TOTAL	89	100.00%	\$771,560	100.00%



4. Contractual Services Prime Contractor Utilization: Informal Purchase Orders Valued Less Than \$5,000

Table 3.33 summarizes all expenditures by SBBC on informal contractual services prime purchase orders valued less than \$5,000. Minority-owned Businesses received 11.70% of the informal contractual services prime purchase order dollars.

African Americans received 103 or 0.96% of the informal contractual services prime purchase orders valued less than \$5,000 during the study period, representing \$222,922 or 1.54% of the informal contractual services expenditures.

Asian-Pacific Americans received 2 or 0.02% of the informal contractual services prime purchase orders valued less than \$5,000 during the study period, representing \$2,159 or 0.01% of the informal contractual services expenditures.

Subcontinent Asian Americans received 21 or 0.20% of the informal contractual services prime purchase orders valued less than \$5,000 during the study period, representing \$29,831 or 0.21% of the informal contractual services expenditures.

Hispanic Americans received 818 or 7.61% of the informal contractual services prime purchase orders valued less than \$5,000 during the study period, representing \$1,443,335 or 9.94% of the informal contractual services expenditures.

Native Americans received 0 or 0.00% of the informal contractual services prime purchase orders valued less than \$5,000 during the study period, representing \$0 or 0.00% of the informal contractual services expenditures.

Minority-owned Businesses received 944 or 8.78% of the informal contractual services prime purchase orders valued less than \$5,000 during the study period, representing \$1,698,246 or 11.70% of the informal contractual services expenditures.

Caucasian Female-owned Businesses received 1,448 or 13.47% of the informal contractual services prime purchase orders valued less than \$5,000 during the study period, representing \$1,827,146 or 12.59% of the informal contractual services expenditures.

Minority and Caucasian Female-owned Businesses received 2,392 or 22.25% of the informal contractual services prime purchase orders valued less than \$5,000 during the study period, representing \$3,525,392 or 24.29% of the informal contractual services expenditures.

Non-minority Male-owned Businesses received 8,358 or 77.75% of the informal contractual services prime purchase orders valued less than \$5,000 during the study period, representing \$10,990,686 or 75.71% of the informal contractual services expenditures.



**Table 3.33: Contractual Services Prime Contractor Utilization:
Purchase Orders Valued Less Than \$5,000,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African Americans	103	0.96%	\$222,922	1.54%
Asian-Pacific Americans	2	0.02%	\$2,159	0.01%
Subcontinent Asian Americans	21	0.20%	\$29,831	0.21%
Hispanic Americans	818	7.61%	\$1,443,335	9.94%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	1,448	13.47%	\$1,827,146	12.59%
Non-minority Males	8,358	77.75%	\$10,990,686	75.71%
TOTAL	10,750	100.00%	\$14,516,078	100.00%
Ethnicity and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African American Females	32	0.30%	\$72,317	0.50%
African American Males	71	0.66%	\$150,605	1.04%
Asian-Pacific American Females	0	0.00%	\$0	0.00%
Asian-Pacific American Males	2	0.02%	\$2,159	0.01%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	21	0.20%	\$29,831	0.21%
Hispanic American Females	15	0.14%	\$22,862	0.16%
Hispanic American Males	803	7.47%	\$1,420,473	9.79%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	1,448	13.47%	\$1,827,146	12.59%
Non-minority Males	8,358	77.75%	\$10,990,686	75.71%
TOTAL	10,750	100.00%	\$14,516,078	100.00%
Minority and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority Females	47	0.44%	\$95,180	0.66%
Minority Males	897	8.34%	\$1,603,066	11.04%
Caucasian Females	1,448	13.47%	\$1,827,146	12.59%
Non-minority Males	8,358	77.75%	\$10,990,686	75.71%
TOTAL	10,750	100.00%	\$14,516,078	100.00%
Minority and Women	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority-owned Businesses	944	8.78%	\$1,698,246	11.70%
Caucasian Female-owned Businesses	1,448	13.47%	\$1,827,146	12.59%
Minority and Caucasian Female-owned Businesses	2,392	22.25%	\$3,525,392	24.29%
Non-minority Male-owned Businesses	8,358	77.75%	\$10,990,686	75.71%
TOTAL	10,750	100.00%	\$14,516,078	100.00%



5. Commodities Prime Contractor Utilization: Informal Purchase Orders Valued Less Than \$5,000

Table 3.34 summarizes all expenditures by SBBC on informal commodities prime purchase orders valued less than \$5,000. Minority-owned Businesses received 4.96% of the informal commodities prime purchase order dollars; Caucasian Female-owned Businesses received 3.39%; and Non-minority Male-owned Businesses received 91.64%.

African Americans received 534 or 0.65% of the informal commodities prime purchase orders valued less than \$5,000 during the study period, representing \$756,585 or 0.79% of the informal commodities expenditures.

Asian-Pacific Americans received 65 or 0.08% of the informal commodities prime purchase orders valued less than \$5,000 during the study period, representing \$69,809 or 0.07% of the informal commodities expenditures.

Subcontinent Asian Americans received 528 or 0.64% of the informal commodities prime purchase orders valued less than \$5,000 during the study period, representing \$307,627 or 0.32% of the informal commodities expenditures.

Hispanic Americans received 2,895 or 3.51% of the informal commodities prime purchase orders valued less than \$5,000 during the study period, representing \$3,461,413 or 3.63% of the informal commodities expenditures.

Native Americans received 90 or 0.11% of the informal commodities prime purchase orders valued less than \$5,000 during the study period, representing \$141,130 or 0.15% of the informal commodities expenditures.

Minority-owned Businesses received 4,112 or 4.99% of the informal commodities prime purchase orders valued less than \$5,000 during the study period, representing \$4,736,563 or 4.96% of the informal commodities expenditures.

Caucasian Female-owned Businesses received 3,363 or 4.08% of the informal commodities prime purchase orders valued less than \$5,000 during the study period, representing \$3,240,633 or 3.39% of the informal commodities expenditures.

Minority and Caucasian Female-owned Businesses received 7,475 or 9.07% of the informal commodities prime purchase orders valued less than \$5,000 during the study period, representing \$7,977,197 or 8.36% of the informal commodities expenditures.

Non-minority Male-owned Businesses received 74,909 or 90.93% of the informal commodities prime purchase orders valued less than \$5,000 during the study period, representing \$87,493,824 or 91.64% of the informal commodities expenditures.



**Table 3.34: Commodities Prime Contractor Utilization:
Purchase Orders Valued Less Than \$5,000,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African Americans	534	0.65%	\$756,585	0.79%
Asian-Pacific Americans	65	0.08%	\$69,809	0.07%
Subcontinent Asian Americans	528	0.64%	\$307,627	0.32%
Hispanic Americans	2,895	3.51%	\$3,461,413	3.63%
Native Americans	90	0.11%	\$141,130	0.15%
Caucasian Females	3,363	4.08%	\$3,240,633	3.39%
Non-minority Males	74,909	90.93%	\$87,493,824	91.64%
TOTAL	82,384	100.00%	\$95,471,021	100.00%
Ethnicity and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
African American Females	370	0.45%	\$520,890	0.55%
African American Males	164	0.20%	\$235,694	0.25%
Asian-Pacific American Females	24	0.03%	\$15,908	0.02%
Asian-Pacific American Males	41	0.05%	\$53,901	0.06%
Subcontinent Asian American Females	495	0.60%	\$276,697	0.29%
Subcontinent Asian American Males	33	0.04%	\$30,931	0.03%
Hispanic American Females	868	1.05%	\$978,667	1.03%
Hispanic American Males	2,027	2.46%	\$2,482,746	2.60%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	90	0.11%	\$141,130	0.15%
Caucasian Females	3,363	4.08%	\$3,240,633	3.39%
Non-minority Males	74,909	90.93%	\$87,493,824	91.64%
TOTAL	82,384	100.00%	\$95,471,021	100.00%
Minority and Gender	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority Females	1,757	2.13%	\$1,792,162	1.88%
Minority Males	2,355	2.86%	\$2,944,402	3.08%
Caucasian Females	3,363	4.08%	\$3,240,633	3.39%
Non-minority Males	74,909	90.93%	\$87,493,824	91.64%
TOTAL	82,384	100.00%	\$95,471,021	100.00%
Minority and Women	Number of Purchase Orders	Percent of Purchase Orders	Amount of Dollars	Percent of Dollars
Minority-owned Businesses	4,112	4.99%	\$4,736,563	4.96%
Caucasian Female-owned Businesses	3,363	4.08%	\$3,240,633	3.39%
Minority and Caucasian Female-owned Businesses	7,475	9.07%	\$7,977,197	8.36%
Non-minority Male-owned Businesses	74,909	90.93%	\$87,493,824	91.64%
TOTAL	82,384	100.00%	\$95,471,021	100.00%



V. SUMMARY

The prime contractor utilization analysis examined \$837,838,957 that SBBC expended on prime purchase orders awarded from Fiscal Years July 1, 2008, to June 30, 2013. The \$837,838,957 expended included \$248,176,703 for construction, \$12,717,210 for professional services, \$149,333,758 for contractual services, and \$427,611,285 for commodities. A total of 111,107 purchase orders were analyzed, which included 1,828 for construction, 133 for professional services 13,132 for contractual services, and 96,014 for commodities.

The utilization analysis was performed separately for formal and informal prime purchase orders. The analysis of formal prime purchase orders was done for all prime purchase orders, construction prime valued \$50,000 and over, professional services valued \$325,000 and over and \$195,000 and over, contractual services valued \$500,000 and over, \$50,000 to \$499,999, and \$5,000 to \$49,999, and commodities valued \$500,000 and over, \$50,000 to \$499,999 and \$5,000 to \$49,999.

The informal levels included construction prime purchase orders less than \$50,000, professional services valued \$50,000 to \$194,999 and less than \$50,000, contractual services valued less than \$5,000, and commodities valued less than \$5,000. *Chapter 9: Prime Contract Disparity Analysis* presents the statistical analysis of disparity in four of the industries.



CHAPTER 4: SUBCONTRACTOR UTILIZATION ANALYSIS

I. INTRODUCTION

As discussed in *Chapter 3: Prime Contractor Utilization Analysis*, a disparity study as required under *Croson*, documents Minority and Woman-owned Business Enterprises, hereinafter referred to as Minority and Caucasian Female Businesses (M/WBEs), contracting history in the agency's market area. The objective of this chapter is to determine the level of M/WBE and non-M/WBE subcontractor utilization by ethnicity and gender. In this Study, the construction and professional services subcontracts issued by the School Board of Broward County's (SBBC) prime contractors during the Fiscal Years July 1, 2008, to June 30, 2013 study period were analyzed.

II. PROFESSIONAL SERVICES AND CONSTRUCTION SUBCONTRACT DATA SOURCES

Extensive research was undertaken to reconstruct the construction and professional service subcontracts issued by SBBC's prime contractors. The subcontract data were compiled by SBBC in conjunction with Mason Tillman. Project files were examined by SBBC staff for awards, payments, and related documents to identify subcontractors, subconsultants, suppliers, and truckers. A review of the documents maintained by the Capital Budget Department revealed some subcontractor records. Subcontract records were also provided by the Facilities Design & Construction Department. In addition, the Supplier Diversity and Outreach Program (SDOP) staff contacted prime contractors to secure their professional services subcontractor names and payment amounts.

Data verifying ethnicity and gender were compiled by cross-referencing the names with certification lists, chambers of commerce directories, and trade organization membership directories, Internet research, and telephone surveys. The organization sources used to verify contractor information are defined in Table 3.01 of *Chapter 3: Prime Contractor Utilization Analysis*.



III. SUBCONTRACTOR UTILIZATION

A. All Subcontracts

As depicted in Table 4.01 below, 707 subcontracts were analyzed, which included 604 construction and 103 professional services subcontracts.

There were \$95,871,386 total subcontract dollars expended during the Fiscal Years July 1, 2008, to June 30, 2013 study period. These dollars included \$87,807,455 for construction and \$8,063,931 for professional services subcontracts.

Table 4.01: Total Subcontracts Awarded and Dollars Expended, Fiscal Years July 1, 2008, to June 30, 2013

Industry	Total Number of Subcontracts	Total Amount Expended
Construction	604	\$87,807,455
Professional Service	103	\$8,063,931
Total	707	\$95,871,386

B. All Subcontracts by Industry

1. Construction Subcontracts

Table 4.02 depicts the identified construction subcontracts awarded by SBBC’s prime contractors. Minority-owned Businesses received 18.28%; Caucasian Female-owned Businesses received 9.07%; and Non-minority Male-owned Businesses received 72.65% of the construction subcontract dollars.

African Americans received 7 or 1.16% of SBBC’s construction subcontracts during the study period, representing \$1,060,204 or 1.21% of the construction subcontract dollars.

Asian-Pacific Americans received 1 or 0.17% of SBBC’s construction subcontracts during the study period, representing \$56,900 or 0.06% of the construction subcontract dollars.

Subcontinent Asian Americans received 12 or 1.99% of SBBC’s construction subcontracts during the study period, representing \$833,339 or 0.95% of the construction subcontract dollars.



Hispanic Americans received 77 or 12.75% of SBBC's construction subcontracts during the study period, representing \$14,010,383 or 15.96% of the construction subcontract dollars.

Native Americans received 3 or 0.50% of SBBC's construction subcontracts during the study period, representing \$92,248 or 0.11% of the construction subcontract dollars.

Minority-owned Businesses received 100 or 16.56% of SBBC's construction subcontracts during the study period, representing \$16,053,074 or 18.28% of the construction subcontract dollars.

Caucasian Female-owned Businesses received 64 or 10.60% of SBBC's construction subcontracts during the study period, representing \$7,960,438 or 9.07% of the construction subcontract dollars.

Minority and Caucasian Female-owned Businesses received 164 or 27.15% of SBBC's construction subcontracts during the study period, representing \$24,013,511 or 27.35% of the construction subcontract dollars.

Non-minority Male-owned Businesses received 440 or 72.85% of SBBC's construction subcontracts during the study period, representing \$63,793,944 or 72.65% of the construction subcontract dollars.



**Table 4.02: Construction Subcontractor Utilization,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	7	1.16%	\$1,060,204	1.21%
Asian-Pacific Americans	1	0.17%	\$56,900	0.06%
Subcontinent Asian Americans	12	1.99%	\$833,339	0.95%
Hispanic Americans	77	12.75%	\$14,010,383	15.96%
Native Americans	3	0.50%	\$92,248	0.11%
Caucasian Females	64	10.60%	\$7,960,438	9.07%
Non-minority Males	440	72.85%	\$63,793,944	72.65%
TOTAL	604	100.00%	\$87,807,455	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	0	0.00%	\$0	0.00%
African American Males	7	1.16%	\$1,060,204	1.21%
Asian-Pacific American Females	0	0.00%	\$0	0.00%
Asian-Pacific American Males	1	0.17%	\$56,900	0.06%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	12	1.99%	\$833,339	0.95%
Hispanic American Females	10	1.66%	\$1,805,549	2.06%
Hispanic American Males	67	11.09%	\$12,204,834	13.90%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	3	0.50%	\$92,248	0.11%
Caucasian Females	64	10.60%	\$7,960,438	9.07%
Caucasian Males	440	72.85%	\$63,793,944	72.65%
TOTAL	604	100.00%	\$87,807,455	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	10	1.66%	\$1,805,549	2.06%
Minority Males	90	14.90%	\$14,247,525	16.23%
Caucasian Females	64	10.60%	\$7,960,438	9.07%
Non-minority Males	440	72.85%	\$63,793,944	72.65%
TOTAL	604	100.00%	\$87,807,455	100.00%
Minority and Women	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority-owned Business Enterprises	100	16.56%	\$16,053,074	18.28%
Caucasian Female-owned Business Enterprises	64	10.60%	\$7,960,438	9.07%
Minority and Caucasian Female-owned Business Enterprises	164	27.15%	\$24,013,511	27.35%
Non-minority Male-owned Business Enterprises	440	72.85%	\$63,793,944	72.65%
TOTAL	604	100.00%	\$87,807,455	100.00%



2. Professional Service Subcontracts

Table 4.03 depicts the professional services subcontracts issued by SBBC's prime contractors. Minority-owned Businesses received 23.30%, Caucasian Female-owned Businesses received 9.90%, and Non-minority Male-owned Business received 66.80% of the professional services subcontract dollars.

African Americans received 2 or 1.94% of SBBC's professional services subcontracts during the study period, representing \$86,375 or 1.07% of the professional services subcontract dollars.

Asian-Pacific Americans received 0 or 0.00% of SBBC's professional services subcontracts during the study period, representing \$0 or 0.00% of the professional services subcontract dollars.

Subcontinent Asian Americans received 3 or 2.91% of SBBC's professional services subcontracts during the study period, representing \$226,356 or 2.81% of the professional services subcontract dollars.

Hispanic Americans received 16 or 15.53% of SBBC's professional services subcontracts during the study period, representing \$1,566,403 or 19.42% of the professional services subcontract dollars.

Native Americans received 0 or 0.00% of SBBC's professional services subcontracts during the study period, representing \$0 or 0.00% of the professional services subcontract dollars.

Minority-owned Businesses received 21 or 20.39% of SBBC's construction subcontracts during the study period, representing \$1,879,134 or 23.30% of the construction subcontract dollars.

Caucasian Female-owned Businesses received 13 or 12.62% of SBBC's professional services subcontracts during the study period, representing \$798,270 or 9.90% of the professional services subcontract dollars.

Minority and Caucasian Female-owned Businesses received 34 or 33.01% of SBBC's construction subcontracts during the study period, representing \$2,677,404 or 33.20% of the construction subcontract dollars.

Non-minority Male-owned Businesses received 69 or 66.99% of SBBC's professional services subcontracts during the study period, representing \$5,386,527 or 66.80% of the professional services subcontract dollars.



**Table 4.03: Professional Services Subcontractor Utilization,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	2	1.94%	\$86,375	1.07%
Asian-Pacific Americans	0	0.00%	\$0	0.00%
Subcontinent Asian Americans	3	2.91%	\$226,356	2.81%
Hispanic Americans	16	15.53%	\$1,566,403	19.42%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	13	12.62%	\$798,270	9.90%
Non-minority Males	69	66.99%	\$5,386,527	66.80%
TOTAL	103	100.00%	\$8,063,931	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	0	0.00%	\$0	0.00%
African American Males	2	1.94%	\$86,375	1.07%
Asian-Pacific American Females	0	0.00%	\$0	0.00%
Asian-Pacific American Males	0	0.00%	\$0	0.00%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	3	2.91%	\$226,356	2.81%
Hispanic American Females	4	3.88%	\$61,551	0.76%
Hispanic American Males	12	11.65%	\$1,504,853	18.66%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	13	12.62%	\$798,270	9.90%
Caucasian Males	69	66.99%	\$5,386,527	66.80%
TOTAL	103	100.00%	\$8,063,931	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	4	3.88%	\$61,551	0.76%
Minority Males	17	16.50%	\$1,817,584	22.54%
Caucasian Females	13	12.62%	\$798,270	9.90%
Non-minority Males	69	66.99%	\$5,386,527	66.80%
TOTAL	103	100.00%	\$8,063,931	100.00%
Minority and Women	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority-owned Business Enterprises	21	20.39%	\$1,879,134	23.30%
Caucasian Female-owned Business Enterprises	13	12.62%	\$798,270	9.90%
Minority and Caucasian Female-owned Business Enterprises	34	33.01%	\$2,677,404	33.20%
Non-minority Male-owned Business Enterprises	69	66.99%	\$5,386,527	66.80%
TOTAL	103	100.00%	\$8,063,931	100.00%



IV. SUMMARY

SBBC's subcontractor utilization analysis examined \$95,871,386 expended on 707 subcontracts awarded by SBBC's prime contractors from Fiscal Years July 1, 2008, to June 30, 2013. The \$95,871,386 expended included \$87,807,455 for construction and \$8,063,931 for professional services. A total of 707 subcontracts were analyzed, which included 604 for construction and 103 for professional services.



CHAPTER 5: MARKET AREA ANALYSIS

I. INTRODUCTION

A. Legal Criteria for Geographic Market Area

The Supreme Court’s decision in *City of Richmond v. J.A. Croson Co.*¹ (*Croson*) held that programs established by local governments to set goals for the participation of minority businesses must be supported by evidence of past discrimination in the award of their contracts. Prior to the *Croson* decision, local agencies could implement race-conscious programs without developing a detailed public record to document the underutilization of minority owned businesses in their award of contracts. Instead, they relied on societal patterns of discrimination.²

Croson established that a local government could not rely on society-wide discrimination as the basis for a race-based program. Instead, a local government was required to identify discrimination within its own contracting jurisdiction.³ In *Croson*, the Court decided that the City of Richmond, Virginia’s Minority Business Enterprise (MBE) construction program was unconstitutional because the evidence of discrimination in the local construction market was insufficient.

Croson was explicit in saying that the local construction market was the appropriate geographical framework within which to perform statistical comparisons of business availability to business utilization. Therefore, the identification of the local market area is particularly important because it establishes the parameters within which to conduct the availability analysis for a disparity study.

B. Application of the Croson Standard

While *Croson* emphasized the importance of the local market area, it provided little assistance in defining its parameters. It is, however, informative to review the Court’s definition of the City of Richmond, Virginia’s market area. In discussing the geographic parameters of the constitutional violation that must be investigated, the Court interchangeably used the terms “relevant market,” “Richmond construction industry,”⁴ and “city’s construction industry.”⁵ These terms were used to define the proper scope for

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

² *United Steelworkers v. Weber*, 433 U.S. 193, 198, n. 1 (1979).

³ *Croson*, 488 U.S. at 497.

⁴ *Croson*, 488 U.S. at 500.

⁵ *Croson*, 488 U.S. at 470.



examining the existence of discrimination within the City. This interchangeable use of terms lends support to a definition of market area that coincides with the boundaries of a contracting jurisdiction.

An analysis of the cases following *Croson* reveals a pattern that provides additional guidance for defining the market area. The body of cases examining the *reasonable* market area definition is *fact-based*—rather than dictated by a specific formula.⁶ In *Cone Corporation v. Hillsborough County*, the United States Eleventh Circuit Court of Appeals considered a study in support of Florida’s Hillsborough County MBE Program, which used minority contractors located in Hillsborough County as the measure of available firms.⁷ The program was found to be constitutional under the compelling governmental interest element of the strict scrutiny standard.

Hillsborough County’s program was based on statistics indicating that specific discrimination existed in the construction contracts awarded by Hillsborough County, not in the construction industry in general. Hillsborough County extracted data from within its own jurisdictional boundaries and assessed the percentage of minority businesses available in Hillsborough County. The Court stated that the disparity study was properly conducted within the “local construction industry.”⁸

Similarly, in *Associated General Contractors v. Coalition for Economic Equity (AGCCII)*, the United States Ninth Circuit Court of Appeals found the City and County of San Francisco, California’s MBE Program to have the factual predicate necessary to survive strict scrutiny.⁹ The San Francisco MBE Program was supported by a study that assessed the number of available MBE contractors within the City and County of San Francisco, California. The Court found it appropriate to use the City and County as the relevant market area within which to conduct a disparity study.¹⁰

In *Coral Construction v. King County*, the United States Ninth Circuit Court of Appeals held that “a set-aside program is valid only if actual, identifiable discrimination has occurred within the local industry affected by the program.”¹¹ In support of its MBE program, King County, Washington offered studies compiled by other jurisdictions, including entities completely within the County, and others coterminous with the boundaries of the County, as well as a jurisdiction completely outside of King County. The plaintiffs contended that *Croson* required King County to compile its own data and cited *Croson* as prohibiting data sharing.

⁶ See e.g., *Concrete Works of Colorado v. City of Denver, Colorado*, 36 F.3d 1513, 1528 (10th Cir. 1994).

⁷ *Cone Corporation v. Hillsborough County*, 908 F.2d 908 (11th Cir. 1990).

⁸ *Id.* at 915.

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

¹⁰ *Id.* at 1415.

¹¹ *Coral Construction Co. v. King County*, 941 F.2d 910 (9th Cir. 1991), *cert. denied*, 112 S.Ct. 875 (1992).



The Court found that data sharing could potentially lead to the improper use of societal discrimination data as the factual basis for a local MBE program and that innocent third parties could be unnecessarily burdened if an MBE program were based on outside data. However, the Court also found that the data from entities within King County and from coterminous jurisdictions were relevant to discrimination in the County. They also found that the data posed no risk of unfairly burdening innocent third parties.

The Court concluded that data gathered by a neighboring county could not be used to support King County’s MBE program. The Court noted, “It is vital that a race-conscious program align itself as closely to the scope of the problem sought to be rectified by the governmental entity. To prevent overbreadth, the enacting jurisdiction should limit its factual inquiry to the presence of discrimination within its own boundaries.”¹² However, the Court did note that the “world of contracting does not conform itself neatly to jurisdictional boundaries.”¹³

There are other situations where courts have approved a market area definition that extended beyond a jurisdiction’s geographic boundaries. In *Concrete Works v. City and County of Denver (Concrete Works)*, the United States Tenth Circuit Court of Appeals directly addressed the issue of whether extra-jurisdictional evidence of discrimination can be used to determine the “local market area” for a disparity study.¹⁴ In *Concrete Works*, the defendant relied on evidence of discrimination in the six-county Denver, Colorado Metropolitan Statistical Area (MSA) to support its MBE program. Plaintiffs argued that the federal constitution prohibited consideration of evidence beyond jurisdictional boundaries. The Court of Appeals disagreed.

Critical to the Court’s acceptance of the Denver MSA, as the relevant local market was the finding that more than 80% of construction and design contracts awarded by the City and County of Denver were awarded to contractors within the MSA. Another consideration was that the City and County of Denver’s analysis was based on United States Census data, which was available for the Denver MSA but not for the City of Denver itself. There was no undue burden placed on nonculpable parties, as the City and County of Denver had expended a majority of its construction contract dollars within the area defined as the local market. Citing *AGCCII*,¹⁵ the Court noted “that any plan that extends race-conscious remedies beyond territorial boundaries must be based on very specific findings that actions the city has taken in the past have visited racial discrimination on such individuals.”¹⁶



¹² *Coral Constr.*, 941 F.2d 917.

¹³ *Id.*

¹⁴ *Concrete Works*, 36 F.3d 1513, 1528 (10th Cir. 1994).

¹⁵ *AGCCII*, 950 F.2d 1401 (9th Cir. 1991).

¹⁶ *Concrete Works*, 36 F.3d at 1528 (10th Cir. 1994).

Clearly, local and state governments must pay special attention to the geographic scope of their disparity studies. *Croson* determined that the statistical analysis should focus on the number of qualified minority business owners in the government's marketplace.¹⁷ It follows from *Croson* and its progeny that an entity may consider evidence of discrimination beyond its own jurisdiction. However, extra-jurisdictional evidence can only be used when there is evidence to support such boundaries. The extra-jurisdictional area where SBBC spent 60% or more of its dollars includes a combination of three counties. The three counties are also contiguous.

II. MARKET AREA ANALYSIS

Given the geographic distribution of the dollars SBBC awarded during the study period, the market area for the four industries was determined to be different. A tri-county area including Broward County, Palm Beach County, and Miami-Dade County was the market area for professional services, contractual services, and commodities. (Broward County was the market area for construction.)

1. Summary of the Distribution of All Purchase Orders Issued

SBBC issued 111,107 purchase orders valued at \$837,838,957 from Fiscal Years July 1, 2008, to June 30, 2013 which is the study period. The distribution of all purchase orders issued and dollars received by prime contractors domiciled in counties within Florida and outside Florida is depicted below in Table 5.01.



¹⁷ *Croson*, 488 U.S. at 501 (1989).

Table 5.01: Distribution of All Purchase Orders Awarded

County	Total Dollars	Number of Contracts	Percent of Dollars	Percent of Contracts
BROWARD	\$417,686,031	49,924	49.85%	44.93%
MIAMI-DADE	\$101,620,945	7,755	12.13%	6.98%
PALM BEACH	\$36,840,425	1,804	4.40%	1.62%
HILLSBOROUGH	\$17,348,880	4,841	2.07%	4.36%
DUVAL	\$7,131,271	1,609	0.85%	1.45%
LEON	\$6,526,799	507	0.78%	0.46%
ORANGE	\$6,175,753	1,197	0.74%	1.08%
SARASOTA	\$5,640,811	190	0.67%	0.17%
POLK	\$3,391,692	1,229	0.40%	1.11%
PINELLAS	\$3,081,006	233	0.37%	0.21%
COLLIER	\$2,604,521	198	0.31%	0.18%
CLAY	\$2,241,656	13	0.27%	0.01%
VOLUSIA	\$2,040,887	81	0.24%	0.07%
SEMINOLE	\$1,731,168	186	0.21%	0.17%
MARTIN	\$1,408,318	275	0.17%	0.25%
LEE	\$1,134,786	58	0.14%	0.05%
PASCO	\$948,752	90	0.11%	0.08%
BREVARD	\$837,026	560	0.10%	0.50%
MANATEE	\$795,672	19	0.09%	0.02%
SAINT LUCIE	\$787,349	60	0.09%	0.05%
ALACHUA	\$543,230	153	0.06%	0.14%
HERNANDO	\$153,808	7	0.02%	0.01%
SUMTER	\$141,608	20	0.02%	0.02%
FLAGLER	\$100,000	1	0.01%	0.00%
MARION	\$91,189	13	0.01%	0.01%
ESCAMBIA	\$89,420	12	0.01%	0.01%
OSCEOLA	\$86,481	4	0.01%	0.00%
LAKE	\$47,451	9	0.01%	0.01%
INDIAN RIVER	\$13,986	4	0.00%	0.00%
LEVY	\$6,295	2	0.00%	0.00%
CHARLOTTE	\$5,183	7	0.00%	0.01%
SAINT JOHNS	\$4,454	9	0.00%	0.01%
MONROE	\$3,095	3	0.00%	0.00%
NASSAU	\$3,005	3	0.00%	0.00%
CITRUS	\$1,647	1	0.00%	0.00%
BAY	\$1,500	2	0.00%	0.00%
HIGHLANDS	\$860	2	0.00%	0.00%
GADSDEN	\$300	1	0.00%	0.00%
OUT-OF-STATE	\$216,484,866	39,980	25.84%	35.98%
OUT-OF-COUNTRY	\$86,832	45	0.01%	0.04%
TOTAL	\$837,838,957	111,107	100.00%	100.00%

2. Distribution of Construction Purchase Orders

SBBC awarded 1,828 construction purchase orders valued at \$248,176,703 during the study period. Businesses located in Broward County received 69.04% of the construction purchase orders and 81.71% of the dollars. Broward County is the construction market area. The distribution of the construction purchase orders awarded and dollars received by utilized firms domiciled inside and outside of the market area is depicted below in Table 5.02.



Table 5.02: Distribution of Construction Purchase Orders

Geographic Area	Total Dollars	Number of Purchase Orders	Percent of Dollars	Percent of Purchase Orders
BROWARD	\$202,796,168	1,262	81.71%	69.04%
MIAMI-DADE	\$31,215,041	419	12.58%	22.92%
PALM BEACH	\$10,493,271	64	4.23%	3.50%
MARTIN	\$124,668	17	0.05%	0.93%
ESCAMBIA	\$71,812	1	0.03%	0.05%
HILLSBOROUGH	\$22,402	5	0.01%	0.27%
POLK	\$9,998	2	0.00%	0.11%
SEMINOLE	\$4,324	7	0.00%	0.38%
OUT-OF-STATE	\$3,439,021	51	1.39%	2.79%
TOTAL	\$248,176,703	1,828	100.00%	100.00%

3. Distribution of Professional Services Purchase Orders

SBBC awarded 133 professional services purchase orders valued at \$12,717,210 during the study period. Businesses located in Broward, Miami-Dade and Palm Beach Counties received 81.20% of the professional services purchase orders and 88.50% of the dollars. This tri-county area is the professional services market area. The distribution of the professional services purchase orders awarded and dollars received by utilized firms domiciled inside and outside of the market area is depicted below in Table 5.03.

Table 5.03: Distribution of Professional Services Purchase Orders

Geographic Area	Total Dollars	Number of Purchase Orders	Percent of Dollars	Percent of Purchase Orders
BROWARD	\$7,041,915	51	55.37%	38.35%
MIAMI-DADE	\$2,760,391	36	21.71%	27.07%
PALM BEACH	\$1,452,808	21	11.42%	15.79%
HILLSBOROUGH	\$916,505	15	7.21%	11.28%
COLLIER	\$393,000	1	3.09%	0.75%
ORANGE	\$38,893	4	0.31%	3.01%
OUT-OF-STATE	\$113,698	5	0.89%	3.76%
TOTAL	\$12,717,210	133	100.00%	100.00%



4. Distribution of Contractual Services Purchase Orders

SBBC awarded 13,132 contractual services purchase orders valued at \$149,333,758 during the study period. Businesses located in Broward, Miami-Dade and Palm Beach Counties received 58.30% of the contractual services purchase orders and 58.30% of the dollars. This tri-county area is the contractual services market area. The distribution of the contractual services purchase orders awarded and dollars received by utilized firms domiciled inside and outside of the market area is depicted below in Table 5.04.

Table 5.04: Distribution of Contractual Services Purchase Orders

Geographic Area	Total Dollars	Number of Purchase Orders	Percent of Dollars	Percent of Purchase Orders
BROWARD	\$59,300,585	5,842	39.71%	44.49%
MIAMI-DADE	\$14,640,678	1,227	9.80%	9.34%
PALM BEACH	\$13,118,578	587	8.78%	4.47%
SARASOTA	\$5,585,841	176	3.74%	1.34%
HILLSBOROUGH	\$2,513,006	366	1.68%	2.79%
VOLUSIA	\$1,998,937	58	1.34%	0.44%
COLLIER	\$1,702,352	42	1.14%	0.32%
ORANGE	\$1,189,978	61	0.80%	0.46%
MARTIN	\$1,174,117	21	0.79%	0.16%
LEON	\$813,117	23	0.54%	0.18%
LEE	\$801,792	25	0.54%	0.19%
MANATEE	\$752,264	7	0.50%	0.05%
SAINT LUCIE	\$734,701	46	0.49%	0.35%
PASCO	\$720,000	1	0.48%	0.01%
PINELLAS	\$461,963	30	0.31%	0.23%
DUVAL	\$389,872	147	0.26%	1.12%
SEMINOLE	\$318,466	13	0.21%	0.10%
POLK	\$261,396	29	0.18%	0.22%
ALACHUA	\$229,293	117	0.15%	0.89%
OSCEOLA	\$84,000	3	0.06%	0.02%
HERNANDO	\$26,295	6	0.02%	0.05%
LEVY	\$6,295	2	0.00%	0.02%
BREVARD	\$4,240	5	0.00%	0.04%
SAINT JOHNS	\$4,146	8	0.00%	0.06%
MONROE	\$3,095	3	0.00%	0.02%
NASSAU	\$2,500	1	0.00%	0.01%
BAY	\$1,500	2	0.00%	0.02%
SUMTER	\$1,000	1	0.00%	0.01%
LAKE	\$660	1	0.00%	0.01%
HIGHLANDS	\$500	1	0.00%	0.01%
OUT-OF-STATE	\$42,483,544	4,275	28.45%	32.55%
OUT-OF-COUNTRY	\$9,049	6	0.01%	0.05%
TOTAL	\$149,333,758	13,132	100.00%	100.00%



5. Distribution of Commodities Purchase Orders

SBBC awarded 96,014 commodities purchase orders valued at \$427,611,285 during the study period. Businesses located in Broward, Miami-Dade and Palm Beach County received 52.05% of the commodities purchase orders and 49.89% of the dollars. This tri-county area is the commodities market area. The distribution of the commodities purchase orders awarded and dollars received by utilized firms domiciled inside and outside of the market area is depicted below in Table 5.05.

Table 5.05: Distribution of Commodities Purchase Orders

Geographic Area	Total Dollars	Number of Purchase Orders	Percent of Dollars	Percent of Purchase Orders
BROWARD	\$148,547,364	42,769	34.74%	44.54%
MIAMI-DADE	\$53,004,835	6,073	12.40%	6.33%
HILLSBOROUGH	\$13,896,968	4,455	3.25%	4.64%
PALM BEACH	\$11,775,768	1,132	2.75%	1.18%
DUVAL	\$6,741,399	1,462	1.58%	1.52%
LEON	\$5,713,682	484	1.34%	0.50%
ORANGE	\$4,946,882	1,132	1.16%	1.18%
POLK	\$3,120,298	1,198	0.73%	1.25%
PINELLAS	\$2,619,043	203	0.61%	0.21%
CLAY	\$2,241,656	13	0.52%	0.01%
SEMINOLE	\$1,408,379	166	0.33%	0.17%
BREVARD	\$832,786	555	0.19%	0.58%
COLLIER	\$509,168	155	0.12%	0.16%
LEE	\$332,994	33	0.08%	0.03%
ALACHUA	\$313,938	36	0.07%	0.04%
PASCO	\$228,752	89	0.05%	0.09%
SUMTER	\$140,608	19	0.03%	0.02%
HERNANDO	\$127,514	1	0.03%	0.00%
MARTIN	\$109,533	237	0.03%	0.25%
FLAGLER	\$100,000	1	0.02%	0.00%
MARION	\$91,189	13	0.02%	0.01%
SARASOTA	\$54,970	14	0.01%	0.01%
SAINT LUCIE	\$52,648	14	0.01%	0.01%
LAKE	\$46,791	8	0.01%	0.01%
MANATEE	\$43,408	12	0.01%	0.01%
VOLUSIA	\$41,950	23	0.01%	0.02%
ESCAMBIA	\$17,608	11	0.00%	0.01%
INDIAN RIVER	\$13,986	4	0.00%	0.00%
CHARLOTTE	\$5,183	7	0.00%	0.01%
OSCEOLA	\$2,481	1	0.00%	0.00%
CITRUS	\$1,647	1	0.00%	0.00%
NASSAU	\$505	2	0.00%	0.00%
HIGHLANDS	\$360	1	0.00%	0.00%
SAINT JOHNS	\$308	1	0.00%	0.00%
GADSDEN	\$300	1	0.00%	0.00%
OUT-OF-STATE	\$170,448,603	35,649	39.86%	37.13%
OUT-OF-COUNTRY	\$77,784	39	0.02%	0.04%
TOTAL	\$427,611,285	96,014	100.00%	100.00%



III. SUMMARY

During the study period, SBBC awarded 111,107 construction, contractual services, and commodities purchase orders valued at \$837,838,957. SBBC awarded 53.54% of purchase orders and 66.38% of dollars to businesses within the market area.

Table 5.06 below presents an overview of the number of construction, professional services, contractual services, and commodities purchase orders SBBC awarded and the dollars spent in the market area.

Construction Purchase Orders: 1,262 or 69.04% of the construction purchase orders were awarded to market area businesses. Construction purchase orders awarded in the market area accounted for \$202,796,168 or 81.71% of the total construction prime contract dollars.

Professional Services Purchase Orders: 108 or 81.20% of the professional services purchase orders were awarded to market area businesses. Professional services purchase orders awarded in the market area accounted for \$11,255,114 or 88.50% of the total professional services prime contract dollars.

Contractual Services Purchase Orders: 7,656 or 58.30% of the contractual services purchase orders were awarded to market area businesses. Contractual services purchase orders awarded in the market area accounted for \$87,059,841 or 58.30% of the total contractual services prime contract dollars.

Commodities Purchase Orders: 49,974 or 52.05% of the commodities purchase orders were awarded to market area businesses. Commodities purchase orders awarded in the market area accounted for \$213,327,966 or 49.89% of the total commodities prime contract dollars.



Table 5.06: Market Area Contract Distribution, All Industries

Geographic Area	Total Dollars	Number of Purchase Orders	Percent of Dollars	Percent of Purchase Orders
All Industries				
Market Area	\$556,147,401	59,483	66.38%	53.54%
Outside Market Area	\$281,691,556	51,624	33.62%	46.46%
TOTAL	\$837,838,957	111,107	100.00%	100.00%
Construction				
Market Area	\$202,796,168	1,262	81.71%	69.04%
Outside Market Area	\$45,380,536	566	18.29%	30.96%
TOTAL	\$248,176,703	1,828	100.00%	100.00%
Professional Services				
Market Area	\$11,255,114	108	88.50%	81.20%
Outside Market Area	\$1,462,096	25	11.50%	18.80%
TOTAL	\$12,717,210	133	100.00%	100.00%
Contractual Services				
Market Area	\$87,059,841	7,656	58.30%	58.30%
Outside Market Area	\$62,273,917	5,476	41.70%	41.70%
TOTAL	\$149,333,758	13,132	100.00%	100.00%
Commodities				
Market Area	\$213,327,966	49,974	49.89%	52.05%
Outside Market Area	\$214,283,318	46,040	50.11%	47.95%
TOTAL	\$427,611,285	96,014	100.00%	100.00%



CHAPTER 6: COMPARATIVE ANALYSIS OF AVAILABILITY MEASURES

I. INTRODUCTION

The purpose of this chapter is to compare the availability measures used in this 2015 School Board of Broward County (SBBC) Disparity Study (Study) to disparity studies conducted for peer agencies in South Florida. The comparison analysis includes a discussion on the appropriate legal standard for determining available market area businesses as set forth in the relevant case law. The South Florida region is defined as Broward County, Palm Beach County, and Miami-Dade County. Two studies were completed by peer agencies in the tri-county area within the last ten years. These studies are the Miami-Dade County Public Schools Disparity Study, and the Broward County, Florida’s State of Minority- and Women-Owned Business Enterprise Study.

The legal standards for availability as considered in this comparative analysis are derived from the 1989 Supreme Court decision *City of Richmond v. J.A. Croson* (*Croson*¹) and its progeny.² The Supreme Court explicitly set forth the parameters for defining a “willing business,” but did not specify what constitutes an “able” business. Since *Croson*, federal circuit courts have opined on the definition of an “able” business. Although these judicial jurisdictions do not concur that a capacity assessment should be a required component of an availability analysis, the Eleventh Circuit has consistently ruled that the ability of a business to perform a public contract should be considered when determining an available business. Therefore, this peer study examines the approach used in the three South Florida disparity studies to address capacity.

II. LEGAL STANDARDS FOR DETERMINING APPROPRIATE MEASURES OF AVAILABILITY

The accuracy and reliability of a disparity study depends in part on the definition and analysis of “availability.” According to *Croson*, availability is the number of businesses in the jurisdiction’s market area that are willing and able to provide goods or services.³ Willingness is defined in *Croson* as a business’ interest in doing government contracting. Although *Croson* discusses availability, the Court did not define “able,” and therefore left

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

² *Various cases, two of the most important in these regards being Builders Association of Greater Chicago v. City of Chicago*, 298 F.Supp.2d 725 (N.D. Ill. 2003), and *Concrete Works of Colorado, Inc. v. City of Denver*, 86 F. Supp. 2d 1042, 1073 (D. Colo. 2000), *rev’d on other grounds*, 321 F.3d 950 (10th Cir. 2003), *cert. denied*, 540 U.S. 1027 (2003).

³ *Croson*, 488 U.S. at 501-502, 509; *see, Contractors Ass’n of E. Pa. v. City of Philadelphia*, 6 F.3d 990, 1003 (3d. Cir. 1993), *aff’d*, 91 F.3d 586 (3d. Cir. 1995) (*reinforced the definition of availability in Croson*).



open the matter of defining capacity.⁴ Given the open interpretation regarding what constitutes “able,” several circuit courts have ruled on the validity of several different methods to measure capacity.

Since 1993, a number of federal circuit courts of appeals have reviewed the application of capacity in the analysis of availability. The courts have opined that capacity can be determined using any one or number of different methods. These include the United States Census Bureau statistics, certification directories, customized census, regression analysis, and industry elasticity. The evolution and application of the case law from *Croson*’s initial ruling is discussed below.

A. Case Law

1. Certification Documentation

In 1993, *Contractors Association of Eastern Pennsylvania v. City of Philadelphia* (“*Philadelphia IV*”)⁵ found certification to be an adequate process for identifying capable firms, recognizing that the process may even understate the availability of MBE firms.⁶ *Philadelphia IV* rejected a statistical disparity finding where the pool of minority businesses used in determining availability were those that were merely licensed to operate in the City of Philadelphia. Merely being licensed to do business with the City the court found did not indicate either a willingness or ability to do work for the City. The court held that using a list of certified contractors was a rational approach to identifying qualified and available firms. The court further stated, “[a]n analysis is not devoid of probative value simply because it may theoretically be possible to adopt a more refined approach [of qualification].”⁷

2. Census Data

In 1998, the Eleventh Circuit in *Engineering Contractors Association of South Florida, Inc. v. Metropolitan Dade County (Dade County II)* found that relying on census data alone does not constitute a strong basis in evidence to justify the program. The Eleventh Circuit noted that census data does not account for firm size, nor does it evaluate whether the firm is actually qualified to perform the contract requirements.⁸ In *Dade County*, the County relied on census data that compared the proportion of Black-owned construction firms in the Standardize Industrial Classification (SIC) codes to majority firms in regards to the proportion of the overall revenues they received. The court concluded that there

⁴ *Midwest Fence Corp. v. United States DOT*, No. 10-C-5627, 2014 U.S. Dist. LEXIS 9911 at *19 (N.D. Ill. Jan. 28, 2014).

⁵ *Contractors Ass’n of E. Pa. v. City of Philadelphia* (“*Philadelphia IV*”), 6 F.3d 990, 1001 (3d Cir. 1993).

⁶ *Id.* at 603

⁷ *Id.* at 603; see also, *Concrete Works IV*, 321 F.3d at 966 (noting a less sophisticated method to calculate availability does not render a disparity study flawed.)

⁸ *Engineering Contractors Ass’n of South Florida v. Metropolitan Dade City*, 943 F. Supp. 1546 (S.D. Fla. 1996), *aff’d* 122 F.3d 895 (11th Cir. 1997).



was not a strong basis in evidence to justify the program because the census data did not account for firm size or firm qualifications.

3. Calculating Elasticity in the Construction Industry

In 1998, the court addressed elasticity of the construction industry in *North Shore Concrete & Associates v. City of New York (North Shore)*. In *North Shore*, the court states, “firm size is not a reliable indicator of the kind of work a firm [construction] can perform.”⁹ The court made this statement based on the City’s evidence that in “the construction industry it is relatively easy to obtain ‘qualifications’ by hiring additional employees.” The court found that the defendant depicted the very essence of elasticity in the construction industry, as the plaintiff was a “small firm whose only employee other than the owner is the secretary . . . however, [it] bid on projects worth over \$1 million”¹⁰

Thus, courts have noted that the construction industry has “considerable elasticity in firm capacity as a firm can rent equipment and hire tradesmen.”¹¹ The *North Shore* court characterized the construction industry as markedly different from the manufacturing industry, where the business is situated in a fixed location with a defined capacity to produce its product.

In 2003, the court in *Concrete Works of Colorado, Inc. v. Denver* (“*Concrete Works IV*”)¹² also found the government’s argument persuasive that capacity in the construction industry is elastic.¹³ The government argued that a construction business’ abilities, including that of M/WBEs, to provide construction services is elastic because they “can perform most services either by hiring additional employees or by employing subcontractors.”¹⁴

4. Custom Census

In 2003, the court in *Concrete Works of Colorado, Inc. v. Denver* (“*Concrete Works IV*”)¹⁵ ruled that disparity studies could determine availability by using construction specialties and geographic location. While the Court noted that this approach was “a more sophisticated method to calculate availability [,]” it held that the City’s 1990 and

⁹ *N. Shore Concrete & Assoc. v. City of New York*, No. 94-cv-4017, 1998 U.S. Dist. LEXIS 6785 * 25 (E.D.N.Y. Apr. 12, 1998).

¹⁰ *Id.*

¹¹ *Builders Ass’n of Greater Chi. v. City of Chicago*, 298 F. Supp. 2d 725, 736 (N.D. Ill.2003); see, *N. Shore Concrete & Assoc. v. City of New York*, No. 94-cv-4017, 1998 U.S. Dist. LEXIS 6785 * 25 (E.D.N.Y. Apr. 12, 1998) (the court quotes defendants’ argument that the construction industry has the ability to change its availability, and therefore capacity to conduct work based on hiring additional employees).

¹² *Id.* at 976 (quoting *Shaw v. Hunt*, 517 U.S. 804, 909 (1996)).

¹³ *Concrete Works IV*, 321 F.3d at 981-983.

¹⁴ *Id.* at 981.

¹⁵ *Concrete Works IV*, 321 F.3d at 976 (quoting *Shaw v. Hunt*, 517 U.S. 804, 909 (1996)).



1995 disparity studies were not fatally flawed because they did not use the 1997 method.¹⁶ The first of the City of Denver’s disparity studies was conducted in 1990 and determined availability using data from eight city bonding contracts, the overall utilization of M/WBEs in the Denver construction market, and interviews of representatives of the M/WBEs, Non-M/WBE construction firms, and government officials.¹⁷ The study conducted in 1995, used the United States Census Bureau data, including information on employment and revenue for proprietorships, Standard Industrial Classification (SIC) codes, and the Public Use Microdata Samples (PUMS).¹⁸ *Concrete Works IV* referenced the several availability methodologies dating back to 1990,¹⁹ and *Concrete Works IV* ruled that disparity studies could determine availability by using construction specialties and geographic location.²⁰

In 2007, *Northern Contracting, Inc. v. Illinois (Northern Contracting)*²¹ held that a “custom census instead of a simple count of the number of registered and prequalified DBEs under Illinois Law” could be used to determine “the number of DBEs that were ‘ready, willing, and able[.]’”²² The custom census, the court opined, is not a miscalculation rendering the methodology used in the disparity study wrong.²³ The custom census involved “first identifying the relevant geographic market” and “the relevant product market.”²⁴ Moreover, after the initial identification of the relevant market, the disparity study surveyed a comprehensive database of M/WBEs and all firms not listed as an M/WBE.²⁵ The court believed the use of the custom census reflected “an attempt by IDOT to arrive at more accurate numbers than would be possible through use of just the list [of DBEs in Illinois].”²⁶

5. Business Size as a Measure of Relative Capacity

In 2008, the court in *Rothe Development Corp. v U.S. Department of Defense (Rothe VII)* identified that an analysis of whether a firm was “qualified” is a required measure of relative capacity.²⁷ The court stated that one measure of whether a firm is qualified is to

¹⁶ *Id.* at 966.

¹⁷ *Id.* at 963-65.

¹⁸ *Id.* at 963.

¹⁹ *Concrete Works of Colo. v. Denver*, 321 F.3d 950, 963 (10th Cir. 2003) (“*Concrete Works IV*”).

²⁰ *See, Concrete Works IV*, 321 F.3d at 966.

²¹ *N. Contracting, Inc. v. Illinois*, 473 F.3d 715, 723 (7th Cir. 2007).

²² *Id.* at 723

²³ *Id.* at 723.

²⁴ *Id.* at 718.

²⁵ *N. Contracting*, 473 F.3d at 718.

²⁶ *Id.* at 722.

²⁷ 545 F. 3d 1023 (Fed. Cir. 2008).



analyze the extent to which size affects success in contracting. The *Rothe VII* court stated that “because they are bigger, bigger firms have a bigger chance to win bigger contracts...[so] all other factors being equal and in a perfectly non-discriminatory market, one would expect the bigger (on average) non-MWBE firms to get a proportionally higher percentage of total construction dollars awarded.”²⁸ A capacity analysis therefore measures the relative size of the businesses studied. The *Rothe VII* court thus equates capacity of a business with the size of the business, such that the size of the business must be accounted for when measuring capacity.

In *Rothe VII*, the court analyzed whether capacity was adequately assessed in the five disparity studies performed for various local governments that the United States Department of Defense (DOD) presented in support of its DBE Program. The court in *Rothe VII* expressed concern that the “relative capacity” of the businesses themselves was not analyzed, even when the size of contracts analyzed was restricted to ensure that the available firms had the capacity to bid competitively. The court opined that the measures employed failed to account for the relative capacity of businesses to bid for more than one contract at a time, even when contract size was restricted.²⁹ The Court noted that while each of the five disparity studies measured the relative sizes of contracts awarded to Minority-owned businesses, “none of the studies took complementary account of the relative sizes of the businesses themselves.”

6. Regression Analysis as a Measure of Relative Capacity

The *Rothe VII* also held that disparity studies should conduct a regression analysis to control for relative capacity.³⁰ Disparity studies, *Rothe VII* found, should “account for the relative capacities of businesses to bid for *more than one contract at a time* [.]”³¹ Though relative capacity was identified as the preferred measure, the court acknowledged that at least one of the consultants still performed a reliable study because the bulk of the businesses considered in those studies were identified in “ways that tend to establish their qualifications,” such as collecting city contract records and bidder lists.

In 2012, the court in *DynaLantic Corp. v. U.S. DOD (DynaLantic)*³² stated that many consultants have performed disparity studies conducting legally sound availability analyses without a regression analysis. The court in *DynaLantic* recognized the fact that courts evaluate availability differently. The court used a Mason Tillman Associates’ (Mason Tillman) disparity study as an example of a study that did not use the methods prescribed by *Rothe VII*, but still performed a legally reliable study. The Mason Tillman disparity study, the court found, used “relatively narrow measurements of availability

²⁸ *Rothe VII*, 545 F. 3d at 1023 (quoting Eng’g Contractors Ass’n v. Metro. Dade Cnty., 22 F. 3d 895, 917 (11th Cir. 1997)).

²⁹ *Id.* At 1044.

³⁰ 545 F.3d 1023, 1041-43 (Fed. Cir. 2008) (“*Rothe VII*”).

³¹ *Id.* at 1044.

³² *DynaLantic Corp.*, 885 F. Supp. 2d at 2367-68.



and/or conducted relatively detailed capacity analyses.”³³ Additionally, the *DynaLantic* court concluded that although the Mason Tillman study did not address firm size with significant government contracting experience, the study sufficiently demonstrated qualified, eligible minority owned firms that were excluded from the contracting market, and “provide[d] *powerful evidence* from which ‘an inference of discriminatory exclusion could arise[.]’”³⁴

III. COMPARISON STUDIES

A. 2010 Broward County, Florida’s State of Minority- and Women-Owned Business Enterprise Disparity Study

The 2010 Broward County, Florida’s State of Minority- and Women-Owned Business Enterprise Disparity Study covered July 1, 2005, to December 31, 2009. Broward County sought to evaluate (1) whether the County’s race and gender-neutral programs had eliminated discrimination, and (2) whether its prior M/WBE initiatives reduced discrimination. Additionally, the examination sought to establish an evidentiary record to support race and gender-conscious remedies.

The 2010 Study established statistical and anecdotal evidence of discrimination against M/WBEs in Broward County’s market area. However, statistical findings did not establish sufficient evidence to support discrimination resulting from the County’s own contracting practices. As a result, the Study recommended that the County monitor its M/WBE utilization for four years, which is consistent with the timeframe for the 2010 Study, to determine whether the statistical evidence compiled would provide the predicate for race and gender remedial measures.

The Study compiled the availability data using Dun & Bradstreet as a major source for identifying available businesses for this study. Membership lists from trade and business organizations were appended to the list of available businesses identified in the Dun & Bradstreet dataset. A sample survey was conducted with 15,000 firms in the Dun & Bradstreet dataset and membership directories to verify the ethnicity and gender of the business owners identified from these sources. The misclassification percentages were reported by NAICS codes. The misclassification of firms listed as non-M/WBEs that were actually M/WBEs ranged from 72 percent to zero. A statistical analysis was applied to the availability estimates to account for the misclassification errors. The availability analysis did not contain a capacity assessment to determine if willing businesses were able to perform goods and services that the County procured.



³³ *DynaLantic Corp.*, 885 F. Supp. 2d at 267-68.

³⁴ *Id.*

B. 2013 Miami Dade Public Schools Disparity Study

The disparity study, conducted for the Miami Dade Public School (District), covered the July 1, 2006, to June 30, 2012 study period and was completed November 2013. The methodology used to enumerate available businesses in the District's 2013 Disparity Study included several sources. There was a "custom census," the prequalified businesses, and businesses that responded to a survey. Dun & Bradstreet was the source used for the "custom census." The dataset extracted from Dun & Bradstreet was limited to firm revenue, number of employees, and specific areas of work.

The businesses identified in Dun & Bradstreet were surveyed to determine willingness to work with the District. A random sample of firms were surveyed to elicit the following information: (1) the business owner's ethnicity and gender (2) whether the business bid or considered bidding on the District's construction and design and construction-related professional services projects, and (3) if the business bid or considered bidding as prime contractor/consultant or subcontractor/consultant or both. The District respondent's list and prequalified firms were appended to the Dun & Bradstreet list to complete the availability list used to calculate disparity.

The Study did not include a capacity assessment as part of the availability analysis. However, a regression analysis was conducted of survey data in the Miami area that controlled for the effects of the company's capacity, ownership level of education, and experience.

C. 2015 School Board of Broward County Disparity Study

The School Board of Broward County 2015 Disparity Study covers the study period July 1, 2009, to June 30, 2013. The Study includes utilization and disparity analyses of M/WBEs and non-M/WBEs on commodities, construction, contractual services, maintenance and repair, professional services, and technology contracts awarded by SBBC.

Four types of sources were used to identify businesses in the market area that provide the commodities and services that SBBC procures. The sources included (i) SBBC's records, including vendors and bidders lists; (ii) government certification directories; (iii) business association membership lists, and a (iv) business community meeting. The businesses that bid on a government contract, secured government certification, or were utilized by SBBC were presumed willing to work with SBBC. All other businesses were surveyed to determine their willingness to work with SBBC. Only the businesses that affirmed an interest in contracting with SBBC were included in the availability analysis. Additionally, the capacity of willing market area businesses to contract with SBBC was assessed through several measures:

- *Size Analysis:* A distribution of contracts by size and industry was calculated to determine the average size of SBBC's purchase orders. Contract size is a determinant of the capacity a willing business needs to be competitive.



- *Largest Awards:* The analysis classified the largest purchase orders SBBC awarded by ethnic group, gender group, and industry in order to determine the demonstrated capacity of M/WBEs to perform large purchase orders.
- *Certification:* The certification procedures used by SBBC and local certifying agencies were reviewed to determine if they met the standard found to be an adequate measure of capacity in *Contractors Association of Eastern Pennsylvania v. City of Philadelphia*.³⁵
- *Capacity Assessment:* The capacity assessment questionnaire designed to elicit information on economic indicators of a business's ability to perform SBBC's purchase orders was administered to assess the relative capacity of M/WBEs and similarly situated non-M/WBEs.

In addition to these four measures, the threshold levels for the prime disparity analysis were limited to ensure that within the pool of willing businesses there was documented capacity to perform the formal purchase orders analyzed.

These analyses demonstrated that the majority of SBBC's purchase orders were small, requiring limited capacity to perform. Furthermore, the awards SBBC made to M/WBEs demonstrated that the capacity of the available businesses are considerably greater than actually needed to bid on the majority of the purchase orders awarded in the industries studied.

The metrics reviewed in the capacity analysis revealed that Caucasian Males and Females are not awarded contracts more frequently because of any single or combination of the business economic indicators measured. The fact that Caucasian Males and Females are awarded more contracts and, therefore, experience higher annual revenue is likely a function of public and private sector business practices, rather than business capacity or a lack thereof.

IV. SUMMARY

Of the three studies included in this comparison analysis, only the School Board of Broward County 2015 Disparity Study included an availability analysis containing an assessment of capacity. The Study's availability analysis included a size analysis on the construction, professional services, contractual services, and commodities awards to determine the size of awarded purchase orders, the largest purchase orders awarded to M/WBEs to gauge the capacity required to perform on SBBC's purchase orders, and a capacity assessment of businesses willing to perform SBBC's purchase orders.



³⁵ 91 F.3d at 586.



CHAPTER 7: PRIME CONTRACTOR AND SUBCONTRACTOR AVAILABILITY ANALYSIS

I. INTRODUCTION

Availability is defined, in *City of Richmond v. J.A. Croson Co.*, as the number of qualified businesses in the jurisdiction’s market area that are willing and able to provide goods or services.¹ Thus, to determine availability, Minority and Woman-owned Business Enterprises, hereinafter Minority and Caucasian Female-owned Business Enterprises (M/WBE), and Non-minority Male-owned Businesses (non-M/WBE) that are ready, willing, and able to provide the goods and services within the jurisdiction’s market area need to be enumerated. The market area of the School Board of Broward County (SBBC), as defined in *Chapter 5: Market Area Analysis*, includes the Tri-County area. The Tri-County area is Broward County, Palm Beach County, and Miami-Dade County, Florida.

When considering sources for determining the number of willing and able M/WBEs and non-M/WBEs in the market area, the selection must be based on whether two aspects about the population in question can be gauged from the sources. One consideration is a business’ interest in doing business with the jurisdiction, as implied by the term “willing,” and the other is its ability or capacity to provide a service or commodity, as implied by the term “able.”

II. PRIME CONTRACTOR AVAILABILITY DATA SOURCES

A. Identification of Willing Businesses within the Market Area

Mason Tillman used four types of sources to identify businesses in the market area that provide the commodities and services that SBBC procures. The first source was SBBC’s records, including vendors and bidders lists. The second source was government certification directories. The third source was business association membership lists, and the corresponding business community meetings. Only businesses determined to be willing were added to the availability list. Any business identified as “willing” from more than one source was counted only once in an industry. A business that was willing to provide commodities or services in more than one industry was listed uniquely in each relevant industry’s availability list.

¹ *City of Richmond v. J.A. Croson Co.*(“Croson”), 488 U.S. 469, 509 (1989).



From all of the compiled sources, 66 sources were ranked. The highest rank was assigned to the utilized businesses, bidders, and vendors. Government certification lists ranked second, and business association membership and community meeting registration lists ranked third. The first source used to build the availability list was SBBC's utilized businesses. Bidders and vendor lists were then appended. Businesses identified from federal government, local government, and SBBC's certification listings were thereafter appended. The certification lists included local small, minority, woman, and disadvantaged business enterprises (L/S/M/W/DBEs). Businesses identified from association membership lists or business community meeting attendance lists were surveyed. The businesses that confirmed their willingness to contract with the District were appended to the availability database. Business associations included trade organizations, professional organizations, and chambers of commerce.

Extensive targeted outreach to business associations in the market area was performed to identify and secure business membership directories. From the 66 sources, 5,894 unique market area businesses that provided commodities or services in one or more of the four industries studied (construction, professional services, contractual services, and commodities) were identified. An accounting of the willing businesses derived from the 66 sources is presented below:

1. School Board of Broward County Records

From SBBC records, 1,565 unique market area businesses were added to the availability database.

2. Government Certification Lists

From government certification lists, 3,376 unique market area businesses were added to the availability database.

3. Business Association Membership Lists and Business Community Meeting Registration

From business association membership lists and business community meeting registration lists 1,688 unique market area businesses were identified, of which 263 were professional services businesses.

The business association members were surveyed to determine their willingness to contract with SBBC. Of the 3,948 surveyed businesses, 536 refused to participate, 1,527 did not respond, 103 telephone numbers were disconnected, and 1,782 businesses completed the survey. Of the 1,782 businesses that completed the survey, 1,688 affirmed their willingness to contract with SBBC.

B. Prime Contractor Availability Sources

Table 7.01 lists the sources from which the list of willing businesses was compiled.



Table 7.01: Prime Contractor Availability Data Sources

Source	Type of Information
School Board of Broward County Records	
Broward County Prime Utilization	M/WBEs and Non-M/WBEs
Government Certification Directories	
Miami-Dade County Small Business Enterprise Certification List	M/WBEs and Non-M/WBEs
Miami-Dade County Community Business Enterprise Certification List	M/WBEs and Non-M/WBEs
Miami-Dade County Community Small Business Enterprise Certification List	M/WBEs and Non-M/WBEs
Florida Department of Transportation Minority Business Enterprise as Certified by the State of Florida	DBEs
Florida Department of Transportation Federal Disadvantaged Business Enterprise as Certified by Member Agencies in the Florida Unified Certification Program	DBEs
Miami-Dade County Small Business Development Certification List	M/WBEs and Non-M/WBEs
Florida Department of Transportation Disadvantaged Business Enterprise Program Federal Aviation Administration Certified Businesses	DBEs
Federal Aviation Administration Certification	DBEs
Florida Department of Transportation Disadvantaged Business Enterprise	DBEs
Florida Department of Transportation Minority Business Enterprise as Certified by the State of Florida	DBEs
Federal Transit Administration Disadvantaged Business Enterprise	DBEs
Miami-Dade County Public Schools Minority/Women Business Enterprise Certified Firms	M/WBEs
U.S. Small Business Administration, Miami-Dade County, Florida	M/WBEs and Non-M/WBEs
Broward County Florida Small Business Enterprise Certification	M/WBEs and Non-M/WBEs



Source	Type of Information
Federal Aviation Administration Certification	M/WBEs and Non-M/WBEs
Federal Transit Administration Disadvantaged Business Enterprise	M/WBEs and Non-M/WBEs
U.S. Small Business Administration 8(a) Certified or 8(a) Joint Venture, Broward County, Florida	DBEs
U.S. Small Business Administration HUBZone Certification, Broward County, Florida	M/WBEs and Non-M/WBEs
U.S. Small Business Administration Small Disadvantaged Business, Broward County, Florida	DBEs
The School District of Palm Beach County Minority/Women owned Business Enterprise Programs	M/WBEs
The School District of Palm Beach County Small Business Enterprise	M/WBEs and Non-M/WBEs
Broward County Public School Minority/Woman-Owned Business Enterprise Certified Vendors	M/WBEs
South Florida Water Management District Small Business Enterprise Directory	M/WBEs and Non-M/WBEs
U.S. Small Business Administration Veteran-Owned Small Business, Broward County, Florida	M/WBEs and Non-M/WBEs
U.S. Small Business Administration Woman-Owned Small Business, Broward County, Florida	M/WBEs
U.S. Small Business Administration 8(a) Certified or 8(a) Joint Venture, Palm Beach County, Florida	DBEs
U.S. Small Business Administration HUBZone Certification, Palm Beach County, Florida	M/WBEs and Non-M/WBEs
U.S. Small Business Administration Small Disadvantaged Business, Palm Beach County, Florida	DBEs
U.S. Small Business Administration Veteran-Owned Small Business, Palm Beach County, Florida	M/WBEs and Non-M/WBEs
U.S. Small Business Administration Woman-Owned Small Business, Palm Beach County, Florida	M/WBEs
Business Association Membership Lists	
Greater Delray Beach Chamber of Commerce	M/WBEs and Non-M/WBEs
Greater Pompano Beach Chamber of Commerce	M/WBEs and Non-M/WBEs



Source	Type of Information
Miramar Pembroke Pines Regional Chamber of Commerce	M/WBEs and Non-M/WBEs
Greater Plantation Chamber of Commerce	M/WBEs and Non-M/WBEs
Cold Spring Area Chamber of Commerce	M/WBEs and Non-M/WBEs
Greater Fort Lauderdale Chamber of Commerce	M/WBEs and Non-M/WBEs
Florida Roofing, Sheet Metal and Air conditioning Contractors Association	M/WBEs and Non-M/WBEs
Margate Chamber of Commerce	M/WBEs and Non-M/WBEs
Business Network International, Miami Dade	M/WBEs and Non-M/WBEs
Masonry Association of Florida, Inc.	M/WBEs and Non-M/WBEs
United States Renewable Energy Association, LLC.	M/WBEs and Non-M/WBEs
Mechanical Contractors Association of America	M/WBEs and Non-M/WBEs
The Greater Sunrise Chamber of Commerce	M/WBEs and Non-M/WBEs
Associated General Contractors of America	M/WBEs and Non-M/WBEs
Hollywood Chamber of Commerce	M/WBEs and Non-M/WBEs
Davie-Cooper City Chamber of Commerce	M/WBEs and Non-M/WBEs
National Association of Women Business Owners Fort Lauderdale/Broward County	M/WBEs
Roofing Contractors Association of South Florida	M/WBEs and Non-M/WBEs
American Council of Engineering Companies, Florida	M/WBEs and Non-M/WBEs
Nursery Growers and Landscape Association	M/WBEs and Non-M/WBEs
Key Biscayne Chamber of Commerce	M/WBEs and Non-M/WBEs
American Council of Engineering Companies	M/WBEs and Non-M/WBEs
Independent Educational Consultants Association	M/WBEs and Non-M/WBEs
Miami Shores Florida Chamber of Commerce	M/WBEs and Non-M/WBEs
South Dade Chamber of Commerce	M/WBEs and Non-M/WBEs
Associated General Contractors of America, Florida East Coast Chapter	M/WBEs and Non-M/WBEs
Puerto Rican Chamber of Commerce of South Florida	M/WBEs
Brazilian Chamber of Commerce of Florida	M/WBEs



Source	Type of Information
Greater North Miami Beach Chamber of Commerce	M/WBEs and Non-M/WBEs
Aventura Sunny Isles Beach Florida Chamber of Commerce	M/WBEs and Non-M/WBEs
Association of Professional Landscape Designers	M/WBEs and Non-M/WBEs
American Concrete Institute of Architects, Florida	M/WBEs and Non-M/WBEs
Florida Prestressed Concrete Association	M/WBEs and Non-M/WBEs
Directory of African American Architects	M/WBEs
American Council of Engineering Companies	M/WBEs and Non-M/WBEs

C. Determination of Willingness

All businesses included in the availability analysis were determined to be willing to contract with SBBC. “Willingness” is defined in *Croson* and its progeny as a business’s interest in contracting with the government.² To be classified as willing, each business either bid on a government contract, secured government certification, or was listed on a business organization’s membership list and affirmed an interest in contracting with SBBC through the willingness survey. Businesses identified from the 66 sources listed in Table 7.01 demonstrated their willingness to perform on public contracts.

D. Distribution of Available Prime Contractors by Source, Ethnicity, and Gender

Table 7.02 to Table 7.06 present the distribution of willing prime contractors by source. The prime contractors utilized by SBBC constitute the highest ranked source. Each ranked business is *counted only once*. For example, a utilized prime contractor was not counted a second time as a bidder, certified business, or company identified from a business association list.

As noted in Table 7.02, 74.54% of the businesses on the unique list of available prime contractors were obtained from SBBC’s records and government certification lists. Willing businesses identified through the business association membership lists and the business community meeting represents 25.46% of the available businesses.



² See generally *Croson*, 488 U.S. 469 (1989).

Table 7.02: Distribution of Prime Contractor Availability Data Sources, All Industries

Sources	M/WBEs Percentage	Non M/WBEs Percentage	Source Percentage
Prime Contractor Utilization	11.67%	42.83%	23.61%
Certification Lists	61.87%	33.31%	50.93%
Subtotal	73.54%	76.14%	74.54%
Willingness Survey	26.46%	23.86%	25.46%
Subtotal	26.46%	23.86%	25.46%
Grand Total*	100.00%	100.00%	100.00%

*The percentages may not total 100 percent due to rounding

A distribution of available businesses by source was also calculated for each industry. As noted in Table 7.03, 85.09% of the construction businesses identified were derived from SBBC’s records, and government certification lists. Companies identified through the business association membership lists and the business community meeting registration lists represent 14.91% of the willing businesses.

Table 7.03: Distribution of Prime Contractor Availability Data Sources, Construction

Sources	M/WBEs Percentage	Non M/WBEs Percentage	Source Percentage
Prime Contractor Utilization	9.77%	25.84%	17.97%
Certification Lists	77.73%	56.93%	67.11%
Subtotal	87.50%	82.77%	85.09%
Willingness Survey	12.50%	17.23%	14.91%
Subtotal	12.50%	17.23%	14.91%
Grand Total*	100.00%	100.00%	100.00%

*The percentages may not total 100 percent due to rounding

Table 7.04 depicts the data sources for the available professional services prime contractors. As noted, 65.39% of the professional services businesses identified were derived from SBBC’s records, government agencies’ records, and government certification lists. Companies identified through the business association membership lists represent 34.61% of the willing businesses.



Table 7.04: Distribution of Prime Contractor Availability Data Sources, Professional services

Sources	M/WBEs Percentage	Non M/WBEs Percentage	Source Percentage
Prime Contractor Utilization	3.20%	12.66%	6.05%
Certification Lists	64.78%	46.72%	59.34%
Subtotal	67.98%	59.39%	65.39%
Willingness Survey	32.02%	40.61%	34.61%
Subtotal	32.02%	40.61%	34.61%
Grand Total*	100.00%	100.00%	100.00%

*The percentages may not total 100 percent due to rounding

Table 7.05 depicts the data sources for the available contractual services prime contractors. As noted, 80.32% of the contractual services businesses identified were derived from SBBC’s records and government certification lists. Companies identified through the business association membership lists and the business community meeting registration lists represent 19.68% of the willing businesses.

Table 7.05: Distribution of Prime Contractor Availability Data Sources, Contractual Services

Sources	M/WBEs Percentage	Non M/WBEs Percentage	Source Percentage
Prime Contractor Utilization	20.43%	46.05%	29.89%
Certification Lists	58.82%	36.10%	50.43%
Subtotal	79.25%	82.15%	80.32%
Willingness Survey	20.75%	17.85%	19.68%
Subtotal	20.75%	17.85%	19.68%
Grand Total*	100.00%	100.00%	100.00%

*The percentages may not total 100 percent due to rounding

Table 7.06 depicts the data sources for the available commodities prime contractors. As noted, 79.78% of the commodities that businesses identified were derived from SBBC’s records and government certification lists. Companies identified through the business



association membership lists and the business community meeting registration lists represent 20.22% of the willing businesses.

Table 7.06: Distribution of Prime Contractor Availability Data Sources, Commodities

Sources	M/WBEs Percentage	Non M/WBEs Percentage	Source Percentage
Prime Contractor Utilization	15.14%	54.34%	34.74%
Certification Lists	65.43%	24.65%	45.04%
Subtotal	80.56%	78.99%	79.78%
Willingness Survey	19.44%	21.01%	20.22%
Subtotal	19.44%	21.01%	20.22%
Grand Total*	100.00%	100.00%	100.00%

*The percentages may not total 100 percent due to rounding

III. CAPACITY

The second component of the availability requirement set forth in *Croson* is the capacity or ability of a business to perform the contracts that a jurisdiction awards.³ However, capacity requirements are not delineated in *Croson*. In those cases where capacity has been considered, the matter has involved large, competitively bid construction prime contracts. Therefore, the capacity of willing market area businesses to contract with SBBC was assessed through several measures:

- *Size Analysis*: A distribution of contracts by size and industry was calculated to determine the average size of SBBC’s purchase orders. Contract size is a determinant of the capacity that a willing business needs to be competitive.
- *Largest Awards*: The analysis classified the largest purchase orders that SBBC awarded by ethnic group, gender group, and industry to determine the demonstrated capacity of M/WBEs to perform large purchase orders.
- *Certification*: The certification procedures used by SBBC and local certifying agencies were reviewed to determine if they met the standard found to be an adequate measure of capacity in *Contractors Association of Eastern Pennsylvania v. City of Philadelphia*.⁴

³ *Croson*, 488 U.S. 469.

⁴ 91 F.3d at 586.



- *Capacity Assessment:* The capacity assessment questionnaire designed to elicit information on economic indicators of a business's ability to perform SBBC's purchase orders was administered to assess the relative capacity of M/WBEs and similarly situated non-M/WBEs.

A. *Size of Contracts Analyzed*

SBBC's construction, professional services, contractual services, and commodities awards were analyzed to determine the size of awarded purchase orders in order to gauge the capacity required to perform on SBBC's contracts.

For the size analysis, SBBC's purchase orders were grouped into nine dollar ranges.⁵ Each industry was analyzed to determine the number and percentage of contracts that fell within the nine size categories. The size distribution of purchase orders awarded to Non-M/WBEs was then compared to the size distribution of purchase orders awarded to Caucasian Female-owned Businesses, Minority Female-owned Businesses, and Minority Male-owned Businesses.

1. All Industry Purchase Orders by Size

Table 7.07 depicts all purchase orders awarded within the nine dollar ranges. Purchase orders valued at less than \$25,000 were 99.52%. Those less than \$50,000 were 99.75%. Those less than \$195,000 were 99.84% and those less than \$500,000 were 99.99%.

2. Construction Purchase Orders by Size

Table 7.08 depicts the construction purchase orders awarded within the nine dollar ranges. Purchase orders valued at less than \$25,000 were 65.04%. Those less than \$50,000 were 72.68%. Those less than \$195,000 were 91.06% and those less than \$500,000 were 96.09%.

3. Professional Services Purchase Orders by Size

Table 7.09 depicts professional services purchase orders within the nine dollar ranges. Purchase orders valued at less than \$25,000 were 61.65%. Those less than \$50,000 were 66.92%. Those less than \$195,000 were 88.72% and those less than \$500,000 were 95.49%.

4. Contractual Services Purchase Orders by Size

Table 7.10 depicts contractual services purchase orders within the nine dollar ranges. Purchase orders valued at less than \$25,000 were 93.15%. Those less than \$50,000 were

⁵ The nine dollar ranges are \$1 to \$4,999, \$5,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$194,999, \$195,000 to \$324,999, \$325,000 to \$499,999, \$500,000 to \$999,999, \$1,000,000 to \$2,999,999, and \$3,000,000 and greater.



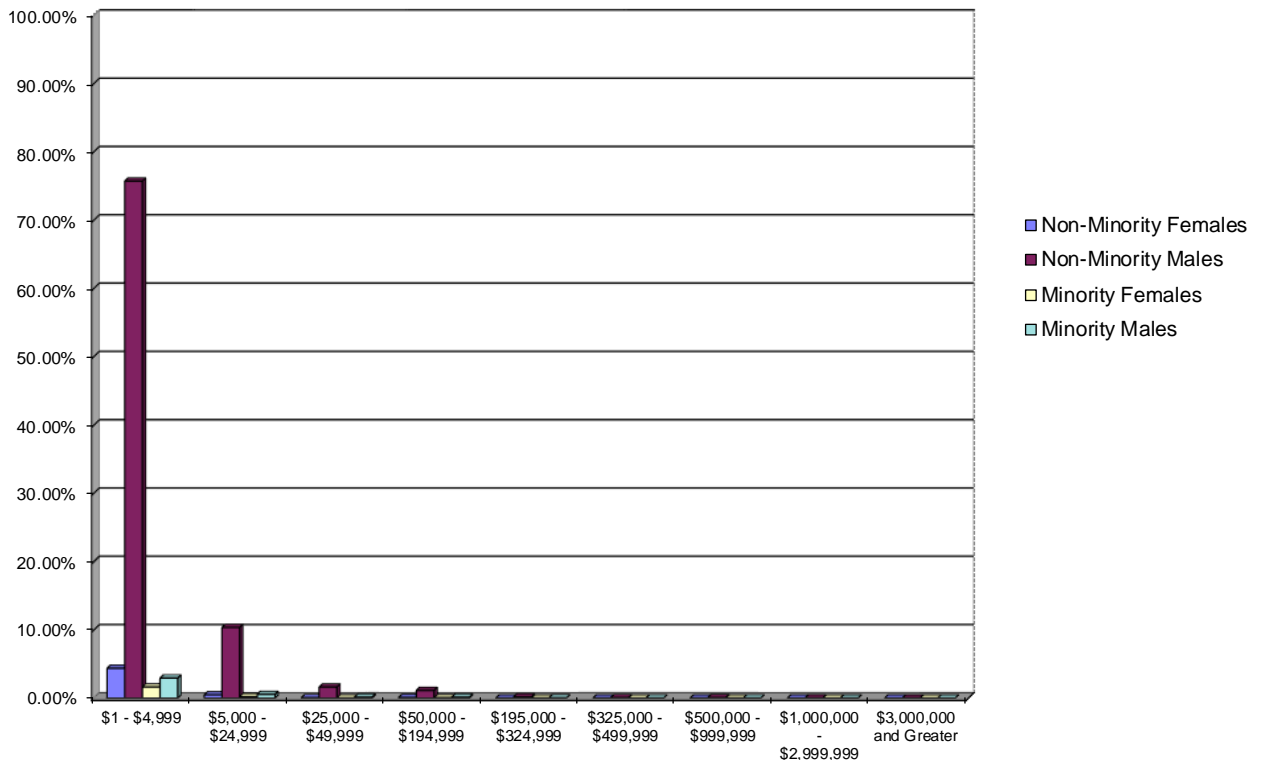
95.75%. Those less than \$195,000 were 98.91% and those less than \$500,000 were 99.61%.

5. Commodities Purchase Orders by Size

Table 7.11 depicts commodities purchase orders within the nine dollar ranges. Purchase orders valued at less than \$25,000 were 97.31%. Those less than \$50,000 were 98.97%. Those less than \$195,000 were 99.79% and those less than \$500,000 were 99.95%.

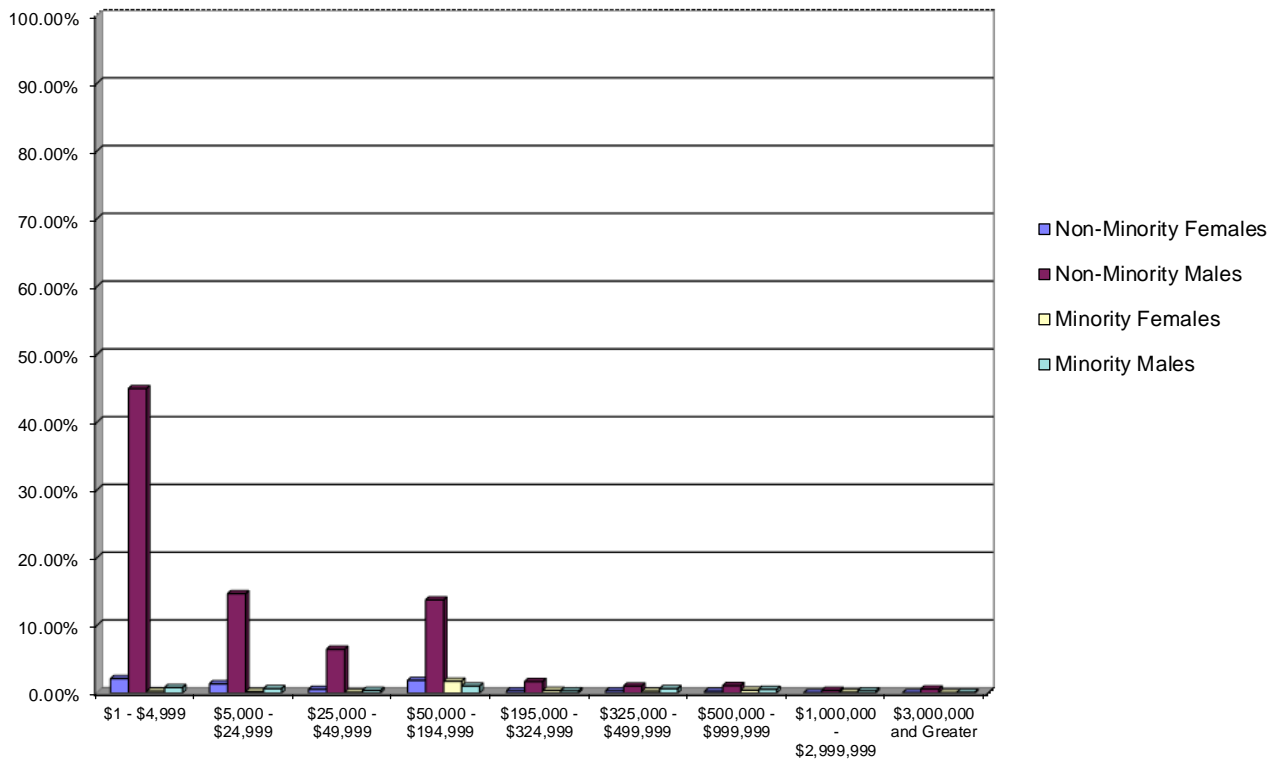
Table 7.07: All Industry Purchase Orders by Size, Fiscal Years July 1, 2008, to June 30, 2013

Size	Non-Minority				Minority				Total	
	Females		Males		Females		Males			
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
\$1 - \$4,999	4,861	4.38%	84,127	75.72%	1,809	1.63%	3,267	2.94%	94,064	84.66%
\$5,000 - \$24,999	542	0.49%	11,509	10.36%	218	0.20%	604	0.54%	12,873	11.59%
\$25,000 - \$49,999	67	0.06%	1,811	1.63%	33	0.03%	164	0.15%	2,075	1.87%
\$50,000 - \$194,999	102	0.09%	1,244	1.12%	64	0.06%	156	0.14%	1,566	1.41%
\$195,000 - \$324,999	12	0.01%	177	0.16%	8	0.01%	49	0.04%	246	0.22%
\$325,000 - \$499,999	12	0.01%	70	0.06%	5	0.00%	16	0.01%	103	0.09%
\$500,000 - \$999,999	13	0.01%	83	0.07%	8	0.01%	17	0.02%	121	0.11%
\$1,000,000 - \$2,999,999	2	0.00%	29	0.03%	3	0.00%	10	0.01%	44	0.04%
\$3,000,000 and Greater	1	0.00%	11	0.01%	1	0.00%	2	0.00%	15	0.01%
Total	5,612	5.05%	99,061	89.16%	2,149	1.93%	4,285	3.86%	111,107	100.00%



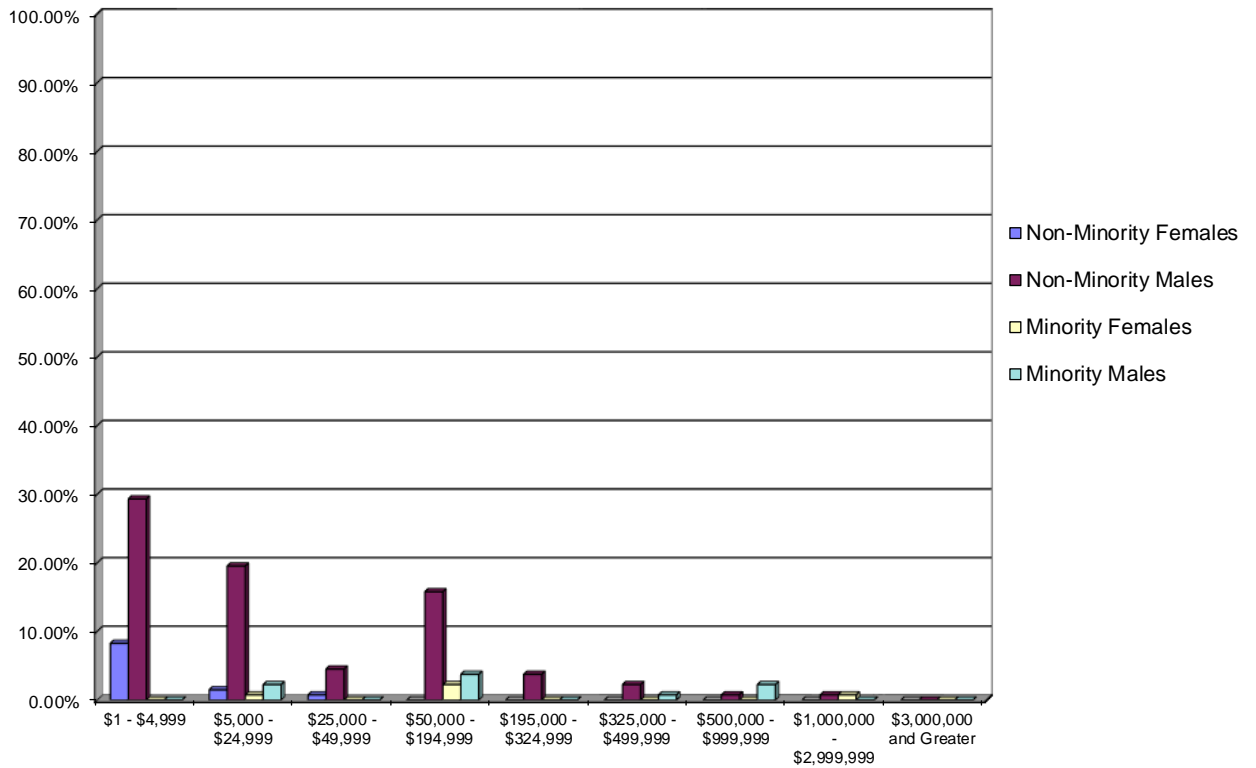
**Table 7.08: Construction Purchase Orders by Size,
Fiscal Years July 1, 2008, to June 30, 2013**

Size	Non-Minority				Minority				Total	
	Females		Males		Females		Males			
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
\$1 - \$4,999	39	2.13%	821	44.91%	5	0.27%	15	0.82%	880	48.14%
\$5,000 - \$24,999	25	1.37%	268	14.66%	4	0.22%	12	0.66%	309	16.90%
\$25,000 - \$49,999	10	0.55%	118	6.46%	2	0.11%	7	0.38%	137	7.49%
\$50,000 - \$194,999	34	1.86%	251	13.73%	32	1.75%	19	1.04%	336	18.38%
\$195,000 - \$324,999	6	0.33%	31	1.70%	7	0.38%	6	0.33%	50	2.74%
\$325,000 - \$499,999	6	0.33%	19	1.04%	5	0.27%	12	0.66%	42	2.30%
\$500,000 - \$999,999	5	0.27%	20	1.09%	8	0.44%	10	0.55%	43	2.35%
\$1,000,000 - \$2,999,999	1	0.05%	7	0.38%	2	0.11%	6	0.33%	16	0.88%
\$3,000,000 and Greater	1	0.05%	11	0.60%	1	0.05%	2	0.11%	15	0.82%
Total	127	6.95%	1,546	84.57%	66	3.61%	89	4.87%	1,828	100.00%



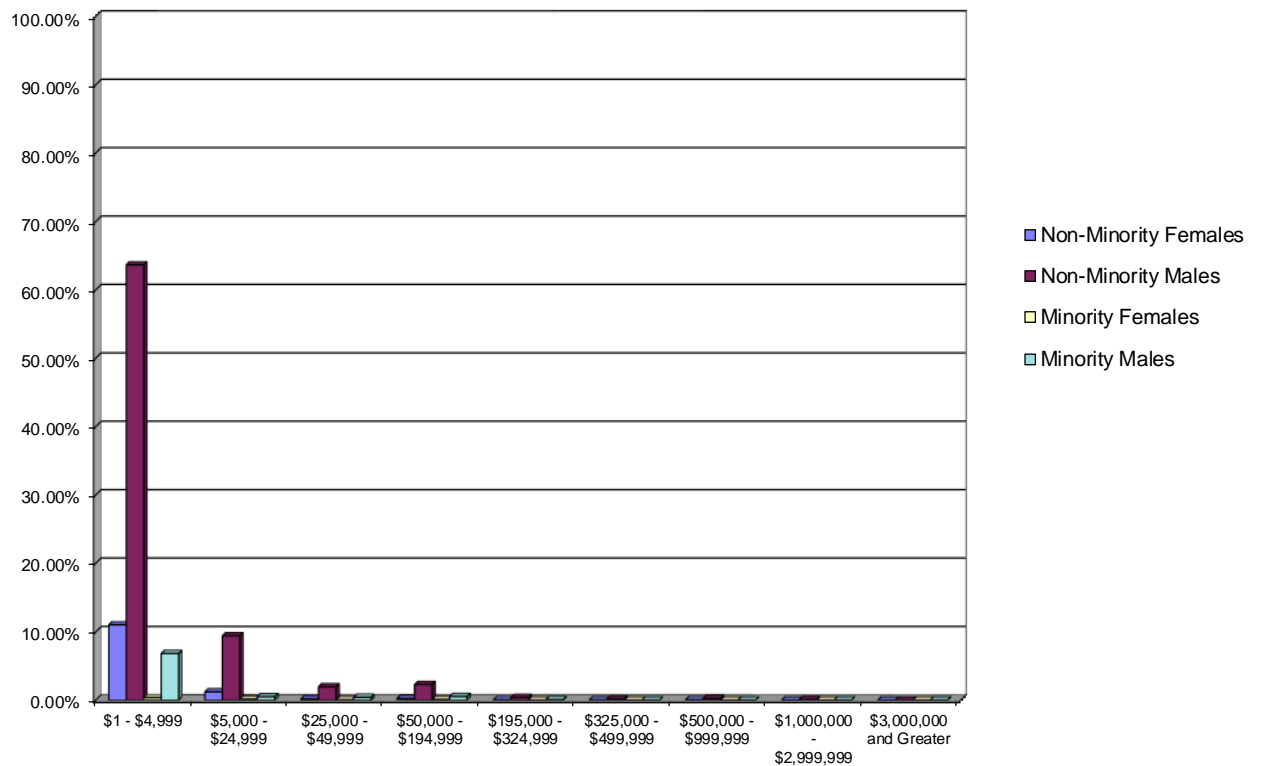
**Table 7.09: Professional Services Purchase Orders by Size,
Fiscal Years July 1, 2008, to June 30, 2013**

Size	Non-Minority				Minority				Total	
	Females		Males		Females		Males			
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
\$1 - \$4,999	11	8.27%	39	29.32%	0	0.00%	0	0.00%	50	37.59%
\$5,000 - \$24,999	2	1.50%	26	19.55%	1	0.75%	3	2.26%	32	24.06%
\$25,000 - \$49,999	1	0.75%	6	4.51%	0	0.00%	0	0.00%	7	5.26%
\$50,000 - \$194,999	0	0.00%	21	15.79%	3	2.26%	5	3.76%	29	21.80%
\$195,000 - \$324,999	0	0.00%	5	3.76%	0	0.00%	0	0.00%	5	3.76%
\$325,000 - \$499,999	0	0.00%	3	2.26%	0	0.00%	1	0.75%	4	3.01%
\$500,000 - \$999,999	0	0.00%	1	0.75%	0	0.00%	3	2.26%	4	3.01%
\$1,000,000 - \$2,999,999	0	0.00%	1	0.75%	1	0.75%	0	0.00%	2	1.50%
\$3,000,000 and Greater	0	0.00%	-	0.00%	0	0.00%	0	0.00%	-	0.00%
Total	14	10.53%	102	76.69%	5	3.76%	12	9.02%	133	100.00%



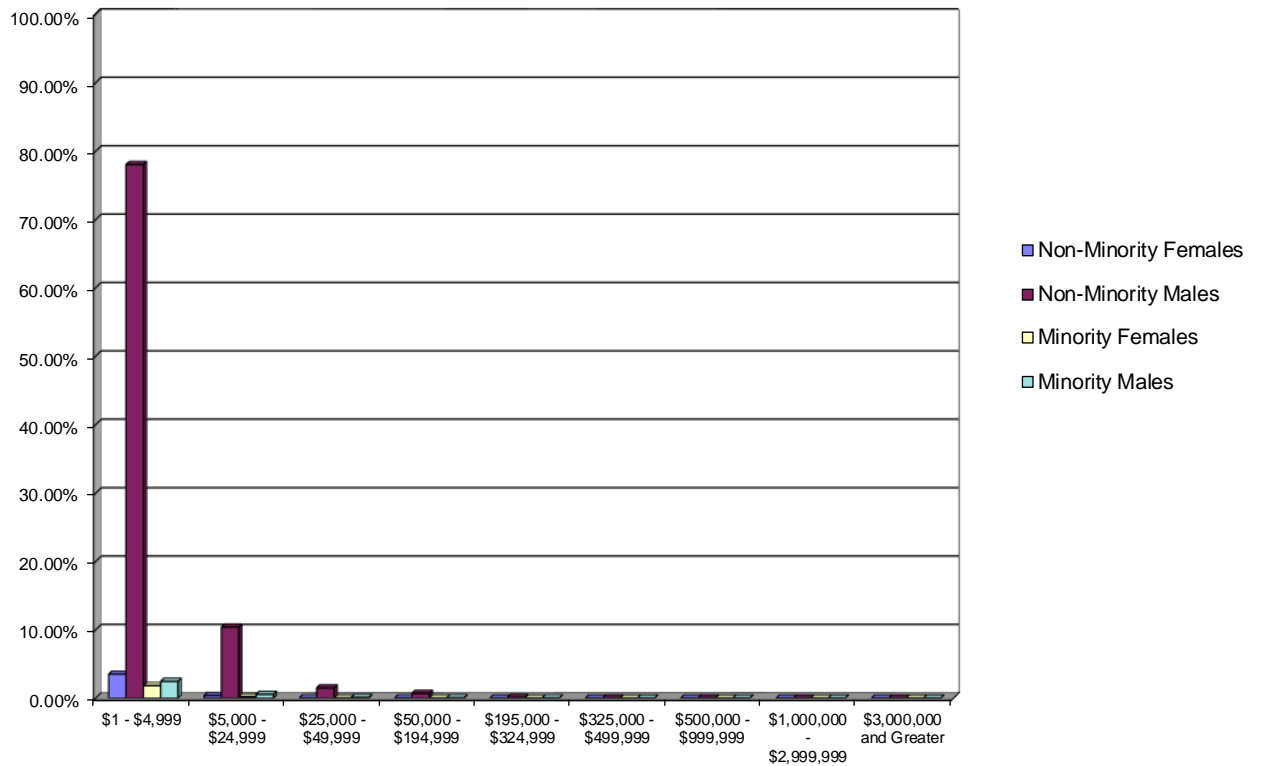
**Table 7.10: Contractual Services Purchase Orders by Size,
Fiscal Years July 1, 2008, to June 30, 2013**

Size	Non-Minority				Minority				Total	
	Females		Males		Females		Males			
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
\$1 - \$4,999	1,448	11.03%	8,358	63.65%	47	0.36%	897	6.83%	10,750	81.86%
\$5,000 - \$24,999	159	1.21%	1,237	9.42%	20	0.15%	67	0.51%	1,483	11.29%
\$25,000 - \$49,999	23	0.18%	258	1.96%	6	0.05%	54	0.41%	341	2.60%
\$50,000 - \$194,999	32	0.24%	301	2.29%	12	0.09%	70	0.53%	415	3.16%
\$195,000 - \$324,999	6	0.05%	51	0.39%	1	0.01%	9	0.07%	67	0.51%
\$325,000 - \$499,999	4	0.03%	21	0.16%	0	0.00%	0	0.00%	25	0.19%
\$500,000 - \$999,999	6	0.05%	31	0.24%	0	0.00%	0	0.00%	37	0.28%
\$1,000,000 - \$2,999,999	1	0.01%	13	0.10%	0	0.00%	0	0.00%	14	0.11%
\$3,000,000 and Greater	0	0.00%	-	0.00%	0	0.00%	0	0.00%	-	0.00%
Total	1,679	12.79%	10,270	78.21%	86	0.65%	1,097	8.35%	13,132	100.00%



**Table 7.11: Commodities Purchase Orders by Size,
Fiscal Years July 1, 2008, to June 30, 2013**

Size	Non-Minority				Minority				Total	
	Females		Males		Females		Males			
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
\$1 - \$4,999	3,363	3.50%	74,909	78.02%	1,757	1.83%	2,355	2.45%	82,384	85.80%
\$5,000 - \$24,999	356	0.37%	9,978	10.39%	193	0.20%	522	0.54%	11,049	11.51%
\$25,000 - \$49,999	33	0.03%	1,429	1.49%	25	0.03%	103	0.11%	1,590	1.66%
\$50,000 - \$194,999	36	0.04%	671	0.70%	17	0.02%	62	0.06%	786	0.82%
\$195,000 - \$324,999	0	0.00%	90	0.09%	0	0.00%	34	0.04%	124	0.13%
\$325,000 - \$499,999	2	0.00%	27	0.03%	0	0.00%	3	0.00%	32	0.03%
\$500,000 - \$999,999	2	0.00%	31	0.03%	0	0.00%	4	0.00%	37	0.04%
\$1,000,000 - \$2,999,999	0	0.00%	8	0.01%	0	0.00%	4	0.00%	12	0.01%
\$3,000,000 and Greater	0	0.00%	-	0.00%	0	0.00%	0	0.00%	-	0.00%
Total	3,792	3.95%	87,143	90.76%	1,992	2.07%	3,087	3.22%	96,014	100.00%



B. Business Capacity Assessment

Neither *Croscon* nor its progeny have given guidance on how to determine if a business is qualified or able to perform public contracting. Consequently, there are no clear methods to define measures of business capacity. A firm's revenue, business size, number of employees, bonding levels, and bidding history are factors that can be used as indicators of capacity. Although these indicators are subject to the effects of marketplace discrimination, the presence of discrimination in SBBC's marketplace is documented in *Chapter 8: Anecdotal Analysis*, *Chapter 9: Prime Contract Disparity Analysis*, *Chapter 10: Subcontract Disparity Analysis*, and *Chapter 11: Regression and Private Sector Analysis*.

To determine the relative capacity of the M/WBEs and Non-M/WBEs enumerated in the availability analysis, an eSurvey was administered. The analysis of business capacity considered annual gross revenue as a proxy for business capacity. Revenue was selected because it is a reflection of a business's contracting activity. This analysis found that Minority Male and Female business revenue and contracting opportunities were limited even when Minority Males and Females and similarly situated Caucasian Males and Females bid on contracts at the same frequency. None of the economic indicators that were assessed accounted for the disproportionate award of contracts to Non-minority Males as documented in *Chapter 9: Prime Contract Disparity Analysis*, and *Chapter 10: Subcontract Disparity Analysis*.

The analysis revealed that Caucasian Males and Females earn higher revenue than Minority Males and Females, with the greatest difference in earnings over \$1 million; Caucasian Males' and Females' and Minority Males' and Females' business earnings were most comparable at the \$500,001 to \$1,000,000 level. The findings discussed below illustrate the impact of independent business characteristics on business capacity.

1. Methodology

a. Data Sample

Inferences about the capacity of businesses identified in the Disparity Study were made from a stratified sample of businesses included in the disparity analysis. The stratified sample of M/WBEs and non-M/WBEs willing to contract with SBBC was drawn from the businesses in the availability and utilization databases. The sample was stratified by ethnicity, gender and industry.

b. Data Analysis

An ordered logistic regression analysis and an analysis of cumulative frequencies were used to analyze the survey data. A statistically significant finding indicates that there is a non-random relationship between the dependent variable and the independent variable. The cumulative frequencies illustrate the distribution of responses by ethnicity, gender, and, in some cases, industry. A Chi-square test of independence was conducted to



determine if there was a statistically significant difference in the frequency of responses by ethnicity and gender.

- ***In the regression coefficient tables***, a finding of statistical significance is denoted by an asterisk (*) when the independent variable is significant at or above the 95% confidence level. Tables of regression results indicate the sign of each variable’s coefficient from the regression output. If the coefficient sign is positive, it indicates that there is a positive relationship between the dependent variable and that independent variable. If the coefficient sign for the independent variable is negative, this implies an inverse relationship between the dependent variable and that independent variable. When the correlation coefficient is close to zero, it indicates that no linear relationship exists.
- ***In the cumulative frequency summary tables***, a finding of statistical significance is denoted by the *p-value*. If the *p-value* is equal to or less than 0.05, the difference is statistically significant at the 95% confidence level.

2. Profile of Respondents

As shown in Table 7.12, the business capacity survey was completed by 102 unique businesses: 23.53% were African American-owned, 0.00% were Subcontinent Asian American or Asian-Pacific American-owned, 37.25% were Hispanic American-owned, 0.98% were Native American-owned, and 38.24% were Caucasian American-owned. Of the 102 surveys, 52.94% were completed by females of all ethnicities, and 47.06% were completed by males of all ethnicities.

Due to the limited number of responses, ethnic groups were combined and were analyzed aggregately as “Minority Males” and “Minority Females” in the cumulative frequency tables. In the regression coefficient tables by ethnicity and gender, no tables are presented for Caucasian Males because there were too few data points. Regression coefficient tables are presented by industry, MBEs (which includes Minority Males and Females), Non-MBEs (which includes Caucasian Males and Females), and Caucasian Females.

Table 7.12: Ethnicity and Gender of Businesses

Response	African American	Hispanic American	Native American	Caucasian American	Total
Female	7.84%	20.59%	0.98%	23.53%	52.94%
Male	15.69%	16.67%	0.00%	14.71%	47.06%
Total	23.53%	37.25%	0.98%	38.24%	100.00%

$\chi^2=5.832$, $df = 3$, $p \text{ value} = 0.1201$

As shown in Table 7.13, 13.73% of businesses provided construction services; 8.82% of businesses provided professional services; 38.24% of businesses provided contractual services; and 39.22% of businesses provided commodities.



Table 7.13: Primary Industry

Response	Minority Females	Minority Males	Caucasian Females	Caucasian Males	Total
Construction	8.82%	14.71%	9.80%	5.88%	39.22%
Professional Services	3.92%	1.96%	4.90%	2.94%	13.73%
Contractual Services	14.71%	12.75%	4.90%	5.88%	38.24%
Commodities	1.96%	2.94%	3.92%	0.00%	8.82%
Total Percent	29.41%	32.35%	23.53%	14.71%	100.00%
Total Number	30	33	24	15	102

3. Capacity Analysis

a. Introduction

Several independent economic indicators were examined to determine the effect of M/WBEs and Non-M/WBEs’ business characteristics on their reported annual gross revenue. Discrimination can depress an M/WBE’s revenue, contracting activity, and number of employees. This analysis shows that contracting opportunities and revenue for M/WBEs are limited even when M/WBEs are similarly situated and bid on SBBC’s contracts at the same frequency as Non-minority Males. Of the metrics considered in this analysis, Non-M/WBEs are not awarded contracts more frequently because of any single measure of capacity or a combination of the capacity measures.

4. Business Annual Gross Revenue by Industry

Business annual gross revenue regression coefficient tables were prepared by industry for all industries, construction, and contractual services. Analyses regarding businesses in the professional services and commodities industries were not performed separately as there were too few data points in the professional services and commodities industries to determine significant relationships. However, these two industries are included in the “all industries” tables.

a. Business Annual Gross Revenue: All Industries

As shown in Table 7.14 there is a significant difference ($p=0.01$) in the frequencies of businesses’ annual gross revenue, according to the ethnicity and gender of the business owner. Overall, 13.73% of businesses earned up to \$50,000; 8.82% of businesses earned \$50,001 to \$100,000; 26.47% of businesses earned \$100,001 to \$500,000; 21.57% of businesses earned \$500,001 to \$1,000,000; 29.41% of businesses earned over \$1 million. Also, 53.33% of Non-minority Males and 50% of Non-minority Females earned over \$1 million dollars, whereas only 18.18% of Non-minority Males and 13.33% of Non-minority Females earned over \$1 million.



Table 7.14: Annual Gross Revenue: All Industries

Response	Minority Females	Minority Males	Caucasian Females	Caucasian Males	Total
\$50,000 or less	23.33%	12.12%	12.50%	0.00%	13.73%
\$50,001 to \$100,000	10.00%	9.09%	4.17%	13.33%	8.82%
\$100,001 to \$500,000	43.33%	33.33%	4.17%	13.33%	26.47%
\$500,001 to \$1,000,000	10.00%	27.27%	29.17%	20.00%	21.57%
Over \$1,000,000	13.33%	18.18%	50.00%	53.33%	29.41%
Total Percent	100.00%	100.00%	100.00%	100.00%	100.00%
Total Number	30	33	24	15	102

$\chi^2=27.9, df=12, p \text{ value} = 0.01$

Chart 7.01 further illustrates that Minority Males and Females earn less annually than Non-minority Males and Females. The revenue of Minority Males and Females is more likely to be in the \$100,001 to \$500,000 range while the revenue of Non-minority Males and Females is more likely to be in the over \$1 million range.

Chart 7.01: Annual Gross Revenue: All Industries

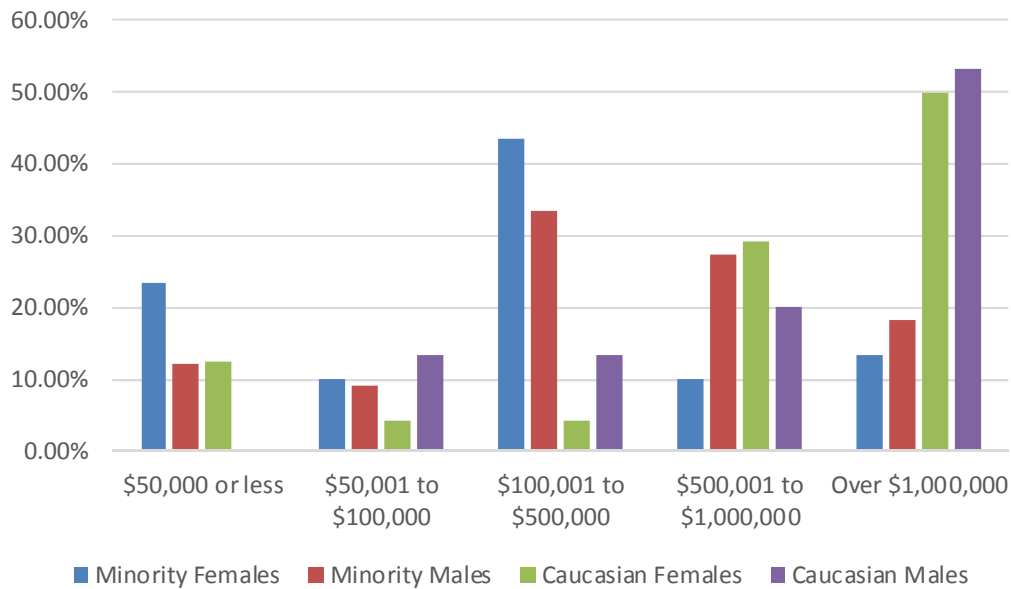


Table 7.15 presents the results of the ordered logistic regression conducted to determine how the annual gross revenue of a business in all industries is impacted by independent business characteristics.

Table 7.15: Annual Gross Revenue Ordered Logistic Regression: All Industries

Annual Gross Revenue	Coefficient	Significance	Standard Error	p-value
Number of Contracts	0.432751	*	0.165890	0.009
Years of Operation	0.235494		0.237093	0.321
Owner's Years of Experience	0.193663		0.269153	0.472
Number of Employees	1.451697	*	0.271488	0.000
Bonding Amount	0.376214	*	0.126705	0.003
Private Sector Revenue	0.000761		0.005436	0.889
Owner's Education	0.072962		0.130206	0.575
Caucasian Female	-1.016073		0.650920	0.119
Minority ⁶	-1.100086		0.563932	0.051

Key findings of the logistic regression of annual gross revenue across all industries are summarized below:

- Businesses whose annual gross revenue is derived from more individual contracts have statistically significant higher annual gross revenue.
- Businesses that have more current employees have statistically significant higher annual gross revenue.
- Businesses that have larger bonding amount have statistically significant higher annual gross revenue.
- Businesses that are owned by Caucasian Females are more likely to have lower annual gross revenue, but not at a statistically significant level.
- Businesses that are owned by minorities are more likely to have lower annual gross revenue, but not at a statistically significant level.

b. Business Annual Gross Revenue: Construction

Table 7.16 presents the results of the ordered logistic regression conducted to determine how annual gross revenue of a business in the construction industry is impacted by independent business characteristics.



⁶ Minority denotes African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, and Native Americans.

Table 7.16: Annual Gross Revenue Ordered Logistic Regression: Construction

Annual Gross Revenue	Coefficient	Significance	Standard Error	p-value
Number of Contracts	0.452547		0.483922	0.350
Years of Operation	0.518846		0.740169	0.483
Owner's Years of Experience	-0.179315		1.016223	0.860
Number of Employees	1.901549	*	0.702255	0.007
Bonding Amount	1.454177	*	0.360610	0.000
Private Sector Revenue	-0.004021		0.009904	0.685
Owner's Education	-0.107800		0.306512	0.725
Caucasian Female	1.223007		1.192667	0.305
Minority ⁷	0.363272		1.044441	0.728

Key findings of the logistic regression of annual gross revenue within the construction industry are summarized below:

- Businesses in the construction industry that have more current employees have statistically significant higher annual gross revenue.
- Businesses in the construction industry that have a larger bonding amount have statistically significant higher annual gross revenue.
- Businesses in the construction industry that are owned by Caucasian Females are more likely to have higher annual gross revenue, but not at a statistically significant level.
- Businesses in the construction industry that are owned by minorities are more likely to have higher annual gross revenue, but not at a statistically significant level.

c. Business Annual Gross Revenue: Professional Services

Table 7.17 presents the results of the ordered logistic regression conducted to determine how annual gross revenue of a business in the professional services industry is impacted by independent business characteristics.



⁷ Minority denotes African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, and Native Americans.

**Table 7.17: Annual Gross Revenue Ordered Logistic Regression:
Professional Services**

Annual Gross Revenue	Coefficient	Significance	Standard Error	p-value
Number of Contracts	0.432751	*	0.165890	0.009
Years of Operation	0.235494		0.237093	0.321
Owner's Years of Experience	0.193663		0.269153	0.472
Number of Employees	1.451697	*	0.271488	0.000
Bonding Amount	0.376214	*	0.126705	0.003
Private Sector Revenue	0.000761		0.005436	0.889
Owner's Education	0.072962		0.130206	0.575
Caucasian Female	-1.016073		0.650920	0.119
Minority ⁸	-1.100086		0.563932	0.051

Key findings of the logistic regression of annual gross revenue within the professional services industry are summarized below:

- Businesses in the professional services industry whose annual gross revenue is derived from more individual contracts have statistically significant higher annual gross revenue.
- Businesses in the professional services industry that have more current employees have statistically significant higher annual gross revenue.
- Businesses in the professional services industry that have larger bonding amount have statistically significant higher annual gross revenue.
- Businesses in the professional services industry that are owned by Caucasian Females are more likely to have lower annual gross revenue, but not at a statistically significant level.
- Businesses in the professional services industry that are owned by minorities are more likely to have lower annual gross revenue, but not at a statistically significant level.

5. Business Annual Gross Revenue by Business Classification

The business annual gross revenue was analyzed for Non-MBEs, WBEs, and MBEs. Analysis regarding Caucasian Males was not performed separately as there were too few responses in the sample to conduct the analysis. Caucasian male responses are included in the Non-MBE tables.



⁸ Minority denotes businesses owned by African American, Asian-Pacific American, Subcontinent American, Hispanic American, and Native American Males and Females.

a. Business Annual Gross Revenue: Non-MBE

Table 7.18 illustrates how the annual gross revenue of businesses owned by Caucasian Males and Caucasian Females is impacted by independent business characteristics.

Table 7.18: Annual Gross Revenue Ordered Logistic Regression: Non-MBE

Annual Gross Revenue	Coefficient	Significance	Standard Error	p-value
Number of Contracts	-0.090878		0.275244	0.741
Years of Operation	0.188339		0.405665	0.642
Owner's Years of Experience	-0.800391		0.704985	0.256
Number of Employees	1.887413	*	0.485420	0.000
Bonding Amount	0.513202	*	0.209008	0.014
Private Sector Revenue	-0.001924		0.009936	0.846
Owner's Education	-0.742322	*	0.282074	0.008

Key findings of the logistic regression of annual gross revenue for Non-MBEs are summarized below:

- Non-MBEs that have more current employees have statistically significant higher annual gross revenue.
- Non-MBEs that have a larger bonding amount have statistically significant higher annual gross revenue.
- Non-MBEs whose owners have a higher level of education are more likely to have statistically significant higher annual gross revenue.

b. Business Annual Gross Revenue: All Industries, WBEs

Table 7.19 illustrates how the annual gross revenue of businesses owned by Caucasian Females is impacted by independent business characteristics.

Table 7.19: Annual Gross Revenue Ordered Logistic Regression: WBEs

Annual Gross Revenue	Coefficient	Significance	Standard Error	p-value
Number of Contracts	-0.973124		0.541255	0.072
Years of Operation	0.348015		0.617035	0.573
Owner's Years of Experience	-2.421247	*	1.050598	0.021
Number of Employees	3.537253	*	1.184724	0.003
Bonding Amount	0.259198		0.340592	0.447
Private Sector Revenue	0.003069		0.019534	0.875
Owner's Education	-0.818484		0.420510	0.052



Key findings of the logistic regression of annual gross revenue for WBEs are summarized below:

- WBEs whose owners have more experience have statistically significant lower gross revenue.
- WBEs that have more current employees have statistically significant higher gross revenue.

c. Business Annual Gross Revenue: MBEs

Table 7.20 illustrates how the annual gross revenue of businesses owned by Minority Males and Minority Females is impacted by independent business characteristics⁹.

Table 7.20: Annual Gross Revenue Ordered Logistic Regression: MBEs

Annual Gross Revenue	Coefficient	Significance	Standard Error	p-value
Number of Contracts	0.596454	*	0.216078	0.006
Years of Operation	0.793467	*	0.316113	0.012
Owner's Years of Experience	0.043037		0.333535	0.897
Number of Employees	1.215806	*	0.320337	0.000
Bonding Amount	0.257602		0.173639	0.138
Private Sector Revenue	0.000594		0.006738	0.930
Owner's Education	0.494629	*	0.173779	0.004

Key findings of the logistic regression of annual gross revenue for MBEs are summarized below:

- MBEs whose annual gross revenue is derived from more individual contracts have statistically significant higher gross revenue.
- MBEs that have been in operation longer are more likely to have statistically significant higher annual gross revenue.
- MBEs that have more current employees have statistically significant higher gross revenue.
- MBEs whose owners have higher education have statistically significant higher gross revenue.

6. Current Employees by Ethnicity, All Industries

Because the number of employees had a positive correlation with annual gross revenue for all businesses, the following tables are presented. As shown in Table 7.21, there is a significant difference (p=0.01) in the frequencies of businesses' number of current employees by ethnicity and gender. Overall, 46.53% of business had less than five employees; 21.78% had six to 10 employees; 17.82% had 11 to 20 employees; 10.89% had 21 to 50 employees; and 2.97% had more than 50 employees. Non-minority Males



⁹ Minority denotes African Americans, Asian-Pacific Americans, Subcontinent Americans, Hispanic Americans, and Native Americans.

and Caucasian Females are the only ethnic and gender groups who reported employing a workforce of over 50 employees.

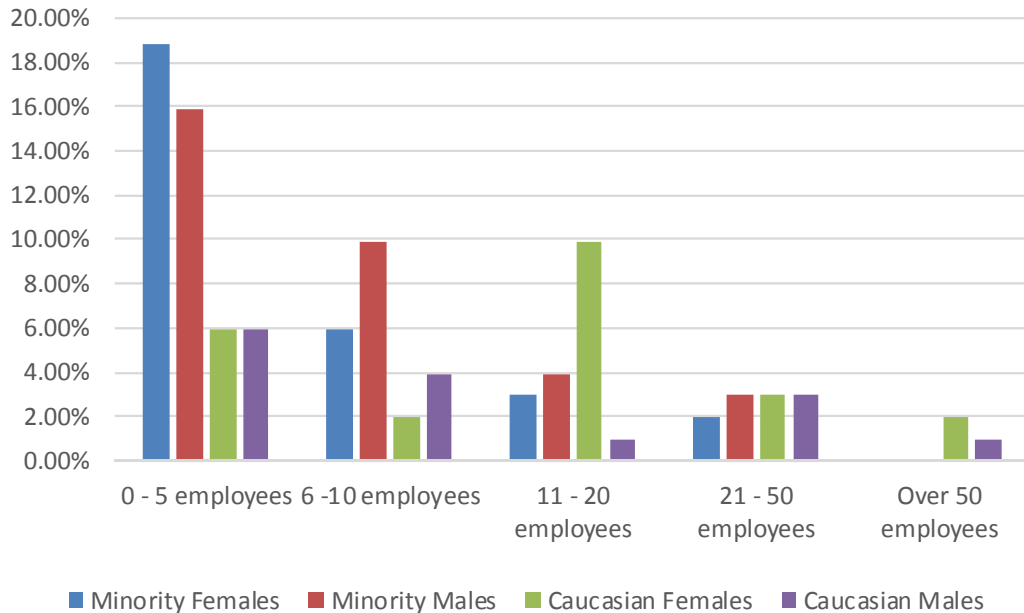
Table 7.21: Current Number of Employees

Response	Minority Females	Minority Males	Caucasian Females	Caucasian Males	Total
0 - 5 employees	18.81%	15.84%	5.94%	5.94%	46.53%
6 -10 employees	5.94%	9.90%	1.98%	3.96%	21.78%
11 - 20 employees	2.97%	3.96%	9.90%	0.99%	17.82%
21 - 50 employees	1.98%	2.97%	2.97%	2.97%	10.89%
Over 50 employees	0.00%	0.00%	1.98%	0.99%	2.97%
Total Percent	29.70%	32.67%	22.77%	14.85%	100.00%
Total Number	30	33	23	15	101

$\chi^2=25.27, df=12, p\text{ value} = 0.01$

Chart 7.02 illustrates that MBEs have fewer employees than Caucasian Females and Non-minority Males. MBEs are more likely to have 0 to 5 employees than Non-minority Females and Non-minority Males.

Chart 7.02: Current Number of Employees



7. Number of Contracts and Frequency of Bidding, All Industries

As shown in Table 7.22, there is a significant difference ($p=0.0014$) in the frequencies of annual contracts performed according to the ethnicity and gender of the business owner. The finding that Non-M/WBEs are awarded more contracts than M/WBEs is also demonstrated in *Chapter 3: Prime Contractor Utilization Analysis*.



Aside from the greater number of workers employed by Non-minority Males and Females, which have been acknowledged by the court to be an unreliable indicator of capacity, none of the factors considered account for Non-MBEs' disproportionate award of contracts. Table 7.22 further illustrates that 9.80% of Non-minority Males were awarded more than twenty (20) contracts, compared to 4.90% of Minority Females, 5.88% of Minority Males, and 16.67% of Non-minority Females.

Table 7.22: Number of Annual Contracts

Response	Minority Females	Minority Males	Caucasian Females	Caucasian Males	Total
1 contract	4.90%	1.96%	1.96%	0.98%	9.80%
2 - 5 contracts	7.84%	10.78%	1.96%	1.96%	22.55%
6 - 10 contracts	8.82%	8.82%	0.98%	0.98%	19.61%
11 - 20 contracts	2.94%	4.90%	1.96%	0.98%	10.78%
Over 20 contracts	4.90%	5.88%	16.67%	9.80%	37.25%
Total Percent	29.41%	32.35%	23.53%	14.71%	100.00%
Total Number	30	33	24	15	102

$\chi^2=31.95, df=12, p\text{ value} = 0.0014$

As shown in Table 7.23 there is no significant difference ($p=0.17$) in the frequencies of bid or qualifications submissions by ethnicity and gender. Table 6.23 illustrates that 40.91% of Minority Females and 33.33% of Minority Males submitted bids or qualifications to SBBC within the past year, and 55.56% of Caucasian Females submitted bids or qualifications to SBBC while 16.67% of Non-minority Males submitted bids or qualifications to SBBC.

Table 7.23: Submitted a Bid or Qualifications to SBBC

Response	Minority Females	Minority Males	Caucasian Females	Caucasian Males	Total
Yes	40.91%	33.33%	55.56%	16.67%	37.80%
No	59.09%	66.67%	44.44%	83.33%	62.20%
Total Percent	100.00%	100.00%	100.00%	100.00%	100.00%
Total Number	22	30	18	12	82

$\chi^2=5.04, df=3, p\text{ value} = 0.17$

8. Conclusion

The analysis shows that the number of purchase orders, the number of employees, and the bonding amount have statistically significant relationships with the business' annual gross revenue in all industries for all ethnic and gender groups. This finding supports an inference that all businesses, regardless of ethnicity or gender, witness an increase in revenue and workers when they are awarded more contracts, when they have more employees, and when they have larger bonding amount.

Because Caucasian Males and Females employ more people, these results may also lead to an assumption that Caucasian Males' and Females' capacity is increased due to their greater number of employees. However, in *North Shore Concrete & Association v. City*



of New York, the court stated in reference to construction contractors that the “firm size is not a reliable indicator of the kind of work a firm can perform.”¹⁰ The court further stated that “it is relatively easy to obtain ‘qualifications’ by hiring additional employees.” Although this court’s opinion specifically references the construction industry, the same elasticity characterizes the professional service industry. In the presence of contracting opportunities, professional service firms have the elasticity to expand their capacity to perform more and larger contracts through subcontracting, joint ventures, and staff augmentation. Therefore, the number of employees is not a reliable indicator of business capacity for either industry.

Considering the metrics reviewed in this analysis, Caucasian Males and Females are not awarded contracts more frequently because of any single business economic indicator or combination of measures. The fact that Caucasian Males and Females are awarded more contracts, and therefore experience higher annual revenue, is likely a function of public and private sector business practices.

C. Largest M/WBE Purchase Orders Awarded by Industry

M/WBEs were awarded large purchase orders in each industry studied. The distribution of the largest purchase orders that SBBC awarded to M/WBEs is depicted in Table 7.24. The utilization analysis shows that M/WBEs demonstrated the capacity to successfully compete for contracts as large as \$7,150,209 in construction, \$1,285,000 in professional services, \$1,273,392 in contractual services, and \$1,452,056 in commodities.

Table 7.24: Largest M/WBE Purchase Orders Awarded by SBBC

Ethnic/Gender Group	Construction	Professional Services	Contractual Services	Commodities
African Americans	\$2,533,057	\$500,659	\$323,262	\$122,590
Asian-Pacific Americans	\$1,575,355	\$1,285,000	\$9,500	\$34,229
Subcontinent Asian Americans	\$0	\$194,686	\$8,000	\$31,640
Hispanic Americans	\$7,150,209	\$946,912	\$254,546	\$1,452,056
Native Americans	\$0	\$0	\$0	\$103,113
Caucasian Female	\$12,184,717	\$33,547	\$1,273,392	\$836,101
Largest Dollar Amounts MBEs	\$7,150,209	\$1,285,000	\$323,262	\$1,452,056
Largest Dollar Amounts WBEs	\$12,184,717	\$1,285,000	\$1,273,392	\$836,101



¹⁰ *N. Shore Concrete & Assoc. v. City of New York*, No. 94-cv-4017, 1998 U.S. Dist. LEXIS 6785 * 25 (E.D.N.Y. Apr. 12, 1998).

IV. PRIME CONTRACTOR AVAILABILITY ANALYSIS

The utilization analysis demonstrates that the majority of the purchase orders are small, requiring limited capacity to perform. Furthermore, the awards that SBBC has made to M/WBEs demonstrate that the capacity of the available businesses is considerably greater than needed to bid on the majority of the purchase orders awarded in the four industries studied.

The prime contractor availability findings for SBBC's market areas are as follows:

A. All Industry Prime Contractor Availability

The distribution of available prime contractors for all industries is summarized in Table 7.25 below.

African Americans account for 13.23% of all industry prime contractors in SBBC's market area.

Asian-Pacific Americans account for 0.87% of all industry prime contractors in SBBC's market area.

Subcontinent Asian Americans account for 1.33% of all industry prime contractors in SBBC's market area.

Hispanic Americans account for 31.83% of all industry prime contractors in SBBC's market area.

Native Americans account for 0.15% of all industry prime contractors in SBBC's market area.

Minority-owned Businesses account for 47.41% of all industry prime contractors in SBBC's market area.

Caucasian Female-owned Businesses account for 14.27% of all industry prime contractors in SBBC's market area.

Minority and Caucasian Female-owned Businesses account for 61.68% of all industry prime contractors in SBBC's market area.

Non-minority Male-owned Businesses account for 38.32% of all industry prime contractors in SBBC's market area.



**Table 7.25: Available All Industry Prime Contractors,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Percent of Businesses
African Americans	13.23%
Asian-Pacific Americans	0.87%
Subcontinent Asian Americans	1.33%
Hispanic Americans	31.83%
Native Americans	0.15%
Caucasian Females	14.27%
Non-minority Males	38.32%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	3.86%
African American Males	9.37%
Asian-Pacific American Females	0.41%
Asian-Pacific American Males	0.47%
Subcontinent Asian American Females	0.47%
Subcontinent Asian American Males	0.86%
Hispanic American Females	9.28%
Hispanic American Males	22.55%
Native American Females	0.08%
Native American Males	0.08%
Caucasian Females	14.27%
Non-minority Males	38.32%
TOTAL	100.00%
Minority and Gender	Percent of Businesses
Minority Females	14.09%
Minority Males	33.32%
Caucasian Females	14.27%
Non-minority Males	38.32%
TOTAL	100.00%
Minority and Females	Percent of Businesses
Minority-owned Businesses	47.41%
Caucasian Female-owned Businesses	14.27%
Minority and Caucasian Female- owned Businesses	61.68%
Non-minority Male-owned Businesses	38.32%
TOTAL	100.00%



B. Construction Prime Contractor Availability

The distribution of available construction prime contractors is summarized in Table 7.26 below.

African Americans account for 15.30% of the construction prime contractors in SBBC's market area.

Asian-Pacific Americans account for 1.53% of the construction prime contractors in SBBC's market area.

Subcontinent Asian Americans account for 0.76% of the construction prime contractors in SBBC's market area.

Hispanic Americans account for 19.12% of the construction prime contractors in SBBC's market area.

Native Americans account for 0.57% of the construction prime contractors in SBBC's market area.

Minority-owned Businesses account for 37.28% of the construction prime contractors in SBBC's market area.

Caucasian Female-owned Businesses account for 11.66% of the construction prime contractors in SBBC's market area.

Minority and Caucasian Female-owned Businesses account for 48.95% of the construction prime contractors in SBBC's market area.

Non-minority Male-owned Businesses account for 51.05% of the construction prime contractors in SBBC's market area.



**Table 7.26: Available Construction Prime Contractors,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Percent of Businesses
African Americans	15.30%
Asian-Pacific Americans	1.53%
Subcontinent Asian Americans	0.76%
Hispanic Americans	19.12%
Native Americans	0.57%
Caucasian Females	11.66%
Non-minority Males	51.05%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	3.44%
African American Males	11.85%
Asian-Pacific American Females	0.96%
Asian-Pacific American Males	0.57%
Subcontinent Asian American Females	0.00%
Subcontinent Asian American Males	0.76%
Hispanic American Females	4.97%
Hispanic American Males	14.15%
Native American Females	0.19%
Native American Males	0.38%
Caucasian Females	11.66%
Non-minority Males	51.05%
TOTAL	100.00%
Minority and Gender	Percent of Businesses
Minority Females	9.56%
Minority Males	27.72%
Caucasian Females	11.66%
Non-minority Males	51.05%
TOTAL	100.00%
Minority and Females	Percent of Businesses
Minority-owned Businesses	37.28%
Caucasian Female-owned Businesses	11.66%
Minority and Caucasian Female- owned Businesses	48.95%
Non-minority Male-owned Businesses	51.05%
TOTAL	100.00%



C. Professional Services Prime Contractor Availability

The distribution of available professional services prime contractors is summarized in Table 7.27 below.

African Americans account for 8.29% of the professional services prime contractors in SBBC's market area.

Asian-Pacific Americans account for 2.50% of the professional services prime contractors in SBBC's market area.

Subcontinent Asian Americans account for 4.21% of the professional services prime contractors in SBBC's market area.

Hispanic Americans account for 47.11% of the professional services prime contractors in SBBC's market area.

Native Americans account for 0.00% of the professional services prime contractors in SBBC's market area.

Minority-owned Businesses account for 62.11% of the professional services prime contractors in SBBC's market area.

Caucasian Female-owned Businesses account for 7.76% of the professional services prime contractors in SBBC's market area.

Minority and Caucasian Female-owned Businesses account for 69.87% of the professional services prime contractors in SBBC's market area.

Non-minority Male-owned Businesses account for 30.13% of the professional services prime contractors in SBBC's market area.



**Table 7.27: Available Professional Services Prime Contractors,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Percent of Businesses
African Americans	8.29%
Asian-Pacific Americans	2.50%
Subcontinent Asian Americans	4.21%
Hispanic Americans	47.11%
Native Americans	0.00%
Caucasian Females	7.76%
Non-minority Males	30.13%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	1.18%
African American Males	7.11%
Asian-Pacific American Females	0.79%
Asian-Pacific American Males	1.71%
Subcontinent Asian American Females	0.66%
Subcontinent Asian American Males	3.55%
Hispanic American Females	11.05%
Hispanic American Males	36.05%
Native American Females	0.00%
Native American Males	0.00%
Caucasian Females	7.76%
Non-minority Males	30.13%
TOTAL	100.00%
Minority and Gender	Percent of Businesses
Minority Females	13.68%
Minority Males	48.42%
Caucasian Females	7.76%
Non-minority Males	30.13%
TOTAL	100.00%
Minority and Females	Percent of Businesses
Minority-owned Businesses	62.11%
Caucasian Female-owned Businesses	7.76%
Minority and Caucasian Female- owned Businesses	69.87%
Non-minority Male-owned Businesses	30.13%
TOTAL	100.00%



D. Contractual Services Prime Contractor Availability

The distribution of available contractual services prime contractors is summarized in Table 7.28 below.

African Americans account for 16.21% of the contractual services prime contractors in SBBC's market area.

Asian-Pacific Americans account for 1.21% of the contractual services prime contractors in SBBC's market area.

Subcontinent Asian Americans account for 1.66% of the contractual services prime contractors in SBBC's market area.

Hispanic Americans account for 21.34% of the contractual services prime contractors in SBBC's market area.

Native Americans account for 0.15% of the contractual services prime contractors in SBBC's market area.

Minority-owned Businesses account for 40.56% of the contractual services prime contractors in SBBC's market area.

Caucasian Female-owned Businesses account for 22.50% of the contractual services prime contractors in SBBC's market area.

Minority and Caucasian Female-owned Businesses account for 63.06% of the contractual services prime contractors in SBBC's market area.

Non-minority Male-owned Businesses account for 36.94% of the contractual services prime contractors in SBBC's market area.



**Table 7.28: Available Contractual Services Prime Contractors,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Percent of Businesses
African Americans	16.21%
Asian-Pacific Americans	1.21%
Subcontinent Asian Americans	1.66%
Hispanic Americans	21.34%
Native Americans	0.15%
Caucasian Females	22.50%
Non-minority Males	36.94%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	6.69%
African American Males	9.51%
Asian-Pacific American Females	0.70%
Asian-Pacific American Males	0.50%
Subcontinent Asian American Females	0.70%
Subcontinent Asian American Males	0.96%
Hispanic American Females	9.76%
Hispanic American Males	11.58%
Native American Females	0.05%
Native American Males	0.10%
Caucasian Females	22.50%
Non-minority Males	36.94%
TOTAL	100.00%
Minority and Gender	Percent of Businesses
Minority Females	17.92%
Minority Males	22.65%
Caucasian Females	22.50%
Non-minority Males	36.94%
TOTAL	100.00%
Minority and Females	Percent of Businesses
Minority-owned Businesses	40.56%
Caucasian Female-owned Businesses	22.50%
Minority and Caucasian Female- owned Businesses	63.06%
Non-minority Male-owned Businesses	36.94%
TOTAL	100.00%



E. Commodities Prime Contractor Availability

The distribution of available commodities prime contractors is summarized in Table 7.29 below.

African Americans account for 12.20% of the commodities prime contractors in SBBC's market area.

Asian-Pacific Americans account for 0.58% of the commodities prime contractors in SBBC's market area.

Subcontinent Asian Americans account for 1.20% of the commodities prime contractors in SBBC's market area.

Hispanic Americans account for 19.85% of the commodities prime contractors in SBBC's market area.

Native American Businesses account for 0.21% of the commodities prime contractors in SBBC's market area.

Minority-owned Businesses account for 34.04% of the commodities prime contractors in SBBC's market area.

Caucasian Female-owned Businesses account for 15.96% of the commodities prime contractors in SBBC's market area.

Minority and Caucasian Female-owned Businesses account for 50.00% of the commodities prime contractors in SBBC's market area.

Non-minority Male-owned Businesses account for 50.00% of the commodities prime contractors in SBBC's market area.



**Table 7.29: Available Commodities Prime Contractors,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Percent of Businesses
African Americans	12.20%
Asian-Pacific Americans	0.58%
Subcontinent Asian Americans	1.20%
Hispanic Americans	19.85%
Native Americans	0.21%
Caucasian Females	15.96%
Non-minority Males	50.00%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	3.97%
African American Males	8.23%
Asian-Pacific American Females	0.33%
Asian-Pacific American Males	0.25%
Subcontinent Asian American Females	0.62%
Subcontinent Asian American Males	0.58%
Hispanic American Females	7.28%
Hispanic American Males	12.57%
Native American Females	0.08%
Native American Males	0.12%
Caucasian Females	15.96%
Non-minority Males	50.00%
TOTAL	100.00%
Minority and Gender	Percent of Businesses
Minority Females	12.28%
Minority Males	21.75%
Caucasian Females	15.96%
Non-minority Males	50.00%
TOTAL	100.00%
Minority and Females	Percent of Businesses
Minority-owned Businesses	34.04%
Caucasian Female-owned Businesses	15.96%
Minority and Caucasian Female- owned Businesses	50.00%
Non-minority Male-owned Businesses	50.00%
TOTAL	100.00%



V. SUBCONTRACTOR AVAILABILITY ANALYSIS

A. Source of Willing and Able Subcontractors

All available prime contractors were included in the calculation of the subcontractor availability. Additional subcontractors in SBBC’s market area were identified using the source in Table 7.30.

Subcontractor availability was not calculated for contractual services or commodities because the subcontracting activity in those industries was limited. Due to this limitation, “all industries” refers to construction and professional services only.

Table 7.30: Unique Subcontractor Availability Data Source

Type Record	Type Information
Subcontract awards provided by SBBC	M/WBEs and non-M/WBEs

B. Determination of Willingness and Capacity

Subcontractor availability was limited to the available prime contractors and the unique businesses utilized as subcontractors. Therefore, the determination of willingness and capacity was achieved. Furthermore, *Croson* does not require a separate measure of subcontractor capacity in the analysis of subcontractor availability.



C. All Industry Subcontractor Availability

The distribution of available all industry subcontractors is summarized in Table 7.31.

African Americans account for 13.78% of all industry subcontractors in SBBC's market area.

Asian-Pacific Americans account for 1.04% of all industry subcontractors in SBBC's market area.

Subcontinent Asian Americans account for 1.53% of all industry subcontractors in SBBC's market area.

Hispanic Americans account for 36.63% of all industry subcontractors in SBBC's market area.

Native Americans account for 0.17% of all industry subcontractors in SBBC's market area.

Minority-owned Businesses account for 53.15% of all industry subcontractors in SBBC's market area.

Caucasian Female-owned Businesses account for 13.52% of all industry subcontractors in SBBC's market area.

Minority and Caucasian Female-owned Businesses account for 66.67% of all industry subcontractors in SBBC's market area.

Non-minority Male-owned Businesses account for 33.33% of all industry subcontractors in SBBC's market area.



**Table 7.31: Available All Industry Subcontractors,
Fiscal Years July 1, 2008, to June 30, 2013**

Group	Percent of Businesses
African Americans	13.78%
Asian-Pacific Americans	1.04%
Subcontinent Asian Americans	1.53%
Hispanic Americans	36.63%
Native Americans	0.17%
Caucasian Females	13.52%
Non-minority Males	33.33%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	3.90%
African American Males	9.88%
Asian-Pacific American Females	0.47%
Asian-Pacific American Males	0.57%
Subcontinent Asian American Females	0.49%
Subcontinent Asian American Males	1.04%
Hispanic American Females	10.11%
Hispanic American Males	26.51%
Native American Females	0.06%
Native American Males	0.11%
Caucasian Females	13.52%
Caucasian Males	33.33%
TOTAL	100.00%
Minority and Gender	Percent of Businesses
Minority Females	15.03%
Minority Males	38.12%
Caucasian Females	13.52%
Non-minority Males	33.33%
TOTAL	100.00%
Minority and Females	Percent of Businesses
Minority-owned Business Enterprises	53.15%
Caucasian Female-owned Business Enterprises	13.52%
Minority and Caucasian Female-owned Business Enterprises	66.67%
Non-minority Male-owned Business Enterprises	33.33%
TOTAL	100.00%



D. Construction Subcontractor Availability

The distribution of available construction subcontractors is summarized in Table 7.32.

African Americans account for 13.44% of the construction subcontractors in SBBC's market area.

Asian-Pacific Americans account for 1.31% of the construction subcontractors in SBBC's market area.

Subcontinent Asian Americans account for 0.82% of the construction subcontractors in SBBC's market area.

Hispanic Americans account for 16.56% of the construction subcontractors in SBBC's market area.

Native Americans account for 0.66% of the construction subcontractors in SBBC's market area.

Minority-owned Businesses account for 32.79% of the construction subcontractors in SBBC's market area.

Caucasian Female-owned Businesses account for 11.48% of the construction subcontractors in SBBC's market area.

Minority and Caucasian Female-owned Businesses account for 44.26% of the construction subcontractors in SBBC's market area.

Non-minority Male-owned Businesses account for 55.74% of the construction subcontractors in SBBC's market area.



**Table 7.32: Available Construction Subcontractors,
Fiscal Years July 1, 2008, to June 30, 2013**

Group	Percent of Businesses
African Americans	13.44%
Asian-Pacific Americans	1.31%
Subcontinent Asian Americans	0.82%
Hispanic Americans	16.56%
Native Americans	0.66%
Caucasian Females	11.48%
Non-minority Males	55.74%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	2.95%
African American Males	10.49%
Asian-Pacific American Females	0.82%
Asian-Pacific American Males	0.49%
Subcontinent Asian American Females	0.00%
Subcontinent Asian American Males	0.82%
Hispanic American Females	4.26%
Hispanic American Males	12.30%
Native American Females	0.16%
Native American Males	0.49%
Caucasian Females	11.48%
Caucasian Males	55.74%
TOTAL	100.00%
Minority and Gender	Percent of Businesses
Minority Females	8.20%
Minority Males	24.59%
Caucasian Females	11.48%
Non-minority Males	55.74%
TOTAL	100.00%
Minority and Females	Percent of Businesses
Minority-owned Business Enterprises	32.79%
Caucasian Female-owned Business Enterprises	11.48%
Minority and Caucasian Female-owned Business Enterprises	44.26%
Non-minority Male-owned Business Enterprises	55.74%
TOTAL	100.00%



E. Professional Services Subcontractor Availability

The distribution of available professional services subcontractors is summarized in Table 7.33.

African Americans account for 7.83% of the professional services subcontractors in SBBC's market area.

Asian-Pacific Americans account for 2.29% of the professional services subcontractors in SBBC's market area.

Subcontinent Asian Americans account for 4.10% of the professional services subcontractors in SBBC's market area.

Hispanic Americans account for 43.98% of the professional services subcontractors in SBBC's market area.

Native Americans account for 0.00% of the professional services subcontractors in SBBC's market area.

Minority-owned Businesses account for 58.19% of the professional services subcontractors in SBBC's market area.

Caucasian Female-owned Businesses account for 8.55% of the professional services subcontractors in SBBC's market area.

Minority and Caucasian Female-owned Businesses account for 66.75% of the professional services subcontractors in SBBC's market area.

Non-minority Male-owned Businesses account for 33.25% of the professional services subcontractors in SBBC's market area.



**Table 7.33: Available Professional Services Subcontractors,
Fiscal Years July 1, 2008, to June 30, 2013**

Group	Percent of Businesses
African Americans	7.83%
Asian-Pacific Americans	2.29%
Subcontinent Asian Americans	4.10%
Hispanic Americans	43.98%
Native Americans	0.00%
Caucasian Females	8.55%
Non-minority Males	33.25%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	1.08%
African American Males	6.75%
Asian-Pacific American Females	0.72%
Asian-Pacific American Males	1.57%
Subcontinent Asian American Females	0.60%
Subcontinent Asian American Males	3.49%
Hispanic American Females	10.24%
Hispanic American Males	33.73%
Native American Females	0.00%
Native American Males	0.00%
Caucasian Females	8.55%
Caucasian Males	33.25%
TOTAL	100.00%
Minority and Gender	Percent of Businesses
Minority Females	12.65%
Minority Males	45.54%
Caucasian Females	8.55%
Non-minority Males	33.25%
TOTAL	100.00%
Minority and Females	Percent of Businesses
Minority-owned Business Enterprises	58.19%
Caucasian Female-owned Business Enterprises	8.55%
Minority and Caucasian Female-owned Business Enterprises	66.75%
Non-minority Male-owned Business Enterprises	33.25%
TOTAL	100.00%



VI. SUMMARY

This chapter provided the availability analysis for SBBC's market area. A total of 6,629 unique businesses that provided goods and services during the study period in one or more of the four industries were identified. Businesses were identified from SBBC's records, government certification lists, business association membership lists, and business community meeting registration lists. A total of 23.61% of the available businesses were identified from prime contractor utilization, 50.93% were identified from certification lists, and 25.46% were identified from the business association membership lists.

Prime contractor and subcontractor availability were analyzed by ethnicity and gender. Minority-owned Businesses account for 47.41% of prime contractors within the four industries, Caucasian Females account for 14.27% of prime contractors, and Non-minority Males account for 38.32%. Minority-owned Businesses account for 53.15% of subcontractors within the two industries, Caucasian Females account for 13.52% of subcontractors, and Non-minority Males account for 33.33% of subcontractors.



CHAPTER 8: ANECDOTAL ANALYSIS

I. INTRODUCTION

This chapter presents the anecdotal findings and a judicial review of commercial discrimination in the market area. The importance of anecdotal testimony in assessing the presence of discrimination in a geographic market was stated in *City of Richmond v. J.A. Croson Co.*¹ (*Croson*). The United States Supreme Court, in its 1989 *Croson* decision, specified the use of anecdotal testimony as a means to determine whether remedial race-conscious relief may be justified in a particular geographic market area. In *Croson*, the Court stated that a pattern of individual discriminatory acts can offer an explanation of the findings of disparity.²

Anecdotal testimony of individual discriminatory acts can highlight the routine practices affecting Minority and Woman-owned Business Enterprises', hereinafter referred to as Caucasian Female-owned Businesses' (M/WBE) access to contracting opportunities within a given market area. The statistical data can quantify the results of discriminatory practices, while anecdotal testimony provides the human context through which the numbers can be understood. Anecdotal testimony from business owners provides information on the kinds of barriers perceived within the market area, including their effect on the development of M/WBEs.

The judicial review focused on court and administrative findings involving business discrimination against minority and woman-owned businesses in public procurement. The judicial review analyzed court decisions and administrative hearing transcripts, summaries, and findings for evidence concerning allegations of disparate treatment by local governments in South Florida. South Florida as defined for this analysis included Broward County, Palm Beach County, and Miami-Dade County, the geographic area described in the Disparity Study *Chapter 5: Market Area*. The research focused on allegations of discrimination published from, Fiscal Years July 1, 2008, to June 30, 2013.



¹ *City of Richmond v. J.A. Croson Co.*, 488 U.S. at 509 (1989).

² *Id.*

A. Anecdotal Evidence of Active or Passive Participation

Croson authorizes anecdotal inquiries along two lines. The first approach investigates active government discrimination or acts of exclusion committed by representatives of a governmental entity. The purpose of this examination is to determine whether the government has committed acts that have prevented M/WBE from obtaining contracting opportunities.

The second line of inquiry examines the government's passive support of exclusionary practices that occur in the market area into which its funds are infused. Passive exclusion results from government officials using public monies to contract with companies that discriminate against M/WBE, or failing to take positive steps to prevent discrimination by contractors who receive public funds.³ Anecdotal evidence of passive discrimination mainly delves into the activities of private-sector entities.

The Tenth Circuit Court of Appeals has cautioned that anecdotal evidence of discrimination is entitled to less evidentiary weight because the evidence concerns more private than government-sponsored activities.⁴ Nonetheless, when paired with appropriate statistical data, anecdotal evidence of either active or passive forms of discrimination can support the imposition of a race and gender-conscious remedial program.⁵

As *Croson* notes, jurisdictions have at their disposal "a whole array of race-neutral devices to increase the accessibility of City contracting opportunities to small business entrepreneurs of all races."⁶ Anecdotal evidence can paint a detailed portrait of the practices and procedures that generally govern the public contract awards in the relevant market area. These narratives, according to *Croson*, can identify specific practices that can be implemented, improved, or eliminated in order to increase contracting opportunities for all business owners.

The objective of this anecdotal process was to interview 30 businesses operating in the School Board of Broward County's (SBBC) market area. The anecdotal questionnaire was designed to discover business owners' positive experiences as well as any barriers that they may have encountered working with or seeking work from SBBC. The questionnaire also sought recommendations for increasing access to contracting opportunities for small, minority and female business owners.

The initial stage of the process screened businesses for their interest in being interviewed. The screener collected basic demographic data and specific information to determine the relevant experiences of the business owners. The screener captured information regarding the

³ *Croson*, 488 U.S. at 491-93, 509.

⁴ *Concrete Works of Colorado v. City and County of Denver*, 36 F.3d at 1530 (10th Cir. 1994): "While a fact finder should accord less weight to personal accounts of discrimination that reflect isolated incidents, anecdotal evidence of a municipality's institutional practices carry more weight due to the systemic impact that such institutional practices have on market conditions."

⁵ *Croson*, 488 U.S. at 509.

⁶ *Croson*, 488 U.S. at 509.



interviewee's experience with discrimination and interest in relating those experiences to a trained interviewer.

Anecdotal probes were used to solicit information from the interviewees who provided construction, professional services, contractual services and commodities. The questions sought to determine if the business owner encountered or had specific knowledge of instances where formal or informal contracting practices had an adverse impact on small, minority, or woman-owned businesses during the study period, Fiscal Years July 1, 2008, through June 30, 2013. A total of 30 interviews were conducted with African American, Hispanic American, Asian-Pacific Americans, Subcontinent Asian Americans, Native American, Caucasian female, and non-minority male business owners who provide the type of construction, professional services, contractual services and commodities procured by SBBC.

II. BUSINESS OWNER RESPONSE CATEGORIES

The interviewees' responses are categorized in the report as follows:

- Difficulty Breaking into the Contracting Community
- Good Old Boys Network
- Difficulty Navigating the Bid Process
- Insufficient Time to Respond to a Bid or Proposal
- Barriers to Financial Resources
- Late Payments to Contractors
- Barriers to Financial Resources
- Exemplary Business Practices by the School Board of Broward County
- Supplier Diversity and Outreach Program Recommendations to Increase M/WBE Participation on School Board of Broward County Contracts

When considering the barriers reported in the anecdotal analysis, the size of the contracts SBBC awarded during the study period is notable. Many of the purchase orders issued by SBBC to prime contractors during the study period were small.

The businesses in the market area were also small. As depicted in Table 8.01, the majority of the businesses in the United States Census County Business Patterns dataset, had fewer than five employees. This data reports the sizes of the businesses in the industries from which School Board of Broward County procures its goods and services.



Table 8.01: Size of Market Area Businesses⁷

Businesses	Broward County	State of Florida	United States
Less than 5 Employees	70.76%	65.95%	59.12%
Less than 10 Employees	12.66%	15.60%	18.48%
Less than 20 Employees	7.97%	9.36%	11.26%
Over 100 Employees	1.81%	1.77%	2.03%
Minority Owned Businesses	43.35%	36.29%	22.23%
Woman Owned Businesses	21.13%	27.22%	27.20%

Barriers to business formation and growth can be particularly profound on a small business and compounded when the business owner is a minority or woman. Anecdotal testimonies derived from the in-depth interviews with both M/WBEs and Non-minority Male-owned businesses (Non-M/WBE) are presented below.

A. *Difficulty Breaking Into the Contractor Community*

A minority male owner of a professional services firm explained why he believes that the Facilities and Construction Department has preferred consultants:

We were working with the Construction Department. As consultants, we were pre-qualified to work with the Construction Department. It was Facilities and Construction that we worked with as consultants. They should be more transparent as to how they select the consultants from the pre-qualified group. It seemed like they had preferred consultants. At least that is what we experienced. There was a bid that we responded to and we were low in four out of the six categories. Over the duration of that bid process, the contractor who was low in only one category got most of the work. How do you explain that, except that he was their preferred guy?

A minority male owner of a construction company explained why he believes that the School Board of Broward County’s bid specifications are structured to favor certain contractors:

I believe the SBBC have preferred contractors because of the way they design and write their specification. They put out their projects as big contracts so that they can disqualify the small contractors. So that they will have the grounds to say the company is too small to undertake a \$10 million job. Therefore, they play favorites for the big boys in their specification requirements. To me, these are the things that rid the field of the smaller guys and favor the bigger guys.



⁷ U.S. Census: County Business Patterns 2013; United States Census Survey of Business Owners 2007.

A Caucasian female owner of a commodities company also reports that she believes that preferred contractors are being utilized by the School Board of Broward County:

I think the SBBC has preferred contractors and the sad thing is they are not giving anybody else a chance to be a preferred contractor.

A minority male owner of a construction company explained why he believes that African Americans have difficulty forging networking relationships with majority contractors:

There is a culture that we cannot break into. That's the biggest problem Black people have. We are not inside the networking relationships. If you get inside that culture and become part of their network, it's a completely different world. You cannot get in those circles unless you are allowed. You are not allowed unless there is a need. There is no need for Black business enterprises.

A Caucasian female owner of a commodities company reported on her experiences at a meet and greet sponsored by the School Board of Broward County:

I had some bad experiences with the SBBC. When I first registered with them, they had a Get To Know the contractor's meeting with all the large contractors there. We got snubbed by those people. They really didn't want to talk to us. It was like they came there to do a song and dance thing and that was it. They really did not try talk with us.

A minority female owner of a commodities company explained why she believes that the same contractors are used by the School Board of Broward County:

First of all, if you're African American and you're trying to do business with the SBBC, they have their little favorites. They already have their people in place, and they want to keep doing business with the same contractors no matter whether you win the bid or not. That's their inside people and they get kickbacks under the table. Even when we secure a bid, they will try to discourage you or make it so that you can't hold onto the bid by not paying you.

B. Good Old Boys Network

A minority male owner of a professional services company believes that the good old boys network is afforded benefits that are not available to businesses:

At the SBBC, the good old boy network does exist. I would say that we've experienced it at the SBBC. I tried to work directly with them,



but they had their relationships with certain contractors and they wanted to stick with their relationships. That's what I experienced. When the economy started declining, it showed up more than even before.

A Caucasian female owner of a commodities company believes that the good old boy network has prevented her from being a successful bidder:

I think that the good old boys are the ones getting the contracts at SBBC.

A Caucasian male owner of a construction company believes that most departments in the School Board of Broward County select contractors from the good old boys network:

I believe all of the SBBC departments prefer to work with the good old boys. They are large companies and only the large companies are getting all the work. I don't know what you want to call that but it sounds like the good old network to me.

A minority male owner of a construction company believes that the good old boys influence the procurement practices at School Board of Broward County:

I believe it's very political at the SBBC. We don't have the deep pockets to finance campaigns for commissioners. It's clear that those people have the ears of the superintendents and construction managers. They have the capacity to influence members to vote in a particular way for their projects and therefore the good old boy network is very subtle. This is how it's done. But they do not want to hear a minority firm complaining that the old boy network is getting the work. If we're not in the loop and there's no transparency, then the minority firms don't have a chance.

A minority female owner of a commodities company reported her experience with the good old boy network:

I don't how they are going to get rid of the good old boys network. The good old boy that I am aware of is [company name withheld]. They always get the work. They go out to eat and have lunch and other outings with the decision makers. They have relationships outside of the work area. We even have pictures of vendors celebrating with SBBC employees at Christmas time. It just seems like they are in bed together. They look out for one another, they always have, they always will. The good old boys are going to be the good old boys until the day they die. That's the way I feel about it.



C. *Difficulty Navigating the Bid Process*

A Caucasian female owner of a commodities company reported that she has experienced difficulty identifying contracting opportunities for the School Board of Broward County:

Their bid information is hard to find, so you really have to know where to look. After trying, I just gave up. I don't know the department name but it was Broward County School Board. They didn't tell me I couldn't bid, but they didn't make it easy for me to access the information. I think the system isn't user friendly. I don't know if they are trying to knock people out, but they aren't trying to help people either.

This same business owner also reported that the amount listed in the School Board of Broward County' solicitation was drastically reduced after award:

I was notified that the bid was going to be a quarter of a million, but end up being only \$25,000. I've had that happen to me twice with the SBBC. They said that it could be up to \$250,000. That's all they said.

A Caucasian male owner of a construction company explained why he believes that the solicitation documents are structured so only large companies can meet the qualifications:

My personal opinion is that I think some of the RFPs are structure to benefit bigger companies that work with the SBBC and have relationships with the people that are writing the RFPs, RFQs, and RFI. I can go out and get all of these certifications but if there's someone writing those RFPs, RFQs, and RFIs specifically for larger companies it's a waste. It's outrageous to me where the qualifications or the specifications were inflated to eliminate smaller businesses; especially when they require specific brand certifications that will eliminate a lot of smaller companies.

A minority male owner of a construction company explained why he believes they were not able to get on the School Board of Broward County's vendor list:

We applied to be a vendor with the School Board of Broward County and the application was rejected. They did not provide a significant reason for the rejection. We were told that the bonding company that was on our list, even though it was an AAA rated company, was not on the School Board's list, and therefore could not be admissible. We never were able to get a conference with them and at some point we decided it was not worth putting in the time and effort, being a small company, to get on their list. I think that



they're not friendly to minority companies because of the way they do business. We were bonded with an AAA bonding company and we could not get on their vendor list. We feel that the gentleman in charge was not competent and the way he structured the bid did not make any sense. It was very convoluted in terms of what they were looking for. It included stuff that was in contradiction with the normal process or procedure of conducting such a project.

D. *Insufficient Time to Respond to a Bid or Proposal*

A Caucasian male owner of a construction company reported that he has received as little as a few hours to respond to a quote from a prime contractor:

I have received quotes in the 11th-hour. Sometimes, they would ask for a quote on a Friday around 5:00 pm in the evening and it would be due on the following Tuesday. I need at least two to three weeks to prepare a bid.

A minority female owner of a commodities company reported that she feels like she does not receive adequate notice to respond to the School Board of Broward County' bid solicitations:

Having inadequate lead time is a never-ending story. If a bid notice comes out on the 25th, they will send out a quote on the 21st. I will have a few days to secure my insurance and other requirements. Three to five days is not enough time to get \$2 million worth of insurance on each vehicle or respond to the other stipulations. It seems like they always find a way to make it just a little bit tougher. We need two weeks to respond. SBBC should put the bids out at least 30 days prior to the due date. They always inform their inside people first, so therefore when it's time for us to bid, we don't have adequate time to respond.

E. *Barriers to Financial Resources*

A minority male owner of a construction company reported that he has not been able to secure financing despite being in business for over two decades:

It's always been a challenge to get financing from a bank or an institution. I've been in business for years and from my personal experience, I've never had a loan from a bank. I have no lines of credit or anything after being in business for 20 plus years. I don't think I was treated fairly. They asked for a fraud visit even though I have been around for 26 years. I still can't seem to satisfy them in providing me any kind of financial assistance. I'm afraid to take on



certain jobs because I know it's going to be more demanding for labor and I may not be able to come up with the payroll.

A minority male owner of a construction company reported that he was unable to secure financing despite his favorable credit score:

I have a 793 credit score. I worked on my credit to make sure the things that were on my credit report were correct. It had several errors on it. So I contacted Equifax, Experian, and Transunion. I got those items removed and that's why my credit ran up to 793. I attempted to get lines of credit from four different banks. I went to [financing institution names withheld] for a \$250,000 line of credit. We could not get that line of credit or anything close to it. We were told we could get anywhere between \$50,000 and \$75,000 but couldn't get anything higher for the volume of work we had and my credit rating. We pretty much had to decline.

A Caucasian female owner of a commodities company reported that she has been given numerous reasons from financing institutions as to why she is being denied credit:

I have received many false promises when it comes to financing. I have been told, "We are going to provide you with credit," and then they say "You have not been in business long enough," or "You don't have enough equity," or they charge me higher interest rates than other people in business.

A minority male owner of a construction company believes that access to lines of credit directly impacts a small business' ability to secure bonding:

Your line of credit dictates the amount of money that determines your bonding. When small companies or black companies try to get bonding it is directly dependent upon their relationship to the banking community. So if you get a line of credit from \$300,000 to \$400,000, you can bond up to \$8 million in a general contract capacity. If your line of credit is \$200,000, then you're bonding limit is in the vicinity of \$2 million. And as a tradesman with a \$100,000 line of credit, you're bond limit is at \$1 million. This actually controls the amount of work you can get and the amount of work you can take on. These factors go hand in hand.

This same business owner further elaborated:

I believe the lending requirements are eased for some minorities to allow them to get the lines of credit they request. A larger amount of credit leads to a larger bonding capacity. A larger bonding capacity,



in turn, gives you the ability to do more work, put more work on the books, and it also gives you the other things that go with that line of credit that allow you to leverage material costs and a volume material costs vender. It also allows you to lock in prices if you've got more work load in concrete price, paint price, or whatever product you're using. You can lock in a discount for a longer period of time. I hope the disparity study finds out the real root issues of what causes companies not to grow or develop.

A Caucasian male owner of a construction company reported on issues that his small business has encountered obtaining bonding:

Our bonding limits are basically related to the revenue and the credit we are able to obtain. Since the bank didn't help us, we could not get bonding. That revenue stream has practically dried up, but the bills are still due. I didn't have enough collateral there to support a bond. This has basically kept me from being able to get work that I would have otherwise been able to get. It has also prevented me from being able to grow my company over the last seven to eight years. I don't think the SBBC has programs to help the small businesses that are struggling to get bonded.

F. Late Payments

A minority male owner of a professional services company reported that they have waited up to 75 days to receive payment from a School Board of Broward County prime contractor:

Working directing with SBBC, we did not have problems with late payments. But working with SBBCs' general contractors is another story. I would say that ninety percent of their payments are late. They are typically 60 to 75 days late. It's always one thing or another as to why they are late. Usually they blame it on SBBC. I do not complain because they will blackball you. Sometimes we try to find out what is happening with the payment but we have to be diplomatic or they will not give us anymore work and spread the word.

A minority female owner of a commodities company reported that she was typically paid late by School Board of Broward County:

SBBC has held our payments for two or three months. Who holds payment for two or three months? They are supposed to have a 30 day turnaround time. None of their payments are on time.



G. Exemplary Practices by the School Board of Broward County'

A minority male owner of a professional services company reported that he received helpful assistance from the Construction and Facilities Department:

There was [SBBC staff name withheld] who was helpful to us. He was in the Construction and Facilities Department. He tried to assist us in getting a couple of projects even though they didn't materialize. But he tried and this is an exception to the rule.

A minority female owner of a commodities company also reported a positive experience that she had with a School Board of Broward County staff member who responded to her request for assistance:

The only person I can really think of is [SBBC staff name withheld]. We also made complaints to her and she tried to help us resolve the problems that we were having at that time. She really went to bat to try to find out information and assist us. She was a really helpful employee. She was in Procurement Department.

H. Supplier Diversity and Outreach Program

A minority female owner of a professional services company believes that the Supplier Diversity and Outreach Program needs more resources in order to be an effective advocate:

As it stands today, I would question the value of the SDOP M/WBE program because they do not have the resources to effectively monitor the program. They need someone to make sure the M/WBE have the resources to effectively bid their projects and make sure they are being treated fairly on the projects.

A minority male owner of a construction firm believes that the Supplier Diversity and Outreach Program is a benefit to the local economy:

When you put an M/WBE to work, there's so many benefits in terms of the local economy.

A Caucasian female owner of a commodities company described how the Supplier Diversity and Outreach Program could be more valuable:

SBBC has an M/WBE program but it doesn't do anything for us. They need to actually have bids strictly for minority and women-owned businesses.



A Caucasian male owner of a construction company believes that the Supplier Diversity and Outreach Program should create more opportunities for small businesses:

I think the M/WBE program could be valuable if it's administered and monitored effectively. I think it could be more valuable. It needs some tweaking to improve opportunities for small businesses because the larger companies dominate our industry.

A minority male owner of a construction firm reported on what he believes is needed to make the Supplier Diversity and Outreach Program more effective:

I believe the SBBC needs to rectify or improve contracting opportunities for minority firms. They should go back to the old days when there were mandates for prime contractors to use minority firms. The M/WBE program can be effective at promoting and fostering the growth and development of minority construction firms. There were specific goals for minority companies. Nowadays the prime contractors use as few minority companies as possible. And, they used to have set-asides where it was for minority to bid on. There was a meeting at SBBC and the Superintendent was there and said, "Yeah, things are better." But we have not seen it, so I'm holding his feet to the fire. I have not seen any effort except for this disparity study so I'll give them kudos for that.

A minority female owner of a commodities company believes the Supplier Diversity and Outreach Program is needed to level the playing field:

I believe that the M/WBE program is valuable. It's needed to help not just minorities but women gain access to contracting opportunities. This helps everybody get a bit of piece of the pie.

I. Recommendations to Increase the M/WBE Participation on School Board of Broward County' Contracts

A minority male owner of a professional services company recommends more transparency in the School Board of Broward County procurement practices:

The way the SBBC does their business should be more transparent. For example, if someone is certified and pre-qualified in a particular discipline or as a general contractor, then all projects that could affect those contractors should be publicized and made available. The way they operate, they have a pre-qualified list and the project managers were allowed to go to the list and determine who they would utilize. That's the system that they had. If I don't have anyone on the inside then, I would be the last one to be called.



This same business owner suggested unbundling large projects into smaller contracts:

They should encourage general contractors to break projects down as much as possible. Most of the contracts are large contracts and are not really tailored towards small firms. It would be great if they could target general contractors to encourage them to break portions of the work into small portions.

A Caucasian female owner of a commodities company recommends that School Board of Broward County create more opportunities for small business owners:

I think they should set aside contracts for small businesses and not give us what the big companies don't want to do and give us the leftovers. They need to make it fair for the smaller businesses to be able to have access to win contracts.

A Caucasian male owner of a construction company recommends separating trade items from large contracts to create more opportunities for specialty contractors:

I'm a trade contractor and a lot of the work that I do is tied to a general contractor's contract. So I am a middle man in the mix of my work. In other words, I am forced to deal with the general contractors for work. The contracts are set up where I have to deal with general contractors and not directly with SBBC Procurement Department.

A minority male owner of a construction company recommends unbundling large contracts to enable small businesses to meet the bonding requirements:

They should unbundle larger projects so that smaller firms can meet the bonding requirements. The prime contractor should cover subcontractors that do not have the bonding capacities to bid. Also, they should partition the work and cut the red tape. The procurement process needs to be streamlined so that it's not so convoluted and therefore making responding to bids more difficult. There is too much red tape to jump through. In other words, breaking up the projects will keep us from being disqualified from the get-go. Otherwise, by default, they are putting out the jobs for the big boys.



A minority female owner of a commodities company recommends that School Board of Broward County implement a sheltered market program, where small businesses compete for contracts only among other small businesses:

They need a sheltered market program because their contracts are too large and are for the bigger companies. Let everybody have a chance to win contracts and not be denied because of the size of the contract. We're just asking for fair treatment and to make a little money with the SBBC. Just allow fair treatment so everyone has an opportunity to advance their business with the SBBC.

A minority male owner of a professional services company recommended unbundling contracts valued below \$40,000 for small business owners:

Unbundling could be easily achieved by just breaking out assignments that are small so that small consultants can get some work. A reasonable size could be a contract valued anywhere from \$30,000 to \$40,000 for professional services contracts. Anything above that amount could be individually assigned.

III. JUDICIAL REVIEW

A. Methodology

Online public records were reviewed to identify documents related to business discrimination by governments in the Tri-County area during the study period. The research sought to identify allegations of commercial discrimination published by the following sources:

- State of Florida, Division of Administrative Hearings
- Clerk of Courts, Broward County 17th Judicial Circuit of Florida
- Clerk and Comptroller, Palm Beach County
- Clerk of Courts, Miami-Dade County
- LexisNexis: Public Records, Legal
- Sun Sentinel Regional Newspaper
- Miami Herald Regional Newspaper

The SBBC Office of General Counsel was asked to provide any documentation of relevant cases and proceedings, including court and administrative hearing transcripts and summaries, involving business discrimination that might not otherwise be accessible to the public. The results of the research is provided below:

- The Florida Agency Indexed Orders was searched using a two-step process in an effort to determine if any commercial discrimination complaints had been filed



against a government agency in the tri-county area during the study period. The review yielded 907 orders and cases concerning agencies within Broward County, 2,600 orders and cases in Palm Beach County, and 729 orders and cases in Miami-Dade County. However, none of the filings involved allegations of commercial discrimination within the study period.

- The archived administrative hearing dockets yielded administrative complaints, motions, and hearing transcripts. The review of administrative dockets identified 564 cases involving local government agencies in the three counties, 165 of which concerned agencies within Broward County. The cases involved formal protests to bid awards, containing allegations that Broward County failed to comply with the specifications in the Invitation to Bid. Only two cases identified in the administrative log involved allegations concerning commercial discrimination.⁸ However, both cases were outside the study period.
- The Clerk of Courts, Broward County 17th Judicial Circuit of Florida website was searched to determine if any Broward agencies were named parties in a court case. The search yielded 2,010 cases concerning matters filed in the Broward County courts, however, none of the cases involved allegations of commercial discrimination within the study period.
- The Clerk and Comptroller, Palm Beach County website was searched to determine if any Palm Beach agency was a named party in a court case. The search yielded five cases concerning matters filed in the Palm Beach County courts. None of the cases involved allegations of commercial discrimination within the study period.
- The Clerk of Courts, Miami-Dade County website was searched to determine if any Miami-Dade agency was a named party in a court case. The County Recorder's Official Record Search yielded 368 cases concerning matters filed in the Palm Beach County courts. None of the cases involved allegations of commercial discrimination within the study period. The Civil, Family, and Probate Court Online System yielded no cases concerning matters of commercial discrimination filed in the Palm Beach County courts within the study period.
- A more global search of federal court documents was conducted to determine if any agency in the tri-county area was a named party in a federal court case. The databases used were the U.S. Combined Federal Court Filings and the U.S. District Courts, Civil and Criminal Filings systems. Individual searches were conducted by County for each of the following terms: Administrative Hearings, Cases against Government Entities, Government Procurement, and Public Contract Law. The U.S. Combined Federal Court Findings and the U.S. District Courts, Civil and Criminal Filings systems yielded zero cases concerning matters



⁸ See *Hewett-Kier Construction, Inc. v. School Board of Broward County*, Case No. 93-6449BID (Feb. 28, 1994); See *Murphy Construction Co. v. Palm Beach County School Board*, Case No. 93-2922BID (Sep. 2, 1993).

filed in the tri-county courts that involved allegations of commercial discrimination within the study period. None of the cases involved allegations of commercial discrimination within the study period.

- The LexisNexis electronic database for legal and public-records related information was reviewed to determine if any of the tri-county agencies were named parties in a federal case. The database was also searched for State cases of commercial discrimination. LexisNexis yielded 20 cases that concerned matters in Public Contracts Law. However, all of these cases were settled outside of jurisdictional parameters. Within the tri-county area, none of the cases involved allegations of commercial discrimination within the study period.
- A media search for commercial discrimination allegations resulted in numerous article links regarding governmental agencies in the tri-county area. Each of the relevant articles were published in either the *Sun Sentinel* or the *Miami Herald*, the two major media outlets located in the tri-county area. The search of the *Sun Sentinel* yielded 80 articles but none of them involved allegations of commercial discrimination within the study period. The search of the *Miami Herald* yielded 3,320 articles regarding commercial discrimination. However, none of the articles involved allegations of commercial discrimination within the study period.

However, the media search identified one additional State Impact report published as a reporting project of National Public Radio (NPR) member stations, a consortium of independent, locally owned and operated public broadcasters. The State Impact Report identified the *Final Report of the Nineteenth State Wide Grand Jury in the Supreme Court of the State of Florida* (Grand Jury Report), dated January 21, 2011. This report examined contracting procedures of the Broward County School Board for corrupt practices.

The Nineteenth Grand Jury was convened to examine the “functioning of the Broward County School Board and the Broward County School District.” The examination included testimony and statements from SBBC’s project managers and building inspectors, managers from the Division of Facilities & Construction Management, District Chief Building Officials, and members of the Broward County School Board. The Nineteenth Grand Jury reported that “much of the activity we have learned of and reported on can be described as corrupt. . . .” The Report recommended that the School Board members should be relieved of some of its power and influence by allowing an independent outside authority to monitor its dealings. Additional recommendations included (1) ethnics training; (2) prohibition of campaign contributions from contractors, vendors and others doing business with the School Board; (3) transition the School Board oversight of the Building department to local building departments; and (4) cease School Board involvement from the selection of contractors, vendors, or financial institutions.



While the report did not focus on commercial discrimination involving Minority and Woman-owned Businesses it did reveal practices that would no doubt have an adverse impact on Minority and Woman-owned Businesses' equal access to SBBC's contract opportunities. The findings of the Grand Jury have direct consequences for the general contracting community, including M/WBEs.

B. Research Findings

The judicial review did not yield any allegations of commercial discrimination by local government agencies within the study period. However, the Grand Jury Report elucidated a blatant failure of SBBC to uniformly apply its contracting and procurement policies and procedures. Furthermore, the failure of SBBC to award and manage contracts in a fair, transparent, and objective manner no doubt also affected M/WBEs ability to successfully compete for SBBC's contracts.

IV. SUMMARY

The testimonies of business owners revealed experiences involving their effort to contract with the School Board of Broward County. A majority of the interviewees reported on the difficulty breaking into the contractor community in the market area. They shared their personal experiences of perceived barriers and efforts to secure financial resources to grow and develop their businesses and remain solvent. Exemplary practices by SBBC's staff were also reported. Recommendations by business owners to improve access for M/WBEs and other small businesses to SBBC's contracting opportunities were also offered.

The judicial review identified evidence of commercial discrimination allegations against local government agencies within the tri-county area, but none were within the study period. There were no published findings of disparate commercial treatment against minority or woman-owned businesses. However, the published Grand Jury Report succinctly documented corrupt practices which may have indirectly impact M/WBEs.



CHAPTER 9: PRIME CONTRACT DISPARITY ANALYSIS

I. INTRODUCTION

The objective of the disparity analysis is to determine the levels at which Minority and Woman-owned Business Enterprises, hereinafter referred to as Caucasian Female-owned Businesses (M/WBE), are utilized on School Board of Broward County (SBBC) prime purchase orders. Under a fair and equitable system of awarding prime purchase orders, the proportion of prime dollars awarded to M/WBEs should be relatively close to the corresponding proportion of available M/WBEs¹ in the relevant market area. If the ratio of utilized M/WBE prime contractors to available M/WBE prime contractors is less than 1, a statistical test is conducted to calculate the probability of observing the empirical disparity ratio or any event which is less probable. This analysis assumes a fair and equitable system.² *Croson* states that an inference of discrimination can be made *prima facie* if the disparity is statistically significant. Under the *Croson* model, Non-minority Male-owned Businesses (non-M/WBE) are not subjected to a statistical test.

The first step in conducting the statistical test is to calculate the contract value that each ethnic and gender group is expected to receive. This value is based on each group's availability in the market area, and shall be referred to as the **expected contract amount**. The next step computes the difference between each ethnic and gender group's expected contract amount and the **actual contract amount** received by each group. The **disparity ratio** is then computed by dividing the actual contract amount by the expected contract amount.

In practice, a disparity ratio of less than 0.80 indicates a relevant degree of disparity. To test the significance of a disparity ratio, a P-value must be calculated.³ All disparity ratios less than one are subject to a statistical test of significance. The three methods employed to calculate statistical significance are a parametric analysis,⁴ a non-parametric analysis,⁵ and a simulation analysis.

¹ Availability is defined as the number of ready, willing, and able firms. The methodology for determining willing and able firms is detailed in *Chapter 7: Prime Contractor and Subcontractor Availability Analysis*.

² When conducting statistical tests, a confidence level must be established as a gauge for the level of certainty that an observed occurrence is not due to chance. It is important to note that a 100-percent confidence level or a level of absolute certainty can never be obtained in statistics. A 95-percent confidence level is considered by the statistical standard to be an acceptable level in determining whether an inference of discrimination can be made. Thus, the data analysis here was done within the 95-percent confidence level.

³ P-value is a measure of statistical significance.

⁴ Parametric analysis is a statistical examination based on the actual values of the variable. In this case, the parametric analysis consists of the actual dollar values of the contracts.



A parametric analysis is most commonly used when the number of contracts is sufficiently large and the variation of the contract dollar amounts is not too large. When the variation in contract dollar amounts is large, a disparity may not be detectable using a parametric analysis. Therefore, a non-parametric analysis would be employed to analyze the contracts ranked by dollar amount. Both parametric and non-parametric analyses are effective due to the central limit theorem, which is strongest when the number of contracts is large and the data are not skewed. When there are too few contracts⁶ or the contract dollar data are skewed, a simulation analysis is employed. The utility of the simulation analysis is also dependent on the severity of the disparity when there are too few contracts. The simulation analysis utilizes randomization to simulate a distribution for the contracts.⁷ By conducting multiple trials in the simulation, the empirical data can be used to test the distribution of contract awards for significance.

For parametric and non-parametric analyses, the P-value takes into account the number of contracts, amount of contract dollars, and variation in contract dollars. If the difference between the actual and expected number of contracts and total contract dollars has a P-value equal to or less than 0.05, the difference is statistically significant.⁸ In the simulation analysis, the P-value takes into account a combination of the distribution formulated from the empirical data and the contract dollar amounts or contract rank. If the actual contract dollar amount, or actual contract rank, falls below the fifth percentile of the distribution, it denotes a P-value less than 0.05, which is statistically significant.

Our statistical model employs all three methods simultaneously to each industry. Findings from one of the three methods are reported. If the P-value from any one of the three methods is less than 0.05 the finding is reported in the disparity tables as statistically significant. If the P-value is greater than 0.05 the finding is reported as not statistically significant.

II. DISPARITY ANALYSIS

A prime disparity analysis was performed on construction, professional services, contractual services, and commodities prime purchase orders for Fiscal Years July 1, 2008, to June 30, 2013.

As demonstrated in *Chapter 7: Prime Contractor and Subcontractor Availability Analysis*, the majority of SBBC's purchase orders were small. Construction prime

⁵ Non-parametric analysis is a method to make data more suitable for statistical testing by allowing one variable to be replaced with a new variable that maintains the essential characteristics of the original one. In this case, the contracts are ranked from the smallest to the largest. The dollar value of each contract is replaced with its rank order number.

⁶ Note: a relatively small availability population size decreases the reliability of the statistical results; therefore any availability percentage less than 1% cannot be labeled as statistically significant.

⁷ The simulation analysis can be conducted using contract dollar amounts or contract rankings.

⁸ A statistical test is not performed for Non-minority Males or when the ratio of utilized to available is greater than 1 for M/WBEs.



purchase orders valued at less than \$50,000 constituted 72.68% of all construction prime purchase orders. Professional Services prime purchase orders valued at less than \$50,000 constituted 88.72% of all professional services prime purchase orders. Contractual services prime purchase orders valued at less than \$50,000 constituted 95.75% of all contractual services prime purchase orders. Commodities prime purchase orders valued at less than \$50,000 constituted 98.97% of all commodities prime purchase orders.

The findings from the three methods employed to calculate statistical significance, as discussed on page 9-2, are presented in the subsequent sections. The outcomes of the statistical analyses are presented in the “P-Value” column of the tables. A description of the statistical outcomes in the disparity tables is presented below in Table 9.01.

Table 9.01: Statistical Outcome Descriptions

P-Value Outcome	Definition of P-Value Outcome
< .05 *	The underutilization is statistically significant
not significant	The underutilization is not statistically significant
----	There are too few available firms to test statistical significance
**	This study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males
< .05 †	The overutilization is statistically significant



A. Disparity Analysis: All Prime Purchase Orders, by Industry

1. Prime Purchase Orders for All Industries

The disparity analysis of construction prime purchase orders all industries is described below and depicted in Table 9.02 and Chart 9.01.

African Americans represent 13.23% of all available businesses and received 1.91% of the dollars spent on all prime purchase orders within all industries. This underutilization is statistically significant.

Asian-Pacific Americans represent 0.87% of all available businesses and received 0.48% of the dollars spent on all prime purchase orders within all industries. There were too few available firms to test statistical significance of this underutilization.

Subcontinent Asian Americans represent 1.33% of all available businesses and received 0.09% of the dollars spent on all prime purchase orders within all industries. This underutilization is statistically significant.

Hispanic Americans represent 31.83% of all available businesses and received 12.14% of the dollars spent on all prime purchase orders within all industries. This underutilization is statistically significant.

Native Americans represent 0.15% of all available businesses and received 0.09% of the dollars spent on all prime purchase orders within all industries. There were too few available firms to test statistical significance of this underutilization.

Minority-owned Businesses represent 47.41% of all available businesses and received 14.71% of the dollars spent on all prime purchase orders within all industries. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 14.27% of all available businesses and received 6.67% of the dollars spent on all prime purchase orders within all industries. This underutilization is statistically significant.

Minority and Caucasian Female-owned Businesses represent 61.68% of all available businesses and received 21.37% of the dollars spent on all prime purchase orders within all industries. This underutilization is statistically significant.

Non-minority Male-owned Businesses represent 38.32% of all available businesses and received 78.63% of the dollars spent on all prime purchase orders within all industries. This overutilization is statistically significant.



**Table 9.02: Disparity Analysis: All Industries Prime Purchase Orders,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$16,005,548	1.91%	13.23%	\$110,843,983	-\$94,838,436	0.14	< .05 *
Asian-Pacific Americans	\$4,022,451	0.48%	0.87%	\$7,330,617	-\$3,308,166	0.55	----
Subcontinent Asian Americans	\$776,615	0.09%	1.33%	\$11,122,315	-\$10,345,701	0.07	< .05 *
Hispanic Americans	\$101,714,311	12.14%	31.83%	\$266,682,788	-\$164,968,477	0.38	< .05 *
Native Americans	\$718,515	0.09%	0.15%	\$1,263,899	-\$545,384	0.57	----
Caucasian Females	\$55,846,369	6.67%	14.27%	\$119,564,890	-\$63,718,521	0.47	< .05 *
Non-minority Males	\$658,755,149	78.63%	38.32%	\$321,030,465	\$337,724,684	2.05	< .05 †
TOTAL	\$837,838,957	100.00%	100.00%	\$837,838,957			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$4,279,969	0.51%	3.86%	\$32,355,826	-\$28,075,858	0.13	< .05 *
African American Males	\$11,725,579	1.40%	9.37%	\$78,488,157	-\$66,762,578	0.15	< .05 *
Asian-Pacific American Females	\$1,348,408	0.16%	0.41%	\$3,412,529	-\$2,064,121	0.40	----
Asian-Pacific American Males	\$2,674,043	0.32%	0.47%	\$3,918,088	-\$1,244,045	0.68	----
Subcontinent Asian American Females	\$324,462	0.04%	0.47%	\$3,918,088	-\$3,593,627	0.08	----
Subcontinent Asian American Males	\$452,153	0.05%	0.86%	\$7,204,227	-\$6,752,074	0.06	----
Hispanic American Females	\$23,398,090	2.79%	9.28%	\$77,729,817	-\$54,331,728	0.30	< .05 *
Hispanic American Males	\$78,316,221	9.35%	22.55%	\$188,952,970	-\$110,636,749	0.41	< .05 *
Native American Females	\$0	0.00%	0.08%	\$631,950	-\$631,950	0.00	----
Native American Males	\$718,515	0.09%	0.08%	\$631,950	\$86,566	1.14	**
Caucasian Females	\$55,846,369	6.67%	14.27%	\$119,564,890	-\$63,718,521	0.47	< .05 *
Non-minority Males	\$658,755,149	78.63%	38.32%	\$321,030,465	\$337,724,684	2.05	< .05 †
TOTAL	\$837,838,957	100.00%	100.00%	\$837,838,957			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$29,350,928	3.50%	14.09%	\$118,048,210	-\$88,697,282	0.25	< .05 *
Minority Males	\$93,886,512	11.21%	33.32%	\$279,195,392	-\$185,308,881	0.34	< .05 *
Caucasian Females	\$55,846,369	6.67%	14.27%	\$119,564,890	-\$63,718,521	0.47	< .05 *
Non-minority Males	\$658,755,149	78.63%	38.32%	\$321,030,465	\$337,724,684	2.05	< .05 †
TOTAL	\$837,838,957	100.00%	100.00%	\$837,838,957			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$123,237,439	14.71%	47.41%	\$397,243,602	-\$274,006,163	0.31	< .05 *
Caucasian Female-owned Businesses	\$55,846,369	6.67%	14.27%	\$119,564,890	-\$63,718,521	0.47	< .05 *
Minority and Caucasian Female-owned Businesses	\$179,083,808	21.37%	61.68%	\$516,808,492	-\$337,724,684	0.35	< .05 *
Non-minority Male-owned Businesses	\$658,755,149	78.63%	38.32%	\$321,030,465	\$337,724,684	2.05	< .05 †

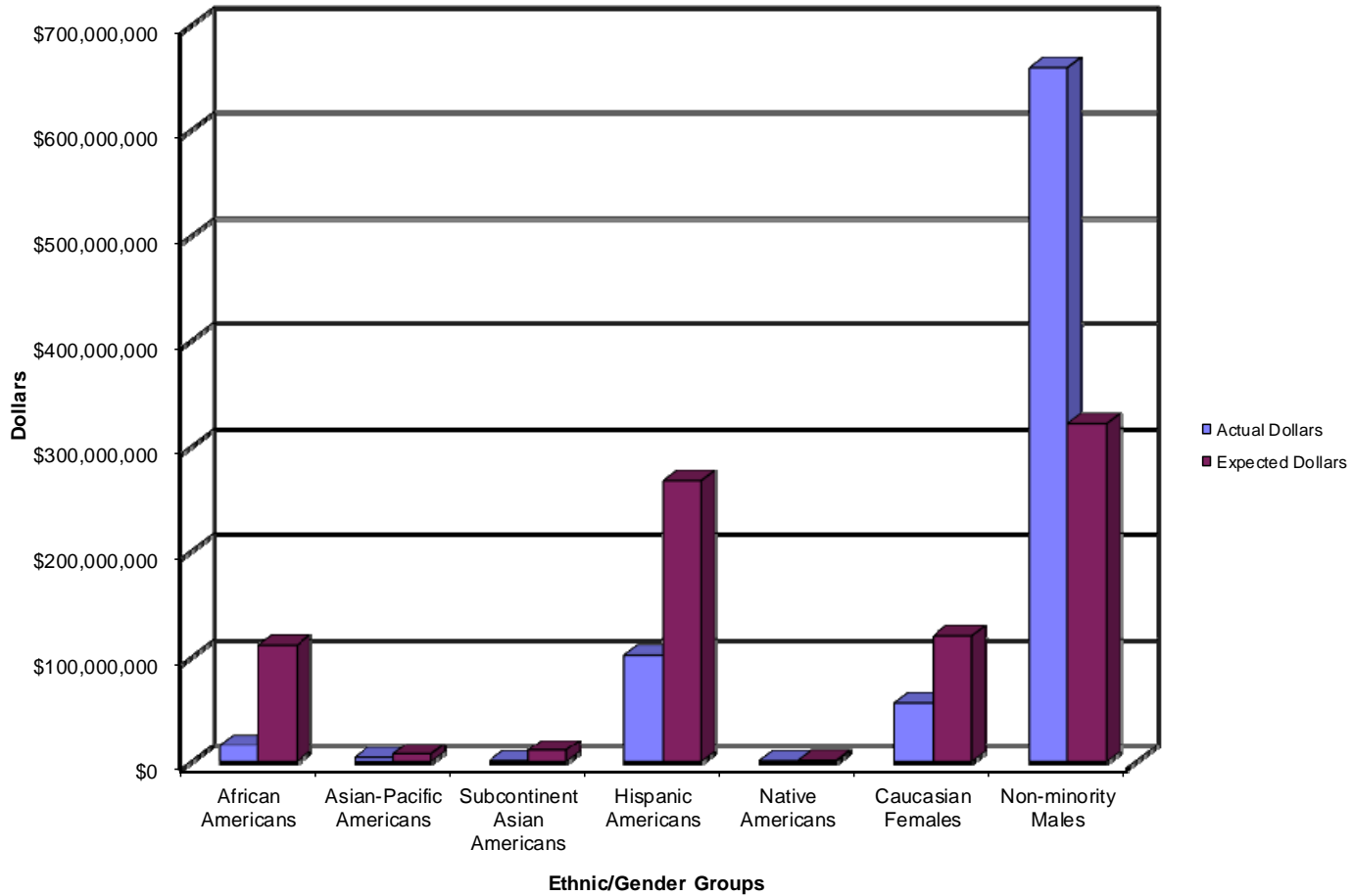
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

**Chart 9.01: Disparity Analysis: All Industries Prime Purchase Orders,
Fiscal Years July 1, 2008, to June 30, 2013**



2. All Construction Prime Purchase Orders

The disparity analysis of all construction prime purchase orders is described below and depicted in Table 9.03 and Chart 9.02.

African Americans represent 15.30% of all available construction businesses and received 2.60% of all construction prime purchase order dollars. This underutilization is statistically significant.

Asian-Pacific Americans represent 1.53% of all available construction businesses and received 0.83% of all construction prime purchase order dollars. This underutilization is statistically significant.

Subcontinent Asian Americans represent 0.76% of all available construction businesses and received 0.00% of all construction prime purchase order dollars. There were too few available firms to test the statistical significance of this underutilization.

Hispanic Americans represent 19.12% of all available construction businesses and received 20.68% of all construction prime purchase order dollars. This study does not test statistically the overutilization of Hispanic Americans.

Native Americans represent 0.57% of all available construction businesses and received 0.00% of all construction prime purchase order dollars. There were too few available firms to test the statistical significance of this underutilization.

Minority-owned Businesses represent 37.28% of all available construction businesses and received 24.11% of all construction prime purchase order dollars. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 11.66% of all available construction businesses and received 10.42% of all construction prime purchase order dollars. This underutilization is not statistically significant.

Minority and Caucasian Female-owned Businesses represent 48.95% of all available construction businesses and received 34.53% of all construction prime purchase order dollars. This underutilization is statistically significant.

Non-minority Male-owned Businesses represent 51.05% of all available construction businesses and received 65.47% of all construction prime purchase order dollars. This overutilization is statistically significant.



**Table 9.03: Disparity Analysis: All Construction Prime Purchase Orders,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$6,462,648	2.60%	15.30%	\$37,962,020	-\$31,499,372	0.17	< .05 *
Asian-Pacific Americans	\$2,056,259	0.83%	1.53%	\$3,796,202	-\$1,739,943	0.54	< .05 *
Subcontinent Asian Americans	\$0	0.00%	0.76%	\$1,898,101	-\$1,898,101	0.00	----
Hispanic Americans	\$51,316,166	20.68%	19.12%	\$47,452,525	\$3,863,641	1.08	**
Native Americans	\$0	0.00%	0.57%	\$1,423,576	-\$1,423,576	0.00	----
Caucasian Females	\$25,852,138	10.42%	11.66%	\$28,946,040	-\$3,093,902	0.89	not significant
Non-minority Males	\$162,489,493	65.47%	51.05%	\$126,698,240	\$35,791,253	1.28	< .05 †
TOTAL	\$248,176,703	100.00%	100.00%	\$248,176,703			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$0	0.00%	3.44%	\$8,541,454	-\$8,541,454	0.00	< .05 *
African American Males	\$6,462,648	2.60%	11.85%	\$29,420,565	-\$22,957,917	0.22	< .05 *
Asian-Pacific American Females	\$0	0.00%	0.96%	\$2,372,626	-\$2,372,626	0.00	----
Asian-Pacific American Males	\$2,056,259	0.83%	0.57%	\$1,423,576	\$632,683	1.44	**
Subcontinent Asian American Females	\$0	0.00%	0.00%	\$0	\$0	----	----
Subcontinent Asian American Males	\$0	0.00%	0.76%	\$1,898,101	-\$1,898,101	0.00	----
Hispanic American Females	\$19,540,919	7.87%	4.97%	\$12,337,656	\$7,203,263	1.58	**
Hispanic American Males	\$31,775,246	12.80%	14.15%	\$35,114,868	-\$3,339,622	0.90	not significant
Native American Females	\$0	0.00%	0.19%	\$474,525	-\$474,525	0.00	----
Native American Males	\$0	0.00%	0.38%	\$949,050	-\$949,050	0.00	----
Caucasian Females	\$25,852,138	10.42%	11.66%	\$28,946,040	-\$3,093,902	0.89	not significant
Non-minority Males	\$162,489,493	65.47%	51.05%	\$126,698,240	\$35,791,253	1.28	< .05 †
TOTAL	\$248,176,703	100.00%	100.00%	\$248,176,703			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$19,540,919	7.87%	9.56%	\$23,726,262	-\$4,185,343	0.82	not significant
Minority Males	\$40,294,153	16.24%	27.72%	\$68,806,161	-\$28,512,007	0.59	< .05 *
Caucasian Females	\$25,852,138	10.42%	11.66%	\$28,946,040	-\$3,093,902	0.89	not significant
Non-minority Males	\$162,489,493	65.47%	51.05%	\$126,698,240	\$35,791,253	1.28	< .05 †
TOTAL	\$248,176,703	100.00%	100.00%	\$248,176,703			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$59,835,072	24.11%	37.28%	\$92,532,423	-\$32,697,350	0.65	< .05 *
Caucasian Female-owned Businesses	\$25,852,138	10.42%	11.66%	\$28,946,040	-\$3,093,902	0.89	not significant
Minority and Caucasian Female-owned Businesses	\$85,687,210	34.53%	48.95%	\$121,478,463	-\$35,791,253	0.71	< .05 *
Non-minority Male-owned Businesses	\$162,489,493	65.47%	51.05%	\$126,698,240	\$35,791,253	1.28	< .05 †

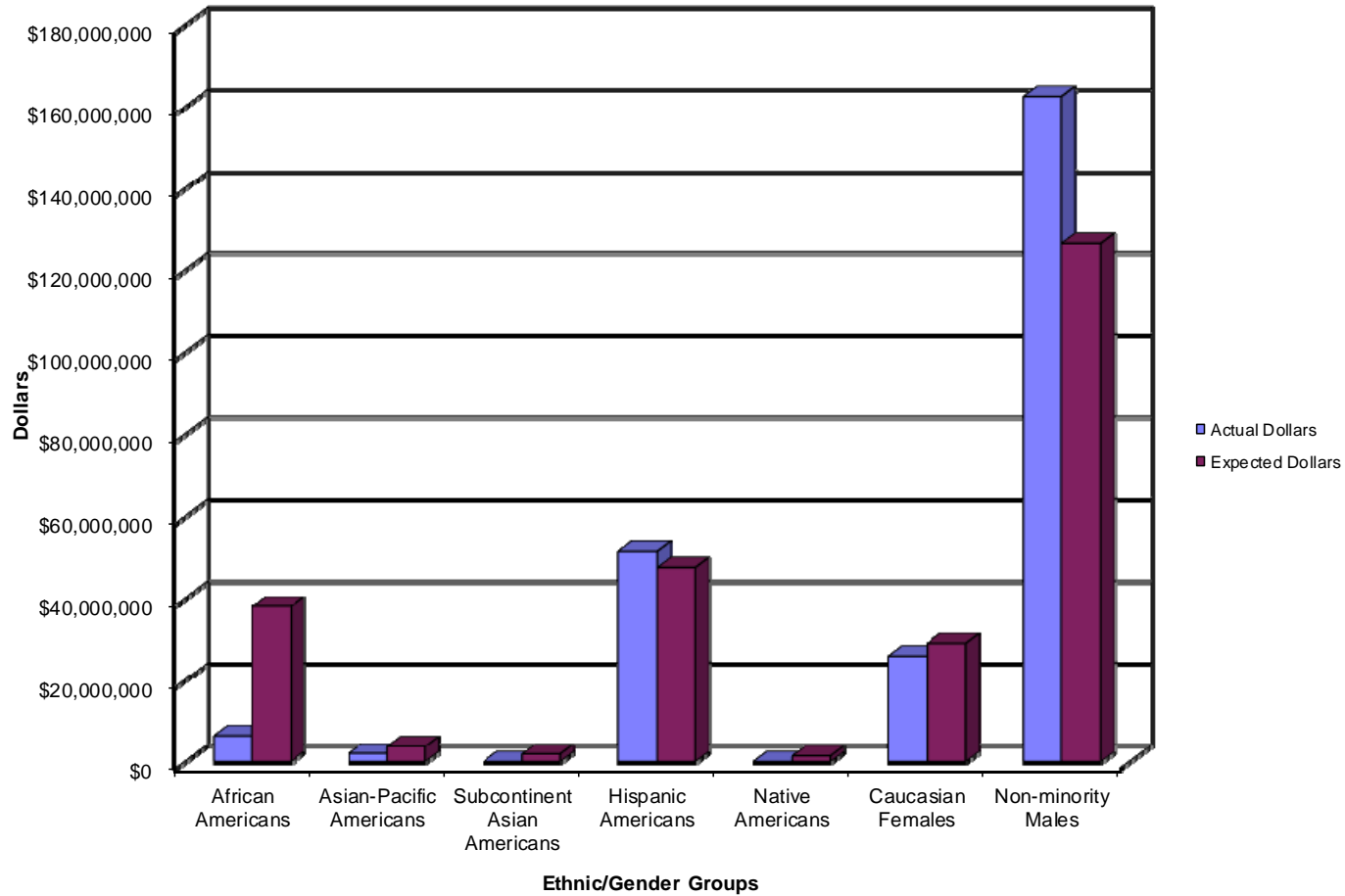
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of MWBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

**Chart 9.02: Disparity Analysis: All Construction Prime Purchase Orders,
Fiscal Years July 1, 2008, to June 30, 2013**



3. All Professional Services Prime Purchase Orders

The disparity analysis of all professional services prime purchase orders is described below and depicted in Table 9.04 and Chart 9.03.

African Americans represent 8.29% of all available professional services businesses and received 4.06% of all professional services prime purchase order dollars. This underutilization is statistically significant.

Asian-Pacific Americans represent 2.50% of all available professional services businesses and received 10.10% of all professional services prime purchase order dollars. This study does not test statistically the overutilization of Asian-Pacific Americans.

Subcontinent Asian Americans represent 4.21% of all available professional services businesses and received 3.01% of all professional services prime purchase order dollars. This underutilization is not statistically significant.

Hispanic Americans represent 47.11% of all available professional services businesses and received 22.46% of all professional services prime purchase order dollars. This underutilization is statistically significant.

Native Americans represent 0.00% of all available professional services businesses and received 0.00% of all professional services prime purchase order dollars. There were too few available firms to test statistical significance.

Minority-owned Businesses represent 62.11% of all available professional services businesses and received 39.64% of all professional services prime purchase order dollars. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 7.76% of all available professional services businesses and received 0.89% of all professional services prime purchase order dollars. This underutilization is not statistically significant.

Minority and Caucasian Female-owned Businesses represent 69.87% of all available professional services businesses and received 40.53% of all professional services prime purchase order dollars. This underutilization is statistically significant.

Non-minority Male-owned Businesses represent 30.13% of all available professional services businesses and received 59.47% of all professional services prime purchase order dollars. This overutilization is statistically significant.



**Table 9.04: Disparity Analysis: All Professional Services Prime Purchase Orders,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$515,709	4.06%	8.29%	\$1,054,190	-\$538,481	0.49	< .05 *
Asian-Pacific Americans	\$1,285,000	10.10%	2.50%	\$317,930	\$967,070	4.04	**
Subcontinent Asian Americans	\$383,391	3.01%	4.21%	\$535,461	-\$152,070	0.72	not significant
Hispanic Americans	\$2,856,380	22.46%	47.11%	\$5,990,475	-\$3,134,096	0.48	< .05 *
Native Americans	\$0	0.00%	0.00%	\$0	\$0	----	----
Caucasian Females	\$113,645	0.89%	7.76%	\$987,257	-\$873,612	0.12	not significant
Non-minority Males	\$7,563,085	59.47%	30.13%	\$3,831,896	\$3,731,189	1.97	< .05 †
TOTAL	\$12,717,210	100.00%	100.00%	\$12,717,210			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$0	0.00%	1.18%	\$150,599	-\$150,599	0.00	not significant
African American Males	\$515,709	4.06%	7.11%	\$903,591	-\$387,883	0.57	< .05 *
Asian-Pacific American Females	\$1,285,000	10.10%	0.79%	\$100,399	\$1,184,601	12.80	**
Asian-Pacific American Males	\$0	0.00%	1.71%	\$217,531	-\$217,531	0.00	not significant
Subcontinent Asian American Females	\$0	0.00%	0.66%	\$83,666	-\$83,666	0.00	----
Subcontinent Asian American Males	\$383,391	3.01%	3.55%	\$451,796	-\$68,404	0.85	not significant
Hispanic American Females	\$475,108	3.74%	11.05%	\$1,405,586	-\$930,479	0.34	< .05 *
Hispanic American Males	\$2,381,272	18.72%	36.05%	\$4,584,889	-\$2,203,617	0.52	< .05 *
Native American Females	\$0	0.00%	0.00%	\$0	\$0	----	----
Native American Males	\$0	0.00%	0.00%	\$0	\$0	----	----
Caucasian Females	\$113,645	0.89%	7.76%	\$987,257	-\$873,612	0.12	not significant
Non-minority Males	\$7,563,085	59.47%	30.13%	\$3,831,896	\$3,731,189	1.97	< .05 †
TOTAL	\$12,717,210	100.00%	100.00%	\$12,717,210			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$1,760,108	13.84%	13.68%	\$1,740,250	\$19,858	1.01	**
Minority Males	\$3,280,372	25.79%	48.42%	\$6,157,807	-\$2,877,435	0.53	< .05 *
Caucasian Females	\$113,645	0.89%	7.76%	\$987,257	-\$873,612	0.12	not significant
Non-minority Males	\$7,563,085	59.47%	30.13%	\$3,831,896	\$3,731,189	1.97	< .05 †
TOTAL	\$12,717,210	100.00%	100.00%	\$12,717,210			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$5,040,480	39.64%	62.11%	\$7,898,057	-\$2,857,577	0.64	< .05 *
Caucasian Female-owned Businesses	\$113,645	0.89%	7.76%	\$987,257	-\$873,612	0.12	not significant
Minority and Caucasian Female-owned Businesses	\$5,154,125	40.53%	69.87%	\$8,885,314	-\$3,731,189	0.58	< .05 *
Non-minority Male-owned Businesses	\$7,563,085	59.47%	30.13%	\$3,831,896	\$3,731,189	1.97	< .05 †

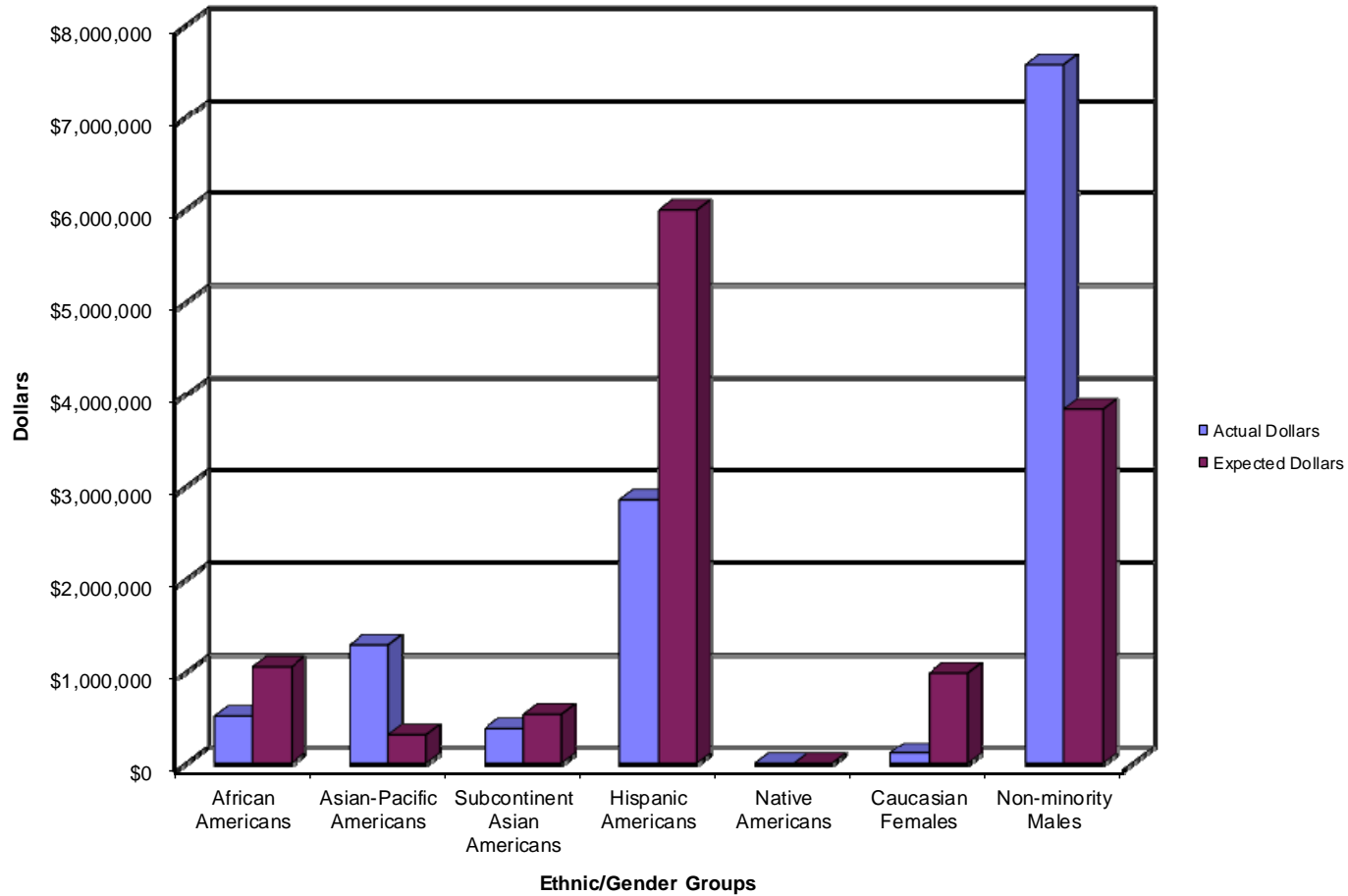
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

Chart 9.03: Disparity Analysis: All Professional Services Prime Purchase Orders All Purchase Orders, Fiscal Years July 1, 2008, to June 30, 2013



4. All Contractual Services Prime Purchase Orders

The disparity analysis of all contractual services prime purchase orders is described below and depicted in Table 9.05 and Chart 9.04.

African Americans represent 16.21% of all available contractual services businesses and received 3.38% of all contractual services prime purchase order dollars. This underutilization is statistically significant.

Asian-Pacific Americans represent 1.21% of all available contractual services businesses and received 0.03% of all contractual services prime purchase order dollars. This underutilization is statistically significant.

Subcontinent Asian Americans represent 1.66% of all available contractual services businesses and received 0.03% of all contractual services prime purchase order dollars. This underutilization is statistically significant.

Hispanic Americans represent 21.34% of all available contractual services businesses and received 6.12% of all contractual services prime purchase order dollars. This underutilization is statistically significant.

Native Americans represent 0.15% of all available contractual services businesses and received 0.00% of all contractual services prime purchase order dollars. There were too few available firms to test the statistical significance of this underutilization.

Minority-owned Businesses represent 40.56% of all available contractual services businesses and received 9.56% of all contractual services prime purchase order dollars. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 22.50% of all available contractual services businesses and received 10.83% of all contractual services prime purchase order dollars. This underutilization is statistically significant.

Minority and Caucasian Female-owned Businesses represent 63.06% of all available contractual services businesses and received 20.39% of all contractual services prime purchase order dollars. This underutilization is statistically significant.

Non-minority Male-owned Businesses represent 36.94% of all available contractual services businesses and received 79.61% of all contractual services prime purchase order dollars. This overutilization is statistically significant.



**Table 9.05: Disparity Analysis: All Contractual Services Prime Purchase Orders,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$5,050,462	3.38%	16.21%	\$24,200,035	-\$19,149,573	0.21	< .05 *
Asian-Pacific Americans	\$49,659	0.03%	1.21%	\$1,803,729	-\$1,754,071	0.03	< .05 *
Subcontinent Asian Americans	\$37,831	0.03%	1.66%	\$2,480,128	-\$2,442,297	0.02	< .05 *
Hispanic Americans	\$9,135,394	6.12%	21.34%	\$31,865,885	-\$22,730,491	0.29	< .05 *
Native Americans	\$0	0.00%	0.15%	\$225,466	-\$225,466	0.00	----
Caucasian Females	\$16,171,960	10.83%	22.50%	\$33,594,459	-\$17,422,499	0.48	< .05 *
Non-minority Males	\$118,888,453	79.61%	36.94%	\$55,164,056	\$63,724,398	2.16	< .05 †
TOTAL	\$149,333,758	100.00%	100.00%	\$149,333,758			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$1,154,097	0.77%	6.69%	\$9,995,667	-\$8,841,570	0.12	< .05 *
African American Males	\$3,896,365	2.61%	9.51%	\$14,204,369	-\$10,308,003	0.27	< .05 *
Asian-Pacific American Females	\$47,500	0.03%	0.70%	\$1,052,175	-\$1,004,675	0.05	----
Asian-Pacific American Males	\$2,159	0.00%	0.50%	\$751,554	-\$749,395	0.00	----
Subcontinent Asian American Females	\$0	0.00%	0.70%	\$1,052,175	-\$1,052,175	0.00	----
Subcontinent Asian American Males	\$37,831	0.03%	0.96%	\$1,427,952	-\$1,390,122	0.03	----
Hispanic American Females	\$708,363	0.47%	9.76%	\$14,580,146	-\$13,871,783	0.05	< .05 *
Hispanic American Males	\$8,427,031	5.64%	11.58%	\$17,285,740	-\$8,858,708	0.49	< .05 *
Native American Females	\$0	0.00%	0.05%	\$75,155	-\$75,155	0.00	----
Native American Males	\$0	0.00%	0.10%	\$150,311	-\$150,311	0.00	----
Caucasian Females	\$16,171,960	10.83%	22.50%	\$33,594,459	-\$17,422,499	0.48	< .05 *
Non-minority Males	\$118,888,453	79.61%	36.94%	\$55,164,056	\$63,724,398	2.16	< .05 †
TOTAL	\$149,333,758	100.00%	100.00%	\$149,333,758			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$1,909,960	1.28%	17.92%	\$26,755,319	-\$24,845,359	0.07	< .05 *
Minority Males	\$12,363,386	8.28%	22.65%	\$33,819,925	-\$21,456,540	0.37	< .05 *
Caucasian Females	\$16,171,960	10.83%	22.50%	\$33,594,459	-\$17,422,499	0.48	< .05 *
Non-minority Males	\$118,888,453	79.61%	36.94%	\$55,164,056	\$63,724,398	2.16	< .05 †
TOTAL	\$149,333,758	100.00%	100.00%	\$149,333,758			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$14,273,345	9.56%	40.56%	\$60,575,244	-\$46,301,898	0.24	< .05 *
Caucasian Female-owned Businesses	\$16,171,960	10.83%	22.50%	\$33,594,459	-\$17,422,499	0.48	< .05 *
Minority and Caucasian Female-owned Businesses	\$30,445,305	20.39%	63.06%	\$94,169,703	-\$63,724,398	0.32	< .05 *
Non-minority Male-owned Businesses	\$118,888,453	79.61%	36.94%	\$55,164,056	\$63,724,398	2.16	< .05 †

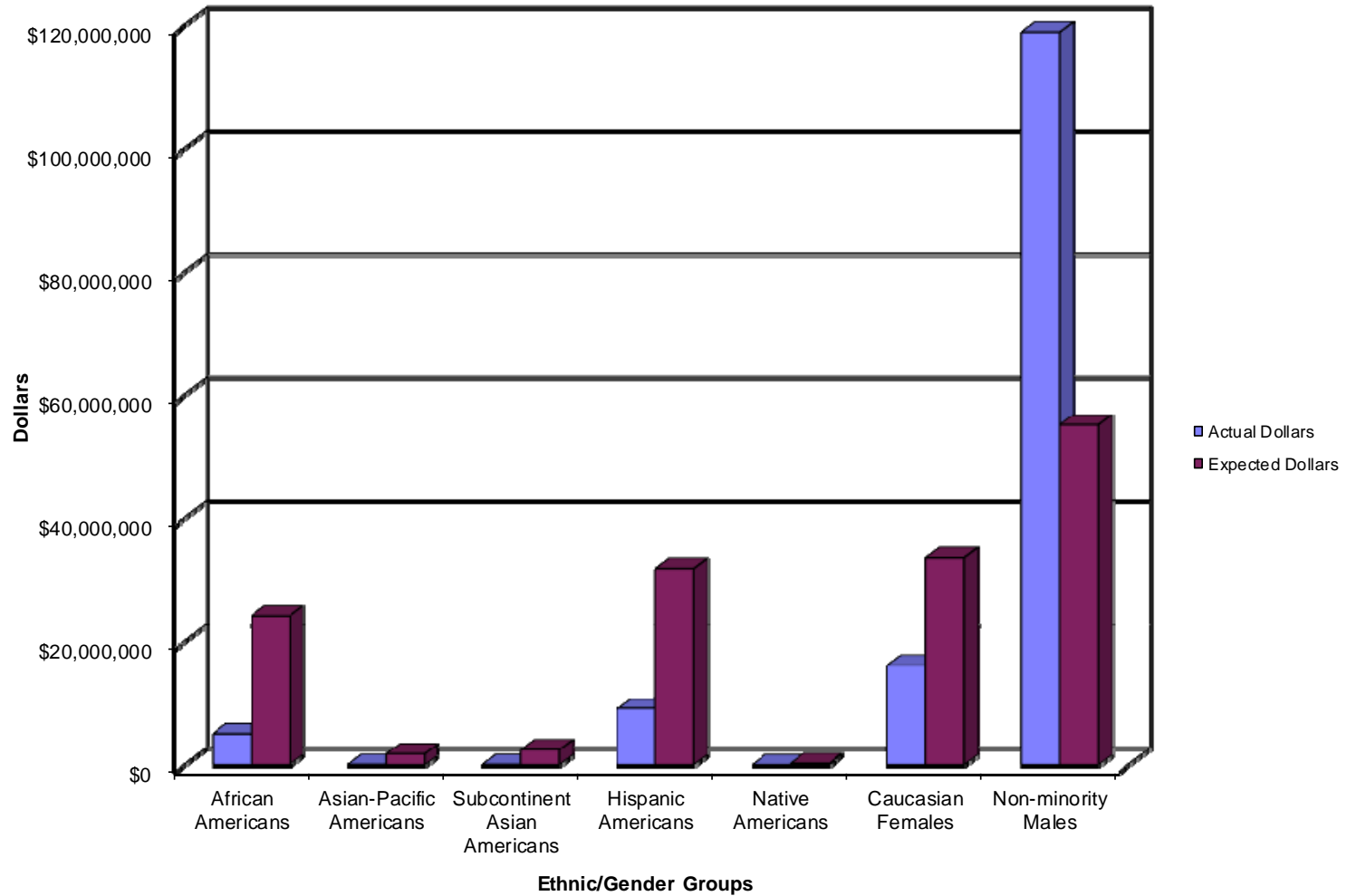
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

**Chart 9.04: Disparity Analysis: All Contractual Services Prime Purchase Orders,
Fiscal Years July 1, 2008, to June 30, 2013**



5. All Commodities Prime Purchase Orders

The disparity analysis of all commodities prime purchase orders is described below and depicted in Table 9.06 and Chart 9.05.

African Americans represent 12.20% of all available commodities businesses and received 0.93% of all commodities prime purchase order dollars. This underutilization is statistically significant.

Asian-Pacific Americans represent 0.58% of all available commodities businesses and received 0.15% of all commodities prime purchase order dollars. There were too few available firms to test the statistical significance of this underutilization.

Subcontinent Asian Americans represent 1.20% of all available commodities businesses and received 0.08% of all commodities prime purchase order dollars. This underutilization is statistically significant.

Hispanic Americans represent 19.85% of all available commodities businesses and received 8.98% of all commodities prime purchase order dollars. This underutilization is statistically significant.

Native Americans represent 0.21% of all available commodities businesses and received 0.17% of all commodities prime purchase order dollars. There were too few available firms to test the statistical significance of this underutilization.

Minority-owned Businesses represent 34.04% of all available commodities businesses and received 10.31% of all commodities prime purchase order dollars. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 15.96% of all available commodities businesses and received 3.21% of all commodities prime purchase order dollars. This underutilization is statistically significant.

Minority and Caucasian Female-owned Businesses represent 50.00% of all available commodities businesses and received 13.52% of all commodities prime purchase order dollars. This underutilization is statistically significant.

Non-minority Male-owned Businesses represent 50.00% of all available commodities businesses and received 86.48% of all commodities prime purchase order dollars. This overutilization is statistically significant.



**Table 9.06: Disparity Analysis: All Commodities Prime Purchase Orders,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$3,976,729	0.93%	12.20%	\$52,169,284	-\$48,192,555	0.08	< .05 *
Asian-Pacific Americans	\$631,533	0.15%	0.58%	\$2,475,830	-\$1,844,297	0.26	----
Subcontinent Asian Americans	\$355,392	0.08%	1.20%	\$5,128,506	-\$4,773,114	0.07	< .05 *
Hispanic Americans	\$38,406,372	8.98%	19.85%	\$84,885,615	-\$46,479,243	0.45	< .05 *
Native Americans	\$718,515	0.17%	0.21%	\$884,225	-\$165,710	0.81	----
Caucasian Females	\$13,708,626	3.21%	15.96%	\$68,262,182	-\$54,553,556	0.20	< .05 *
Non-minority Males	\$369,814,117	86.48%	50.00%	\$213,805,642	\$156,008,475	1.73	< .05 †
TOTAL	\$427,611,285	100.00%	100.00%	\$427,611,285			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$3,125,872	0.73%	3.97%	\$16,977,123	-\$13,851,251	0.18	< .05 *
African American Males	\$850,857	0.20%	8.23%	\$35,192,161	-\$34,341,304	0.02	< .05 *
Asian-Pacific American Females	\$15,908	0.00%	0.33%	\$1,414,760	-\$1,398,853	0.01	----
Asian-Pacific American Males	\$615,626	0.14%	0.25%	\$1,061,070	-\$445,444	0.58	----
Subcontinent Asian American Females	\$324,462	0.08%	0.62%	\$2,652,675	-\$2,328,214	0.12	----
Subcontinent Asian American Males	\$30,931	0.01%	0.58%	\$2,475,830	-\$2,444,900	0.01	----
Hispanic American Females	\$2,673,700	0.63%	7.28%	\$31,124,725	-\$28,451,025	0.09	< .05 *
Hispanic American Males	\$35,732,672	8.36%	12.57%	\$53,760,889	-\$18,028,218	0.66	< .05 *
Native American Females	\$0	0.00%	0.08%	\$353,690	-\$353,690	0.00	----
Native American Males	\$718,515	0.17%	0.12%	\$530,535	\$187,980	1.35	**
Caucasian Females	\$13,708,626	3.21%	15.96%	\$68,262,182	-\$54,553,556	0.20	< .05 *
Non-minority Males	\$369,814,117	86.48%	50.00%	\$213,805,642	\$156,008,475	1.73	< .05 †
TOTAL	\$427,611,285	100.00%	100.00%	\$427,611,285			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$6,139,941	1.44%	12.28%	\$52,522,974	-\$46,383,033	0.12	< .05 *
Minority Males	\$37,948,600	8.87%	21.75%	\$93,020,486	-\$55,071,886	0.41	< .05 *
Caucasian Females	\$13,708,626	3.21%	15.96%	\$68,262,182	-\$54,553,556	0.20	< .05 *
Non-minority Males	\$369,814,117	86.48%	50.00%	\$213,805,642	\$156,008,475	1.73	< .05 †
TOTAL	\$427,611,285	100.00%	100.00%	\$427,611,285			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$44,088,542	10.31%	34.04%	\$145,543,460	-\$101,454,919	0.30	< .05 *
Caucasian Female-owned Businesses	\$13,708,626	3.21%	15.96%	\$68,262,182	-\$54,553,556	0.20	< .05 *
Minority and Caucasian Female-owned Businesses	\$57,797,168	13.52%	50.00%	\$213,805,642	-\$156,008,475	0.27	< .05 *
Non-minority Male-owned Businesses	\$369,814,117	86.48%	50.00%	\$213,805,642	\$156,008,475	1.73	< .05 †

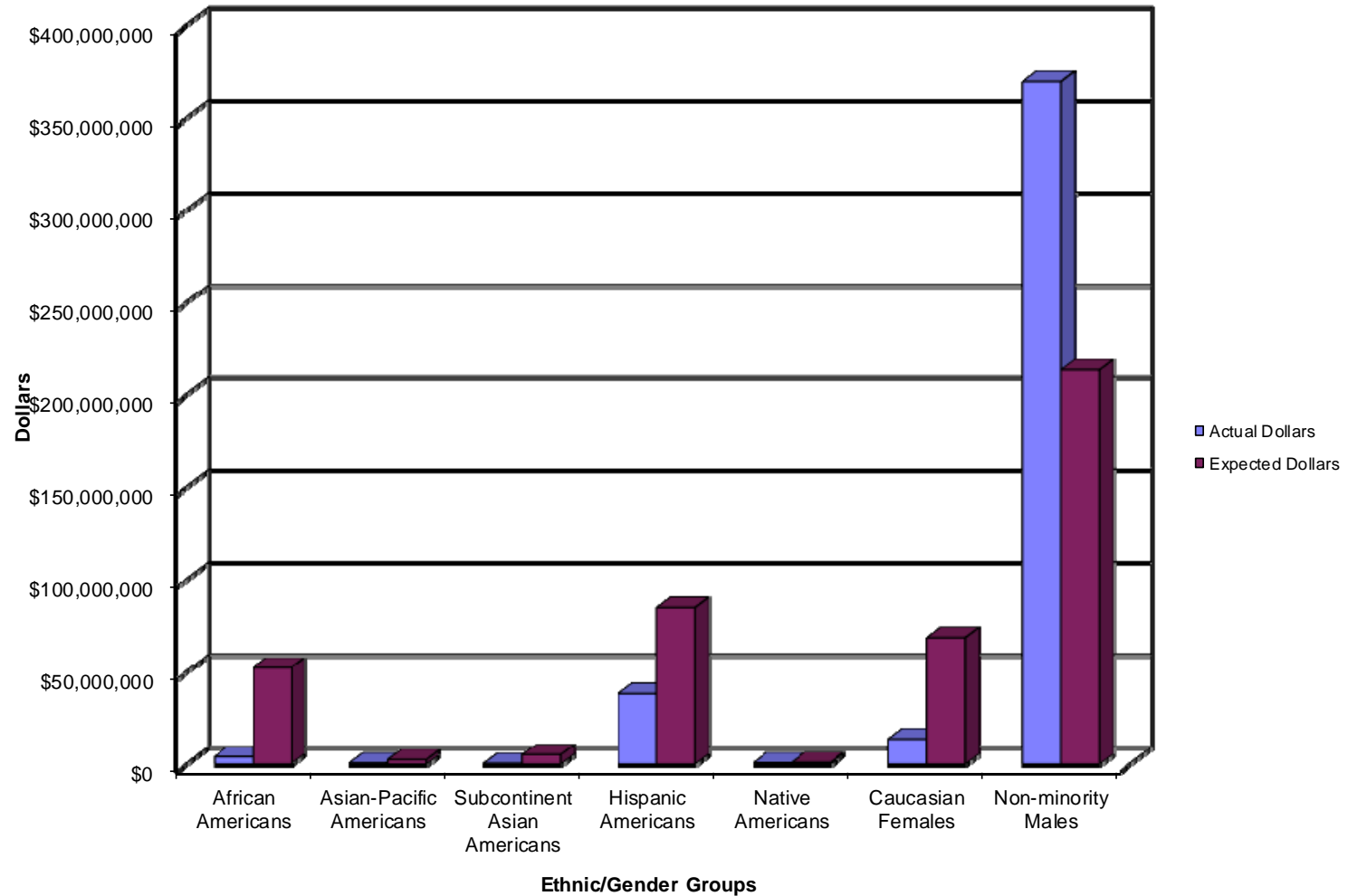
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

**Chart 9.05: Disparity Analysis: All Commodities Prime Purchase Orders,
Fiscal Years July 1, 2008, to June 30, 2013**



B. Disparity Analysis: All Formal Prime Purchase Orders, by Industry

1. Formal Construction Prime Purchase Orders Valued \$50,000 and Over

The disparity analysis of formal construction prime purchase orders valued \$50,000 and over is described below and depicted in Table 9.07 and Chart 9.06.

African Americans represent 15.30% of the available construction businesses and received 2.71% of the dollars on formal construction prime purchase orders valued \$50,000 and over. This underutilization is statistically significant.

Asian-Pacific Americans represent 1.53% of the available construction businesses and received 0.86% of the dollars on formal construction prime purchase orders valued \$50,000 and over. This underutilization is statistically significant.

Subcontinent Asian Americans represent 0.76% of the available construction businesses and received 0.00% of the dollars on formal construction prime purchase orders valued \$50,000 and over. There were too few available firms to test the statistical significance of this underutilization.

Hispanic Americans represent 19.12% of the available construction businesses and received 21.31% of the dollars on formal construction prime purchase orders valued \$50,000 and over. This study does not test statistically the overutilization of Hispanic Americans.

Native Americans represent 0.57% of the available construction businesses and received 0.00% of the dollars on formal construction prime purchase orders valued \$50,000 and over. There were too few available firms to test the statistical significance of this underutilization.

Minority-owned Businesses represent 37.28% of the available construction businesses and received 24.89% of the dollars on formal construction prime purchase orders valued \$50,000 and over. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 11.66% of the available construction businesses and received 10.49% of the dollars on formal construction prime purchase orders valued \$50,000 and over. This underutilization is not statistically significant.

Minority and Caucasian Female-owned Businesses represent 48.95% of the available construction businesses and received 35.38% of the dollars on formal construction prime purchase orders valued \$50,000 and over. This underutilization is statistically significant.



Non-minority Male-owned Businesses represent 51.05% of the available construction businesses and received 64.62% of dollars on formal construction prime purchase orders valued \$50,000 and over. This overutilization is statistically significant.



Table 9.07: Disparity Analysis: Formal Construction Prime Purchase Orders Valued \$50,000 and Over, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$6,460,999	2.71%	15.30%	\$36,444,155	-\$29,983,156	0.18	< .05 *
Asian-Pacific Americans	\$2,056,259	0.86%	1.53%	\$3,644,415	-\$1,588,157	0.56	< .05 *
Subcontinent Asian Americans	\$0	0.00%	0.76%	\$1,822,208	-\$1,822,208	0.00	----
Hispanic Americans	\$50,772,801	21.31%	19.12%	\$45,555,194	\$5,217,608	1.11	**
Native Americans	\$0	0.00%	0.57%	\$1,366,656	-\$1,366,656	0.00	----
Caucasian Females	\$25,002,947	10.49%	11.66%	\$27,788,668	-\$2,785,721	0.90	not significant
Non-minority Males	\$153,960,657	64.62%	51.05%	\$121,632,367	\$32,328,289	1.27	< .05 †
TOTAL	\$238,253,663	100.00%	100.00%	\$238,253,663			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$0	0.00%	3.44%	\$8,199,935	-\$8,199,935	0.00	< .05 *
African American Males	\$6,460,999	2.71%	11.85%	\$28,244,220	-\$21,783,221	0.23	< .05 *
Asian-Pacific American Females	\$0	0.00%	0.96%	\$2,277,760	-\$2,277,760	0.00	----
Asian-Pacific American Males	\$2,056,259	0.86%	0.57%	\$1,366,656	\$689,603	1.50	**
Subcontinent Asian American Females	\$0	0.00%	0.00%	\$0	\$0	----	----
Subcontinent Asian American Males	\$0	0.00%	0.76%	\$1,822,208	-\$1,822,208	0.00	----
Hispanic American Females	\$19,417,329	8.15%	4.97%	\$11,844,350	\$7,572,979	1.64	**
Hispanic American Males	\$31,355,472	13.16%	14.15%	\$33,710,843	-\$2,355,371	0.93	not significant
Native American Females	\$0	0.00%	0.19%	\$455,552	-\$455,552	0.00	----
Native American Males	\$0	0.00%	0.38%	\$911,104	-\$911,104	0.00	----
Caucasian Females	\$25,002,947	10.49%	11.66%	\$27,788,668	-\$2,785,721	0.90	not significant
Non-minority Males	\$153,960,657	64.62%	51.05%	\$121,632,367	\$32,328,289	1.27	< .05 †
TOTAL	\$238,253,663	100.00%	100.00%	\$238,253,663			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$19,417,329	8.15%	9.56%	\$22,777,597	-\$3,360,268	0.85	not significant
Minority Males	\$39,872,730	16.74%	27.72%	\$66,055,031	-\$26,182,301	0.60	< .05 *
Caucasian Females	\$25,002,947	10.49%	11.66%	\$27,788,668	-\$2,785,721	0.90	not significant
Non-minority Males	\$153,960,657	64.62%	51.05%	\$121,632,367	\$32,328,289	1.27	< .05 †
TOTAL	\$238,253,663	100.00%	100.00%	\$238,253,663			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$59,290,059	24.89%	37.28%	\$88,832,628	-\$29,542,568	0.67	< .05 *
Caucasian Female-owned Businesses	\$25,002,947	10.49%	11.66%	\$27,788,668	-\$2,785,721	0.90	not significant
Minority and Caucasian Female-owned Businesses	\$84,293,006	35.38%	48.95%	\$116,621,296	-\$32,328,289	0.72	< .05 *
Non-minority Male-owned Businesses	\$153,960,657	64.62%	51.05%	\$121,632,367	\$32,328,289	1.27	< .05 †

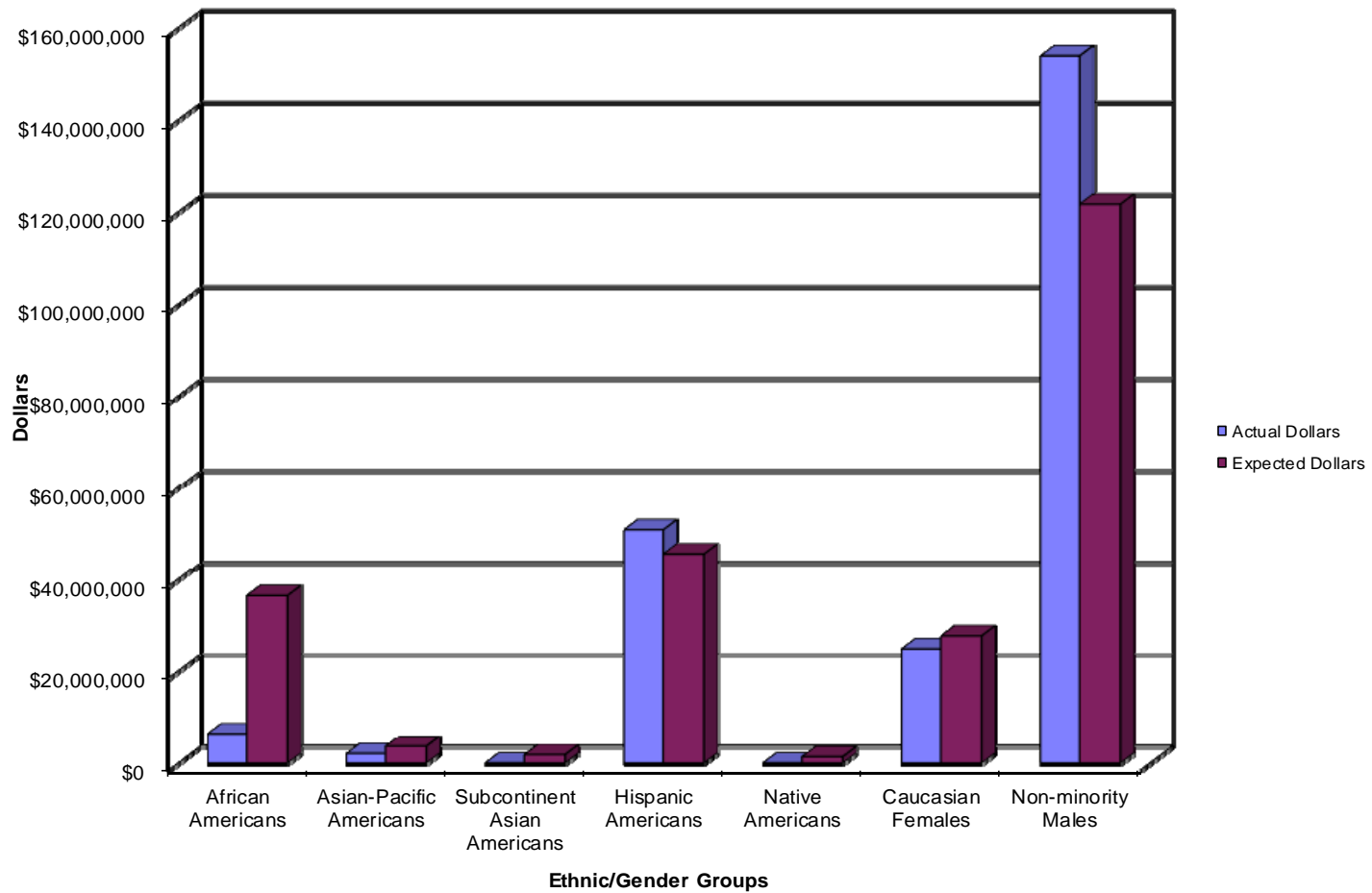
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

Chart 9.06: Disparity Analysis: Formal Construction Prime Purchase Orders Valued \$50,000 and Over, Fiscal Years July 1, 2008, to June 30, 2013



2. Formal Professional Services Prime Purchase Orders Valued \$325,000 and Over

The disparity analysis of formal professional services prime purchase orders valued \$325,000 and over is described below and depicted in Table 9.08 and Chart 9.07.

African Americans represent 8.29% of the available professional services businesses and received 6.48% of the dollars on formal professional services prime purchase orders valued \$325,000 and over. This underutilization is not statistically significant.

Asian-Pacific Americans represent 2.50% of the available professional services businesses and received 16.62% of the dollars on formal professional services prime purchase orders valued \$325,000 and over. This study does not test statistically the overutilization of Asian-Pacific Americans.

Subcontinent Asian Americans represent 4.21% of the available professional services businesses and received 0.00% of the dollars on formal professional services prime purchase orders valued \$325,000 and over. This underutilization is not statistically significant.

Hispanic Americans represent 47.11% of the available professional services businesses and received 28.81% of the dollars on formal professional services prime purchase orders valued \$325,000 and over. This underutilization is not statistically significant.

Native Americans represent 0.00% of the available professional services businesses and received 0.00% of the dollars on formal professional services prime purchase orders valued \$325,000 and over. There were too few available firms to test the statistical significance.

Minority-owned Businesses represent 62.11% of the available professional services businesses and received 51.92% of the dollars on formal professional services prime purchase orders valued \$325,000 and over. This underutilization is not statistically significant.

Caucasian Female-owned Businesses represent 7.76% of the available professional services businesses and received 0.00% of the dollars on formal professional services prime purchase orders valued \$325,000 and over. This underutilization is not statistically significant.

Minority and Caucasian Female-owned Businesses represent 69.87% of the available professional services businesses and received 51.92% of the dollars on formal professional services prime purchase orders valued \$325,000 and over. This underutilization is not statistically significant.



Non-minority Male-owned Businesses represent 30.13% of the available professional services businesses and received 48.08% of the dollars on formal professional services prime purchase orders valued \$325,000 and over. This overutilization is not statistically significant.



Table 9.08: Disparity Analysis: Formal Professional Services Prime Purchase Orders Valued \$325,000 and Over, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$500,659	6.48%	8.29%	\$640,743	-\$140,084	0.78	not significant
Asian-Pacific Americans	\$1,285,000	16.62%	2.50%	\$193,240	\$1,091,760	6.65	**
Subcontinent Asian Americans	\$0	0.00%	4.21%	\$325,457	-\$325,457	0.00	not significant
Hispanic Americans	\$2,227,206	28.81%	47.11%	\$3,641,045	-\$1,413,838	0.61	not significant
Native Americans	\$0	0.00%	0.00%	\$0	\$0	----	----
Caucasian Females	\$0	0.00%	7.76%	\$600,060	-\$600,060	0.00	not significant
Non-minority Males	\$3,716,727	48.08%	30.13%	\$2,329,048	\$1,387,679	1.60	not significant
TOTAL	\$7,729,592	100.00%	100.00%	\$7,729,592			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$0	0.00%	1.18%	\$91,535	-\$91,535	0.00	not significant
African American Males	\$500,659	6.48%	7.11%	\$549,208	-\$48,549	0.91	not significant
Asian-Pacific American Females	\$1,285,000	16.62%	0.79%	\$61,023	\$1,223,977	21.06	**
Asian-Pacific American Males	\$0	0.00%	1.71%	\$132,217	-\$132,217	0.00	not significant
Subcontinent Asian American Females	\$0	0.00%	0.66%	\$50,853	-\$50,853	0.00	----
Subcontinent Asian American Males	\$0	0.00%	3.55%	\$274,604	-\$274,604	0.00	not significant
Hispanic American Females	\$0	0.00%	11.05%	\$854,323	-\$854,323	0.00	not significant
Hispanic American Males	\$2,227,206	28.81%	36.05%	\$2,786,721	-\$559,515	0.80	not significant
Native American Females	\$0	0.00%	0.00%	\$0	\$0	----	----
Native American Males	\$0	0.00%	0.00%	\$0	\$0	----	----
Caucasian Females	\$0	0.00%	7.76%	\$600,060	-\$600,060	0.00	not significant
Non-minority Males	\$3,716,727	48.08%	30.13%	\$2,329,048	\$1,387,679	1.60	not significant
TOTAL	\$7,729,592	100.00%	100.00%	\$7,729,592			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$1,285,000	16.62%	13.68%	\$1,057,734	\$227,266	1.21	**
Minority Males	\$2,727,865	35.29%	48.42%	\$3,742,750	-\$1,014,885	0.73	not significant
Caucasian Females	\$0	0.00%	7.76%	\$600,060	-\$600,060	0.00	not significant
Non-minority Males	\$3,716,727	48.08%	30.13%	\$2,329,048	\$1,387,679	1.60	not significant
TOTAL	\$7,729,592	100.00%	100.00%	\$7,729,592			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$4,012,865	51.92%	62.11%	\$4,800,484	-\$787,618	0.84	not significant
Caucasian Female-owned Businesses	\$0	0.00%	7.76%	\$600,060	-\$600,060	0.00	not significant
Minority and Caucasian Female-owned Businesses	\$4,012,865	51.92%	69.87%	\$5,400,544	-\$1,387,679	0.74	not significant
Non-minority Male-owned Businesses	\$3,716,727	48.08%	30.13%	\$2,329,048	\$1,387,679	1.60	not significant

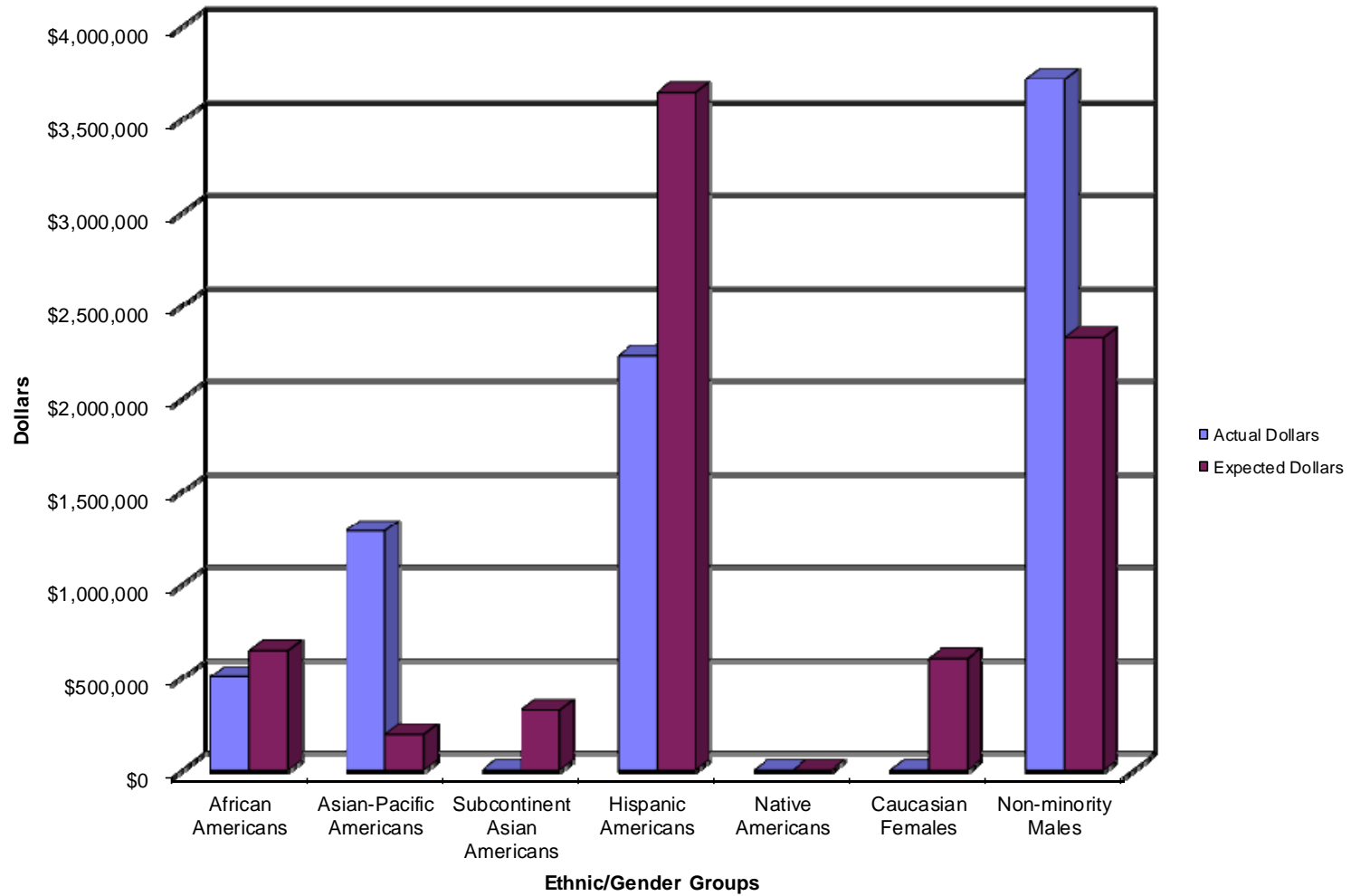
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

Chart 9.07: Disparity Analysis: Formal Professional Services Prime Purchase Orders Valued \$325,000 and Over, Fiscal Years July 1, 2008, to June 30, 2013



3. Formal Professional Services Prime Purchase Orders Valued \$195,000 and Over

The disparity analysis of formal professional services prime purchase orders valued \$195,000 and over is described below and depicted in Table 9.09 and Chart 9.08.

African Americans represent 8.29% of the available professional services businesses and received 5.57% of the dollars on formal professional services prime purchase orders valued \$195,000 and over. This underutilization is not statistically significant.

Asian-Pacific Americans represent 2.50% of the available professional services businesses and received 14.30% of the dollars on formal professional services prime purchase orders valued \$195,000 and over. This study does not test statistically the overutilization of Asian-Pacific Americans.

Subcontinent Asian Americans represent 4.21% of the available professional services businesses and received 0.00% of the dollars on formal professional services prime purchase orders valued \$195,000 and over. This underutilization is not statistically significant.

Hispanic Americans represent 47.11% of the available professional services businesses and received 24.78% of the dollars on formal professional services prime purchase orders valued \$195,000 and over. This underutilization is statistically significant.

Native Americans represent 0.00% of the available professional services businesses and received 0.00% of the dollars on formal professional services prime purchase orders valued \$195,000 and over. There were too few available firms to test the statistical significance.

Minority-owned Businesses represent 62.11% of the available professional services businesses and received 44.65% of the dollars on formal professional services prime purchase orders valued \$195,000 and over. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 7.76% of the available professional services businesses and received 0.00% of the dollars on formal professional services prime purchase orders valued \$195,000 and over. This underutilization is not statistically significant.

Minority and Caucasian Female-owned Businesses represent 69.87% of the available professional services businesses and received 44.65% of the dollars on formal professional services prime purchase orders valued \$195,000 and over. This underutilization is statistically significant.



Non-minority Male-owned Businesses represent 30.13% of the available professional services businesses and received 55.35% of the dollars on formal professional services prime purchase orders valued \$195,000 and over. This overutilization is statistically significant.



Table 9.09: Disparity Analysis: Formal Professional Services Prime Purchase Orders Valued \$195,000 and Over, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$500,659	5.57%	8.29%	\$744,984	-\$244,325	0.67	not significant
Asian-Pacific Americans	\$1,285,000	14.30%	2.50%	\$224,678	\$1,060,322	5.72	**
Subcontinent Asian Americans	\$0	0.00%	4.21%	\$378,404	-\$378,404	0.00	not significant
Hispanic Americans	\$2,227,206	24.78%	47.11%	\$4,233,400	-\$2,006,194	0.53	< .05 *
Native Americans	\$0	0.00%	0.00%	\$0	---	---	---
Caucasian Females	\$0	0.00%	7.76%	\$697,683	-\$697,683	0.00	not significant
Non-minority Males	\$4,974,241	55.35%	30.13%	\$2,707,957	\$2,266,284	1.84	< .05 †
TOTAL	\$8,987,106	100.00%	100.00%	\$8,987,106			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$0	0.00%	1.18%	\$106,426	-\$106,426	0.00	not significant
African American Males	\$500,659	5.57%	7.11%	\$638,558	-\$137,899	0.78	not significant
Asian-Pacific American Females	\$1,285,000	14.30%	0.79%	\$70,951	\$1,214,049	18.11	**
Asian-Pacific American Males	\$0	0.00%	1.71%	\$153,727	-\$153,727	0.00	not significant
Subcontinent Asian American Females	\$0	0.00%	0.66%	\$59,126	-\$59,126	0.00	---
Subcontinent Asian American Males	\$0	0.00%	3.55%	\$319,279	-\$319,279	0.00	not significant
Hispanic American Females	\$0	0.00%	11.05%	\$993,312	-\$993,312	0.00	not significant
Hispanic American Males	\$2,227,206	24.78%	36.05%	\$3,240,088	-\$1,012,882	0.69	not significant
Native American Females	\$0	0.00%	0.00%	\$0	\$0	---	---
Native American Males	\$0	0.00%	0.00%	\$0	\$0	---	---
Caucasian Females	\$0	0.00%	7.76%	\$697,683	-\$697,683	0.00	not significant
Non-minority Males	\$4,974,241	55.35%	30.13%	\$2,707,957	\$2,266,284	1.84	< .05 †
TOTAL	\$8,987,106	100.00%	100.00%	\$8,987,106			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$1,285,000	14.30%	13.68%	\$1,229,815	\$55,185	1.04	**
Minority Males	\$2,727,865	30.35%	48.42%	\$4,351,652	-\$1,623,786	0.63	not significant
Caucasian Females	\$0	0.00%	7.76%	\$697,683	-\$697,683	0.00	not significant
Non-minority Males	\$4,974,241	55.35%	30.13%	\$2,707,957	\$2,266,284	1.84	< .05 †
TOTAL	\$8,987,106	100.00%	100.00%	\$8,987,106			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$4,012,865	44.65%	62.11%	\$5,581,466	-\$1,568,601	0.72	< .05 *
Caucasian Female-owned Businesses	\$0	0.00%	7.76%	\$697,683	-\$697,683	0.00	not significant
Minority and Caucasian Female-owned Businesses	\$4,012,865	44.65%	69.87%	\$6,279,149	-\$2,266,284	0.64	< .05 *
Non-minority Male-owned Businesses	\$4,974,241	55.35%	30.13%	\$2,707,957	\$2,266,284	1.84	< .05 †

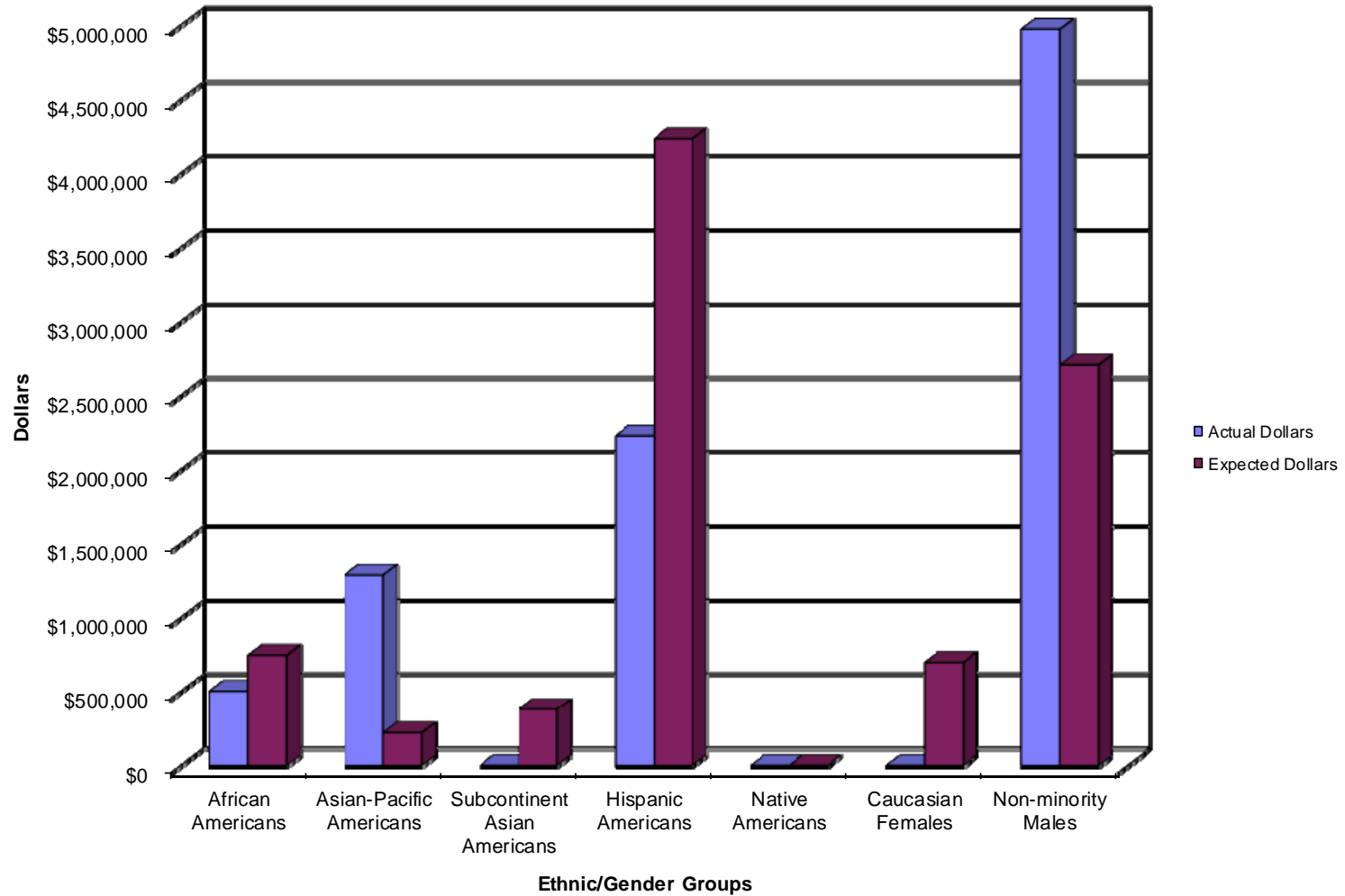
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

Chart 9.08: Disparity Analysis: Formal Professional Services Prime Purchase Orders Valued \$195,000 and Over, Fiscal Years July 1, 2008, to June 30, 2013



4. Formal Contractual Services Prime Purchase Orders Valued \$500,000 and Over

The disparity analysis of contractual services prime purchase orders is described below and depicted in Table 9.10 and Chart 9.09.

African Americans represent 16.21% of the available contractual services businesses and received 0.00% of the dollars on formal contractual services prime purchase orders valued \$500,000 and over. This underutilization is statistically significant.

Asian-Pacific Americans represent 1.21% of the available contractual services businesses and received 0.00% of the dollars on formal contractual services prime purchase orders valued \$500,000 and over. This underutilization is not statistically significant.

Subcontinent Asian Americans represent 1.66% of the available contractual services businesses and received 0.00% of the dollars on formal contractual services prime purchase orders valued \$500,000 and over. This underutilization is not statistically significant.

Hispanic Americans represent 21.34% of the available contractual services businesses and received 0.00% of the dollars on formal contractual services prime purchase orders valued \$500,000 and over. This underutilization is statistically significant.

Native Americans represent 0.15% of the available contractual services businesses and received 0.00% of the dollars on formal contractual services prime purchase orders valued \$500,000 and over. There were too few available firms to test the statistical significance of this underutilization.

Minority-owned Businesses represent 40.56% of the available contractual services businesses and received 0.00% of the dollars on formal contractual services prime purchase orders valued \$500,000 and over. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 22.50% of the available contractual services businesses and received 12.76% of the dollars on formal contractual services prime purchase orders valued \$500,000 and over. This underutilization is not statistically significant.

Minority and Caucasian Female-owned Businesses represent 63.06% of the available contractual services businesses and received 12.76% of the dollars on formal contractual services prime purchase orders valued \$500,000 and over. This underutilization is statistically significant.



Non-minority Male-owned Businesses represent 36.94% of the available contractual services businesses and received 87.24% of the dollars on formal contractual services prime purchase orders valued \$500,000 and over. This overutilization is statistically significant.



Table 9.10: Disparity Analysis: Formal Contractual Services Prime Purchase Orders Valued \$500,000 and Over, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$0	0.00%	16.21%	\$6,884,582	-\$6,884,582	0.00	< .05 *
Asian-Pacific Americans	\$0	0.00%	1.21%	\$513,137	-\$513,137	0.00	not significant
Subcontinent Asian Americans	\$0	0.00%	1.66%	\$705,563	-\$705,563	0.00	not significant
Hispanic Americans	\$0	0.00%	21.34%	\$9,065,412	-\$9,065,412	0.00	< .05 *
Native Americans	\$0	0.00%	0.15%	\$64,142	-\$64,142	0.00	----
Caucasian Females	\$5,420,205	12.76%	22.50%	\$9,557,168	-\$4,136,963	0.57	not significant
Non-minority Males	\$37,063,225	87.24%	36.94%	\$15,693,426	\$21,369,799	2.36	< .05 †
TOTAL	\$42,483,430	100.00%	100.00%	\$42,483,430			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$0	0.00%	6.69%	\$2,843,632	-\$2,843,632	0.00	< .05 *
African American Males	\$0	0.00%	9.51%	\$4,040,950	-\$4,040,950	0.00	< .05 *
Asian-Pacific American Females	\$0	0.00%	0.70%	\$299,330	-\$299,330	0.00	----
Asian-Pacific American Males	\$0	0.00%	0.50%	\$213,807	-\$213,807	0.00	----
Subcontinent Asian American Females	\$0	0.00%	0.70%	\$299,330	-\$299,330	0.00	----
Subcontinent Asian American Males	\$0	0.00%	0.96%	\$406,233	-\$406,233	0.00	----
Hispanic American Females	\$0	0.00%	9.76%	\$4,147,854	-\$4,147,854	0.00	< .05 *
Hispanic American Males	\$0	0.00%	11.58%	\$4,917,559	-\$4,917,559	0.00	< .05 *
Native American Females	\$0	0.00%	0.05%	\$21,381	-\$21,381	0.00	----
Native American Males	\$0	0.00%	0.10%	\$42,761	-\$42,761	0.00	----
Caucasian Females	\$5,420,205	12.76%	22.50%	\$9,557,168	-\$4,136,963	0.57	not significant
Non-minority Males	\$37,063,225	87.24%	36.94%	\$15,693,426	\$21,369,799	2.36	< .05 †
TOTAL	\$42,483,430	100.00%	100.00%	\$42,483,430			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$0	0.00%	17.92%	\$7,611,525	-\$7,611,525	0.00	< .05 *
Minority Males	\$0	0.00%	22.65%	\$9,621,310	-\$9,621,310	0.00	< .05 *
Caucasian Females	\$5,420,205	12.76%	22.50%	\$9,557,168	-\$4,136,963	0.57	not significant
Non-minority Males	\$37,063,225	87.24%	36.94%	\$15,693,426	\$21,369,799	2.36	< .05 †
TOTAL	\$42,483,430	100.00%	100.00%	\$42,483,430			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$0	0.00%	40.56%	\$17,232,836	-\$17,232,836	0.00	< .05 *
Caucasian Female-owned Businesses	\$5,420,205	12.76%	22.50%	\$9,557,168	-\$4,136,963	0.57	not significant
Minority and Caucasian Female-owned Businesses	\$5,420,205	12.76%	63.06%	\$26,790,004	-\$21,369,799	0.20	< .05 *
Non-minority Male-owned Businesses	\$37,063,225	87.24%	36.94%	\$15,693,426	\$21,369,799	2.36	< .05 †

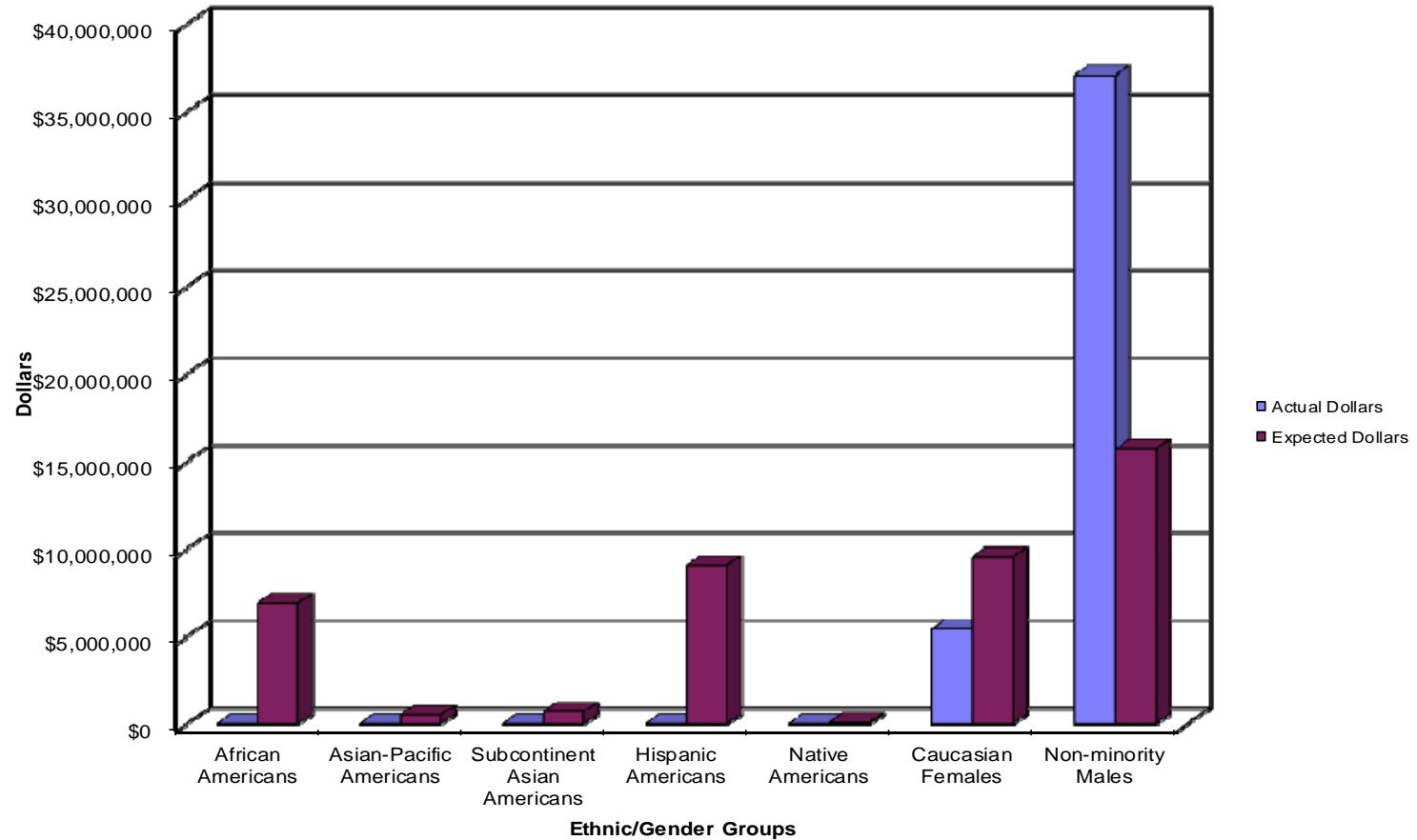
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

Chart 9.09: Disparity Analysis: Formal Contractual Services Prime Purchase Orders Valued \$500,000 and Over, Fiscal Years July 1, 2008, to June 30, 2013



5. Formal Contractual Services Prime Purchase Orders Valued \$50,000 to \$499,999

The disparity analysis of contractual services prime purchase orders is described below and depicted in Table 9.11 and Chart 9.10.

African Americans represent 16.21% of the available contractual services businesses and received 6.06% of the dollars on formal contractual services prime purchase orders valued \$50,000 to \$499,999. This underutilization is statistically significant.

Asian-Pacific Americans represent 1.21% of the available contractual services businesses and received 0.00% of the dollars on formal contractual services prime purchase orders valued \$50,000 to \$499,999. This underutilization is statistically significant.

Subcontinent Asian Americans represent 1.66% of the available contractual services businesses and received 0.00% of the dollars on formal contractual services prime purchase orders valued \$50,000 to \$499,999. This underutilization is statistically significant.

Hispanic Americans represent 21.34% of the available contractual services businesses and received 8.49% of the dollars on formal contractual services prime purchase orders valued \$50,000 to \$499,999. This underutilization is statistically significant.

Native Americans represent 0.15% of the available contractual services businesses and received 0.00% of the dollars on formal contractual services prime purchase orders valued \$50,000 to \$499,999. There were too few available firms to test the statistical significance of this underutilization.

Minority-owned Businesses represent 40.56% of the available contractual services businesses and received 14.55% of the dollars on formal contractual services prime purchase orders valued \$50,000 to \$499,999. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 22.50% of the available contractual services businesses and received 10.16% of the dollars on formal contractual services prime purchase orders valued \$50,000 to \$499,999. This underutilization is statistically significant.

Minority and Caucasian Female-owned Businesses represent 63.06% of the available contractual services businesses and received 24.72% of the dollars on formal contractual services prime purchase orders valued \$50,000 to \$499,999. This underutilization is statistically significant.



Non-minority Male-owned Businesses represent 36.94% of the available contractual services businesses and received 75.28% of the dollars on formal contractual services prime purchase orders valued \$50,000 to \$499,999. This overutilization is statistically significant.



Table 9.11: Disparity Analysis: Formal Contractual Services Prime Purchase Orders Valued \$50,000 to \$499,999, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$3,893,914	6.06%	16.21%	\$10,414,864	-\$6,520,950	0.37	< .05 *
Asian-Pacific Americans	\$0	0.00%	1.21%	\$776,263	-\$776,263	0.00	< .05 *
Subcontinent Asian Americans	\$0	0.00%	1.66%	\$1,067,362	-\$1,067,362	0.00	< .05 *
Hispanic Americans	\$5,458,405	8.49%	21.34%	\$13,713,982	-\$8,255,578	0.40	< .05 *
Native Americans	\$0	0.00%	0.15%	\$97,033	-\$97,033	0.00	----
Caucasian Females	\$6,531,562	10.16%	22.50%	\$14,457,901	-\$7,926,339	0.45	< .05 *
Non-minority Males	\$48,384,239	75.28%	36.94%	\$23,740,715	\$24,643,524	2.04	< .05 †
TOTAL	\$64,268,120	100.00%	100.00%	\$64,268,120			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$787,778	1.23%	6.69%	\$4,301,792	-\$3,514,013	0.18	< .05 *
African American Males	\$3,106,136	4.83%	9.51%	\$6,113,072	-\$3,006,936	0.51	< .05 *
Asian-Pacific American Females	\$0	0.00%	0.70%	\$452,820	-\$452,820	0.00	----
Asian-Pacific American Males	\$0	0.00%	0.50%	\$323,443	-\$323,443	0.00	----
Subcontinent Asian American Females	\$0	0.00%	0.70%	\$452,820	-\$452,820	0.00	----
Subcontinent Asian American Males	\$0	0.00%	0.96%	\$614,542	-\$614,542	0.00	----
Hispanic American Females	\$600,303	0.93%	9.76%	\$6,274,794	-\$5,674,491	0.10	< .05 *
Hispanic American Males	\$4,858,102	7.56%	11.58%	\$7,439,189	-\$2,581,087	0.65	< .05 *
Native American Females	\$0	0.00%	0.05%	\$32,344	-\$32,344	0.00	----
Native American Males	\$0	0.00%	0.10%	\$64,689	-\$64,689	0.00	----
Caucasian Females	\$6,531,562	10.16%	22.50%	\$14,457,901	-\$7,926,339	0.45	< .05 *
Non-minority Males	\$48,384,239	75.28%	36.94%	\$23,740,715	\$24,643,524	2.04	< .05 †
TOTAL	\$64,268,120	100.00%	100.00%	\$64,268,120			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$1,388,081	2.16%	17.92%	\$11,514,570	-\$10,126,489	0.12	< .05 *
Minority Males	\$7,964,238	12.39%	22.65%	\$14,554,934	-\$6,590,696	0.55	< .05 *
Caucasian Females	\$6,531,562	10.16%	22.50%	\$14,457,901	-\$7,926,339	0.45	< .05 *
Non-minority Males	\$48,384,239	75.28%	36.94%	\$23,740,715	\$24,643,524	2.04	< .05 †
TOTAL	\$64,268,120	100.00%	100.00%	\$64,268,120			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$9,352,319	14.55%	40.56%	\$26,069,504	-\$16,717,185	0.36	< .05 *
Caucasian Female-owned Businesses	\$6,531,562	10.16%	22.50%	\$14,457,901	-\$7,926,339	0.45	< .05 *
Minority and Caucasian Female-owned Businesses	\$15,883,881	24.72%	63.06%	\$40,527,406	-\$24,643,524	0.39	< .05 *
Non-minority Male-owned Businesses	\$48,384,239	75.28%	36.94%	\$23,740,715	\$24,643,524	2.04	< .05 †

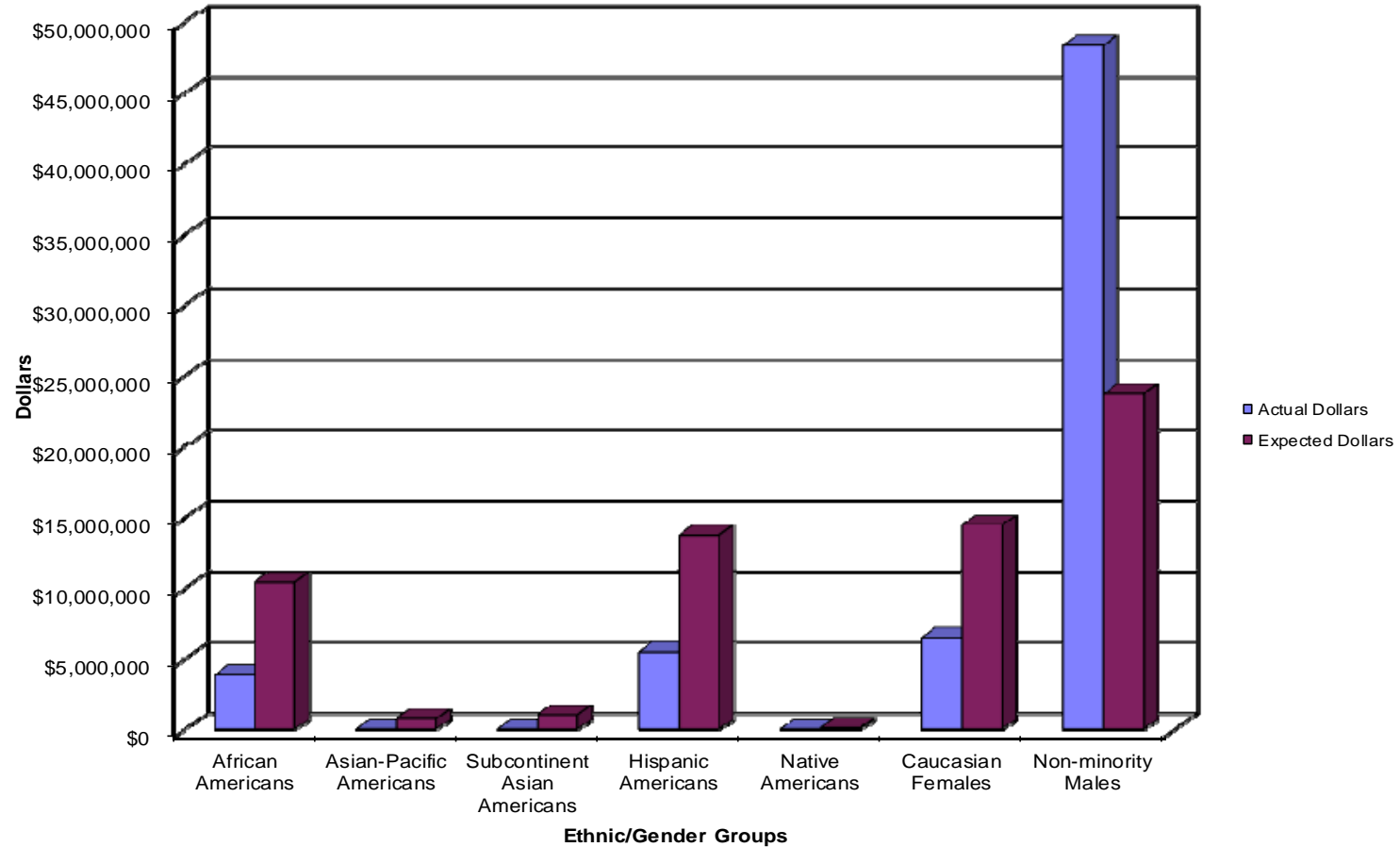
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

Chart 9.10: Disparity Analysis: Formal Contractual Services Prime Purchase Orders Valued \$50,000 to \$499,999, Fiscal Years July 1, 2008, to June 30, 2013



6. Formal Contractual Services Prime Purchase Orders Valued \$5,000 to \$49,999

The disparity analysis of contractual services prime purchase orders is described below and depicted in Table 9.12 and Chart 9.11.

African Americans represent 16.21% of the available contractual services businesses and received 3.33% of the dollars on formal contractual prime purchase orders valued \$5,000 to \$49,999. This underutilization is statistically significant.

Asian-Pacific Americans represent 1.21% of the available contractual services businesses and received 0.17% of the dollars on formal contractual services prime purchase orders valued \$5,000 to \$49,999. This underutilization is statistically significant.

Subcontinent Asian Americans represent 1.66% of the available contractual services businesses and received 0.03% of the dollars on formal contractual services prime purchase orders valued \$5,000 to \$49,999. This underutilization is statistically significant.

Hispanic Americans represent 21.34% of the available contractual services businesses and received 7.96% of the dollars on formal contractual services prime purchase orders valued \$5,000 to \$49,999. This underutilization is statistically significant.

Native Americans represent 0.15% of the available contractual services businesses and received 0.00% of the dollars on formal contractual services prime purchase orders valued \$5,000 to \$49,999. There were too few available firms to test the statistical significance of this underutilization.

Minority-owned Businesses represent 40.56% of the available contractual services businesses and received 11.48% of the dollars on formal contractual services prime purchase orders valued \$5,000 to \$49,999. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 22.50% of the available contractual businesses and received 8.53% of the dollars on formal contractual services prime purchase orders valued \$5,000 to \$49,999. This underutilization is statistically significant.

Minority and Caucasian Female-owned Businesses represent 63.06% of the available contractual services businesses and received 20.01% of the dollars on formal contractual services prime purchase orders valued \$5,000 to \$49,999. This underutilization is statistically significant.

Non-minority Male-owned Businesses represent 36.94% of the available contractual services businesses and received 79.99% of the dollars on formal contractual services



prime purchase orders valued \$5,000 to \$49,999. This overutilization is statistically significant.



Table 9.12: Disparity Analysis: Formal Contractual Services Prime Purchase Orders Valued \$5,000 to \$49,999, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$933,626	3.33%	16.21%	\$4,548,210	-\$3,614,584	0.21	< .05 *
Asian-Pacific Americans	\$47,500	0.17%	1.21%	\$338,997	-\$291,497	0.14	< .05 *
Subcontinent Asian Americans	\$8,000	0.03%	1.66%	\$466,121	-\$458,121	0.02	< .05 *
Hispanic Americans	\$2,233,654	7.96%	21.34%	\$5,988,948	-\$3,755,294	0.37	< .05 *
Native Americans	\$0	0.00%	0.15%	\$42,375	-\$42,375	0.00	----
Caucasian Females	\$2,393,047	8.53%	22.50%	\$6,313,820	-\$3,920,773	0.38	< .05 *
Non-minority Males	\$22,450,303	79.99%	36.94%	\$10,367,660	\$12,082,644	2.17	< .05 †
TOTAL	\$28,066,130	100.00%	100.00%	\$28,066,130			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$294,002	1.05%	6.69%	\$1,878,609	-\$1,584,607	0.16	< .05 *
African American Males	\$639,624	2.28%	9.51%	\$2,669,602	-\$2,029,977	0.24	< .05 *
Asian-Pacific American Females	\$47,500	0.17%	0.70%	\$197,748	-\$150,248	0.24	----
Asian-Pacific American Males	\$0	0.00%	0.50%	\$141,249	-\$141,249	0.00	----
Subcontinent Asian American Females	\$0	0.00%	0.70%	\$197,748	-\$197,748	0.00	----
Subcontinent Asian American Males	\$8,000	0.03%	0.96%	\$268,373	-\$260,373	0.03	----
Hispanic American Females	\$85,198	0.30%	9.76%	\$2,740,226	-\$2,655,029	0.03	< .05 *
Hispanic American Males	\$2,148,457	7.65%	11.58%	\$3,248,722	-\$1,100,265	0.66	< .05 *
Native American Females	\$0	0.00%	0.05%	\$14,125	-\$14,125	0.00	----
Native American Males	\$0	0.00%	0.10%	\$28,250	-\$28,250	0.00	----
Caucasian Females	\$2,393,047	8.53%	22.50%	\$6,313,820	-\$3,920,773	0.38	< .05 *
Non-minority Males	\$22,450,303	79.99%	36.94%	\$10,367,660	\$12,082,644	2.17	< .05 †
TOTAL	\$28,066,130	100.00%	100.00%	\$28,066,130			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$426,699	1.52%	17.92%	\$5,028,456	-\$4,601,757	0.08	< .05 *
Minority Males	\$2,796,081	9.96%	22.65%	\$6,356,195	-\$3,560,114	0.44	< .05 *
Caucasian Females	\$2,393,047	8.53%	22.50%	\$6,313,820	-\$3,920,773	0.38	< .05 *
Non-minority Males	\$22,450,303	79.99%	36.94%	\$10,367,660	\$12,082,644	2.17	< .05 †
TOTAL	\$28,066,130	100.00%	100.00%	\$28,066,130			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$3,222,780	11.48%	40.56%	\$11,384,651	-\$8,161,871	0.28	< .05 *
Caucasian Female-owned Businesses	\$2,393,047	8.53%	22.50%	\$6,313,820	-\$3,920,773	0.38	< .05 *
Minority and Caucasian Female-owned Businesses	\$5,615,827	20.01%	63.06%	\$17,698,471	-\$12,082,644	0.32	< .05 *
Non-minority Male-owned Businesses	\$22,450,303	79.99%	36.94%	\$10,367,660	\$12,082,644	2.17	< .05 †

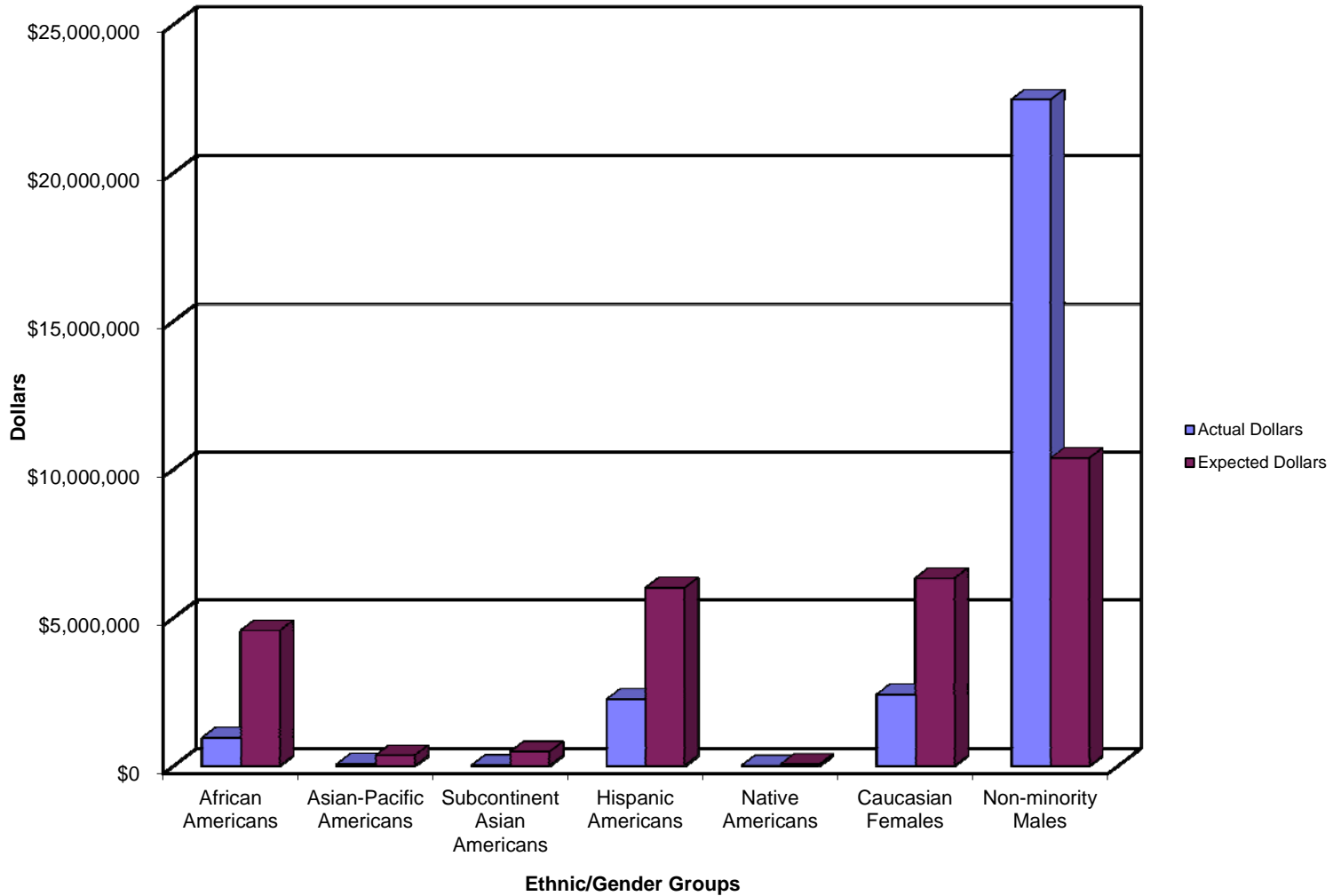
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

Chart 9.11: Disparity Analysis: Formal Contractual Service Prime Purchase Orders Valued \$5,000 to \$49,999, Fiscal Years July 1, 2008, to June 30, 2013



7. Formal Commodities Prime Purchase Orders Valued \$500,000 and Over

The disparity analysis of commodities prime purchase orders is described below and depicted in Table 9.13 and Chart 9.12.

African Americans represent 12.20% of the available commodities businesses and received 0.00% of the dollars on formal commodities prime purchase orders valued \$500,000 and over. This underutilization is statistically significant.

Asian-Pacific Americans represent 0.58% of the available commodities businesses and received 0.00% of the dollars on formal commodities prime purchase orders valued \$500,000 and over. There were too few available firms to test the statistical significance of this underutilization.

Subcontinent Asian Americans represent 1.20% of the available commodities businesses and received 0.00% of the dollars on formal commodities prime purchase orders valued \$500,000 and over. This underutilization is not statistically significant.

Hispanic Americans represent 19.85% of the available commodities businesses and received 18.46% of the dollars on formal commodities prime purchase orders valued \$500,000 and over. This underutilization is not statistically significant.

Native Americans represent 0.21% of the available commodities businesses and received 0.00% of the dollars on formal commodities prime purchase orders valued \$500,000 and over. There were too few available firms to test statistical significance of this underutilization.

Minority-owned Businesses represent 34.04% of the available commodities businesses and received 18.46% of the dollars on formal commodities prime purchase orders valued \$500,000 and over. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 15.96% of the available commodities businesses and received 3.00% of the dollars on formal commodities prime purchase orders valued \$500,000 and over. This underutilization is statistically significant.

Minority and Caucasian Female-owned Businesses represent 50.00% of the available commodities businesses and received 21.46% of the dollars on formal commodities prime purchase orders valued \$500,000 and over. This underutilization is statistically significant.



Non-minority Male-owned Businesses represent 50.00% of the available commodities businesses and received 78.54% of the dollars on formal commodities prime purchase orders valued \$500,000 and over. This overutilization is statistically significant.



Table 9.13: Disparity Analysis: Formal Commodities Prime Purchase Orders Valued \$500,000 and Over, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$0	0.00%	12.20%	\$5,428,913	-\$5,428,913	0.00	< .05 *
Asian-Pacific Americans	\$0	0.00%	0.58%	\$257,643	-\$257,643	0.00	----
Subcontinent Asian Americans	\$0	0.00%	1.20%	\$533,690	-\$533,690	0.00	not significant
Hispanic Americans	\$8,214,786	18.46%	19.85%	\$8,833,485	-\$618,699	0.93	not significant
Native Americans	\$0	0.00%	0.21%	\$92,015	-\$92,015	0.00	----
Caucasian Females	\$1,336,101	3.00%	15.96%	\$7,103,594	-\$5,767,493	0.19	< .05 *
Non-minority Males	\$34,947,793	78.54%	50.00%	\$22,249,340	\$12,698,453	1.57	< .05 †
TOTAL	\$44,498,680	100.00%	100.00%	\$44,498,680			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$0	0.00%	3.97%	\$1,766,697	-\$1,766,697	0.00	not significant
African American Males	\$0	0.00%	8.23%	\$3,662,216	-\$3,662,216	0.00	< .05 *
Asian-Pacific American Females	\$0	0.00%	0.33%	\$147,225	-\$147,225	0.00	----
Asian-Pacific American Males	\$0	0.00%	0.25%	\$110,419	-\$110,419	0.00	----
Subcontinent Asian American Females	\$0	0.00%	0.62%	\$276,046	-\$276,046	0.00	----
Subcontinent Asian American Males	\$0	0.00%	0.58%	\$257,643	-\$257,643	0.00	----
Hispanic American Females	\$0	0.00%	7.28%	\$3,238,944	-\$3,238,944	0.00	< .05 *
Hispanic American Males	\$8,214,786	18.46%	12.57%	\$5,594,540	\$2,620,246	1.47	**
Native American Females	\$0	0.00%	0.08%	\$36,806	-\$36,806	0.00	----
Native American Males	\$0	0.00%	0.12%	\$55,209	-\$55,209	0.00	----
Caucasian Females	\$1,336,101	3.00%	15.96%	\$7,103,594	-\$5,767,493	0.19	< .05 *
Non-minority Males	\$34,947,793	78.54%	50.00%	\$22,249,340	\$12,698,453	1.57	< .05 †
TOTAL	\$44,498,680	100.00%	100.00%	\$44,498,680			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$0	0.00%	12.28%	\$5,465,719	-\$5,465,719	0.00	< .05 *
Minority Males	\$8,214,786	18.46%	21.75%	\$9,680,027	-\$1,465,241	0.85	not significant
Caucasian Females	\$1,336,101	3.00%	15.96%	\$7,103,594	-\$5,767,493	0.19	< .05 *
Non-minority Males	\$34,947,793	78.54%	50.00%	\$22,249,340	\$12,698,453	1.57	< .05 †
TOTAL	\$44,498,680	100.00%	100.00%	\$44,498,680			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$8,214,786	18.46%	34.04%	\$15,145,746	-\$6,930,960	0.54	< .05 *
Caucasian Female-owned Businesses	\$1,336,101	3.00%	15.96%	\$7,103,594	-\$5,767,493	0.19	< .05 *
Minority and Caucasian Female-owned Businesses	\$9,550,887	21.46%	50.00%	\$22,249,340	-\$12,698,453	0.43	< .05 *
Non-minority Male-owned Businesses	\$34,947,793	78.54%	50.00%	\$22,249,340	\$12,698,453	1.57	< .05 †

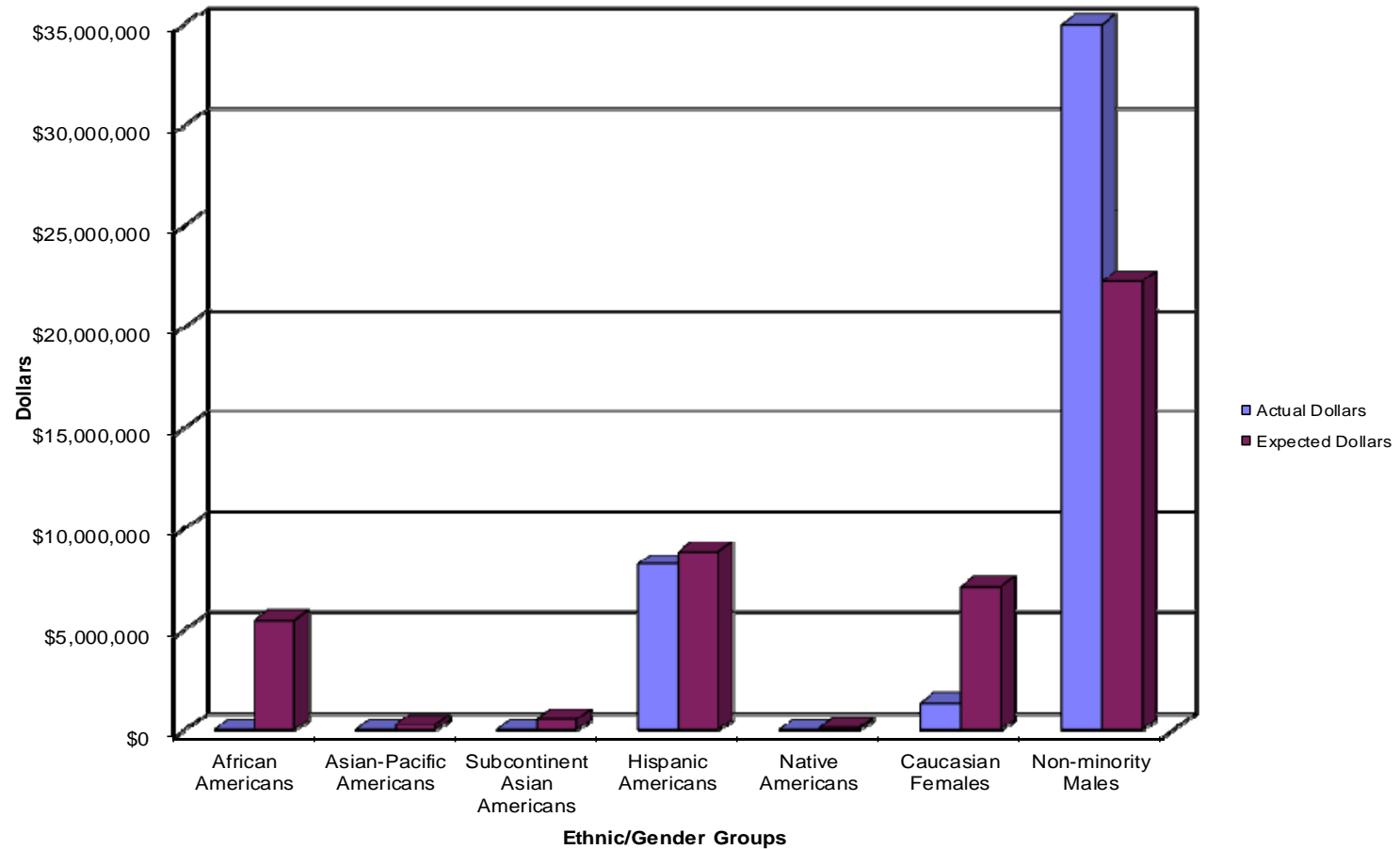
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

Chart 9.12: Disparity Analysis: Formal Commodities Prime Purchase Orders Valued \$500,000 and Over, Fiscal Years July 1, 2008, to June 30, 2013



8. Formal Commodities Prime Purchase Orders Valued \$50,000 to \$499,999

The disparity analysis of commodities prime purchase orders is described below and depicted in Table 9.14 and Chart 9.13.

African Americans represent 12.20% of the available commodities businesses and received 1.44% of the dollars on formal commodities prime purchase orders valued \$50,000 to \$499,999. This underutilization is statistically significant.

Asian-Pacific Americans represent 0.58% of the available commodities businesses and received 0.00% of the dollars on formal commodities prime purchase orders valued \$50,000 to \$499,999. There were too few available firms to test the statistical significance of this underutilization.

Subcontinent Asian Americans represent 1.20% of the available commodities businesses and received 0.00% of the dollars on formal commodities prime purchase orders valued \$50,000 to \$499,999. This underutilization is statistically significant.

Hispanic Americans represent 19.85% of the available commodities businesses and received 14.16% of the dollars on formal commodities prime purchase orders valued \$50,000 to \$499,999. This underutilization is statistically significant.

Native Americans represent 0.21% of the available commodities businesses and received 0.23% of the dollars on formal commodities prime purchase orders valued \$50,000 to \$499,999. This study does not test statistically the overutilization of Native Americans.

Minority-owned Businesses represent 34.04% of the available commodities businesses and received 15.83% of the dollars on formal commodities prime purchase orders valued \$50,000 to \$499,999. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 15.96% of the available commodities businesses and received 3.70% of the dollars on formal commodities prime purchase orders valued \$50,000 to \$499,999. This underutilization is statistically significant.

Minority and Caucasian Female-owned Businesses represent 50.00% of the available commodities businesses and received 19.54% of the dollars on formal commodities prime purchase orders valued \$50,000 to \$499,999. This underutilization is statistically significant.

Non-minority Male-owned Businesses represent 50.00% of the available commodities businesses and received 80.46% of the dollars on formal commodities prime purchase orders valued \$50,000 to \$499,999. This overutilization is statistically significant.



Table 9.14: Disparity Analysis: Formal Commodities Prime Purchase Orders Valued \$50,000 to \$499,999, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$1,676,339	1.44%	12.20%	\$14,172,365	-\$12,496,026	0.12	< .05 *
Asian-Pacific Americans	\$0	0.00%	0.58%	\$672,587	-\$672,587	0.00	----
Subcontinent Asian Americans	\$0	0.00%	1.20%	\$1,393,216	-\$1,393,216	0.00	< .05 *
Hispanic Americans	\$16,451,828	14.16%	19.85%	\$23,060,119	-\$6,608,291	0.71	< .05 *
Native Americans	\$261,458	0.23%	0.21%	\$240,210	\$21,248	1.09	**
Caucasian Females	\$4,303,294	3.70%	15.96%	\$18,544,179	-\$14,240,885	0.23	< .05 *
Non-minority Males	\$93,472,430	80.46%	50.00%	\$58,082,674	\$35,389,756	1.61	< .05 †
TOTAL	\$116,165,349	100.00%	100.00%	\$116,165,349			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$1,172,576	1.01%	3.97%	\$4,612,024	-\$3,439,448	0.25	< .05 *
African American Males	\$503,763	0.43%	8.23%	\$9,560,341	-\$9,056,578	0.05	< .05 *
Asian-Pacific American Females	\$0	0.00%	0.33%	\$384,335	-\$384,335	0.00	----
Asian-Pacific American Males	\$0	0.00%	0.25%	\$288,251	-\$288,251	0.00	----
Subcontinent Asian American Females	\$0	0.00%	0.62%	\$720,629	-\$720,629	0.00	----
Subcontinent Asian American Males	\$0	0.00%	0.58%	\$672,587	-\$672,587	0.00	----
Hispanic American Females	\$329,468	0.28%	7.28%	\$8,455,377	-\$8,125,909	0.04	< .05 *
Hispanic American Males	\$16,122,361	13.88%	12.57%	\$14,604,742	\$1,517,619	1.10	**
Native American Females	\$0	0.00%	0.08%	\$96,084	-\$96,084	0.00	----
Native American Males	\$261,458	0.23%	0.12%	\$144,126	\$117,332	1.81	**
Caucasian Females	\$4,303,294	3.70%	15.96%	\$18,544,179	-\$14,240,885	0.23	< .05 *
Non-minority Males	\$93,472,430	80.46%	50.00%	\$58,082,674	\$35,389,756	1.61	< .05 †
TOTAL	\$116,165,349	100.00%	100.00%	\$116,165,349			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$1,502,043	1.29%	12.28%	\$14,268,449	-\$12,766,405	0.11	< .05 *
Minority Males	\$16,887,581	14.54%	21.75%	\$25,270,047	-\$8,382,466	0.67	< .05 *
Caucasian Females	\$4,303,294	3.70%	15.96%	\$18,544,179	-\$14,240,885	0.23	< .05 *
Non-minority Males	\$93,472,430	80.46%	50.00%	\$58,082,674	\$35,389,756	1.61	< .05 †
TOTAL	\$116,165,349	100.00%	100.00%	\$116,165,349			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$18,389,625	15.83%	34.04%	\$39,538,496	-\$21,148,871	0.47	< .05 *
Caucasian Female-owned Businesses	\$4,303,294	3.70%	15.96%	\$18,544,179	-\$14,240,885	0.23	< .05 *
Minority and Caucasian Female-owned Businesses	\$22,692,919	19.54%	50.00%	\$58,082,674	-\$35,389,756	0.39	< .05 *
Non-minority Male-owned Businesses	\$93,472,430	80.46%	50.00%	\$58,082,674	\$35,389,756	1.61	< .05 †

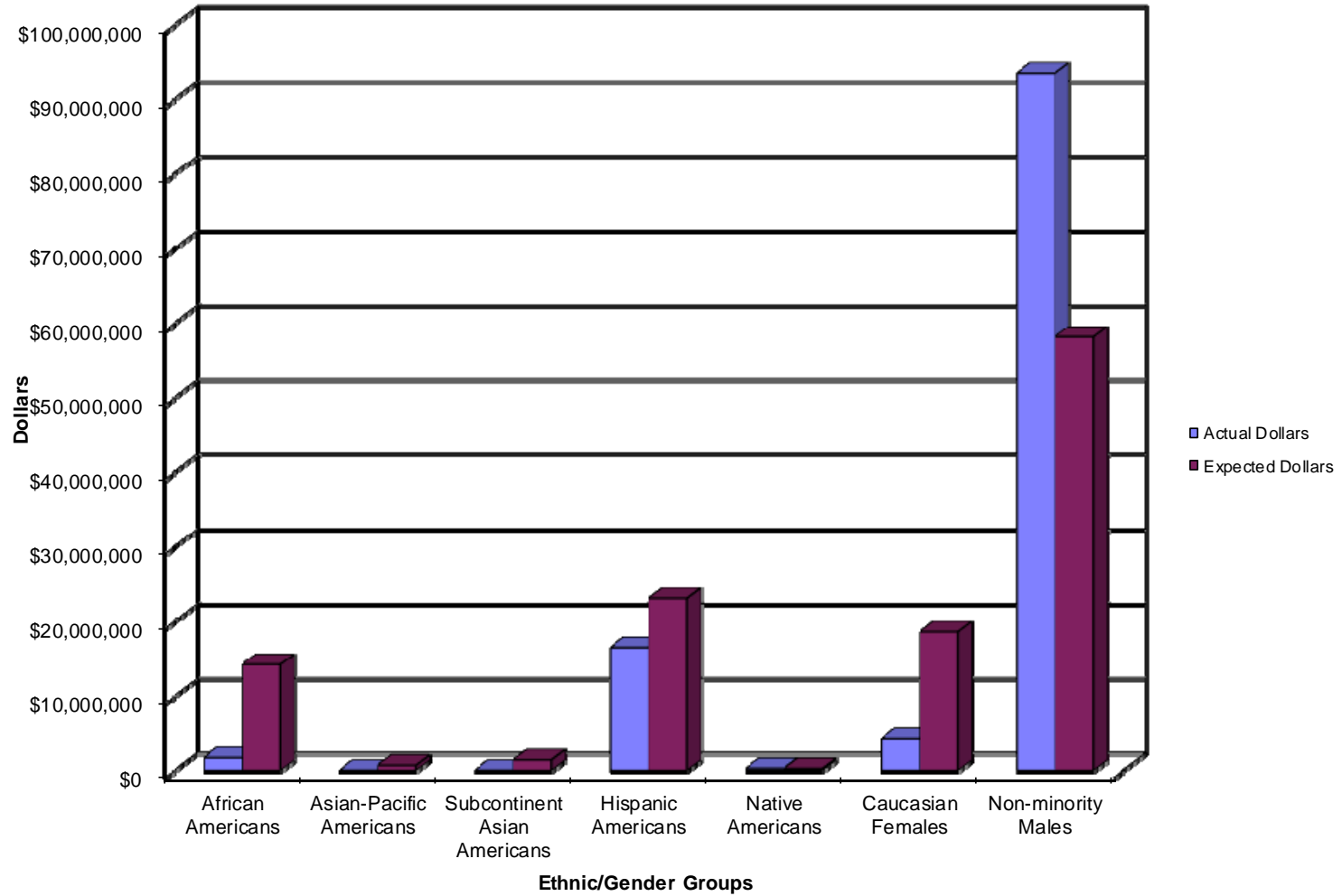
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

Chart 9.13: Disparity Analysis: Formal Commodities Prime Purchase Orders Valued \$50,000 to \$499,999, Fiscal Years July 1, 2008, to June 30, 2013



9. Formal Commodities Prime Purchase Orders Valued \$5,000 to \$49,999

The disparity analysis of commodities prime purchase orders is described below and depicted in Table 9.15 and Chart 9.14.

African Americans represent 12.20% of the available commodities businesses and received 0.90% of the dollars on formal commodities prime purchase orders valued \$5,000 to \$49,999. This underutilization is statistically significant.

Asian-Pacific Americans represent 0.58% of the available commodities businesses and received 0.33% of the dollars on formal commodities prime purchase orders valued \$5,000 to \$49,999. There were too few available firms to test the statistical significance of this underutilization.

Subcontinent Asian Americans represent 1.20% of the available commodities businesses and received 0.03% of the dollars on formal commodities prime purchase orders valued \$5,000 to \$49,999. This underutilization is statistically significant.

Hispanic Americans represent 19.85% of the available commodities businesses and received 5.99% of the dollars on formal commodities prime purchase orders valued \$5,000 to \$49,999. This underutilization is statistically significant.

Native Americans represent 0.21% of the available commodities businesses and received 0.18% of the dollars on formal commodities prime purchase orders valued \$5,000 to \$49,999. There were too few available firms to test the statistical significance of this underutilization.

Minority-owned Businesses represent 34.04% of the available commodities businesses and received 7.43% of the dollars on formal commodities prime purchase orders valued \$5,000 to \$49,999. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 15.96% of the available commodities businesses and received 2.82% of the dollars on formal commodities prime purchase orders valued \$5,000 to \$49,999. This underutilization is statistically significant.

Minority and Caucasian Female-owned Businesses represent 50.00% of the available commodities businesses and received 10.25% of the dollars on formal commodities prime purchase orders valued \$5,000 to \$49,999. This underutilization is statistically significant.



Non-minority Male-owned Businesses represent 50.00% of the available commodities businesses and received 89.75% of the dollars on formal commodities prime purchase orders valued \$5,000 to \$49,999. This overutilization is statistically significant.



Table 9.15: Disparity Analysis: Formal Commodities Prime Purchase Orders Valued \$5,000 to \$49,999, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$1,543,805	0.90%	12.20%	\$20,920,384	-\$19,376,579	0.07	< .05 *
Asian-Pacific Americans	\$561,724	0.33%	0.58%	\$992,832	-\$431,107	0.57	----
Subcontinent Asian Americans	\$47,765	0.03%	1.20%	\$2,056,580	-\$2,008,815	0.02	< .05 *
Hispanic Americans	\$10,278,345	5.99%	19.85%	\$34,039,947	-\$23,761,602	0.30	< .05 *
Native Americans	\$315,928	0.18%	0.21%	\$354,583	-\$38,655	0.89	----
Caucasian Females	\$4,828,598	2.82%	15.96%	\$27,373,791	-\$22,545,193	0.18	< .05 *
Non-minority Males	\$153,900,070	89.75%	50.00%	\$85,738,118	\$68,161,952	1.80	< .05 †
TOTAL	\$171,476,235	100.00%	100.00%	\$171,476,235			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$1,432,405	0.84%	3.97%	\$6,807,989	-\$5,375,584	0.21	< .05 *
African American Males	\$111,400	0.06%	8.23%	\$14,112,395	-\$14,000,995	0.01	< .05 *
Asian-Pacific American Females	\$0	0.00%	0.33%	\$567,332	-\$567,332	0.00	----
Asian-Pacific American Males	\$561,724	0.33%	0.25%	\$425,499	\$136,225	1.32	**
Subcontinent Asian American Females	\$47,765	0.03%	0.62%	\$1,063,748	-\$1,015,983	0.04	----
Subcontinent Asian American Males	\$0	0.00%	0.58%	\$992,832	-\$992,832	0.00	----
Hispanic American Females	\$1,365,566	0.80%	7.28%	\$12,481,314	-\$11,115,748	0.11	< .05 *
Hispanic American Males	\$8,912,779	5.20%	12.57%	\$21,558,633	-\$12,645,854	0.41	< .05 *
Native American Females	\$0	0.00%	0.08%	\$141,833	-\$141,833	0.00	----
Native American Males	\$315,928	0.18%	0.12%	\$212,750	\$103,178	1.48	**
Caucasian Females	\$4,828,598	2.82%	15.96%	\$27,373,791	-\$22,545,193	0.18	< .05 *
Non-minority Males	\$153,900,070	89.75%	50.00%	\$85,738,118	\$68,161,952	1.80	< .05 †
TOTAL	\$171,476,235	100.00%	100.00%	\$171,476,235			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$2,845,736	1.66%	12.28%	\$21,062,217	-\$18,216,481	0.14	< .05 *
Minority Males	\$9,901,831	5.77%	21.75%	\$37,302,109	-\$27,400,278	0.27	< .05 *
Caucasian Females	\$4,828,598	2.82%	15.96%	\$27,373,791	-\$22,545,193	0.18	< .05 *
Non-minority Males	\$153,900,070	89.75%	50.00%	\$85,738,118	\$68,161,952	1.80	< .05 †
TOTAL	\$171,476,235	100.00%	100.00%	\$171,476,235			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$12,747,568	7.43%	34.04%	\$58,364,327	-\$45,616,759	0.22	< .05 *
Caucasian Female-owned Businesses	\$4,828,598	2.82%	15.96%	\$27,373,791	-\$22,545,193	0.18	< .05 *
Minority and Caucasian Female-owned Businesses	\$17,576,165	10.25%	50.00%	\$85,738,118	-\$68,161,952	0.20	< .05 *
Non-minority Male-owned Businesses	\$153,900,070	89.75%	50.00%	\$85,738,118	\$68,161,952	1.80	< .05 †

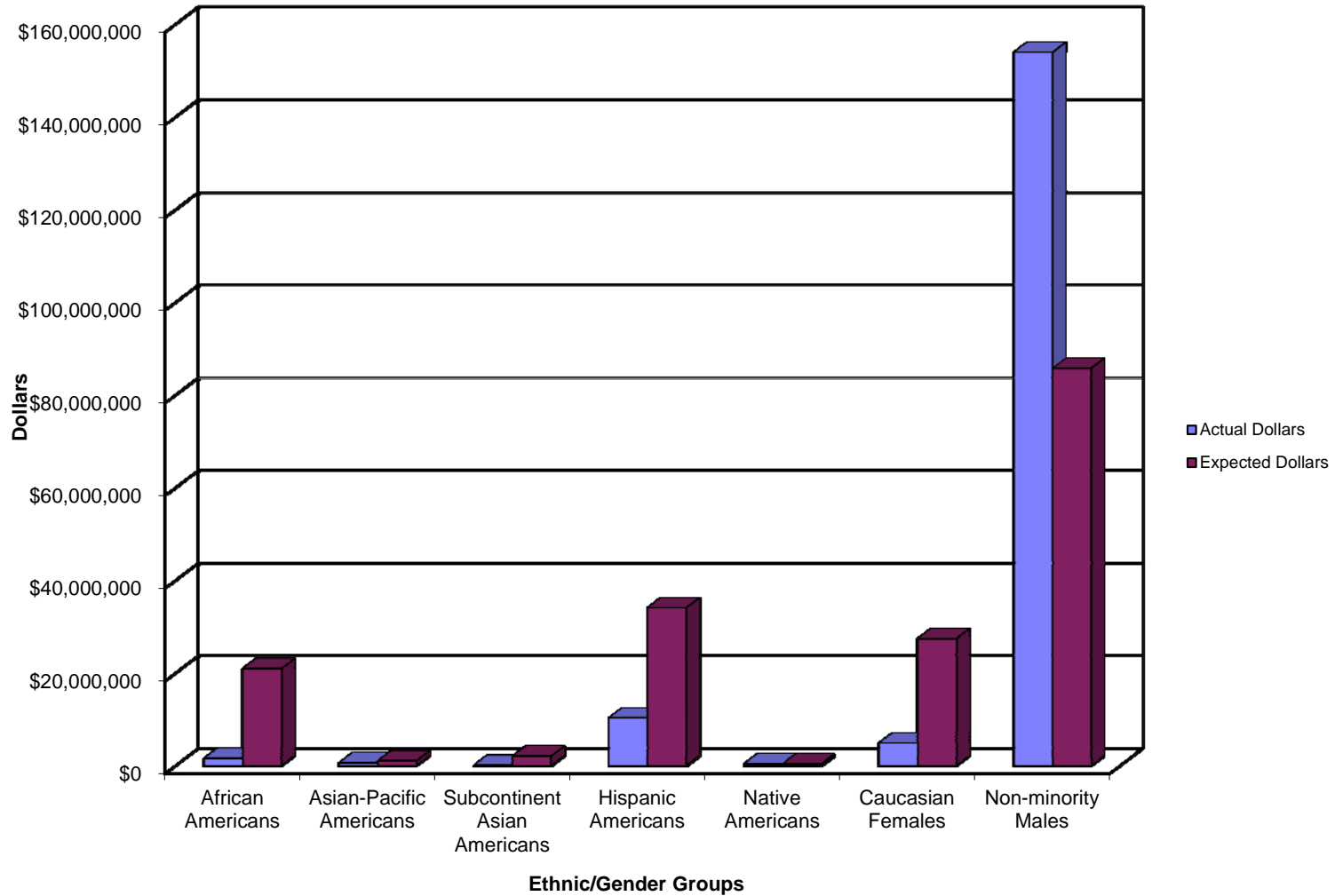
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

Chart 9.14: Disparity Analysis: Formal Commodities Prime Purchase Orders Valued \$5,000 to \$49,999, Fiscal Years July 1, 2008, to June 30, 2013



C. Disparity Analysis: All Informal Prime Purchase Orders, by Industry

1. Informal Construction Prime Purchase Orders Valued Less Than \$50,000

The disparity analysis of informal construction prime purchase orders valued less than \$50,000 is described below and depicted in Table 9.16 and Chart 9.15.

African Americans represent 15.30% of the available construction businesses and received 0.02% of the dollars on informal construction prime purchase orders valued less than \$50,000. This underutilization is statistically significant.

Asian-Pacific Americans represent 1.53% of the available construction businesses and received 0.00% of the dollars on informal construction prime purchase orders valued less than \$50,000. This underutilization is statistically significant.

Subcontinent Asian Americans represent 0.76% of the available construction businesses and received 0.00% of the dollars on informal construction prime purchase orders valued less than \$50,000. There were too few available firms to test the statistical significance of this underutilization.

Hispanic Americans represent 19.12% of the available construction businesses and received 5.48% of the dollars on informal construction prime purchase orders valued less than \$50,000. This underutilization is statistically significant.

Native Americans represent 0.57% of the available construction businesses and received 0.00% of the dollars on informal construction prime purchase orders valued less than \$50,000. There were too few available firms to test the statistical significance of this underutilization.

Minority-owned Businesses represent 37.28% of the available construction businesses and received 5.49% of the dollars on informal construction prime purchase orders valued less than \$50,000. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 11.66% of the available construction businesses and received 8.56% of the dollars on informal construction prime purchase orders valued less than \$50,000. This underutilization is statistically significant.

Minority and Caucasian Female-owned Businesses represent 48.95% of the available construction businesses and received 14.05% of the dollars on informal construction prime purchase orders valued less than \$50,000. This underutilization is statistically significant.



Non-minority Male-owned Businesses represent 51.05% of the available construction businesses and received 85.95% of the dollars on informal construction prime purchase orders valued less than \$50,000. This overutilization is statistically significant.



Table 9.16: Disparity Analysis: Informal Construction Prime Purchase Orders Valued Less Than \$50,000, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$1,649	0.02%	15.30%	\$1,517,865	-\$1,516,216	0.00	< .05 *
Asian-Pacific Americans	\$0	0.00%	1.53%	\$151,786	-\$151,786	0.00	< .05 *
Subcontinent Asian Americans	\$0	0.00%	0.76%	\$75,893	-\$75,893	0.00	----
Hispanic Americans	\$543,364	5.48%	19.12%	\$1,897,331	-\$1,353,967	0.29	< .05 *
Native Americans	\$0	0.00%	0.57%	\$56,920	-\$56,920	0.00	----
Caucasian Females	\$849,191	8.56%	11.66%	\$1,157,372	-\$308,181	0.73	< .05 *
Non-minority Males	\$8,528,837	85.95%	51.05%	\$5,065,873	\$3,462,963	1.68	< .05 †
TOTAL	\$9,923,040	100.00%	100.00%	\$9,923,040			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$0	0.00%	3.44%	\$341,520	-\$341,520	0.00	< .05 *
African American Males	\$1,649	0.02%	11.85%	\$1,176,345	-\$1,174,696	0.00	< .05 *
Asian-Pacific American Females	\$0	0.00%	0.96%	\$94,867	-\$94,867	0.00	----
Asian-Pacific American Males	\$0	0.00%	0.57%	\$56,920	-\$56,920	0.00	----
Subcontinent Asian American Females	\$0	0.00%	0.00%	\$0	\$0	----	----
Subcontinent Asian American Males	\$0	0.00%	0.76%	\$75,893	-\$75,893	0.00	----
Hispanic American Females	\$123,590	1.25%	4.97%	\$493,306	-\$369,716	0.25	< .05 *
Hispanic American Males	\$419,774	4.23%	14.15%	\$1,404,025	-\$984,251	0.30	< .05 *
Native American Females	\$0	0.00%	0.19%	\$18,973	-\$18,973	0.00	----
Native American Males	\$0	0.00%	0.38%	\$37,947	-\$37,947	0.00	----
Caucasian Females	\$849,191	8.56%	11.66%	\$1,157,372	-\$308,181	0.73	< .05 *
Non-minority Males	\$8,528,837	85.95%	51.05%	\$5,065,873	\$3,462,963	1.68	< .05 †
TOTAL	\$9,923,040	100.00%	100.00%	\$9,923,040			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$123,590	1.25%	9.56%	\$948,665	-\$825,076	0.13	< .05 *
Minority Males	\$421,423	4.25%	27.72%	\$2,751,130	-\$2,329,706	0.15	< .05 *
Caucasian Females	\$849,191	8.56%	11.66%	\$1,157,372	-\$308,181	0.73	< .05 *
Non-minority Males	\$8,528,837	85.95%	51.05%	\$5,065,873	\$3,462,963	1.68	< .05 †
TOTAL	\$9,923,040	100.00%	100.00%	\$9,923,040			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$545,013	5.49%	37.28%	\$3,699,795	-\$3,154,782	0.15	< .05 *
Caucasian Female-owned Businesses	\$849,191	8.56%	11.66%	\$1,157,372	-\$308,181	0.73	< .05 *
Minority and Caucasian Female-owned Businesses	\$1,394,204	14.05%	48.95%	\$4,857,167	-\$3,462,963	0.29	< .05 *
Non-minority Male-owned Businesses	\$8,528,837	85.95%	51.05%	\$5,065,873	\$3,462,963	1.68	< .05 †

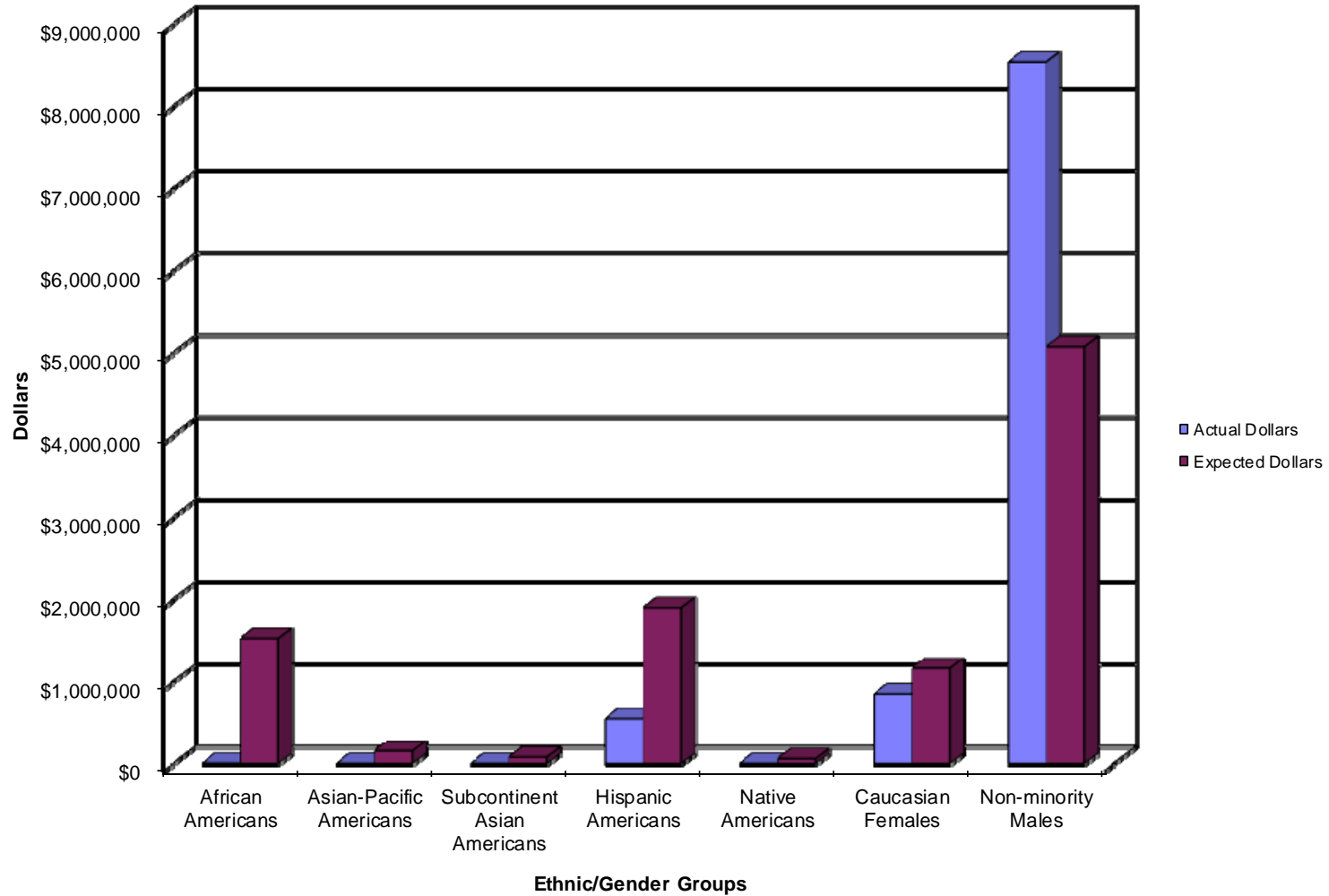
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

Chart 9.15: Disparity Analysis: Informal Construction Prime Purchase Orders Valued Less Than \$50,000, Fiscal Years July 1, 2008, to June 30, 2013



2. Informal Professional Services Prime Purchase Orders Valued \$50,000 to \$194,999

The disparity analysis of informal professional services prime purchase orders valued \$50,000 to \$194,999 is described below and depicted in Table 9.17 and Chart 9.16.

African Americans represent 8.29% of the available professional services businesses and received 0.00% of the dollars on informal professional services prime purchase orders valued \$50,000 to \$194,999. This underutilization is not statistically significant.

Asian-Pacific Americans represent 2.50% of the available professional services businesses and received 0.00% of the dollars on informal professional services prime purchase orders valued \$50,000 to \$194,999. This underutilization is not statistically significant.

Subcontinent Asian Americans represent 4.21% of the available professional services businesses and received 12.96% of the dollars on informal professional services prime purchase orders valued \$50,000 to \$194,999. This study does not test statistically the overutilization of Subcontinent Asian Americans.

Hispanic Americans represent 47.11% of the available professional services businesses and received 20.60% of the dollars on informal professional services prime purchase orders valued \$50,000 to \$194,999. This underutilization is statistically significant.

Native Americans represent 0.00% of the available professional services businesses and received 0.00% of the dollars on informal professional services prime purchase orders valued \$50,000 to \$194,999. There were too few available firms to test the statistical significance.

Minority-owned Businesses represent 62.11% of the available professional services businesses and received 33.56% of the dollars on informal professional services prime purchase orders valued \$50,000 to \$194,999. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 7.76% of the available professional services businesses and received 0.00% of the dollars on informal professional services prime purchase orders valued \$50,000 to \$194,999. This underutilization is not statistically significant.

Minority and Caucasian Female-owned Businesses represent 69.87% of the available professional services businesses and received 33.56% of the dollars on informal professional services prime purchase orders valued \$50,000 to \$194,999. This underutilization is statistically significant.



Non-minority Male-owned Businesses represent 30.13% of the available professional services businesses and received 66.44% of the dollars on informal professional services prime purchase orders valued \$50,000 to \$194,999. This overutilization is statistically significant.



Table 9.17: Disparity Analysis: Informal Professional Services Prime Purchase Orders Valued \$50,000 to \$194,999, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$0	0.00%	8.29%	\$245,248	-\$245,248	0.00	not significant
Asian-Pacific Americans	\$0	0.00%	2.50%	\$73,964	-\$73,964	0.00	not significant
Subcontinent Asian Americans	\$383,391	12.96%	4.21%	\$124,570	\$258,821	3.08	**
Hispanic Americans	\$609,573	20.60%	47.11%	\$1,393,630	-\$784,057	0.44	< .05 *
Native Americans	\$0	0.00%	0.00%	\$0	\$0	----	----
Caucasian Females	\$0	0.00%	7.76%	\$229,676	-\$229,676	0.00	not significant
Non-minority Males	\$1,965,579	66.44%	30.13%	\$891,456	\$1,074,123	2.20	< .05 †
TOTAL	\$2,958,544	100.00%	100.00%	\$2,958,544			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$0	0.00%	1.18%	\$35,035	-\$35,035	0.00	not significant
African American Males	\$0	0.00%	7.11%	\$210,212	-\$210,212	0.00	not significant
Asian-Pacific American Females	\$0	0.00%	0.79%	\$23,357	-\$23,357	0.00	----
Asian-Pacific American Males	\$0	0.00%	1.71%	\$50,607	-\$50,607	0.00	not significant
Subcontinent Asian American Females	\$0	0.00%	0.66%	\$19,464	-\$19,464	0.00	----
Subcontinent Asian American Males	\$383,391	12.96%	3.55%	\$105,106	\$278,285	3.65	**
Hispanic American Females	\$465,108	15.72%	11.05%	\$326,997	\$138,111	1.42	**
Hispanic American Males	\$144,466	4.88%	36.05%	\$1,066,633	-\$922,167	0.14	< .05 *
Native American Females	\$0	0.00%	0.00%	\$0	\$0	----	----
Native American Males	\$0	0.00%	0.00%	\$0	\$0	----	----
Caucasian Females	\$0	0.00%	7.76%	\$229,676	-\$229,676	0.00	not significant
Non-minority Males	\$1,965,579	66.44%	30.13%	\$891,456	\$1,074,123	2.20	< .05 †
TOTAL	\$2,958,544	100.00%	100.00%	\$2,958,544			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$465,108	15.72%	13.68%	\$404,853	\$60,254	1.15	**
Minority Males	\$527,857	17.84%	48.42%	\$1,432,558	-\$904,701	0.37	< .05 *
Caucasian Females	\$0	0.00%	7.76%	\$229,676	-\$229,676	0.00	not significant
Non-minority Males	\$1,965,579	66.44%	30.13%	\$891,456	\$1,074,123	2.20	< .05 †
TOTAL	\$2,958,544	100.00%	100.00%	\$2,958,544			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$992,965	33.56%	62.11%	\$1,837,412	-\$844,447	0.54	< .05 *
Caucasian Female-owned Businesses	\$0	0.00%	7.76%	\$229,676	-\$229,676	0.00	not significant
Minority and Caucasian Female-owned Businesses	\$992,965	33.56%	69.87%	\$2,067,088	-\$1,074,123	0.48	< .05 *
Non-minority Male-owned Businesses	\$1,965,579	66.44%	30.13%	\$891,456	\$1,074,123	2.20	< .05 †

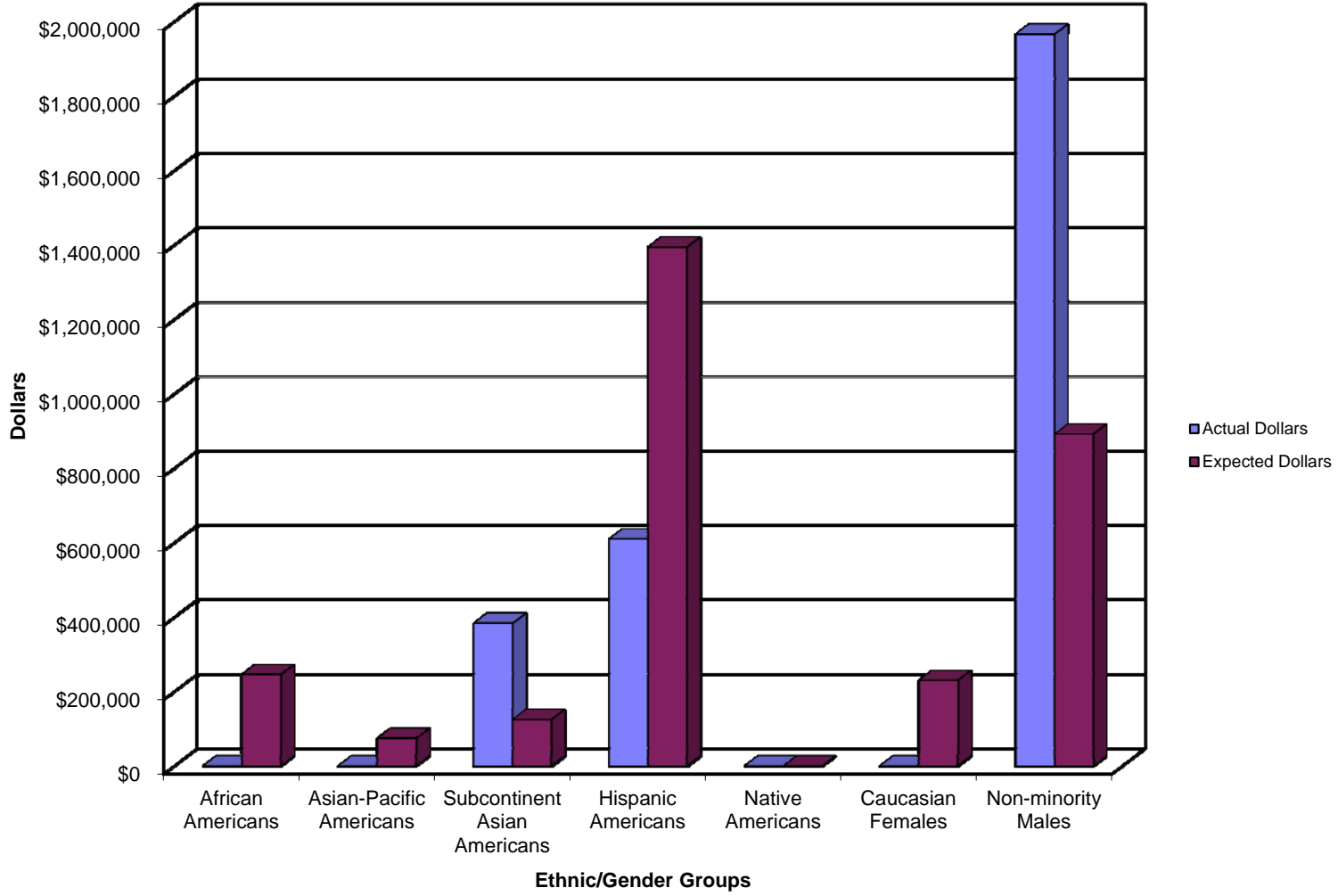
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

Chart 9.16: Disparity Analysis: Informal Professional Services Prime Purchase Orders Valued \$50,000 to \$194,999, Fiscal Years July 1, 2008, to June 30, 2013



3. Informal Professional Services Prime Purchase Orders Valued Less than \$50,000

The disparity analysis of informal professional services prime purchase orders valued less than \$50,000 is described below and depicted in Table 9.18 and Chart 9.17.

African Americans represent 8.29% of the available professional services businesses and received 1.95% of the dollars on informal professional services prime purchase orders valued less than \$50,000. This underutilization is not statistically significant.

Asian-Pacific Americans represent 2.50% of the available professional services businesses and received 0.00% of the dollars on informal professional services prime purchase orders valued less than \$50,000. This underutilization is not statistically significant.

Subcontinent Asian Americans represent 4.21% of the available professional services businesses and received 0.00% of the dollars on informal professional services prime purchase orders valued less than \$50,000. This underutilization is statistically significant.

Hispanic Americans represent 47.11% of the available professional services businesses and received 2.54% of the dollars on informal professional services prime purchase orders valued less than \$50,000. This underutilization is statistically significant.

Native Americans represent 0.00% of the available professional services businesses and received 0.00% of the dollars on informal professional services prime purchase orders valued less than \$50,000. There were too few available firms to test the statistical significance.

Minority-owned Businesses represent 62.11% of the available professional services businesses and received 4.49% of the dollars on informal professional services prime purchase orders valued less than \$50,000. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 7.76% of the available professional services businesses and received 14.73% of the dollars on informal professional services prime purchase orders valued less than \$50,000. This study does not test statistically the overutilization of Caucasian Female-owned Businesses.

Minority and Caucasian Female-owned Businesses represent 69.87% of the available professional services businesses and received 19.22% of the dollars on informal professional services prime purchase orders valued less than \$50,000. This underutilization is statistically significant.



Non-minority Male-owned Businesses represent 30.13% of the available professional services businesses and received 80.78% of the dollars on informal professional services prime purchase orders valued less than \$50,000. This overutilization is statistically significant.



Table 9.18: Disparity Analysis: Informal Professional Services Prime Purchase Orders Valued Less than \$50,000, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$15,050	1.95%	8.29%	\$63,958	-\$48,908	0.24	not significant
Asian-Pacific Americans	\$0	0.00%	2.50%	\$19,289	-\$19,289	0.00	not significant
Subcontinent Asian Americans	\$0	0.00%	4.21%	\$32,487	-\$32,487	0.00	< .05 *
Hispanic Americans	\$19,600	2.54%	47.11%	\$363,445	-\$343,845	0.05	< .05 *
Native Americans	\$0	0.00%	0.00%	\$0	\$0	----	----
Caucasian Females	\$113,645	14.73%	7.76%	\$59,897	\$53,748	1.90	**
Non-minority Males	\$623,265	80.78%	30.13%	\$232,483	\$390,781	2.68	< .05 †
TOTAL	\$771,560	100.00%	100.00%	\$771,560			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$0	0.00%	1.18%	\$9,137	-\$9,137	0.00	not significant
African American Males	\$15,050	1.95%	7.11%	\$54,821	-\$39,771	0.27	not significant
Asian-Pacific American Females	\$0	0.00%	0.79%	\$6,091	-\$6,091	0.00	----
Asian-Pacific American Males	\$0	0.00%	1.71%	\$13,198	-\$13,198	0.00	not significant
Subcontinent Asian American Females	\$0	0.00%	0.66%	\$5,076	-\$5,076	0.00	----
Subcontinent Asian American Males	\$0	0.00%	3.55%	\$27,411	-\$27,411	0.00	not significant
Hispanic American Females	\$10,000	1.30%	11.05%	\$85,278	-\$75,278	0.12	< .05 *
Hispanic American Males	\$9,600	1.24%	36.05%	\$278,168	-\$268,568	0.03	< .05 *
Native American Females	\$0	0.00%	0.00%	\$0	\$0	----	----
Native American Males	\$0	0.00%	0.00%	\$0	\$0	----	----
Caucasian Females	\$113,645	14.73%	7.76%	\$59,897	\$53,748	1.90	**
Non-minority Males	\$623,265	80.78%	30.13%	\$232,483	\$390,781	2.68	< .05 †
TOTAL	\$771,560	100.00%	100.00%	\$771,560			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$10,000	1.30%	13.68%	\$105,582	-\$95,582	0.09	< .05 *
Minority Males	\$24,650	3.19%	48.42%	\$373,597	-\$348,947	0.07	< .05 *
Caucasian Females	\$113,645	14.73%	7.76%	\$59,897	\$53,748	1.90	**
Non-minority Males	\$623,265	80.78%	30.13%	\$232,483	\$390,781	2.68	< .05 †
TOTAL	\$771,560	100.00%	100.00%	\$771,560			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$34,650	4.49%	62.11%	\$479,179	-\$444,529	0.07	< .05 *
Caucasian Female-owned Businesses	\$113,645	14.73%	7.76%	\$59,897	\$53,748	1.90	**
Minority and Caucasian Female-owned Businesses	\$148,295	19.22%	69.87%	\$539,077	-\$390,781	0.28	< .05 *
Non-minority Male-owned Businesses	\$623,265	80.78%	30.13%	\$232,483	\$390,781	2.68	< .05 †

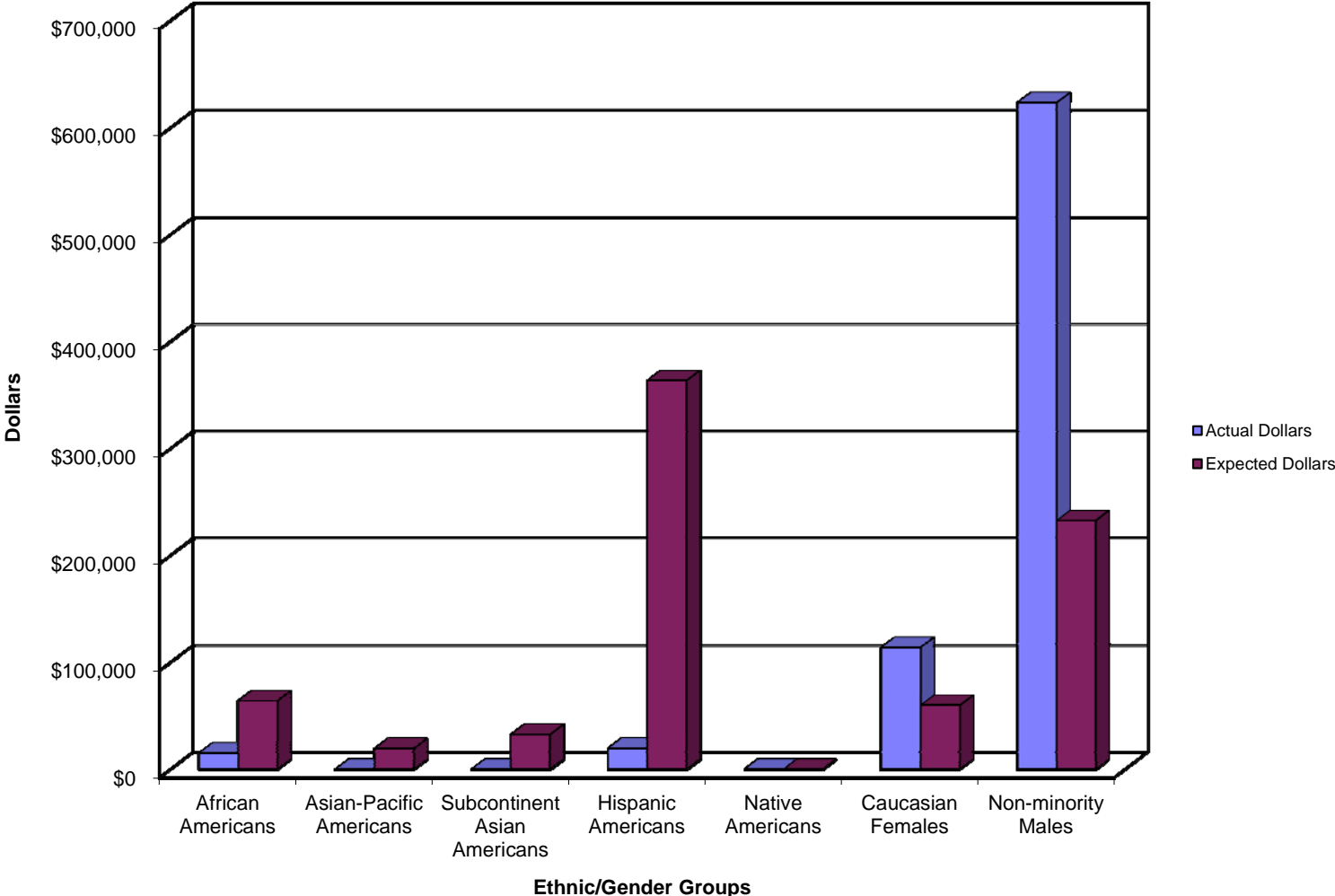
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

Chart 9.17: Disparity Analysis: Informal Professional Services Prime Purchase Orders Valued Less than \$50,000, Fiscal Years July 1, 2008, to June 30, 2013



4. Informal Contractual Services Prime Purchase Orders Valued Less Than \$5,000

The disparity analysis of informal contractual services prime purchase orders valued less than \$5,000 is described below and depicted in Table 9.19 and Chart 9.18.

African Americans represent 16.21% of the available contractual services businesses and received 1.54% of the dollars on informal contractual services purchase orders valued less than \$5,000. This underutilization is statistically significant.

Asian-Pacific Americans represent 1.21% of the available contractual services businesses and received 0.01% of the dollars on informal contractual services purchase orders valued less than \$5,000. This underutilization is statistically significant.

Subcontinent Asian Americans represent 1.66% of the available contractual services businesses and received 0.21% of the dollars on informal contractual services purchase orders valued less than \$5,000. This underutilization is statistically significant.

Hispanic Americans represent 21.34% of the available contractual services businesses and received 9.94% of the dollars on informal contractual services purchase orders valued less than \$5,000. This underutilization is statistically significant.

Native Americans represent 0.15% of the available contractual services businesses and received 0.00% of the dollars on informal contractual services purchase orders valued less than \$5,000. There were too few available firms to test statistical significance of this underutilization.

Minority-owned Businesses represent 40.56% of the available contractual services businesses and received 11.70% of the dollars on informal contractual services purchase orders valued less than \$5,000. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 22.50% of the available contractual services businesses and received 12.59% of the dollars on informal contractual services purchase orders valued less than \$5,000. This underutilization is statistically significant.

Minority and Caucasian Female-owned Businesses represent 63.06% of the available contractual services businesses and received 24.29% of the dollars on informal contractual services purchase orders valued less than \$5,000. This underutilization is statistically significant.

Non-minority Male-owned Businesses represent 36.94% of the available contractual services businesses and received 75.71% of the dollars on informal contractual services purchase orders valued less than \$5,000. This overutilization is statistically significant.



**Table 9.19: Disparity Analysis: Informal Contractual Services Prime Purchase Orders Valued Less Than \$5,000
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$222,922	1.54%	16.21%	\$2,352,379	-\$2,129,457	0.09	< .05 *
Asian-Pacific Americans	\$2,159	0.01%	1.21%	\$175,333	-\$173,174	0.01	< .05 *
Subcontinent Asian Americans	\$29,831	0.21%	1.66%	\$241,082	-\$211,252	0.12	< .05 *
Hispanic Americans	\$1,443,335	9.94%	21.34%	\$3,097,543	-\$1,654,208	0.47	< .05 *
Native Americans	\$0	0.00%	0.15%	\$21,917	-\$21,917	0.00	----
Caucasian Females	\$1,827,146	12.59%	22.50%	\$3,265,570	-\$1,438,424	0.56	< .05 *
Non-minority Males	\$10,990,686	75.71%	36.94%	\$5,362,255	\$5,628,431	2.05	< .05 †
TOTAL	\$14,516,078	100.00%	100.00%	\$14,516,078			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$72,317	0.50%	6.69%	\$971,635	-\$899,317	0.07	< .05 *
African American Males	\$150,605	1.04%	9.51%	\$1,380,744	-\$1,230,140	0.11	< .05 *
Asian-Pacific American Females	\$0	0.00%	0.70%	\$102,277	-\$102,277	0.00	----
Asian-Pacific American Males	\$2,159	0.01%	0.50%	\$73,055	-\$70,897	0.03	----
Subcontinent Asian American Females	\$0	0.00%	0.70%	\$102,277	-\$102,277	0.00	----
Subcontinent Asian American Males	\$29,831	0.21%	0.96%	\$138,805	-\$108,974	0.21	----
Hispanic American Females	\$22,862	0.16%	9.76%	\$1,417,272	-\$1,394,410	0.02	< .05 *
Hispanic American Males	\$1,420,473	9.79%	11.58%	\$1,680,271	-\$259,798	0.85	< .05 *
Native American Females	\$0	0.00%	0.05%	\$7,306	-\$7,306	0.00	----
Native American Males	\$0	0.00%	0.10%	\$14,611	-\$14,611	0.00	----
Caucasian Females	\$1,827,146	12.59%	22.50%	\$3,265,570	-\$1,438,424	0.56	< .05 *
Non-minority Males	\$10,990,686	75.71%	36.94%	\$5,362,255	\$5,628,431	2.05	< .05 †
TOTAL	\$14,516,078	100.00%	100.00%	\$14,516,078			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$95,180	0.66%	17.92%	\$2,600,767	-\$2,505,587	0.04	< .05 *
Minority Males	\$1,603,066	11.04%	22.65%	\$3,287,486	-\$1,684,420	0.49	< .05 *
Caucasian Females	\$1,827,146	12.59%	22.50%	\$3,265,570	-\$1,438,424	0.56	< .05 *
Non-minority Males	\$10,990,686	75.71%	36.94%	\$5,362,255	\$5,628,431	2.05	< .05 †
TOTAL	\$14,516,078	100.00%	100.00%	\$14,516,078			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$1,698,246	11.70%	40.56%	\$5,888,253	-\$4,190,007	0.29	< .05 *
Caucasian Female-owned Businesses	\$1,827,146	12.59%	22.50%	\$3,265,570	-\$1,438,424	0.56	< .05 *
Minority and Caucasian Female-owned Businesses	\$3,525,392	24.29%	63.06%	\$9,153,823	-\$5,628,431	0.39	< .05 *
Non-minority Male-owned Businesses	\$10,990,686	75.71%	36.94%	\$5,362,255	\$5,628,431	2.05	< .05 †

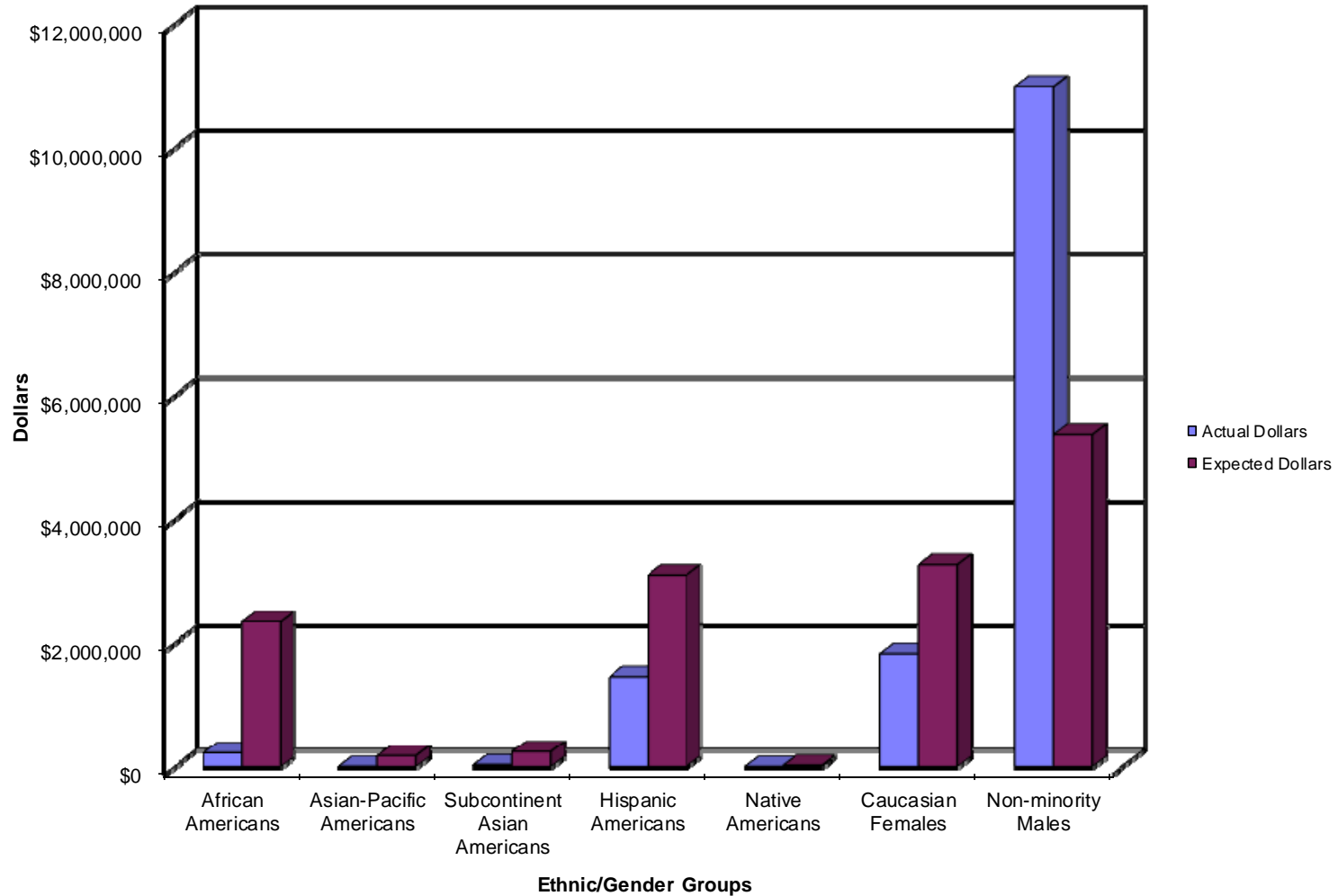
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

**Chart 9.18: Disparity Analysis: Informal Contractual Services Prime Purchase Orders Valued Less Than \$5,000
Fiscal Years July 1, 2008, to June 30, 2013**



5. Informal Commodities Prime Purchase Orders Valued Less Than \$5,000

The disparity analysis of informal commodities prime purchase orders valued less than \$5,000 is described below and depicted in Table 9.20 and Chart 9.19.

African Americans represent 12.20% of the available commodities businesses and received 0.79% of the dollars on informal commodities purchase orders valued less than \$5,000. This underutilization is statistically significant.

Asian-Pacific Americans represent 0.58% of the available commodities businesses and received 0.07% of the dollars on informal commodities purchase orders valued less than \$5,000. There were too few available firms to test the statistical significance of this underutilization.

Subcontinent Asian Americans represent 1.20% of the available commodities businesses and received 0.32% of the dollars on informal commodities purchase orders valued less than \$5,000. This underutilization is statistically significant.

Hispanic Americans represent 19.85% of the available commodities businesses and received 3.63% of the dollars on informal commodities purchase orders valued less than \$5,000. This underutilization is statistically significant.

Native Americans represent 0.21% of the available commodities businesses and received 0.15% of the dollars on informal commodities purchase orders valued less than \$5,000. There were too few available firms to test statistical significance of this underutilization.

Minority-owned Businesses represent 34.04% of the available commodities businesses and received 4.96% of the dollars on informal commodities purchase orders valued less than \$5,000. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 15.96% of the available commodities businesses and received 3.39% of the dollars on informal commodities purchase orders valued less than \$5,000. This underutilization is statistically significant.

Minority and Caucasian Female-owned Businesses represent 50.00% of the available commodities businesses and received 8.36% of the dollars on informal commodities purchase orders valued less than \$5,000. This underutilization is statistically significant.

Non-minority Male-owned Businesses represent 50.00% of the available commodities businesses and received 91.64% of the dollars on informal commodities purchase orders valued less than \$5,000. This overutilization is statistically significant.



**Table 9.20: Disparity Analysis: Informal Commodities Prime Purchase Orders Valued Less Than \$5,000
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$756,585	0.79%	12.20%	\$11,647,623	-\$10,891,038	0.06	< .05 *
Asian-Pacific Americans	\$69,809	0.07%	0.58%	\$552,769	-\$482,960	0.13	----
Subcontinent Asian Americans	\$307,627	0.32%	1.20%	\$1,145,021	-\$837,393	0.27	< .05 *
Hispanic Americans	\$3,461,413	3.63%	19.85%	\$18,952,064	-\$15,490,651	0.18	< .05 *
Native Americans	\$141,130	0.15%	0.21%	\$197,417	-\$56,288	0.71	----
Caucasian Females	\$3,240,633	3.39%	15.96%	\$15,240,618	-\$11,999,985	0.21	< .05 *
Non-minority Males	\$87,493,824	91.64%	50.00%	\$47,735,511	\$39,758,314	1.83	< .05 †
TOTAL	\$95,471,021	100.00%	100.00%	\$95,471,021			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$520,890	0.55%	3.97%	\$3,790,413	-\$3,269,522	0.14	< .05 *
African American Males	\$235,694	0.25%	8.23%	\$7,857,210	-\$7,621,516	0.03	< .05 *
Asian-Pacific American Females	\$15,908	0.02%	0.33%	\$315,868	-\$299,960	0.05	----
Asian-Pacific American Males	\$53,901	0.06%	0.25%	\$236,901	-\$182,999	0.23	----
Subcontinent Asian American Females	\$276,697	0.29%	0.62%	\$592,252	-\$315,555	0.47	----
Subcontinent Asian American Males	\$30,931	0.03%	0.58%	\$552,769	-\$521,838	0.06	----
Hispanic American Females	\$978,667	1.03%	7.28%	\$6,949,090	-\$5,970,423	0.14	< .05 *
Hispanic American Males	\$2,482,746	2.60%	12.57%	\$12,002,974	-\$9,520,228	0.21	< .05 *
Native American Females	\$0	0.00%	0.08%	\$78,967	-\$78,967	0.00	----
Native American Males	\$141,130	0.15%	0.12%	\$118,450	\$22,679	1.19	**
Caucasian Females	\$3,240,633	3.39%	15.96%	\$15,240,618	-\$11,999,985	0.21	< .05 *
Non-minority Males	\$87,493,824	91.64%	50.00%	\$47,735,511	\$39,758,314	1.83	< .05 †
TOTAL	\$95,471,021	100.00%	100.00%	\$95,471,021			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$1,792,162	1.88%	12.28%	\$11,726,589	-\$9,934,428	0.15	< .05 *
Minority Males	\$2,944,402	3.08%	21.75%	\$20,768,303	-\$17,823,901	0.14	< .05 *
Caucasian Females	\$3,240,633	3.39%	15.96%	\$15,240,618	-\$11,999,985	0.21	< .05 *
Non-minority Males	\$87,493,824	91.64%	50.00%	\$47,735,511	\$39,758,314	1.83	< .05 †
TOTAL	\$95,471,021	100.00%	100.00%	\$95,471,021			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Businesses	\$4,736,563	4.96%	34.04%	\$32,494,893	-\$27,758,329	0.15	< .05 *
Caucasian Female-owned Businesses	\$3,240,633	3.39%	15.96%	\$15,240,618	-\$11,999,985	0.21	< .05 *
Minority and Caucasian Female-owned Businesses	\$7,977,197	8.36%	50.00%	\$47,735,511	-\$39,758,314	0.17	< .05 *
Non-minority Male-owned Businesses	\$87,493,824	91.64%	50.00%	\$47,735,511	\$39,758,314	1.83	< .05 †

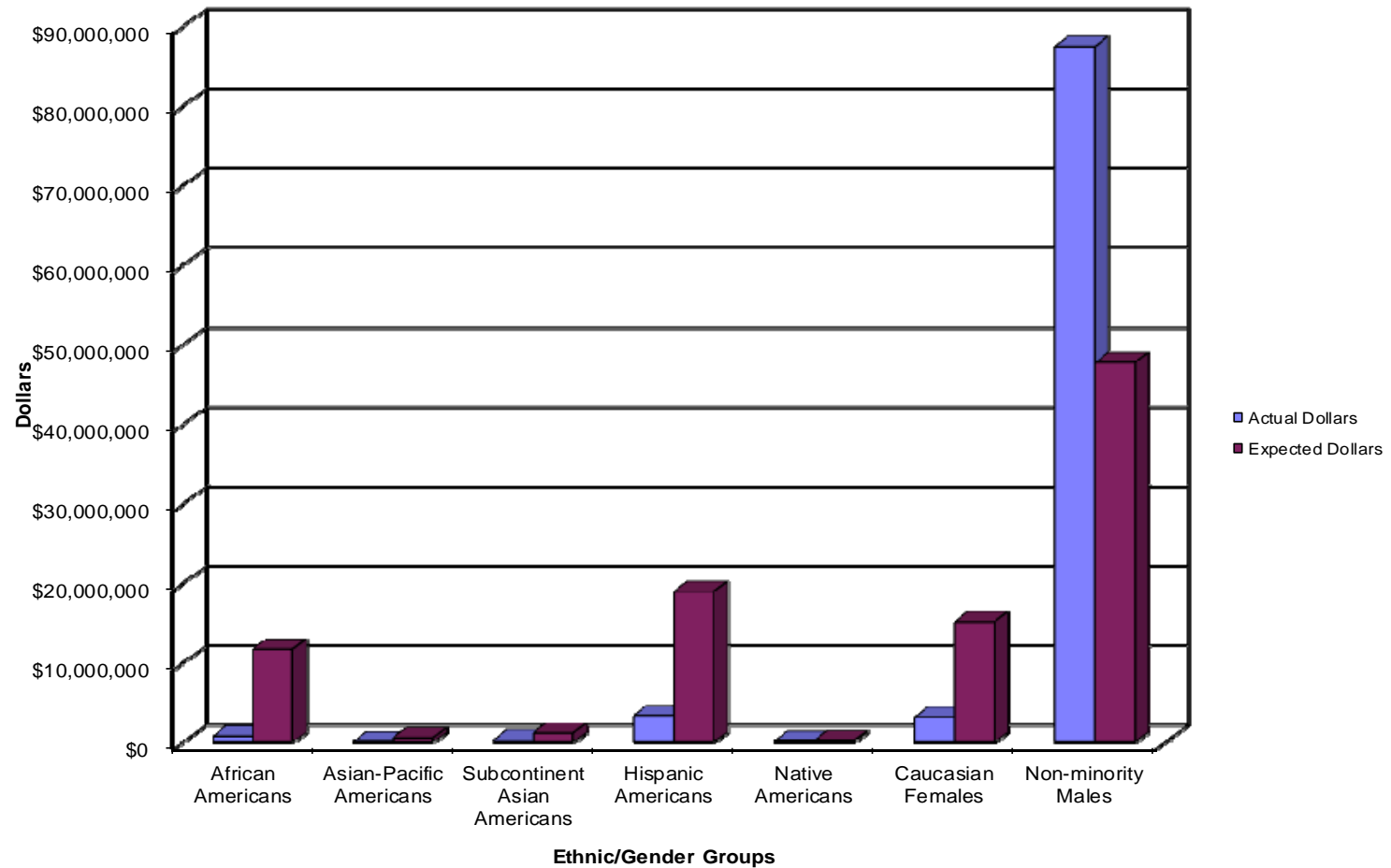
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

**Chart 9.19: Disparity Analysis: Informal Commodities Prime Purchase Orders Valued Less Than \$5,000
Fiscal Years July 1, 2008, to June 30, 2013**



III. **DISPARITY ANALYSIS SUMMARY**

A finding of statistically significant disparity is a required factual predicate for race and gender-conscious remedies⁹ Race and gender-conscious and race and gender-neutral remedies to address the documented disparity are presented in *Chapter 12: Recommendations*.

In the four industries under examination in this chapter, the analysis of prime disparity revealed evidence of a statistically significant disparity in the award of purchase orders to several ethnic and gender groups as compared to the documented availability. Ethnic and gender groups with a documented disparity can be included in the race and gender-conscious recommendations.

A. All Industries Prime Purchase Orders

As indicated in Table 9.21 disparity was found for African Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on all prime purchase orders regardless of purchase order value.

Table 9.21: Disparity Summary: All Industries Prime Purchase Order Dollars, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity/Gender	All Industries
	All Purchase Orders
African Americans	Disparity
Asian-Pacific Americans	No Disparity
Subcontinent Asian Americans	Disparity
Hispanic Americans	Disparity
Native Americans	No Disparity
Minority-owned Businesses	Disparity
Caucasian Female-owned Businesses	Disparity
Minority and Caucasian Female-owned Businesses	Disparity

⁹ *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989); *H.B. Rowe Company v. Tippett*, 615 F.3d 233, Court of Appeals, Fourth Circuit (N.C. July 22, 2010).



B. Construction Prime Purchase Orders

As indicated in Table 9.22 below, disparity was found for African Americans, Asian-Pacific Americans, Minority-owned Businesses, and Minority and Caucasian Female-owned Businesses on all construction prime purchase orders regardless of purchase order value.

In addition, disparity was found for African Americans, Asian-Pacific Americans, Minority-owned Businesses, and Minority and Caucasian Female-owned Businesses on prime purchase orders valued \$50,000 and over.

Finally, disparity was found for African Americans, Asian-Pacific Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on prime purchase orders valued less than \$50,000.

Table 9.22: Disparity Summary: Construction Prime Purchase Order Dollars, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity/Gender	Construction		
	All Purchase Orders	\$50,000 and Over	Less than \$50,000
African Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Asian-Pacific Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Subcontinent Asian Americans	No Disparity	No Disparity	No Disparity
Hispanic Americans	No Disparity	No Disparity	<i>Disparity</i>
Native Americans	No Disparity	No Disparity	No Disparity
Minority-owned Businesses	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Caucasian Female-owned Businesses	No Disparity	No Disparity	<i>Disparity</i>
Minority and Caucasian Female-owned Businesses	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>



C. Professional Services Prime Purchase Orders

As indicated in Table 9.23 below, disparity was found for African Americans, Hispanic Americans, Minority-owned Businesses, and Minority and Caucasian Female-owned Businesses prime contractors on all professional services purchase orders regardless of purchase order value.

Disparity was found for none of ethnic groups of prime contractors on professional services purchase orders valued \$325,000 and over. Disparity was found for Hispanic Americans, Minority-owned Businesses, and Minority and Caucasian Female-owned Businesses prime contractors on professional services purchase orders valued \$195,000 and over.

In addition, Disparity was found for Hispanic Americans, Minority-owned Businesses, and Minority and Caucasian Female-owned Businesses prime contractors on professional services purchase orders valued \$50,000 to \$194,999.

Finally, disparity was found for Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, and Minority and Caucasian Female-owned Businesses prime contractors on professional services purchase orders valued less than \$50,000.

Table 9.23: Disparity Summary: Professional Services Prime Purchase Order Dollars, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity /Gender	Professional Services				
	All Purchase Orders	\$325,000 and Over	\$195,000 and Over	\$50,000 to \$194,999	Less than \$50,000
African Americans	<i>Disparity</i>	No Disparity	No Disparity	No Disparity	No Disparity
Asian-Pacific Americans	No Disparity	No Disparity	No Disparity	No Disparity	No Disparity
Subcontinent Asian Americans	No Disparity	No Disparity	No Disparity	No Disparity	<i>Disparity</i>
Hispanic Americans	<i>Disparity</i>	No Disparity	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Native Americans	No Disparity	No Disparity	No Disparity	No Disparity	No Disparity
Minority-owned Businesses	<i>Disparity</i>	No Disparity	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>



Ethnicity /Gender	Professional Services				
	All Purchase Orders	\$325,000 and Over	\$195,000 and Over	\$50,000 to \$194,999	Less than \$50,000
Caucasian Female-owned Businesses	No Disparity	No Disparity	No Disparity	No Disparity	No Disparity
Minority and Caucasian Female-owned Businesses	Disparity	No Disparity	Disparity	Disparity	Disparity

D. Contractual Services Prime Purchase Orders

As indicated in Table 9.24 below, disparity was found for African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on all contractual services prime purchase orders regardless of purchase order value.

Disparity was found for African Americans, Hispanic Americans, Minority-owned Businesses, and Minority and Caucasian Female-owned Businesses on prime purchase orders valued \$500,000 and over. Disparity was also found for African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on prime purchase orders valued \$50,000 to \$499,999.

In addition, disparity was found for African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on prime purchase orders valued \$5,000 to \$49,999.

Finally, disparity was found for African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on prime purchase orders valued less than \$5,000.



Table 9.24: Disparity Summary: Contractual Services Prime Purchase Order Dollars, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity /Gender	Contractual Services				
	All Purchase Orders	\$500,000 and Over	\$50,000 to \$499,999	\$5,000 to \$49,999	Less than \$5,000
African Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Asian-Pacific Americans	<i>Disparity</i>	No Disparity	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Subcontinent Asian Americans	<i>Disparity</i>	No Disparity	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Hispanic Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Native Americans	No Disparity	No Disparity	No Disparity	No Disparity	No Disparity
Minority-owned Businesses	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Caucasian Female-owned Businesses	<i>Disparity</i>	No Disparity	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Minority and Caucasian Female-owned Businesses	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>

E. Commodities Prime Purchase Orders

As indicated in Table 9.25 below, disparity was found for African Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on all commodities prime purchase orders regardless of purchase order value.

Disparity was found for African Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on prime purchase orders valued 500,000 and over. Disparity was also found for African Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on prime purchase orders valued \$50,000 to \$499,999.



In addition, disparity was found for African Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on prime purchase orders valued \$5,000 to \$49,999.

Finally, disparity was found for African Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on prime purchase orders valued less than \$5,000.

Table 9.25: Disparity Summary: Commodities Prime Purchase Order Dollars, July 1, 2008, to June 30, 2013

Ethnicity /Gender	Commodities				
	All Purchase Orders	\$500,000 and Over	\$50,000 to \$499,999	\$5,000 to \$49,999	Less than \$5,000
African Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Asian-Pacific Americans	No Disparity	No Disparity	No Disparity	No Disparity	No Disparity
Subcontinent Asian Americans	<i>Disparity</i>	No Disparity	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Hispanic Americans	<i>Disparity</i>	No Disparity	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Native Americans	No Disparity	No Disparity	No Disparity	No Disparity	No Disparity
Minority-owned Businesses	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Caucasian Female-owned Businesses	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Minority and Caucasian Female-owned Businesses	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>



CHAPTER 10: SUBCONTRACT DISPARITY ANALYSIS

I. INTRODUCTION

The objective of this chapter is to determine if there was any underutilization of Minority and Woman-owned Business Enterprises, hereinafter referred to as Minority and Caucasian Female-owned Businesses (M/WBE), subcontractors on School Board of Broward County's (SBBC) purchase orders during the Fiscal Years July 1, 2008, to June 30, 2013 study period. A detailed discussion of the statistical procedures for conducting a disparity analysis is set forth in *Chapter 9: Prime Contract Disparity Analysis*. The same statistical procedures are used to perform the subcontractor disparity analysis.

Under a fair and equitable system of awarding subcontracts, the proportion of subcontracts and subcontract dollars awarded to M/WBE subcontractors should be relatively close to the proportion of available M/WBE subcontractors in the agency's market area. Availability is defined as the number of willing and able businesses. The methodology for determining willing and able businesses is detailed in *Chapter 7: Prime Contractor and Subcontractor Availability Analysis*.

If the ratio of utilized M/WBE subcontractors to available M/WBE subcontractors is less than one, a statistical test is conducted to calculate the probability of observing the empirical disparity ratio or any event which is less probable.¹ *Croson* states that an inference of discrimination can be made *prima facie* if the observed disparity is statistically significant.² Under the *Croson* model, Non-minority Male-owned Businesses (Non-MWBE) are not subjected to a statistical test.

II. DISPARITY ANALYSIS

As detailed in *Chapter 4: Subcontractor Utilization Analysis*, extensive efforts were undertaken to obtain subcontractor records for SBBC'S construction subcontracts. The disparity analysis was performed on subcontracts issued between Fiscal Years July 1, 2008, and June 30, 2013.

The subcontract disparity findings in the construction and professional services industries under consideration are summarized below. The outcomes of the statistical analyses are

¹ When conducting statistical tests, a confidence level must be established as a gauge for the level of certainty that an observed occurrence is not due to chance. It is important to note that a 100-percent confidence level or a level of absolute certainty can never be obtained in statistics. A 95-percent confidence level is considered by statistical standards to be an acceptable level in determining whether an inference of discrimination can be made. Thus, the data analysis here was done within the 95-percent confidence level.

² *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989).



presented in the “P-Value” column of the tables. A description of the statistical outcomes in the disparity tables are presented below in Table 10.01.

Table 10.01: Statistical Outcome Descriptions

P-Value Outcome	Definition of P-Value Outcome
< .05 *	The underutilization is statistically significant
not significant	The analysis is not statistically significant
----	There are too few available firms to test statistical significance
**	The statistical test is not performed for the overutilization of DBEs or the underutilization of Non-minority Males
< .05 †	The overutilization is statistically significant

III. DISPARITY ANALYSIS: ALL SUBCONTRACTS, BY INDUSTRY

A. Construction Subcontracts

The disparity analysis of construction subcontracts is described below and depicted in Table 10.02 and Chart 10.01.

African Americans represent 13.46% of the available construction businesses and received 1.19% of the construction subcontract dollars. This underutilization is statistically significant.

Asian-Pacific Americans represent 1.31% of the available construction businesses and received 0.06% of the construction subcontract dollars. This underutilization is statistically significant.

Subcontinent Asian Americans represent 0.82% of the available construction businesses and received 0.93% of the construction subcontract dollars. This study does not test statistically the overutilization of Subcontinent Asian Americans.

Hispanic Americans represent 16.42% of the available construction businesses and received 15.68% of the construction subcontract dollars. This underutilization is not statistically significant.

Native Americans represent 0.66% of the available construction businesses and received 0.10% of the dollars for construction subcontracts. There were too few available firms to test statistical significance of this underutilization.

Minority-owned Businesses represent 32.68% of the available construction businesses and received 17.97% of the construction subcontract dollars. This underutilization is statistically significant.



Caucasian Female-owned Businesses represent 11.33% of the available construction businesses and received 8.86% of the construction subcontract dollars. This underutilization is statistically significant.

Minority and Caucasian Female-owned Businesses represent 44.01% of the available construction businesses and received 26.83% of the construction subcontract dollars. This underutilization is statistically significant.

Non-minority Male-owned Businesses represent 55.99% of the available construction businesses and received 73.17% of the construction subcontract dollars. This overutilization is statistically significant.



**Table 10.02: Disparity Analysis: Construction Subcontracts,
Fiscal Years July 1, 2008, and June 30, 2013**

Group	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$1,060,204	1.19%	13.46%	\$12,028,885	-\$10,968,681	0.09	< .05 *
Asian-Pacific Americans	\$56,900	0.06%	1.31%	\$1,173,550	-\$1,116,650	0.05	< .05 *
Subcontinent Asian Americans	\$833,339	0.93%	0.82%	\$733,469	\$99,871	1.14	**
Hispanic Americans	\$14,010,383	15.68%	16.42%	\$14,669,372	-\$658,989	0.96	not significant
Native Americans	\$92,248	0.10%	0.66%	\$586,775	-\$494,527	0.16	----
Caucasian Females	\$7,916,138	8.86%	11.33%	\$10,121,866	-\$2,205,729	0.78	< .05 *
Non-minority Males	\$65,367,262	73.17%	55.99%	\$50,022,558	\$15,344,705	1.31	< .05 †
TOTAL	\$89,336,474	100.00%	100.00%	\$89,336,474			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$0	0.00%	2.96%	\$2,640,487	-\$2,640,487	0.00	< .05 *
African American Males	\$1,060,204	1.19%	10.51%	\$9,388,398	-\$8,328,194	0.11	< .05 *
Asian-Pacific American Females	\$0	0.00%	0.82%	\$733,469	-\$733,469	0.00	----
Asian-Pacific American Males	\$56,900	0.06%	0.49%	\$440,081	-\$383,181	0.13	----
Subcontinent Asian American Females	\$0	0.00%	0.00%	\$0	\$0	----	----
Subcontinent Asian American Males	\$833,339	0.93%	0.82%	\$733,469	\$99,871	1.14	**
Hispanic American Females	\$1,805,549	2.02%	4.27%	\$3,814,037	-\$2,008,488	0.47	< .05 *
Hispanic American Males	\$12,204,834	13.66%	12.15%	\$10,855,335	\$1,349,499	1.12	**
Native American Females	\$0	0.00%	0.16%	\$146,694	-\$146,694	0.00	----
Native American Males	\$92,248	0.10%	0.49%	\$440,081	-\$347,833	0.21	----
Caucasian Females	\$7,916,138	8.86%	11.33%	\$10,121,866	-\$2,205,729	0.78	< .05 *
Caucasian Males	\$65,367,262	73.17%	55.99%	\$50,022,558	\$15,344,705	1.31	< .05 †
TOTAL	\$89,336,474	100.00%	100.00%	\$89,336,474			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$1,805,549	2.02%	8.21%	\$7,334,686	-\$5,529,137	0.25	< .05 *
Minority Males	\$14,247,525	15.95%	24.47%	\$21,857,364	-\$7,609,839	0.65	< .05 *
Caucasian Females	\$7,916,138	8.86%	11.33%	\$10,121,866	-\$2,205,729	0.78	< .05 *
Non-minority Males	\$65,367,262	73.17%	55.99%	\$50,022,558	\$15,344,705	1.31	< .05 †
TOTAL	\$89,336,474	100.00%	100.00%	\$89,336,474			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Business Enterprises	\$16,053,074	17.97%	32.68%	\$29,192,050	-\$13,138,976	0.55	< .05 *
Caucasian Female-owned Business Enterprises	\$7,916,138	8.86%	11.33%	\$10,121,866	-\$2,205,729	0.78	< .05 *
Minority and Caucasian Female-owned Business Enterprises	\$23,969,211	26.83%	44.01%	\$39,313,916	-\$15,344,705	0.61	< .05 *
Non-minority Male-owned Business Enterprises	\$65,367,262	73.17%	55.99%	\$50,022,558	\$15,344,705	1.31	< .05 †

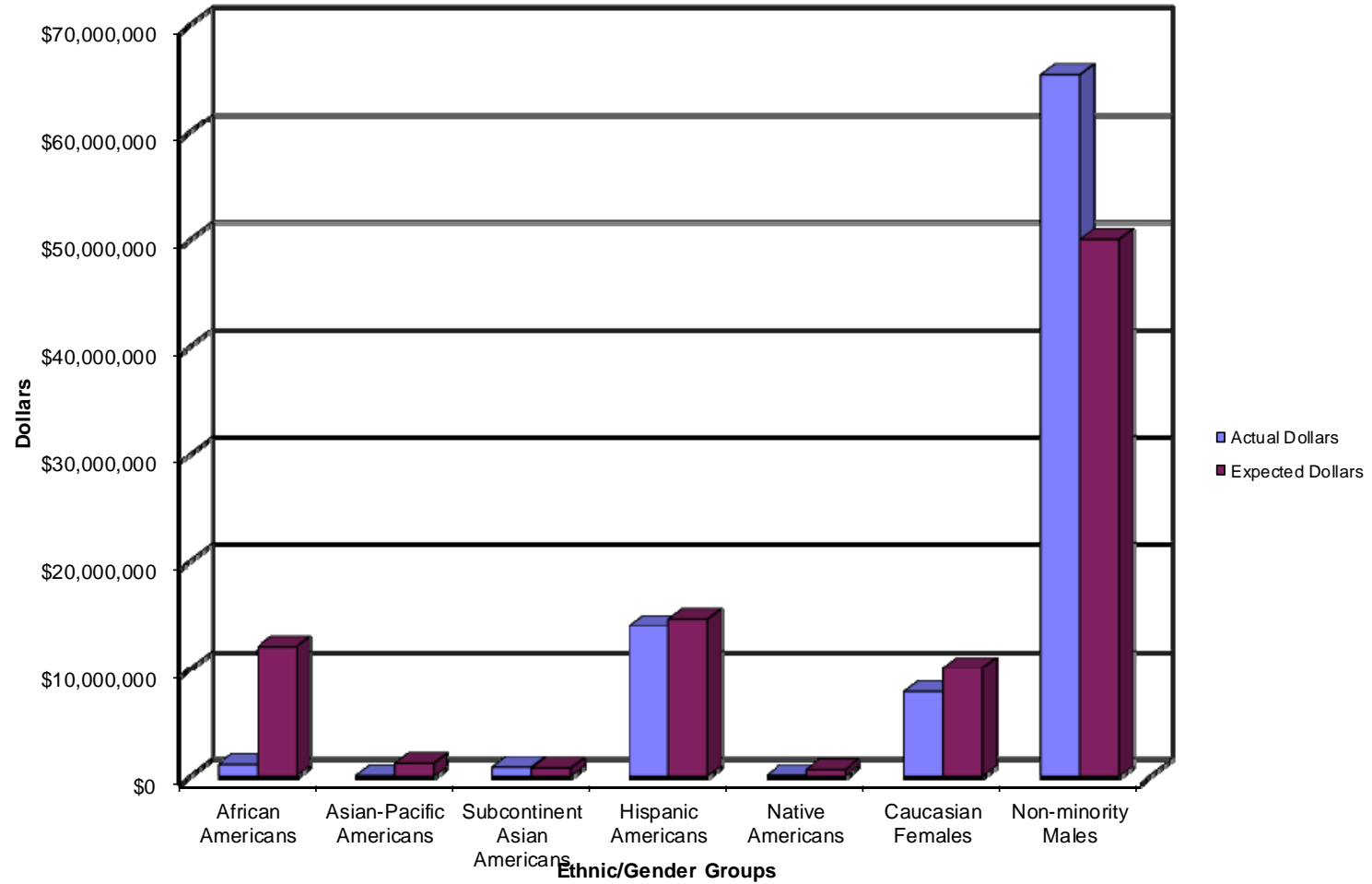
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) denotes that this study does not test statistically the overutilization of MWBEs or the underutilization of Non-minority males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

**Chart 10.01: Disparity Analysis: Construction Subcontracts,
Fiscal Years July 1, 2008, and June 30, 2013**



B. Professional Services Subcontracts

The disparity analysis of professional services subcontracts is described below and depicted in Table 10.03 and Chart 10.02.

African Americans represent 7.83% of the available professional services businesses and received 1.07% of the professional services subcontract dollars. This underutilization is statistically significant.

Asian-Pacific Americans represent 2.29% of the available professional services businesses and received 0.00% of the professional services subcontract dollars. This underutilization is not statistically significant.

Subcontinent Asian Americans represent 4.10% of the available professional services businesses and received 2.81% of the professional services subcontract dollars. This underutilization is not statistically significant.

Hispanic Americans represent 44.10% of the available professional services businesses and received 19.42% of the professional services subcontract dollars. This underutilization is statistically significant.

Native Americans represent 0.00% of the available professional services businesses and received 0.00% of the dollars for professional services subcontracts. There were too few available firms to test statistical significance.

Minority-owned Businesses represent 58.31% of the available professional services businesses and received 23.30% of the professional services subcontract dollars. This underutilization is statistically significant.

Caucasian Female-owned Businesses represent 8.55% of the available professional services businesses and received 9.90% of the professional services subcontract dollars. This study does not test statistically the overutilization of Caucasian Female-owned Businesses.

Minority and Caucasian Female-owned Businesses represent 66.87% of the available professional services businesses and received 33.20% of the professional services subcontract dollars. This underutilization is statistically significant.

Non-minority Male-owned Businesses represent 33.13% of the available professional services businesses and received 66.80% of the professional services subcontract dollars. This overutilization is statistically significant.



**Table 10.03: Disparity Analysis: Professional Services Subcontracts,
Fiscal Years July 1, 2008, and June 30, 2013**

Group	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$86,375	1.07%	7.83%	\$631,513	-\$545,138	0.14	< .05 *
Asian-Pacific Americans	\$0	0.00%	2.29%	\$184,596	-\$184,596	0.00	not significant
Subcontinent Asian Americans	\$226,356	2.81%	4.10%	\$330,330	-\$103,974	0.69	not significant
Hispanic Americans	\$1,566,403	19.42%	43.98%	\$3,546,187	-\$1,979,783	0.44	< .05 *
Native Americans	\$0	0.00%	0.00%	\$0	\$0	----	----
Caucasian Females	\$798,270	9.90%	8.55%	\$689,806	\$108,464	1.16	**
Non-minority Males	\$5,386,527	66.80%	33.25%	\$2,681,500	\$2,705,027	2.01	< .05 †
TOTAL	\$8,063,931	100.00%	100.00%	\$8,063,931			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$0	0.00%	1.08%	\$87,440	-\$87,440	0.00	not significant
African American Males	\$86,375	1.07%	6.75%	\$544,072	-\$457,697	0.16	< .05 *
Asian-Pacific American Females	\$0	0.00%	0.72%	\$58,293	-\$58,293	0.00	----
Asian-Pacific American Males	\$0	0.00%	1.57%	\$126,303	-\$126,303	0.00	not significant
Subcontinent Asian American Females	\$0	0.00%	0.60%	\$48,578	-\$48,578	0.00	----
Subcontinent Asian American Males	\$226,356	2.81%	3.49%	\$281,752	-\$55,396	0.80	not significant
Hispanic American Females	\$61,551	0.76%	10.24%	\$825,824	-\$764,274	0.07	< .05 *
Hispanic American Males	\$1,504,853	18.66%	33.73%	\$2,720,362	-\$1,215,510	0.55	< .05 *
Native American Females	\$0	0.00%	0.00%	\$0	\$0	----	----
Native American Males	\$0	0.00%	0.00%	\$0	\$0	----	----
Caucasian Females	\$798,270	9.90%	8.55%	\$689,806	\$108,464	1.16	**
Caucasian Males	\$5,386,527	66.80%	33.25%	\$2,681,500	\$2,705,027	2.01	< .05 †
TOTAL	\$8,063,931	100.00%	100.00%	\$8,063,931			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$61,551	0.76%	12.65%	\$1,020,136	-\$958,585	0.06	< .05 *
Minority Males	\$1,817,584	22.54%	45.54%	\$3,672,489	-\$1,854,905	0.49	< .05 *
Caucasian Females	\$798,270	9.90%	8.55%	\$689,806	\$108,464	1.16	**
Non-minority Males	\$5,386,527	66.80%	33.25%	\$2,681,500	\$2,705,027	2.01	< .05 †
TOTAL	\$8,063,931	100.00%	100.00%	\$8,063,931			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority-owned Business Enterprises	\$1,879,134	23.30%	58.19%	\$4,692,625	-\$2,813,491	0.40	< .05 *
Caucasian Female-owned Business Enterprises	\$798,270	9.90%	8.55%	\$689,806	\$108,464	1.16	**
Minority and Caucasian Female-owned Business Enterprises	\$2,677,404	33.20%	66.75%	\$5,382,431	-\$2,705,027	0.50	< .05 *
Non-minority Male-owned Business Enterprises	\$5,386,527	66.80%	33.25%	\$2,681,500	\$2,705,027	2.01	< .05 †

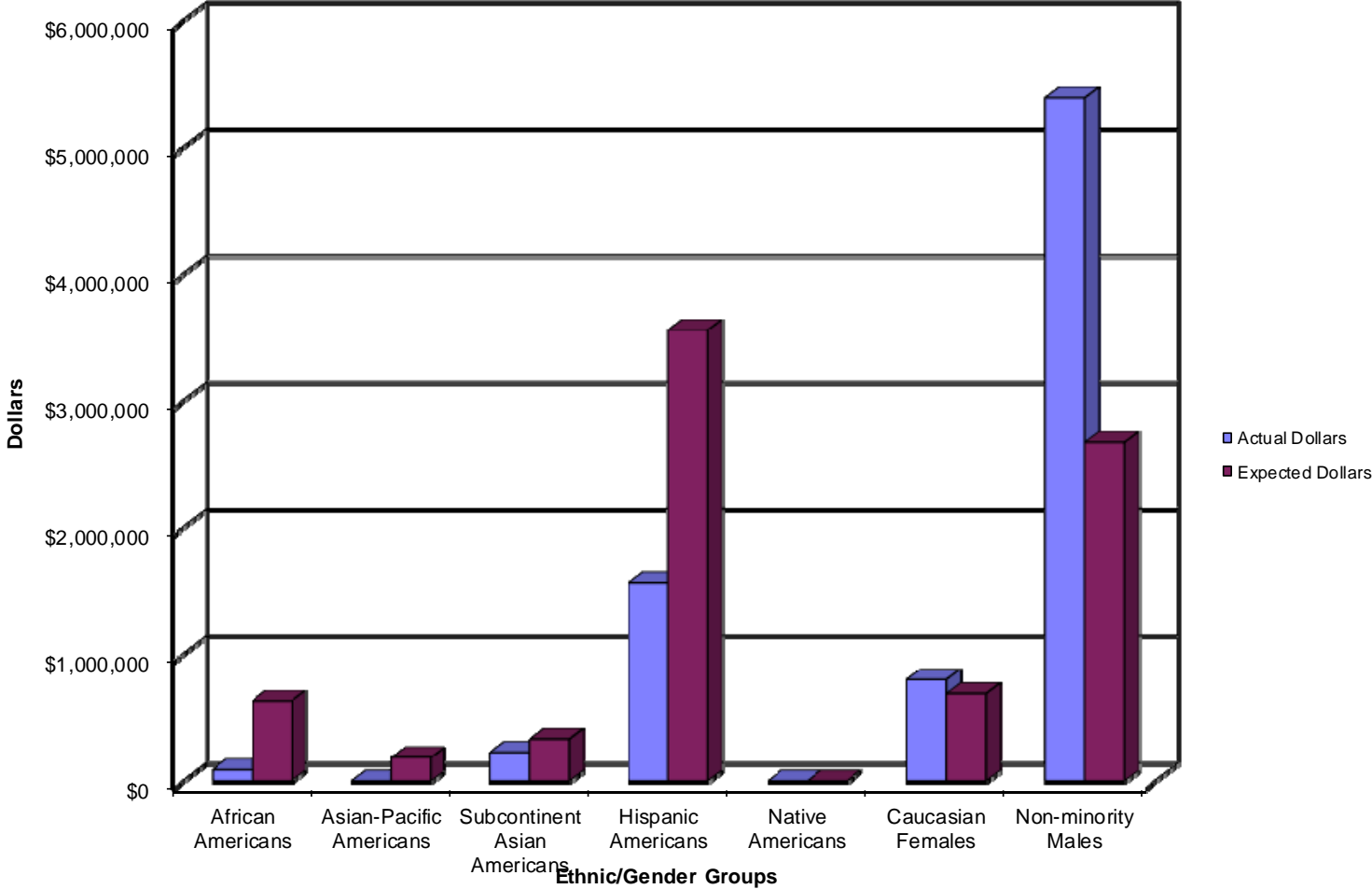
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) denotes that this study does not test statistically the overutilization of M/WBEs or the underutilization of Non-minority males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

Chart 10.02: Disparity Analysis: Professional Services Subcontracts, Fiscal Years July 1, 2008, and June 30, 2013



IV. SUBCONTRACT DISPARITY SUMMARY

As indicated in Table 10.04, disparity was found for African American, Asian-Pacific American, Minority-owned Business Enterprise, Caucasian Female-owned Business, and Minority and Caucasian Female-owned Business construction subcontractors. Disparity was also found for African American, Hispanic American, Minority-owned Business Enterprise, and Minority and Caucasian Female-owned Business professional services subcontractors.

**Table 10.04: Subcontract Disparity Summary,
Fiscal Years July 1, 2008, and June 30, 2013**

Ethnicity / Gender	Construction	Professional Services
African Americans	Yes	Yes
Asian-Pacific Americans	Yes	No
Subcontinent Asian Americans	No	No
Hispanic Americans	No	Yes
Native Americans	No	No
Minority-owned Businesses	Yes	Yes
Caucasian Female-owned Businesses	Yes	No
Minority and Caucasian Female-owned Businesses	Yes	Yes



CHAPTER 11: REGRESSION AND PRIVATE SECTOR ANALYSIS

I. INTRODUCTION

Private sector business practices which are not subject to government Minority and Woman-owned Business Enterprises, hereinafter referred to as Minority and Caucasian Female-owned Business (M/WBE), requirements are indicators of marketplace conditions that could adversely affect the formation and growth of M/WBEs, thereby depressing the current availability of M/WBEs. *Concrete Works of Colorado v. City of Denver (Concrete Works II)*¹ sets forth a framework for considering a passive participant model for an analysis of discrimination in private sector business practices. In accordance with *Concrete Works II*, regression analyses were conducted to examine three outcome variables—business ownership rates, business earnings, and business loan approval. Each regression analysis compared minority group members² and Caucasian Females to Non-minority Males by controlling for race and gender-neutral explanatory variables such as age, education, marital status, and access to capital. The impact of the explanatory variables on the outcome variables is described in this chapter. These findings elucidate the socio-economic conditions in the School Board of Broward County's (SBBC) market area that should be considered when measuring the relative availability of M/WBEs and Caucasian males.

The United States Census Public Use Microdata Sample (PUMS) data was used to compare minority and Caucasian Females' probability of owning a business to the probability of Non-minority males owning a business. A logistic regression analysis was used to determine if race and gender have a statistically significant effect on the probability of business ownership. The PUMS data was also used to compare the business earnings of M/WBEs to Non-minority Male-owned businesses. An Ordinary Least Squares (OLS) regression was utilized to analyze the PUMS data for disparities in business earnings after controlling for race and gender-neutral factors. The Federal Reserve Board's National Survey of Small Business Finances (NSSBF) dataset was used to compare M/WBEs' business loan approval probabilities to Non-minority Male-owned businesses' loan approval probabilities, while controlling for other business explanatory variables.

The applicable limits of the private sector discrimination findings are set forth in *Builders Association of Greater Chicago v. City of Chicago (City of Chicago)*,³ where the court

¹ *Concrete Works of Colo., Inc. v. City of Denver*, 86 F. Supp. 2d 1042, 1073 (D. Colo. 2000), rev'd on other grounds, 321 F.3d 950 (10th Cir. 2003), cert. denied, 540 United States 1027 (2003).

² Minority group members include both males and females.

³ *Builders Association of Greater Chicago v. City of Chicago*, 298 F.Supp.2d 725 (N.D. Ill. 2003).



established that even when there is evidence of private sector discrimination, the findings cannot be used as the factual predicate for a government-sponsored, race-conscious M/WBE Program unless there is a nexus between the private sector data and the public agency actions. However, the private sector findings can be used to develop race-neutral programs to address barriers to the formation and development of M/WBEs. Given the case law, caution must be exercised in the interpretation and application of the regression findings. Case law regarding the application of private sector discrimination is discussed below in detail.

II. LEGAL ANALYSIS

A. Passive Discrimination

The controlling legal precedent set forth in the 1989 *City of Richmond v. J.A. Croson Co.*⁴ decision authorized state and local governments to remedy discrimination in the award of subcontracts by its prime contractors on the grounds that the government cannot be a “passive participant” in such discrimination. In January 2003, *Concrete Works II* and *City of Chicago* extended the private sector analysis to the investigation of discriminatory barriers that M/WBEs encountered in the formation and development of businesses and their consequence for state and local remedial programs. *Concrete Works II* set forth a framework for considering such private sector discrimination as a passive participant model for analysis. However, the obligation of presenting an appropriate nexus between the government remedy and the private sector discrimination was first addressed in *City of Chicago*.

The Tenth Circuit Court of Appeals decided in *Concrete Works II* that business activities conducted in the private sector, if within the government’s market area, are also appropriate areas to explore the issue of passive participation. However, the appropriateness of the City’s remedy, given the finding of private sector discrimination, was not at issue before the court. The question before the court was whether sufficient facts existed to determine if the private sector business practices under consideration constituted discrimination. For technical legal reasons,⁵ the court did not examine whether a consequent public sector remedy, i.e., one involving a goal requirement on the City of Denver’s contracts, was “narrowly tailored” or otherwise supported by the City’s private sector findings of discrimination.

⁴ 488 United States 469 (1989).

⁵ Plaintiff had not preserved the issue on appeal. Therefore, it was no longer part of the case.



B. *Narrow Tailoring*

The question of whether a particular public sector remedy is narrowly tailored when it is based solely on business practices within the private sector was at issue in *City of Chicago*. *City of Chicago*, decided ten months after *Concrete Works II*, found that certain private sector business practices constituted discrimination against minorities in the Chicago market area. However, the District Court did not find the City of Chicago's M/WBE subcontracting goal to be a remedy "narrowly tailored" to address the documented private sector discriminatory business practices that had been discovered within the City's market area. The court explicitly stated that certain discriminatory business practices documented by regression analyses constituted private sector discrimination. It is also notable that the documented discriminatory business practices reviewed by the court in the *City of Chicago* were similar to those reviewed in *Concrete Works II*. Notwithstanding the fact that discrimination in the City of Chicago's market area was documented, the court determined that the evidence was insufficient to support the City's race-based subcontracting goals. The court ordered an injunction to invalidate the City of Chicago's race-based program.

We note the following statements from that opinion:

Racial preferences are, by their nature, highly suspect, and they cannot be used to benefit one group that, by definition, is not either individually or collectively the present victim of discrimination. There may well also be (and the evidence suggests that there are) minorities and women who do not enter the industry because they perceive barriers to entry. If there is none, and their perception is in error, that false perception cannot be used to provide additional opportunities to M/WBEs already in the market to the detriment of other firms who, again by definition, neither individually nor collectively are engaged in discriminatory practices.⁶

Given these distortions of the market and these barriers, is the City's program narrowly tailored as a remedy? It is here that I believe the program fails. There is no "meaningful individualized review" of M/WBEs, *Gratz v. Bollinger*, 539 United States 244, 156 L. Ed. 2d 257, 123 S.Ct. 2411, 2431 (2003) (Justice O'Connor concurring). Chicago's program is more expansive and more rigid than plans that have been sustained by the courts. It has no termination date, nor has it any means for determining a termination date. The 'graduation' revenue amount is very high, \$27,500,000, and very few have graduated. There is no net worth threshold. A third-generation Japanese-American from a wealthy family, with a graduate degree from MIT, qualifies (and an Iraqi immigrant does not). Waivers are rarely or never granted on construction contracts, but

⁶ *Builders Association of Greater Chicago v. City of Chicago*, 298 F.Supp.2d 725 (N.D. Ill. 2003).



“regarding the availability of waivers is of particular importance... a ‘rigid numerical quota’ particularly disserves the cause of narrow tailoring” *Adarand Constructors v. Slater, supra*, at 1177. The City’s program has a “rigid numerical quota,” a quota not related to the number of available, willing and able firms but to concepts of how many of those firms there should be. Formalistic points did not survive strict scrutiny in *Gratz v. Bollinger, supra*, and formalistic percentages cannot survive scrutiny.⁷

C. Capacity to Perform Contracts

The federal circuit appellate decision in *Rothe Development Corp. v. United States Department of Defense (Rothe)*⁸ involved the issue of capacity. There were two earlier appeals prior to the appellate court’s decision in November 2008 that the Department of Defense’s (DOD) small disadvantaged business program was unconstitutional on its face.

One of the arguments proffered by *Rothe* on appeal was that the district court erred by relying on six disparity studies that failed to establish that the DOD played any role in the discriminatory exclusion of minority owned contractors.

The court acknowledged that two of the studies relied upon by Congress attempted to deal with capacity. The New York City study limited prime contracts to those valued at \$1 million and under, and the firms in the Dallas study had a “demonstrated capacity to win large competitively bid contracts.” Thus, the court concluded that several studies that were relied upon demonstrated that the businesses had the capacity to perform a contract. The court expressed an additional concern as to whether the businesses could do more than one contract a time and deduced that a regression analysis was recommended as the corrective measure going forward.⁹

Caution should also be exercised when determining which minority or gender group is appropriate for race or gender-conscious remedies. For a local government’s M/WBE program to be narrowly tailored there must be a statistical finding that available minority subcontractors are underutilized. Where the underutilization of a minority group is not found to be statistically significant, the minority group should not be included in race-conscious remedies.¹⁰

⁷ *Builders Association of Greater Chicago v. City of Chicago*, 298 F.Supp.2d 725 (N.D. Ill. 2003).

⁸ 545 F.3d 1023 (Fed. Cir. 2008).

⁹ *Id.*

¹⁰ *H.B. Rowe Company v. Tippett*, 615 F.3d 233, Court of Appeals, Fourth Circuit (N.C.), July 22, 2010 (NO. 09-1050). The Rowe Court also ruled that statistical evidence of overutilization of women business enterprises that is not statistically significant is sufficient factual predicate for gender-based remedies.



D. Conclusion

As established in *City of Chicago*, private sector discrimination cannot be used as the factual basis for a government sponsored, race-based M/WBE program without a nexus to the government's actions. Therefore, the discrimination that might be revealed in the regression analysis is not a sufficient factual predicate for an SBBC race-based M/WBE Program unless a nexus is established between SBBC and the private sector data. These economic indicators, albeit not a measure of passive discrimination, are illustrative of private sector discrimination and can support SBBC-sponsored, race-neutral programs.

III. REGRESSION ANALYSIS METHODOLOGY

A regression analysis is the methodology employed to ascertain whether there are private sector economic indicators of discrimination in SBBC's market area that could impact the formation and development of M/WBEs. The three regression analyses focus on the construction, professional services, contractual services, and commodities industries.

As noted, three separate regression analyses are used. They are the Business Ownership Analysis, the Earnings Disparity Analysis, and the Business Loan Approval Analysis. All analyses takes into consideration race and gender-neutral factors, such as age, education, and creditworthiness in assessing whether the explanatory factors examined are disproportionately affecting minorities and females when compared to similarly situated Non-minority Males.

IV. DATASETS ANALYZED

The 2009 to 2013 PUMS datasets produced by the United States Census Bureau were compiled and used to analyze business ownership and earnings disparities within SBBC's market area of Broward, Miami-Dade and Palm Beach Counties. The data for the tri-county area was identified using Public Use Microdata Areas (PUMA), a variable within the PUMS dataset that reports data for counties within states. The dataset includes information on personal profile, industry, work characteristics, and family structure. The PUMS data allowed for an analysis by an individual's race and gender.

The 2003 NSSBF dataset was utilized to examine business loan approval rates in the Business Loan Approval Analysis. The NSSBF dataset contains observations for business and owner characteristics, including the business owner's credit and resources and the business's credit and financial health. The NSSBF records the geographic location of the business by Census Division, instead of city, county, or state. While the NSSBF data is available by Census Division, the South Atlantic subdivision where SBBC is domiciled lacked sufficient data to perform an accurate regression analysis by minority status, gender, and industry. Therefore, the sampling region was expanded to the South Region which includes the South Atlantic, East South Central, and West South Central Census Divisions.



The 2003 NSSBF contains the most recent available data on access to credit for the South Atlantic subdivision. The dataset allowed for an analysis of all minority groups combined by industry within the South region.

V. REGRESSION MODELS DEFINED

A. Business Ownership Analysis

The Business Ownership Analysis examines the relationship between the probability of being a business owner and independent socio-economic variables. Business ownership, the dependent variable, includes business owners of incorporated and non-incorporated businesses. The business ownership variable utilizes two values. A value of “1” indicates that a person is a business owner, whereas a value of “0” indicates that a person is not a business owner. When the dependent variable is defined this way, it is called a binary variable.¹¹ In this case a logistic regression model is utilized to predict the probability of business ownership using independent socio-economic variables. Three logistic models were run to predict the probability of business ownership in the construction, professional services, contractual services, and commodities industries. Categories of the independent variables analyzed include educational level, personal characteristics, race, and gender.

In the findings tables, disparity is denoted by an asterisk (*) when the independent variable is significant at or above the 95-percent level. A finding of disparity indicates that there is a non-random relationship between the probability of owning a business and the independent variable. Tables of regression results indicate the sign of each variable’s coefficient from the regression output. If the coefficient sign is positive, it indicates that there is a positive relationship between the dependent variable and that independent variable. For example, having an advanced degree is positively related to the probability of being a business owner, holding all other variables constant. If the coefficient sign for the independent variable is negative, this implies an inverse relationship between the dependent variable and that independent variable. For instance, if an individual owns his or her own home, he or she has a lower probability of owning a business, holding all other variables constant.

For each of the four industries the logistic regression is used to identify the probability that an individual owns a business given his or her background including race, gender, and race and gender-neutral factors. Table 11.01 presents the independent variables used for the Business Ownership Analysis.

¹¹ In this case, the standard Ordinary Least Squares (OLS) Regression model cannot be employed and a Logistic model is utilized to predict the probability of business ownership.



Table 11.01: Independent Variables Used in the Business Ownership Analysis

Personal Characteristics	Educational Attainment	Race	Gender
Age	Associate's Degree	African American	Female
Homeowner	Bachelor's Degree	Hispanic American	
Finances	Advanced Degree	Asian American	
Speaking English at Home		Native American	
Children Under The Age of Six		Other Minority*	
Marital Status		Caucasian	

* Other Minority includes individuals who identified as other or reported belonging to two or more racial groups.

B. The Earnings Disparity Analysis

The Earnings Disparity Analysis examines the relationship between the annual self-employment income and independent socio-economic variables. “Wages” are defined as the individual’s total dollar income earned in the previous twelve months. Categories of independent socio-economic variables analyzed include personal characteristics, educational attainment, race, and gender.

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

In the table below a finding of disparity is denoted by an asterisk (*) when an independent variable is significant at or above the 95 percent level. A finding of disparity indicates that there is a non-random relationship between wages and the independent variable. Tables of regression results indicate the sign of each variable's coefficient from the regression output. If the coefficient sign is positive, it means there is a positive relationship between the dependent variable and that independent variable. If the coefficient sign for the independent variable is negative, this implies an inverse relationship between the dependent variable and that independent variable.

An OLS regression analysis is used to assess the presence of business earning disparities. OLS regressions have been conducted separately for each industry. Table 11.02 presents the independent variables used for the Earnings Disparity Analysis.¹²



¹² If an independent variable is a binary variable, it will be coded as “1” if the individual has that variable present and “0” if otherwise (i.e. for the Hispanic American variable, it is coded as “1” if the individual is Hispanic American and “0” if otherwise). If an independent variable is a continuous variable, a value will be used (i.e. one’s age can be labeled as 35).

Table 11.02: Independent Variables Used for the Earnings Disparity Analysis

Personal Characteristics	Educational Attainment	Race	Gender
Age	Associate's Degree	African American	Female
Homeowner	Bachelor's Degree	Hispanic American	
Finances	Advanced Degree	Asian American	
Speaking English at Home		Native American	
Children Under The Age of Six		Other Minority*	
Marital Status		Caucasian	

* Other Minority includes individuals who identified as other or reported belonging to two or more racial groups

C. The Business Loan Approval Analysis

The Business Loan Approval Analysis examines the relationship between the probability of obtaining a business loan and variables related to socio-economic factors and business characteristics. The model is a Binary Logistic model where the dependent variable is the reported probability of obtaining a business loan.

The NSSBF data was collected by the United States Federal Reserve. The NSSBF collects information on small businesses (fewer than 500 employees) in the United States, such as owner characteristics, business size, use of financial services, and the income and balance sheets of the business. The 2003 NSSBF dataset is the most recently released dataset.

In the findings table, disparity is denoted by an asterisk (*) when the independent variable is significant at or above the 95 percent level. A finding of disparity indicates that there is a non-random relationship between obtaining a business loan and each independent variable. The tables containing the regression results also indicate the sign of each variable's coefficient from the regression output. If the coefficient sign is positive, it means there is a positive relationship between the independent and dependent variables. If the sign of the coefficient for the independent variable is negative, this implies an inverse relationship between the independent and dependent variables.

A Binary Logistic regression is used to examine the factors that might explain loan approvals for the business owners. The independent variables describe three sets of factors:

- Business owner's minority and gender group classification
- Business owner's credit and resources
- Business' credit and financial health



Table 11.03 presents the independent variables used for the Business Loan Approval Analysis.¹³

Table 11.03: Independent Variables Used for Business Loan Approval Analysis

Business Owner's Characteristics	Business's Credit and Financial Health	Race	Gender
Bachelor's Degree Use of Personal Credit Card for Business	Age of Business Location Credit Score Type of Organization	Minority	Female

VI. FINDINGS

A. Business Ownership Analysis

The business ownership variable is defined by the number of self-employed individuals in each of the four industries. The analysis considered incorporated and non-incorporated businesses. The data in this section comes from Broward County, Miami-Dade County, and Palm Beach County. The counties were specified using PUMA, variables within the PUMS dataset that can specify the different counties within states.¹⁴ As noted in *Section IV*, because each PUMA is determined by the United States Census, the region analyzed in the regression analyses could be limited to the tri-county area.

Previous studies have shown that many non-discriminatory factors, such as education, age, and marital status, are associated with self-employment. In this analysis, race and gender-neutral factors are combined with race and gender-specific factors in a logistic regression model to determine whether observed race or gender disparities are independent of the race and gender-neutral factors known to be associated with self-employment. It must be noted that many of these variables, such as having an advanced degree, while seeming to be race and gender-neutral, may in fact be correlated with race and gender. For example, if Caucasian Females are less probable to have advanced degrees and the regression results show that individuals with advanced degrees are significantly more probable to own a business, Caucasian Females may be disadvantaged in multiple ways. First, Caucasian Females may have statistically significant lower business ownership rates, so they face a direct disadvantage as a group. Second, they are

¹³ If an independent variable is a binary variable, it will be coded as "1" if the individual has that variable present and "0" if otherwise (i.e. for the Hispanic American variable, it is coded as "1" if the individual is Hispanic American and "0" if otherwise). If an independent variable is a continuous variable, a value will be used (i.e. one's age can be labeled as 35).

¹⁴ The PUMS data were collected by the United States Census Bureau from a five percent sample of United States households. The observations were weighted to preserve the representative nature of the sample in relation to the population as a whole.



indirectly disadvantaged as they tend to have less advanced degrees, which significantly increase one's chances of owning a business.

1. Logistic Model Results for Construction Business Ownership Probabilities

Table 11.04 presents the logistic regression results for the probability of owning a business in the construction industry based on the 18 variables analyzed in this model.

Table 11.04: Construction Logistic Model

Business Ownership Model	Coefficient	Significance	Standard Error	Wald (df)	P-value
Serial No (a)	0.000		0.000	0.005 (1)	0.945
Age	0.098	*	0.006	253.337 (1)	<0.001
Age Squared	-0.001	*	0.000	135.872 (1)	<0.001
Associate's Degree (b)	0.045		0.051	0.781 (1)	0.377
Bachelor's Degree (b)	-0.064		0.044	2.097 (1)	0.148
Advanced Degree (b)	-0.259	*	0.082	9.971 (1)	0.002
Home Owner	0.207	*	0.029	49.580 (1)	<0.001
Interest and Dividends	0.000	*	0.000	8.918 (1)	0.003
Monthly Mortgage or Rental Payment	0.000	*	0.000	187.42 (1)	<0.001
Only English Spoken in Home	-0.189	*	0.047	15.863 (1)	<0.001
Child Under Age 6	0.109		0.124	0.774	0.379
Married	0.115	*	0.028	17.199 (1)	<0.001
Caucasian Female	-0.610	*	0.046	176.938 (1)	<0.001
African American	-0.590	*	0.048	152.324 (1)	<0.001
Hispanic American	-0.203	*	0.050	16.291 (1)	<0.001
Asian American	-0.327	*	0.151	4.682 (1)	0.030
Native American	-0.242		0.174	1.933 (1)	0.785
Other Minority	-0.392	*	0.064	37.736 (1)	<0.001
Constant	-2.538		18.004	0.020 (1)	0.013

(a) the variable Serial No is included in the model to adjust for including multiple members of the same household in the analysis.

(b) for the variables Associate's Degree, Bachelor's Degree and Advanced degree, the comparison group is comprised of all individuals who were not awarded an Associate's, Bachelor's, or Advanced College Degree, including less than high school education, high school diploma, GED or alternative credential, and some college..

Note: P-value of less than 0.05 denote findings of statistical significance.

* identifies statistically significant variables.



The construction industry logistic regression results indicate the following:¹⁵

- The probability of construction business ownership is positively associated with increased age and age squared. This is indicative of a curvilinear relationship; older individuals are significantly¹⁶ more probable to be business owners in the construction industry than younger individuals.
- Persons with an Advanced Degree have a significantly lower probability of business ownership in the construction industry.
- Caucasian Females have a lower probability of business ownership in the construction industry than similarly situated Non-minority Males.
- African-Americans, Hispanic Americans, Asian Americans and Other minorities have a lower probability of business ownership in the construction industry than similarly situated Non-minority Males.

2. Logistic Model Results for Commodities Business Ownership Probabilities

Table 11.05 presents the logistic regression results for the probability of owning a business in the commodities industry using the 18 variables analyzed in this model.

Table 11.05: Commodities Logistic Model

Business Ownership Model	Coefficient	Significance	Standard Error	Wald (df)	P-value
Serial No (a)	0.000		0.000	1.080 (1)	0.299
Age	0.117	*	0.003	1126.324(1)	< .001
Age Squared	-0.001	*	0.000	569.491 (1)	< .001
Associate's Degree (b)	0.047		0.026	3.213 (1)	0.073
Bachelor's Degree (b)	0.112	*	0.020	30.599 (1)	< .001
Advanced Degree (b)	-0.043		0.033	1.787 (1)	0.957
Home Owner	0.277	*	0.019	209.850 (1)	< .001
Interest and Dividends	0.000	*	0.000	88.481 (1)	< .001
Monthly Mortgage or Rental Payment	0.000	*	0.000	1381.432(1)	< .001

¹⁵ For the Business Ownership Analysis, significant results are presented for age, education, race, and gender variables only.

¹⁶ Throughout this chapter, significance refers to statistical significance.



Business Ownership Model	Coefficient	Significance	Standard Error	Wald (df)	P-value
Only English Spoken in Home	-0.345	*	0.026	182.064 (1)	< .001
Child Under Age 6	0.161	*	0.041	15.344 (1)	< .001
Married	0.233	*	0.018	176.228 (1)	< .001
Caucasian Female	-0.202	*	0.018	131.676 (1)	< .001
African American	-0.638	*	0.031	431.286 (1)	< .001
Hispanic American	-0.356	*	0.029	153.369 (1)	< .001
Asian American	0.023		0.045	0.261 (1)	0.609
Native American	-0.159		0.136	1.365 (1)	0.243
Other Minority	-0.175	*	0.044	15.818 (1)	< .001
Constant	-17.224		2.478	2.478 (1)	0.115

(a) the variable Serial No is included in the model to adjust for including multiple members of the same household in the analysis.

(b) for the variables Associate's Degree, Bachelor's Degree and Advanced degree, the comparison group is comprised of all individuals who were not awarded an Associate's, Bachelor's, or Advanced College Degree, including less than high school education, high school diploma, GED or alternative credential, and some college..

Note: P-value of less than 0.05 denote findings of statistical significance.

* identifies statistically significant variables.

The commodities industry logistic regression results indicate the following:

- The probability of commodities business ownership is positively associated with increased age and age squared. This is indicative of a curvilinear relationship; older individuals are significantly more probable to be business owners in the commodities industry than younger individuals.
- Persons with a Bachelor's Degree have a significantly higher probability of business ownership in the commodities industry than persons with less than an Associate's Degree.
- African Americans, Hispanic Americans, and Other Minorities have a significantly lower probability of business ownership in the commodities industry than similarly situated Non-minority Males.
- Caucasian Females have a significantly lower probability of business ownership in the commodities industry than similarly situated Non-minority Males.



3. Logistic Model Results for Contractual Services Business Ownership Probabilities

Table 11.06 presents the logistic regression results for the probability of owning a business in the professional services industry using the 18 variables analyzed in this model.

Table 11.06: Contractual Services Logistic Model

Business Ownership Model	Coefficient	Significance	Standard Error	Wald(df)	P-value
Serial No (a)	0.000		0.000	1.305 (1)	0.253
Age	0.087	*	0.005	263.523 (1)	< .001
Age Squared	-0.001	*	0.000	97.090 (1)	< .001
Associate's Degree (b)	-0.314	*	0.042	56.031 (1)	< .001
Bachelor's Degree (b)	0.154	*	0.030	27.128 (1)	< .001
Advanced Degree (b)	0.606	*	0.030	415.849 (1)	< .001
Home Owner	-0.010		0.028	0.121 (1)	0.728
Interest and Dividends	0.000	*	0.000	20.122 (1)	< .001
Monthly Mortgage or Rental Payment	0.000	*	0.000	283.558 (1)	< .001
Only English Spoken in Home	-0.175	*	0.038	21.664 (1)	< .001
Child Under Age 6	0.237	*	0.048	24.382 (1)	< .001
Married	0.047		0.025	3.553 (1)	0.059
Caucasian Female	-0.637	*	0.025	639.414 (1)	< .001
African American	-0.859	*	0.047	327.990 (1)	< .001
Hispanic American	-0.200	*	0.042	22.549 (1)	< .001
Asian American	-0.847	*	0.075	129.107 (1)	< .001
Native American	-0.865	*	0.242	12.800 (1)	< .001
Other Minority	-0.393	*	0.065	35.981 (1)	< .001
Constant	-22.154		15.861	1.951 (1)	0.162

(a) the variable Serial No is included in the model to adjust for including multiple members of the same household in the analysis.

(b) for the variables Associate's Degree, Bachelor's Degree and Advanced degree, the comparison group is comprised of all individuals who were not awarded an Associate's, Bachelor's, or Advanced College Degree, including less than high school education, high school diploma, GED or alternative credential, and some college..

Note: P-value of less than 0.05 denote findings of statistical significance.

* identifies statistically significant variables.



The contractual services industry logistic regression results indicate the following:

- The probability of contractual services business ownership is positively associated with increased age and age squared. This is indicative of a curvilinear relationship; older individuals are significantly more probable to be business owners in the contractual services industry than younger individuals.
- Persons with an Associate’s Degree have a significantly lower probability of business ownership in the contractual services.
- Persons with either a Bachelor’s Degree or an advanced degree have a significantly higher probability of business ownership in the contractual services industry than persons with less than an Associate’s Degree.
- Caucasian Females have a significantly lower probability of business ownership in the contractual services industry than Non-minority Males.
- African Americans, Hispanic Americans, Asian Americans, Native Americans and Other Minorities have a significantly lower probability of business ownership in the contractual services industry than Non-minority Males.

4. Logistic Model Results for Professional Services

Table 11.07 presents the logistic regression results for the probability of owning a business in the professional services industry using the 18 variables analyzed in this model.

Table 11.07: Professional Services Logistic Model

Business Ownership Model	Coefficient	Significance	Standard Error	Wald(df)	P-value
Serial No (a)	0.000		0.000	0.317 (1)	0.574
Age	0.086	*	0.024	13.064 (1)	< .001
Age Squared	0.000		0.000	1.818 (1)	0.178
Associate’s Degree (b)	0.234		0.157	2.236 (1)	0.135
Bachelor’s Degree (b)	0.306	*	0.113	7.336 (1)	0.007
Advanced Degree (b)	0.311	*	0.129	5.821 (1)	0.016
Home Owner	0.060		0.131	0.211 (1)	0.646
Interest and Dividends	0.000		0.000	0.098 (1)	0.754
Monthly Mortgage or Rental Payment	0.000	*	0.000	26.997 (1)	< .001
Only English Spoken in Home	0.182		0.172	1.117 (1)	0.290



Business Ownership Model	Coefficient	Significance	Standard Error	Wald(df)	P-value
Child Under Age 6	0.413		0.318	1.690 (1)	0.194
Married	0.009		0.107	0.007 (1)	0.936
Caucasian Female	-0.395	*	0.120	10.876 (1)	< .001
African American	-0.233		0.239	0.946 (1)	0.331
Hispanic American	0.496	*	0.183	7.377 (1)	0.007
Asian American	-0.804	*	0.343	5.503 (1)	0.019
Native American	-0.671		1.052	0.407 (1)	0.524
Other Minority	-0.369	*	0.310	1.413 (1)	0.235
Constant	-41.020		62.157	0.436 (1)	0.509

(a) the variable Serial No is included in the model to adjust for including multiple members of the same household in the analysis.

(b) for the variables Associate's Degree, Bachelor's Degree and Advanced degree, the comparison group is comprised of all individuals who were not awarded an Associate's, Bachelor's, or Advanced College Degree, including less than high school education, high school diploma, GED or alternative credential, and some college..

Note: P-value of less than 0.05 denote findings of statistical significance.

* identifies statistically significant variables.

The professional services industry logistic regression results indicate the following:

- The probability of professional services business ownership is positively associated with increased age. Older individuals are significantly more probable to be business owners in the professional services industry than younger individuals.
- Persons with either a Bachelor's Degree or an Advanced Degree have a significantly higher probability of business ownership in professional services.
- Caucasian Females have a significantly lower probability of business ownership in the professional services industry than Non-minority Males.
- Hispanic Americans have a significantly higher probability of business ownership in the professional services industry than Non-minority Males.
- Asian Americans and Other Minorities have a significantly lower probability of business ownership in the professional services industry than Non-minority Males.



B. Business Earnings Analysis

The business earnings variable is identified by self-employment income¹⁷ during the Fiscal Years July 1, 2008, and June 30, 2013 for the four industries: construction, professional services, contractual services, and commodities. The analysis considered incorporated and non-incorporated businesses.

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

1. OLS Regression Results for Business Earnings in the Construction Industry

Table 11.08 depicts the results of the OLS regression for business earnings in the construction industry based on the 18 variables analyzed in this model.

Table 11.08: Construction Industry Ordinary Least Squares Regression

Earnings Disparity Model	Coefficient	Significance	Standard Error	T	P-value
Serial No (a)	.000		.000	0.311	0.756
Business Incorporated	-18183.090	*	487.923	-37.266	< .001
Age	767.737	*	112.415	6.829	< .001
Age Squared	-9.093	*	1.160	-7.840	< .001
Associate's Degree (b)	1532.739		902.673	1.698	0.090
Bachelor's Degree (b)	3556.735	*	772.669	4.603	< .001
Advanced Degree (b)	5256.244	*	1455.793	3.611	< .001
Home Owner	869.678		555.183	1.566	0.117
Interest and Dividends	0.012		0.015	0.812	0.417
Monthly Mortgage or Rental Payment	2.667		0.292	9.133	< .001
Only English Spoken in Home	-509.225		834.753	-0.610	0.542
Child Under Age 6	-1125.122		2439.027	-0.461	0.645
Married	2888.208	*	512.922	5.631	< .001
Caucasian Female	-2012.212	*	866.193	-2.323	0.020
African American	-2178.606	*	914.120	-2.383	0.017

¹⁷ The terms "business earnings" and "self-employment income" are used interchangeably.



Earnings Disparity Model	Coefficient	Significance	Standard Error	T	P-value
Hispanic American	-2968.170	*	887.409	-3.345	< .001
Asian American	-3665.355		2710.779	-1.352	0.176
Native American	-119.849		3284.792	-0.036	0.971
Other Minority	-1542.289		1219.891	-1.264	0.206
Constant	-102630.384		329083.916	-0.312	0.755

(a) the variable Serial No is included in the model to adjust for including multiple members of the same household in the analysis.

(b) for the variables Associate's Degree, Bachelor's Degree and Advanced degree, the comparison group is comprised of all individuals who were not awarded an Associate's, Bachelor's, or Advanced College Degree, including less than high school education, high school diploma, GED or alternative credential, and some college..

Note: P-value of less than 0.05 denote findings of statistical significance.

* identifies statistically significant variables.

The OLS regression results for business earnings in the construction industry indicate the following¹⁸:

- Age and age squared are significantly related to business earnings in the construction industry indicating a curvilinear relationship. In other words, as age of the business owner increases the business earnings also increase, up to a certain age. After that point, as age of the business owner increases, earnings decrease.
- Business owners in the construction industry with either a Bachelor's Degree or an Advanced Degree have significantly higher business earnings than those owners with less than an Associate's Degree.
- Hispanic American and African American business owners have significantly lower business earnings in the construction industry than Non-minority Males.
- Caucasian Female business owners have significantly lower business earnings in the construction industry than Non-minority Males.

2. OLS Regression Results for Business Earnings in the Commodities Industry

Table 11.09 depicts the results of the OLS regression for business earnings in the commodities industry based on the 18 variables analyzed in this model.



¹⁸ For the Business Earnings Analysis, significant results are presented for age, education, race, and gender variables only.

Table 11.09: Commodities Ordinary Least Squares Regression

Earnings Disparity Model	Coefficient	Significance	Standard Error	t	P-value
Serial No (a)	0.000		0.000	0.197	0.844
Business Incorporated	-23455.956	*	497.638	-47.135	< .001
Age	853.155	*	117.614	7.254	< .001
Age Squared	-9.458	*	1.144	-8.268	< .001
Associate's Degree (b)	1568.867		823.670	1.905	0.057
Bachelor's Degree (b)	4970.643	*	615.019	8.082	< .001
Advanced Degree (b)	7759.522	*	980.935	7.910	< .001
Home Owner	1985.929	*	625.460	3.175	< .001
Interest and Dividends	0.051	*	0.011	4.848	< .001
Monthly Mortgage or Rental Payment	4.059	*	0.250	16.258	< .001
Only English Spoken in Home	209.645		767.408	0.273	0.785
Child Under Age 6	-3674.998	*	1328.636	-2.766	0.006
Married	1415.299		547.386	2.586	0.010
Caucasian Female	-5993.243	*	551.814	-10.861	< .001
African American	-5440.797	*	994.756	-5.469	< .001
Hispanic American	-3114.912	*	869.896	-3.581	< .001
Asian American	-5171.214	*	1345.675	-3.843	< .001
Native American	719.621		4333.851	0.166	0.868
Other Minority	-3391.791	*	1402.594	-2.418	0.016
Constant	-65528.201		342431.665	-0.191	0.848

(a) the variable Serial No is included in the model to adjust for including multiple members of the same household in the analysis.

(b) for the variables Associate's Degree, Bachelor's Degree and Advanced degree, the comparison group is comprised of all individuals who were not awarded an Associate's, Bachelor's, or Advanced College Degree, including less than high school education, high school diploma, GED or alternative credential, and some college..

Note: P-value of less than 0.05 denote findings of statistical significance.

* identifies statistically significant variables.



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

- Age and age squared are significantly related to business earnings in the commodities industry indicating a curvilinear relationship. In other words, as age of the business owner increases the business earnings also increase.
- Business owners in the commodities industry with either a Bachelor’s Degree or an Advanced Degree have significantly higher business earnings than those owners with less than an Associate’s Degree.
- Hispanic American, African American, Asian American, and Other Minority business owners have significantly lower business earnings in the commodities industry than Non-minority Males.
- Caucasian Female business owners have significantly lower business earnings in the commodities industry than Non-minority Males.

3. OLS Regression Results for Business Earnings in the Contractual Services Industry

Table 11.10 depicts the results of the OLS regression for business earnings in the contractual services industry based on the 18 variables analyzed in this model.

Table 11.10: Contractual Services Ordinary Least Squares Regression

Earnings Disparity Model	Coefficient	Significance	Standard Error	T	P-value
Serial No (a)	0.000		0.003	0.371	0.711
Business Incorporated	-36915.250	*	973.874	-37.906	< .001
Age	1461.227	*	227.842	6.413	< .001
Age Squared	-15.766	*	2.212.	-7.127	< .001
Associate’s degree (b)	1256.655		1878.403	0.669	0.504
Bachelor’s degree (b)	8506.266	*	1256.791	6.768	< .001
Advanced Degree (b)	20856.601	*	1207.156	17.277	< .001
Home Owner	4512.393	*	1204.953	3.745	< .001
Interest and Dividends	0.038	*	0.017	2.248	0.025
Monthly Mortgage or Rental Payment	4.806	*	0.424	11.331	< .001
Only English Spoken in Home	3626.721	*	1492.547	2.430	0.015
Child Under Age 6	-3882.362		2138.090	-1.816	0.069
Married	-215.044		1044.674	-0.206	0.837



Earnings Disparity Model	Coefficient	Significance	Standard Error	T	P-value
Caucasian Female	-11288.525	*	1050.352	-10.747	< .001
African American	-11209.018	*	2079.894	-5.389	< .001
Hispanic American	-1912.131		1697.335	-1.127	0.260
Asian American	4568.673		3132.865	1.458	0.145
Native American	8777.164		10775.516	0.815	0.415
Other Minority	-8362.334	*	2832.638	-2.952	0.003
Constant	-251718.821		656011.990	-0.384	0.701

(a) the variable Serial No is included in the model to adjust for including multiple members of the same household in the analysis.

(b) for the variables Associate's Degree, Bachelor's Degree and Advanced degree, the comparison group is comprised of all individuals who were not awarded an Associate's, Bachelor's, or Advanced College Degree, including less than high school education, high school diploma, GED or alternative credential, and some college..

Note: P-value of less than 0.05 denote findings of statistical significance.

* identifies statistically significant variables.

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

- Age and age squared are significantly related to business earnings in the contractual services industry indicating a curvilinear relationship. In other words, as age of the business owner increases the business earnings also increase, up to a certain age. After that point, as age of the business owner increases, earnings decrease.
- Business owners in the contractual services industry with either a Bachelor's Degree or an Advanced Degree have significantly higher business earnings than those owners with less than an Associate's Degree.
- African American and Other Minority business owners have significantly lower business earnings in the contractual services industry than Non-minority Males.
- Caucasian Female business owners have significantly lower business earnings in the contractual services industry than Non-minority Males.



4. OLS Regression Results for Business Earnings in the Professional Services Industry

Table 11.11 depicts the results of the OLS regression for business earnings in the professional services industry based on the 18 variables analyzed in this model.

Table 11.11: Professional Services Ordinary Least Squares Regression

Earnings Disparity Model	Coefficient	Significance	Standard Error	t	P-value
Serial No (a)	0.000		0.000	-0.628	0.530
Business Incorporated	-26296.882	*	2379.724	-11.050	< .001
Age	802.916		608.668	1.319	0.188
Age Squared	-9.564		5.534	-1.728	0.084
Associate's degree (b)	3638.442		3935.989	0.924	0.356
Bachelor's degree (b)	3959.611		2830.328	1.399	0.162
Advanced Degree (b)	5594.307		3175.015	1.762	0.079
Home Owner	-6048.651		3345.298	-1.808	0.071
Interest and Dividends	0.024		0.062	0.388	0.698
Monthly Mortgage or Rental Payment	1.100		1.020	1.078	.281
Only English Spoken in Home	-7482.781		4131.019	-1.811	0.071
Child Under Age 6	-8421.047		8521.726	-0.988	0.323
Married	4093.446		2648.877	1.545	0.123
Caucasian Female	-6148.140	*	3038.389	-2.023	0.043
African American	-5861.270		6188.922	-0.947	0.344
Hispanic American	-4681.189		4300.514	-1.089	0.277
Asian American	-7000.012		8841.579	-0.792	0.429
Native American	-5255.366		27884.228	-0.188	0.851
Other Minority	-1775.823		8034.562	-0.221	0.825
Constant	987224.269		1542309.382	0.640	0.522

(a) the variable Serial No is included in the model to adjust for including multiple members of the same household in the analysis.

(b) for the variables Associate's Degree, Bachelor's Degree and Advanced degree, the comparison group is comprised of all individuals who were not awarded an Associate's, Bachelor's, or Advanced College Degree, including less than high school education, high school diploma, GED or alternative credential, and some college..

Note: P-value of less than 0.05 denote findings of statistical significance.

* identifies statistically significant variables.



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

- Caucasian Female business owners have significantly lower business earnings in the professional services industry than Non-minority Males.

C. Business Loan Approval Analysis

Access to business capital in the form of loans is measured by the Business Loan Approval Analysis. The probability of business loan approval variable is a score that reflects the reported probability of experiencing loan approval. The data in this section comes from the 2003 NSSBF dataset.¹⁹ Previous studies have shown that many non-discriminatory factors such as education, experience of the business owner, and business characteristics could lead to differences in a business owner's loan approval rate. In this analysis race and gender-neutral factors are combined with race and gender groups in an ordered logistic regression model to determine whether observed race or gender disparities were independent of the race and gender-neutral factors known to be associated with business loan approval.

Access to business capital in the form of loans is measured by the probability of obtaining a business loan among the business owners in four industries. It should be noted that the dataset does not contain sufficient information on all ethnic groups to allow for a separate examination of each group. Therefore, results are provided for all minority males and females combined and for Caucasian Females, referred to as Minority Business Enterprises (MBEs) and Caucasian Female-owned Businesses (WBEs), or collectively as M/WBEs. The NSSBF records the geographic location of the business by Census Division instead of city, county, or state. Due to insufficient data in the construction, professional services, contractual services, and commodities industries, the sampling region was expanded to the South region defined by the Census. This region includes the South Atlantic, East South Central, and West South Central subdivisions.

The results of the ordered logistic regression for each set of factors are presented in the tables below.

¹⁹ NSSBF data is only available for 1987, 1993, and 2003.



1. Binary Logistic Regression Results for Business Loan Approval in the Construction Industry

The binary logistic regression results for business loan approval in the construction industry based on the nine variables analyzed in this model are depicted in Table 11.12.

Table 11.12: Binary Logistic Model for the Business Loan Approval Analysis in the Construction Industry

Loan Denial Model	Coefficient	Significance	Standard Error	Wald(df)	P-value
Business Owner's Minority Group					
Caucasian Female	0.726		0.724	1.004 (1)	0.316
Minority	0.464		0.931	0.248 (1)	0.618
Business Owner's Credit and Resources					
Bachelor's or Postgraduate Degree	-0.647		0.714	0.821 (1)	0.365
Use of owner's personal credit card for business	0.028		0.028	0.002 (1)	0.964
Firm's Credit and Financial Health					
South Region	-0.359		0.647	0.308 (1)	0.579
Business has D&B credit score of 50 or higher	-1.475	*	0.629	5.503 (1)	0.019
Age of Business	-0.072	*	0.036	4.083 (1)	0.043
Rural Area	0.995		0.865	1.324 (1)	0.250
C-Corporation	-0.500		0.692	0.522 (1)	0.470
Constant	-1.103		1.044	1.116 (1)	0.291

Note: P-value of less than 0.05 denotes findings of statistical significance.

Results from the logistic regression analysis indicate that there was no significant difference in the probability of obtaining a business loan in the construction industry between Non-minority Males and Minorities or Caucasian Females based on the race or gender variables included in the model.

- Businesses with a Dun and Bradstreet (D&B) credit score of 50 or higher have a significantly higher probability of obtaining a business loan in the construction industry than businesses with D&B credit scores of 49 or less.



- Businesses that have been established for longer time periods have a significantly higher probability of obtaining a business loan in the construction industry than younger businesses.

2. Binary Logistic Regression Results for Business Loan Approval in the Commodities Industry

The Binary Logistic regression results for business loan approval in the commodities industry based on the nine variables analyzed in this model are depicted in Table 11.13.

Table 11.13: Binary Logistic Model for the Business Loan Approval Analysis in the Commodities Industry

Loan Denial Model	Coefficient	Significance	Standard Error	Wald(df)	P-value
Business Owner's Minority Group					
Caucasian Female	-0.009		0.588	0.000(1)	0.987
Minority	2.255	*	0.608	13.760(1)	< 0.001
Business Owner's Credit and Resources					
Bachelor's or Postgraduate Degree	-0.501		0.391	1.641(1)	0.200
Use of owner's personal credit card for business	1.081	*	0.495	4.766(1)	0.029
Firm's Credit and Financial Health					
South Region	0.275		0.499	0.304(1)	0.581
Businesses has D&B credit score of 50 or higher	-0.955		0.491	3.775(1)	0.052
Age of Business	-0.051	*	0.025	4.264(1)	0.039
Rural Area	.303		0.624	0.236(1)	0.627
C-Corporation	0.560		0.602	0.865(1)	0.352
Constant	-2.349	*	0.908	6.698(1)	0.010

Note: P-value of less than 0.05 denotes findings of statistical significance.

The statistically significant Ordered Logistic Regression results for the commodities industry Business Loan Approval Analysis indicate the following:



- Minority groups have a lower probability of obtaining a business loan in the commodities industry than Non-minority Males.
- Business owners who use their own personal credit card for business have a statistically lower probability of obtaining a business loan in the commodities industry than business owners who do not use their own personal credit cards for business expenses.
- Businesses that have been established for longer time periods have a significantly higher probability of obtaining a business loan in the commodities industry than younger businesses.

3. Binary Logistic Regression Results for Business Loan Approval in the Contractual Services Industry

The binary logistic regression results for business loan approval in the contractual services industry based on the nine variables analyzed in this model are depicted in Table 11.14.

Table 11.14: Binary Logistic Model for the Business Loan Approval Analysis in the Contractual Services Industry

Loan Denial Model	Coefficient	Significance	Standard Error	Wald(df)	P-value
Business Owner's Minority Group					
Caucasian Female	1.190	*	0.571	4.344(1)	0.037
Minority	1.332	*	0.611	4.761(1)	0.029
Business Owner's Credit and Resources					
Bachelor's or Postgraduate Degree	-0.389		0.307	1.605(1)	0.205
Firm's Credit and Financial Health					
South Region	0.187		0.496	0.142(1)	0.706
Business has D&B credit score of 50 or higher	-1.641	*	0.553	8.789(1)	0.003
Age of Business	-0.010		0.024	0.170(1)	0.680
Rural Area	-0.543		0.602	0.813(1)	0.367
C-Corporation	0.014		0.516	0.001(1)	0.979
Constant	-1.443		0.772	3.495(1)	0.062

Note: P-value of less than 0.05 denotes findings of statistical significance.



The statistically significant Ordered Logistic Regression results for the contractual services industry Business Loan Approval Analysis indicate the following:

- Caucasian Females have a lower probability of obtaining a business loan in the contractual services industry than Non-minority Males.
- Minority groups have a lower probability of obtaining a business loan in the contractual services industry than Non-minority Males.
- Businesses with a D&B credit score of 50 or higher have a higher probability of obtaining a business loan in the contractual services industry than businesses with D&B credit scores of 49 or less, although this relationship was not statistically significant.

4. Binary Logistic Regression Results for Business Loan Approval in the Professional Services Industry

The binary logistic regression results for business loan approval in the professional services industry based on the nine variables analyzed in this model are depicted in Table 11.15.

Table 11.15: Binary Logistic Model for the Business Loan Approval Analysis in the Professional Services Industry

Loan Denial Model	Coefficient	Significance	Standard Error	Wald(df)	P-value
Business Owner's Minority Group					
Caucasian Female	-18.802		10065.269	0.000	0.999
Minority	0.111		0.974	0.013	0.909
Business Owner's Credit and Resources					
Bachelor's or Postgraduate Degree	-0.197		0.527	0.139	0.709
Use of owner's personal credit card for business	0.657		0.829	0.628	0.428
Firm's Credit and Financial Health					
South Region	-1.161		0.910	1.628	0.202
Business has D&B credit score of 50 or higher	-1.514		0.836	3.283	0.070
Age of Business	-0.059		0.052	1.299	0.254



Loan Denial Model	Coefficient	Significance	Standard Error	Wald(df)	P-value
Rural Area	-0.980		1.241	0.624	0.429
C-Corporation	0.989		1.204	0.674	0.412
Constant	-0.574		1.710	0.113	0.737

Note: P-value of less than 0.05 denotes findings of statistical significance.

Results from the logistic regression analysis indicate that there was no significant difference in the probability of obtaining a business loan in the professional services industry between Non-minority Males and minorities or women based on the race or gender variables included in the model.

VII. CONCLUSION

Three regression analyses were conducted to determine whether there were factors in the private sector which might help explain any statistical disparities between M/WBE availability and utilization identified in the Disparity Study. The three analyses examined the following outcome variables—business ownership, business earnings, and business loan approval.

These analyses were performed for four industries: construction, professional services, contractual services, and commodities. The regression analyses examined the effect of race and gender on the three outcome variables. The Business Ownership Analysis and the Earnings Disparity Analysis examined data from the 2009 to 2013 PUMS datasets for Broward, Miami-Dade and Palm Beach Counties, and compared business ownership rates and earnings for M/WBEs to those of similarly situated Non-minority Males. The Business Loan Approval Analysis used the 2003 NSSBF dataset and compared business loan approval rates for M/WBEs to those of similarly situated Non-minority Males.

A. Business Ownership Analysis Conclusions

The purpose of the Business Ownership Analysis was to examine the relationship between an individual's probability of owning a business in the construction, professional services, contractual services, and commodities industries and race and gender. In this analysis, independent socio-economic variables (e.g., age, marital status, finances) are combined with race and gender groups to determine whether observed race or gender disparities were associated with business ownership in the construction, professional services, contractual services, and commodities industries.

Controlling for race and gender-neutral factors, the Business Ownership Analysis results show that statistically significant disparities in the probability of owning a business exist for Caucasian Females, Hispanic Americans, African Americans, Asian Americans, Native Americans and Other Minorities when compared to similarly situated Non-



minority Males. Caucasian Females, African Americans, and Other Minorities experience the greatest disparity as they are significantly less likely to own a business in all four of the industries examined when compared to similarly situated Non-minority Males. Hispanic Americans are significantly less likely to own a business when compared to similarly situated Non-minority Males in construction, contractual services, and commodities. However, Hispanic Americans are more likely to own a business in the professional services industry than similarly situated Non-minority Males. Asian Americans are less likely to own a business in construction and contractual services, while Native Americans are less likely to own business in contractual services than similarly situated Non-minority Males.

Table 11.16 depicts the Business Ownership Disparity regression results by race, gender, and industry.

Table 11.16: Statistically Significant Business Ownership Disparities

Race / Gender	Construction	Commodities	Contractual Services	Professional Services
Caucasian Female	Yes	Yes	Yes	Yes
African American	Yes	Yes	Yes	Yes
Hispanic American	Yes	Yes	Yes	Yes
Native American	No	No	Yes	No
Asian American	Yes	No	Yes	No
Other Minority	Yes	Yes	Yes	Yes

a. It is important to note that while there was statistically significant difference between Hispanic Americans and the reference group, the coefficient was positive, indicating that Hispanic Americans were more likely to be business owners. All other significant relationships are in the opposite direction.

B. Business Earnings Analysis Conclusions

The purpose of the Business Earnings Analysis was to examine the relationship between annual self-employment income and race and gender. In this analysis, independent socio-economic variables (e.g., age, marital status, finances) are combined with race and gender groups to determine whether observed race or gender disparities were associated with self-employment income.



Controlling for race and gender-neutral factors, the Business Earnings Analysis indicated statistically significant disparities in business earnings for Caucasian Females in the all four industries examined when compared to similarly situated Non-minority Males. African Americans have significantly lower business earnings in the construction, commodities and contractual services industries than Non-minority Males. Hispanic Americans have significantly lower business earnings in the construction and commodities industries than Non-minority Males. Other minorities have significantly lower business earnings in the commodities and contractual services industries than Non-minority Males. Asian Americans have significantly lower business earnings in the commodities industry than Non-minority Males.

Table 11.17 depicts the earnings disparity regression results by race, gender, and industry.

Table 11.17: Statistically Significant Business Earnings Disparities

Race / Gender	Construction	Commodities	Contractual Services	Professional Services
Caucasian Female	Yes	Yes	Yes	Yes
African American	Yes	Yes	Yes	No
Hispanic American	Yes	Yes	No	No
Native American	No	No	No	No
Asian American	No	Yes	No	No
Other Minority	No	Yes	Yes	No

C. Business Loan Approval Analysis Conclusions

Controlling for race and gender-neutral factors, the Business Loan Approval Analysis reveals statistically significant disparities for M/WBEs when compared to similarly situated Non-minority Males. Caucasian Females have a statistically significant disparity in obtaining a business loan in the contractual services industries. Minority groups have a disparity in obtaining a business loan in the commodities and contractual services industries.

The statistically significant disparity documented for M/WBEs when compared to similarly situated Non-minority Males, points to the presence of race and gender disparity



as a factor in access to business capital. Access to business capital in the private sector constitutes a major factor in business development, continuity, and growth. The documented disparity in M/WBE access to business capital may have adversely impacted the number of these businesses in the professional services and commodities industries available to perform on SBBC contracts during the Study period.

Table 11.18 depicts the Business Loan Approval Analysis regression results by race, gender, and industry.

Table 11.18: Statistically Significant Business Loan Approval Disparities

Race / Gender	Construction	Commodities	Contractual Services	Professional Services
Caucasian Female	No	No	Yes	No
Minority	No	Yes	Yes	No

D. Regression Findings

The analyses of the three outcome variables document disparities that could adversely affect the formation and growth of minority and woman-owned business within the construction, professional services, contractual services, and commodities industries. In the absence of a race and gender-neutral explanation for the disparities, the regression findings point to racial and gender discrimination that leads to depressed business ownership, business earnings, and business loan approval rates. Such discrimination creates economic conditions in the private sector that impede the efforts of minority and female business owners to create and grow businesses. An impact of these private sector conditions is manifested in lower minority and female business formation rates.

It is important to note that there are limitations to the application of the regression findings. No matter how discriminatory the private sector may be, the findings cannot be used as the factual basis for a government-sponsored, race-conscious M/WBE or DBE program. Therefore, caution must be exercised in the interpretation and application of the regression findings. Nevertheless, the findings can be a formula for developing race and gender-neutral programs to eliminate identified barriers to the formation and development of M/WBEs.



CHAPTER 12: RECOMMENDATIONS

I. INTRODUCTION

The Disparity Study (Study) conducted for the School Board of Broward County, Florida (SBBC) documented a statistical disparity at both the prime contract and subcontract levels. This chapter provides race and gender-neutral and race and gender-specific recommendations to remedy the documented statistically significant disparity in the utilization of the available market area Minority and Woman-owned Business Enterprises, hereinafter referred to as Minority and Caucasian Female-owned Business Enterprises (M/WBEs). Recommendations are tailored to enhance the SBBC's contracting practices, policies, and procedures. They include strategies to eliminate barriers to M/WBE and other small businesses' access to the SBBC's construction, professional services, contractual services, and commodities contracts. Additionally, the SBBC's Supplier Diversity and Outreach Program's policy could be modified to include race-specific remedies and an expanded race-neutral component.

The chapter is organized into four sections. The four sections present: 1) a review of the SBBC's Supplier Diversity and Outreach Program, 2) a summary of the prime contract and subcontract disparity findings, 3) race and gender-conscious remedies to address the documented disparity, and 4) race and gender-neutral remedies to enhance the administrative processes, supportive services, and the website.

II. SUPPLIER DIVERSITY AND OUTREACH PROGRAM ASSESSMENT

SBBC adopted the Supplier Diversity and Outreach Program (SDOP) Policy 7007, in 1988.¹ The SDOP was enacted to mitigate discrimination against M/WBEs in order to achieve parity in the number of contracts and dollars received by M/WBEs.



¹ Administrative Procedure School Board of Broward County, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007-A (2014).

A. *Supplier Diversity and Outreach Program Standards*

Policy 7007 commits SBBC to make every effort to provide contracting opportunities for M/WBEs. There are race and gender-neutral guidelines set forth in the Policy to implement the SDOP. The guidelines are as follows:

1. Identify competitive contracting opportunities for School Board Construction and Purchasing contracts within SBBC budget
2. Analyze M/WBEs available to provide the products and services identified as prime contract and subcontract opportunities
3. Monitor and maintain records in sufficient detail to verify the good faith efforts made to achieve M/WBE participation in SBBC contracting
4. Coordinate outreach with the Supply Management and Logistics Department and Facilities and Management Department to offer instructions and provide clarity to the M/WBEs regarding bid/proposal specifications, procurement policies, procedures, and general bidding requirements
5. Maintain a database of M/WBEs and encourage M/WBEs to participate in training programs offered by SBBC and its third party business development assistance providers
6. Encourage the development of M/WBEs by using the services provided by the Small Business Administration and other third-party business development assistance providers
7. Refer M/WBEs to third-party development assistance providers for bonding, financial services, and technical assistance
8. Promote the SDOP internally and externally using an annual marketing and communication plan
9. Collect and maintain information and submit SDOP status reports to the Supplier Diversity and Outreach Program Advisory Committee (SDOPAC) and the Superintendent
10. Schedule pre-bid and pre-proposal meetings, where appropriate, to inform potential contractors of the SDOP requirements and bid/proposal requirements
11. Provide information and assistance on certification procedures, subcontracting practices, and bonding requirements
12. Provide supplier diversity training to SBBC employees



13. Review multi-year contracts, amendments, and change orders for opportunities for M/WBE participation
14. Review upcoming bids to determine if restructuring a large procurement to multi-bid awards, primary, first and second alternate bid award, or other reduction of large contracts would enhance M/WBE participation
15. Investigate race, ethnic, and gender-neutral provisions to lessen barriers to participation by businesses wishing to contract with SBBC
16. Plan and participate in vendor training seminars for the purpose of informing potential bidders/proposers/vendors of the SDOP and the SBBC contract opportunities
17. Partner with professional organizations and private corporations to develop a Mentorship/Partnership Plan designed to broaden the base of emerging M/WBEs
18. Serve as a liaison to economic development organizations and agencies that work in support of economic development in the minority communities
19. Provide notices of bids/business proposals to foster the participation of M/WBEs
20. Create online M/WBE directories for vendors and SBBC employees to identify subcontractors and suppliers

2. M/WBE Certification Criteria

To qualify as a Minority-owned Business Enterprise, the business must be at least 51 percent owned, managed, and operated by a minority person(s).² The minority person(s) must be a citizen or lawful permanent resident of the United States who is a member of one of the following ethnic groups:

- a) African American, having origins in any of the Black racial groups of Africa
- b) Native American, including persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians
- c) Asian-Pacific American, including persons with origins in Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the United States Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of



² Administrative Procedure School Board of Broward County, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007(II)(A)(1)-(4) (2014).

the Northern Marianas Islands, Macao, Fiji, Tonga, Kirbati, Javalu, Nauru, Federated States of Micronesia, or Hong Kong

- d) Subcontinent Asian American, including persons with origins in India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal, or Sri Lanka;
- e) Hispanic American, a person of Spanish or Portuguese origin which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese descent, regardless of race

To qualify as a Woman-owned Business Enterprise the business must be at least 51 percent owned, managed, and operated by a woman. The 51 percent standard for M/WBE ownership must comport with the following standards:

- a) Ownership by the minority/woman shall be real, substantial, and continuing, and shall go beyond mere pro forma ownership of the firm as reflected in its percentage, with no exchange of capital at fair market value. The minority/woman owner(s) must demonstrate that they manage and control the daily operations of the business.
- b) Minority/woman owner shares in all risk and profits commensurate with the ownership interest as demonstrated by a detailed examination of the substance of business arrangements with others.
- c) The salary or allocated portion of the profits that is paid to the minority or woman owner must be commensurate with their ownership interest.
- d) The minority or woman owner acquired or established the firm from independently-owned holdings.
- e) Ownership of 51 percent obtained by transfer of stock with no exchange of capital at fair market value must be owned by the minority/woman for a minimum of one year subsequent to the period when the majority ownership interest in the firm by a non-minority male was transferred. This requirement shall not apply to minority/woman owners who take a 51 percent or greater interest in a firm due to an inheritance or divorce decree.
- f) For a corporation, the minority/woman must own at least 51 percent of the corporation's voting stock. Any voting agreements among the shareholders must not dilute the rights or influence the minority/woman owner(s) of the corporation's stock or classes of stock.
- g) The minority/woman partner(s) in a partnership must own at least 51 percent of the partnership, profits, voting control, assets, and/or dividends.



- h) The sole proprietorship must be minority or woman-owned.
- i) In any other form of organization, the minority/woman owner must own at least 51 percent of the business interest of the organization, including, but not limited to 51 percent of the business's assets, dividends, and intangible assets.

The annual gross receipts of an eligible M/WBE must average over three years within the following thresholds:

- Goods and Services: \$6 million
- Professional Services: \$6 million
- Construction Trade and/or General Contracting: \$12 million

M/WBE manufacturers, wholesalers, and retailers must have 25 or fewer employees.

3. M/WBE Certification Review Process

1. A complete M/WBE certification application must be submitted with the required documentation.
2. Within 30 days following the initial receipt of application, the SDOP staff shall request that the applicant furnish omitted items or additional information. If requested items are not received within 30 days from the date of the request, the applicant's M/WBE certification application file will be deemed closed. An applicant whose application has been closed under this Section shall have the right to submit a new application within 30 days from receipt of the notice to close the applicant's M/WBE certification file.
3. An on-site review, when deemed appropriate, shall be conducted with the M/WBE applicant to discuss the documentation submitted and to determine if the applicant meets the criteria for ownership and control. Failure to cooperate with the scheduling of an on-site review shall result in the denial of the application.
4. Applicants who have been determined eligible for certification shall receive a certificate and certification letter stating the term for which the business has been certified, the specialty area(s) of the business, and the minority status categories in which the business is certified. Once certified, an applicant's certification shall be valid for a three year period from the date of issue unless certification is suspended or revoked.
5. Applicants who are determined to be ineligible shall receive a letter stating the basis for their denial of certification, citing applicable rules. If denied, a business shall not be eligible to submit a new application for one year.



6. The ethnic and gender status of the business provided on the M/WBE certification application will also be retained in the M/WBE Office's database with all other relevant data. The original M/WBE certification application will be on file in the M/WBE Office.
7. To assure the truthfulness of any statements made during the certification application process to the M/WBE Office, as required by these regulations, the statements must be submitted in writing. Such written statements will be in the form of a sworn affidavit. Submission of such an affidavit will be a requirement for M/WBE certification. Failure to submit such a sworn affidavit upon request will be grounds for denial of an M/WBE certification.³

a. Recertification Process

To recertify as an M/WBE with SBBC, the M/WBE must follow the guidelines enumerated in the Administrative Procedures for the SDOP.⁴ The M/WBE Office will notify the M/WBE no later than 60 days prior to the expiration date of the relevant certification period. Following this notification, the M/WBE applicant must follow the recertification procedures. Recertification will be granted when the applicant has substantiated their eligibility as an M/WBE by following the recertification procedures, which are listed below:

1. The M/WBE applicant must submit the application for renewal of certification to the M/WBE Office no less than 30 days prior to the date of expiration of the existing certification.
2. All applications for renewal of certification must contain an affidavit attesting to the accuracy of the statements and information provided; a declaration that ownership and operational control of the firm has not changed during the time period since M/WBE certification was granted; and contain copies or verification of the applicant M/WBE's current financial statement, tax returns from the previous two years, and the current license to do business.
3. The M/WBE Office staff must review the application to ensure appropriate documentation, signature, completeness, and accuracy upon receipt.
4. The M/WBE Office staff must request that the applicant M/WBE supply or furnish omitted items or additional information within thirty days following the initial receipt of the information. If the requested items are not received by the



³ Administrative Procedure School Board of Broward County, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007(II)(B)(1)-(8) (2014).

⁴ See generally Administrative Procedure School Board of Broward County, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007(II)(C) (2014).

M/WBE Office within thirty days of the request, then the applicant's recertification application will be denied.⁵

Applicants determined to be eligible will receive a recertification certificate and a recertification letter stating the length of time for which the business has been certified, the specialty area of the business, and the minority status categories that the M/WBE is certified in.⁶ Applicants deemed ineligible shall receive a letter stating the basis for denial of certification, with an explanation that cites to applicable rules; the applicant will not be eligible to submit a new application for the duration of one year from the date of the notice of denial of certification, or the SBBC final order of denial.⁷

b. Reciprocal Certification Process

Reciprocal certification may be granted to applicants with current certification(s) with an approved certification program.⁸ A list of governmental entities that meet the School Board's M/WBE certification standard is maintained by the SDOP staff. The certification standards of the reciprocal agencies have been vetted and approved by the SDOP staff.⁹

4. SDOP Program Management

The Supplier Diversity and Outreach Program Advisory Committee (SDOPAC) is charged with establishing bylaws to assist in the implementation and evaluation of the SDOP. The Committee is comprised of staff designated by the Superintendent of Schools and selected from the following departments: Supply Management and Logistics, Facilities Design & Construction Management Department, and Physical Plant Operations. The SDOPAC is tasked with representing the minority and majority business interests.

The Administrator of the SDOP is required to maintain data designed to track total dollar expenditures and the number of contracts associated with M/WBE participation on SBBC contract awards. Specifically, the responsibilities, functions, and duties of the SDOP Administrator include the following:

- Monitor contractor and vendor contracts to ensure that their committed M/WBE participation matches their actual participation;
- Penalize contractors and vendors whose actual participation efforts fail to meet their committed M/WBE participation goals;

⁵ Administrative Procedure School Board of Broward County, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007(II)(C)(2)-(5) (2014).

⁶ Administrative Procedure School Board of Broward County, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007(II)(C)(7).

⁷ *Id.* at § 7007(II)(C)(8).

⁸ *Id.* at § 7007(II)(D).

⁹ *Id.* at § 7007(II)(D)(1)-(2).



- Provide an annual report in October, or as soon thereafter as available, to the Superintendent of Schools that summarizes the activity of the SDOP and the total dollar expenditures awarded to M/WBE annually.

B. Supplier Diversity and Outreach Program Effectiveness

An analysis was performed to identify the extent to which SBBC has implemented the SDOP programmatic elements. One measure of the SDOP’s effectiveness was the number of dollars received by SDOP-certified M/WBEs. Another measure of SDOP effectiveness is the extent to which the programmatic elements were implemented.

1. SDOP-certified M/WBE Utilization

As illustrated in Table 12.01, purchase orders awarded to SDOP-certified M/WBEs were analyzed by ethnicity and gender. This analysis revealed that SDOP-certified M/WBEs received 6.60% of the purchase order dollars awarded. Non-SDOP certified M/WBEs received 83% off the purchase orders. The total percent of purchase order dollars awarded to SDOP-certified and non-SDOP certified M/WBEs was 14.99%.

Table 12.01: SDOP Certified M/WBE Prime Contractor Utilization by Ethnicity: All Industries, July 1, 2009 to June 30, 2013

Ethnicity	SDOP Certified Firms			All MWBE Firms		
	Number of Purchase Orders	Total Dollars	Percent of Total Dollars	Number of Purchase Orders	Total Dollars	Percent of Total Dollars
African Americans	130	\$3,852,004	0.70%	417	\$8,134,737	1.48%
Asian-Pacific Americans	56	\$1,033,118	0.19%	81	\$1,045,632	0.19%
Subcontinent Asian Americans	439	\$274,865	0.05%	474	\$342,400	0.06%
Hispanic Americans	2,267	\$22,761,129	4.14%	3,939	\$46,288,454	8.41%
Native Americans	0	\$0	0.00%	119	\$717,407	0.13%
Caucasian Females	1,285	\$8,369,495	1.52%	4,612	\$25,928,697	4.71%
TOTAL	4,177	\$36,290,611	6.60%	9,642	\$82,457,327	14.99%

Table 12.02 details the size of the purchase orders awarded to SDOP-certified M/WBEs. Of the 4,177 purchase orders received by SDOP-certified M/WBEs, 3,388 were less than \$5,000. Only 7 purchase orders awarded to SDOP-certified M/WBEs were greater than \$500,000.



**Table 12.02: SDOP Certified Firms Utilization by Threshold:
All Industries, July 1, 2009 to June 30, 2013**

Size	SDOP Certified Firms		
	Number of Purchase Orders	Total Dollars	Percent of Total Dollars
\$1 - \$4,999	3,388	\$3,329,683	0.61%
\$5,000 - \$24,999	531	\$5,780,686	1.05%
\$25,000 - \$49,999	101	\$3,521,125	0.64%
\$50,000 - \$194,999	133	\$12,537,008	2.28%
\$195,000 - \$324,999	8	\$1,801,093	0.33%
\$325,000 - \$499,999	9	\$3,761,857	0.68%
\$500,000 - \$999,999	5	\$3,559,159	0.65%
\$1,000,000 - \$2,999,999	2	\$2,000,000	0.36%
\$3,000,000 and greater	0	\$0	0.00%
	4,177	\$36,290,611	6.60%

The thresholds presented in Table 12.03 detail the distribution of purchase orders awarded to SDOP-certified M/WBEs by dollar amount, ethnicity, and gender. In each purchase order threshold analyzed, except \$325,000 - \$499,999, Hispanic American businesses received the majority of purchase orders and dollars awarded to SDOP-certified M/WBEs. Within the \$325,000 to \$499,999 threshold, Caucasian Female-owned businesses received the majority of purchase orders and dollars. While certified Hispanic American-owned business have experienced a measure of success in the SDOP M/WBE program, all ethnicities combined have only been awarded 6.60% of the purchase order dollars.



Table 12.03: SDOP Certified M/WBE Utilization by Threshold and Ethnicity: All Industries, Fiscal Years July 1, 2008, to June 30, 2013

Size	Ethnicity	Number of Purchase Orders	Percent of Contracts	Total Dollars	Percent of Total Dollars
\$1 - \$4,999	African Americans	74	2.18%	\$151,278	4.54%
	Asian-Pacific Americans	25	0.74%	\$37,255	1.12%
	Subcontinent Asian Americans	436	12.87%	\$250,740	7.53%
	Hispanic Americans	1,748	51.59%	\$1,968,476	59.12%
	Native Americans	0	0.00%	\$0	0.00%
	Caucasian Females	1,105	32.62%	\$921,933	27.69%
	Non-minority Males	0	0.00%	\$0	0.00%
	TOTAL	3,388	100.00%	\$3,329,683	100.00%
Size	Ethnicity	Number of Purchase Orders	Percent of Contracts	Total Dollars	Percent of Total Dollars
\$5,000 - \$24,999	African Americans	21	3.95%	\$223,944	3.87%
	Asian-Pacific Americans	22	4.14%	\$282,285	4.88%
	Subcontinent Asian Americans	3	0.56%	\$24,125	0.42%
	Hispanic Americans	349	65.73%	\$3,908,674	67.62%
	Native Americans	0	0.00%	\$0	0.00%
	Caucasian Females	136	25.61%	\$1,341,658	23.21%
	Non-minority Males	0	0.00%	\$0	0.00%
	TOTAL	531	100.00%	\$5,780,686	100.00%
Size	Ethnicity	Number of Purchase Orders	Percent of Contracts	Total Dollars	Percent of Total Dollars
\$25,000 - \$49,999	African Americans	13	12.87%	\$448,921	12.75%
	Asian-Pacific Americans	8	7.92%	\$232,674	6.61%
	Subcontinent Asian Americans	0	0.00%	\$0	0.00%
	Hispanic Americans	73	72.28%	\$2,619,167	74.38%
	Native Americans	0	0.00%	\$0	0.00%
	Caucasian Females	7	6.93%	\$220,363	6.26%
	Non-minority Males	0	0.00%	\$0	0.00%
	TOTAL	101	100.00%	\$3,521,125	100.00%
Size	Ethnicity	Number of Purchase Orders	Percent of Contracts	Total Dollars	Percent of Total Dollars
\$50,000 - \$194,999	African Americans	18	13.53%	\$1,567,767	12.51%
	Asian-Pacific Americans	0	0.00%	\$0	0.00%
	Subcontinent Asian Americans	0	0.00%	\$0	0.00%
	Hispanic Americans	86	64.66%	\$8,190,594	65.33%
	Native Americans	0	0.00%	\$0	0.00%
	Caucasian Females	29	21.80%	\$2,778,647	22.16%
	Non-minority Males	0	0.00%	\$0	0.00%
	TOTAL	133	100.00%	\$12,537,008	100.00%



Size	Ethnicity	Number of Purchase Orders	Percent of Contracts	Total Dollars	Percent of Total Dollars
\$195,000 - \$324,999	African Americans	1	12.50%	\$212,025	11.77%
	Asian-Pacific Americans	0	0.00%	\$0	0.00%
	Subcontinent Asian Americans	0	0.00%	\$0	0.00%
	Hispanic Americans	5	62.50%	\$1,114,487	61.88%
	Native Americans	0	0.00%	\$0	0.00%
	Caucasian Females	2	25.00%	\$474,581	26.35%
	Non-minority Males	0	0.00%	\$0	0.00%
	TOTAL	8	100.00%	\$1,801,093	100.00%
Size	Ethnicity	Number of Purchase Orders	Percent of Contracts	Total Dollars	Percent of Total Dollars
\$325,000 - \$499,999	African Americans	3	33.33%	\$1,248,069	33.18%
	Asian-Pacific Americans	1	11.11%	\$480,904	12.78%
	Subcontinent Asian Americans	0	0.00%	\$0	0.00%
	Hispanic Americans	1	11.11%	\$447,986	11.91%
	Native Americans	0	0.00%	\$0	0.00%
	Caucasian Females	4	44.44%	\$1,584,898	42.13%
	Non-minority Males	0	0.00%	\$0	0.00%
	TOTAL	9	100.00%	\$3,761,857	100.00%
Size	Ethnicity	Number of Purchase Orders	Percent of Contracts	Total Dollars	Percent of Total Dollars
\$500,000 - \$999,999	African Americans	0	0.00%	\$0	0.00%
	Asian-Pacific Americans	0	0.00%	\$0	0.00%
	Subcontinent Asian Americans	0	0.00%	\$0	0.00%
	Hispanic Americans	3	60.00%	\$2,511,744	70.57%
	Native Americans	0	0.00%	\$0	0.00%
	Caucasian Females	2	40.00%	\$1,047,415	29.43%
	Non-minority Males	0	0.00%	\$0	0.00%
	TOTAL	5	100.00%	\$3,559,159	100.00%
Size	Ethnicity	Number of Purchase Orders	Percent of Contracts	Total Dollars	Percent of Total Dollars
\$1,000,000 - \$2,999,999	African Americans	0	0.00%	\$0	0.00%
	Asian-Pacific Americans	0	0.00%	\$0	0.00%
	Subcontinent Asian Americans	0	0.00%	\$0	0.00%
	Hispanic Americans	2	100.00%	\$2,000,000	100.00%
	Native Americans	0	0.00%	\$0	0.00%
	Caucasian Females	0	0.00%	\$0	0.00%
	Non-minority Males	0	0.00%	\$0	0.00%
	TOTAL	2	100.00%	\$2,000,000	100.00%

This analysis illustrates the fact that SDOP-certified M/WBEs received fewer purchase order dollars than non SDOP-certified M/WBEs. As documented in *Chapter 9: Prime Contract Disparity Analysis*, M/WBE utilization was lower than M/WBE availability. This finding suggests that SBBC should enhance its outreach efforts to certify more market area M/WBEs.



2. Implementation of Programmatic Administrative Procedures

A review of SBBC’s implementation of the elements of the Supplier Diversity and Outreach Program’s administrative procedures indicates that majority of the procedures were undertaken during the study period. The steps SBBC took to implement the administrative procedures are delineated below in Table 12.04.

Recommendations to eliminate the documented statistical disparity are detailed below, in *Section IV: Race and Gender-Specific Recommendations*.

Table 12.04: Implementation of the Supplier Diversity and Outreach Program Administrative Guidelines

SDOP ADMINISTRATIVE PROCEDURES	
Guidelines	Compliance Steps
Identify competitive contracting opportunities within the District Budget ¹⁰	A list of contracting opportunities were identified by the Supplier Diversity and Outreach Program Coordinator.
Encourage development of M/WBE by using services and assistance provided by the Small Business Administration (SBA) and other third party development assistance providers ¹¹	The development services currently provided by third party development assistance providers include: <ul style="list-style-type: none"> • Starting a business • Creating a business plan • Exporting products and services • Marketing, loan, and bonding assistance • Structuring your business and registering your company • Getting certified with governmental agencies (SBE, M/WBE, DBE 8(a))



¹⁰ State Board of Education Administrative Rules, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007-A(1)(1) (2014).

¹¹ State Board of Education Administrative Rules, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007-A(1)(6) (2014).

SDOP ADMINISTRATIVE PROCEDURES	
Guidelines	Compliance Steps
Refer businesses to third party development assistance providers for bonding, financial, and technical assistance ¹²	SBBC does not formally track the businesses that are referred to third party development assistance programs. Approval of supplier diversity software tool to track these services is pending.
Promote the SDOP internally and externally through the use of an annual marketing and communication plan ¹³	SDOP does not maintain a formal annual marketing and communications plan. However, an SDOP Strategic Plan is in place to develop a marketing and communications outreach plan for 2015-2016.
Provide supplier diversity training to School Board employees ¹⁴	SDOP staff has conducted monthly procurement staff program training since October 2014. Training for the Business Support Center, Division of Facilities & Construction Management, and Physical Plant Operations staff is planned.
Review multi-year contracts, amendments, and change orders for opportunities for M/WBE participation ¹⁵	The SDOP Department does not currently analyze multi-year contracts, amendments, or change orders to identify opportunities for M/WBE participation. ¹⁶
Plan and participate in vendor training seminars for the purpose of informing potential bidders, proposers, and vendors of SBBC's program and the business opportunities available ¹⁷	Vendor training seminars provided by the SDOP include the following: <ul style="list-style-type: none"> • Minority Enterprise Development Week Business Matchmaker Conference • Christian Businesses Consortium – Mt. Olive Baptist Church

¹² State Board of Education Administrative Rules, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007-A(1)(7) (2014).

¹³ State Board of Education Administrative Rules, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007-A(1)(8) (2014).

¹⁴ State Board of Education Administrative Rules, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007-A(1)(12) (2014).

¹⁵ State Board of Education Administrative Rules, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007-A(1)(13) (2014).

¹⁶ In response to inquiry about this review, SDOP staff responded that the Department is in the process of a financial software conversion and enhancement to track vendors by commodity codes, agreements, M/WBE status, and prequalification status.

¹⁷ State Board of Education Administrative Rules, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007-A(1)(16) (2014).



SDOP ADMINISTRATIVE PROCEDURES	
Guidelines	Compliance Steps
	<ul style="list-style-type: none"> • Broward County Public Schools Construction Workshop • South Florida Minority Supplier Development Council I MBE Input Committee • Turner Construction School of Construction Management • Greater Ft. Lauderdale Business Alliance • Florida Women’s Business Center’s Business Woman Rock Breakfast • Broward County School District’s Contractor Pre-Qualification Workshop
<p>Provide notices of bids and business proposals to facilitate the participation of M/WBES¹⁸</p>	<p>DemandStar is the application used to advertise bids and RFPs. DemandStar is a subscription service offered to government entities that provides an option for email delivery of bid notices. Email notifications of upcoming opportunities are also sent directly to M/WBES.</p>

III. SUMMARY OF STATISTICAL DISPARITY FINDINGS

The statistical analysis of M/WBE utilization is the key component of the Study and the predicate for the proposed race and gender-conscious remedies. The objective of the analysis was to determine if M/WBE contractor utilization was at the level of their availability in SBBC’s market area. According to the United States Supreme Court, the statistically significant underutilization of an ethnic or gender group constitutes a disparity.¹⁹ Race and gender-specific recommendations are proposed to remedy underutilization where a statistically significant disparity was documented. An extensive effort was undertaken to secure a comprehensive dataset of the prime contracts awarded during the study period from SBBC.

The prime purchase orders were analyzed at three dollar thresholds for construction, four dollar thresholds for professional services, and five dollar thresholds for contractual services and commodities, each threshold is set forth in SBBC’s procurement standards. The findings are presented by ethnicity and gender within each industry at both the



¹⁸ State Board of Education Administrative Rules, Supplier Diversity & Outreach Program, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 7007-A(1)(19) (2014).

¹⁹ *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 495-96 (1989).

formal and informal contract threshold. There was also an additional analysis of informal contracts under \$50,000 for construction and under \$5,000 for contractual services and commodities.

A. Prime Contracts

As indicated in Table 12.05, SBBC issued 111,107 prime purchase orders during the study period. The 111,107 prime purchase orders included 1,828 for construction, 133 for professional services, 13,132 for contractual services, and 96,014 for commodities.

The payments made by SBBC during the study period totaled \$837,838,957 for all 111,107 prime purchase orders. Payments included \$248,176,703 for construction, \$12,717,210 for professional services, \$149,333,758 for contractual services, and \$427,611,285 for commodities purchase orders.

**Table 12.05: Total Prime Purchase Orders and Dollars Expended:
All Industries, Fiscal Years July 1, 2008, to June 30, 2013**

Industry	Total Number of Purchase Orders	Total Dollars Expended
Construction	1,828	\$248,176,703
Professional Services	133	\$12,717,210
Contractual Services	13,132	\$149,333,758
Commodities	96,014	\$427,611,285
Total Expenditures	111,107	\$837,838,957

B. Subcontracts

As depicted in Table 12.06, 707 subcontracts were analyzed during the study period. The 707 of subcontracts included 604 for construction and 103 for professional services.

The subcontract dollars expended during the study period totaled \$95,871,386 for all 707 subcontracts. The subcontract dollars included \$87,807,455 for construction and \$8,063,931 for professional services.



Table 12.06: Total Subcontracts Awarded and Dollars Expended: All Industries, Fiscal Years July 1, 2008, to June 30, 2013

Industry	Total Number of Subcontracts	Total Dollars Expended
Construction	604	\$87,807,455
Professional Services	103	\$8,063,931
Total Expenditures	707	\$95,871,386

C. Prime Contractor Disparity Findings

1. All Industries Prime Purchase Orders

As indicated in Table 12.07, disparity was found for African Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on all prime purchase orders regardless of purchase order value.

Table 12.07: Disparity Summary: All Industries Prime Purchase Orders, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity/Gender	All Industries
	All Purchase Orders
African Americans	<i>Disparity</i>
Asian-Pacific Americans	No Disparity
Subcontinent Asian Americans	<i>Disparity</i>
Hispanic Americans	<i>Disparity</i>
Native Americans	No Disparity
Minority-owned Businesses	<i>Disparity</i>
Caucasian Female-owned Businesses	<i>Disparity</i>
Minority and Caucasian Female-owned Businesses	<i>Disparity</i>



2. Construction Prime Purchase Orders

As indicated in Table 12.08 below, disparity was found for African Americans, Asian-Pacific Americans, Minority-owned Businesses, and Minority and Caucasian Female-owned Businesses on all construction prime purchase orders regardless of purchase order value. In addition, disparity was found for African Americans, Asian-Pacific Americans, Minority-owned Businesses, and Minority and Caucasian Female-owned Businesses on prime purchase orders valued \$50,000 and over.

Finally, disparity was found for African Americans, Asian-Pacific Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on prime purchase orders valued less than \$50,000.

Table 12.08: Disparity Summary: Construction Prime Purchase Orders, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity/Gender	Construction		
	All Purchase Orders	\$50,000 and Over	Less than \$50,000
African Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Asian-Pacific Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Subcontinent Asian Americans	No Disparity	No Disparity	No Disparity
Hispanic Americans	No Disparity	No Disparity	<i>Disparity</i>
Native Americans	No Disparity	No Disparity	No Disparity
Minority-owned Businesses	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Caucasian Female-owned Businesses	No Disparity	No Disparity	<i>Disparity</i>
Minority and Caucasian Female-owned Businesses	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>



3. Professional Services Prime Purchase Orders

As indicated in Table 12.09 below, disparity was found for African Americans, Hispanic Americans, Minority-owned Businesses, and Minority and Caucasian Female-owned Businesses prime contractors on all professional services prime purchase orders regardless of purchase order value.

No disparity was found for any of the ethnic groups on professional services prime purchase orders valued \$325,000 and over. Disparity was found for Hispanic Americans, Minority-owned Businesses, and Minority- and Caucasian Female-owned Businesses on professional services prime purchase orders valued \$195,000 and over.

In addition, disparity was found for Hispanic Americans, Minority-owned Businesses, and Minority and Caucasian Female-owned Businesses on professional services prime purchase orders valued \$50,000 to \$194,999.

Finally, disparity was found for Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, and Minority and Caucasian Female-owned Businesses on professional services prime purchase orders valued less than \$50,000.

Table 12.09: Disparity Summary: Professional Services Prime Purchase Order, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity /Gender	Professional Services				
	All Purchase Orders	\$325,000 and Over	\$195,000 and Over	\$50,000 to \$194,999	Less than \$50,000
African Americans	<i>Disparity</i>	No Disparity	No Disparity	No Disparity	No Disparity
Asian-Pacific Americans	No Disparity	No Disparity	No Disparity	No Disparity	No Disparity
Subcontinent Asian Americans	No Disparity	No Disparity	No Disparity	No Disparity	<i>Disparity</i>
Hispanic Americans	<i>Disparity</i>	No Disparity	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Native Americans	No Disparity	No Disparity	No Disparity	No Disparity	No Disparity
Minority-owned Businesses	<i>Disparity</i>	No Disparity	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>



Ethnicity /Gender	Professional Services				
	All Purchase Orders	\$325,000 and Over	\$195,000 and Over	\$50,000 to \$194,999	Less than \$50,000
Caucasian Female-owned Businesses	No Disparity	No Disparity	No Disparity	No Disparity	No Disparity
Minority and Caucasian Female-owned Businesses	Disparity	No Disparity	Disparity	Disparity	Disparity

4. Contractual Services Prime Purchase Orders

As indicated in Table 12.10 below, disparity was found for African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on contractual services prime purchase orders regardless of purchase order value.

Disparity was found for African Americans, Hispanic Americans, Minority-owned Businesses, and Minority and Caucasian Female-owned Businesses on contractual services prime purchase orders valued \$500,000 and over. Disparity was also found for African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on contractual services prime purchase orders valued \$50,000 to \$499,999.

In addition, disparity was found for African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on contractual services prime purchase orders valued \$5,000 to \$49,999.

Finally, disparity was found for African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on contractual services prime purchase orders valued less than \$5,000.



Table 12.10: Disparity Summary: Contractual Services Prime Purchase Orders, Fiscal Years July 1, 2008, to June 30, 2013

Ethnicity /Gender	Contractual Services				
	All Purchase Orders	\$500,000 and Over	\$50,000 to \$499,999	\$5,000 to \$49,999	Less than \$5,000
African Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Asian-Pacific Americans	<i>Disparity</i>	No Disparity	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Subcontinent Asian Americans	<i>Disparity</i>	No Disparity	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Hispanic Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Native Americans	No Disparity	No Disparity	No Disparity	No Disparity	No Disparity
Minority-owned Businesses	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Caucasian Female-owned Businesses	<i>Disparity</i>	No Disparity	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Minority and Caucasian Female-owned Businesses	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>

5. Commodities Prime Purchase Orders

As indicated in Table 12.11 below, disparity was found for African Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on commodities prime purchase orders regardless of purchase order value.

Disparity was found for African Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on commodities prime purchase orders valued 500,000 and over. Disparity was also found for African Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on commodities prime purchase orders valued \$50,000 to \$499,999.



In addition, disparity was found for African Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on commodities prime purchase orders valued \$5,000 to \$49,999.

Finally, disparity was found for African Americans, Subcontinent Asian Americans, Hispanic Americans, Minority-owned Businesses, Caucasian Female-owned Businesses, and Minority and Caucasian Female-owned Businesses on commodities prime purchase orders valued less than \$5,000.



**Table 12.11: Disparity Summary: Commodities Prime Purchase Orders,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity /Gender	Commodities				
	All Purchase Orders	\$500,000 and Over	\$50,000 to \$499,999	\$5,000 to \$49,999	Less than \$5,000
African Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Asian-Pacific Americans	No Disparity	No Disparity	No Disparity	No Disparity	No Disparity
Subcontinent Asian Americans	<i>Disparity</i>	No Disparity	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Hispanic Americans	<i>Disparity</i>	No Disparity	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Native Americans	No Disparity	No Disparity	No Disparity	No Disparity	No Disparity
Minority-owned Businesses	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Caucasian Female-owned Businesses	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Minority and Caucasian Female-owned Businesses	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>

D. Subcontractor Disparity Findings

Extensive efforts were undertaken to obtain subcontracting records for SBBC’s construction and professional services prime purchase orders. SBBC’s contractual services and commodities subcontract records were not available. Thus, a subcontract analysis for the contractual services and commodities industries could not be performed. The subcontract disparity findings for construction and professional services are summarized in Table 12.12 below.



**Table 12.12: Subcontractor Disparity Summary,
Fiscal Years July 1, 2008, to June 30, 2013**

Ethnicity/Gender	Construction	Professional Services
African Americans	<i>Disparity</i>	<i>Disparity</i>
Asian-Pacific Americans	<i>Disparity</i>	No Disparity
Subcontinent Asian Americans	No Disparity	No Disparity
Hispanic Americans	No Disparity	<i>Disparity</i>
Native Americans	No Disparity	No Disparity
Caucasian Females	No Disparity	No Disparity

IV. RACE AND GENDER-SPECIFIC RECOMMENDATIONS

SBBC has implemented various race and gender-neutral remedies, including the enactment of the Supplier Diversity and Outreach Program targeting M/WBE parity. Despite these efforts, statistically significant disparities in the utilization of available M/WBEs were documented in the analysis of SBBC prime purchase orders for all four industries and construction and professional services subcontracts. SBBC should consider the recommended races and gender-specific requirements set forth in this section.

A. Prime Contract Remedies

1. Incentive Credits for Professional Services and Contractual Services Contracts

African American, Subcontinent Asian American, and Hispanic American Businesses were found to have a disparity at a statistically significant level on SBBC’s professional services prime purchase orders. African American, Asian-Pacific American, Subcontinent Asian American, Hispanic American, and Caucasian Female-owned Businesses were found to have statistically significant disparity on SBBC’s contractual services prime purchase orders.

SBBC should incorporate incentive credits in the evaluation points assigned to each solicitation for professional services and contractual services contracts to increase the participation of these groups on its prime contracts. The incentive credits should apply when the selection process includes a Request for Proposal or Statement of Qualifications.

Including incentive credits as one of the evaluation criteria could counterbalance the competitive disadvantage experienced by the groups with a statistically significant



disparity. Incentive credits of 10 to 15 percent of the maximum points would be specified in the published evaluation criteria and applied in the evaluation process for formal professional services and contractual services prime contracts. A business that is eligible for incentive credits would be assigned the incentive credits during the evaluation of the technical proposal. The groups that are eligible for incentive credits are listed in Table 12.13.

Table 12.13: Groups Eligible for Prime Incentive Credits

INCENTIVE CREDITS ELIGIBLE GROUPS
Professional Services
African American
Subcontinent Asian American
Hispanic American
Contractual Services
African Americans
Asian-Pacific Americans
Subcontinent Asian Americans
Hispanic Americans
Caucasian Females

2. Bid Discounts for Construction and Commodities Prime Contracts

African American, Asian-Pacific American, Hispanic American, and Caucasian Female-owned Businesses demonstrated a statistically significant disparity on SBBC’s construction prime purchase orders. African American, Subcontinent Asian American, Hispanic American and Caucasian Female-owned Businesses were found to have a statistically significant disparity on SBBC’s commodities prime purchase orders.

SBBC should apply a five (5) percent bid discount for evaluation purposes on construction and commodities prime contracts for the groups that had a statistically significant disparity. The bid discount, when applied, would reduce the bidder’s price by five (5) percent for evaluation purposes. The groups that are eligible for bid discounts are listed in Table 12.14.



Table 12.14: Groups Eligible for Construction and Commodities Prime Contracts Bid Discounts

BID DISCOUNT ELIGIBLE GROUPS
Construction
African Americans
Asian-Pacific Americans
Hispanic Americans
Caucasian Females
Commodities
African Americans
Subcontinent Asian Americans
Hispanic Americans
Caucasian Females

B. Subcontract Remedies

1. Set Overall Construction and Professional Services Subcontracting Goals

A construction subcontracting goal should be set for minority groups with a finding of statistically significant disparity, which are African Americans and Asian-Pacific Americans. A construction subcontracting goal should also be set for Caucasian Females, an underutilized group. Caucasian Females are underutilized, albeit not at a statistically significant level. Since Caucasian Females are not subject to strict scrutiny, gender-specific goals can be predicated on underutilization. The ethnic and gender subcontracting goals for the construction subcontracts should reflect the availability of African American, Asian-Pacific American, and Caucasian Female-owned Businesses.

A professional services subcontracting goal should be set for African Americans and Hispanic Americans, the minority groups with a finding of statistically significant disparity. To meet the narrowly tailored standard, the subcontract goals should be based on the ethnic and gender groups' availability levels.

Table 12.15 below depicts the construction and professional services subcontractor availability documented in the Study.

Table 12.15: Subcontractor Availability

Ethnic and Gender Groups	Construction Availability	Professional Services Availability
African American	13.44%	7.83%
Asian-Pacific American	1.31%	
Hispanic American		43.98%
Caucasian Female	11.48%	



2. Require Construction and Professional Services Subcontracting Goal Attainment at Bid Opening

One method of ensuring that the M/WBE goals are met is to require the prime contractor to meet the subcontract goal at the time of bid opening or submit a good faith effort with the bid. The M/WBE goal must be met with one or more certified MBEs, and one or more certified WBEs that provide a commercially useful function. A responsive bid must meet the M/WBE goal or document a good faith effort.

3. Employ a Quantifiable Good Faith Effort

SBBC should develop concise, detailed, and quantifiable good faith effort requirements for its prime contractors to ensure they are making a bona fide attempt to meet the M/WBE goals. Good faith efforts should minimally include the following:

- Attendance at pre-bid conference, if held
- Copies of written notification sent to all SDOP-certified contractors that perform the type of work to be subcontracted, in sufficient time to allow the SDOP-certified contractor to prepare a proposal or bid
- Advising the SDOP-certified contractor of the specific work the prime contractor intends to subcontract, that their interest in the project is being solicited, and how to obtain information for the review and inspection of the plans, specifications and requirements of the bid
- A written statement that economically feasible portions of work were selected to be performed by SDOP-certified contractors, including, where appropriate, segmenting or combining elements of work into economically feasible units
- A statement of the efforts made to negotiate with SDOP-certified contractors, including the name, address, and telephone number of the contractor that was contacted, the date the negotiations took place, and a description of the information provided to the contractor regarding the plans, specifications, and requirements for the portions of the work to be performed

The ability of the prime contractor to perform the work with its own workforce should not in itself excuse the contractor from making good faith efforts to meet the M/WBE participation goals. The good faith effort requirements should include penalties and sanctions for non-compliance.

For example, a prime contractor would earn five (5) points for advertising at least twice in the general circulation media, minority-focused media, or trade-related publications at least ten (10) days prior to submission. Requisite documentation, such as dated copies of the advertisement or an affidavit from the periodical verifying these efforts, would be required from the prime contractors. The quantified process would require a minimum overall score for the prime contractor to demonstrate a good faith effort in lieu of meeting the M/WBE goal.



The following actions outline evidence of the minimum good faith effort to meet the SDOP M/WBE subcontracting goal, and describe describes the criteria to quantify good faith efforts.

- Advertising Effort (5 points)

Effort: Contractors must advertise opportunities for M/WBEs in three (3) print or digital media outlets during the two (2) weeks prior to the bid opening. Contractors should be required to publish these opportunities in the general circulation media, minority-focused media, trade association publications, or trade-related publications at least twice unless, unless SBBC waives this requirement due to time constraints.

Documentation: The advertisement should include the name and location of the project, the location where plans and specifications can be viewed, the subcontractor proposal due date, and the items of work or specialties being solicited.

- Outreach to Identify M/WBEs (15 points)

Effort: The contractor should attempt to outreach to M/WBEs by utilizing the SDOP-approved online databases of certified firms or the approved external database. The scope of work required should be identified, and the contractor needs to seek out relevant companies to perform the specified work.

Documentation: The contractor should retain dated documentation of any correspondence targeting M/WBE and/or outreach to SDOP-approved online database listings of certified firms.

- Pre-Bid Meeting Attendance (5 points)

Effort: Attendance at the pre-bid meeting is mandatory to comply with the good faith effort requirement. If a pre-bid meeting is not offered, five points should be deducted from the 80-point minimum score.

Documentation: The contractor's name should appear on SBBC's pre-bid meeting sign-in sheet to document the company presence.

- Provide Timely Written Notification Effort (20 points)

Effort: The contractor will solicit subcontract bids and material quotes from relevant individual M/WBEs in writing and in a timely manner to reasonably result in the M/WBE goal being met. Relevant M/WBEs are firms that could feasibly provide services or supplies required for completing the scope of services provided in the bid document.

Documentation: Written correspondence with the subcontractor's name, address, contact person, and the date of the written notice should be documented. Written notification



must be dated and transmitted at least ten business days prior to the bid due date and include verification of transmission date. Such verification may include copies of certified mail return receipts and automated facsimile journals.

- Initial Contact Follow-up (15 points)

Effort: The contractor should follow-up on initial solicitations by contacting M/WBE subcontractors prior to the bid opening to determine with certainty whether the subcontractors are interested in performing the specific items of work on the project. Such contact shall be within a reasonable amount of time to allow the prospective M/WBE subcontractor an opportunity to submit a competitive sub-bid. The content of the initial letter, email, or facsimile should be different for the follow-up correspondence to indicate the additional effort expended to secure bidders.

Documentation: The list of subcontractors who were contacted—including results of that contact, documented by a telephone log, e-mail print-out, automated facsimile journal, or fax transmittal documents—is required. The record should include the M/WBE's name, telephone number, contacted person, dates of contact, and the outcome.

- Identify Items of Work (15 points)

Effort: The contractor should identify specific items of the work to be performed by subcontractors. Portions of work or other assistance that could reasonably be expected to produce a level of M/WBE participation sufficient to meet the goals should be offered to prospective M/WBE subcontractors.

Documentation: The list utilized to define the specific items of work solicited, including the identification process for S/M/WBE firms from which such work was solicited, is required. Documents should be reviewed to determine if the work is specific to that listed in the goal-setting document for the specific work item.

- Negotiate in Good Faith (15 points)

Effort: The contractor should negotiate in good faith with the M/WBE, and not unjustifiably reject bids, quotes, and proposals prepared by the M/WBE as unsatisfactory.

Documentation: Written statements of the names, addresses, and telephone numbers of subcontractors contacted by the contractor to negotiate price or services should be submitted. Dates of the negotiations and the results should be included, as well as documentation of the quotes/proposals received from M/WBEs.

- Bonding Requirements

Effort: Waive or reduce bonding requirements for subcontractors.



Documentation: Copies of bid solicitations waiving or reducing bond requirements.

- Assist in Financing, Bonding, and Insurance (10 points)

Effort: Where applicable, the contractor should advise and make efforts to assist interested M/WBEs in obtaining bonds, lines of credit, or insurance which SBBC requires.

Documentation: Written statements of the type of assistance offered to M/WBEs are required. The contractor should provide the name, contact person, and telephone number of the bonding company or financial institution offering assistance.

4. Implement a Commercially Useful Function Requirement

SBBC should require evidence that all certified subcontractors, suppliers and truckers listed on a bid or proposal to meet an M/WBE goal perform a Commercially Useful Function (CUF). The purpose of the CUF requirement is to prevent certified M/WBEs businesses from acting as a “pass through” or “front” when identified as a subcontractor to meet a contract goal. Participation that is artificial or incidental in order to meet the contract goal does not meet the CUF. When CUF is not verified, there is a potential for obtaining unwarranted SBBC preference advantages. The CUF requirement should apply to all procurement activity including change orders, substitutions, and task orders.

Minimally, a business performing a CUF does all of the following:

- Is responsible for the execution of a distinct element of the work of the contract
- Carries out its obligation by actually performing, managing, or supervising the work involved and in the case of a supplier warehousing its materials, supplies, and equipment
- Performs work that is normal business practice for its industry, service, and function
- Is not further subcontracting a portion of the work that is greater than that expected to be subcontracted by normal industry practices
- Maintains an inventory and a business establishment



5. Assess Penalties for Failing to Achieve the M/WBE Contract Goals

SBBC should levy monetary penalties on prime contractors that do not meet the M/WBE goals. The penalty should equal the M/WBE goal shortfall, which should be assessed during the project close-out. It should be withheld from the prime contractor's final payment.

V. RACE AND GENDER-NEUTRAL RECOMMENDATIONS

This section presents additional race and gender-neutral strategies. As proposed, these recommendations should strengthen the SDOP, and improve its effectiveness in eliminating the statistically significant underutilization of M/WBEs documented in the Study. Implementation of these strategies should significantly improve M/WBE access to SBBC contracts.

The recommendations herein include administrative strategies which might require modifications to procurement policy. As proposed, the data management standards to strengthen the monitoring, tracking, and reporting of subcontractor utilization will necessitate modifications to the current procedures. In addition, the proposed business webpage modifications would consolidate some of the published information available for contractors.

A. Data Extraction Process

The process of securing SBBC's prime and subcontract data evidenced a decentralized, fragmented management of the contracting and procurement data needed to analyze contracts awarded during the study period. A detailed description of the steps undertaken to obtain the prime data and reconstruct the subcontracts awarded during the study period illustrates the fragmented condition of SBBC's contract record keeping.

The condition of SBBC's contract data was in marked contrast to what was expected, given the procurement process outlined in the purchasing policies.²⁰ Given the condition of the data management process documented in the Study, the key race and gender-neutral recommendation proposed for SBBC is to implement a centralized computerized accounting system capable of producing numeric, verifiable, and structured reports.

1. Prime and Subcontract Payment Data Reconstruction

a. Procurement & Warehousing Services Department

The Procurement & Warehousing Services Department is obligated to provide responsible and efficient procurement services. This Department was initially identified as the source for prime contract purchase orders and payment data. The Department pays the invoices based on purchase orders issued by the departments and must ensure that the

²⁰ State Board of Education Administrative Rules, FLA. ADMIN. CODE ANN. r. 6A-1.0 § 3320 (2014).



payment does not exceed the purchase order amount. It was determined that the Department does not have a record of the contracts awarded or the contract encumbered amount. Additionally, the system does not capture the contract award amount against which the purchase orders and payments are written.

Data collection efforts in the Procurement & Warehousing Services Department were initially coordinated by the Director. Mason Tillman's initial request was for all construction, professional services, contractual services, and commodities prime contract awards and payments, subcontract awards and payments, and vendor information for the study period. The first dataset provided by Procurement & Warehousing Services on September 16, 2014, contained 2,958 purchase orders. It was later discovered that this dataset did not include all purchase orders against which the Procurement & Warehousing Services Department made payments during the study period. In an effort to provide a complete dataset of purchase orders issued during the study period, a second dataset was prepared by the Procurement & Warehousing Services Department. The second dataset was comprised of 12 files containing 119,119 purchase orders. Many were multiple payments to the same vendor. These purchase orders were purported to be complete prime contract purchase orders against which the Department made payments during the study period.

The 12 files contained vendor contact information and purchase order amounts. This dataset, however, did not have a project number. There was, in fact, no field in the 119,119 records to link the purchase order number to the project number. It was also determined in reviewing the 119,119 records that payment for shipping and handling charges had been included in the purchase order dataset as if they were unique prime contracts. These fees were removed by Mason Tillman.

b. Capital Budget Department

The Capital Budget Department is responsible for authorizing payments to construction contractors and construction related vendors. Mason Tillman requested construction prime contract and subcontract awards and payments from the Capital Budget Department. The dataset provided by the Capital Budget Department included 15,856 purchase orders issued during the study period, and a list of contractors that received a construction prime contract during the study period.

Mason Tillman queried the purchase order records received from the Capital Budget Department against the purchase order records received from Procurement & Warehousing Services Department. The query determined that there were 1,405 unique purchase orders in the Capital Budget Department's dataset, which were not in the Procurement & Warehousing Services Department's dataset. It was this finding that prompted the Procurement & Warehousing Services Department to generate a third dataset to be inclusive of the previously excluded 1,405 purchase orders.



In addition to the purchase order records, the Capital Budget Department maintained a static file of documents in File Maker Pro® related to the projects managed by the Facilities Design & Construction Management Department. Although the documents in the static file were not systematically archived, the database which contained 40,000 documents, was identified by the Capital Budget Department as a source of subcontractors and suppliers utilized on the construction projects awarded during the study period. Indeed the static file contained several useful documents. The forms identified in the static file were Direct Purchase Program Savings, Reduction of Retainage Certification, Monthly M/WBE Subcontractors Utilization Report, Waiver and Release of Lien upon Partial Payment, Full and Final Release of Lien, Partial Release of Lien, Conditional Waiver and Release of Liens and Claims, Waiver and Release of Lien upon Final Payment, Waiver and Release of Lien upon Progress Payment, Partial Waiver and Release of Lien, and Change Orders. Design consultant invoices were also found in the static file of documents²¹

The static file with 40,000 records was reviewed manually in an effort to identify subcontractor invoices, payments made to subcontractors, and supplier purchases. Albeit a labor intensive task, requiring several days to read the documents for a single contract, the review produced information sufficient to assess the purchase order dataset provided by the Procurement & Warehousing Services Department. It was determined from the assessment that several hundred purchase orders which were identified in the Procurement & Warehousing Services Department dataset as prime contractors were in fact payments to prime contractors' suppliers. These records were reclassified as suppliers.

The Reduction of Retainage Certification and Release of Lien forms identified in the PDF documents were requested for prime contractors and their subcontractors. The value of the purchase order in addition to the retainage amount withheld, as indicated on the forms, enabled a calculation of payments made by the prime contractor to the subcontractors. The amount in the retainage release forms paid to the subcontractors was used to calculate the subcontractor award.

These static records also allowed Mason Tillman to identify several design consultants who were not found in the Procurement & Warehousing Services Department's dataset. Because some construction projects were bid under a Construction Management at Risk (CM @ Risk) delivery model, there were several design consultants that were not paid directly by SBBC and therefore not captured in the purchase order records.

While the review of the static files was instructive and yielded additional and useful data, there were several projects for which required forms could not be located. In addition, Mason Tillman found inconsistent reporting within the forms, such as contract amendments and change orders that were not clearly coded.



²¹ Several of the forms contained the same type of data although the name of the form was different.

c. Division of Facilities & Construction Management

Division of Facilities & Construction Management is the SBBC department responsible for the design and award of construction, improvement, and maintenance of educational facilities. Construction and design consultant contracts and projects are managed by this Department. Mason Tillman requested Release of Lien forms and Monthly M/WBE Subcontractors Utilization Reports from the Department for each of the construction contracts identified by the Capital Budget Department. However, a complete set of the forms could not be provided for several large construction projects.

The Division of Facilities & Construction Management was also asked to provide contracts for all of the design consultants utilized on the nine largest construction contracts identified in the Procurement & Warehousing Services Department's dataset. The specific request was for the name, award amount, and payment information of all utilized design consultants, specialty consultants, and subconsultants. The Division of Facilities & Construction Management provided a spreadsheet listing consultant names, project numbers, and school sites.

Mason Tillman also requested Statements of Qualifications and proposals submitted by professional service and design consultants. These files, which were archived off-site, were not made available.

d. Risk Management Department

The Risk Management Department is responsible for providing risk prevention and mitigation services. Risk Management is supposed to receive a copy of each contract and all contract amendments upon Board Approval in order to verify the contractor's compliance with the contract insurance requirements. It was anticipated that the Risk Management Department could provide a complete list of awarded prime contracts. A review of the records maintained by the Risk Management Department revealed that only a limited number of contracts had been submitted to the Department. In addition, only contracts from 2012 and beyond were maintained electronically. This repository was determined to be insufficient as a source for defining a complete set of construction prime contract records.

2. Subcontractor Data Collection

The subcontractor data collection occurred in phases, beginning with the discovery of the Direct Purchase Program Savings Forms scanned in the Capital Budget Department's File Maker Pro® static file. The subsequent discovery of the Reduction of Retainage Certification, Monthly M/WBE Subcontractors Utilization Report, Waiver and Release of Lien upon Partial Payment, Full and Final Release of Lien, Partial Release of Lien, Conditional Waiver and Release of Liens and Claims, Waiver and Release of Lien upon Final Payment, Waiver and Release of Lien upon Progress Payment, Partial Waiver and



Release of Lien, and Change Order forms²² revealed additional subcontractors and suppliers. As the final effort to reconstruct the professional service subcontractors, the Supplier Diversity and Outreach Program staff assisted in collecting subcontractor records directly from the prime contractors. The staff effort was concentrated on identifying subconsultants that worked for the design consultants utilized on the large construction contracts.

The utilization data collection which began September 16, 2014, when the Director of Procurement & Warehousing Services Department provided the initial incomplete set of prime contract records, and was not concluded until September 4, 2015. When SBBC concluded its research, the records available for the professional service analysis still appeared to be incomplete. These records did include the professional service subcontractors utilized on eight of the nine largest construction prime contracts. However, the professional service subcontractors could not be identified for the one large construction prime contractor that defaulted, and there was no comprehensive record of the contractors used on the other professional services contracts.

B. Data Management Enhancements

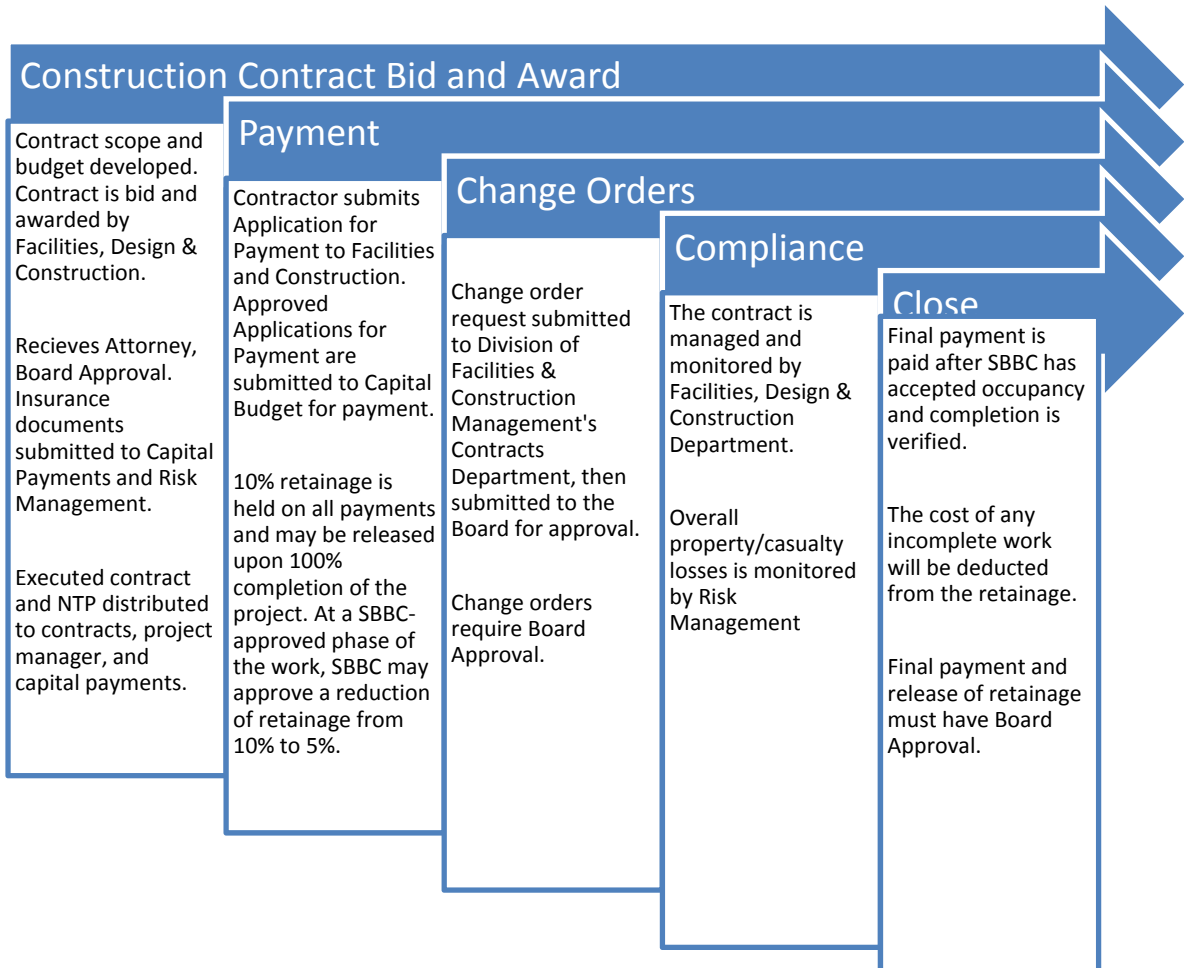
While the maintenance of records during the study period was fragmented, the solicitation and record management process set forth in SBBC's procedures is detailed and comprehensive. This process which was last amended in 2007, and in place during the study period, includes critical phases from solicitation to project closeout including responsible parties, compliance requirements, and reporting specifications.²³ SBBC procedures can be found Chart 12.01 below.

²² Several of the forms contained the same type of data although the name of the form was different.

²³ Construction Contracts Support Risk Checklist, The School Board of Broward County, Florida, Facilities and Construction Management Division, *available at* <http://www.broward.k12.fl.us/constructioncontracts/Documents/PM%20Support/CM%20at%20Risk%20Checklist%2001-30-07.pdf>; School Board of Broward County, Facilities and Construction Management Division: Contracts Department, *Change Management Change Order Guidelines and Requirements* (2014).



Chart 12.01: SBBC Procedure for Professional Services Agreements



SBBC should consistently and uniformly apply all procedures as detailed in the 2007 standards. The uniform application of the SBBC policies and procedures in addition to a centralized fully computerized system capable of producing numeric structured reports would greatly improve efficiency and transparency.

1. Implement a Centralized and Uniform Financial System

A financial system with the capacity to capture each contract award and the purchase orders linked to the corresponding prime contract, is needed. A module to capture the related subcontract awards and payments needs to be a component of the application. The system should track each purchase order by a unique project number. The contract record should include the contract name, award amount and date, payment amounts and dates, and vendor name and contact information. Purchase orders approved for invoice



payments should link to the contract. Classifying purchase orders based on contract number and corresponding project number would be effective.

2. Create a System to Report, Track, and Collect All Subcontractor Information

SBBC should report and track all subcontractor payment information, and should uniformly apply data management procedures to all subcontractor information regardless of M/WBE status. This system should have the functionality to track contract amounts and payments to all subcontractors, subconsultants, suppliers, and truckers.

The subcontractor tracking system should capture SDOP-certified businesses, and Non-certified businesses to be used on all prime contracts at the time of award. The information should be collected on a Subcontractor Utilization Form submitted with the prime contractor's bid, proposal, and statement of qualifications. The Subcontractor Utilization Form should capture the contract number, the contract name, award amount, the subcontractor's name, address, telephone number, and contact person. A copy of the forms reporting year-to-date payment to each listed subcontractor should accompany each prime contractor's invoice.

a. Subcontractor Payment

SBBC should institute a system that allows prime contractors to input subcontractor payments directly into an electronic database. This system should capture all payments made to subcontractors, suppliers, and truckers in data fields that link back to the prime contract. It should also allow the subcontractor to verify the reported payment. If the data is in fact submitted manually, it should be entered into the subcontractor payment module upon receipt.

3. Track Type of Work Performed by Industry Code

SBBC should utilize the North American Industry Classification System (NAICS) industry codes to describe the specific nature of work performed on each prime and subcontract. Currently, the system does not record industry codes in a consistent manner. Contracts should be assigned the appropriate NAICS code at the time of award and entered into the system when the contract record is set up. This will allow for the centralized financial system to have uniformity, and to provide more accessible vendor records.

It is recommended that SBBC use only one classification system, the NAICS code, for uniformity in the classification of contracts. The NAICS codes should be adopted because these codes capture more industries than any other industry classification system. This is the standard used by the Federal Statistical Agencies in classifying business establishments for purpose of publishing statistical data related to the United States business economy.



a. Vendor Information Module

SBBC should construct a Vendor Information Module that conforms to the updated and modified data management system. This Module should record contact information, NAICS classification, certification status, ethnicity, and gender. The vendor records should include the vendor identification number in the Vendor Registration Form.

The Vendor Information Module would maintain the records of all eligible M/WBEs and all utilized vendors. The database would contain customized reports allowing the vendors to be sorted by specialty. The report would be useful in determining the number of available M/WBEs. The vendor list should contain the following data fields:

- Company Name
- Contact Person
- Title
- Address
- Telephone
- Email
- Company URL
- Facsimile Number
- Ethnicity of Owner
- Gender of Owner
- Certification Number
- Certification Agency
- NAICS Code(s) based on vendor's specialty



b. Prime Contractor Award and Payment

This Module should include pertinent information about the contract award, including contract number, awarded vendor, award amount, contract description, and any change orders issued. Payments would be tracked by purchase order, corresponding project number, and include the payment date and payment amount. A cross-reference check should be built into the component to ensure that total payments do not exceed the award amount.

The Module should record the prime contractor information, including the prime contractor name, contract number, award amount, award date, contract description, contract category, contract type, and contract modifications.

c. Modifications and Change Orders

When there is a change or modification to a prime contractor record after the original award, the modification should be entered into a modification form. The feature should contain a reference field to note the reason for the change. The purchase order data, as provided to Mason Tillman, did not have a separate field that indicated whether the purchase order constituted an original contract award or a change order. More uniformity and organization is required to represent the status of the change order or modification. Creating a field that records all modifications and change orders should create more uniformity in data management, and allow for change orders to be easily linked to the original contract.

C. Administrative Strategies

1. Unbundle Large Procurements into Smaller Contracts

SBBC designs and writes their specification requirements to favor their preferred contractors. They put out large projects so that they can disqualify the small contractors, and have the grounds to say the company is too small to undertake a \$10 million job. To me, these practices rid the field of the smaller guys and favor the bigger guys.

Bundling occurs when small purchases are consolidated into one contract, or when goods or services are grouped together into a single solicitation. Bundling also occurs when projects that are on separate sites—or on discrete areas of the same site—are included in one solicitation. Design-build and CM @ Risk delivery systems, task order contracts, and multi-year price agreements are types of bundled contracts.

Bundling contracts effectively prevent small firms from bidding on the individual parts of large-scale projects for which they are qualified. This circumstance occurs when the scale of the contract limits the competition to large businesses and includes items that can only be bundles

and/or performed by a larger business.



For example, the dataset provided by the Procurement & Warehousing Services Department included nine construction contracts valued over \$1,000,000, including one valued at \$19,472,835, as identified in Table 12.16. These contracts comprise the majority of the contracting budget, and create barriers for small firms in the award of SBBC construction contracts.

Table 12.16: Construction Contracts Valued Over \$1,000,000

Prime Name	Project Number	Project Name	Award Amount	Reduction Retainage Form
Skanska USA Building, Inc.	P.000877	Cooper City High School	\$19,472,835.39	Received
Kaufman Lynn Construction, Inc.	P.000687.05.10	Fort Lauderdale High School	\$14,958,327.65	Received
Balfour Beatty Construction	P.000067.05.10	Blanche Ely High School	\$5,911,600.89	Received
Recreational Design	P.001357.05.10	South Broward High School	\$3,463,084.00	Received
KVC Constructors, Inc.	P.000176.05.10	Fort Lauderdale High School	\$3,216,602.00	Received
TGSV Enterprises, Inc.	P.000673.05.10	Southwest Bus Facility	\$2,323,822.14	Received
Burke Construction Group, Inc.	P.000197.05.10	Sheridan Technical Center	\$1,319,948.00	Received
Cedars Electro-Mechanical, Inc.	P.000505.05.10	Western High School	\$1,254,092.57	Received
National Roofing, Inc.	P.000889.05.10		\$1,186,707.26	Not Received

In determining whether large procurements should be unbundled, the following criteria should be reviewed:

- Whether or not the project takes place in more than one location
- Size and complexity of the procurement
- Similarity of the goods and services procured
- Sequencing and delivery of the work
- Public safety issues and convenience
- Procurement division options
- Size of the task orders issued against the procurement



2. Revise Bonding Requirements

I don't think SBBC has programs to help the small businesses that are struggling to get bonded. Because of the bonding limits, we could not get bonding and our revenue stream practically dried up. I didn't have enough collateral to support a bond, which has kept me from getting work I would have otherwise been able to get, and has prevented me from the ability to grow my company.

Bonding requirements can be a barrier to small and M/WBE bidders. Surety premiums are an indirect cost to SBBC that the prime contractor and subcontractor passes through in their bids. The bonding requirements on small contracts should be evaluated to ensure that they do not carry a disproportionately high level of coverage. On small contracts, the bonding requirements should be set in relation to the nature and scope of work to be performed, while balancing liability, risk, and statutory requirements. In addition, SBBC should implement standard risk management provisions that reflect reasonable risks for all of its contracts.

Consideration should be given to eliminate the bonding requirements on small contracts where the agency has limited exposure. SBBC should also consider implementing a Surety Assistance Program for small contracts. A Surety Assistance Program could attract more bidders and thereby increase competition and reduce costs. Any revisions to the bonding provisions must comply with statutory requirements.

3. Clarify the Pre-qualification Standards for Construction, Professional Services, and Contractual Services Contracts

The way that SBBC does business should be more transparent...SBBC has a pre-qualified list, and the project managers are allowed to pull from the list and determine who to utilize. If I don't have anyone on the inside, then I am the last one to be called.

The pre-qualification requirements for construction, professional services, and contractual services contracts should be clarified. The pre-qualification application procedures and the pre-qualification application forms for construction and professional services (including architectural, engineering, and surveying), and contractual services are published on the Procurement & Warehousing Services Department website. The number of required experience categories and years of experience should be clearly defined, and the requirements should be well-publicized so that all

contractors that are certified and pre-qualified in a particular discipline or as a general contractor are aware of the specifications.

SBBC should be more transparent concerning the evaluation criteria. Though the prequalification process is published on the Procurement & Warehousing Department's website, the evaluation criteria is not delineated. The pre-qualification staffing levels should be unambiguous in all categories so applicants understand what is required. The minimum staff required for each level should be specified and the weight given to each



category or combination of categories in the pre-qualification process should be quantified. SBBC should be more transparent as to how much weight is given to each category in the pre-qualification process. These modifications should make the pre-qualification requirement more explicit and increase the pool of qualified construction and architectural, engineering, and surveying services pre-qualification applicants

4. Apply Penalties Against Fraudulent M/WBEs

To safeguard the interests of SBBC and bona fide M/WBEs, all applicants to the SDOP must certify under penalty of perjury that the SDOP Administrative Counsel (SDOPAC) has the right to investigate and pursue prosecution of businesses that willfully and falsely claim eligibility status. The SDOPAC should sanction contractors who violate the program requirements. Sanctions may include withholding payments, termination of contracts, breach of contract damages, rejection of bids, and contractor debarment.

5. Expand Solicitation Notification Criteria

Print media is increasingly being replaced by digital media. Accordingly, publishing bidding opportunities in newspapers and trade publications can be ineffective in reaching M/WBEs. Recognizing that searching for bidding opportunities in print media is time-consuming and tedious, SBBC currently posts the bidding opportunities on its website. Email, Twitter™, and text alerts could reach more M/WBEs and should be a standard method of communication. Electronic communication should be updated and maintained by the M/WBE Program. Electronic updates also could be posted on SBBC's website and Procurement & Warehousing Department's webpage weekly or bi-weekly on the same day of the week.

6. Provide Adequate Lead Time for Advertising Solicitations

In order to maximize M/WBE participation, SBBC should ensure that prime contractors have adequate lead time to bid. Prime contractors, including M/WBEs, should receive notice of contract opportunities at least four (4) weeks before the response is due. Longer lead times would not only allow businesses sufficient time to address questions and concerns about the solicitation, but would also permit prime contractors to give more lead time to subcontractors. Notice of bidding opportunities should be disseminated to M/WBEs through Twitter™ and text alerts.

With longer lead time, prime contractors would have sufficient time to search and contact qualified M/WBE subcontractors to meet contracting goals. Additionally, subcontractors would have sufficient lead time to prepare bids or proposals. Prime contractors should be required to allow at least ten (10) business days for M/WBE subcontractors to submit their bids and statements of qualifications.



7. Provide Debriefing Sessions for Unsuccessful Bidders

Debriefing sessions should be made available to any unsuccessful bidder. This option should be published on the Procurement & Warehousing Department's webpage. This service should be referenced in the Notice of Intent to Award sent to unsuccessful bidders. SBBC should consider including the following information in its debriefing sessions:

- Evaluation scores
- The firm's significant strengths and weaknesses in its proposal or bid in accordance with the evaluation criteria
- Summary of the rationale for the selection decision

8. Implement Formal Dispute Resolution Standards

SBBC should establish a protocol to ensure that contractors have a vehicle to address contract complaints and disputes in a formal dispute resolution process. This is particularly important for payment disputes or other routine contract matters. Whenever possible, SBBC should attempt to address concerns of contractors before formal dispute resolution is necessary. The office responsible for contractor complaints and disputes should be staffed with qualified personnel and should have authority to investigate concerns, complaints, and disputes. In addition, more transparent procedures to escalate complaints and disputes from the director-level to executive-level personnel should be formulated, implemented, and publicized widely on the Procurement & Warehousing Department's webpage.

Any complaint filed by contractors should be written and include at least the following information:

- Date submitted
- Contract number
- Contractor's name, address, and telephone number
- Factual allegations contained in the dispute, supported by an affidavit based on the claimant's personal knowledge
- Documentation of all evidentiary grounds supporting the contractor's requested relief

The dispute resolution standards should apply to disputes between prime contractors and SBBC, as well as disputes between subcontractors and prime contractors. The dispute resolutions should include provisions for an ombudsperson to handle mediation as needed to achieve timely dispute resolution. Mediation should be mandatory in the event a dispute cannot be resolved by the ombudsperson within 10 business days.

The first step in the mediation process should be taken by the aggrieved party. The aggrieved party would submit a complaint in writing to the ombudsperson. The



ombudsperson would then aid the parties in resolving the dispute by investigating the claim and making initial contact with SBBC, the prime contractor, or the subcontractor. If the dispute is not resolved through these means, the ombudsperson will assist the aggrieved party in filing a request for mediation. A dispute would have to be taken to the ombudsperson before proceeding to mediation.

Mediation is the second step in the resolution process. The mediator would contact both parties involved in the dispute and assist the parties achieve a resolution. Neither party may involve legal representation during the mediation process. If the parties are not able to reach a mutually agreed upon resolution through mediation, the dispute may proceed to arbitration. A dispute must be mediated before it can proceed to arbitration.

Arbitration is the final step to resolving a dispute. The decision reached by the arbitrator is final and binding. The parties may retain legal representation during the arbitration process.

9. Develop an Expedited Payment Program

One of the biggest problems is payroll...I'm afraid to take on certain jobs. I'll avoid them because I know it's going to be more demanding for labor . . . and payroll and getting paid in a timely manner has always been my biggest challenge in business.

Expedited payment standards should be implemented in order to remove a significant barrier to small businesses—late payments from prime contractors. Payments to prime contractors would be made within fifteen (15) days of SBBC receiving an undisputed invoice, and prime contractors would be required to pay their subcontractors within five (5) days of receipt of their invoice payment. SBBC should also implement measures that encourage prime contractors to quickly resolve disputed invoices between the subcontractor and prime contractor as a component of the Formal Dispute

Resolution Standards discussed above.

10. Give Five-Day Notice of Invoice Disputes

Invoice disputes are a source of delayed invoice payments. Within five (5) days of receiving a disputed invoice, SBBC should provide the prime contractor with an Invoice Dispute Notification detailing items in dispute. Undisputed invoice amounts should be paid within fifteen (15) days and disputed items should be resolved in a timely manner and thereafter paid promptly.

The prime contractor should have the same obligation to give notice to the subcontractor within five (5) days of any disputed invoice or item of work on an invoice. Payments from SBBC to the prime contractor should be withheld and the prime contractor should be penalized if the subcontractor is not paid timely. Undisputed work should be paid in compliance with the prompt payment provision. The prime contractor should act to



resolve the dispute timely. Once the invoice issue is cured, the prime contractor should pay the subcontractor within five (5) days of receiving payment from SBBC.

D. Supportive Services Strategies

The following recommendations would promote the Supplier Diversity and Outreach Program and the supportive services offered by SBBC to assist small businesses in becoming familiar with SBBC’s contracting procedures and acquire the required expertise.

1. Enhance the Direct Owner Purchasing Program to Include Construction Contracts Under \$200,000

The same companies always get the work. There seems to be [a trend] that most of the work goes to the same company, and new and smaller firms are not getting the contracts.

Under the Direct Owner Purchasing Program, the suppliers of construction equipment, materials, and supplies are paid directly by SBBC to avoid the sales tax. This Program therefore reduces the amount of the prime contractor’s bid subject to a bond. SBBC issues the payment to the supplier directly. However, the oversight requirements established by the Direct Owner Purchasing Program only apply to contracts where the cost of materials and equipment exceed \$200,000.

For the purpose of bonding a job, the cost of construction equipment, materials, and supplies are subtracted from the bid price, thereby reducing the amount of the contractor’s bond required for the bid. The benefits of such a program should not be restricted to contracts where the cost of materials and equipment exceed \$200,000. This threshold requirement should apply to all solicitations requiring construction equipment, materials, and supplies.

This program would be especially helpful for M/WBEs because the surety bond premium would be reduced by the value of the construction equipment, materials, and supplies costs. Thus the cost of the contract, and the amount that has to be bonded and funded, could be reduced by the construction equipment, materials, and supplies costs included in the direct purchase. The cash flow required to pay suppliers in advance of receiving reimbursement for the materials is also eliminated. Additionally, SBBC’s costs, which the contractors pass through in their bids, would be reduced, and the supplier, knowing that it would receive direct payment from SBBC, could give the M/WBE a more competitive price, thereby reducing the overall bid price. By reducing supplier costs and allowing M/WBEs to become more competitive, SBBC is providing M/WBEs and new businesses access to contracts that are consistently awarded to the same companies, and thereby taking steps to alleviate perceived barriers to entry into the “good old boys” network.



2. Use Direct Contracting to Award Small Contracts

Direct contracting is a procurement method to award separate contracts for specialty or non-license services which might otherwise be included as an item of work in a construction contract or within the scope of an architecture and engineering contract. Direct contracting can increase the opportunities for, and build the capacity of, small businesses. Direct contracting allows small businesses to work as prime contractors on a greater variety of contracts.

In the construction industry, trucking, demolition, surveying, and landscaping could be awarded as direct contracts and not as items of work in the general construction contract. Design services, which are not required to be performed by a licensed engineer, architect, or registered surveyor, might also be awarded as direct contracts. These services include planning, environmental assessments, ecological services, cultural resource services, and testing services. If these specialty services were separated from large design contracts and awarded as prime contracts, it would increase opportunities for M/WBEs to be prime contractors on SBBC contracts.

3. Establish Low-Cost and No-Cost Post-Award Supportive Services

After the contract is awarded, SBBC should provide supportive services to eligible businesses to assist them during the term of the contract. SBBC should make technical assistance available to the contractor which should include, but is not be limited to, the following:

- *Supportive and Developmental Services*—Written and oral instruction on competitive bidding, management techniques, and general business operations should be offered. These services could be provided through continuing education programs sponsored by SBBC, or technical and developmental services contractors.

4. Develop Contract Opportunities Forecast

SBBC should publish a 12-to-24 month contract opportunities forecast annually. The forecast should identify the industries within which contract opportunities are anticipated to be awarded. This forecast should be distributed to business and trade associations, incorporated into SBBC's outreach events, and published on SBBC's website.

Anticipated contract opportunities, where there are no pre-qualified M/WBEs, should be considered targets of opportunity. Targeted recruitment should be undertaken to increase the number of pre-qualified M/WBEs in the industries with anticipated opportunities.



E. Subcontract Remedies

1. Pay Mobilization to Subcontractors

Under circumstances where mobilization payments are approved for the prime contractor, the subcontractor should be paid an amount equal to its participation percentage no later than five (5) business days before it is required to mobilize for work. For subcontractors, project start-up costs can also be significant. A subcontractor that has limited resources and access to credit may find that expenses inhibit its ability to bid on SBBC's contracts. To ensure transparency, subcontractors should be notified by email or facsimile when prime contractors receive mobilization payments from SBBC. The information should also be posted on SBBC's website.

2. Expedites Subcontractor Payment Standards

When working with general contractors with SBBC, 90% of their payments are late. Payments are typically 60 to 75 days late. Usually they blame it on SBBC, but I don't complain because they will blackball you.

Expand the expedited payment program to require SBBC prime contractors to pay M/WBE subcontractors, subconsultants, truckers, and suppliers in a timely manner. Prime contractors should be required to pay their M/WBE subcontractors within five (5) days of their receipt of payment. If there is a disputed invoice between a prime contractor and its subcontractor, the prime contractor should issue a written notice within three (3) days, and disputed invoices should be paid within five (5) days of being resolved. SBBC should not release final payment to a prime contractor until an audit of previous subcontractor payments has been satisfactorily completed.

3. Notify Subcontractors Regarding Requested Substitution

When a prime contractor requests for substitution or to self-perform work for a listed subcontractor, SBBC should give the listed subcontractor prompt, written notice of the prime contractor's request for substitution and the reason for the request. SBBC should provide the subcontractor a notification letter outlining the prime contractor's allegations.

The notification letter should be sent to the listed subcontractor by certified or registered mail. It should have a description of the scope of the work subject to the proposed substitution. A copy of the contractor's request for the substitution should be enclosed with the notification letter. The notification letter should also advise the subcontractor that within 10 working days from the date of receipt of the notice written objections to the substitution must be submitted.



F. Contract Monitoring and Reporting

1. Fully Staff the SDOP Office

SBBC's SDOP Office staff should be increased to fulfill the services that will be required if the recommended M/WBE program enhancements are implemented. Adequate staffing is necessary to implement an effective M/WBE program. The staff should have knowledge of SBBC's procurement standards, State of Florida contracting law, and affirmative action programs.

The personnel should also have professional knowledge of the relevant industries and relevant best management practices. Education levels and professional experience should include business administration and business processes. Computer and database knowledge should be a requisite skill. All staff should have an expressed interest in increasing the participation of M/WBEs in all facets of SBBC's contracting. The staff's performance standards should include objective measures of the extent to which the M/WBE goals are attained.

2. Establish an M/WBE Ombudsperson Position

SBBC should authorize the appointment of an ombudsperson as a resource to support the SDOP staff. The ombudsperson would have the authority to receive, investigate and mediate complaints concerning the actions of SBBC staff, its prime contractors, and subcontractors. The ombudsperson would operate independently of the SDOP Office and should be appointed.

3. Develop Department-Wide Staff Training and Program Enhancements Implementation

A manual to train SBBC staff on the enhanced procedures and process for procurements should be promulgated and distributed to key SBBC procurement staff and SDOP staff. The manual will act as a tool to implement the program enhancements recommended in this report.

Corresponding staff training modules should be implemented; the training should provide background on the SDOP, its policies, and its objectives. Managers and departmental staff should be required to attend annual training seminars to ensure that they are abreast of any changes in the state and local regulations and enhancements to SBBC's SDOP. The training module should also be included in the new employee training.

4. Conduct Routine Post-Award Contract Compliance Monitoring

Monthly contract compliance monitoring should be conducted to ensure that the subcontractor participation listed in bids, proposals, and Statements of Qualification is achieved for the contract duration. After the contract is awarded regular compliance



monitoring should verify the prime contractor's utilization of the listed subcontractors. Consistent contract compliance monitoring could minimize the hardships experienced by all subcontractors due to unauthorized substitutions and late payments.

The following contract compliance monitoring methods are recommended:

- Track and report subcontractor utilization in an electronic database utilizing the updated M/WBE involvement reporting web-based payment application
- Impose penalties for failure to pay a listed subcontractor for work performed or for unauthorized substitution
- Collect the canceled checks written to subcontractors in order to verify monthly payment information
- Require submission of a subcontractor participation report including verification of prior payment with the prime contractor's payment request
- Notify prime contractors and subcontractors when there is non-compliance with program requirements
- Publish prime contractor payments on SBBC's website to inform subcontractors when the prime contractor is paid
- Verify subcontractor prior invoice payment on the prime contractor's request for payment
- Establish a secure page on the Procurement & Warehousing Department's website for subcontractors to report nonpayment

G. Website Enhancement Strategies

The Procurement & Warehousing Services Department's Uniform Resource Locator (URL) was evaluated in June 2015. The objective of the review was to analyze its usability, functionality, and informational value for contractors inquiring about doing business with SBBC. The review disclosed that the Department's URL was a distinct address that was not hosted as a webpage under SBBC's primary domain name. Since the Department is an operational unit of SBBC, it would be appropriate for the Department's URL to be a webpage. Given the fact that the Department has a website instead of a webpage, the recommendations are presented in two sections: (1) the consolidation of the Department's website into a webpage housed within SBBC's website and (2) enhancements to the Department's current website that would be incorporated into the Department's webpage.

Since the Department's website provides useful information in a clear and organized manner, the transition from a website to a webpage would minimally involve changing the Department's URLs and incorporating a link to SBBC's website. Several modifications to the website could enhance its content and functionality for the business user. The website has a loading time of less than 10 seconds using Google Chrome, Google Chrome for Mobile, Mozilla Firefox, and Microsoft Internet Explorer. All webpages were found to be concise, explanatory, and on a Flesch-Kincaid 9.7 grade reading level. The Flesch-Kincaid determination is a readability test designed to indicate



how difficult a reading passage is to understand, measured by grade level. Given its grade rating, the website is accessible to the vast majority of users. However recommendations are presented to enhance the website's utility and functionality for its end users.

1. Recommendations for Website Consolidation

a. Provide a Uniform URL for SBBC Departments

SBBC has at least six different department websites under its management, as illustrated by Figures 12.01 through 12.13 below. The use of different domain names can confuse users exploring the website and should be avoided because they can hinder the efficient search for needed information for efficiency. All departments' web addresses should have the same originating path as SBBC's website URL (<http://www.browardschools.com>) and should be set up as webpages.

Since the URL to the Department's homepage (<http://www.broward.k12.fl.us>) is not a public website, the user is re-routed directly to SBBC's website (<http://www.browardschools.com>). The Department's website address does not allow direct access from the SBBC website because it is not within SBBC's website's list of secondary domain page names.

As a webpage, the Department's address would be formatted as a forward slash followed by the path location (<http://www.browardschools.com/Supply>). An example of the expected webpage formatting for a department within an agency is found on the Jobs webpage, Figure 12.02 below. The Jobs webpage uses the SBBC originating path, followed by a forward slash and the page location within the domain (<http://www.browardschools.com/Jobs>). From this URL pathway, the user can hyperlink directly to SBBC's Jobs page and hyperlink from the Jobs page to SBBC's homepage.



Figure 12.01: Procurement & Warehousing Services Department's Website

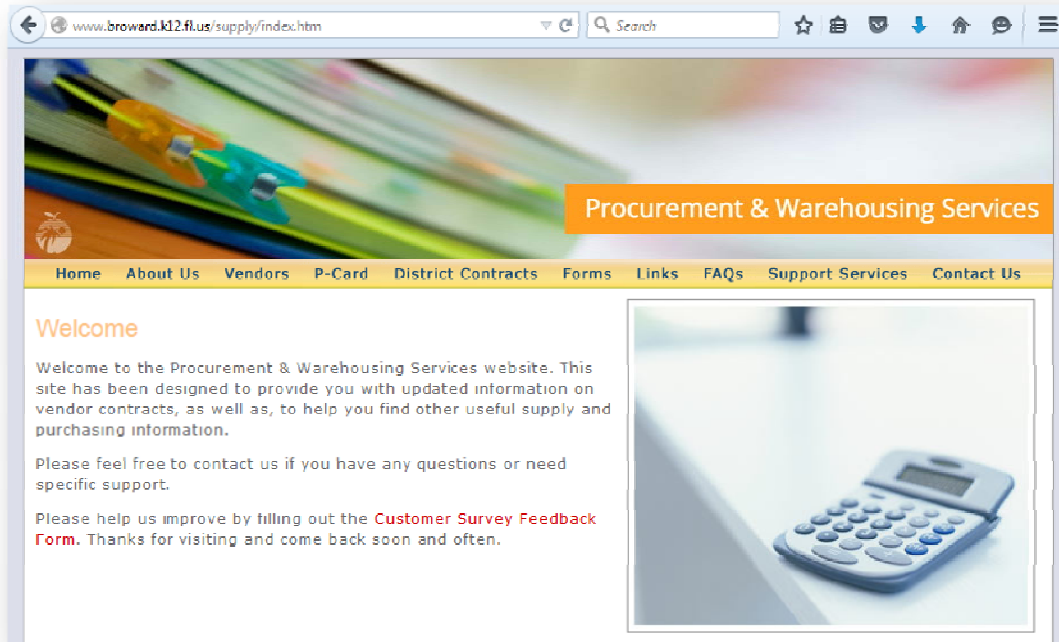


Figure 12.02: School Board of Broward County Job's Webpage



Figure 12.03: School Board of Broward County's Website



b. Use a Single Logo Across Webpages and Departments

The logo used on the Department’s website differs from the logo on SBBC’s homepage as well as other department websites. All of the SBBC’s department webpages should use the same logo. The use of the same logo would provide a consistent and professional appearance for the webpages. Examples of the different logos used by the various departments are depicted in Figures 12.04 to 12.11 below:

Figure 12.04: SBBC Logo Used on the Procurement & Warehousing Services Department’s Website



Figure 12.05: SBBC Logo Used on the School Board of Broward County’s Website



Figure 12.06: SBBC Logo Used on the Procurement & Warehousing Services – Construction Contracts Department’s Website



Figure 12.07: SBBC Logo Used on Materials Logistic Website



Figure 12.08: SBBC Logo Used on the Facilities Design & Construction Department Website



Figure 12.09: SBBC Logo Used on the Office of the Chief Strategy & Operations Officer Website



Figure 12.10: SBBC Logo Used on the Information Technology: Standards Website



Figure 12.11: SBBC Logo Used on the SBBC Policies Website



c. Link SBBC’s Logo to the Homepage

The SBBC logo on every webpage within the SBBC’s website should link to the homepage. The current logo on the Department’s website is relatively small and the color contrasts with the background of the website limits visibility for the user. The logo should have an increased size and placement, with the colors modified to make it more easily visible.

d. Provide Accessibility for Persons with Disabilities

Users with disabilities can contact SBBC for reasonable accommodations. In the interest of providing immediate access without staff assistance, SBBC should consider a text-to-speech feature. The text-to-speech feature reads text on the webpage aloud, thereby removing additional barriers for visually impaired individuals. It should also reduce the processing time necessary for staff to respond to inquiries regarding accessibility.

e. Offer Mobile-Optimized Website

Mobile devices such as smartphones, tablets, and tablet hybrids are being used more increasingly to perform tasks traditionally done on personal computers. Businesses are also focusing on mobile-first approaches to reach consumers. In order to accommodate the growing number of mobile users, the SBBC’s website should be mobile-optimized to ensure that all website features function properly on mobile devices. SBBC should offer a dedicated mobile site to tailor content to its users browsing on a handheld device. A mobile view and desktop view switch should also be provided.

2. Recommendations for the Procurement & Warehousing Services Department Website

There are modifications that could enhance the current website’s content and structure for the business user that should be incorporated to enhance its functionality as a webpage. Errors detected in some of the hyperlinks and formatting should be corrected.



a. Functionality

i. Control External Links

External links connecting to Portable Document Format (PDF) files should open in a new tab instead of leading the user away from the Department’s webpage. Numerous links load within the parent window causing the user to experience loss of navigation from the Department’s webpage. The Vendor Registration form, the Certification and Recertification application, the M/WBE brochure, and the Certified M/WBE’s Vendor List are examples of PDF files that load within the parent window. Redirecting the user to a different webpage without notification can be confusing for those seeking specific contract information. A more cohesive structure of the Department’s webpage would greatly enhance accessibility and overall usability.

ii. Provide a Consistent Layout

Navigation of the Department’s website is hampered by inconsistent layouts. Many of the links lead to external PDF files or other SBBC websites. Files less than three pages in length do not need to be in PDF. The information related to SBBC’s procurement process should be housed within the Department’s webpage. Examples of links that should be revised are the Request for Proposals Process Flow Chart, Vendor Registration Procedures, and Consultant Hiring Guidelines. Some links should be removed completely, with the information consolidated into other subpages. For example, the current Support Services link connects to the Support Services website for all of SBBC. The only relevant information for the Procurement & Warehousing Department was one staff’s contact information that can easily be added to the Department’s *Contact Us* webpage.

iii. Provide Consistent Formatting

The *Links Page* on the Department’s website (<http://www.broward.k12.fl.us/supply/links/>) has inconsistent fonts and colors. Text on the Forms page (<http://www.broward.k12.fl.us/supply/forms/>) are all uppercase while sentences on the Vendors page (<http://www.broward.k12.fl.us/supply/vendors>) are first initial uppercase. All text on the proposed webpage should follow consistent font, color, and capitalization rules. Figures 12.12 and 12.13 depict the current design issues’ website.



Figure 12.12: Links Page of the Department's Website

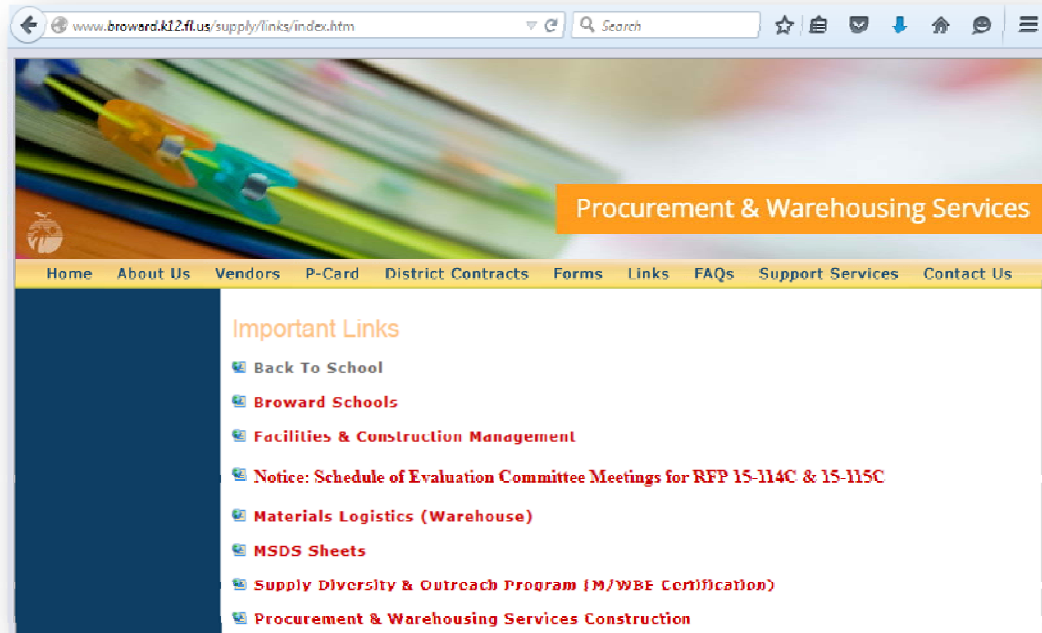
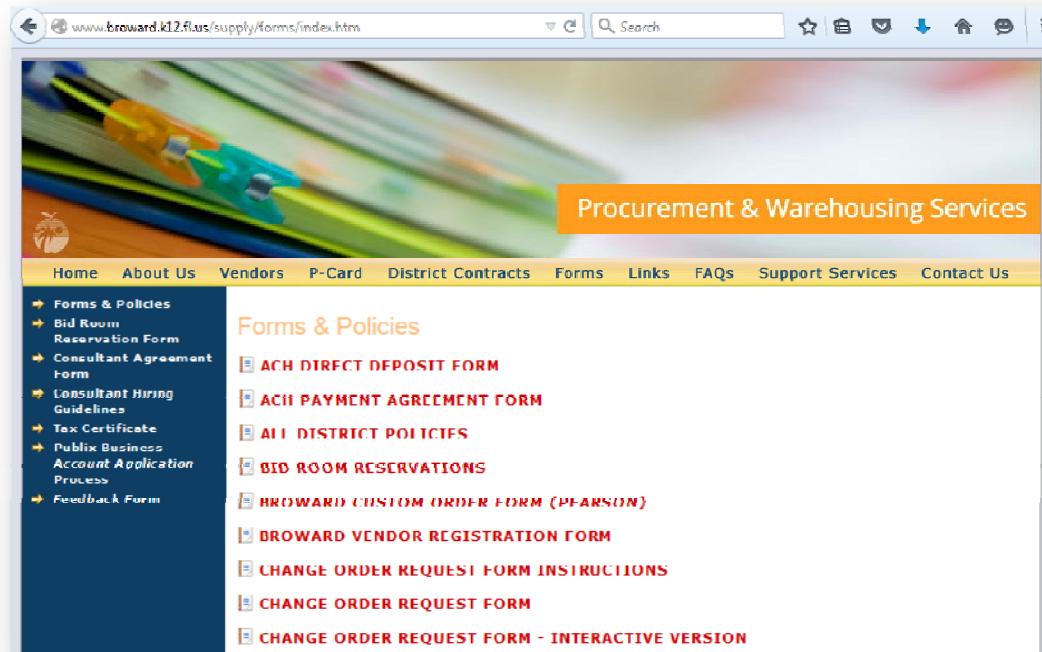


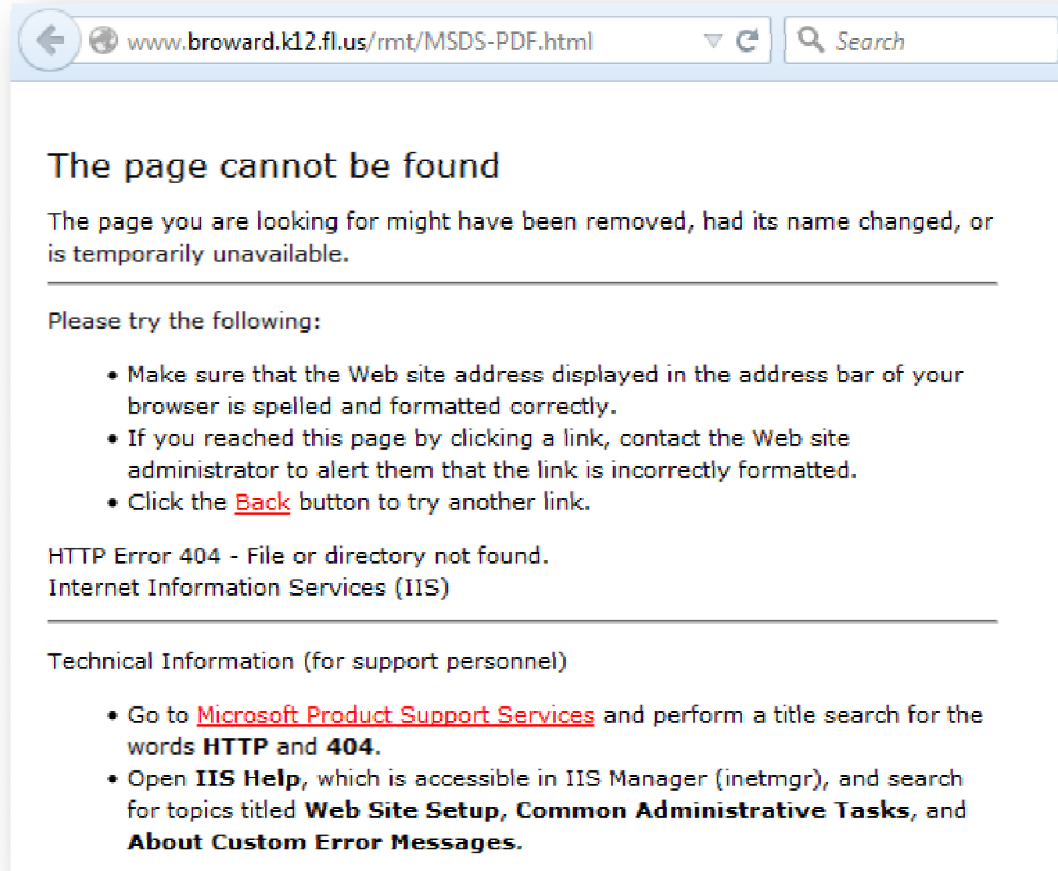
Figure 12.13: Forms Page of the Department's Website



iv. Maintain Links

Some links on the subpages, pages and links within webpages, display an error message that states that the document or file cannot be found, as shown in Figure 12.14.

Figure 12.14: Error Pages on the Website



Every subpage on the webpage should contain up-to-date and functioning links. Listed below are webpages on the Department's current website that generate errors or could not be found messages:

- Vendors > Jessica Lundsford Act-F.S. 1012.465
(http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=Ch101n2/Sec465.HTM)
- District Contracts > Technology Contracts > AUTOMATED MESSAGING SOLUTION (RFP/Bid Number 10-081N)
(http://www.broward.k12.fl.us/supply/docs/contracts/10-081N_Automated_Messaging_Solution.pdf)



- District Contracts > Technology Contracts > TELECOMMUNICATIONS, INTERNAL CONNECTIONS AND INTERNET (RFP/Bid Number 29-015N)
(http://www.broward.k12.fl.us/supply/docs/contracts/29-015N_%20Telecommunications.pdf)
- District Contracts > Commodity Codes by Purchasing Agent
(<http://www.broward.k12.fl.us/supply/docs/forms/COMMODITY%20LISTING%20-%20By%20Module%20-%205-14-14.pdf>)
- Forms > Forms & Policies > Bid Room Reservations
(http://www.broward.k12.fl.us/supply/docs/forms/Bid_Room_Reservation%20Revised.pdf)
- Forms > Bid Room Reservation Forms
(http://www.broward.k12.fl.us/supply/docs/forms/Bid_Room_Reservation%20Revised%20final.pdf)
- Links > Back To School
(<http://www.broward.k12.fl.us/supply/docs/forms/Back%20To%20School%202009.pdf>)
- Links > MSDS Sheets
(<http://www.broward.k12.fl.us/rmt/MSDS-PDF.html>)

Links and information that are not relevant to Procurement & Warehousing Services Department, such as the *Back to School* link listed above should be removed.

b. Content Enhancements

i. Improve the Frequently Asked Questions Page

The Frequently Asked Questions (FAQ) page should include answers to general questions submitted by users. The FAQ page should also include a table of contents to allow users to easily determine if the answer to their question is already archived. In addition, delineating the questions in a bold font would allow users to quickly discern the response to their question while scrolling the page.

ii. Update Information on the Subpages

There are subpages that are not current, while others are blank. The Events page (<http://www.broward.k12.fl.us/supply/vendors/events.htm>) is not updated and the Defaulted Vendors page (http://www.broward.k12.fl.us/supply/vendors/def_ven.htm) is blank, listing no defaulted vendors. The Defaulted Vendors page notes that the last revision was performed on April 19, 2006. As such, this page needs to be updated with a more recent record of defaulted vendors. All the information on the webpage should be updated, as appropriate.



iii. Rename or Reclassify Links

Acronyms should not be used to name the links. The SIU link on the Vendors webpage connects to Broward District Schools Police Department (<http://www.broward.k12.fl.us/police/>). The purpose of the SIU link is to provide forms, memorandum, the Critical Resource Manual, and documentation of policy changes. These applications refer only to department heads, school administrators, or confidential persons. It also has no description as to the service or information provided by the file. Links that are only used by internal staff such as the one for SIU, should be removed.

iv. Publish Business Procurement Processes

All manuals should be published in a standardized, downloadable, and readable format. Providing an open source for information on the procurement process will engender the public's trust in the procurement process and make procurement decisions more transparent. In addition, businesses would have the information needed to make informed judgments about doing business with SBBC. Furthermore, the time a business must commit to locating information related to the contracting process could be reduced. It would also be a cost saving to reduce the amount of SBBC staff time spent on responding to a myriad of requests from businesses seeking information about the contracting process. An open source would not only conserve staff time and resources, but it would also foster goodwill with SBBC's small, minority, and women-owned businesses.

v. Maintain Virtual Plan Room

Online access to plans and specifications could reduce the cost for SBBC to produce the documents, and the costs for contractors to acquire them. Such software could reduce the need to designate or pay for a space for a physical plan room and reduce the reproduction cost for contractors.

vi. Publish Intent to Award

SBBC should notify all bidders of its intent to award the contract by mail and posting on its website prior to the award of the contract. The level of M/WBE participation should also be posted.

vii. Publish Prime Contractor Awards and Payments

Prime contractor payments should be posted on SBBC's website as a means of informing the public and mitigating the late payment problem. Late payments can be a disincentive for SBEs and M/WBEs wanting to perform as a subcontractor. To facilitate use of the published postings, the website should be updated weekly or bi-weekly on the same day of the week. Subcontractors should be able to view prime payments made for all project. This system will provide subcontractors with information on payments made to prime contractors, thereby reducing subcontractors' inquiries about payment.



viii. Post Key Staff Contact Information on the Contact Us Page

Names, telephone numbers, email addresses, and facsimile numbers for key staff within the Departments that participate in the Procurement process should be published for the convenience of vendors and customers. Office hours and addresses should also be published. Minimally, the contact information for key staff at the Procurement & Warehousing Services Department, the Capital Budget Department, the Facilities Design & Construction Department, and the Risk Management Department should be published.

ix. List All Certified Subcontractors

The *Vendors M/WBE Information* page, which contains lists of certified M/WBE's Vendors, should be searchable so that the prime contractors and various department officials can target their search with keywords—such as business name, industry, location of the business, and ethnicity of the business owner—should be developed to ensure that information on certified vendors is made accessible. The directory of certified contractors, consultants, truckers, and suppliers, should be available on the website in both PDF and Excel formats.

VI. SUMMARY

This chapter provided a summary of the statistical findings and an assessment of the effectiveness of SBBC's Supplier Diversity and Outreach Program. Given the finding of statistically significant disparity in the award of both prime contracts and subcontracts, race and gender-neutral and race and gender specific recommendations have been offered to increase the level of contracting with M/WBEs. Since SBBC may implement race and gender-neutral recommendations without reliance on the statistical results, these proposed race and gender-neutral enhancements to the SDOP could benefit all small businesses.

The race and gender-specific recommendations, on the other hand, are applicable only to the ethnic groups where statistically significant disparity was documented. Race and gender-conscious remedies seek to bring the use of the underutilized in parity with their availability.





MASON TILLMAN

ASSOCIATES, LTD

www.masontillman.com