



DISPARITY STUDY

FINAL REPORT
JULY 2018



MASON TILLMAN
ASSOCIATES, L.P.

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	1-7
B. ULTIMATE BURDEN OF PROOF	1-7
IV. CROSON EVIDENTIARY FRAMEWORK.....	1-8
A. ACTIVE OR PASSIVE PARTICIPATION	1-9
B. SYSTEMIC DISCRIMINATORY EXCLUSION	1-11
C. ANECDOTAL EVIDENCE	1-19
D. REMEDIAL STATUTORY SCHEME	1-24
V. CONSIDERATION OF RACE-NEUTRAL OPTIONS	1-27
VI. CONCLUSION	1-28
VII. LIST OF AUTHORITIES	1-29
CHAPTER 2: CONTRACTING AND PROCUREMENT ANALYSIS.....	2-1
I. INTRODUCTION.....	2-1
II. GOVERNING LAWS AND REGULATIONS	2-2
A. CINCINNATI MUNICIPAL CODES.....	2-2
B. CINCINNATI ADMINISTRATIVE REGULATIONS	2-4
III. INDUSTRIES	2-4
A. INDUSTRIES AND DEFINITIONS	2-4
IV. PROCUREMENT PROCESS OVERVIEW	2-5
A. DECENTRALIZED PROCUREMENTS	2-6
B. PROCUREMENT BY QUOTES	2-6



Table of Contents

C. PUBLISHED BIDS	2-6
D. FORMAL PROCUREMENTS	2-7
E. OTHER PROCUREMENTS	2-7
V. SMALL BUSINESS PROGRAM	2-8
A. ELIGIBILITY.....	2-9
B. CERTIFICATION.....	2-10
C. SBE GOALS.....	2-10
CHAPTER 3: PRIME CONTRACTOR UTILIZATION ANALYSIS.....	3-1
I. INTRODUCTION.....	3-1
II. PRIME CONTRACT DATA SOURCES.....	3-2
III. PRIME CONTRACTOR UTILIZATION THRESHOLDS	3-3
IV. PRIME CONTRACTOR UTILIZATION.....	3-3
A. ALL PRIME CONTRACTORS	3-3
B. HIGHLY USED PRIME CONTRACTORS.....	3-4
C. HIGHLY USED CONSTRUCTION PRIME CONTRACTORS	3-5
D. HIGHLY USED PROFESSIONAL SERVICES PRIME CONTRACTORS	3-6
E. HIGHLY USED SUPPLIES AND SERVICES PRIME CONTRACTORS	3-8
F. ALL PRIME CONTRACTS BY INDUSTRY	3-10
G. PRIME CONTRACTS \$250,000 AND OVER, BY INDUSTRY	3-16
H. PRIME CONTRACTS \$50,001 TO \$249,999, BY INDUSTRY	3-22
I. PRIME CONTRACTS \$5,001 TO \$50,000, BY INDUSTRY	3-28
J. INFORMAL CONTRACTS BY INDUSTRY	3-34
V. SUMMARY	3-38
CHAPTER 4: SUBCONTRACTOR UTILIZATION ANALYSIS.....	4-1
I. INTRODUCTION.....	4-1
II. DATA SOURCES.....	4-1
III. SUBCONTRACTOR UTILIZATION	4-2
A. ALL SUBCONTRACTS.....	4-2
B. ALL SUBCONTRACTS BY INDUSTRY	4-3
IV. SUMMARY	4-7



Table of Contents

CHAPTER 5:	MARKET AREA ANALYSIS.....	5-1
I.	MARKET AREA DEFINITION	5-1
	A. LEGAL CRITERIA FOR MARKET AREA.....	5-1
	B. APPLICATION OF THE CROSON STANDARD.....	5-2
II.	MARKET AREA ANALYSIS	5-4
III.	CITY OF CINCINNATI MARKET AREA.....	5-9
CHAPTER 6:	PRIME CONTRACTOR AND SUBCONTRACTOR AVAILABILITY ANALYSIS.....	6-1
I.	INTRODUCTION.....	6-1
II.	PRIME CONTRACTOR AVAILABILITY DATA SOURCES	6-1
	A. IDENTIFICATION OF WILLING BUSINESSES WITHIN THE MARKET AREA.....	6-1
	B. PRIME CONTRACTOR SOURCES	6-2
	C. DETERMINATION OF WILLINGNESS	6-3
	D. DISTRIBUTION OF AVAILABLE PRIME CONTRACTORS BY SOURCE, ETHNICITY, AND GENDER	6-3
	E. SIZE OF PRIME CONTRACTS ANALYZED.....	6-8
	F. BUSINESS CAPACITY E-SURVEY.....	6-13
	G. LARGEST M/WBE CONTRACT AWARDED BY INDUSTRY	6-23
III.	PRIME CONTRACTOR AVAILABILITY ANALYSIS.....	6-24
	A. ALL PRIME CONTRACTOR AVAILABILITY	6-24
	B. CONSTRUCTION PRIME CONTRACTOR AVAILABILITY	6-26
	C. PROFESSIONAL SERVICES PRIME CONTRACTOR AVAILABILITY	6-28
	D. SUPPLIES AND SERVICES PRIME CONTRACTOR AVAILABILITY	6-30
IV.	SUBCONTRACTOR AVAILABILITY ANALYSIS	6-32
	A. SOURCE OF POTENTIALLY WILLING AND ABLE SUBCONTRACTORS.....	6-32
	B. DETERMINATION OF WILLINGNESS AND CAPACITY	6-32
	C. SIZE OF SUBCONTRACTS ANALYZED.....	6-33
	D. CONSTRUCTION SUBCONTRACTOR AVAILABILITY.....	6-37
	E. PROFESSIONAL SERVICES SUBCONTRACTOR AVAILABILITY	6-39
V.	SUMMARY... ..	6-41



Table of Contents

CHAPTER 7: PRIME CONTRACT DISPARITY ANALYSIS	7-1
I. INTRODUCTION.....	7-1
II. DISPARITY ANALYSIS	7-3
A. DISPARITY ANALYSIS: ALL PRIME CONTRACTS.....	7-4
B. DISPARITY ANALYSIS: ALL PRIME CONTRACTS \$250,000 AND OVER BY INDUSTRY	7-16
C. DISPARITY ANALYSIS: ALL PRIME CONTRACTS \$50,001 TO \$249,999 BY INDUSTRY	7-28
D. DISPARITY ANALYSIS: ALL PRIME CONTRACTS \$5,001 TO \$50,000 BY INDUSTRY	7-40
E. DISPARITY ANALYSIS: ALL PRIME CONTRACTS \$5,000 AND UNDER BY INDUSTRY	7-52
III. DISPARITY ANALYSIS SUMMARY	7-61
A. ALL PRIME CONTRACTS.....	7-61
B. CONSTRUCTION PRIME CONTRACTS	7-63
C. PROFESSIONAL SERVICES PRIME CONTRACTS.....	7-65
D. SUPPLIES AND SERVICES PRIME CONTRACTS	7-67
CHAPTER 8: SUBCONTRACT DISPARITY ANALYSIS	8-1
I. INTRODUCTION.....	8-1
II. DISPARITY ANALYSIS	8-2
III. DISPARITY ANALYSIS: ALL SUBCONTRACTS, BY INDUSTRY	8-3
A. CONSTRUCTION SUBCONTRACTS	8-3
B. PROFESSIONAL SERVICES SUBCONTRACTS	8-6
IV. SUBCONTRACT DISPARITY SUMMARY	8-9
CHAPTER 9: REGRESSION ANALYSIS	9-1
I. INTRODUCTION.....	9-1
II. LEGAL ANALYSIS	9-2
A. PASSIVE DISCRIMINATION	9-2
B. NARROW TAILORING	9-3
C. CONCLUSION.....	9-4



Table of Contents

III. REGRESSION ANALYSIS METHODOLOGY	9-4
IV. DATASETS ANALYZED	9-5
V. REGRESSION MODELS DEFINED	9-6
A. BUSINESS OWNERSHIP ANALYSIS	9-6
B. THE EARNINGS DISPARITY ANALYSIS.....	9-7
VI. FINDINGS.....	9-9
A. BUSINESS OWNERSHIP ANALYSIS	9-9
B. BUSINESS OWNERSHIP ANALYSIS CONCLUSION	9-14
C. BUSINESS EARNINGS ANALYSIS.....	9-15
D. BUSINESS EARNINGS ANALYSIS CONCLUSION	9-20
VII. CONCLUSION	9-20
CHAPTER 10: ANECDOTAL ANALYSIS	10-1
I. INTRODUCTION.....	10-1
A. ANECDOTAL EVIDENCE OF DISCRIMINATION - ACTIVE AND PASSIVE PARTICIPATION	10-2
B. ANECDOTAL METHODOLOGY	10-2
II. BUSINESS OWNER RESPONSE CATEGORIES	10-4
A. RACIAL BARRIERS	10-5
B. DIFFICULTY WITH THE CONTRACTING COMMUNITY	10-7
C. GOOD OLD BOYS NETWORK	10-11
D. DIFFICULTY NAVIGATING THE BID PROCESS	10-15
E. INSUFFICIENT TIME TO RESPOND TO BID OR PROPOSAL.....	10-20
F. SELECTION COMMITTEE.....	10-22
G. PRIME CONTRACTORS CIRCUMVENT THE SBE PROGRAM REQUIREMENTS.....	10-23
H. PROBLEMS WITH THE SBE CERTIFICATION PROCESS	10-24
I. BARRIERS TO FINANCIAL RESOURCES	10-27
J. LATE PAYMENTS FROM THE CITY	10-29
K. LATE PAYMENTS FROM PRIME CONTRACTORS	10-32
L. COMMENTS ABOUT THE CITY'S SBE PROGRAM	10-33
M. EXEMPLARY BUSINESS PRACTICES BY THE CITY	10-39
N. PRIVATE SECTOR EXPERIENCES	10-42
O. RECOMMENDATIONS TO INCREASE SBE PARTICIPATION ON THE CITY'S CONTRACTS	10-43



Table of Contents

III. SUMMARY...	10-46
CHAPTER 11: RECOMMENDATIONS	11-1
I. INTRODUCTION	11-1
II. DISPARITY ANALYSIS FINDINGS	11-1
A. PRIME CONTRACTS	11-2
B. SUBCONTRACTS	11-3
C. PRIME CONTRACTOR DISPARITY FINDINGS	11-3
D. SUBCONTRACTOR DISPARITY FINDINGS	11-7
III. RACE AND GENDER-CONSCIOUS RECOMMENDATIONS	11-7
A. PROMULGATE A DIVERSITY AND INCLUSION PROGRAM	11-8
B. PRIME CONTRACT REMEDIES	11-10
C. SUBCONTRACT REMEDIES	11-13
D. ESTABLISH COMMUNITY BENEFITS INITIATIVE	11-16
IV. SMALL BUSINESS ENTERPRISE PROGRAM ANALYSIS FINDINGS	11-17
A. SBE PROGRAM REVIEW	11-18
B. SBE PROGRAM EFFECTIVENESS	11-19
C. SBE PRIME CONTRACTS BY THRESHOLD	11-21
D. COMPARATIVE ANALYSIS OF OTHER CITIES' INCLUSION PROGRAMS	11-24
V. RACE AND GENDER-NEUTRAL RECOMMENDATIONS	11-25
A. PRE-AWARD RECOMMENDATIONS	11-25
B. POST-AWARD RECOMMENDATIONS	11-31
VI. ADMINISTRATIVE RECOMMENDATIONS	11-31
A. WEBSITE ENHANCEMENTS	11-31
B. DATA MANAGEMENT ENHANCEMENTS	11-33



List of Tables

TABLE 2.01: GOVERNING LAWS AND REGULATIONS	2-2
TABLE 2.02: CITY OF CINCINNATI'S PROCUREMENT PROCESS	2-10
TABLE 3.01: BUSINESS ETHNIC AND GENDER GROUPS	3-2
TABLE 3.02: UTILIZATION ANALYSIS CONTRACT THRESHOLDS	3-3
TABLE 3.03: TOTAL PRIME CONTRACTS AND DOLLARS EXPENDED: ALL INDUSTRIES, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	3-4
TABLE 3.04: TOTAL PRIME CONTRACTS	3-4
TABLE 3.05: ALL PRIME CONTRACTS DISTRIBUTED BY NUMBER OF VENDORS.....	3-5
TABLE 3.06: TOP 38 HIGHLY USED PRIME CONTRACTORS	3-5
TABLE 3.07: CONSTRUCTION PRIME CONTRACTS	3-5
TABLE 3.08: CONSTRUCTION PRIME CONTRACTS DISTRIBUTED BY NUMBER OF VENDORS	3-6
TABLE 3.09: TOP 12 HIGHLY USED CONSTRUCTION PRIME CONTRACTORS	3-6
TABLE 3.10 PROFESSIONAL SERVICES PRIME CONTRACTS	3-7
TABLE 3.11: PROFESSIONAL SERVICES PRIME CONTRACTS DISTRIBUTED BY NUMBER OF VENDORS.....	3-7
TABLE 3.12: TOP 14 HIGHLY USED PROFESSIONAL SERVICES PRIME CONTRACTORS	3-8
TABLE 3.13: SUPPLIES AND SERVICES PRIME CONTRACTS	3-8
TABLE 3.14: SUPPLIES AND SERVICES PRIME CONTRACTS DISTRIBUTED BY NUMBER OF VENDORS.....	3-9
TABLE 3.15: TOP 29 HIGHLY USED SUPPLIES AND SERVICES PRIME CONTRACTORS.....	3-9
TABLE 3.16: CONSTRUCTION PRIME CONTRACTOR UTILIZATION: ALL CONTRACTS, JANUARY 1, 2009, TO DECEMBER 31, 2013	3-11



TABLE 3.17: PROFESSIONAL SERVICES PRIME CONTRACTOR UTILIZATION: ALL CONTRACTS, JANUARY 1, 2009, TO DECEMBER 31, 2013	3-13
TABLE 3.18: SUPPLIES AND SERVICES PRIME CONTRACTOR UTILIZATION: ALL CONTRACTS, JANUARY 1, 2009, TO DECEMBER 31, 2013	3-15
TABLE 3.19: CONSTRUCTION PRIME CONTRACTOR UTILIZATION: CONTRACTS \$250,000 AND OVER, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	3-17
TABLE 3.20: PROFESSIONAL SERVICES PRIME CONTRACTOR UTILIZATION: CONTRACTS \$250,000 AND OVER, JANUARY 1, 2009, TO DECEMBER 31, 2013	3-19
TABLE 3.21: SUPPLIES AND SERVICES PRIME CONTRACTOR UTILIZATION: CONTRACTS \$250,000 AND OVER, JANUARY 1, 2009, TO DECEMBER 31, 2013	3-21
TABLE 3.22: CONSTRUCTION PRIME CONTRACTOR UTILIZATION: CONTRACTS \$50,001 TO \$249,999, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	3-23
TABLE 3.23: PROFESSIONAL SERVICES PRIME CONTRACTOR UTILIZATION: CONTRACTS \$50,001 TO \$249,999, JANUARY 1, 2009, TO DECEMBER 31, 2013	3-25
TABLE 3.24: SUPPLIES AND SERVICES PRIME CONTRACTOR UTILIZATION: CONTRACTS \$50,001 TO \$249,999, JANUARY 1, 2009, TO DECEMBER 31, 2013	3-27
TABLE 3.25: CONSTRUCTION PRIME CONTRACTOR UTILIZATION: CONTRACTS \$5,001 TO \$50,000, JANUARY 1, 2009, TO DECEMBER 31, 2013	3-29
TABLE 3.26: PROFESSIONAL SERVICES PRIME CONTRACTOR UTILIZATION: CONTRACTS \$5,001 TO \$50,000, JANUARY 1, 2009, TO DECEMBER 31, 2013	3-31
TABLE 3.27: SUPPLIES AND SERVICES PRIME CONTRACTOR UTILIZATION: CONTRACTS \$5,001 TO \$50,000, JANUARY 1, 2009, TO DECEMBER 31, 2013	3-33
TABLE 3.28: CONSTRUCTION PRIME CONTRACTOR UTILIZATION: CONTRACTS \$5,000 AND UNDER, JANUARY 1, 2009, TO DECEMBER 31, 2013	3-35
TABLE 3.29: SUPPLIES AND SERVICES PRIME CONTRACTOR UTILIZATION: CONTRACTS \$5,000 AND UNDER, JANUARY 1, 2009, TO DECEMBER 31, 2013	3-37



TABLE 4.01: TOTAL SUBCONTRACTS AWARDED AND DOLLARS EXPENDED, ALL INDUSTRIES, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	4-2
TABLE 4.02: CONSTRUCTION SUBCONTRACTOR UTILIZATION, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	4-4
TABLE 4.03: PROFESSIONAL SERVICES SUBCONTRACTOR UTILIZATION, JANUARY 1, 2009, TO DECEMBER 31, 2013	4-6
TABLE 5.01: DISTRIBUTION OF ALL CONTRACTS.....	5-5
TABLE 5.02: DISTRIBUTION OF CONSTRUCTION CONTRACTS.....	5-6
TABLE 5.03: DISTRIBUTION OF PROFESSIONAL SERVICES CONTRACTS.....	5-7
TABLE 5.04: DISTRIBUTION OF SUPPLIES AND SERVICES CONTRACTS	5-8
TABLE 5.05: DISTRIBUTION OF THE CITY OF CINCINNATI'S PRIME CONTRACTS	5-9
TABLE 6.01: PRIME CONTRACTOR AVAILABILITY DATA SOURCES.....	6-2
TABLE 6.02: DISTRIBUTION OF PRIME CONTRACTOR AVAILABILITY DATA SOURCES, ALL INDUSTRIES	6-4
TABLE 6.03: DISTRIBUTION OF PRIME CONTRACTOR AVAILABILITY DATA SOURCES, CONSTRUCTION.....	6-5
TABLE 6.04: DISTRIBUTION OF PRIME CONTRACTOR AVAILABILITY DATA SOURCES, PROFESSIONAL SERVICES	6-6
TABLE 6.05: DISTRIBUTION OF PRIME CONTRACTOR AVAILABILITY DATA SOURCES, SUPPLIES AND SERVICES	6-7
TABLE 6.06: ALL INDUSTRY PRIME CONTRACTS BY SIZE, ...	6-9
TABLE 6.07: CONSTRUCTION PRIME CONTRACTS BY SIZE, ...	6-10
TABLE 6.08: PROFESSIONAL SERVICES PRIME CONTRACTS BY SIZE, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	6-10
TABLE 6.09: SUPPLIES AND SERVICES PRIME CONTRACTS BY SIZE, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	6-12
TABLE 6.10: ETHNICITY AND GENDER OF BUSINESSES	6-15
TABLE 6.11: PRIMARY INDUSTRY	6-16



TABLE 6.12: ANNUAL GROSS REVENUE: ALL INDUSTRIES	6-17
TABLE 6.13: ANNUAL GROSS REVENUE ORDERED LOGISTIC REGRESSION: ALL INDUSTRIES, ALL ETHNICITIES	6-18
TABLE 6.14: ANNUAL GROSS REVENUE ORDERED LOGISTIC REGRESSION: NON- M/WBE	6-18
TABLE 6.15: ANNUAL GROSS REVENUE ORDERED LOGISTIC REGRESSION: CAUCASIAN FEMALE BUSINESSES	6-19
TABLE 6.16: ANNUAL GROSS REVENUE ORDERED LOGISTIC REGRESSION: MBES	6-19
TABLE 6.17: CURRENT NUMBER OF EMPLOYEES	6-20
TABLE 6.18: NUMBER OF ANNUAL CONTRACTS	6-21
TABLE 6.19: SUBMITTED A BID OR QUALIFICATIONS TO THE CITY	6-22
TABLE 6.20: LARGEST M/WBE CONTRACTS AWARDED	6-23
TABLE 6.21: ALL AVAILABLE PRIME CONTRACTORS	6-25
TABLE 6.22: AVAILABLE CONSTRUCTION PRIME CONTRACTORS	6-27
TABLE 6.23: AVAILABLE PROFESSIONAL SERVICES PRIME CONTRACTORS	6-29
TABLE 6.24: AVAILABLE SUPPLIES AND SERVICES PRIME CONTRACTORS.....	6-31
TABLE 6.25: UNIQUE SUBCONTRACTOR AVAILABILITY DATA SOURCE.....	6-32
TABLE 6.26: ALL SUBCONTRACTS BY SIZE, ...	6-34
TABLE 6.27: CONSTRUCTION SUBCONTRACTS BY SIZE,.....	6-35
TABLE 6.28: PROFESSIONAL SERVICES SUBCONTRACTS BY SIZE, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	6-36
TABLE 6.29: AVAILABLE CONSTRUCTION SUBCONTRACTORS	6-38
TABLE 6.30: AVAILABLE PROFESSIONAL SERVICES SUBCONTRACTORS	6-40
TABLE 7.01: STATISTICAL OUTCOME DESCRIPTIONS	7-3
TABLE 7.02: DISPARITY ANALYSIS: ALL PRIME CONTRACTS, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	7-5



TABLE 7.03: DISPARITY ANALYSIS: ALL CONSTRUCTION PRIME CONTRACTS, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-8
TABLE 7.04: DISPARITY ANALYSIS: ALL PROFESSIONAL SERVICES PRIME CONTRACTS, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-11
TABLE 7.05: DISPARITY ANALYSIS: ALL SUPPLIES AND SERVICES PRIME CONTRACTS, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-14
TABLE 7.06: DISPARITY ANALYSIS: ALL PRIME CONTRACTS \$250,000 AND OVER, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-17
TABLE 7.07: DISPARITY ANALYSIS: CONSTRUCTION PRIME CONTRACTS \$250,000 AND OVER, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-20
TABLE 7.08: DISPARITY ANALYSIS: PROFESSIONAL SERVICES PRIME CONTRACTS \$250,000 AND OVER, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-23
TABLE 7.09: DISPARITY ANALYSIS: SUPPLIES AND SERVICES PRIME CONTRACTS \$250,000 AND OVER, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-26
TABLE 7.10: DISPARITY ANALYSIS: ALL PRIME CONTRACTS \$50,001 TO \$249,999, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-29
TABLE 7.11: DISPARITY ANALYSIS: CONSTRUCTION PRIME CONTRACTS \$50,001 TO \$249,999, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-32
TABLE 7.12: DISPARITY ANALYSIS: PROFESSIONAL SERVICES PRIME CONTRACTS \$50,001 TO \$249,999, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-35
TABLE 7.13: DISPARITY ANALYSIS: SUPPLIES AND SERVICES PRIME CONTRACTS \$50,001 TO \$249,999, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-38
TABLE 7.14: DISPARITY ANALYSIS: ALL PRIME CONTRACTS \$5,001 TO \$50,000, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-41
TABLE 7.15: DISPARITY ANALYSIS: CONSTRUCTION PRIME CONTRACTS \$5,001 TO \$50,000, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-44
TABLE 7.16: DISPARITY ANALYSIS: PROFESSIONAL SERVICES PRIME CONTRACTS \$5,001 TO \$50,000, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-47
TABLE 7.17: DISPARITY ANALYSIS: SUPPLIES AND SERVICES PRIME CONTRACTS \$5,001 TO \$50,000, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-50



TABLE 7.18: DISPARITY ANALYSIS: ALL PRIME CONTRACTS \$5,000 AND UNDER, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-53
TABLE 7.19: DISPARITY ANALYSIS: CONSTRUCTION PRIME CONTRACTS \$5,000 AND UNDER, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-56
TABLE 7.20: DISPARITY ANALYSIS: SUPPLIES AND SERVICES PRIME CONTRACTS \$5,000 AND UNDER, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-59
TABLE 7.21: DISPARITY SUMMARY: ALL INDUSTRIES PRIME CONTRACT DOLLARS JANUARY 1, 2009, TO DECEMBER 31, 2013	7-62
TABLE 7.22: DISPARITY SUMMARY: CONSTRUCTION PRIME CONTRACT DOLLARS JANUARY 1, 2009, TO DECEMBER 31, 2013	7-64
TABLE 7.23: DISPARITY SUMMARY: PROFESSIONAL SERVICES PRIME CONTRACT DOLLARS JANUARY 1, 2009, TO DECEMBER 31, 2013	7-66
TABLE 7.24: DISPARITY SUMMARY: SUPPLIES AND SERVICES PRIME CONTRACT DOLLARS JANUARY 1, 2009, TO DECEMBER 31, 2013	7-68
TABLE 8.01: STATISTICAL OUTCOME DESCRIPTIONS	8-2
TABLE 8.02: DISPARITY ANALYSIS: CONSTRUCTION SUBCONTRACTS, JANUARY 1, 2009, TO DECEMBER 31, 2013	8-4
TABLE 8.03: DISPARITY ANALYSIS: PROFESSIONAL SERVICES SUBCONTRACTS, JANUARY 1, 2009, TO DECEMBER 31, 2013	8-7
TABLE 8.04: SUBCONTRACT DISPARITY SUMMARY, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	8-9
TABLE 9.01: NON-MINORITY MALE AND M/WBE LOAN APPROVAL	9-6
TABLE 9.02: INDEPENDENT VARIABLES USED IN THE BUSINESS OWNERSHIP ANALYSIS.....	9-7
TABLE 9.03: INDEPENDENT VARIABLES USED FOR THE EARNINGS DISPARITY ANALYSIS.....	9-8
TABLE 9.04: CONSTRUCTION INDUSTRY LOGISTIC MODEL.....	9-10
TABLE 9.05: SUPPLIES AND SERVICES LOGISTIC MODEL	9-11
TABLE 9.06: MISCELLANEOUS AND OTHER PROFESSIONAL SERVICES LOGISTIC MODEL	9-12



TABLE 9.07: STATISTICALLY SIGNIFICANT BUSINESS OWNERSHIP DISPARITIES.....	9-14
TABLE 9.08: CONSTRUCTION INDUSTRY OLS REGRESSION	9-15
TABLE 9.09: SUPPLIES AND SERVICES OLS REGRESSION	9-17
TABLE 9.10: PROFESSIONAL SERVICES OLS REGRESSION	9-18
TABLE 9.11: STATISTICALLY SIGNIFICANT BUSINESS EARNINGS DISPARITIES	9-20
TABLE 10.01: PROFILE OF eSURVEY RESPONDENTS BY ETHNICITY AND GENDER	10-4
TABLE 10.02: BUSINESS SIZE COMPARISON.....	10-5
TABLE 10.03: PRE-QUALIFICATION REQUIREMENTS	10-17
TABLE 10.04: VENDOR SELF-SERVICE WEBSITE	10-19
TABLE 10.05: INSUFFICIENT TIME TO PREPARE BID OR QUOTE	10-21
TABLE 10.06: LACK OF PERSONNEL.....	10-23
TABLE 10.07: CERTIFICATION PROCESS.....	10-24
TABLE 10.08: FINANCING	10-27
TABLE 10.09: BONDING REQUIREMENTS	10-28
TABLE 10.10: PROVIDED A SERVICE OR COMMODITIES, BUT PAYMENT SUBSTANTIALLY DELAYED	10-29
TABLE 10.11: SMALL BUSINESS ENTERPRISE PROGRAM.....	10-33
TABLE 10.12: TECHNICAL ASSISTANCE RESOURCES	10-44
TABLE 11.01: TOTAL PRIME CONTRACTS AND DOLLARS EXPENDED: ALL INDUSTRIES, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	11-2
TABLE 11.02: TOTAL SUBCONTRACTS AWARDED AND DOLLARS EXPENDED: ALL INDUSTRIES, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	11-3
TABLE 11.03: DISPARITY SUMMARY: CONSTRUCTION PRIME CONTRACT DOLLARS, JANUARY 1, 2009, TO DECEMBER 31, 2013	11-4



TABLE 11.04: DISPARITY SUMMARY: CONSTRUCTION PRIME CONTRACT DOLLARS BY INFORMAL THRESHOLD, JANUARY 1, 2009, TO DECEMBER 31, 2013	11-4
TABLE 11.05: DISPARITY SUMMARY: PROFESSIONAL SERVICES PRIME CONTRACT DOLLARS, JANUARY 1, 2009, TO DECEMBER 31, 2013	11-5
TABLE 11.06: DISPARITY SUMMARY: PROFESSIONAL SERVICES PRIME CONTRACT DOLLARS BY INFORMAL THRESHOLD, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	11-5
TABLE 11.07: DISPARITY SUMMARY: SUPPLIES AND SERVICES PRIME CONTRACT DOLLARS, JANUARY 1, 2009, TO DECEMBER 31, 2013	11-6
TABLE 11.08: DISPARITY SUMMARY: SUPPLIES AND SERVICES PRIME CONTRACT DOLLARS BY INFORMAL THRESHOLD, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	11-6
TABLE 11.09: SUBCONTRACTOR DISPARITY SUMMARY, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	11-7
TABLE 11.10: GROUPS ELIGIBLE FOR SUPPLIES AND SERVICES BID DISCOUNTS	11-12
TABLE 11.11: SUBCONTRACTOR AVAILABILITY	11-13
TABLE 11.12: M/WBE PARTICIPATION PERCENTAGE.....	11-17
TABLE 11.13: SBE CERTIFIED PRIME CONTRACTOR UTILIZATION BY ETHNICITY, ALL INDUSTRIES, JANUARY 1, 2009 TO DECEMBER 31, 2013	11-20
TABLE 11.14: NON-CERTIFIED PRIME CONTRACTOR UTILIZATION, BY THRESHOLD, ALL INDUSTRIES, JANUARY 1, 2009 TO DECEMBER 31, 2013	11-20
TABLE 11.15: SBE CERTIFIED PRIME CONTRACTOR UTILIZATION BY THRESHOLD AND ETHNICITY, ALL INDUSTRIES, JANUARY 1, 2009 TO DECEMBER 31, 2013	11-22
TABLE 11.16: U.S. CENSUS DEMOGRAPHIC DATA FOR CITY OF CINCINNATI, TAMPA, ST. LOUIS, AND MEMPHIS	11-24
TABLE 11.17: UNBUNDLING CRITERIA	11-26
TABLE 11.18: SAMPLE SUBCONTRACT DATABASE STRUCTURE.....	11-35



List of Charts

CHART 6.01: COMPARISON OF SAMPLE TO PRIME CONTRACTOR AVAILABILITY	6-15
CHART 6.02: ANNUAL GROSS REVENUE: ALL INDUSTRIES.....	6-17
CHART 6.03: CURRENT NUMBER OF EMPLOYEES	6-21
CHART 7.01: DISPARITY ANALYSIS: ALL PRIME CONTRACTS, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	7-6
CHART 7.02: DISPARITY ANALYSIS: ALL CONSTRUCTION PRIME CONTRACTS, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-9
CHART 7.03: DISPARITY ANALYSIS: ALL PROFESSIONAL SERVICES PRIME CONTRACTS, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-12
CHART 7.04: DISPARITY ANALYSIS: ALL SUPPLIES AND SERVICES PRIME CONTRACTS, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-15
CHART 7.05: DISPARITY ANALYSIS: ALL PRIME CONTRACTS \$250,000 AND OVER, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-18
CHART 7.06: DISPARITY ANALYSIS: CONSTRUCTION PRIME CONTRACTS \$250,000 AND OVER, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	7-21
CHART 7.07: DISPARITY ANALYSIS: PROFESSIONAL SERVICES PRIME CONTRACTS \$250,000 AND OVER, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	7-24
CHART 7.08: DISPARITY ANALYSIS: SUPPLIES AND SERVICES PRIME CONTRACTS \$250,000 AND OVER, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	7-27
CHART 7.09: DISPARITY ANALYSIS: ALL INDUSTRIES PRIME CONTRACTS \$50,001 TO \$249,999, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-30
CHART 7.10: DISPARITY ANALYSIS: CONSTRUCTION PRIME CONTRACTS \$50,001 TO \$249,999, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-33
CHART 7.11: DISPARITY ANALYSIS: PROFESSIONAL SERVICES PRIME CONTRACTS \$50,001 TO \$249,999, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	7-36
CHART 7.12: DISPARITY ANALYSIS: SUPPLIES AND SERVICES PRIME CONTRACTS \$50,001 TO \$249,999, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	7-39



CHART 7.13: DISPARITY ANALYSIS: ALL PRIME CONTRACTS \$5,001 TO \$50,000, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-42
CHART 7.14: DISPARITY ANALYSIS: CONSTRUCTION PRIME CONTRACTS \$5,001 TO \$50,000, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	7-45
CHART 7.15: DISPARITY ANALYSIS: PROFESSIONAL SERVICES PRIME CONTRACTS \$5,001 TO \$50,000, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	7-48
CHART 7.16: DISPARITY ANALYSIS: SUPPLIES AND SERVICES PRIME CONTRACTS \$5,001 TO \$50,000, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	7-51
CHART 7.17: DISPARITY ANALYSIS: ALL PRIME CONTRACTS \$5,000 AND UNDER, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-53
CHART 7.18: DISPARITY ANALYSIS: CONSTRUCTION PRIME CONTRACTS \$5,000 AND UNDER, JANUARY 1, 2009, TO DECEMBER 31, 2013	7-57
CHART 7.19: DISPARITY ANALYSIS: SUPPLIES AND SERVICES PRIME CONTRACTS \$5,000 AND UNDER, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	7-60
CHART 8.01: DISPARITY ANALYSIS: CONSTRUCTION SUBCONTRACTS, JANUARY 1, 2009, TO DECEMBER 31, 2013.....	8-5
CHART 8.02: DISPARITY ANALYSIS: PROFESSIONAL SERVICES SUBCONTRACTS, JANUARY 1, 2009, TO DECEMBER 31, 2013	8-8
CHART 11.01: SBE CERTIFIED AND NON-CERTIFIED FIRMS CONTRACT AWARDS BY THRESHOLD, ALL INDUSTRIES.....	11-21



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.

In 1999, the Cincinnati City Council passed Ordinance No. 335-1999 adopting a race and gender-neutral Small Business Enterprise (SBE) program, which is codified in Chapter 323 of the Cincinnati Municipal Code. If there is evidence of statistically significant underutilization of available minority and woman-owned businesses, the City's SBE program 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. 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.² Specifically, the government must show that the race-conscious

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

² *Id.* at 493-95.



remedies are narrowly tailored to achieve a compelling state interest.³ 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.⁴ 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.⁵

2. 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.⁶ 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.⁷ The courts have also described the test as requiring an “exceedingly persuasive justification” for classifications based on gender.⁸ 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.”⁹

³ *Croson*, 488 U.S. at 493.

⁴ *Id.* at 509.

⁵ *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.

⁶ 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 VT*”), 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 & County of Denver*, 321 F.3d 950, 960 (10th Cir. 2003) (“*Concrete Works*”); and *H.B. Rowe Co. v. Tippet*, 615 F.3d 233, 236 (4th Cir. 2010).

⁷ *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*”).

⁸ *Hogan*, 458 U.S. at 751; see also *Mich. Rd. Builders Ass’n, Inc. v. Milliken*, 834 F.2d 583, 595 (6th Cir. 1987).

⁹ *Id.* at 728; see also *Schlesinger v. Ballard*, 419 U.S. 498, 508 (1975).



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.¹⁰ 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.”¹¹ 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.¹²

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.”¹³ 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.¹⁴

The Eleventh Circuit also applied intermediate scrutiny.¹⁵ 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.”¹⁶ 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 v. Virginia*,¹⁷ finding the all-male program at Virginia Military Institute unconstitutional, signaled a heightened level of scrutiny.¹⁸ 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.¹⁹ While the Eleventh Circuit United States Court of Appeals echoed that speculation, it

¹⁰ *Contractors Ass’n of E. Pa. v. City of Philadelphia* (“*Philadelphia IV*”), 6 F.3d 990, 1001 (3d Cir. 1993).

¹¹ *Philadelphia IV*, 6 F.3d at 1009-10.

¹² *Id.* at 1002.

¹³ *Associated Gen. Contractors of Cal. v. City & Cnty. of San Francisco*, 813 F.2d 1401, 940 (9th Cir. 1991) (hereinafter “*AGCC I*”).

¹⁴ *Ballard*, 419 U.S. at 508.

¹⁵ *Ensley Branch N.A.A.C.P. v. Seibels*, 31 F.3d 1548, 1579-80 (11th Cir. 1994).

¹⁶ *Dade County II*, 122 F.3d 895, 909 (1997) (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.”).

¹⁷ *Virginia*, 518 U.S. at 534.

¹⁸ *Dade County II*, 122 F.3d at 907-08.

¹⁹ *Virginia*, 518 U.S. at 534.



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.”²⁰

In *Dade County II*, the Eleventh Circuit 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.²¹ *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.’”²²

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;²³ 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”²⁴ but instead ensuring that the affirmative action is “a product of analysis rather than a stereotyped reaction based on habit.”²⁵

This determination requires “evidence of past discrimination in the economic sphere at which the affirmative action program is directed.”²⁶ 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.”²⁷

3. 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.²⁸

²⁰ *Dade County II*, 122 F.3d at 908.

²¹ *Id.* at 909.

²² *Id.* at 910.

²³ *Id.* (quoting *Ensley Branch*, 31 F.3d at 1580).

²⁴ *Id.* (quoting *Hayes v. N. State Law Enforcement Officers Ass’n.*, 10 F.3d 207, 217 (4th Cir. 1993) (racial discrimination case)).

²⁵ *Id.* (quoting *Philadelphia IV*, 6 F.3d at 1010).

²⁶ *Id.* (quoting *Ensley Branch*, 31 F.3d at 1581).

²⁷ *Id.* 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.).

²⁸ *AGCC I*, 813 F.2d at 943; *Lakeside Roofing Company v. State of Missouri*, et al., 2012 WL 709276 (E.D. Mo.).



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.²⁹ 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.³⁰ 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.³¹ 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.³²

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."³³

4. 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.³⁴

In 2006 the City of Cincinnati's SBE Program requirements were challenged in *Cleveland Construction, Inc. v. City of Cincinnati*. Specifically, a bidder who failed to show it had made a good faith effort to obtain SBE participation at the established goal level of 35% on the project claimed the City's SBE Program included race and gender classifications that rendered the program unconstitutional.³⁵ The City countered that its

²⁹ *Armour v. City of Indianapolis, Ind.*, 132 S. Ct. 2073, 2080 (2012) (quoting *Heller v. Doe*, 509 U.S. 312, 319–320 (1993)).

³⁰ *Id.*

³¹ *Lakeside Roofing Company v. State of Missouri*, et al., 2012 WL 709276 (E.D. Mo.); see SULLIVAN, KATHLEEN M. & GUNTHER GERALD, CONSTITUTIONAL LAW FOUNDATION PRESS, New York, NY.16th ed. Chapter 9 (2007).

³² *Croson*, 488 U.S. at 515.

³³ *AGCC I*, 813 F.2d at 943.

³⁴ *Doe 1 v. Lower Merion Sch. Dist.*, 689 F. Supp. 2d 742, 748 (E.D. Pa. 2010).

³⁵ *Cleveland Constr., Inc. v. City of Cincinnati*, 169 Ohio App. 3d 627 (2006), *rev'd on other grounds*, 118 Ohio St. 3d 283 (Ohio 2008); *cert. denied* 128 S. Ct. 379 (U.S. 2007).



SBE program was a lawful “outreach” program encouraging contractors to use “good faith efforts” to promote opportunities for women and minorities. The SBE Program included an annual goal for small businesses on City projects. Although the Program was race and gender neutral, it included a subcontracting outreach component which compared the availability of M/WBEs with their use by bidders. The Ohio Court of Appeals held that “[w]here regulations pressure or encourage contractors to hire minority subcontractors, courts must apply strict scrutiny.”³⁶ The City’s SBE Program was found to be unconstitutional in part and the City was ordered to remove the portions of the Program that produced racial or gender preferences.

In 2006, *Lion Apparel v. City of Cincinnati*, the City of Cincinnati’s SBE Program was challenged again in federal court.³⁷ The plaintiff claimed the City’s requirement to demonstrate a good faith effort to include minority and/or women subcontractors in City-funded contracts over \$100,000 violated the Equal Protection Clause and 42 U.S.C.S. Sections 1981 and 1983.³⁸ The court ruled that the good faith effort requirements of the SBE program were limited to City-funded construction contracts, which did not apply to the plaintiff’s contract for goods. Therefore, the plaintiff lacked standing to sue in federal court.³⁹ The court did not examine the constitutionality of the City’s good faith effort requirement to include M/WBE as subcontractors in City-funded construction contracts.

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:⁴⁰

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

³⁶ *Cleveland Constr., Inc. v. City of Cincinnati*, 864 N.E.2d 116, 126 (Ohio Ct. App. 2006).

³⁷ *Lion Apparel v. City of Cincinnati*, No.1:05cv061, 2006 U.S. Dist. LEXIS 96528, at *6-7 (D. Ohio Mar. 13, 2006); 2006 WL 4643320.

³⁸ *Id.* at 7-8.

³⁹ *Id.* at 11.

⁴⁰ *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).



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.⁴¹ Whether the government has produced a strong basis in evidence is a question of law.⁴² The defendant in a constitutional claim against a disparity study has the initial burden of proof to show that there was past discrimination.⁴³ 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.⁴⁴

The adequacy of the government’s evidence is “evaluated in the context of the breadth of the remedial program advanced by the [jurisdiction].”⁴⁵ 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.⁴⁶

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.⁴⁷ 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*”):⁴⁸

[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

⁴¹ *Philadelphia VI*, 91 F.3d at 586 (citing *Concrete Works of Colo. v. Denver*, 36 F.3d 1513, 1522 (10th Cir. 1994)); see *Croson*, 488 U.S. at 510.

⁴² *Id.* (citing *Associated Gen. Contractors v. New Haven*, 791 F. Supp. 941, 944 (D. Conn. 1992)).

⁴³ *Concrete Works of Colo. v. Denver* (“*Concrete Works I*”), 36 F.3d 1513, 1521-22 (10th Cir. 1994) (citing *Wygant v. Jackson Bd. of Educ.*, 476 U.S. 267, 292 (1986)).

⁴⁴ *Concrete Works I*, 36 F.3d at 1522.

⁴⁵ *Id.* (citing *Croson*, 488 U.S. at 498).

⁴⁶ See *Croson*, 488 U.S. at 488.

⁴⁷ See *Wygant v. Jackson Bd. of Educ.*, 476 U.S. 267, 277-78, 293 (1986).

⁴⁸ *Id.* (O’Connor, S., concurrence).



discrimination and thus a remedial purpose, or that the plan instituted on the basis of this evidence was not sufficiently “narrowly tailored.”⁴⁹

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.⁵⁰ 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.⁵¹ 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.⁵²

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.⁵³

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.”⁵⁴ 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.

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 of past discrimination, and the race-conscious remedy

⁴⁹ *Wygant*, 476 U.S. at 277-78.

⁵⁰ *Philadelphia VI*, 91 F.3d at 597.

⁵¹ *Id.* at 597.

⁵² *Id.* at 597-598.

⁵³ 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.

⁵⁴ *Concrete Works of Colo., Inc. v. Denver* (“*Concrete Works IV*”), 321 F.3d 950, 979 (10th Cir. 2003).



must be “narrowly tailored,” as set forth in *Croson*.⁵⁵ 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.⁵⁶ 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.⁵⁷ 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.⁵⁸

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 discrimination holding that evidence of a government entity infusing its tax dollars into a discriminatory system can satisfy passive discrimination.⁵⁹

In *Concrete Works I*, the district court granted summary judgment in favor of the City of Denver in 1993.⁶⁰ 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.⁶¹ The case was remanded with specific instructions permitting the parties “to develop a factual record to support their competing interpretations of the empirical data.”⁶² On remand, the district court entered a judgment in favor of the plaintiff holding that the City’s ordinances violated the Fourteenth Amendment.⁶³

The district court in *Concrete III* rejected the four disparity studies the City offered to support the continuation of Denver’s M/WBE program.⁶⁴ The court surmised that (1) the

⁵⁵ *Croson*, 488 U.S. at 486.

⁵⁶ *Croson*, 488 U.S. at 488.

⁵⁷ *Id.* at 509.

⁵⁸ *Id.* at 492, accord *Coral Constr. Co. v. King Cnty.*, 941 F.2d 910, 916 (9th Cir. 1991).

⁵⁹ *Concrete Works of Colo., Inc. v. City & County of Denver* (“*Concrete Works I*”), 823 F. Supp. 821, 824 (D. Colo. 1993), *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).

⁶⁰ *Id.* at 994.

⁶¹ *Concrete Works of Colo., Inc. v. City & County of Denver* (“*Concrete Works II*”), 36 F.3d 1513, 1530-31 (10th Cir. 1994).

⁶² *Id.*

⁶³ *Concrete Works of Colo., Inc. v. City & County of Denver* (“*Concrete Works III*”), 86 F. Supp. 2d 1042, 1079 (D. Colo. 2000).

⁶⁴ *Id.* at 1065-68.



methodology employed in the statistical studies was not “designed to answer the relevant questions,”⁶⁵ (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.⁶⁶ 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.”⁶⁷ 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:

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).⁶⁸

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.”⁶⁹ 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.”⁷⁰ 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.⁷¹

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

⁶⁵ *Concrete Works III*, 86 F. Supp. 2d. at 1067.

⁶⁶ *Concrete Works III*, 86 F. Supp. 2d. at 1057-58, 1071.

⁶⁷ *Id.* at 1068.

⁶⁸ *Concrete Works of Colo., Inc. v. Denver* (“*Concrete Works IV*”), 321 F.3d 950, 975-76 (10th Cir, 2003).

⁶⁹ *Id.* at 976 (quoting *Shaw v. Hunt*, 517 U.S. 804, 909 (1996)).

⁷⁰ *Concrete Works IV*, 321 F.3d at 976.

⁷¹ *Id.* at 959, 977, 990.



within the private sector was at issue in *Builders Association of Greater Chicago v. City of Chicago*.⁷² 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.⁷³ The challenged program consisted of a 16.9% MBE subcontracting goal, a 10% MBE prime contracting goal, a 4.5% WBE subcontracting goal and a 1% WBE prime contracting goal.⁷⁴

The district court found that private sector business practices offered by the City, which were based on United States Census and surveys, constituted discrimination against minorities in the Chicago market area.⁷⁵ 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 M/WBEs in order to formulate remedies "more akin to a laser beam than a baseball bat."⁷⁶ The City was ordered to suspend its M/WBE goals program.

As recent as 2010, the Fourth Circuit in *H.B. Rowe Co. v. Tippet* 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.⁷⁷ The court found that the private sector data did not test whether the underutilization was statistically significant or just mere chance.⁷⁸

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).⁷⁹ Thus, it is essential to demonstrate a pattern and practice of such discriminatory exclusion in the relevant market area.⁸⁰ 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.⁸¹ Mere statistics and

⁷² *Builders Ass'n of Greater Chi. v. City of Chi.*, 298 F. Supp. 2d 725, 732 (N.D. Ill. 2003).

⁷³ *Builders Ass'n of Greater Chi. v. City of Chi.*, 298 F. Supp. 2d 726, 729, 733-34.

⁷⁴ *Id.* at 729.

⁷⁵ *Id.* at 735-37.

⁷⁶ *Id.* at 737-39, 742.

⁷⁷ *H.B. Rowe Co. v. Tippet*, 615 F.3d 233, 236 (4th Cir. 2010).

⁷⁸ *Id.*

⁷⁹ *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)).

⁸⁰ *Croson*, 488 U.S. at 509.

⁸¹ *Id.* at 506.



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.⁸² 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[.]"⁸³

The *Croson* Court made clear that both prime contract and subcontracting data was relevant.⁸⁴ 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."⁸⁵ 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."⁸⁶ 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.⁸⁷ 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."⁸⁸ *Croson* further states, "**In the extreme case**, some form of narrowly tailored racial preference might be necessary to break down patterns of deliberate exclusion."⁸⁹

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.⁹⁰ The court held that both statistical and anecdotal evidence should be relied

⁸² *Croson*, 488 U.S. at 509.

⁸³ *Id.* at 501 (citing *Hazelwood Sch. Dist. v. United States*, 433 U.S. 299, 307-08 (1977)).

⁸⁴ *Id.* at 502-03.

⁸⁵ *Id.*

⁸⁶ *Id.* at 509.

⁸⁷ *Id.*

⁸⁸ *Croson*, 488 U.S. at 509 (emphasis added).

⁸⁹ *Id.* (emphasis added).

⁹⁰ *Coral Constr.*, 941 F.2d at 917-18, 920-26.



upon in establishing systemic discriminatory exclusion in the relevant marketplace as the factual predicate for an MBE program.⁹¹ 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.⁹²

Likewise, anecdotal evidence, standing alone, is unlikely to establish a systemic pattern of discrimination.⁹³ Nonetheless, anecdotal evidence is important because the individuals who testify about their personal experiences bring “the cold numbers convincingly to life.”⁹⁴

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.”⁹⁵ Conversely, in *Concrete Works I*, the district court specifically approved the Denver Metropolitan Statistical Area (MSA) as the appropriate market area since 80% of the construction contracts were let there.⁹⁶

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.⁹⁷ Extra-jurisdictional evidence may be permitted, when it is reasonably related to where the jurisdiction contracts.⁹⁸

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

⁹¹ *Coral Constr.*, 941 F.2d at 919.

⁹² *Coral Constr.*, 941 F.2d at 919.

⁹³ *Id.*

⁹⁴ *Id.* (quoting *Int’l Bhd. of Teamsters v. United States*, 431 U.S. 324, 339 (1977)).

⁹⁵ *Id.* at 925.

⁹⁶ *Concrete Works I*, 823 F. Supp. at 835-836 (D. Colo. 1993); *rev’d on other grounds*, 36 F.3d 1513 (10th Cir. 1994).

⁹⁷ *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”).

⁹⁸ 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.



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.⁹⁹ 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.

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.¹⁰⁰ 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.¹⁰¹

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.¹⁰² 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.¹⁰³

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

⁹⁹ See *Croson*, 488 U.S. at 509-10.

¹⁰⁰ *Id.* at 499 (stating, "[i]t is sheer speculation how many minority firms there would be in Richmond absent past societal discrimination").

¹⁰¹ See *AGCC II*, 950 F.2d at 1414 (consultant study looked at City's MBE utilization over a one-year period).

¹⁰² 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.

¹⁰³ *H.B. Rowe Co. v. Tippet*, 615 F.3d 233, 236 (4th Cir. 2010); see *Engineering Contractors Association of South Florida v. Metropolitan Dade County*, 1546 (S.D. Fla. 1996), *aff'd*, 122 F.3d 895 (11th Cir. 1997); see also *Concrete Works of Colorado v. City and County of Denver*, 36 F.3d 1513 (10th Cir. 1994).



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*.¹⁰⁴

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 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.¹⁰⁵ The study found that available MBEs received far fewer construction contract dollars in proportion to their numbers than their available non-minority counterparts.¹⁰⁶ 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.¹⁰⁷

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.”¹⁰⁸ 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

¹⁰⁴ *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.

¹⁰⁵ *AGCC II*, 950 F.2d at 1414.

¹⁰⁶ *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.

¹⁰⁷ *Associated General Contractors of California Inc. v. Coalition for Economic Equity*, 950 F.2d 1401 (1991).

¹⁰⁸ *Croson*, 488 U.S. at 501 (quoting *Hazelwood Sch. Dist.*, 433 U.S. at 307-308).



determined the analysis of the disparity index and the findings of its significance are to be judged on a case-by-case basis.¹⁰⁹

Following the dictates of *Croson*, courts may carefully examine whether there are data that show MBEs are qualified, ready, willing, and able to perform.¹¹⁰ *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:

[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.¹¹¹

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.¹¹² 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.”¹¹³ 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

¹⁰⁹ *Concrete Works II*, 36 F.3d at 1522.

¹¹⁰ The *Philadelphia* study was vulnerable on this issue.

¹¹¹ *Concrete Works II*, 36 F.3d at 1528.

¹¹² *Associated Gen. Contractors of Ohio, Inc. v. Drabik*, 214 F.3d 730, 734-38 (6th Cir. 2000). 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*.

¹¹³ *Drabik*, 214 F.3d at 736.



ability to do particular work or in terms of the number of tasks they have resources to complete.¹¹⁴

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.

The opinions in *Philadelphia VI*¹¹⁵ and *Dade County I*,¹¹⁶ 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.¹¹⁷ 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.¹¹⁸

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."¹¹⁹ 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.¹²⁰

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% of project engineer logs on projects valued at more than \$30,000.¹²¹ 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.¹²²

¹¹⁴ *Drabik*, 214 F.3d at 736.

¹¹⁵ *Philadelphia VI*, 91 F.3d at 604-605.

¹¹⁶ *Eng'g Contractors Ass'n v. Metro. Dade County* ("Dade County I"), 943 F. Supp. 1546, 1582-83 (S.D. Fla. 1996).

¹¹⁷ *Philadelphia VI*, 91 F.3d at 590.

¹¹⁸ *Id.* at 609-10.

¹¹⁹ *Id.* at 605.

¹²⁰ *Id.*

¹²¹ *Id.* at 600.

¹²² 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



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 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.¹²³ Although theoretically it may 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.¹²⁴

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 work projects.”¹²⁵ 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.¹²⁶ 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.”¹²⁷

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.¹²⁸ 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.¹²⁹ In addition, a

also found the program flawed because it did not provide sufficient waivers and exemptions, as well as consideration of race-neutral alternatives.

¹²³ *Philadelphia VI*, 91 F.3d at 603.

¹²⁴ *Id.* at 603-605, 609.

¹²⁵ *Id.* at 603.

¹²⁶ *Id.*

¹²⁷ *Id.* at 603.

¹²⁸ *Dade County I*, 943 F. Supp. at 1560.

¹²⁹ 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).



comprehensive count of bidders is dependent on the adequacy of the agency's record-keeping.¹³⁰

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 evidence to justify race-conscious affirmative action.¹³¹ 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."¹³² 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.¹³³

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*¹³⁴
- Prime contractors showing MBE bids to non-minority subcontractors to find a non-minority firm to underbid the MBEs — *Cone Corporation v. Hillsborough County*¹³⁵
- M/WBEs' inability to obtain contracts for private sector work — *Coral Construction*¹³⁶

¹³⁰ 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).

¹³¹ *Dade County I*, 943 F. Supp. at 1557.

¹³² *Croson*, 488 U.S. at 509; see *Teamsters*, 431 U.S. at 338.

¹³³ 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.]").

¹³⁴ *Philadelphia IV*, 6 F.3d at 1002.

¹³⁵ *Cone Corp.*, 908 F.2d at 916.



- M/WBEs told that they were not qualified, although they were later found to be qualified when evaluated by outside parties — *AGCC II*¹³⁷
- Attempts to circumvent M/WBE project goals — *Concrete Works II*¹³⁸
- Harassment of M/WBEs by an entity's personnel to discourage them from bidding on an entity's contracts — *AGCC II*¹³⁹

Courts must assess the extent to which relief measures disrupt settled “rights and expectations” when determining the appropriate corrective measures.¹⁴⁰ 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.¹⁴¹ 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.”¹⁴²

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.”¹⁴³

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

¹³⁶ 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 Construction*, 941 F.2d 910 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).

¹³⁷ *AGCC II*, 950 F.2d at 1415.

¹³⁸ *Concrete Works II*, 36 F.3d at 1530.

¹³⁹ *AGCC II*, 950 F.2d at 1415.

¹⁴⁰ *Wygant*, 476 U.S. at 283.

¹⁴¹ *Int’l Bhd. of Teamsters v. United States*, 431 U.S. 324, 339 (U.S.1977); *Coral Constr.*, 941 F.2d at 919.

¹⁴² *Croson*, 488 U.S. at 509 (citing *Teamsters*, 431 U.S. at 338).

¹⁴³ *Id.* at 480.



that ongoing discrimination may be occurring in much of the King County business community.”¹⁴⁴

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.”¹⁴⁵ After noting the Supreme 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.¹⁴⁶

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.”¹⁴⁷

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*.¹⁴⁸ 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.¹⁴⁹ “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

¹⁴⁴ *Coral Constr.*, 941 F.2d at 917-18.

¹⁴⁵ *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).

¹⁴⁶ *Id.* at 919.

¹⁴⁷ *Id.*

¹⁴⁸ *Philadelphia IV*, 6 F.3d at 1002.

¹⁴⁹ *Id.* at 1003.



exceptional case, be so dominant or pervasive that it passes muster under *Croson*, it is insufficient here.¹⁵⁰

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 v. District of Columbia*.¹⁵¹ 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.¹⁵²

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.”¹⁵³ However, it held that this was not the “exceptional case” where, unreinforced by statistics, the anecdotal evidence was enough.¹⁵⁴

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.”¹⁵⁵ 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*.¹⁵⁶ There, the court approved a “vast number of individual accounts of discrimination,” which included (1) numerous reports of MBEs

¹⁵⁰ *Philadelphia IV*, 6 F.3d at 1003.

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

¹⁵² *O’Donnell Constr. Co. v. D.C.*, 963 F.2d 420, 427 (D.C. Cir. 1992).

¹⁵³ *Dade County II*, 122 F.3d at 925.

¹⁵⁴ *Id.* at 926.

¹⁵⁵ *Concrete Works II*, 36 F.3d at 1530.

¹⁵⁶ *AGCC II*, 950 F.2d at 1401.



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 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.¹⁵⁷ 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. The case law suggests that, to be optimally persuasive, anecdotal evidence collectively should satisfy six particular requirements.¹⁵⁸ These requirements are that the accounts:

- are gathered from minority contractors, preferably those that are “qualified”¹⁵⁹
- concern specific, verifiable instances of discrimination¹⁶⁰
- involve the actions of governmental officials¹⁶¹
- involve events within the relevant jurisdiction’s market area¹⁶²
- discuss the harm that the improper conduct has inflicted on the businesses in question¹⁶³
- collectively reveal that discriminatory exclusion and impaired contracting opportunities are systemic rather than isolated or sporadic¹⁶⁴

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.¹⁶⁵ The court then turned to the statistical data.¹⁶⁶ While the matter is not free of countervailing considerations, 57 accounts, many of which appeared to be of the type

¹⁵⁷ *AGCC II*, 950 F.2d at 1415.

¹⁵⁸ *Philadelphia IV*, 6 F.3d at 1003. The anecdotal evidence must be “dominant or pervasive.”

¹⁵⁹ *Philadelphia VI*, 91 F.3d at 603.

¹⁶⁰ *Coral Constr.*, 941 F.2d at 917-18; *but see Concrete Works II*, 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.”).

¹⁶¹ *Croson*, 488 U.S. at 509.

¹⁶² *Coral Constr.*, 941 F.2d at 925.

¹⁶³ *O’Donnell*, 963 F.2d at 427.

¹⁶⁴ *Coral Constr.*, 941 F.2d at 919.

¹⁶⁵ *Philadelphia IV*, 6 F.3d. at 1002-03.

¹⁶⁶ *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. Tippet, (“Rowe”) challenged the constitutionality of the North Carolina General Assembly’s Statute 136-28.4 (Statute), promulgated in 1983.¹⁶⁷ 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.¹⁶⁸ The 1983 Statute directed North Carolina Department of Transportation (NCDOT) to encourage and promote the policy.¹⁶⁹ 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.¹⁷⁰

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.¹⁷¹ In 1991, the constitutionality of the statute was challenged.¹⁷² 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.¹⁷³ As a result of the challenge, NCDOT suspended its M/WBE program in 1991.¹⁷⁴

In 1993, NCDOT commissioned a disparity study on state-funded transportation construction contracts.¹⁷⁵ The study determined that minority and women subcontractors were underutilized at a statistically significant level and the M/WBE Program was re-

¹⁶⁷ *H.B. Rowe Co. v. Tippet*, 615 F.3d 233, 236 (4th Cir. 2010).

¹⁶⁸ *Id.*

¹⁶⁹ *Id.*

¹⁷⁰ *Id.*

¹⁷¹ *Id.*

¹⁷² *Id.* at 237; see *Dickerson Carolina, Inc. v. Harrelson*, 114 N.C. App. 693 (1994).

¹⁷³ *Rowe*, 615 F.3d at 237 (citing *Croson*, 488 U.S. at 504).

¹⁷⁴ *Id.*

¹⁷⁵ *Rowe*, 615 F.3d at 237 (citing *Croson*, 488 U.S. at 504).



implemented.¹⁷⁶ In 1998, the North Carolina General Assembly again commissioned an update to the 1993 study.¹⁷⁷ The 1998 update study concluded that minority and women-owned businesses continued to be underutilized in State-funded road construction contracts.¹⁷⁸

In 2002, Rowe was denied a NCDOT contract because the company's bid included 6.6% women subcontractor participation and no minority subcontractor participation.¹⁷⁹ NCDOT claimed that Rowe failed to meet the good faith effort requirements of the M/WBE program.¹⁸⁰ A third study was commissioned in 2004 to again study minority and women contractor participation on the State's highway construction industry.¹⁸¹ In 2006, relying on the 2004 study, the North Carolina General Assembly amended Statute 136-28.4.¹⁸² 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.
- Remedial action should include a sunset provision.¹⁸³

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.¹⁸⁴ 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.¹⁸⁵

¹⁷⁶ Rowe, 615 F.3d at 237.

¹⁷⁷ *Id.*

¹⁷⁸ *Id.*

¹⁷⁹ *Id.*

¹⁸⁰ *Id.*

¹⁸¹ *Id.* at 238.

¹⁸² *Id.*

¹⁸³ *Id.* at 238-39.

¹⁸⁴ *Id.* at 238.

¹⁸⁵ 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.¹⁸⁶ The methodology used in the 2004 disparity study calculated a disparity at .05 confidence level.¹⁸⁷ A statistical calculation is significant at the .05 confidence level because the probability of that result occurring by chance is 5% or less.¹⁸⁸ 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.¹⁸⁹

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.¹⁹⁰ 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.¹⁹¹ 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.¹⁹² 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.¹⁹³ The 2004 disparity study calculated the overutilization of women subcontractors as statistically significant at a .05 confidence level.¹⁹⁴ The circuit court further noted that the private sector evidence was insufficient to overcome the strong

¹⁸⁶ *Id.* at 243-44.

¹⁸⁷ *Id.* at 244.

¹⁸⁸ *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)).

¹⁸⁹ *Id.* (citing EARL BABBIE, THE PRACTICE OF SOCIAL RESEARCH 483 (11th ed. 2007)).

¹⁹⁰ *Id.* at 261.

¹⁹¹ *Id.* at 245.

¹⁹² *Id.* at 254.

¹⁹³ *Id.*

¹⁹⁴ *Rowe*, 615 F.3d at 254-55.



evidence of overutilization.¹⁹⁵ 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.¹⁹⁶

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.¹⁹⁷ 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.¹⁹⁸ 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.¹⁹⁹ 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[.]”²⁰⁰

¹⁹⁵ *Id.* at 255.

¹⁹⁶ *Id.*

¹⁹⁷ *AGCC II*, 950 F.2d at 1404.

¹⁹⁸ *Croson*, 488 U.S. at 508.

¹⁹⁹ *Id.* at 507.

²⁰⁰ *Gutter 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.²⁰¹

The Ninth Circuit Court of Appeals in *Coral Construction* ruled that there is no requirement that an entity exhaust every possible race-neutral alternative.²⁰² 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.²⁰³

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 City of Cincinnati may consider race and gender-based remedies for its local and state funded 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.

²⁰¹ *Croson*, 488 U.S. at 507 (upholding MBE program where it operated in conjunction with race-neutral measures aimed at assisting all small businesses).

²⁰² *Coral Constr.*, 941 F.2d at 910.

²⁰³ *Dade County II*, 122 F.3d at 927; *Hershell Gill Consulting Eng'rs, Inc. v. Miami-Dade County*, 333 F. Supp. 2d 1305 (S.D. Fla. 2004). 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)	3, 28
<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, 4
<i>Associated Gen. Contractors v. Coal. for Econ. Equity (“AGCC II”)</i> , 950 F.2d 1401 (9th Cir. 1991)	passim
<i>Associated Gen. Contractors of Ohio, Inc. v. Drabik</i> , 214 F.3d 730 (6th Cir. 2000)	16, 17
<i>Associated Gen. Contractors v. New Haven</i> , 791 F. Supp. 941 (D. Conn. 1992)	7
<i>Builders Ass’n of Greater Chi. v. City of Chi.</i> , 298 F. Supp. 2d 725 (N.D. Ill. 2003)	11
<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.</i> , 488 U.S. 469 (1989)	passim
<i>Cleveland Constr., Inc. v. City of Cincinnati</i> , 169 Ohio App. 3d 627	6
<i>Cleveland Constr., Inc. v. City of Cincinnati</i> , 864 N.E. 2d 116 (Ohio Ct. App. 2006)	6
<i>Concrete Works of Colo., Inc. v. City & Cnty. of Denver (“Concrete Works I”)</i> , 823 F. Supp. 821 (D. Colo. 1993)	passim
<i>Concrete Works of Colo., Inc. v. City & Cnty. of Denver (“Concrete Works II”)</i> , 36 F.3d 1513 (10th Cir. 1994)	9, 16, 20, 23
<i>Concrete Works of Colo., Inc. v. City & Cnty. of Denver (“Concrete Works III”)</i> , 86 F. Supp. 2d 1042 (D. Colo. 2000)	9, 10



<i>Concrete Works of Colo., Inc. v. City & Cnty. of Denver (“Concrete Works IV”),</i> 321 F.3d 950 (10th Cir. 2003)	8, 10
<i>Cone Corp. v. Hillsborough Cnty.,</i> 908 F.2d 908 (11th Cir. 1990)	13, 19
<i>Contractors Ass’n of E. Pa. v. City of Philadelphia (“Philadelphia IV”),</i> 6 F.3d 990 (3d Cir. 1993)	3, 22, 23, 24
<i>Contractors Ass’n of E. Pa. v. City of Philadelphia (“Philadelphia V”),</i> 893 F. Supp. 419, 430, 431, 433, 437 (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)	passim
<i>Coral Constr. Co. v. King Cnty.,</i> 941 F.2d 910 (9th Cir. 1991)	passim
<i>Dickerson Carolina v. Harrelson,</i> 114 N.C. App. 693 (1994)	24
<i>Doe 1 v. Lower Merion Sch. Dist.,</i> 689 F. Supp. 2d 742, 748 (E.D. Pa. 2010)	5
<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)	15, 17, 19
<i>Eng’g Contractors Ass’n v. Metro. Dade Cnty. (“Dade County II”),</i> 122 F.3d 895 (11th Cir. 1997)	2, 3, 4, 22, 28
<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)	28
<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



<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)	28
<i>Int’l Bhd. of Teamsters v. United States</i> , 431 U.S. 324 (1977)	13, 19, 20
<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>Lion Apparel v. City of Cincinnati</i> , 2006 U.S. Dist. LEXIS 96528 (D. Ohio Mar. 13, 2006)	6
<i>Mich. Rd. Builders Ass’n v. Milliken</i> , 834 F.2d 583 (6th Cir. 1987)	2
<i>Miss. Univ. for Women v. Hogan</i> , 458 U.S. 718 (1982)	2
<i>Monterey Mech. Co. v. Pete Wilson et al.</i> , 125 F.3d 702 (9th Cir. 1997)	11
<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).....	22, 23
<i>Ohio Contractors Ass’n v. Keip</i> , 1983 U.S. App. LEXIS 24185 (6th Cir. 1983)	16
<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).....	10
<i>United States v. Virginia</i> , 518 U.S. 515 (1996)	2, 3
<i>W.H. Scott Constr. Co. v. City of Jackson</i> , 199 F.3d 206 (1999)	11
<i>Wygant v. Jackson Bd. of Educ.</i> , 476 U.S. 267 (1986)	7, 8, 20



CHAPTER 2: CONTRACTING AND PROCUREMENT ANALYSIS

I. INTRODUCTION

This chapter is an overview of the City of Cincinnati's (City's) policies governing the purchase of construction, professional services including architecture and engineering (hereinafter referred to as professional services), and supplies and services during the January 1, 2009, through December 31, 2013, study period. The relevant codes and regulations of the Cincinnati Municipal Code and Administrative Regulations are addressed.

Cincinnati is the third largest city in the State of Ohio; Cincinnati is within Hamilton County, one of 88 counties in the State of Ohio. The City's legislative authority is its City Council. The Council is comprised of a Vice Mayor, President Pro Tem, and seven council members. The City's procurement is handled by the Purchasing Division of the Finance Department under the management of the City Purchasing Agent, who reports to the Director of Finance.

The manuals reviewed in preparation of this chapter include:

- Purchasing Policies and Procedures Manual, City of Cincinnati Finance Department, Purchasing Division
- Understanding the Procurement Process, City of Cincinnati Finance Department, Purchasing Division, published February 2010



II. GOVERNING LAWS AND REGULATIONS

The applicable codes and regulations governing the purchase of construction, professional services, and supplies and services for the City include:

Table 2.01: Governing Laws and Regulations

CINCINNATI MUNICIPAL CODE
Chapter 321
CINCINNATI ADMINISTRATIVE REGULATIONS
Administrative Regulation 14 Administrative Regulation 23 Administrative Regulation 24 Administrative Regulation 34 Administrative Regulation 45 Administrative Regulation 60

A. Cincinnati Municipal Codes

1. Cincinnati Municipal Code, Section 321-11

Section 321-11 governs procurements of \$5,000 and less, which is decentralized for construction and supplies and services. Purchases are made without advertising, according to procedures promulgated by the City Purchasing Agent.

2. Cincinnati Municipal Code, Section 321-13

Section 321-13 governs procurements in excess of \$5,000, but not greater than \$50,000 for construction and supplies and services. Purchases are made by quotes from vendors that are registered with the City in the commodity code of the item or service needed by the City.

3. Cincinnati Municipal Code, Section 321-15

Section 321-15 governs procurement in excess of \$50,000, but not greater than \$250,000 for construction and supplies and services. Purchases are made through competitive bidding, with advertising of at least one (1) week.



4. Cincinnati Municipal Code, Section 321-17

Section 321-17 governs the procurements in excess of \$250,000 for construction and supplies and services. These purchases require a formal bidding process, with advertisement of at least two (2) weeks, and the approval of the City Manager, and the Board or Commission on whose behalf the contract is made.

5. Cincinnati Municipal Code, Sections 321-19 and 321-51 through 321-69

Sections 321-19 and 321-51 through 321-69 govern the procurement of professional services through a request for proposal process. In addition, further details pertaining to the requirement for use of a competitive process related to the procurement of professional and non-standard services are contained in Administrative Regulation 23.

6. Cincinnati Municipal Code, Sections 321-21 through 321-49

Sections 321-21 through 321-49 detail the requirements of the bidding process utilized by the Division of Purchasing.

7. Cincinnati Municipal Code Section 321-85

Section 321-85 governs the procurement of sole source purchases for supplies and services or construction. Documentation from the manufacturer is required for documentation of a sole source.

8. Cincinnati Municipal Code Section 321-87

Section 321-87 governs the procurement of direct awards for supplies and services and construction. It provides that a direct award shall be made only when approved by the City Purchasing Agent for compatible equipment, accessories or replacement parts, original manufacturer supplies, public utility services and supplies for trial use or testing.

9. Cincinnati Municipal Code Section 321-89

Section 321-89 governs the procurement of emergency purchases. Further detail is provided for emergency purchases in Administrative Regulation 34.

10. Cincinnati Municipal Code Sections 321-95 through 321-107

Sections 321-95 through 321-107 detail procurements by the City using various cooperative purchasing arrangements.



11. Cincinnati Municipal Code Sections 321-111 through 321-125

Sections 321-111 through 321-125 provide regulations that pertain to construction contracts into which the City may enter.

12. Cincinnati Municipal Code Sections 321-129 through 321-139

Sections 321-129 through 321-139 pertain to requirements for bid and performance surety required by the City.

B. Cincinnati Administrative Regulations

1. Administrative Regulation 14

Regulation 14 governs the certification of funds for decentralized procurements for construction and goods and other services valued at \$3,000 and less.

2. Administrative Regulation 23

Administrative Regulation 23 pertains to the procurement of professional and non-standard services through a competitive process, except in specific instances cited in the regulation. All provisions of the regulation must be adhered to, unless waived by the City Manager in a specific case.

III. INDUSTRIES

A. Industries and Definitions

The City of Cincinnati procurements, as addressed, are classified into three industries, as follows:

Construction: construction, reconstruction, improvement, enlargement, alteration, repair, painting, decorating, wrecking or demolition, of any public improvement with an estimated cost of more than \$4,000.¹

Professional Services: personal services of a specialized nature requiring the exercise of a peculiar skill or aptitude, including architecture and engineering services.²

Supplies and Services: all property, equipment, materials, pharmaceuticals, printing;³ and the labor furnished by a contractor, not involving the delivery of a specific end

¹ CINCINNATI, OHIO, MUNICIPAL CODE, ORD. No. 426, Ch.321 § 321-1-C3 (1992).

² CINCINNATI, OHIO, MUNICIPAL CODE, ORD. No. 426, Ch.321 § 321-1-P (1992).

product other than reports. Employment agreements and collective bargaining agreements are expressly excluded.⁴

IV. PROCUREMENT PROCESS OVERVIEW

The procurement methods utilized by the City vary depending on the value and type of the procurement. Decentralized procurements are permitted for the purchase of construction and supplies and services valued at \$5,000 and under. Construction and supplies and services valued from \$5,000 to \$50,000 are procured using a request for quotes. Procurements for construction and supplies and services valued from \$50,000 to \$250,000 are procured using a published request for bids. These bids must be advertised for at least one week.

Formal procurements, using published requests for bids, are used to secure construction and supplies and services valued at \$250,000 and over. These bids must be advertised for at least two weeks. All bids must be received by the City Purchasing Agent in a sealed envelope by noon on the date of the closing of the bid, at which time the sealed bids are opened and publicly read. While bid and performance surety may be required, in most cases it is waived unless specifically required by a particular instance. Performance surety is required for all contracts for demolition, regardless of amount, and for construction in excess of \$50,000.

All specific professional services, regardless of the estimated project value, are also procured using published requests for bids. Depending on the dollar amount and industry, formal procurements are solicited using Requests for Proposals (RFPs), Invitations to Bid (ITB), Requests for Information (RFI), and Requests for Qualifications (RFQ). All formal procurements have advertising requirements. Such requirements are detailed in Administrative Regulation 23 and the RFP Manual to which it makes reference.

The procurement process involves a contract review, approval, and execution process. Decentralized procurements are approved by the User Department and Purchasing Division. Procurements by Quotes and Publicized Bids are approved by the Purchasing Division. Informal bids that are less than \$250,000 are approved by the City Purchasing Agent. Formal bids must be approved the City Manager, designee, or the appropriate Board or Commission for which the procurement is being made.

Certain solicitations are permissible without a competitive procurement process. These include sole source purchases, emergency procurements, and direct awards. These must always be approved by the City Purchasing Agent or the City Manager, depending on the amount of the purchase or the circumstances.



³ CINCINNATI, OHIO, MUNICIPAL CODE, ORD. No. 426, Ch.321 § 321-1-S2 (1992).

⁴ CINCINNATI, OHIO, MUNICIPAL CODE, ORD. No. 426, Ch.321 § 321-1-S (1992).

A. Decentralized Procurements

1. Construction and Supplies and Services Valued at \$5,000 and Under

The purchase of construction and supplies and services valued at \$5,000 and under are procured without competition. Both the User Department and the Purchasing Division must authorize the award. Furthermore, the award must be given to an SBE listed for that particular commodity code, unless determined by the City Purchasing Agent to be impractical or not in the best interest of the City, to support an award to the SBE based on price. In such case, competitive bidding shall be conducted.

B. Procurement by Quotes

1. Construction and Supplies and Services Valued from \$5,000 to \$50,000

The purchases of construction and supplies and services valued from \$5,000 to \$50,000 are procured using written quotes. At least two quotes must be solicited from SBEs. The award must then go to the lower of the two SBE quotes. If there is only one SBE in a commodity code, or only one SBE provides a quote, then two quotes are sought from non-SBEs in that same commodity code. If the SBE is the lowest quote, it gets the award; if a non-SBE is the lowest quote, the SBE must be given the opportunity to match the quote of the lowest non-SBE. If the SBE matches the lowest non-SBE, the SBE is given the award. If the SBE decides not to match the lowest non-SBE quote, only then shall the award go to a non-SBE. Advertising is not required. The City Purchasing Agent is authorized to approve the award. The City has piloted taking electronic bids online for demolitions of less than \$50,000. This experience will be evaluated to determine if this methodology can be expanded to other bidding situations.

C. Published Bids

2. Construction and Supplies and Services Valued from \$50,000 to \$250,000

The purchase of construction and supplies and services valued from \$50,000 to \$250,000 is procured through competitive bidding. The procurement is awarded to the vendor that provides the lowest and best bid. The solicitation is advertised for a minimum of one week in The City Bulletin or online via the Vendor Self Service (VSS) website. Performance and bid bonds are required for all demolition contracts and construction contracts valued over \$50,000. The City Purchasing Agent is authorized to approve the award.



D. Formal Procurements

1. Construction and Supplies and Services Valued at \$250,000 and Over

The purchase of construction and supplies and services valued at \$250,000 and over is procured using either a Request for Proposal (RFP) or Invitation to Bid (ITB). Both the RFP and ITB must include the time, date, and location where the proposals will be received. They must also include the proposal requirements and evaluation factors that will be considered in awarding the contract. Performance bond requirements are specified in the solicitation. The solicitations are advertised for a minimum of two weeks in The City Bulletin, in the lobby of the Purchasing Division, and online via the VSS website. The City Manager or the appropriate Board or Commission is authorized to approve the award. All bids and proposals must be submitted in a sealed envelope and are opened at a public reading of all such bids and proposals.

2. Professional Services

Professional services are procured using a RFP, RFI, or RFQ. The competitive proposal is used when the City Purchasing Agent deems the use of competitive bidding not practical or advantageous to the City.

The contract is awarded to the consultant whose proposal is considered to be the most advantageous to the City based on price, delivery schedule, the terms of the contract and any other criteria delineated in the solicitation. Administrative Regulation 23 requires, among other things, that all solicitations identify the minimum qualifications required for the successful completion of the proposed work, generate open and fair competition to the maximum extent practicable and achieve the City's SBE goals and Equal Employment Opportunity (EEO) requirements. The City Manager or the appropriate Board or Commission is authorized to approve the award.

E. Other Procurements

1. Emergency Purchases

Upon declaration of an emergency or in the presence of a threat to public health, welfare, or safety, the City Purchasing Agent may procure construction and supplies and services without public notice, solicitation of a bid, or Council approval. Advertising may be waived by the City Manager in consultation with the City Purchasing Agent.

Emergency purchases valued at \$100,000 and under are procured through verbal bids, and purchases valued over \$100,000 are procured through three written quotes. However, every effort must be made to secure competitive bids. Competitive quotations are encouraged for emergency purchases when the normal competitive quotations are waived.



Procurements valued over \$100,000 must be approved by the Department Head with the City Purchasing Agent's concurrence, and approval of the City Manager or Assistant City Manager.

Additional details pertaining to emergency purchases are provided in Administrative Regulation 34.

2. Sole Source Purchases

Sole source procurements may be used to procure construction and supplies and services without competition after it is determined by the City Purchasing Agent that only one source is available to provide the needed good or service.

The sole source procurement must be secured in writing. The award is negotiated based on schedule, delivery, and terms of the contract.⁵ A record of the sole source procurement is maintained by the City Purchasing Agent. The record includes the contractor's name, award amount, and the type of supplies, services, or construction purchased. Sole source procurements are authorized by the City Purchasing Agent. Documentation of the product or service's availability from only one provider is required.

3. Direct Award Purchases

Purchases for construction and supplies and services may be procured by direct awards without competitive solicitation if the City Purchasing Agent deems one of the following goods or services is needed:

- Compatible equipment accessories or replacement parts
- Supplies from the original manufacturer
- Public utility services
- Supplies for trial use or testing

Contracts for direct awards are negotiated based on price, delivery schedule, and contract terms. Direct awards are authorized by the City Purchasing Agent.⁶

V. SMALL BUSINESS PROGRAM

The City adopted an interim Small Business Enterprise Program (SBE Program) after its race and gender-conscious Equal Opportunity Business Program was legally challenged in 1998. In 1999, the SBE Program was officially adopted under City Ordinance No. 335-1999. The Office of Contract Compliance (OCC) is charged with the responsibility of administering the SBE Program. Pursuant to Section 323-15 of the City's Municipal

⁵ The terms may include the amount of the contract and the supplies, services, or construction to be procured.

⁶ The City may also enter into cooperative purchases with other state agencies to procure supplies, services, and materials without engaging in the competitive solicitation process.



Code, the OCC is responsible for the SBE Program. Specifically, the responsibilities, functions and duties of the OCC according to the Cincinnati Municipal Code include the following:

- A resource for small businesses
- Disseminate information and communicate with SBEs
- Solicit input from representatives of SBEs, trade associations, and community organizations
- Hold quarterly outreach events for SBEs and owners of small businesses that are eligible to participate in the City's SBE program
- Publish bi-annual newsletters regarding small business matters
- Produce video programming geared toward small businesses
- Publicly inform SBEs and owners of eligible small businesses of the City's procurement forecast in cooperation with the City's Purchasing Division and other appropriate City departments
- Certify, recertify, and decertify SBEs
- Assist SBEs in overcoming barriers to program participation, including business management and technical assistance resources
- Maintain records and reports submitted by contractors
- Monitor SBE participation levels on projects throughout the duration of the contract in conjunction with other City agencies
- Investigate alleged violations of the SBE program rules and regulations and provide written results of the investigation including the reasons for the determination and any penalty imposed
- Determine whether a bidder or offeror made good faith efforts as defined in the SBE program rules and regulations to include SBEs in its bid or proposal
- Provide contact information on SBEs upon request by potential bidders on City contracts
- Notify the appropriate City departments of a contractor's failure to comply with the SBE program rules and regulations, and of the result of any appeal from that determination
- Provide ongoing monitoring and oversight functions to determine successful bidders' continuing compliance with the SBE Program Rules and Regulations and their utilization of SBEs, Minority-owned Business Enterprises (MBEs), and Woman-owned Business Enterprises (WBEs)

A. Eligibility

To qualify as a SBE, the business must have a gross revenue for the preceding three years or a specified number of employees as defined in 13 Code of Federal Regulations (CFR) Section 121.103. Businesses may not exceed the size standards set forth in 15 United States Code (USC) Section 632 and 13 CFR Section 121.101, et seq. The vendor must have been in business for at least one year and have maintained a fixed office within Hamilton County at least one year prior to the submission of the SBE application.



The business must perform a commercially useful function (CUF) and each owner must not have a net worth that exceeds \$750,000 at the time of entry into the SBE Program and during the term of certification in the Program. A CUF is defined as being responsible for the execution of a distinct element of the work and for performing, managing, and supervising the work.⁷

B. Certification

The City's SBE certification requirements are consistent with the provisions set forth in Section 323-1-S of the City's Municipal Code. A firm may be certified as a SBE through (1) self-certification if the contract value is less than \$50,000; (2) streamlined certification for firms currently certified through the State of Ohio EDGE Program or the Federal 8 (a) Business Development Program; and (3) the full SBE application process.

C. SBE Goals

The current SBE goal is 30% for construction and 15% for professional services and supplies and services contracts.

Table 2.02: City of Cincinnati's Procurement Process

CITY OF CINCINNATI PROCUREMENT MATRIX					
Decentralized Procurements⁸					
Construction and Supplies and Services	\$5,000 and Under	None	Decentralized Procurement	Lowest and Best Bid	User Department and Purchasing Division
Procurement by Quotes⁹					
Construction and Supplies and Services	\$5,000 to \$50,000	None	Solicit Quotes	Two Quotes from SBEs, if Available, Otherwise Three; and SBE can Match low Non-SBE	City Purchasing Agent
Publicized Bids¹⁰					
Construction and Supplies and Services	\$50,000 to \$250,000	Publicized for one week in <i>The City Bulletin</i> , Purchasing Division's lobby, and	Competitive Bidding	Lowest and Best Bid	City Purchasing Agent

⁷ CINCINNATI, OHIO, MUNICIPAL CODE, ORD. No. 426, Ch.321 § 321-1-C1 (1992).

⁸ CINCINNATI, OHIO, MUNICIPAL CODE, ORD. No. 426, Ch.321 § 321-11 (1992).

⁹ CINCINNATI, OHIO, MUNICIPAL CODE, ORD. No. 426, Ch.321 § 321-1-13 (1992).

¹⁰ CINCINNATI, OHIO, MUNICIPAL CODE, ORD. No. 426, Ch.321 § 321-15 (1992).



CITY OF CINCINNATI PROCUREMENT MATRIX					
		online at the VSS			
Formal Procurements					
Construction and Supplies and Services ¹¹	\$250,000 and over	Publicized for a minimum of two weeks in <i>The City Bulletin</i> , Purchasing Division's lobby, and online at the VSS	Request for Proposal; Invitation to Bid	Most advantageous to the City for a proposal; Lowest and best for bid	City Manager or designee; or the appropriate Board or Commission
Professional Services ¹²	None	Publicized in <i>The City Bulletin</i> for at least two weeks and VSS	Request for Proposal, Request for Information, or Request for Qualifications	Most advantageous proposal	City Manager or designee; or the appropriate Board or Commission
Other Procurements					
Emergency Purchases ¹³	\$100,000 and under	None	Requisition	Effort should be made to secure competitive bids	Department Head with concurrence of City Purchasing Agent
Emergency Purchases ¹⁴	\$100,000 and over	None	Requisition	Written quotes, preferably three	Department Head, in consultation with City Purchasing Agent, and approval of the City Manager or Assistant City Manager
Sole Source Purchases (supplies and services or construction) ¹⁵	None	None	Non-competitive	Negotiations based on price, delivery, and terms	City Purchasing Agent
Direct Award (supplies and	None	None	Non-competitive	Negotiations based on price,	City Purchasing Agent

¹¹ CINCINNATI, OHIO, MUNICIPAL CODE, ORD. No. 426, Ch.321 § 321-1-17 (1992).

¹² CINCINNATI, OHIO, MUNICIPAL CODE, ORD. No. 426, Ch.321 §§ 321-19, 321-51 through 321-69 (1992).

¹³ CINCINNATI, OHIO, MUNICIPAL CODE, ORD. No. 426, Ch.321 § 321-89 (1992); Administrative Regulation 34.

¹⁴ *Id.*

¹⁵ CINCINNATI, OHIO, MUNICIPAL CODE, ORD. No. 426, Ch.321 § 321-85 (1992).



CITY OF CINCINNATI PROCUREMENT MATRIX					
services or construction) ¹⁶				delivery, and terms	
Cooperative purchasing	>\$50,000	None	Non-competitive (cooperating jurisdiction has procured vendor through a competitive process)	Price stated by cooperative jurisdiction	City Purchasing Agent



¹⁶ CINCINNATI, OHIO, MUNICIPAL CODE, ORD. No. 426, Ch.321 § 321-87 (1992).

CHAPTER 3: PRIME CONTRACTOR UTILIZATION ANALYSIS

I. INTRODUCTION

This chapter documents the City of Cincinnati's (City's) utilization of Minority and Woman-owned Business Enterprise (M/WBE), hereinafter referred to as Minority and Caucasian Female Business Enterprise, and Non-minority Male-owned Business Enterprise prime contractors by ethnicity and gender. The analysis is limited to contracts awarded and executed during the study period, which is January 1, 2009, to December 31, 2013. Utilization is a calculation of the number of contracts and amount of dollars expended by the City. For the analysis, the City's expenditures were classified into three industries—construction, professional services including architecture and engineering (hereinafter professional services), and supplies and services. Construction includes new erection, reconstruction, improvement, enlargement, alteration, repair, painting, decorating, and wrecking or demolition of any public improvement with an estimated cost of more than \$4,000.¹ Professional services include personal services of a specialized nature requiring the exercise of a peculiar skill or aptitude. Supplies and services include all property, equipment, materials, pharmaceuticals,² printing,³ and labor furnished by a contractor, not involving the delivery of a specific end product other than reports.

The utilization data in the Disparity Study (Study) are disaggregated into seven ethnic and gender groups. The seven groups are listed in Table 3.01.

¹ CINCINNATI, OHIO, MUNICIPAL CODE, ORD. No. 426, Ch.321 § 321-1-C3 (1992).

² Pharmaceuticals are typically excluded from the utilization analysis, but will be included based on CINCINNATI, OHIO, MUNICIPAL CODE, ORD. No. 426, Ch. 321 § 321-1-S2 (1992).

³ CINCINNATI, OHIO, MUNICIPAL CODE, ORD. No. 426, Ch. 321 § 321-1-S2 (1992).



Table 3.01: Business Ethnic and Gender Groups

Ethnic and Gender Category	Definition
African American Businesses	Businesses owned by male and female African Americans
Asian American Businesses	Businesses owned by male and female Asian Americans
Hispanic American Businesses	Businesses owned by male and female Hispanic Americans
Native American Businesses	Businesses owned by male and female Native Americans
Minority-owned Business Enterprises	Businesses owned by African American, Asian American, Hispanic American, and Native American males and females
Caucasian Female Business Enterprises	Businesses owned by Caucasian females
Non-minority Male-owned Business Enterprises	Businesses owned by Caucasian males, and businesses that could not be identified as minority or female-owned ⁴

II. PRIME CONTRACT DATA SOURCES

The prime contractor records are contract data extracted from the City’s financial system. The payments were issued during the January 1, 2009, to December 31, 2013, study period. Contracts were grouped by “DOC ID” and prime vendor.

Each contract was classified into one of the three industries. Non-competitive bid contracts were excluded from the Study. The industry classifications were reviewed and approved by the City.

The ethnicity and gender of the prime contractors were researched in an effort to verify the ethnicity and gender of each prime contractor. The prime contractor names were cross-referenced with certification lists, chamber of commerce lists, and trade organization membership directories. Each prime contractor’s website was also reviewed for the ethnicity and gender of the business owner. 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 contract records were cleaned, the utilization analysis was performed.

⁴ See Section II: Prime Contract Data Sources for the methodology employed to identify the ethnicity and gender of the City’s utilized prime contractors.



III. PRIME CONTRACTOR UTILIZATION THRESHOLDS

The City's procurement process is managed by the City Finance Department and regulated by Cincinnati Municipal Code, Chapter 321 and the Administrative Regulations. Contract value thresholds considered in the utilization analysis mirror the thresholds detailed in the City Municipal Code. The Municipal Code delineates the solicitation procedures by industry. The utilization analysis was limited to contracts valued at \$250,000 and over, between \$50,001 and \$249,999, between \$5,001 and \$50,000, at \$5,000 and under, and at all combined thresholds. Under the procurement policy, contracts in excess of \$250,000 are considered formal procurements. The City's procurement policies have been summarized in *Chapter 2: Contracting and Procurement Analysis*.

Table 3.02 presents the contract value thresholds for the utilization analysis.

Table 3.02: Utilization Analysis Contract Thresholds

Contract Threshold
\$250,000 and Over
\$50,001 to \$249,999
\$5,001 to \$50,000
\$5,000 and Under

IV. PRIME CONTRACTOR UTILIZATION

A. All Prime Contractors

As depicted in Table 3.03, the City issued 10,228 prime contracts during the January 1, 2009, to December 31, 2013, study period. The 10,228 prime contracts included 1,563 for construction, 1,229 for professional services, and 7,436 for supplies and services.

The payments made by the City during the study period totaled \$1,232,570,508 for all 10,228 prime contracts. Payments included \$541,126,211 for construction, \$371,576,494 for professional services, and \$319,867,803 for supplies and services contracts.



**Table 3.03: Total Prime Contracts and Dollars Expended:
All Industries, January 1, 2009, to December 31, 2013**

Industry	Total Number of Contracts	Total Dollars Expended
Construction	1,563	\$541,126,211
Professional Services	1,229	\$371,576,494
Supplies and Services	7,436	\$319,867,803
Total Expenditures	10,228	\$1,232,570,508

B. Highly Used Prime Contractors

The highly used prime contractor analysis determined which individual contractors received the majority of contract dollars during the study period. To conduct the analysis, all prime contracts with the contract amount are clustered by prime contractor name. The contract amounts for each prime contractor are aggregated. From the aggregated amounts, the prime contractors who received approximately 70% of contract dollars are determined. These contractors are deemed “highly used.” The ethnicity and gender of the highly used prime contractors are presented in this analysis.

The City awarded a total of 10,228 construction, professional services, and supplies and services prime contracts during the study period. As depicted in Table 3.04, the City’s 10,228 prime contracts were received by 1,985 unique vendors.

Table 3.04: Total Prime Contracts

Total Prime Contracts	10,228
Total Utilized Vendors	1,985
Total Expenditures	\$1,232,570,508



Table 3.05 below presents the distribution of the City’s prime contracts according to the number of vendors. Ninety-six of the 1,985 vendors received \$862,727,733 or approximately 70% of the total prime contract dollars. The 96 vendors represented 4.84% of the 1,985 vendors. The findings illustrate that a small group of prime contractors received the majority of dollars the City spent.

Table 3.05: All Prime Contracts Distributed by Number of Vendors

Vendors	Total Dollars	Percent of Dollars ⁵	Number of Contracts	Percent of Contracts ⁶
96 Highly Used Vendors	\$862,727,733	70%	882	9%
1,985 Total Vendors	\$1,232,570,508	100%	10,228	100%

Table 3.06 presents the ethnicity and gender of 38 of the 96 most highly used prime contractors, who received 49.90% of dollars spent. The 38 most highly used prime contractors were Non-minority Male-owned Business Enterprises. The contracts received by these 38 businesses ranged from \$128 to \$22,046,487.

Table 3.06: Top 38 Highly Used Prime Contractors

Ethnicity/ Gender ⁷	Total Dollars	Percent of Dollars	Number of Contracts	Percent of Contracts
Non-minority Male	\$615,070,838	49.90%	422	4.13%

C. Highly Used Construction Prime Contractors

The pattern of highly used vendors was evident in construction. The City awarded a total of 1,563 construction prime contracts during the study period. As depicted in Table 3.07 below, the 1,563 construction prime contracts were received by 277 unique vendors.

Table 3.07: Construction Prime Contracts

Total Prime Contracts	1,563
Total Utilized Vendors	277
Total Expenditures	\$541,126,211

An analysis was performed to determine the number of vendors that received approximately 70% of the construction prime contract dollars. The 24 most highly used vendors represented 8.66% of the 277 vendors.

⁵ Percentages are rounded to the nearest whole number.

⁶ Percentages are rounded to the nearest whole number.

⁷ African Americans, Asian Americans, Hispanic Americans, Native Americans, and Caucasian Females were omitted from the table because they were not highly used.



Table 3.08 below presents the distribution of the City's construction prime contracts according to the number of vendors. Twenty-four of the 277 vendors received \$376,606,219 or 69.60% of the prime contract dollars. The findings illustrate that a small group of prime contractors received the majority of construction prime contract dollars the City spent.

Table 3.08: Construction Prime Contracts Distributed by Number of Vendors

Vendors	Total Dollars	Percent of Dollars ⁸	Number of Contracts	Percent of Contracts ⁹
24 Highly Used Vendors	\$376,606,219	70%	293	19%
277 Total Vendors	\$541,126,211	100%	1,563	100%

Table 3.09 below presents the ethnicity and gender of 12 of the 24 most highly used construction prime contractors, representing 51.16% of dollars spent. The 12 most highly used construction prime contractors were Non-minority Male Business Enterprises. The contracts received by these 12 businesses ranged from \$1,482 to \$21,050,669.

Table 3.09: Top 12 Highly Used Construction Prime Contractors

Ethnicity/ Gender ¹⁰	Total Dollars	Percent of Dollars	Number of Contracts	Percent of Contracts
Non-minority Male	\$276,846,262	51.16%	197	12.60%

D. Highly Used Professional Services Prime Contractors

The pattern of a small number of highly used contractors was evident in professional services contracts. The City awarded a total of 1,229 professional services prime contracts during the study period. As depicted in Table 3.10 below, the 1,229 professional services prime contracts were received by 496 vendors.

⁸ Percentages are rounded to the nearest whole number.

⁹ Percentages are rounded to the nearest whole number.

¹⁰ African Americans, Asian Americans, Hispanic Americans, Native Americans, and Caucasian Females were omitted from the table because they were not highly used.



Table 3.10 Professional Services Prime Contracts

Total Prime Contracts	1,229
Total Utilized Vendors	496
Total Expenditures	\$371,576,494

An analysis was performed to determine the number of vendors that received approximately 70% of the dollars the City awarded in professional services prime contracts. The analysis determined that 33 vendors received 70.07% of the total professional services prime contract dollars. The 33 most highly used vendors represented 6.65% of the 496 vendors.

Table 3.11 below presents the distribution of the City's professional services prime contracts according to the number of vendors. Thirty-three of the 496 vendors received \$260,351,283 or 70.07% of the prime contract dollars. The findings illustrate that a small group of prime contractors received the majority of the professional services prime contract dollars the City spent.

**Table 3.11: Professional Services Prime Contracts Distributed
by Number of Vendors**

Vendors	Total Dollars	Percent of Dollars ¹¹	Number of Contracts	Percent of Contracts ¹²
33 Highly Used Vendors	\$260,351,283	70%	117	10%
496 Total Vendors	\$371,576,494	100%	1,229	100%

Table 3.12 presents the ethnicity and gender of the 14 most highly used professional services prime contractors, representing 50.32% of dollars spent. The 14 most highly used professional services prime contractors consisted of Non-minority Male-owned and African American Business Enterprises. The contracts received by these 14 businesses ranged from \$1,193 to \$22,046,487.

¹¹ Percentages are rounded to the nearest whole number.

¹² Percentages are rounded to the nearest whole number.



Table 3.12: Top 14 Highly Used Professional Services Prime Contractors

Ethnicity/ Gender¹³	Total Dollars	Percent of Dollars	Number of Contracts	Percent of Contracts
African Americans	\$6,304,727	1.70%	2	0.16%
Non-minority Males	\$180,646,301	48.62%	61	4.96%

E. Highly Used Supplies and Services Prime Contractors

The pattern of a small number of highly used contractors was evident in supplies and services contracts. The City awarded a total of 7,436 supplies and services prime contracts during the study period. As depicted in Table 3.13 below, the 7,436 supplies and services prime contracts were received by 1,378 vendors.

Table 3.13: Supplies and Services Prime Contracts

Total Prime Contracts	7,436
Total Utilized Vendors	1,378
Total Expenditures	\$319,867,803

An analysis was performed to determine the number of vendors that received approximately 70% of the supplies and services prime contract dollars the City awarded. The analysis determined that 70 vendors received 70.16% of the total supplies and services prime contract dollars. The 70 vendors represented 5.08% of the 1,378 vendors.

Table 3.14 below presents the distribution of the City's supplies and services prime contracts according to the number of vendors. Seventy of the 1,378 vendors received \$224,428,637 or 70.16% of the prime contract dollars. The findings illustrate that a small group of prime contractors received the majority of the supplies and services prime contract dollars the City spent.

¹³ Asian Americans, Hispanic Americans, Native Americans, and Caucasian Females were omitted from the table because they were not highly used.



Table 3.14: Supplies and Services Prime Contracts Distributed by Number of Vendors

Vendors	Total Dollars	Percent of Dollars ¹⁴	Number of Contracts	Percent of Contracts ¹⁵
70 Highly Used Vendors	\$224,428,637	70%	726	10%
1,378 Total Vendors	\$319,867,803	100.00%	7,436	100.00%

Table 3.15 presents the ethnicity and gender of 29 of the 70 most highly used supplies and services prime contractors, representing 49.94% of dollars spent. These 29 most highly used supplies and services prime contractors were Non-minority Male-owned Business Enterprises. The contracts received by these 29 businesses ranged from \$50 to \$20,517,224.

Table 3.15: Top 29 Highly Used Supplies and Services Prime Contractors

Ethnicity/ Gender ¹⁶	Total Dollars	Percent of Dollars	Number of Contracts	Percent of Contracts
Non-minority Male	\$159,746,993	49.94%	328	4.41%

¹⁴ Percentages are rounded to the nearest whole number.

¹⁵ Percentages are rounded to the nearest whole number.

¹⁶ African Americans, Asian Americans, Hispanic Americans, Native Americans, and Caucasian Females were omitted from the table because they were not highly used.



F. All Prime Contracts by Industry

1. Construction Prime Contractor Utilization: All Contracts

Table 3.16 summarizes all contract dollars expended by the City on construction prime contracts. Minority-owned Business Enterprises received 2.44% of the construction prime contract dollars; Caucasian Female Business Enterprises received 2.13%; and Non-minority Male-owned Business Enterprises received 95.42%.

African Americans received 96 or 6.14% of all construction prime contracts during the study period, representing \$5,247,455 or 0.97% of the construction prime contract dollars.

Asian Americans received 19 or 1.22% of all construction prime contracts during the study period, representing \$7,091,558 or 1.31% of the construction prime contract dollars.

Hispanic Americans received 0 or 0.00% of all construction prime contracts during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Native Americans received 56 or 3.58% of all construction prime contracts during the study period, representing \$885,718 or 0.16% of the construction prime contract dollars.

Minority-owned Business Enterprises received 171 or 10.94% of all construction prime contracts during the study period, representing \$13,224,731 or 2.44% of the construction prime contract dollars.

Caucasian Female Business Enterprises received 242 or 15.48% of all construction prime contracts during the study period, representing \$11,534,672 or 2.13% of the construction prime contract dollars.

Minority and Caucasian Female Business Enterprises received 413 or 26.42% of all construction prime contracts during the study period, representing \$24,759,403 or 4.58% of the construction prime contract dollars.

Non-minority Male-owned Business Enterprises received 1,150 or 73.58% of all construction prime contracts during the study period, representing \$516,366,808 or 95.42% of the construction prime contract dollars.



**Table 3.16: Construction Prime Contractor Utilization:
All Contracts, January 1, 2009, to December 31, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	96	6.14%	\$5,247,455	0.97%
Asian Americans	19	1.22%	\$7,091,558	1.31%
Hispanic Americans	0	0.00%	\$0	0.00%
Native Americans	56	3.58%	\$885,718	0.16%
Caucasian Females	242	15.48%	\$11,534,672	2.13%
Non-minority Males	1,150	73.58%	\$516,366,808	95.42%
TOTAL	1,563	100.00%	\$541,126,211	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	9	0.58%	\$789,688	0.15%
African American Males	87	5.57%	\$4,457,766	0.82%
Asian American Females	0	0.00%	\$0	0.00%
Asian American Males	19	1.22%	\$7,091,558	1.31%
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	56	3.58%	\$885,718	0.16%
Caucasian Females	242	15.48%	\$11,534,672	2.13%
Non-minority Males	1,150	73.58%	\$516,366,808	95.42%
TOTAL	1,563	100.00%	\$541,126,211	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	9	0.58%	\$789,688	0.15%
Minority Males	162	10.36%	\$12,435,043	2.30%
Caucasian Females	242	15.48%	\$11,534,672	2.13%
Non-minority Males	1,150	73.58%	\$516,366,808	95.42%
TOTAL	1,563	100.00%	\$541,126,211	100.00%
Minority and Females	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	171	10.94%	\$13,224,731	2.44%
Caucasian Female Business Enterprises	242	15.48%	\$11,534,672	2.13%
Minority and Caucasian Female Business Enterprises	413	26.42%	\$24,759,403	4.58%
Non-minority Male Business Enterprises	1,150	73.58%	\$516,366,808	95.42%
TOTAL	1,563	100.00%	\$541,126,211	100.00%

*The percentages may not total 100 percent due to rounding.



2. Professional Services Prime Contractor Utilization: All Contracts

Table 3.17 summarizes all contract dollars expended by the City on professional services prime contracts. Minority-owned Business Enterprises received 5.59% of the professional services prime contract dollars; Caucasian Female Business Enterprises received 3.90%; and Non-minority Male-owned Business Enterprises received 90.51%.

African Americans received 139 or 11.31% of all professional services prime contracts during the study period, representing \$14,349,970 or 3.86% of the professional services prime contract dollars.

Asian Americans received 17 or 1.38% of all professional services prime contracts during the study period, representing \$6,312,263 or 1.70% of the professional services prime contract dollars.

Hispanic Americans received 3 or 0.24% of all professional services prime contracts during the study period, representing \$104,402 or 0.03% of the professional services prime contract dollars.

Native Americans received 0 or 0.00% of all professional services prime contracts during the study period, representing \$0 or 0.00% of the professional services prime contract dollars.

Minority-owned Business Enterprises received 159 or 12.94% of all professional services prime contracts during the study period, representing \$20,766,635 or 5.59% of the professional services prime contract dollars.

Caucasian Female Business Enterprises received 115 or 9.36% of all professional services prime contracts during the study period, representing \$14,499,517 or 3.90% of the professional services prime contract dollars.

Minority and Caucasian Female Business Enterprises received 274 or 22.29% of all professional services prime contracts during the study period, representing \$35,266,152 or 9.49% of the professional services prime contract dollars.

Non-minority Male-owned Business Enterprises received 955 or 77.71% of all professional services prime contracts during the study period, representing \$336,310,342 or 90.51% of the professional services prime contract dollars.



**Table 3.17: Professional Services Prime Contractor Utilization:
All Contracts, January 1, 2009, to December 31, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	139	11.31%	\$14,349,970	3.86%
Asian Americans	17	1.38%	\$6,312,263	1.70%
Hispanic Americans	3	0.24%	\$104,402	0.03%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	115	9.36%	\$14,499,517	3.90%
Non-minority Males	955	77.71%	\$336,310,342	90.51%
TOTAL	1,229	100.00%	\$371,576,494	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	37	3.01%	\$3,184,585	0.86%
African American Males	102	8.30%	\$11,165,385	3.00%
Asian American Females	3	0.24%	\$2,050,960	0.55%
Asian American Males	14	1.14%	\$4,261,303	1.15%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	3	0.24%	\$104,402	0.03%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	115	9.36%	\$14,499,517	3.90%
Non-minority Males	955	77.71%	\$336,310,342	90.51%
TOTAL	1,229	100.00%	\$371,576,494	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	40	3.25%	\$5,235,545	1.41%
Minority Males	119	9.68%	\$15,531,090	4.18%
Caucasian Females	115	9.36%	\$14,499,517	3.90%
Non-minority Males	955	77.71%	\$336,310,342	90.51%
TOTAL	1,229	100.00%	\$371,576,494	100.00%
Minority and Females	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	159	12.94%	\$20,766,635	5.59%
Caucasian Female Business Enterprises	115	9.36%	\$14,499,517	3.90%
Minority and Caucasian Female Business Enterprises	274	22.29%	\$35,266,152	9.49%
Non-minority Male Business Enterprises	955	77.71%	\$336,310,342	90.51%
TOTAL	1,229	100.00%	\$371,576,494	100.00%

*The percentages may not total 100 percent due to rounding.



3. Supplies and Services Prime Contractor Utilization: All Contracts

Table 3.18 summarizes all contract dollars expended by the City on supplies and services prime contracts. Minority-owned Business Enterprises received 1.13% of the supplies and services prime contract dollars; Caucasian Female Business Enterprises received 1.87%; and Non-minority Male-owned Business Enterprises received 97.00%.

African Americans received 220 or 2.96% of all supplies and services prime contracts during the study period, representing \$3,163,112 or 0.99% of the supplies and services prime contract dollars.

Asian Americans received 60 or 0.81% of all supplies and services prime contracts during the study period, representing \$408,515 or 0.13% of the supplies and services prime contract dollars.

Hispanic Americans received 18 or 0.24% of all supplies and services prime contracts during the study period, representing \$35,515 or 0.01% of the supplies and services prime contract dollars.

Native Americans received 0 or 0.00% of all supplies and services prime contracts during the study period, representing \$0 or 0.00% of the supplies and services prime contract dollars.

Minority-owned Business Enterprises received 298 or 4.01% of all supplies and services prime contracts during the study period, representing \$3,607,141 or 1.13% of the supplies and services prime contract dollars.

Caucasian Female Business Enterprises received 687 or 9.24% of all supplies and services prime contracts during the study period, representing \$5,983,393 or 1.87% of the supplies and services prime contract dollars.

Minority and Caucasian Female Business Enterprises received 985 or 13.25% of all supplies and services prime contracts during the study period, representing \$9,590,534 or 3.00% of the supplies and services prime contract dollars.

Non-minority Male-owned Business Enterprises received 6,451 or 86.75% of all supplies and services prime contracts during the study period, representing \$310,277,269 or 97.00% of the supplies and services prime contract dollars.



**Table 3.18: Supplies and Services Prime Contractor Utilization:
All Contracts, January 1, 2009, to December 31, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	220	2.96%	\$3,163,112	0.99%
Asian Americans	60	0.81%	\$408,515	0.13%
Hispanic Americans	18	0.24%	\$35,515	0.01%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	687	9.24%	\$5,983,393	1.87%
Non-minority Males	6,451	86.75%	\$310,277,269	97.00%
TOTAL	7,436	100.00%	\$319,867,803	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	66	0.89%	\$1,881,928	0.59%
African American Males	154	2.07%	\$1,281,184	0.40%
Asian American Females	5	0.07%	\$102,613	0.03%
Asian American Males	55	0.74%	\$305,902	0.10%
Hispanic American Females	1	0.01%	\$7,250	0.00%
Hispanic American Males	17	0.23%	\$28,265	0.01%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	687	9.24%	\$5,983,393	1.87%
Non-minority Males	6,451	86.75%	\$310,277,269	97.00%
TOTAL	7,436	100.00%	\$319,867,803	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	72	0.97%	\$1,991,791	0.62%
Minority Males	226	3.04%	\$1,615,351	0.51%
Caucasian Females	687	9.24%	\$5,983,393	1.87%
Non-minority Males	6,451	86.75%	\$310,277,269	97.00%
TOTAL	7,436	100.00%	\$319,867,803	100.00%
Minority and Females	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	298	4.01%	\$3,607,141	1.13%
Caucasian Female Business Enterprises	687	9.24%	\$5,983,393	1.87%
Minority and Caucasian Female Business Enterprises	985	13.25%	\$9,590,534	3.00%
Non-minority Male Business Enterprises	6,451	86.75%	\$310,277,269	97.00%
TOTAL	7,436	100.00%	\$319,867,803	100.00%

*The percentages may not total 100 percent due to rounding.



G. Prime Contracts \$250,000 and Over, by Industry

1. Construction Prime Contractor Utilization: Contracts \$250,000 and Over

Table 3.19 summarizes all contract dollars expended by the City on construction prime contracts valued at \$250,000 and over. Minority-owned Business Enterprises received 1.84% of the construction prime contract dollars; Caucasian Female Business Enterprises received 1.47%; and Non-minority Male-owned Business Enterprises received 96.69%.

African Americans received 3 or 0.84% of the construction prime contracts valued at \$250,000 and over during the study period, representing \$3,388,276 or 0.67% of the construction prime contract dollars.

Asian Americans received 8 or 2.23% of the construction prime contracts valued at \$250,000 and over during the study period, representing \$5,883,762 or 1.17% of the construction prime contract dollars.

Hispanic Americans received 0 or 0.00% of the construction prime contracts valued at \$250,000 and over during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Native Americans received 0 or 0.00% of the construction prime contracts valued at \$250,000 and over during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Minority-owned Business Enterprises received 11 or 3.07% of the construction prime contracts valued at \$250,000 and over during the study period, representing \$9,272,037 or 1.84% of the construction prime contract dollars.

Caucasian Female Business Enterprises received 8 or 2.23% of the construction prime contracts valued at \$250,000 and over during the study period, representing \$7,423,434 or 1.47% of the construction prime contract dollars.

Minority and Caucasian Female Business Enterprises received 19 or 5.31% of the construction prime contracts valued at \$250,000 and over during the study period, representing \$16,695,471 or 3.31% of the construction prime contract dollars.

Non-minority Male-owned Business Enterprises received 339 or 94.69% of the construction prime contracts valued at \$250,000 and over during the study period, representing \$487,021,541 or 96.69% of the construction prime contract dollars.



**Table 3.19: Construction Prime Contractor Utilization:
Contracts \$250,000 and Over, January 1, 2009, to December 31, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	3	0.84%	\$3,388,276	0.67%
Asian Americans	8	2.23%	\$5,883,762	1.17%
Hispanic Americans	0	0.00%	\$0	0.00%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	8	2.23%	\$7,423,434	1.47%
Non-minority Males	339	94.69%	\$487,021,541	96.69%
TOTAL	358	100.00%	\$503,717,012	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	1	0.28%	\$549,610	0.11%
African American Males	2	0.56%	\$2,838,665	0.56%
Asian American Females	0	0.00%	\$0	0.00%
Asian American Males	8	2.23%	\$5,883,762	1.17%
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	8	2.23%	\$7,423,434	1.47%
Non-minority Males	339	94.69%	\$487,021,541	96.69%
TOTAL	358	100.00%	\$503,717,012	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	1	0.28%	\$549,610	0.11%
Minority Males	10	2.79%	\$8,722,427	1.73%
Caucasian Females	8	2.23%	\$7,423,434	1.47%
Non-minority Males	339	94.69%	\$487,021,541	96.69%
TOTAL	358	100.00%	\$503,717,012	100.00%
Minority and Females	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	11	3.07%	\$9,272,037	1.84%
Caucasian Female Business Enterprises	8	2.23%	\$7,423,434	1.47%
Minority and Caucasian Female Business Enterprises	19	5.31%	\$16,695,471	3.31%
Non-minority Male Business Enterprises	339	94.69%	\$487,021,541	96.69%
TOTAL	358	100.00%	\$503,717,012	100.00%

*The percentages may not total 100 percent due to rounding.



2. Professional Services Prime Contractor Utilization: Contracts \$250,000 and Over

Table 3.20 summarizes all contract dollars expended by the City on professional services prime contracts valued at \$250,000 and over. Minority-owned Business Enterprises received 5.29% of the professional services prime contract dollars; Caucasian Female Business Enterprises received 3.50%; and Non-minority Male-owned Business Enterprises received 91.21%.

African Americans received 13 or 7.07% of the professional services prime contracts valued at \$250,000 and over during the study period, representing \$12,241,968 or 3.61% of the professional services prime contract dollars.

Asian Americans received 6 or 3.26% of the professional services prime contracts valued at \$250,000 and over during the study period, representing \$5,717,179 or 1.68% of the professional services prime contract dollars.

Hispanic Americans received 0 or 0.00% of the professional services prime contracts valued at \$250,000 and over during the study period, representing \$0 or 0.00% of the professional services prime contract dollars.

Native Americans received 0 or 0.00% of the professional services prime contracts valued at \$250,000 and over during the study period, representing \$0 or 0.00% of the professional services prime contract dollars.

Minority-owned Business Enterprises received 19 or 10.33% of the professional services prime contracts valued at \$250,000 and over during the study period, representing \$17,959,148 or 5.29% of the professional services prime contract dollars.

Caucasian Female Business Enterprises received 7 or 3.80% of the professional services prime contracts valued at \$250,000 and over during the study period, representing \$11,860,343 or 3.50% of the professional services prime contract dollars.

Minority and Caucasian Female Business Enterprises received 26 or 14.13% of the professional services prime contracts valued at \$250,000 and over during the study period, representing \$29,819,491 or 8.79% of the professional services prime contract dollars.

Non-minority Male-owned Business Enterprises received 158 or 85.87% of the professional services prime contracts valued at \$250,000 and over during the study period, representing \$309,479,801 or 91.21% of the professional services prime contract dollars.



**Table 3.20: Professional Services Prime Contractor Utilization:
Contracts \$250,000 and Over, January 1, 2009, to December 31, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	13	7.07%	\$12,241,968	3.61%
Asian Americans	6	3.26%	\$5,717,179	1.68%
Hispanic Americans	0	0.00%	\$0	0.00%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	7	3.80%	\$11,860,343	3.50%
Non-minority Males	158	85.87%	\$309,479,801	91.21%
TOTAL	184	100.00%	\$339,299,291	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	2	1.09%	\$2,571,080	0.76%
African American Males	11	5.98%	\$9,670,888	2.85%
Asian American Females	1	0.54%	\$2,000,000	0.59%
Asian American Males	5	2.72%	\$3,717,179	1.10%
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	3.80%	\$11,860,343	3.50%
Non-minority Males	158	85.87%	\$309,479,801	91.21%
TOTAL	184	100.00%	\$339,299,291	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	3	1.63%	\$4,571,080	1.35%
Minority Males	16	8.70%	\$13,388,068	3.95%
Caucasian Females	7	3.80%	\$11,860,343	3.50%
Non-minority Males	158	85.87%	\$309,479,801	91.21%
TOTAL	184	100.00%	\$339,299,291	100.00%
Minority and Females	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	19	10.33%	\$17,959,148	5.29%
Caucasian Female Business Enterprises	7	3.80%	\$11,860,343	3.50%
Minority and Caucasian Female Business Enterprises	26	14.13%	\$29,819,491	8.79%
Non-minority Male Business Enterprises	158	85.87%	\$309,479,801	91.21%
TOTAL	184	100.00%	\$339,299,291	100.00%

*The percentages may not total 100 percent due to rounding.



3. Supplies and Services Prime Contractor Utilization: Contracts \$250,000 and Over

Table 3.21 summarizes all contract dollars expended by the City on supplies and services prime contracts valued at \$250,000 and over. Minority-owned Business Enterprises received 0.23% of the supplies and services prime contract dollars; Caucasian Female Business Enterprises received 0.87%; and Non-minority Male-owned Business Enterprises received 98.91%.

African Americans received 1 or 0.46% of the supplies and services prime contracts valued at \$250,000 and over during the study period, representing \$525,026 or 0.23% of the supplies and services prime contract dollars.

Asian Americans received 0 or 0.00% of the supplies and services prime contracts valued at \$250,000 and over during the study period, representing \$0 or 0.00% of the supplies and services prime contract dollars.

Hispanic Americans received 0 or 0.00% of the supplies and services prime contracts valued at \$250,000 and over during the study period, representing \$0 or 0.00% of the supplies and services prime contract dollars.

Native Americans received 0 or 0.00% of the supplies and services prime contracts valued at \$250,000 and over during the study period, representing \$0 or 0.00% of the supplies and services prime contract dollars.

Minority-owned Business Enterprises received 1 or 0.46% of the supplies and services prime contracts valued at \$250,000 and over during the study period, representing \$525,026 or 0.23% of the supplies and services prime contract dollars.

Caucasian Female Business Enterprises received 5 or 2.28% of the supplies and services prime contracts valued at \$250,000 and over during the study period, representing \$2,005,587 or 0.87% of the supplies and services prime contract dollars.

Minority and Caucasian Female Business Enterprises received 6 or 2.74% of the supplies and services prime contracts valued at \$250,000 and over during the study period, representing \$2,530,612 or 1.09% of the supplies and services prime contract dollars.

Non-minority Male-owned Business Enterprises received 213 or 97.26% of the supplies and services prime contracts valued at \$250,000 and over during the study period, representing \$228,900,557 or 98.91% of the supplies and services prime contract dollars.



**Table 3.21: Supplies and Services Prime Contractor Utilization:
Contracts \$250,000 and Over, January 1, 2009, to December 31, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	1	0.46%	\$525,026	0.23%
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	5	2.28%	\$2,005,587	0.87%
Non-minority Males	213	97.26%	\$228,900,557	98.91%
TOTAL	219	100.00%	\$231,431,169	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	1	0.46%	\$525,026	0.23%
African American Males	0	0.00%	\$0	0.00%
Asian American Females	0	0.00%	\$0	0.00%
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	5	2.28%	\$2,005,587	0.87%
Non-minority Males	213	97.26%	\$228,900,557	98.91%
TOTAL	219	100.00%	\$231,431,169	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	1	0.46%	\$525,026	0.23%
Minority Males	0	0.00%	\$0	0.00%
Caucasian Females	5	2.28%	\$2,005,587	0.87%
Non-minority Males	213	97.26%	\$228,900,557	98.91%
TOTAL	219	100.00%	\$231,431,169	100.00%
Minority and Females	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	1	0.46%	\$525,026	0.23%
Caucasian Female Business Enterprises	5	2.28%	\$2,005,587	0.87%
Minority and Caucasian Female Business Enterprises	6	2.74%	\$2,530,612	1.09%
Non-minority Male Business Enterprises	213	97.26%	\$228,900,557	98.91%
TOTAL	219	100.00%	\$231,431,169	100.00%

*The percentages may not total 100 percent due to rounding.



H. Prime Contracts \$50,001 to \$249,999, by Industry

1. Construction Prime Contractor Utilization: Contracts \$50,001 to \$249,999

Table 3.22 summarizes all prime contract dollars expended by the City on construction prime contracts valued between \$50,001 and \$249,999. Minority-owned Business Enterprises received 8.17% of the construction prime contract dollars; Caucasian Female Business Enterprises received 6.17%; and Non-minority Male-owned Business Enterprises received 85.67%.

African Americans received 6 or 2.91% of the construction prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$789,973 or 2.99% of the construction prime contract dollars.

Asian Americans received 6 or 2.91% of the construction prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$1,157,262 or 4.38% of the construction prime contract dollars.

Hispanic Americans received 0 or 0.00% of the construction prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Native Americans received 2 or 0.97% of the construction prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$210,229 or 0.80% of the construction prime contract dollars.

Minority-owned Business Enterprises received 14 or 6.80% of the construction prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$2,157,464 or 8.17% of the construction prime contract dollars.

Caucasian Female Business Enterprises received 18 or 8.74% of the construction prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$1,629,169 or 6.17% of the construction prime contract dollars.

Minority and Caucasian Female Business Enterprises received 32 or 15.53% of the construction prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$3,786,633 or 14.33% of the construction prime contract dollars.

Non-minority Male-owned Business Enterprises received 174 or 84.47% of the construction prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$22,629,059 or 85.67% of the construction prime contract dollars.



**Table 3.22: Construction Prime Contractor Utilization:
Contracts \$50,001 to \$249,999, January 1, 2009, to December 31, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	6	2.91%	\$789,973	2.99%
Asian Americans	6	2.91%	\$1,157,262	4.38%
Hispanic Americans	0	0.00%	\$0	0.00%
Native Americans	2	0.97%	\$210,229	0.80%
Caucasian Females	18	8.74%	\$1,629,169	6.17%
Non-minority Males	174	84.47%	\$22,629,059	85.67%
TOTAL	206	100.00%	\$26,415,692	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	2	0.97%	\$201,060	0.76%
African American Males	4	1.94%	\$588,914	2.23%
Asian American Females	0	0.00%	\$0	0.00%
Asian American Males	6	2.91%	\$1,157,262	4.38%
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	2	0.97%	\$210,229	0.80%
Caucasian Females	18	8.74%	\$1,629,169	6.17%
Non-minority Males	174	84.47%	\$22,629,059	85.67%
TOTAL	206	100.00%	\$26,415,692	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	2	0.97%	\$201,060	0.76%
Minority Males	12	5.83%	\$1,956,405	7.41%
Caucasian Females	18	8.74%	\$1,629,169	6.17%
Non-minority Males	174	84.47%	\$22,629,059	85.67%
TOTAL	206	100.00%	\$26,415,692	100.00%
Minority and Females	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	14	6.80%	\$2,157,464	8.17%
Caucasian Female Business Enterprises	18	8.74%	\$1,629,169	6.17%
Minority and Caucasian Female Business Enterprises	32	15.53%	\$3,786,633	14.33%
Non-minority Male Business Enterprises	174	84.47%	\$22,629,059	85.67%
TOTAL	206	100.00%	\$26,415,692	100.00%

*The percentages may not total 100 percent due to rounding.



2. Professional Services Prime Contractor Utilization: Contracts \$50,001 to \$249,999

Table 3.23 summarizes all contract dollars expended by the City on professional services prime contracts valued between \$50,001 and \$249,999. Minority-owned Business Enterprises received 7.85% of the professional services prime contract dollars; Caucasian Female Business Enterprises received 7.23%; and Non-minority Male-owned Business Enterprises received 84.92%.

African Americans received 9 or 4.46% of the professional services prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$1,340,554 or 5.56% of the professional services prime contract dollars.

Asian Americans received 3 or 1.49% of the professional services prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$495,422 or 2.06% of the professional services prime contract dollars.

Hispanic Americans received 1 or 0.50% of the professional services prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$55,750 or 0.23% of the professional services prime contract dollars.

Native Americans received 0 or 0.00% of the professional services prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$0 or 0.00% of the professional services prime contract dollars.

Minority-owned Business Enterprises received 13 or 6.44% of the professional services prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$1,891,726 or 7.85% of the professional services prime contract dollars.

Caucasian Female Business Enterprises received 17 or 8.42% of the professional services prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$1,742,150 or 7.23% of the professional services prime contract dollars.

Minority and Caucasian Female Business Enterprises received 30 or 14.85% of the professional services prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$3,633,875 or 15.08% of the professional services prime contract dollars.

Non-minority Male-owned Business Enterprises received 172 or 85.15% of the professional services prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$20,466,469 or 84.92% of the professional services prime contract dollars.



**Table 3.23: Professional Services Prime Contractor Utilization:
Contracts \$50,001 to \$249,999, January 1, 2009, to December 31, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	9	4.46%	\$1,340,554	5.56%
Asian Americans	3	1.49%	\$495,422	2.06%
Hispanic Americans	1	0.50%	\$55,750	0.23%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	17	8.42%	\$1,742,150	7.23%
Non-minority Males	172	85.15%	\$20,466,469	84.92%
TOTAL	202	100.00%	\$24,100,344	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	3	1.49%	\$397,238	1.65%
African American Males	6	2.97%	\$943,316	3.91%
Asian American Females	0	0.00%	\$0	0.00%
Asian American Males	3	1.49%	\$495,422	2.06%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	1	0.50%	\$55,750	0.23%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	17	8.42%	\$1,742,150	7.23%
Non-minority Males	172	85.15%	\$20,466,469	84.92%
TOTAL	202	100.00%	\$24,100,344	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	3	1.49%	\$397,238	1.65%
Minority Males	10	4.95%	\$1,494,488	6.20%
Caucasian Females	17	8.42%	\$1,742,150	7.23%
Non-minority Males	172	85.15%	\$20,466,469	84.92%
TOTAL	202	100.00%	\$24,100,344	100.00%
Minority and Females	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	13	6.44%	\$1,891,726	7.85%
Caucasian Female Business Enterprises	17	8.42%	\$1,742,150	7.23%
Minority and Caucasian Female Business Enterprises	30	14.85%	\$3,633,875	15.08%
Non-minority Male Business Enterprises	172	85.15%	\$20,466,469	84.92%
TOTAL	202	100.00%	\$24,100,344	100.00%

*The percentages may not total 100 percent due to rounding.



3. Supplies and Services Prime Contractor Utilization: Contracts \$50,001 to \$249,999

Table 3.24 summarizes all contract dollars expended by the City on supplies and services prime contracts valued between \$50,001 and \$249,999. Minority-owned Business Enterprises received 3.77% of the supplies and services prime contract dollars; Caucasian Female Business Enterprises received 4.25%; and Non-minority Male-owned Business Enterprises received 91.98%.

African Americans received 14 or 2.73% of the supplies and services prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$1,891,405 or 3.48% of the supplies and services prime contract dollars.

Asian Americans received 2 or 0.39% of the supplies and services prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$159,205 or 0.29% of the supplies and services prime contract dollars.

Hispanic Americans received 0 or 0.00% of the supplies and services prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$0 or 0.00% of the supplies and services prime contract dollars.

Native Americans received 0 or 0.00% of the supplies and services prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$0 or 0.00% of the supplies and services prime contract dollars.

Minority-owned Business Enterprises received 16 or 3.13% of the supplies and services prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$2,050,610 or 3.77% of the supplies and services prime contract dollars.

Caucasian Female Business Enterprises received 21 or 4.10% of the supplies and services prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$2,311,310 or 4.25% of the supplies and services prime contract dollars.

Minority and Caucasian Female Business Enterprises received 37 or 7.23% of the supplies and services prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$4,361,920 or 8.02% of the supplies and services prime contract dollars.

Non-minority Male-owned Business Enterprises received 475 or 92.77% of the supplies and services prime contracts valued between \$50,001 and \$249,999 during the study period, representing \$50,026,169 or 91.98% of the supplies and services prime contract dollars.



**Table 3.24: Supplies and Services Prime Contractor Utilization:
Contracts \$50,001 to \$249,999, January 1, 2009, to December 31, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	14	2.73%	\$1,891,405	3.48%
Asian Americans	2	0.39%	\$159,205	0.29%
Hispanic Americans	0	0.00%	\$0	0.00%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	21	4.10%	\$2,311,310	4.25%
Non-minority Males	475	92.77%	\$50,026,169	91.98%
TOTAL	512	100.00%	\$54,388,090	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	8	1.56%	\$1,044,731	1.92%
African American Males	6	1.17%	\$846,674	1.56%
Asian American Females	1	0.20%	\$100,000	0.18%
Asian American Males	1	0.20%	\$59,205	0.11%
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	21	4.10%	\$2,311,310	4.25%
Non-minority Males	475	92.77%	\$50,026,169	91.98%
TOTAL	512	100.00%	\$54,388,090	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	9	1.76%	\$1,144,731	2.10%
Minority Males	7	1.37%	\$905,879	1.67%
Caucasian Females	21	4.10%	\$2,311,310	4.25%
Non-minority Males	475	92.77%	\$50,026,169	91.98%
TOTAL	512	100.00%	\$54,388,090	100.00%
Minority and Females	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	16	3.13%	\$2,050,610	3.77%
Caucasian Female Business Enterprises	21	4.10%	\$2,311,310	4.25%
Minority and Caucasian Female Business Enterprises	37	7.23%	\$4,361,920	8.02%
Non-minority Male Business Enterprises	475	92.77%	\$50,026,169	91.98%
TOTAL	512	100.00%	\$54,388,090	100.00%

*The percentages may not total 100 percent due to rounding.



1. Prime Contracts \$5,001 to \$50,000, by Industry

1. Construction Prime Contractor Utilization: Contracts \$5,001 to \$50,000

Table 3.25 summarizes all prime contract dollars expended by the City on construction prime contracts valued between \$5,001 and \$50,000. Minority-owned Business Enterprises received 17.02% of the construction prime contract dollars; Caucasian Female Business Enterprises received 22.99% and Non-minority Male-owned Business Enterprises received 60.00%.

African Americans received 80 or 11.44% of the construction prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$1,044,993 or 10.11% of the construction prime contract dollars.

Asian Americans received 1 or 0.14% of the construction prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$48,061 or 0.47% of the construction prime contract dollars.

Hispanic Americans received 0 or 0.00% of the construction prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Native Americans received 51 or 7.30% of the construction prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$665,239 or 6.44% of the construction prime contract dollars.

Minority-owned Business Enterprises received 132 or 18.88% of the construction prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$1,758,293 or 17.02% of the construction prime contract dollars.

Caucasian Female Business Enterprises received 177 or 25.32% of the construction prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$2,374,826 or 22.99% of the construction prime contract dollars.

Minority and Caucasian Female Business Enterprises received 309 or 44.21% of the construction prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$4,133,119 or 40.00% of the construction prime contract dollars.

Non-minority Male-owned Business Enterprises received 390 or 55.79% of the construction prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$6,198,424 or 60.00% of the construction prime contract dollars.



**Table 3.25: Construction Prime Contractor Utilization:
Contracts \$5,001 to \$50,000, January 1, 2009, to December 31, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	80	11.44%	\$1,044,993	10.11%
Asian Americans	1	0.14%	\$48,061	0.47%
Hispanic Americans	0	0.00%	\$0	0.00%
Native Americans	51	7.30%	\$665,239	6.44%
Caucasian Females	177	25.32%	\$2,374,826	22.99%
Non-minority Males	390	55.79%	\$6,198,424	60.00%
TOTAL	699	100.00%	\$10,331,543	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	4	0.57%	\$30,294	0.29%
African American Males	76	10.87%	\$1,014,700	9.82%
Asian American Females	0	0.00%	\$0	0.00%
Asian American Males	1	0.14%	\$48,061	0.47%
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	51	7.30%	\$665,239	6.44%
Caucasian Females	177	25.32%	\$2,374,826	22.99%
Non-minority Males	390	55.79%	\$6,198,424	60.00%
TOTAL	699	100.00%	\$10,331,543	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	4	0.57%	\$30,294	0.29%
Minority Males	128	18.31%	\$1,728,000	16.73%
Caucasian Females	177	25.32%	\$2,374,826	22.99%
Non-minority Males	390	55.79%	\$6,198,424	60.00%
TOTAL	699	100.00%	\$10,331,543	100.00%
Minority and Females	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	132	18.88%	\$1,758,293	17.02%
Caucasian Female Business Enterprises	177	25.32%	\$2,374,826	22.99%
Minority and Caucasian Female Business Enterprises	309	44.21%	\$4,133,119	40.00%
Non-minority Male Business Enterprises	390	55.79%	\$6,198,424	60.00%
TOTAL	699	100.00%	\$10,331,543	100.00%

*The percentages may not total 100 percent due to rounding.



2. Professional Services Prime Contractor Utilization: Contracts \$5,001 to \$50,000

Table 3.26 summarizes all contract dollars expended by the City on professional services prime contracts valued between \$5,001 and \$50,000. Minority-owned Business Enterprises received 10.39% of the professional services prime contract dollars; Caucasian Female Business Enterprises received 11.14%; and Non-minority Male-owned Business Enterprises received 78.47%.

African Americans received 32 or 9.76% of the professional services prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$586,399 or 8.36% of the professional services prime contract dollars.

Asian Americans received 6 or 1.83% of the professional services prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$97,617 or 1.39% of the professional services prime contract dollars.

Hispanic Americans received 1 or 0.30% of the professional services prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$44,550 or 0.64% of the professional services prime contract dollars.

Native Americans received 0 or 0.00% of the professional services prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$0 or 0.00% of the professional services prime contract dollars.

Minority-owned Business Enterprises received 39 or 11.89% of the professional services prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$728,565 or 10.39% of the professional services prime contract dollars.

Caucasian Female Business Enterprises received 32 or 9.76% of the professional services prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$781,135 or 11.14% of the professional services prime contract dollars.

Minority and Caucasian Female Business Enterprises received 71 or 21.65% of the professional services prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$1,509,700 or 21.53% of the professional services prime contract dollars.

Non-minority Male-owned Business Enterprises received 257 or 78.35% of the professional services prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$5,503,265 or 78.47% of the professional services prime contract dollars.



**Table 3.26: Professional Services Prime Contractor Utilization:
Contracts \$5,001 to \$50,000, January 1, 2009, to December 31, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	32	9.76%	\$586,399	8.36%
Asian Americans	6	1.83%	\$97,617	1.39%
Hispanic Americans	1	0.30%	\$44,550	0.64%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	32	9.76%	\$781,135	11.14%
Non-minority Males	257	78.35%	\$5,503,265	78.47%
TOTAL	328	100.00%	\$7,012,966	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	10	3.05%	\$143,948	2.05%
African American Males	22	6.71%	\$442,451	6.31%
Asian American Females	2	0.61%	\$50,960	0.73%
Asian American Males	4	1.22%	\$46,656	0.67%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	1	0.30%	\$44,550	0.64%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	32	9.76%	\$781,135	11.14%
Non-minority Males	257	78.35%	\$5,503,265	78.47%
TOTAL	328	100.00%	\$7,012,966	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	12	3.66%	\$194,908	2.78%
Minority Males	27	8.23%	\$533,657	7.61%
Caucasian Females	32	9.76%	\$781,135	11.14%
Non-minority Males	257	78.35%	\$5,503,265	78.47%
TOTAL	328	100.00%	\$7,012,966	100.00%
Minority and Women	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	39	11.89%	\$728,565	10.39%
Caucasian Female Business Enterprises	32	9.76%	\$781,135	11.14%
Minority and Caucasian Female Business Enterprises	71	21.65%	\$1,509,700	21.53%
Non-minority Male Business	257	78.35%	\$5,503,265	78.47%
TOTAL	328	100.00%	\$7,012,966	100.00%

*The percentages may not total 100 percent due to rounding.



3. Supplies and Services Prime Contractor Utilization: Contracts \$5,001 to \$50,000

Table 3.27 summarizes all contract dollars expended by the City on supplies and services prime contracts valued between \$5,001 and \$50,000. Minority-owned Business Enterprises received 1.93% of the supplies and services prime contract dollars; Caucasian Female Business Enterprises received 3.17%; and Non-minority Male-owned Business Enterprises received 94.91%.

African Americans received 16 or 1.27% of the supplies and services prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$302,054 or 1.25% of the supplies and services prime contract dollars.

Asian Americans received 10 or 0.79% of the supplies and services prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$155,641 or 0.64% of the supplies and services prime contract dollars.

Hispanic Americans received 1 or 0.08% of the supplies and services prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$7,250 or 0.03% of the supplies and services prime contract dollars.

Native Americans received 0 or 0.00% of the supplies and services prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$0 or 0.00% of the supplies and services prime contract dollars.

Minority-owned Business Enterprises received 27 or 2.14% of the supplies and services prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$464,945 or 1.93% of the supplies and services prime contract dollars.

Caucasian Female Business Enterprises received 46 or 3.65% of the supplies and services prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$764,655 or 3.17% of the supplies and services prime contract dollars.

Minority and Caucasian Female Business Enterprises received 73 or 5.80% of the supplies and services prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$1,229,599 or 5.09% of the supplies and services prime contract dollars.

Non-minority Male-owned Business Enterprises received 1,186 or 94.20% of the supplies and services prime contracts valued between \$5,001 and \$50,000 during the study period, representing \$22,917,414 or 94.91% of the supplies and services prime contract dollars.



**Table 3.27: Supplies and Services Prime Contractor Utilization:
Contracts \$5,001 to \$50,000, January 1, 2009, to December 31, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	16	1.27%	\$302,054	1.25%
Asian Americans	10	0.79%	\$155,641	0.64%
Hispanic Americans	1	0.08%	\$7,250	0.03%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	46	3.65%	\$764,655	3.17%
Non-minority Males	1,186	94.20%	\$22,917,414	94.91%
TOTAL	1,259	100.00%	\$24,147,013	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	7	0.56%	\$172,802	0.72%
African American Males	9	0.71%	\$129,252	0.54%
Asian American Females	0	0.00%	\$0	0.00%
Asian American Males	10	0.79%	\$155,641	0.64%
Hispanic American Females	1	0.08%	\$7,250	0.03%
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	46	3.65%	\$764,655	3.17%
Non-minority Males	1,186	94.20%	\$22,917,414	94.91%
TOTAL	1,259	100.00%	\$24,147,013	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	8	0.64%	\$180,052	0.75%
Minority Males	19	1.51%	\$284,893	1.18%
Caucasian Females	46	3.65%	\$764,655	3.17%
Non-minority Males	1,186	94.20%	\$22,917,414	94.91%
TOTAL	1,259	100.00%	\$24,147,013	100.00%
Minority and Females	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	27	2.14%	\$464,945	1.93%
Caucasian Female Business Enterprises	46	3.65%	\$764,655	3.17%
Minority and Caucasian Female Business Enterprises	73	5.80%	\$1,229,599	5.09%
Non-minority Male Business Enterprises	1,186	94.20%	\$22,917,414	94.91%
TOTAL	1,259	100.00%	\$24,147,013	100.00%

*The percentages may not total 100 percent due to rounding.



J. Informal Contracts by Industry

1. Construction Prime Contractor Utilization: Contracts \$5,000 and Under

Table 3.28 summarizes all contract dollars expended by the City on construction prime contracts valued at \$5,000 and under. Minority-owned Business Enterprises received 5.58% of the construction prime contract dollars; Caucasian Female Business Enterprises received 16.20%; and Non-minority Male-owned Business Enterprises received 78.22%.

African Americans received 7 or 2.33% of the construction prime contracts valued at \$5,000 and under during the study period, representing \$24,213 or 3.66% of the construction prime contract dollars.

Asian Americans received 4 or 1.33% of the construction prime contracts valued at \$5,000 and under during the study period, representing \$2,473 or 0.37% of the construction prime contract dollars.

Hispanic Americans received 0 or 0.00% of the construction prime contracts valued at \$5,000 and under during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Native Americans received 3 or 1.00% of the construction prime contracts valued at \$5,000 and under during the study period, representing \$10,250 or 1.55% of the construction prime contract dollars.

Minority-owned Business Enterprises received 14 or 4.67% of the construction prime contracts valued at \$5,000 and under during the study period, representing \$36,936 or 5.58% of the construction prime contract dollars.

Caucasian Female Business Enterprises received 39 or 13.00% of the construction prime contracts valued at \$5,000 and under during the study period, representing \$107,243 or 16.20% of the construction prime contract dollars.

Minority and Caucasian Female Business Enterprises received 53 or 17.67% of the construction prime contracts valued at \$5,000 and under during the study period, representing \$144,179 or 21.78% of the construction prime contract dollars.

Non-minority Male-owned Business Enterprises received 247 or 82.33% of the construction prime contracts valued at \$5,000 and under during the study period, representing \$517,784 or 78.22% of the construction prime contract dollars.



**Table 3.28: Construction Prime Contractor Utilization:
Contracts \$5,000 and Under, January 1, 2009, to December 31, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	7	2.33%	\$24,213	3.66%
Asian Americans	4	1.33%	\$2,473	0.37%
Hispanic Americans	0	0.00%	\$0	0.00%
Native Americans	3	1.00%	\$10,250	1.55%
Caucasian Females	39	13.00%	\$107,243	16.20%
Non-minority Males	247	82.33%	\$517,784	78.22%
TOTAL	300	100.00%	\$661,963	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	2	0.67%	\$8,725	1.32%
African American Males	5	1.67%	\$15,488	2.34%
Asian American Females	0	0.00%	\$0	0.00%
Asian American Males	4	1.33%	\$2,473	0.37%
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	3	1.00%	\$10,250	1.55%
Caucasian Females	39	13.00%	\$107,243	16.20%
Non-minority Males	247	82.33%	\$517,784	78.22%
TOTAL	300	100.00%	\$661,963	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	2	0.67%	\$8,725	1.32%
Minority Males	12	4.00%	\$28,211	4.26%
Caucasian Females	39	13.00%	\$107,243	16.20%
Non-minority Males	247	82.33%	\$517,784	78.22%
TOTAL	300	100.00%	\$661,963	100.00%
Minority and Females	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	14	4.67%	\$36,936	5.58%
Caucasian Female Business Enterprises	39	13.00%	\$107,243	16.20%
Minority and Caucasian Female Business Enterprises	53	17.67%	\$144,179	21.78%
Non-minority Male Business Enterprises	247	82.33%	\$517,784	78.22%
TOTAL	300	100.00%	\$661,963	100.00%

*The percentages may not total 100 percent due to rounding.



2. Supplies and Services Prime Contractor Utilization: Contracts \$5,000 and Under

Table 3.29 summarizes all contract dollars expended by the City on supplies and services prime contracts valued at \$5,000 and under. Minority-owned Business Enterprises received 5.72% of the supplies and services prime contract dollars; Caucasian Female Business Enterprises received 9.11%; and Non-minority Male-owned Business Enterprises received 85.17%.

African Americans received 189 or 3.47% of the supplies and services prime contracts valued at \$5,000 and under during the study period, representing \$444,627 or 4.49% of the supplies and services prime contract dollars.

Asian Americans received 48 or 0.88% of the supplies and services prime contracts valued at \$5,000 and under during the study period, representing \$93,669 or 0.95% of the supplies and services prime contract dollars.

Hispanic Americans received 17 or 0.31% of the supplies and services prime contracts valued at \$5,000 and under during the study period, representing \$28,265 or 0.29% of the supplies and services prime contract dollars.

Native Americans received 0 or 0.00% of the supplies and services prime contracts valued at \$5,000 and under during the study period, representing \$0 or 0.00% of the supplies and services prime contract dollars.

Minority-owned Business Enterprises received 254 or 4.66% of the supplies and services prime contracts valued at \$5,000 and under during the study period, representing \$566,561 or 5.72% of the supplies and services prime contract dollars.

Caucasian Female Business Enterprises received 615 or 11.29% of the supplies and services prime contracts valued at \$5,000 and under during the study period, representing \$901,841 or 9.11% of the supplies and services prime contract dollars.

Minority and Caucasian Female Business Enterprises received 869 or 15.96% of the supplies and services prime contracts valued at \$5,000 and under during the study period, representing \$1,468,402 or 14.83% of the supplies and services prime contract dollars.

Non-minority Male-owned Business Enterprises received 4,577 or 84.04% of the supplies and services prime contracts valued at \$5,000 and under during the study period, representing \$8,433,130 or 85.17% of the supplies and services prime contract dollars.



**Table 3.29: Supplies and Services Prime Contractor Utilization:
Contracts \$5,000 and Under, January 1, 2009, to December 31, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	189	3.47%	\$444,627	4.49%
Asian Americans	48	0.88%	\$93,669	0.95%
Hispanic Americans	17	0.31%	\$28,265	0.29%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	615	11.29%	\$901,841	9.11%
Non-minority Males	4,577	84.04%	\$8,433,130	85.17%
TOTAL	5,446	100.00%	\$9,901,532	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	50	0.92%	\$139,369	1.41%
African American Males	139	2.55%	\$305,258	3.08%
Asian American Females	4	0.07%	\$2,613	0.03%
Asian American Males	44	0.81%	\$91,056	0.92%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	17	0.31%	\$28,265	0.29%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	615	11.29%	\$901,841	9.11%
Non-minority Males	4,577	84.04%	\$8,433,130	85.17%
TOTAL	5,446	100.00%	\$9,901,532	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	54	0.99%	\$141,982	1.43%
Minority Males	200	3.67%	\$424,579	4.29%
Caucasian Females	615	11.29%	\$901,841	9.11%
Non-minority Males	4,577	84.04%	\$8,433,130	85.17%
TOTAL	5,446	100.00%	\$9,901,532	100.00%
Minority and Females	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	254	4.66%	\$566,561	5.72%
Caucasian Female Business Enterprises	615	11.29%	\$901,841	9.11%
Minority and Caucasian Female Business Enterprises	869	15.96%	\$1,468,402	14.83%
Non-minority Male Business Enterprises	4,577	84.04%	\$8,433,130	85.17%
TOTAL	5,446	100.00%	\$9,901,532	100.00%

*The percentages may not total 100 percent due to rounding.



V. SUMMARY

The City's prime contractor utilization analysis examined \$1,232,570,508 expended on the prime contracts awarded from January 1, 2009, to December 31, 2013. The expended \$1,232,570,508 included \$541,126,211 for construction, \$371,576,494 for professional services, and \$319,867,803 for supplies and services. A total of 10,228 contracts were analyzed, which included 1,563 for construction, 1,229 for professional services, and 7,436 for supplies and services.

The utilization analysis was performed separately for thresholds that mirror the City's procurement policies. The analysis of formal contracts was conducted for contracts valued \$250,000 and over for each industry. The other levels included contracts valued between \$50,001 and \$249,999, between \$5,001 and \$50,000, and \$5,000 and under.



CHAPTER 4: SUBCONTRACTOR UTILIZATION ANALYSIS

I. INTRODUCTION

As discussed in *Chapter 3: Prime Contractor Utilization Analysis*, a disparity study, documents the contracting of Minority and Woman-owned Business Enterprises (M/WBEs), hereinafter referred to as Minority and Caucasian Female Business Enterprises, in the agency's market area, as required under *Croson*.¹ 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 Disparity Study (Study), the construction, professional services including architecture and engineering (hereinafter professional services), and supplies and services subcontracts issued by the City of Cincinnati's (City's) prime contractors during the January 1, 2009, to December 31, 2013, study period were analyzed.

II. DATA SOURCES

Extensive research was undertaken to reconstruct the construction, professional services, and supplies and services subcontracts issued by the City's prime contractors. The subcontract data were compiled by the City in conjunction with Mason Tillman. Project files were examined by the City's staff for awards, payments, and related documents that identified subcontractors, subconsultants, suppliers, and truckers. Prime contractors were also surveyed by Mason Tillman to secure their subcontractors, subconsultants, suppliers and truckers award and payment data. All identified subcontractors, subconsultants, suppliers, and truckers were surveyed to verify their payment amounts. Data verifying ethnicity and gender were compiled from certification lists, minority and women business organization membership directories, Internet research, and telephone surveys.



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

III. SUBCONTRACTOR UTILIZATION

A. All Subcontracts

As depicted in Table 4.01 below, 1,469 subcontracts were analyzed, which included 1,328 construction and 141 professional services subcontracts.

The total subcontract dollars expended during the January 1, 2009, to December 31, 2013, study period were \$121,553,166. These included \$113,780,917 for construction subcontracts and \$7,772,248 for professional services subcontracts.

Table 4.01: Total Subcontracts Awarded and Dollars Expended, All Industries, January 1, 2009, to December 31, 2013

Industry	Total Number of Subcontracts	Total Amount Expended
Construction	1,328	\$113,780,917
Professional Services	141	\$7,772,248
Total	1,469	\$121,553,166



B. All Subcontracts by Industry

1. Construction Subcontracts

Table 4.02 depicts the identified construction subcontracts awarded by the City's prime contractors. Minority-owned Business Enterprises received 5.52%; Caucasian Female Business Enterprises received 5.26%; and Non-minority Male-owned Business Enterprises received 89.22% of the construction subcontract dollars.

African Americans received 58 or 4.37% of the City's construction subcontracts during the study period, representing \$4,350,864 or 3.82% of the construction subcontract dollars.

Asian Americans received 34 or 2.56% of the City's construction subcontracts during the study period, representing \$1,260,424 or 1.11% of the construction subcontract dollars.

Hispanic Americans received 15 or 1.13% of the City's construction subcontracts during the study period, representing \$669,705 or 0.59% of the construction subcontract dollars.

Native Americans received none of the City's construction subcontracts during the study period.

Minority-owned Business Enterprises received 107 or 8.06% of the City's construction subcontracts during the study period, representing \$6,280,994 or 5.52% of the construction subcontract dollars.

Caucasian Female Business Enterprises received 118 or 8.89% of the City's construction subcontracts during the study period, representing \$5,979,952 or 5.26% of the construction subcontract dollars.

Minority and Caucasian Female Business Enterprises received 225 or 16.94% of the City's construction subcontracts during the study period, representing \$12,260,946 or 10.78% of the construction subcontract dollars.

Non-minority Male-owned Business Enterprises received 1,103 or 83.06% of the City's construction subcontracts during the study period, representing \$101,519,971 or 89.22% of the construction subcontract dollars.



**Table 4.02: Construction Subcontractor Utilization,
January 1, 2009, to December 31, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	58	4.37%	\$4,350,864	3.82%
Asian Americans	34	2.56%	\$1,260,424	1.11%
Hispanic Americans	15	1.13%	\$669,705	0.59%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	118	8.89%	\$5,979,952	5.26%
Non-minority Males	1,103	83.06%	\$101,519,971	89.22%
TOTAL	1,328	100.00%	\$113,780,917	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	1	0.08%	\$130,864	0.12%
African American Males	57	4.29%	\$4,220,000	3.71%
Asian American Females	5	0.38%	\$188,466	0.17%
Asian American Males	29	2.18%	\$1,071,959	0.94%
Hispanic American Females	15	1.13%	\$669,705	0.59%
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	118	8.89%	\$5,979,952	5.26%
Non-minority Males	1,103	83.06%	\$101,519,971	89.22%
TOTAL	1,328	100.00%	\$113,780,917	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	21	1.58%	\$989,035	0.87%
Minority Males	86	6.48%	\$5,291,959	4.65%
Caucasian Females	118	8.89%	\$5,979,952	5.26%
Non-minority Males	1,103	83.06%	\$101,519,971	89.22%
TOTAL	1,328	100.00%	\$113,780,917	100.00%
Minority and Women	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	107	8.06%	\$6,280,994	5.52%
Caucasian Female Business Enterprises	118	8.89%	\$5,979,952	5.26%
Minority and Caucasian Female Business Enterprises	225	16.94%	\$12,260,946	10.78%
Non-minority Male Business Enterprises	1,103	83.06%	\$101,519,971	89.22%
TOTAL	1,328	100.00%	\$113,780,917	100.00%

*The percentages may not total 100 percent due to rounding.



2. Professional Services Subcontracts

Table 4.03 depicts the professional services subcontracts issued by the City's prime contractors. Minority-owned Business Enterprises received 12.05%; Caucasian Female Business Enterprises received 5.64%; and Non-minority Male-owned Business Enterprises received 82.31% of the professional services subcontract dollars.

African Americans received 7 or 4.96% of the City's professional services subcontracts during the study period, representing \$432,067 or 5.56% of the professional services subcontract dollars.

Asian Americans received 7 or 4.96% of the City's professional services subcontracts during the study period, representing \$504,672 or 6.49% of the professional services subcontract dollars.

Hispanic Americans received none of the City's professional services subcontracts during the study period.

Native Americans received none of the City's professional services subcontracts during the study period.

Minority-owned Business Enterprises received 14 or 9.93% of the City's professional services subcontracts during the study period, representing \$936,740 or 12.05% of the professional services subcontract dollars.

Caucasian Female Business Enterprises received 6 or 4.26% of the City's professional services subcontracts during the study period, representing \$438,464 or 5.64% of the professional services subcontract dollars.

Minority and Caucasian Female Business Enterprises received 20 or 14.18% of the City's professional services subcontracts during the study period, representing \$1,375,204 or 17.69% of the professional services subcontract dollars.

Non-minority Male-owned Business Enterprises received 121 or 85.82% of the City's professional services subcontracts during the study period, representing \$6,397,044 or 82.31% of the professional services subcontract dollars.



**Table 4.03: Professional Services Subcontractor Utilization,
January 1, 2009, to December 31, 2013**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	7	4.96%	\$432,067	5.56%
Asian Americans	7	4.96%	\$504,672	6.49%
Hispanic Americans	0	0.00%	\$0	0.00%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	6	4.26%	\$438,464	5.64%
Non-minority Males	121	85.82%	\$6,397,044	82.31%
TOTAL	141	100.00%	\$7,772,248	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	4.96%	\$432,067	5.56%
Asian American Females	1	0.71%	\$193,661	2.49%
Asian American Males	6	4.26%	\$311,012	4.00%
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	6	4.26%	\$438,464	5.64%
Non-minority Males	121	85.82%	\$6,397,044	82.31%
TOTAL	141	100.00%	7,772,248	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	1	0.71%	\$193,661	2.49%
Minority Males	13	9.22%	\$743,079	9.56%
Caucasian Females	6	4.26%	\$438,464	5.64%
Non-minority Males	121	85.82%	\$6,397,044	82.31%
TOTAL	141	100.00%	\$7,772,248	100.00%
Minority and Women	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	14	9.93%	\$936,740	12.05%
Caucasian Female Business Enterprises	6	4.26%	\$438,464	5.64%
Minority and Caucasian Female Business Enterprises	20	14.18%	\$1,375,204	17.69%
Non-minority Male Business Enterprises	121	85.82%	\$6,397,044	82.31%
TOTAL	141	100.00%	\$7,772,248	100.00%

*The percentages may not total 100 percent due to rounding.



IV. SUMMARY

The City's subcontractor utilization analysis examined \$121,553,166 expended on subcontracts awarded by the City's prime contractors from January 1, 2009, to December 31, 2013. The \$121,553,166 expended included \$113,780,917 for construction and \$7,772,248 for professional services. A total of 1,469 subcontracts were analyzed, which included 1,328 for construction and 141 for professional services.



CHAPTER 5: MARKET AREA ANALYSIS

I. MARKET AREA DEFINITION

The Sixth Circuit Court of Appeals has not defined the appropriate parameters for establishing the relevant market area for local agencies in the State of Ohio. Although the United States Supreme Court ruled that local agencies could not rely on society-wide discrimination to justify race-conscious remedies, the court did not define the factual predicate needed to determine the appropriate local market area.¹

Several circuit courts have provided guidance on determining the relevant market area for local agencies. The measures have included several definitions of market area. Definitions included a geographic location where the majority of the agency's dollars are spent, the majority of the agency's prime contractors are located, and a fixed geographic or geopolitical boundary.²

A. Legal Criteria for Market Area

The Supreme Court's decision in *City of Richmond v. J.A. Croson Co.*³ held that programs established by local governments to set goals for the participation of Minority Business Enterprises (MBEs) must be supported by evidence of past discrimination in the awarding 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 MBEs in their awarding of contracts. Instead, they relied on widely recognized societal patterns of discrimination.⁴

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.⁵ In *Croson*, the court found the City of Richmond, Virginia's MBE construction program to be unconstitutional because there was insufficient evidence of discrimination in the local construction market.

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

² *Concrete Works v. Denver*, 36 F.3d 1513, 1516-17 (10th Cir. 1994) ("Concrete Works II"); *Cone Corp. v. Hillsborough Cnty.*, 908 F.2d 908 (11th Cir. 1990); *Associated Gen. Contractors v. Coal. for Econ. Equity*, 950 F.2d 1401 (9th Cir. 1991) ("AGCCIF"); *Coral Constr. v. King Cnty.*, 941 F.2d 910, 925 (9th Cir. 1991).

³ *Croson*, 488 U.S. at 469.

⁴ *United Steelworkers v. Weber*, 433 U.S. 193, 198, n. 1 (1979).

⁵ *Croson*, 488 U.S. at 497.



Croson was explicit in saying that the local construction market was the appropriate geographical framework within which to perform statistical comparisons of business availability and utilization.⁶ Therefore, the identification of the local market area is particularly important because it establishes the parameters within which to conduct 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. However, it is 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,"⁷ and "city's construction industry."⁸ Thus, it has been concluded that these terms were used to define the proper scope for 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.

The body of cases examining *reasonable* market area definition is *fact-based*—rather than dictated by a specific formula.⁹ In *Cone Corporation v. Hillsborough County*,¹⁰ the Eleventh Circuit Court of Appeals considered a study in support of Florida's Hillsborough County MBE Program, which used minority contractors located in the county as the measure of available firms. 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 the County, not in the construction industry in general. Hillsborough County had extracted data from within its own jurisdictional boundaries and assessed the percentage of minority businesses available in Hillsborough County. The court stated that the study was properly conducted within the "local construction industry."¹¹

Similarly, in *Associated General Contractors v. Coalition for Economic Equity* ("AGCCII"),¹² the Ninth Circuit Court of Appeals found the City and County of San Francisco's MBE Program to have the factual predicate necessary to survive strict scrutiny. The San Francisco MBE Program was supported by a study that assessed the number of available MBE contractors within the City and County of San Francisco. The

⁶ See *Croson*, 488 U.S. at 469.

⁷ *Id.* at 500.

⁸ *Id.* at 470.

⁹ See *Concrete Works II*, 36 F.3d at 1528.

¹⁰ *Cone Corp.*, 908 F.2d at 908.

¹¹ *Id.* at 915.

¹² *AGCC II*, 950 F.2d at 1401.



court found it appropriate to use the City and County as the relevant market area within which to conduct a disparity study.¹³

In *Coral Construction v. King County*, the 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.”¹⁴ In support of its MBE Program, King County offered studies compiled by other jurisdictions, including entities completely within the county or coterminous with the boundaries of the county, as well as a separate jurisdiction completely outside of the county. The plaintiffs contended that *Croson* required King County to compile its own data and cited *Croson* as prohibiting data sharing.

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 was based on outside data. However, the court also found that the data from entities within the county and from coterminous jurisdictions were relevant to discrimination in the county. It 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 closely to the scope of the problem legitimately sought to be rectified by the governmental entity.”¹⁵ It further stated, “To prevent overbreadth, the enacting jurisdiction should limit its factual inquiry to the presence of discrimination within its own boundaries.”¹⁶ However, the court did note that the “world of contracting does not conform itself neatly to jurisdictional boundaries.”¹⁷

There are other situations where courts have approved a definition of market area that extends beyond a jurisdiction’s geographic boundaries. In *Concrete Works v. City and County of Denver II*¹⁸ (*Concrete Works II*), the 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. In *Concrete Works II*, the defendant relied on evidence of discrimination in the six-county Denver Metropolitan Statistical Area (MSA) to support its MBE program.¹⁹ Plaintiffs argued that the federal constitution prohibited consideration of evidence beyond jurisdictional boundaries. The Tenth Circuit Court of Appeals disagreed with this definition.

¹³ *AGCC II*, 950 F.2d. at 1415.

¹⁴ *Coral Constr.*, 941 F.2d at 910.

¹⁵ *Id.* at 917.

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *Concrete Works II*, 36 F.3d at 1528.

¹⁹ *Concrete Works II*, 36 F.3d at 1520.



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 Denver were awarded to contractors within the MSA.²⁰ Another consideration was that Denver's analysis was based on United States Census data, which was available for the Denver MSA, but not for the City itself. There was no undue burden placed on nonculpable parties, as Denver had conducted a majority of its construction contracts within the area defined as the local market. The court cited *AGCC II*²¹ noting "that any plan that extended 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.'"²²

Similarly, New York State conducted a disparity study in which the geographic market consisted of New York State and eight counties in northern New Jersey. The geographic market was defined as the area encompassing the location of businesses that received more than 90% of the dollar value of all contracts the agency awarded.²³

State and local governments must pay special attention to the geographical scope of their disparity studies. It follows that an entity may limit consideration of evidence of discrimination within its own jurisdiction, and extra-jurisdictional evidence can be used only if there is specific evidence to support such boundaries.

II. MARKET AREA ANALYSIS

Although *Croson* and its progeny do not provide a bright line rule for the delineation of the local market area, taken collectively, the case law supports a definition of market area as the geographical boundaries of the government entity. As described below, the market area analysis determined that the majority of the City of Cincinnati's (City) dollars were spent with prime contractors located within Hamilton County. Therefore, it is within the County where evidence of discrimination will be considered.

1. Summary of the Distribution of All Contracts

The City awarded 10,228 contracts valued at \$1,232,570,508 during the January 1, 2009, to December 31, 2013, study period. The distribution of all contracts awarded and dollars received by all firms is depicted below in Table 5.01.

²⁰ *Concrete Works II*, 36 F.3d at 1520.

²¹ *AGCC II*, 950 F.2d at 1401.

²² *Concrete Works II*, 36 F.3d at 1528 (citing *AGCC II*, 950 F.2d at 1414).

²³ *Opportunity Denied! New York State's Study*, 26 *Urban Lawyer* No. 3, Summer 1994.



Table 5.01: Distribution of All Contracts

Geographic Area	Number of Contracts	Total Dollars	Percent of Contracts	Percent of Dollars
HAMILTON	5,737	\$787,575,538	56.09%	63.90%
CLERMONT	282	\$43,199,199	2.76%	3.50%
BUTLER	407	\$40,708,908	3.98%	3.30%
GREENE	58	\$22,735,772	0.57%	1.84%
MONTGOMERY	61	\$20,634,894	0.60%	1.67%
FRANKLIN	194	\$17,615,485	1.90%	1.43%
WARREN	80	\$13,891,986	0.78%	1.13%
SUMMIT	85	\$8,009,713	0.83%	0.65%
CUYAHOGA	121	\$6,702,655	1.18%	0.54%
ATHENS	4	\$2,873,135	0.04%	0.23%
WAYNE	26	\$2,749,796	0.25%	0.22%
LAKE	15	\$1,311,903	0.15%	0.11%
WOOD	3	\$1,147,919	0.03%	0.09%
LICKING	5	\$765,527	0.05%	0.06%
MEDINA	2	\$707,336	0.02%	0.06%
MAHONING	2	\$457,702	0.02%	0.04%
MORGAN	11	\$431,849	0.11%	0.04%
SHELBY	2	\$396,177	0.02%	0.03%
AUGLAIZE	10	\$361,677	0.10%	0.03%
BROWN	6	\$346,080	0.06%	0.03%
MIAMI	25	\$275,174	0.24%	0.02%
CLARK	4	\$217,537	0.04%	0.02%
STARK	15	\$183,648	0.15%	0.01%
FAYETTE	10	\$179,066	0.10%	0.01%
FAIRFIELD	2	\$164,166	0.02%	0.01%
HOCKING	2	\$140,509	0.02%	0.01%
MADISON	14	\$112,042	0.14%	0.01%
HIGHLAND	2	\$104,049	0.02%	0.01%
GALLIA	1	\$96,992	0.01%	0.01%
PORTAGE	3	\$62,062	0.03%	0.01%
CLINTON	7	\$60,347	0.07%	0.00%
LAWRENCE	1	\$57,030	0.01%	0.00%
VAN WERT	1	\$50,244	0.01%	0.00%
RICHLAND	4	\$39,737	0.04%	0.00%
DELAWARE	2	\$11,262	0.02%	0.00%
DEFIANCE	3	\$10,382	0.03%	0.00%
MEIGS	2	\$6,325	0.02%	0.00%
LUCAS	2	\$5,610	0.02%	0.00%
UNION	1	\$4,887	0.01%	0.00%
LORAIN	5	\$4,646	0.05%	0.00%
GEAUGA	2	\$1,310	0.02%	0.00%
OUT OF STATE	2,975	\$256,127,148	29.09%	20.78%
OUT OF COUNTRY	34	\$2,033,085	0.33%	0.16%
TOTAL	10,228	\$1,232,570,508	100.00%	100.00%



2. Distribution of Construction Contracts

The City awarded 1,563 construction contracts valued at \$541,126,211 during the study period. Businesses located in Hamilton County received 81.13% of the construction contracts and 63.64% of the construction dollars. The distribution of the construction contracts awarded and dollars received by all firms is depicted below in Table 5.02.

Table 5.02: Distribution of Construction Contracts

Geographic Area	Number of Contracts	Total Dollars	Percent of Contracts	Percent of Dollars
HAMILTON	1268	\$344,351,916	81.13%	63.64%
CLERMONT	58	\$35,334,813	3.71%	6.53%
BUTLER	57	\$23,678,060	3.65%	4.38%
GREENE	2	\$22,176,468	0.13%	4.10%
MONTGOMERY	16	\$17,157,920	1.02%	3.17%
FRANKLIN	5	\$5,082,936	0.32%	0.94%
ATHENS	1	\$2,861,863	0.06%	0.53%
WARREN	12	\$2,722,504	0.77%	0.50%
CUYAHOGA	7	\$2,089,198	0.45%	0.39%
MEDINA	1	\$705,101	0.06%	0.13%
SHELBY	1	\$358,142	0.06%	0.07%
BROWN	6	\$346,080	0.38%	0.06%
SUMMIT	5	\$185,775	0.32%	0.03%
HIGHLAND	2	\$104,049	0.13%	0.02%
GALLIA	1	\$96,992	0.06%	0.02%
LAWRENCE	1	\$57,030	0.06%	0.01%
LAKE	2	\$29,975	0.13%	0.01%
CLINTON	1	\$15,900	0.06%	0.00%
DELAWARE	1	\$10,901	0.06%	0.00%
OUT OF STATE	116	\$83,760,587	7.42%	15.48%
TOTAL	1,563	\$541,126,211	100.00%	100.00%



3. Distribution of Professional Services Contracts

The City awarded 1,229 professional services including architecture and engineering (hereinafter professional services) contracts valued at \$371,576,494 during the study period. Businesses located in Hamilton County received 59.64% of the professional services contracts and 75.65% of the professional services dollars. The distribution of the professional services contracts awarded and dollars received by all firms is depicted below in Table 5.03.

Table 5.03: Distribution of Professional Services Contracts

Geographic Area	Number of Contracts	Total Dollars	Percent of Contracts	Percent of Dollars
HAMILTON	733	\$281,086,908	59.64%	75.65%
WARREN	9	\$9,334,003	0.73%	2.51%
FRANKLIN	59	\$5,008,710	4.80%	1.35%
BUTLER	21	\$3,295,585	1.71%	0.89%
CUYAHOGA	21	\$2,547,175	1.71%	0.69%
CLERMONT	8	\$1,942,946	0.65%	0.52%
WOOD	2	\$962,346	0.16%	0.26%
LICKING	1	\$693,910	0.08%	0.19%
AUGLAIZE	6	\$360,494	0.49%	0.10%
LAKE	2	\$148,600	0.16%	0.04%
RICHLAND	2	\$31,225	0.16%	0.01%
SUMMIT	1	\$2,475	0.08%	0.00%
OUT OF STATE	355	\$66,112,870	29.71%	17.41%
OUT OF COUNTRY	9	\$49,246	0.73%	0.01%
TOTAL	1,229	\$371,576,494	100.00%	100.00%

4. Distribution of Supplies and Services Contracts

The City awarded 7,436 supplies and services contracts valued at \$319,867,803 during the study period. Businesses located in Hamilton County received 50.24% of the supplies and services contracts and 50.69% of the supplies and services dollars. The distribution of the supplies and services contracts awarded and dollars received by all firms is depicted below in Table 5.04.



Table 5.04: Distribution of Supplies and Services Contracts

Geographic Area	Number of Contracts	Total Dollars	Percent of Contracts	Percent of Dollars
HAMILTON	3,736	\$162,136,714	50.24%	50.69%
BUTLER	329	\$13,735,263	4.42%	4.29%
SUMMIT	79	\$7,821,463	1.06%	2.45%
FRANKLIN	130	\$7,523,840	1.75%	2.35%
CLERMONT	216	\$5,921,440	2.90%	1.85%
MONTGOMERY	45	\$3,476,974	0.61%	1.09%
WAYNE	26	\$2,749,796	0.35%	0.86%
CUYAHOGA	93	\$2,066,282	1.25%	0.65%
WARREN	59	\$1,835,479	0.79%	0.57%
LAKE	11	\$1,133,328	0.15%	0.35%
GREENE	56	\$559,304	0.75%	0.17%
MAHONING	2	\$457,702	0.03%	0.14%
MORGAN	11	\$431,849	0.15%	0.14%
MIAMI	25	\$275,174	0.34%	0.09%
CLARK	4	\$217,537	0.05%	0.07%
WOOD	1	\$185,573	0.01%	0.06%
STARK	15	\$183,648	0.20%	0.06%
FAYETTE	10	\$179,066	0.13%	0.06%
FAIRFIELD	2	\$164,166	0.03%	0.05%
HOCKING	2	\$140,509	0.03%	0.04%
MADISON	14	\$112,042	0.19%	0.04%
LICKING	4	\$71,617	0.05%	0.02%
PORTAGE	3	\$62,062	0.04%	0.02%
VAN WERT	1	\$50,244	0.01%	0.02%
CLINTON	6	\$44,447	0.08%	0.01%
SHELBY	1	\$38,035	0.01%	0.01%
ATHENS	3	\$11,272	0.04%	0.00%
DEFIANCE	3	\$10,382	0.04%	0.00%
RICHLAND	2	\$8,512	0.03%	0.00%
MEIGS	2	\$6,325	0.03%	0.00%
LUCAS	2	\$5,610	0.03%	0.00%
UNION	1	\$4,887	0.01%	0.00%
LORAIN	5	\$4,646	0.07%	0.00%
MEDINA	1	\$2,235	0.01%	0.00%
GEAUGA	2	\$1,310	0.03%	0.00%
AUGLAIZE	4	\$1,183	0.05%	0.00%
DELAWARE	1	\$362	0.01%	0.00%
OUT OF COUNTRY	25	\$1,983,839	0.34%	0.62%
OUT OF STATE	2,504	\$106,253,691	33.67%	33.22%
TOTAL	7,436	\$319,867,803	100.00%	100.00%



III. CITY OF CINCINNATI MARKET AREA

During the study period, the City awarded 10,228 construction, professional services, and supplies and services contracts valued at \$1,232,570,508. The City awarded 56.09% of all contracts and 63.90% of all dollars to businesses located in the market area. Thus, the market area for the Disparity Study is determined to be the geographical boundaries of Hamilton County. The analysis of discrimination has been limited to an examination of contracts awarded to available market area businesses.

Table 5.05 below presents an overview of the number of construction, professional services, and supplies and services contracts the City awarded and the dollars spent in the market area during their respective study periods.

Construction Contracts: 1,268 or 81.13% of construction contracts were awarded to market area businesses. The dollar value of those contracts was \$344,351,916 or 63.64% of the total construction dollars.

Professional Services: 733 or 59.64% of professional service contracts were awarded to market area businesses. The dollar value of those contracts was \$281,086,908 or 75.65% of the total professional services dollars.

Supplies and Services: 3,736 or 50.24% of supplies and services contracts were awarded to market area businesses. The dollar value of those contracts was \$162,136,714 or 50.69% of the total supplies and services dollars.

Table 5.05: Distribution of the City of Cincinnati's Prime Contracts

Geographic Area	Number of Contracts	Total Dollars	Percent of Contracts	Percent of Dollars
Combined Industries				
Hamilton County	5,737	\$787,575,538	56.09%	63.90%
Outside Market Area	4,491	\$444,994,970	43.91%	36.10%
TOTAL	10,228	\$1,232,570,508	100.00%	100.00%
Construction				
Hamilton County	1,268	\$344,351,916	81.13%	63.64%
Outside Market Area	295	\$196,774,295	18.87%	36.36%
TOTAL	1,563	\$541,126,211	100.00%	100.00%
Professional Services				
Hamilton County	733	\$281,086,908	59.64%	75.65%
Outside Market Area	496	\$90,489,586	40.36%	24.35%
TOTAL	1,229	\$371,576,494	100.00%	100.00%
Supplies and Services				
Hamilton County	3,736	\$162,136,714	50.24%	50.69%
Outside Market Area	3,700	\$157,731,089	49.76%	49.31%
TOTAL	7,436	\$319,867,803	100.00%	100.00%



CHAPTER 6: PRIME CONTRACTOR AND SUBCONTRACTOR AVAILABILITY ANALYSIS

I. INTRODUCTION

Availability is defined, according to *Croson*, as the number of qualified businesses in the jurisdiction's market area that are willing and able to provide goods or services.¹ To determine availability, Minority and Woman-owned Business Enterprises, hereinafter referred to as Minority and Caucasian Female Business Enterprises (M/WBEs), and non-M/WBEs within the jurisdiction's market area that are ready, willing, and able to provide the goods and services that an agency procures must be enumerated. The market area for the three industries—construction, professional services including architecture and engineering (hereinafter professional services), and supplies and services, as defined in *Chapter 5: Market Area Analysis*, is Hamilton County (County).

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's interest in contracting with the jurisdiction, as implied by the term "willing," and the other is its ability or capacity to provide a service or good, as implied by the term "able."

II. PRIME CONTRACTOR AVAILABILITY DATA SOURCES

A. Identification of Willing Businesses within the Market Area

Mason Tillman used three types of sources to identify businesses in the market area that provide the goods and services that the City procures. One source was the City's records, including vendors and bidders lists. The second source was government certification directories. The third source was business association membership lists. 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 goods or services in more than one industry was listed uniquely in each relevant industry's availability list.

The three sources were ranked, with the highest rank assigned to the utilized businesses, bidders, and vendors. Government certification lists ranked second, and business association membership lists ranked third. Therefore, the first document used to build the

¹ *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 509 (1989).



availability list was the City's record of utilized businesses. Bidders and vendor lists were then appended. Businesses identified on certification lists collected from federal and local government certification agencies were thereafter appended. The local certification lists included Small, Minority-owned, Caucasian Female, and Disadvantaged Business Enterprises (S/M/W/DBEs). Businesses on association membership lists that affirmed their willingness through a survey of business association members were also appended. The business associations included trade and professional groups and chambers of commerce.

Extensive targeted outreach to business associations in the market area was performed to identify and secure business membership lists. The outreach garnered a number of membership lists.

From the three sources, 1,731 unique market area businesses that provided goods or services in one or more of the three industries were identified. An accounting of the willing businesses derived by source is listed below:

B. Prime Contractor Sources

Table 6.01 lists the sources from which the list of willing businesses was compiled.

Table 6.01: Prime Contractor Availability Data Sources

Source	Type of Information
City of Cincinnati Records	
City of Cincinnati SBE Directory	M/WBEs and SBEs
Government Certification Directories	
State of Ohio Department of Administrative Services Encouraging Diversity, Growth and Equity (EDGE) Certification List	MBEs
State of Ohio Department of Administrative Services Minority Business Enterprise (MBE) Certification List	MBEs
Hamilton County Small Business Association MWBE List	M/WBEs and SBEs
State of Ohio Disadvantaged Business Enterprise (DBE) List	DBEs
Business Association Membership Lists	
African American Chamber - Greater Cincinnati, Northern Kentucky	MBEs
Allied Construction Industries	M/WBEs and non-M/WBEs
Anderson Area Chamber of Commerce	M/WBEs and non-M/WBEs



Source	Type of Information
Associated Builders and Contractors, Inc. - Ohio Valley Chapter	M/WBEs and non-M/WBEs
Cincinnati USA Regional Chamber	M/WBEs and non-M/WBEs
Community Development Corporations Association of Greater Cincinnati	M/WBEs and non-M/WBEs
Greater Hamilton Chamber of Commerce	M/WBEs and non-M/WBEs
Hispanic Chamber Cincinnati USA	M/WBEs
Independent Electrical Contractors Association	M/WBEs and non-M/WBEs
Minority Business Accelerator	MBEs
National Electrical Contractors Association	M/WBEs and non-M/WBEs
Ohio Lawn Care Association	M/WBEs and non-M/WBEs
Ohio Roofing Contractors Association	M/WBEs and non-M/WBEs
Ohio Nursery and Landscape Association	M/WBEs and non-M/WBEs
Over-the-Rhine Chamber of Commerce	M/WBEs and non-M/WBEs
Ohio Trucking Association, Inc.	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 the City. “Willingness” is defined in *Croson* and its progeny as a business’s interest in doing government contracting. To be classified as willing, the 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 the City through the willingness survey. Businesses identified from the sources listed in Table 6.01 demonstrated their willingness to perform on public contracts.

D. Distribution of Available Prime Contractors by Source, Ethnicity, and Gender

Tables 6.02 through 6.05 present the distribution of willing prime contractors by source. The highest ranked source was the prime contractors utilized by the City. Each ranked business is *counted only once*. For example, a prime contractor sourced from the City’s utilized prime contractors was not counted a second time as a bidder, certified business, or company identified from a business association list.

As noted in Table 6.02, 74.58% of the businesses on the unique list of available prime contractors were obtained from the City’s records, other government agencies’ records, and government certification lists. Willing businesses identified through the business



association membership lists and the business community meetings represent 25.42% of the available businesses.

**Table 6.02: Distribution of Prime Contractor Availability Data Sources,
All Industries**

Sources	M/WBEs Percentage	Non-M/WBEs Percentage	Source Percentage
Prime Contractor Utilization	35.39%	60.34%	52.40%
Certification Lists	43.92%	11.78%	22.01%
Agency Task Force - EIAC	0.54%	0.00%	0.17%
Subtotal	79.85%	72.12%	74.58%
Community Meeting Attendees	1.63%	0.25%	0.69%
Willingness Survey	16.15%	16.69%	16.52%
Chambers and Trade Organization	2.36%	10.93%	8.20%
Subtotal	20.15%	27.88%	25.42%
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 also was calculated for each industry. As noted in Table 6.03, 71.98% of the construction businesses identified were derived from the City's records, other government agencies' records, and government certification lists. Companies identified through the business association membership lists and the business community meetings represent 28.02% of the willing businesses.



**Table 6.03: Distribution of Prime Contractor Availability Data Sources,
Construction**

Sources	M/WBEs Percentage	Non-M/WBEs Percentage	Source Percentage
Prime Contractor Utilization	23.60%	48.20%	39.18%
Certification Lists	58.39%	17.99%	32.80%
Subtotal	81.99%	66.19%	71.98%
Community Meeting Attendees	0.00%	0.36%	1.59%
Willingness Survey	9.94%	16.55%	14.12%
Chambers and Trade Organization	4.35%	16.91%	12.30%
Subtotal	18.01%	33.81%	28.02%
Grand Total*	98.14%	100.00%	100.00%

*The percentages may not total 100 percent due to rounding.

Table 6.04 depicts the data sources for the available professional services prime contractors. As noted, 65.64% of the professional services businesses identified were derived from the City's records, other government agencies' records, and government certification lists. Companies identified through the business association membership lists and the business community meetings represent 34.36% of the willing businesses.



**Table 6.04: Distribution of Prime Contractor Availability Data Sources,
Professional Services**

Sources	M/WBEs Percentage	Non-M/WBEs Percentage	Source Percentage
Prime Contractor Utilization	32.30%	47.52%	42.22%
Certification Lists	38.50%	15.13%	23.27%
Agency Task Force - EAC	0.44%	0.00%	0.15%
Subtotal	71.24%	62.65%	65.64%
Community Meeting Attendees	1.33%	0.24%	0.62%
Willingness Survey	26.11%	30.26%	28.81%
Chambers and Trade Organization	1.33%	6.86%	4.93%
Subtotal	28.76%	37.35%	34.36%
Grand Total*	100.00%	100.00%	100.00%

*The percentages may not total 100 percent due to rounding.

Table 6.05 depicts the data sources for the available supplies and services prime contractors. As noted, 87.76% of the supplies and services businesses identified were derived from the City's records, government agencies' records, and government certification lists. Companies identified through the business association membership lists and the business community meetings represent 12.24% of the willing businesses.



**Table 6.05: Distribution of Prime Contractor Availability Data Sources,
Supplies and Services**

Sources	M/WBEs Percentage	Non-M/WBEs Percentage	Source Percentage
Prime Contractor Utilization	50.94%	78.67%	71.17%
Certification Lists	40.09%	7.52%	16.33%
Agency Task Force - EIAC	0.94%	0.00%	0.26%
Subtotal	0.00%	86.19%	87.76%
Community Meeting Attendees	0.00%	0.35%	0.26%
Willingness Survey	6.60%	4.02%	4.72%
Chambers and Trade Organization	1.42%	9.44%	7.27%
Subtotal	8.02%	13.81%	12.24%
Grand Total*	54.01%	100.00%	100.00%

*The percentages may not total 100 percent due to rounding.



E. Size of Prime Contracts Analyzed

The City's construction, professional services, and supplies and services prime contracts were analyzed to determine the size of awarded contracts in order to gauge the capacity required to perform on the City's prime contracts.

For the size analysis, the City's prime contracts were grouped into nine dollar ranges.² Each industry was analyzed to determine the number and percentage of prime contracts that fell within the nine size categories. The size distribution of prime contracts awarded to Non-minority Males was then compared to the size distribution of prime contracts awarded to Caucasian Females, Minority Females, and Minority Males. As illustrated in the four following tables, Non-minority Males were awarded a higher proportion of contracts in each size category. However, M/WBEs were awarded contracts as large as \$2,861,862.59 in construction, \$6,279,613.20 in professional services, and \$623,930.93 in supplies and services.

1. All Prime Contracts by Size

Table 6.06 depicts prime contracts awarded in all industries within the nine dollar ranges. Contracts valued at \$25,000 and under were 78.02%. Those valued at \$50,000 and under were 83.56%. Those less than \$100,000 were 88.18% and those less than \$500,000 were 95.15%.

2. Construction Prime Contracts by Size

Table 6.07 depicts the construction prime contracts awarded within the nine dollar ranges. Contracts valued at \$25,000 and under were 57.45%. Those valued at \$50,000 and under were 63.92%. Those less than \$100,000 were 69.80% and those less than \$500,000 were 83.75%.

3. Professional Services Prime Contracts by Size

Table 6.08 depicts professional services prime contracts within the nine dollar ranges. Contracts valued at \$25,000 and under were 59.80%. Those valued at \$50,000 and under were 68.59%. Those less than \$100,000 were 75.51% and those less than \$500,000 were 89.99%.

4. Supplies and Services Prime Contracts by Size

Table 6.09 depicts supplies and services prime contracts within the nine dollar ranges. Contracts valued at \$25,000 and under were 85.36%. Those valued at \$50,000 and under were 90.17%. Those less than \$100,000 were 94.14% and those less than \$500,000 were 98.40%.

² The nine dollar ranges are \$1 to \$5,000, \$5,001 to \$25,000, \$25,001 to \$50,000, \$50,001 to \$99,999, \$100,000 to \$249,999, \$250,000 to \$499,999, \$500,000 to \$999,999, \$1,000,000 to \$2,999,999, and \$3,000,000 and greater.



**Table 6.06: All Industry Prime Contracts by Size,
January 1, 2009, to December 31, 2013**

Size	Non-Minority				Minority				Total	
	Females		Males		Females		Males			
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
\$1 - \$5,000	713	6.97%	5,192	50.76%	78	0.76%	278	2.72%	6,261	61.21%
\$5,001 - \$25,000	207	2.02%	1,338	13.08%	20	0.20%	154	1.51%	1,719	16.81%
\$25,001 - \$50,000	48	0.47%	495	4.84%	4	0.04%	20	0.20%	567	5.54%
\$50,001 - \$99,999	31	0.30%	427	4.17%	5	0.05%	9	0.09%	472	4.61%
\$100,000 - \$249,999	25	0.24%	394	3.85%	9	0.09%	20	0.20%	448	4.38%
\$250,000 - \$499,999	8	0.08%	248	2.42%	0	0.00%	9	0.09%	265	2.59%
\$500,000 - \$999,999	7	0.07%	184	1.80%	3	0.03%	11	0.11%	205	2.00%
\$1,000,000 - \$2,999,999	4	0.04%	202	1.97%	2	0.02%	5	0.05%	213	2.08%
\$3,000,000 and greater	1	0.01%	76	0.74%	0	0.00%	1	0.01%	78	0.76%
Total*	1,044	10.21%	8,556	83.65%	121	1.18%	507	4.96%	10,228	100.00%

*The percentages may not total 100 percent due to rounding.

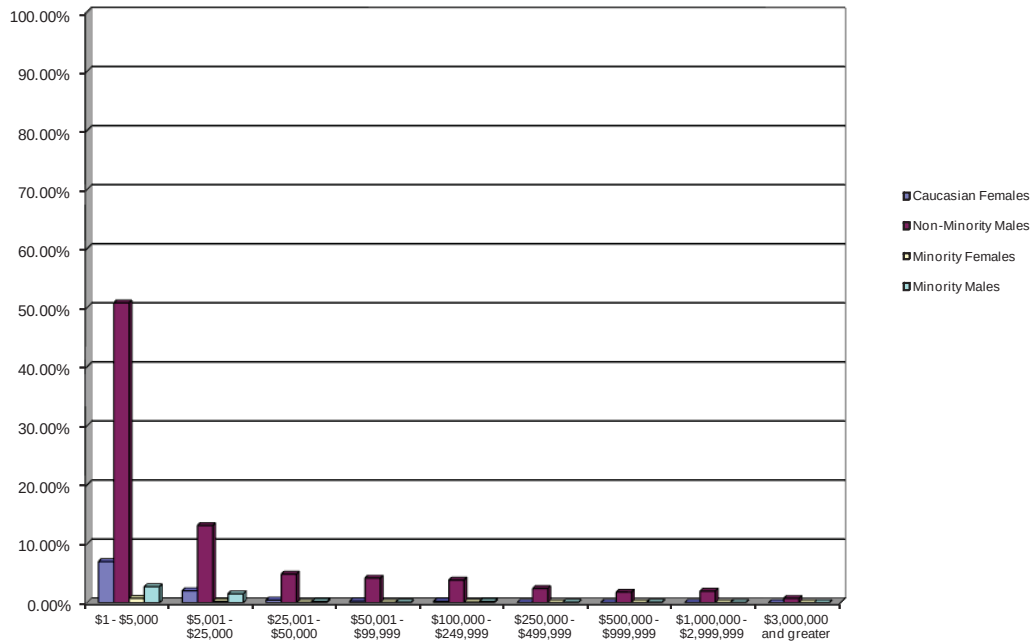


**Table 6.07: Construction Prime Contracts by Size,
January 1, 2009, to December 31, 2013**

Size	Non-Minority				Minority				Total	
	Females		Males		Females		Males			
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
\$1 - \$5,000	39	2.50%	247	15.80%	2	0.13%	12	0.77%	300	19.19%
\$5,001 - \$25,000	155	9.92%	321	20.54%	4	0.26%	118	7.55%	598	38.26%
\$25,001 - \$50,000	22	1.41%	69	4.41%	0	0.00%	10	0.64%	101	6.46%
\$50,001 - \$99,999	13	0.83%	74	4.73%	1	0.06%	4	0.26%	92	5.89%
\$100,000 - \$249,999	5	0.32%	100	6.40%	1	0.06%	8	0.51%	114	7.29%
\$250,000 - \$499,999	2	0.13%	100	6.40%	0	0.00%	2	0.13%	104	6.65%
\$500,000 - \$999,999	4	0.26%	89	5.69%	1	0.06%	4	0.26%	98	6.27%
\$1,000,000 - \$2,999,999	2	0.13%	113	7.23%	0	0.00%	4	0.26%	119	7.61%
\$3,000,000 and greater	0	0.00%	37	2.37%	0	0.00%	0	0.00%	37	2.37%
Total*	242	15.48%	1,150	73.58%	9	0.58%	162	10.36%	1,563	100.00%

*The percentages may not total 100 percent due to rounding.

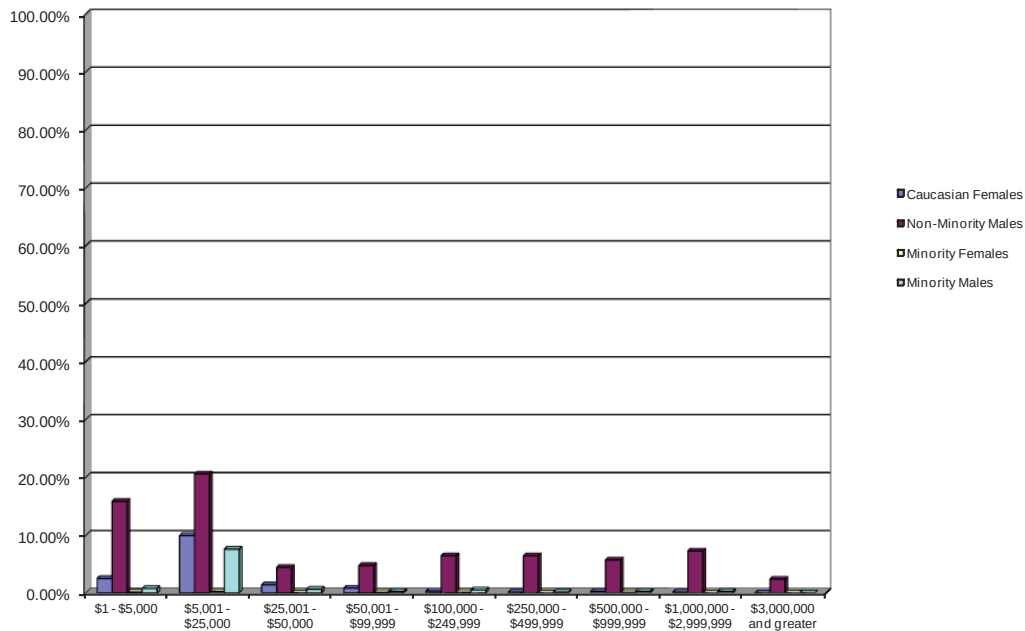


**Table 6.08: Professional Services Prime Contracts by Size,
January 1, 2009, to December 31, 2013**

Size	Non-Minority				Minority				Total	
	Females		Males		Females		Males			
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
\$1 - \$5,000	59	51.30%	368	38.53%	22	55.00%	66	55.46%	515	41.90%
\$5,001 - \$25,000	16	13.91%	173	18.12%	11	27.50%	20	16.81%	220	17.90%
\$25,001 - \$50,000	16	13.91%	84	8.80%	1	2.50%	7	5.88%	108	8.79%
\$50,001 - \$99,999	8	6.96%	73	7.64%	1	2.50%	3	2.52%	85	6.92%
\$100,000 - \$249,999	9	7.83%	99	10.37%	2	5.00%	7	5.88%	117	9.52%
\$250,000 - \$499,999	2	1.74%	52	5.45%	0	0.00%	7	5.88%	61	4.96%
\$500,000 - \$999,999	2	1.74%	35	3.66%	1	2.50%	7	5.88%	45	3.66%
\$1,000,000 - \$2,999,999	2	1.74%	48	5.03%	2	5.00%	1	0.84%	53	4.31%
\$3,000,000 and greater	1	0.87%	23	2.41%	0	0.00%	1	0.84%	25	2.03%
Total*	115	100.00%	955	100.00%	40	100.00%	119	100.00%	1,229	100.00%

* The percentages may not total 100 percent due to rounding.

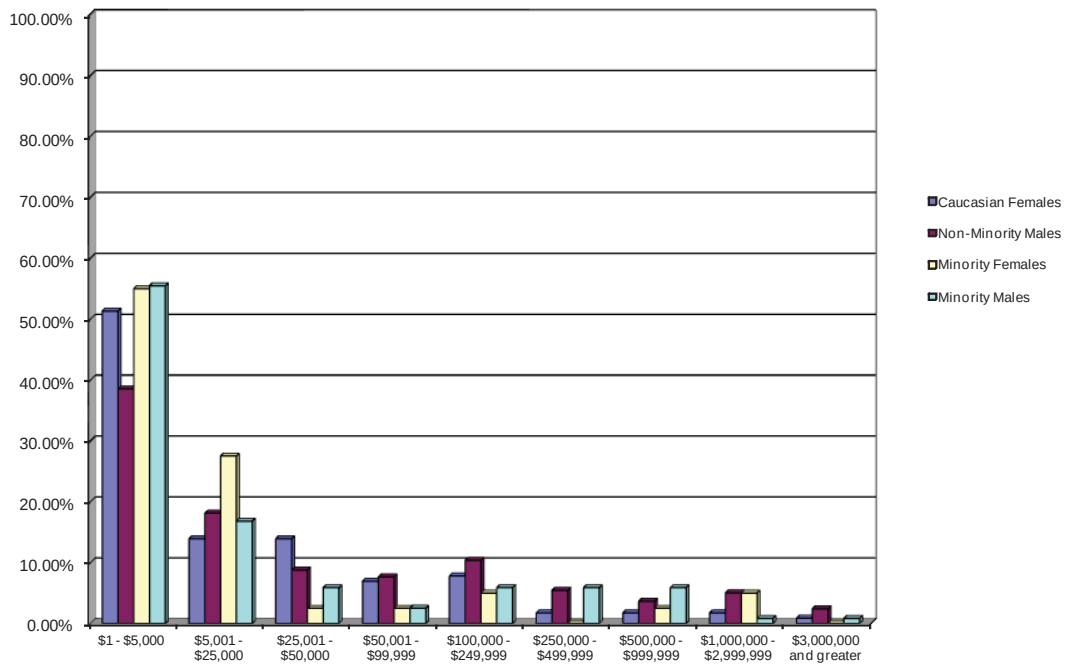
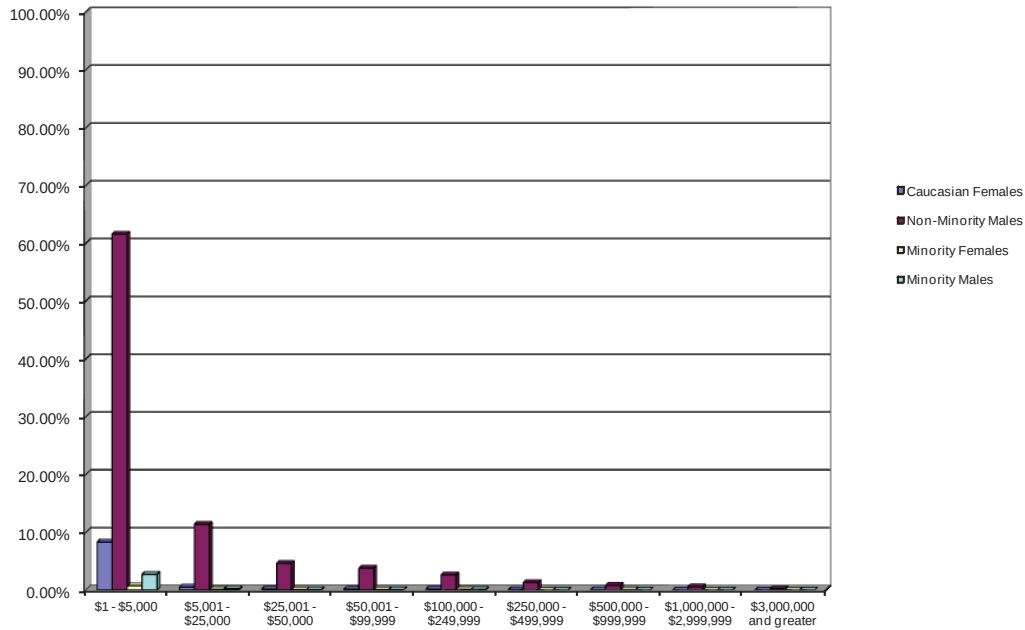


**Table 6.09: Supplies and Services Prime Contracts by Size,
January 1, 2009, to December 31, 2013**

Size	Non-Minority				Minority				Total	
	Females		Males		Females		Males			
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
\$1 - \$5,000	615	8.27%	4,577	61.55%	54	0.73%	200	2.69%	5,446	73.24%
\$5,001 - \$25,000	36	0.48%	844	11.35%	5	0.07%	16	0.22%	901	12.12%
\$25,001 - \$50,000	10	0.13%	342	4.60%	3	0.04%	3	0.04%	358	4.81%
\$50,001 - \$99,999	10	0.13%	280	3.77%	3	0.04%	2	0.03%	295	3.97%
\$100,000 - \$249,999	11	0.15%	195	2.62%	6	0.08%	5	0.07%	217	2.92%
\$250,000 - \$499,999	4	0.05%	96	1.29%	0	0.00%	0	0.00%	100	1.34%
\$500,000 - \$999,999	1	0.01%	60	0.81%	1	0.01%	0	0.00%	62	0.83%
\$1,000,000 - \$2,999,999	0	0.00%	41	0.55%	0	0.00%	0	0.00%	41	0.55%
\$3,000,000 and greater	0	0.00%	16	0.22%	0	0.00%	0	0.00%	16	0.22%
Total*	687	9.24%	6,451	86.75%	72	0.97%	226	3.04%	7,436	100.00%

* The percentages may not total 100 percent due to rounding.



F. Business Capacity e-Survey

Neither *Croson*, nor its progeny have given definitive 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 the City's marketplace is documented in *Chapter 9: Regression Analysis*, *Chapter 7: Prime Contractor Disparity Analysis*, and *Chapter 10: Anecdotal Analysis*.

To determine the relative capacity of the M/WBEs and non-M/WBEs enumerated in the availability analysis, an e-Survey 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 M/WBEs' business revenue and contracting opportunities were limited even when M/WBEs and similarly situated Non-Minority Males 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.

However, the analysis showed that Non-Minority Males earn higher revenue than M/WBEs, with the greatest difference in earnings over \$10 million; M/WBEs and Non-Minority Males' business earnings were most comparable at the \$500,001 to \$1,000,000 level. Therefore, the analysis of prime contract disparity was performed for contracts with a total value of \$500,000. These findings are presented in *Chapter 7: Prime Contract Disparity Analysis*. The findings discussed below illustrate the impact of independent business characteristics on business capacity.

1. Methodology

a. Data Sample

The stratified sample of M/WBEs and non-M/WBEs was drawn from 2,426 businesses in the availability and utilization databases by ethnicity, gender, and industry to ensure that the sample was proportionally representative of the total population of willing businesses.

b. Data Limitations

Primary limitations of this self-administered survey are the total number of responses received from select ethnic groups and the reliability of the self-reported data. To acknowledge this limitation, which is common to all survey data, the margin of error is presented. A survey was completed by 236 unique businesses, which corresponds to a $\pm 6.06\%$ margin of error at the 95% confidence level when estimating a single proportion.



The margin of error calculates the imprecision that is inherent in survey data. The results depicted below represent a range of values, rather than a specific number. The accurate representation of each finding is within a range of 6.06% above and below the reported statistic.

c. Data Analysis

An ordered logistic regression analysis and an analysis of cumulative frequencies were used to analyze the survey data. The ordered logistic regression model estimates a linear relationship between the independent variables and the dependent variable. 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

The business capacity survey was completed by 236 unique businesses – 24.58% were African American-owned, 2.12% were Asian American-owned, 1.69% were Hispanic American-owned, 0.42% were Native American-owned, 25.42% were Caucasian Female-owned and 45.76% were Caucasian Male-owned. Of the 236 surveys, 38.98% were completed by females of all ethnicities, and 61.02% were completed by males of all ethnicities.



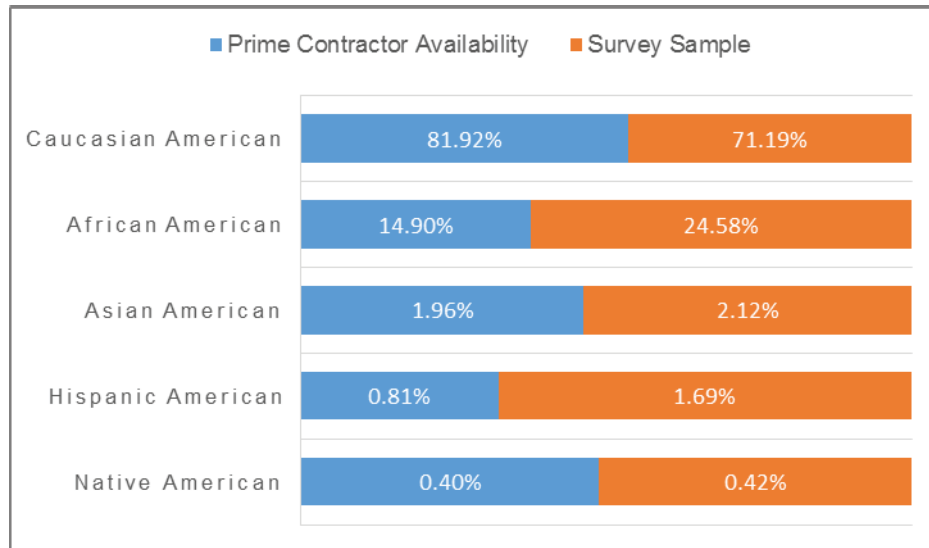
Table 6.10: Ethnicity and Gender of Businesses

Response	African American	Asian American	Hispanic American	Native American	Caucasian American	Total
Female	11.02%	1.27%	0.85%	0.42%	25.42%	38.98%
Male	13.56%	0.85%	0.85%	0.00%	45.76%	61.02%
Total Percent	24.58%	2.12%	1.69%	0.42%	71.19%	100.00%
Total Number	58	5	4	1	168	236

$\chi^2=4.2854$, $df=4$, $p\text{-value}=0.3688$

As shown in Chart 6.01, the ethnic profile of survey responses closely resembled the ethnic profile of the available prime contractors. Caucasian Americans comprised 81.92% of the available prime contractors and 71.19% of the survey responses; African Americans comprised 14.90% of available prime contractors and 24.58% of survey responses; Asian Americans comprised 1.96% of available prime contractors and 2.12% of survey responses; Hispanic Americans comprised 0.81% of available prime contractors and 1.69% of survey responses; and Native Americans comprised 0.40% of available prime contractors and 0.42% of survey responses.

Chart 6.01: Comparison of Sample to Prime Contractor Availability



As shown in Table 6.11, 28.81% of businesses provided construction; 41.53% of businesses provided professional services; and 29.66% of businesses provided supplies and services.

Table 6.11: Primary Industry

Response	African American	Asian American	Hispanic American	Native American	Caucasian Females	Non-Minority Males	Total
Construction	31.03%	20.00%	50.00%	100.00%	23.33%	29.63%	28.81%
Professional Services	46.55%	80.00%	50.00%	0.00%	46.67%	34.26%	41.53%
Supplies and Services	22.41%	0.00%	0.00%	0.00%	30.00%	36.11%	29.66%
Total Percent	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Total Number	58	5	4	1	60	108	236

$\chi^2=13.1514$, $df=10$, $p\text{-value}=0.2153$

3. Capacity Analysis

a. Introduction

Several independent economic indicators were examined to determine the effect of M/WBEs and non-MWBEs' business characteristics on their reported annual gross revenue. Discrimination can depress an M/WBE's revenue, contracting activity, and number of employees. This analysis will show that contracting opportunities and revenue for M/WBEs are limited even when M/WBEs are similarly situated and bid on the City's contracts at the same frequency as Non-Minority Males. Of the metrics considered in this analysis, with the exception of the number of employees, non-M/WBEs are not awarded contracts more frequently because of any single measure of capacity or a combination of the capacity measures examined in this analysis.

4. Business Annual Gross Revenue, All Industries

As shown in Table 6.12, there is a significant difference ($p=0.00$) in the frequencies of businesses' annual gross revenue, according to the ethnicity and gender of the business owner. Overall, 9.75% of businesses earned up to \$50,000; 5.93% of businesses earned \$50,001 to \$100,000; 12.29% of businesses earned \$100,001 to \$300,000; 7.20% of businesses earned \$300,001 to \$500,000; 11.44% of businesses earned \$500,001 to \$1 million; 17.80% of businesses earned \$1 million to \$3 million; 6.36% of businesses earned \$3 million to \$5 million; 11.02% of businesses earned \$5 million to \$10 million, 12.71% of businesses earned over \$10 million; and 5.51% of businesses did not report their annual revenue.



Table 6.12: Annual Gross Revenue: All Industries

Response	African American	Asian American	Hispanic American	Native American	MBEs	Caucasian Females	Non-Minority Males	Total
\$50,000 and Under	25.86%	0.00%	0.00%	0.00%	22.06%	10.00%	1.85%	9.75%
\$50,001 to \$100,000	8.62%	0.00%	0.00%	100.00%	8.82%	5.00%	4.63%	5.93%
\$100,001 to \$300,000	20.69%	60.00%	50.00%	0.00%	25.00%	6.67%	7.41%	12.29%
\$300,001 to \$500,000	3.45%	0.00%	0.00%	0.00%	2.94%	8.33%	9.26%	7.20%
\$500,001 to \$1,000,000	13.79%	0.00%	50.00%	0.00%	14.71%	11.67%	9.26%	11.44%
\$1,000,001 to \$3,000,000	13.79%	0.00%	0.00%	0.00%	11.76%	28.33%	15.74%	17.80%
\$3,000,001 to \$5,000,000	3.45%	20.00%	0.00%	0.00%	4.41%	8.33%	6.48%	6.36%
\$5,000,001 to \$10,000,000	1.72%	0.00%	0.00%	0.00%	1.47%	11.67%	16.67%	11.02%
Over \$10,000,000	3.45%	20.00%	0.00%	0.00%	4.41%	5.00%	22.22%	12.71%
Unknown	5.17%	0.00%	0.00%	0.00%	4.41%	5.00%	6.48%	5.51%
Total Percent	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Total Number	58	5	4	1	68	60	108	236

$\chi^2=104.1469$, $df=45$, $p\text{-value}=0.000001$

Chart 6.02 illustrates that MBEs and Caucasian Females earn less annually than Non-Minority Males. Despite this distinction, the revenue of MBEs, Caucasian Females, and Non-Minority Males is most similar at the \$501,000 to \$1 million range. Non-Minority Males' revenue begins to increase exponentially at the \$5 million to \$10 million range, with the greatest disparity in earnings at the over \$10 million level.

Chart 6.02: Annual Gross Revenue: All Industries

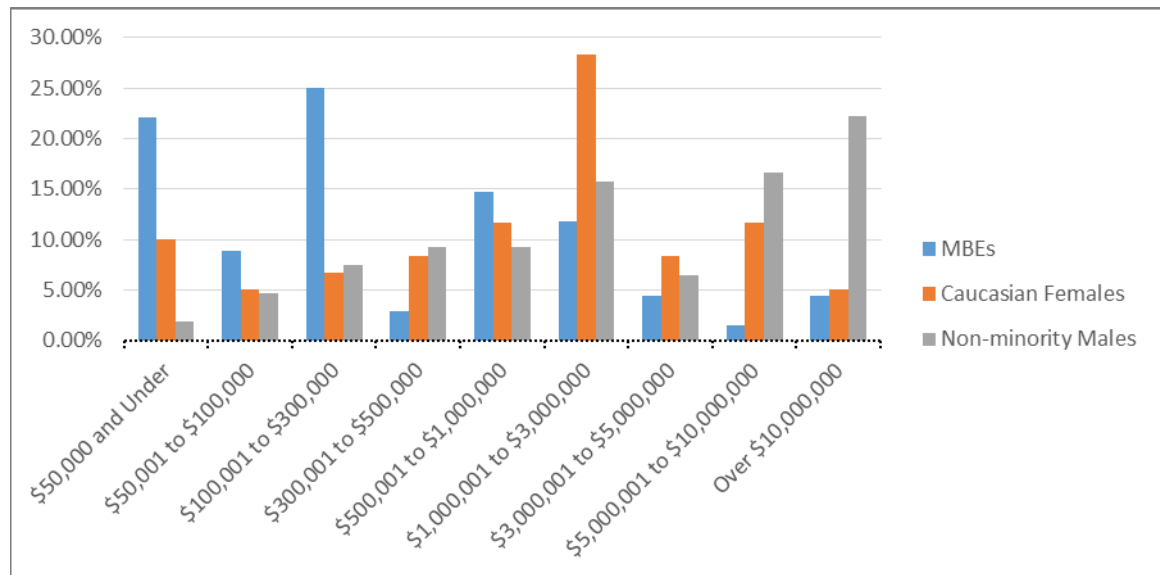


Table 6.13 presents the results of the ordered logistic regression conducted to determine how a business's gross revenue is impacted by independent business characteristics.



Table 6.13: Annual Gross Revenue Ordered Logistic Regression: All Industries, All Ethnicities

Annual Gross Revenue	Coefficient	Significance	Standard Error	p-value
Number of Contracts	0.169177	*	0.085550	0.048
Years of Business Operation	0.128385		0.138131	0.353
Owner's Years of Experience	0.070210		0.205138	0.732
Number of Employees	1.688445	*	0.177609	0.000
Owner's Gender	-1.024219	*	0.496602	0.039
Bond Insurance	0.000000	*	0.000000	0.004
Number of Locations	0.104702		0.133940	0.434
Public Sector Revenue	0.176986		0.106725	0.097
Owner's Education	0.228315	*	0.102521	0.026
Caucasian Female	0.512391		0.594461	0.389
Minority	-0.540924		0.403617	0.180

- M/WBEs and non-M/WBEs whose annual gross revenue is derived from more individual contracts have statistically significant higher gross revenue.
- M/WBEs and non-M/WBEs that have more current employees have statistically significant higher gross revenue.
- Businesses that are owned by females have statistically significant lower gross revenue.
- M/WBEs and non-M/WBEs that have a larger bonding level have statistically significant higher gross revenue.
- M/WBEs and non-M/WBEs whose owners have a higher level of education have statistically significant higher gross revenue.

5. Business Annual Gross Revenue by Ethnicity

The data in Table 6.14 to Table 6.16 was disaggregated to determine if the relationship between annual gross revenue and independent business characteristics was different among non-M/WBEs, Caucasian Females, and MBEs.

Table 6.14 illustrates how the gross revenue of businesses owned by non-M/WBEs is impacted by independent business characteristics.

Table 6.14: Annual Gross Revenue Ordered Logistic Regression: Non-M/WBE

Annual Gross Revenue	Coefficient	Significance	Standard Error	p-value
Number of Contracts	0.091384		0.159828	0.567
Years of Business Operation	0.098744		0.204083	0.628
Owner's Years of Experience	0.447926		0.315558	0.156
Number of Employees	1.666743	*	0.261574	0.000
Owner's Gender	0.000000		(omitted)	
Bond Insurance	0.000000		0.000000	0.068
Number of Locations	0.139068		0.191554	0.468
Public Sector Revenue	0.367472		0.191391	0.055
Owner's Education	0.068818		0.161997	0.671



- Non-M/WBEs with more current employees have statistically significant higher annual gross revenue.

Table 6.15 illustrates how the gross revenue of businesses owned by Caucasian Females is impacted by independent business characteristics.

Table 6.15: Annual Gross Revenue Ordered Logistic Regression: Caucasian Female Businesses

Annual Gross Revenue	Coefficient	Significance	Standard Error	p-value
Number of Contracts	0.004874		0.171117	0.977
Years of Business Operation	-0.329200		0.366295	0.369
Owner's Years of Experience	-0.508674		0.522088	0.330
Number of Employees	2.719707	*	0.489968	0.000
Owner's Gender	0.000000		(omitted)	
Bond Insurance	0.000001		0.000000	0.072
Number of Locations	-0.231024		0.291541	0.428
Public Sector Revenue	0.591934	*	0.246820	0.016
Owner's Education	0.428318		0.243554	0.079

- Caucasian Female-owned Businesses with more current employees have statistically significant higher annual gross revenue.
- Caucasian Female-owned Businesses whose annual gross revenue is mostly derived from public sector have statistically significant higher annual gross revenue.

Table 6.16 illustrates how the gross revenue of businesses owned by Minority Males and Females is impacted by independent business characteristics.

Table 6.16: Annual Gross Revenue Ordered Logistic Regression: MBEs

Annual Gross Revenue	Coefficient	Significance	Standard Error	p-value
Number of Contracts	0.372544	*	0.141738	0.009
Years of Business Operation	0.351963		0.272075	0.196
Owner's Years of Experience	-0.080899		0.370105	0.827
Number of Employees	1.714725	*	0.372743	0.000
Owner's Gender	-1.132084	*	0.570143	0.047
Bond Insurance	0.000002	*	0.000001	0.000
Number of Locations	0.636919		0.476094	0.181
Public Sector Revenue	-0.119047		0.198626	0.549
Owner's Education	0.462838	*	0.228454	0.043

- MBEs whose annual gross revenue is derived from more individual contracts have statistically significant higher gross revenue.
- MBEs that have more current employees have statistically significant higher gross revenue.
- MBEs that are owned by females have statistically significant lower gross revenue.



- MBEs that have a larger bonding level 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 business, the following tables are presented.

As shown in Table 6.17, there is a significant difference ($p=0.00$) in the frequencies of businesses' number of current employees by ethnicity and gender. Overall, 35.59% of business had less than five (5) employees; 15.25% had six (6) to 10 employees; 16.95% had 11 to 20 employees; 11.86% had 21 to 50 employees; 17.37% had more than 50 employees; and 2.97% did not report the number of persons they employ.

Table 6.17: Current Number of Employees

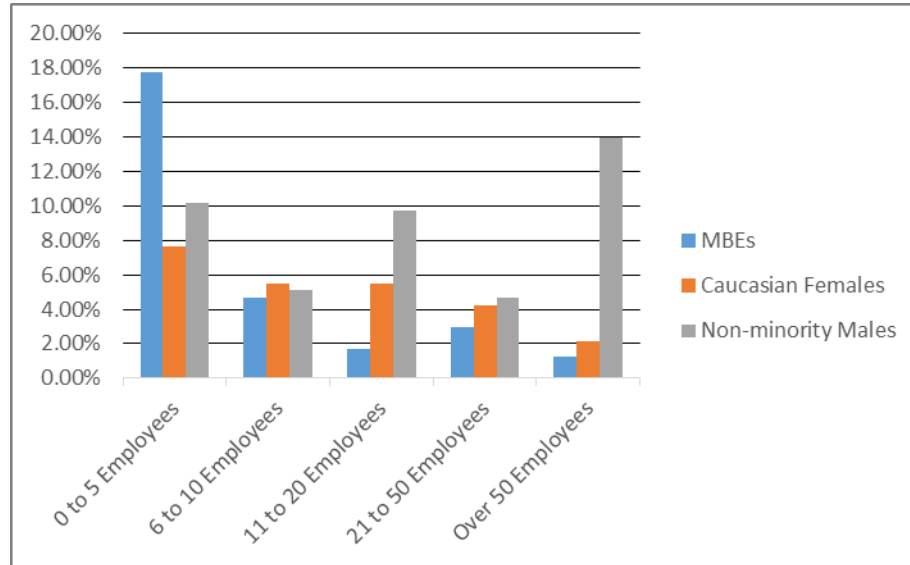
Response	African American	Asian American	Hispanic American	Native American	MBEs	Caucasian Females	MWBEs	Non-Minority Males	Total
0 to 5 Employees	15.68%	0.85%	0.85%	0.42%	17.80%	7.63%	25.42%	10.17%	35.59%
6 to 10 Employees	3.39%	0.42%	0.85%	0.00%	4.66%	5.51%	10.17%	5.08%	15.25%
11 to 20 Employees	1.69%	0.00%	0.00%	0.00%	1.69%	5.51%	7.20%	9.75%	16.95%
21 to 50 Employees	2.54%	0.42%	0.00%	0.00%	2.97%	4.24%	7.20%	4.66%	11.86%
Over 50 Employees	0.85%	0.42%	0.00%	0.00%	1.27%	2.12%	3.39%	13.98%	17.37%
Unknown	0.42%	0.00%	0.00%	0.00%	0.42%	0.42%	0.85%	2.12%	2.97%
Total Percent	24.58%	2.12%	1.69%	0.42%	28.81%	25.42%	54.24%	45.76%	100.00%
Total Number	58	5	4	1	68	60	128	108	236

$\chi^2=59.1302$, $df=25$, $p\text{-value}=0.0001$

Chart 6.03 illustrates that MBEs and Caucasian Females have fewer employees than Non-Minority Males. Despite this distinction, MBEs, Caucasian Females and Non-Minority Males are most similar at the 6 to 10 employee level. It is at the over 50 employee level that Non-Minority Males greatly outnumber Caucasian Females and MBEs.



Chart 6.03: Current Number of Employees



7. Number of Contracts and Frequency of Bidding, All Industries

As shown in Table 6.18, there is a significant difference ($p=0.00$) in the frequencies of annual contracts performed, according to the ethnicity and gender of the business owner. This finding is also demonstrated in *Chapter 3: Prime Contractor Utilization Analysis*, in which non-M/WBEs are awarded more contracts than M/WBEs.

Aside from the greater number of workers employed by non-M/WBEs, which has been acknowledged by the court to be an unreliable indicator of capacity, none of the factors considered accounts for non-M/WBEs' statistically significant, disproportionate award of contracts. Table 6.09 illustrates that 36.44% of non-M/WBEs were awarded more than five (5) contracts, compared to 19.92% of Caucasian Females and 14.83% of MBEs.

Table 6.18: Number of Annual Contracts

Response	African American	Asian American	Hispanic American	Native American	MBEs	Caucasian Females	M/WBEs	Non-Minority Males	Total
0	0.85%	0.00%	0.00%	0.00%	0.85%	1.27%	2.12%	0.42%	2.54%
1	2.54%	0.00%	0.42%	0.00%	2.97%	0.00%	2.97%	1.27%	4.24%
2	3.39%	0.42%	0.00%	0.00%	3.81%	0.85%	4.66%	1.69%	6.36%
3	3.39%	0.00%	0.00%	0.00%	3.39%	0.42%	3.81%	1.69%	5.51%
4	0.85%	0.00%	0.42%	0.00%	1.27%	0.42%	1.69%	0.00%	1.69%
5	0.85%	0.42%	0.00%	0.00%	1.27%	0.85%	2.12%	0.42%	2.54%
Over 5	12.29%	1.27%	0.85%	0.42%	14.83%	19.92%	34.75%	36.44%	71.19%
Unknown	0.42%	0.00%	0.00%	0.00%	0.42%	1.69%	2.12%	3.81%	5.93%
Total Percent	24.58%	2.12%	1.69%	0.42%	28.81%	25.42%	54.24%	45.76%	100.00%
Total Number	58	5	4	1	68	60	128	108	236

$\chi^2=66.8257$, $df=35$, $p\text{-value}=0.0009$



As shown in Table 6.19, there is no significant difference ($p=0.0501$) in the frequencies of bid or qualifications submissions by ethnicity and gender. This finding supports an inference that despite M/WBEs and non-M/WBEs submitting bids or qualifications at nearly the same frequency, there is no objective factor to account for non-M/WBEs' disproportionate award of contracts. Table 6.10 illustrates that 61.76% of MBEs submitted bids or qualifications to the City within the past year; 81.67% of Caucasian Females submitted bids or qualifications to the City; and 72.22% of non-M/WBEs submitted bids or qualifications to the City.

Table 6.19: Submitted a Bid or Qualifications to the City

Response	African American	Asian American	Hispanic American	Native American	MBEs	Caucasian Females	M/WBEs	Non-Minority Males	Total
Yes	62.07%	80.00%	50.00%	0.00%	61.76%	81.67%	71.09%	72.22%	71.61%
No	29.31%	20.00%	50.00%	100.00%	30.88%	11.67%	21.88%	13.89%	18.22%
Not Sure	8.62%	0.00%	0.00%	0.00%	7.35%	6.67%	7.03%	13.89%	10.17%
Total Percent	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Total Number	58	5	4	1	68	60	128	108	236

$\chi^2=18.3012$, $df=10$, $p\text{-value}=0.0501$

8. Conclusion

The analysis shows that there is a statistically significant relationship between annual gross revenue and the number of contracts, the number of employees, owner's gender, bond insurance, and owner's education. This finding supports an inference that all businesses, regardless of ethnicity or gender, witness an increase in revenue when they are awarded more contracts and have more employees. There is also a statistically significant relationship between annual gross revenue and businesses that are owned by males, businesses with a larger bonding level, and businesses whose owners have higher education.

These results may lead to an assumption that non-M/WBEs' 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."³ 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 professional service businesses. 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, non-M/WBEs are not awarded contracts more frequently because of any single or a combination of the business

³ *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).



economic indicators measured. The fact that non-M/WBEs are awarded more contracts and, therefore, experience higher annual revenue is likely a function of public and private sector business practices.

G. Largest M/WBE Contract Awarded by Industry

M/WBEs were awarded large contracts in each industry. The distribution of the largest contracts the City awarded to M/WBEs is depicted in Table 6.20. In each industry, M/WBEs were awarded very large, competitively bid contracts. The utilization analysis shows that M/WBEs demonstrated the capacity to successfully compete for contracts as large as \$2,861,863 in construction, \$6,279,613 in professional services, and \$623,931 in supplies and services.

Table 6.20: Largest M/WBE Contracts Awarded

Ethnic/Gender Group	Construction	Professional Services	Supplies and Services
African American Female	\$549,610	\$2,000,000	\$525,026
African American Male	\$1,712,866	\$3,359,920	\$198,648
Asian American Female	----	\$2,000,000	\$100,000
Asian American Male	\$1,084,624	\$988,468	\$59,205
Hispanic American Female	----	----	\$7,250
Hispanic American Male	----	\$55,750	\$4,885
Native American Female	----	----	----
Native American Male	\$151,229	----	----
Caucasian Female	\$2,861,863	\$6,279,613	\$623,931
Largest Dollar Amounts MBEs	\$1,712,866	\$3,359,920	\$525,026
Largest Dollar Amounts WBEs	\$2,861,863	\$6,279,613	\$623,931

(----) denotes a group that was not awarded any contracts within the respective industry.

*percentages are rounded to the nearest whole dollar.



III. PRIME CONTRACTOR AVAILABILITY ANALYSIS

The size of the City's contracts demonstrates that the majority of the contracts are small, requiring limited capacity to perform them. Furthermore, the awards the City 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 contracts awarded in the three industries studied. Nevertheless, as noted in *Chapter 3: Prime Contractor Utilization Analysis* and *Chapter 7: Prime Contract Disparity Analysis*, the decision was made to limit the prime contracts subject to the disparity analysis to those under \$500,000.

The prime contractor availability findings for the City's market area are as follows:

A. All Prime Contractor Availability

The distribution of available prime contractors for all industries is summarized in Table 6.21 below. These ethnic and gender groups are defined in Table 3.01 of *Chapter 3: Prime Contractor Utilization Analysis*.

African Americans account for 14.90% of all available businesses in the City's market area.

Asian Americans account for 1.96% of all available businesses in the City's market area.

Hispanic Americans account for 0.81% of all available businesses in the City's market area.

Native Americans account for 0.40% of all available businesses in the City's market area.

Minority-owned Business Enterprises account for 18.08% of all available businesses in the City's market area.

Caucasian Female Business Enterprises account for 13.75% of all available businesses in the City's market area.

Minority and Caucasian Female Business Enterprises account for 31.83% of all available businesses in the City's market area.

Non-minority Male-owned Business Enterprises account for 68.17% of all available businesses in the City's market area.



Table 6.21: All Available Prime Contractors

Ethnicity	Percent of Businesses
African Americans	14.90%
Asian Americans	1.96%
Hispanic Americans	0.81%
Native Americans	0.40%
Caucasian Females	13.75%
Non-Minority Males	68.17%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	3.41%
African American Males	11.50%
Asian American Females	0.64%
Asian American Males	1.33%
Hispanic American Females	0.17%
Hispanic American Males	0.64%
Native American Females	0.12%
Native American Males	0.29%
Caucasian Females	13.75%
Non-Minority Males	68.17%
TOTAL	100.00%
Minority and Gender	Percent of Businesses
Minority Females	4.33%
Minority Males	13.75%
Caucasian Females	13.75%
Non-Minority Males	68.17%
TOTAL	100.00%
Minority and Females	Percent of Businesses
Minority Business Enterprises	18.08%
Caucasian Female Business Enterprises	13.75%
Minority and Caucasian Female Business Enterprises	31.83%
Non-Minority Male Business Enterprises	68.17%
TOTAL	100.00%



B. Construction Prime Contractor Availability

The distribution of available construction prime contractors is summarized in Table 6.22 below. These ethnic and gender groups are defined in Table 3.01 of *Chapter 3: Prime Contractor Utilization Analysis*.

African Americans account for 20.96% of the available construction businesses in the City's market area.

Asian Americans account for 1.59% of the available construction businesses in the City's market area.

Hispanic Americans account for 0.46% of the available construction businesses in the City's market area.

Native Americans account for 0.68% of the available construction businesses in the City's market area.

Minority-owned Business Enterprises account for 23.69% of the available construction businesses in the City's market area.

Caucasian Female Business Enterprises account for 12.98% of the available construction businesses in the City's market area.

Minority and Caucasian Female Business Enterprises account for 36.67% of the available construction businesses in the City's market area.

Non-minority Male-owned Business Enterprises account for 63.33% of the available construction businesses in the City's market area.



Table 6.22: Available Construction Prime Contractors

Ethnicity	Percent of Businesses
African Americans	20.96%
Asian Americans	1.59%
Hispanic Americans	0.46%
Native Americans	0.68%
Caucasian Females	12.98%
Non-Minority Males	63.33%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	2.28%
African American Males	18.68%
Asian American Females	0.46%
Asian American Males	1.14%
Hispanic American Females	0.23%
Hispanic American Males	0.23%
Native American Females	0.23%
Native American Males	0.46%
Caucasian Females	12.98%
Non-Minority Males	63.33%
TOTAL	100.00%
Minority and Gender	Percent of Businesses
Minority Females	3.19%
Minority Males	20.50%
Caucasian Females	12.98%
Non-Minority Males	63.33%
TOTAL	100.00%
Minority and Females	Percent of Businesses
Minority Business Enterprises	23.69%
Caucasian Female Business Enterprises	12.98%
Minority and Caucasian Female Business Enterprises	36.67%
Non-Minority Male Business Enterprises	63.33%
TOTAL	100.00%



C. Professional Services Prime Contractor Availability

The distribution of available professional services prime contractors is summarized in Table 6.23 below. These ethnic and gender groups are defined in Table 3.01 of *Chapter 3: Prime Contractor Utilization Analysis*.

African Americans account for 13.71% of the available professional services businesses in the City's market area.

Asian Americans account for 3.08% of the available professional services businesses in the City's market area.

Hispanic Americans account for 1.23% of the available professional services businesses in the City's market area.

Native Americans account for 0.62% of the available professional services businesses in the City's market area.

Minority-owned Business Enterprises account for 18.64% of the available professional services businesses in the City's market area.

Caucasian Female Business Enterprises account for 16.18% of the available professional services businesses in the City's market area.

Minority and Caucasian Female Business Enterprises account for 34.82% of the available professional services businesses in the City's market area.

Non-minority Male-owned Business Enterprises account for 65.18% of the available professional services businesses in the City's market area.



Table 6.23: Available Professional Services Prime Contractors

Ethnicity	Percent of Businesses
African Americans	13.71%
Asian Americans	3.08%
Hispanic Americans	1.23%
Native Americans	0.62%
Caucasian Females	16.18%
Non-Minority Males	65.18%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	4.01%
African American Males	9.71%
Asian American Females	1.23%
Asian American Males	1.85%
Hispanic American Females	0.15%
Hispanic American Males	1.08%
Native American Females	0.15%
Native American Males	0.46%
Caucasian Females	16.18%
Non-Minority Males	65.18%
TOTAL	100.00%
Minority and Gender	Percent of Businesses
Minority Females	5.55%
Minority Males	13.10%
Caucasian Females	16.18%
Non-Minority Males	65.18%
TOTAL	100.00%
Minority and Females	Percent of Businesses
Minority Business Enterprises	18.64%
Caucasian Female Business Enterprises	16.18%
Minority and Caucasian Female Business Enterprises	34.82%
Non-Minority Male Business Enterprises	65.18%
TOTAL	100.00%



D. Supplies and Services Prime Contractor Availability

The distribution of available supplies and services prime contractors is summarized in Table 6.24 below. These ethnic and gender groups are defined in Table 3.01 of *Chapter 3: Prime Contractor Utilization Analysis*.

African Americans account for 13.01% of the available supplies and services businesses in the City's market area.

Asian Americans account for 1.28% of the available supplies and services businesses in the City's market area.

Hispanic Americans account for 0.77% of the available supplies and services businesses in the City's market area.

Native Americans account for 0.13% of the available supplies and services businesses in the City's market area.

Minority-owned Business Enterprises account for 15.18% of the available supplies and services businesses in the City's market area.

Caucasian Female Business Enterprises account for 11.86% of the available supplies and services businesses in the City's market area.

Minority and Caucasian Female Business Enterprises account for 27.04% of the available supplies and services businesses in the City's market area.

Non-minority Male-owned Business Enterprises account for 72.96% of the available supplies and services businesses in the City's market area.



Table 6.24: Available Supplies and Services Prime Contractors

Ethnicity	Percent of Businesses
African Americans	13.01%
Asian Americans	1.28%
Hispanic Americans	0.77%
Native Americans	0.13%
Caucasian Females	11.86%
Non-Minority Males	72.96%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	3.57%
African American Males	9.44%
Asian American Females	0.13%
Asian American Males	1.15%
Hispanic American Females	0.26%
Hispanic American Males	0.51%
Native American Females	0.00%
Native American Males	0.13%
Caucasian Females	11.86%
Non-Minority Males	72.96%
TOTAL	100.00%
Minority and Gender	Percent of Businesses
Minority Females	3.95%
Minority Males	11.22%
Caucasian Females	11.86%
Non-Minority Males	72.96%
TOTAL	100.00%
Minority and Females	Percent of Businesses
Minority Business Enterprises	15.18%
Caucasian Female Business Enterprises	11.86%
Minority and Caucasian Female Business Enterprises	27.04%
Non-Minority Male Business Enterprises	72.96%
TOTAL	100.00%



IV. SUBCONTRACTOR AVAILABILITY ANALYSIS

A. Source of Potentially Willing and Able Subcontractors

All available prime contractors were included in the calculation of subcontractor availability. Additional subcontractors in the City's market area were identified using the source in Table 6.25. Subcontractor availability was not calculated for the supplies and services industry, as the subcontracting activity in that industry was limited.

Table 6.25: Unique Subcontractor Availability Data Source

Type Record	Type Information
Subcontract awards provided by City of Cincinnati	M/WBEs and non-M/WBEs

B. Determination of Willingness and Capacity

Subcontractor availability was limited to the utilized prime contractors and the unique businesses utilized as subcontractors. Therefore, the determination of willingness was achieved. *Croson* does not require a measure of subcontractor capacity. It is not necessary to address capacity issues in the analysis of subcontractor availability.



C. Size of Subcontracts Analyzed

The City's construction, professional services, and supplies and services subcontracts were analyzed to determine the size of awarded contracts in order to gauge the capacity required to perform on the City's subcontracts.

For the size analysis, the City's subcontracts were grouped into nine dollar ranges.⁴ Each industry was analyzed to determine the number and percentage of contracts that fell within the nine size categories. The size distribution of contracts awarded to Non-minority Males was then compared to the size distribution of contracts awarded to Caucasian Females, Minority Females, and Minority Males.

1. All Subcontracts by Size

Table 6.26 depicts subcontracts awarded in all industries within the nine dollar ranges. Contracts valued at \$25,000 and under were 55.45%. Those valued at \$50,000 and under were 69.62%. Those less than \$100,000 were 80.72% and those less than \$500,000 were 96.87%.

2. Construction Subcontracts by Size

Table 6.27 depicts the construction subcontracts awarded within the nine dollar ranges. Contracts valued at \$25,000 and under were 54.41%. Those valued at \$50,000 and under were 68.50%. Those less than \$100,000 were 80.03% and those less than \$500,000 were 96.83%.

3. Professional Services Subcontracts by Size

Table 6.28 depicts professional services subcontracts within the nine dollar ranges. Contracts valued at \$25,000 and under were 65.25%. Those valued at \$50,000 and under were 80.14%. Those less than \$100,000 were 87.23% and those less than \$500,000 were 97.16%.



⁴ The nine dollar ranges are \$1 to \$5,000, \$5,001 to \$25,000, \$25,001 to \$50,000, \$50,001 to \$99,999, \$100,000 to \$249,999, \$250,000 to \$499,999, \$500,000 to \$999,999, \$1,000,000 to \$2,999,999, and \$3,000,000 and greater.

**Table 6.26: All Subcontracts by Size,
January 1, 2009, to December 31, 2013**

Size	Non-Minority				Minority				Total	
	Females		Males		Females		Males			
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
\$1 - \$5,000	21	1.43%	343	23.37%	6	0.41%	17	1.16%	387	26.36%
\$5,001 - \$25,000	47	3.20%	336	22.89%	5	0.34%	39	2.66%	427	29.09%
\$25,001 - \$50,000	23	1.57%	169	11.51%	5	0.34%	11	0.75%	208	14.17%
\$50,001 - \$99,999	17	1.16%	126	8.58%	3	0.20%	17	1.16%	163	11.10%
\$100,000 - \$249,999	11	0.75%	128	8.72%	2	0.14%	12	0.82%	153	10.42%
\$250,000 - \$499,999	4	0.27%	77	5.25%	1	0.07%	2	0.14%	84	5.72%
\$500,000 - \$999,999	1	0.07%	31	2.11%	0	0.00%	0	0.00%	32	2.18%
\$1,000,000 - \$2,999,999	0	0.00%	12	0.82%	0	0.00%	1	0.07%	13	0.89%
\$3,000,000 and greater	0	0.00%	1	0.07%	0	0.00%	0	0.00%	1	0.07%
Total	124	8.45%	1223	83.31%	22	1.50%	99	6.74%	1468	100.00%

*The percentages may not total 100 percent due to rounding.

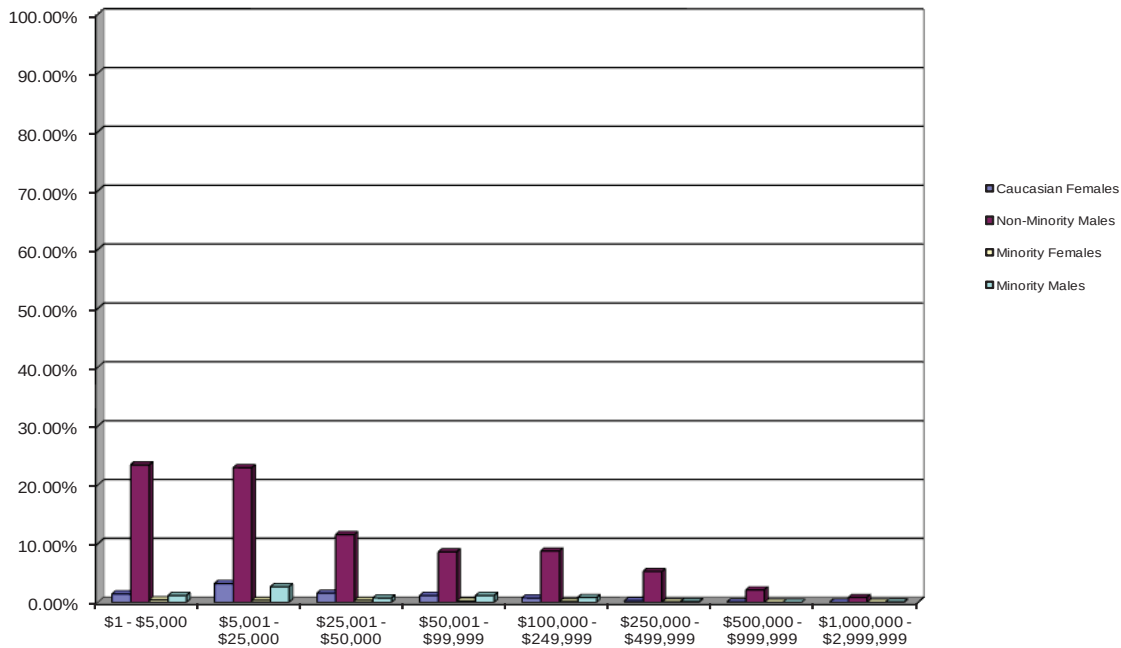


**Table 6.27: Construction Subcontracts by Size,
January 1, 2009, to December 31, 2013**

Size	Non-Minority				Minority				Total	
	Females		Males		Females		Males			
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
\$1 - \$5,000	18	1.36%	297	22.38%	6	0.45%	15	1.13%	336	25.32%
\$5,001 - \$25,000	46	3.47%	299	22.53%	5	0.38%	36	2.71%	386	29.09%
\$25,001 - \$50,000	23	1.73%	151	11.38%	5	0.38%	8	0.60%	187	14.09%
\$50,001 - \$99,999	16	1.21%	119	8.97%	3	0.23%	15	1.13%	153	11.53%
\$100,000 - \$249,999	11	0.83%	123	9.27%	1	0.08%	9	0.68%	144	10.85%
\$250,000 - \$499,999	3	0.23%	73	5.50%	1	0.08%	2	0.15%	79	5.95%
\$500,000 - \$999,999	1	0.08%	27	2.03%	0	0.00%	0	0.00%	28	2.11%
\$1,000,000 - \$2,999,999	0	0.00%	12	0.90%	0	0.00%	1	0.08%	13	0.98%
\$3,000,000 and greater	0	0.00%	1	0.08%	0	0.00%	0	0.00%	1	0.08%
Total	118	8.89%	1,102	83.04%	21	1.58%	86	6.48%	1,327	100.00%

*The percentages may not total 100 percent due to rounding.

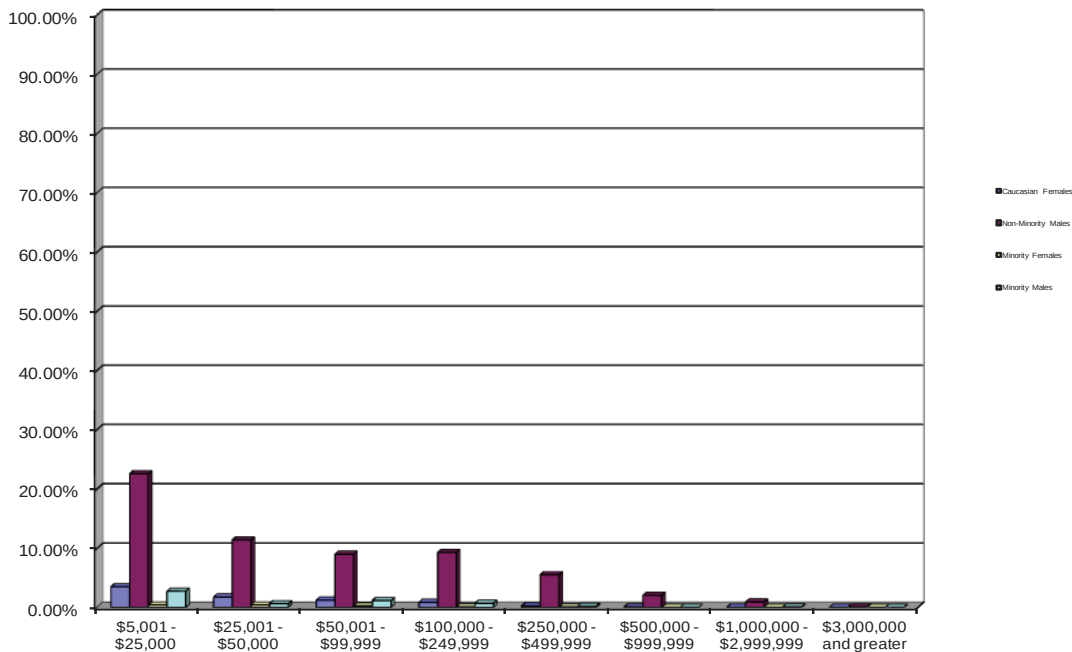
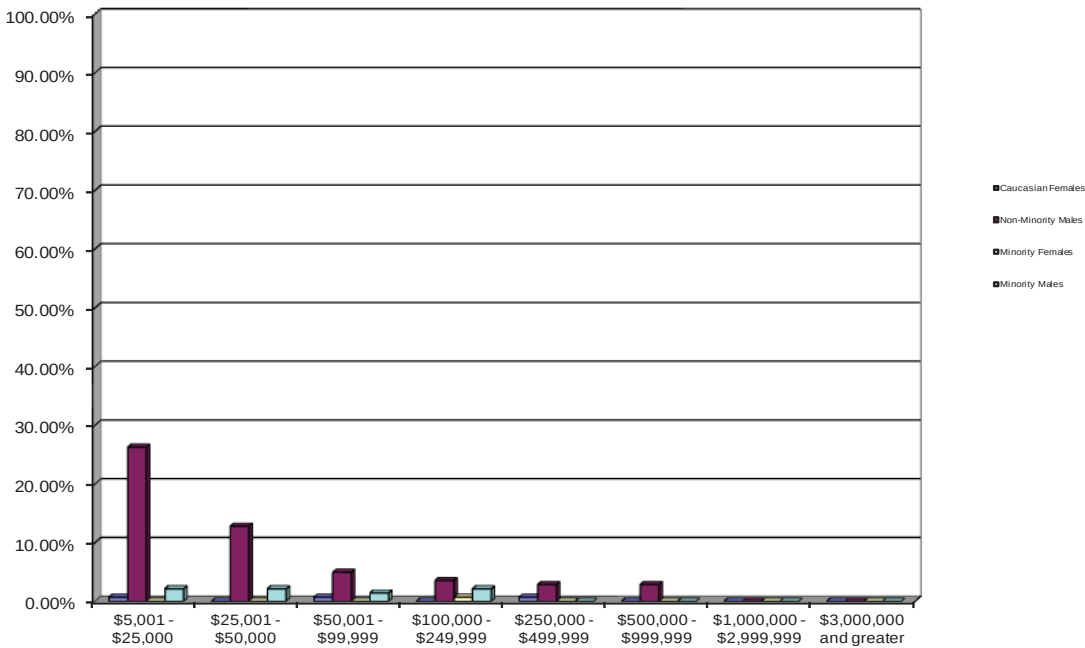


**Table 6.28: Professional Services Subcontracts by Size,
January 1, 2009, to December 31, 2013**

Size	Non-Minority				Minority				Total	
	Females		Males		Females		Males			
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
\$1 - \$5,000	3	2.13%	46	32.62%	0	0.00%	2	1.42%	51	36.17%
\$5,001 - \$25,000	1	0.71%	37	26.24%	0	0.00%	3	2.13%	41	29.08%
\$25,001 - \$50,000	0	0.00%	18	12.77%	0	0.00%	3	2.13%	21	14.89%
\$50,001 - \$99,999	1	0.71%	7	4.96%	0	0.00%	2	1.42%	10	7.09%
\$100,000 - \$249,999	0	0.00%	5	3.55%	1	0.71%	3	2.13%	9	6.38%
\$250,000 - \$499,999	1	0.71%	4	2.84%	0	0.00%	0	0.00%	5	3.55%
\$500,000 - \$999,999	0	0.00%	4	2.84%	0	0.00%	0	0.00%	4	2.84%
\$1,000,000 - \$2,999,999	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
\$3,000,000 and greater	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	6	4.26%	121	85.82%	1	0.71%	13	9.22%	141	100.00%

*The percentages may not total 100 percent due to rounding.



D. Construction Subcontractor Availability

The distribution of available construction subcontractors is summarized in Table 6.29 below. These ethnic and gender groups are defined in Table 3.01 of *Chapter 3: Prime Contractor Utilization Analysis*.

African Americans account for 16.56% of the available construction businesses in the City's market area.

Asian Americans account for 1.25% of the available construction businesses in the City's market area.

Hispanic Americans account for 0.47% of the available construction businesses in the City's market area.

Native Americans account for 0.63% of the available construction businesses in the City's market area.

Minority-owned Business Enterprises account for 18.91% of the available construction businesses in the City's market area.

Caucasian Female Business Enterprises account for 10.47% of the available construction businesses in the City's market area.

Minority and Caucasian Female Business Enterprises account for 29.38% of the available construction businesses in the City's market area.

Non-minority Male-owned Business Enterprises account for 70.63% of the available construction businesses in the City's market area.



Table 6.29: Available Construction Subcontractors

Ethnicity	Percent of Businesses
African Americans	16.56%
Asian Americans	1.25%
Hispanic Americans	0.47%
Native Americans	0.63%
Caucasian Females	10.47%
Non-Minority Males	70.63%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	1.88%
African American Males	14.69%
Asian American Females	0.31%
Asian American Males	0.94%
Hispanic American Females	0.31%
Hispanic American Males	0.16%
Native American Females	0.16%
Native American Males	0.47%
Caucasian Females	10.47%
Non-Minority Males	70.63%
TOTAL	100.00%
Minority and Gender	Percent of Businesses
Minority Females	2.66%
Minority Males	16.25%
Caucasian Females	10.47%
Non-Minority Males	70.63%
TOTAL	100.00%
Minority and Females	Percent of Businesses
Minority Business Enterprises	18.91%
Caucasian Female Business Enterprises	10.47%
Minority and Caucasian Female Business Enterprises	29.38%
Non-Minority Male Business Enterprises	70.63%
TOTAL	100.00%



E. Professional Services Subcontractor Availability

The distribution of available professional services subcontractors is summarized in Table 6.30 below. These ethnic and gender groups are defined in Table 3.01 of *Chapter 3: Prime Contractor Utilization Analysis*.

African Americans account for 14.04% of the available professional services businesses in the City's market area.

Asian Americans account for 3.18% of the available professional services businesses in the City's market area.

Hispanic Americans account for 1.16% of the available professional services businesses in the City's market area.

Native Americans account for 0.58% of the available professional services businesses in the City's market area.

Minority-owned Business Enterprises account for 18.96% of the available professional services businesses in the City's market area.

Caucasian Female Business Enterprises account for 15.63% of the available professional services businesses in the City's market area.

Minority and Caucasian Female Business Enterprises account for 34.59% of the available professional services businesses in the City's market area.

Non-minority Male-owned Business Enterprises account for 65.41% of the available professional services businesses in the City's market area.



Table 6.30: Available Professional Services Subcontractors

Ethnicity	Percent of Businesses
African Americans	14.04%
Asian Americans	3.18%
Hispanic Americans	1.16%
Native Americans	0.58%
Caucasian Females	15.63%
Non-Minority Males	65.41%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	4.20%
African American Males	9.84%
Asian American Females	1.16%
Asian American Males	2.03%
Hispanic American Females	0.14%
Hispanic American Males	1.01%
Native American Females	0.14%
Native American Males	0.43%
Caucasian Females	15.63%
Non-Minority Males	65.41%
TOTAL	100.00%
Minority and Gender	Percent of Businesses
Minority Females	5.64%
Minority Males	13.31%
Caucasian Females	15.63%
Non-Minority Males	65.41%
TOTAL	100.00%
Minority and Females	Percent of Businesses
Minority Business Enterprises	18.96%
Caucasian Female Business Enterprises	15.63%
Minority and Caucasian Female Business Enterprises	34.59%
Non-Minority Male Business Enterprises	65.41%
TOTAL	100.00%



V. SUMMARY

This chapter provided the availability analysis for the City of Cincinnati's market area. A total of 1,731 unique businesses that can provide goods or services in one or more of the three industries were identified. Businesses were identified from the City's records, government certification lists, and business association membership lists. A total of 52.40% of these businesses were identified from prime contractor utilization, 22.01% were identified from certification lists, and 16.52% were identified from the willingness survey.

Prime contracts were analyzed by size. A total of 78.02% of contracts were valued at \$25,000 and under, 83.56% were valued at \$50,000 and under, 88.18% percent were valued at less than \$100,000, and 95.15% were valued at less than \$500,000. Contractor availability was analyzed by ethnicity and gender. MBEs account for 18.08%, WBEs account for 13.75%, and Non-minority Male-owned Business Enterprises account for 68.17% of available prime contractors in all industries.

Subcontracts were also analyzed by size. A total of 55.45% of contracts were valued at \$25,000 and under, 69.62% were valued at \$50,000 and under, 80.72% were valued at less than \$100,000, and 96.87% were valued at less than \$500,000. Subcontractor availability was analyzed by ethnicity and gender. MBEs account for 19.07%, WBEs account for 13.28%, and Non-minority Male-owned Business Enterprises account for 67.64% of available subcontractors in all industries.



CHAPTER 7: 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 (M/WBEs), hereinafter referred to as Minority and Caucasian Female Business Enterprises, are utilized on the City of Cincinnati's (City's) contracts. Under a fair and equitable system of awarding contracts, the proportion of contract 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*³ 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 Business Enterprises 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. Then, the **disparity ratio** is computed by dividing the actual contract amount by the expected contract amount.

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.⁴ All disparity findings less than 1 are subject to analysis, which tests statistical significance. The three

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 6: 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 *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 509 (1989).

⁴ P-value is a measure of statistical significance.



methods employed to calculate statistical significance are a parametric analysis,⁵ a non-parametric analysis,⁶ and a simulation analysis.

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 contracts⁷ 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.⁸ 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.⁹ 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.

The statistical model employs all three methods simultaneously to each industry. Findings from one of the three methods as applied to each industry 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.

⁵ 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.

⁶ 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.

⁷ Note: A relatively small availability population size decreases the reliability of the statistical results. Therefore, any availability percentage under one percent cannot be labeled as statistically significant.

⁸ The simulation analysis can be conducted using contract dollar amounts or contract rankings.

⁹ A statistical test is not performed for Non-minority Males or when the disparity ratio is greater than one for M/WBEs.



II. DISPARITY ANALYSIS

A prime contract disparity analysis was performed on construction, professional services including architecture and engineering (hereinafter professional services), and supplies and services contracts awarded during the January 1, 2009, to December 31, 2013 study period.

As demonstrated in *Chapter 6: Prime Contractor and Subcontractor Availability Analysis*, the majority of the City's contracts were small. Construction prime contracts valued at \$50,000 and under constituted 63.92% of all construction prime contracts. Professional services contracts valued at \$50,000 and under constituted 68.59% of professional services prime contracts. Supplies and services prime contracts valued at \$50,000 and under constituted 90.17% of all supplies and services prime contracts.

The formal threshold for construction prime contracts and supplies and services prime contracts was set at \$250,000 and over. The threshold levels for the disparity analysis were set in accordance with the City's procurement policies. The disparity analysis was performed for informal prime contracts valued at \$5,000 and under, \$5,001 to \$50,000, and \$50,001 to \$249,999.

The findings from the three methods employed to calculate statistical significance, as discussed on page 7-2, are presented in the following 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 7.01.

Table 7.01: 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 M/WBEs or the underutilization of Non-minority Males.
< .05 †	The overutilization is statistically significant.



A. Disparity Analysis: All Prime Contracts

1. Prime Contracts for All Industries

The disparity analysis for all industries is described below and depicted in Table 7.02 and Chart 7.01.

African Americans represent 14.90% of all available businesses and received 1.85% of the dollars expended on all prime contracts within all industries. This underutilization is statistically significant.

Asian Americans represent 1.96% of all available businesses and received 1.12% of the dollars expended on all prime contracts within all industries. This underutilization is statistically significant.

Hispanic Americans represent 0.81% of all available businesses and received 0.01% of the dollars expended on all prime contracts within all industries. There are too few available firms to test statistical significance of this underutilization.

Native Americans represent 0.40% of all available businesses and received 0.07% of the dollars expended on all prime contracts within all industries. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 18.08% of all available businesses and received 3.05% of the dollars expended on all prime contracts within all industries. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 13.75% of all available businesses and received 2.60% of the dollars expended on all prime contracts within all industries. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 31.83% of all available businesses and received 5.65% of the dollars expended on all prime contracts within all industries. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 68.17% of all available businesses and received 94.35% of the dollars expended on all prime contracts within all industries. This overutilization is statistically significant.



**Table 7.02: Disparity Analysis: All Prime Contracts,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$22,760,536	1.85%	14.90%	\$183,710,682	-\$160,950,146	0.12	< .05 *
Asian Americans	\$13,812,336	1.12%	1.96%	\$24,209,935	-\$10,397,599	0.57	< .05 *
Hispanic Americans	\$139,917	0.01%	0.81%	\$9,968,797	-\$9,828,880	0.01	----
Native Americans	\$885,718	0.07%	0.40%	\$4,984,398	-\$4,098,680	0.18	----
Caucasian Females	\$32,017,582	2.60%	13.75%	\$169,469,544	-\$137,451,962	0.19	< .05 *
Non-minority Males	\$1,162,954,419	94.35%	68.17%	\$840,227,152	\$322,727,268	1.38	< .05 †
TOTAL	\$1,232,570,508	100.00%	100.00%	\$1,232,570,508			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$5,856,201	0.48%	3.41%	\$42,011,358	-\$36,155,157	0.14	< .05 *
African American Males	\$16,904,335	1.37%	11.50%	\$141,699,325	-\$124,794,990	0.12	< .05 *
Asian American Females	\$2,153,573	0.17%	0.64%	\$7,832,626	-\$5,679,053	0.27	----
Asian American Males	\$11,658,763	0.95%	1.33%	\$16,377,309	-\$4,718,546	0.71	< .05 *
Hispanic American Females	\$7,250	0.00%	0.17%	\$2,136,171	-\$2,128,921	0.00	----
Hispanic American Males	\$132,667	0.01%	0.64%	\$7,832,626	-\$7,699,959	0.02	----
Native American Females	\$0	0.00%	0.12%	\$1,424,114	-\$1,424,114	0.00	----
Native American Males	\$885,718	0.07%	0.29%	\$3,560,285	-\$2,674,567	0.25	----
Caucasian Females	\$32,017,582	2.60%	13.75%	\$169,469,544	-\$137,451,962	0.19	< .05 *
Non-minority Males	\$1,162,954,419	94.35%	68.17%	\$840,227,152	\$322,727,268	1.38	< .05 †
TOTAL	\$1,232,570,508	100.00%	100.00%	\$1,232,570,508			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$8,017,024	0.65%	4.33%	\$53,404,268	-\$45,387,244	0.15	< .05 *
Minority Males	\$29,581,483	2.40%	13.75%	\$169,469,544	-\$139,888,061	0.17	< .05 *
Caucasian Females	\$32,017,582	2.60%	13.75%	\$169,469,544	-\$137,451,962	0.19	< .05 *
Non-minority Males	\$1,162,954,419	94.35%	68.17%	\$840,227,152	\$322,727,268	1.38	< .05 †
TOTAL	\$1,232,570,508	100.00%	100.00%	\$1,232,570,508			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$37,598,507	3.05%	18.08%	\$222,873,812	-\$185,275,306	0.17	< .05 *
Caucasian Female Business Enterprises	\$32,017,582	2.60%	13.75%	\$169,469,544	-\$137,451,962	0.19	< .05 *
Minority and Caucasian Female Business Enterprises	\$69,616,089	5.65%	31.83%	\$392,343,356	-\$322,727,268	0.18	< .05 *
Non-minority Male Business Enterprises	\$1,162,954,419	94.35%	68.17%	\$840,227,152	\$322,727,268	1.38	< .05 †

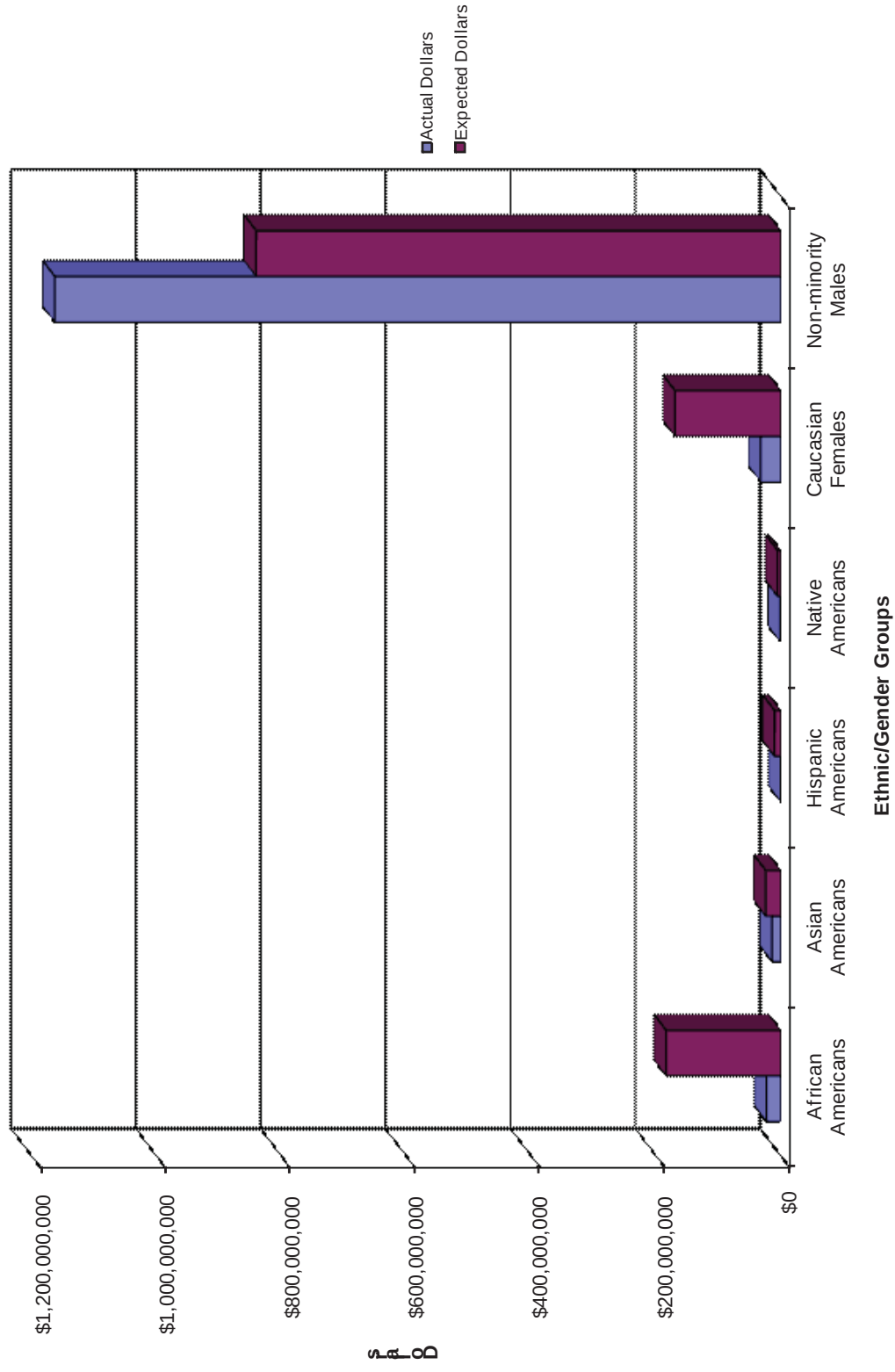
(*) denotes a statistically significant underutilization.

(†) 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 7.01: Disparity Analysis: All Prime Contracts,
January 1, 2009, to December 31, 2013**



2. All Construction Prime Contracts

The disparity analysis of all construction prime contracts is described below and depicted in Table 7.03 and Chart 7.02.

African Americans represent 20.96% of the available construction businesses and received 0.97% of the dollars for construction prime contracts. This underutilization is statistically significant.

Asian Americans represent 1.59% of the available construction businesses and received 1.31% of the dollars for construction prime contracts. This underutilization is not statistically significant.

Hispanic Americans represent 0.46% of the available construction businesses and received 0.00% of the dollars for construction prime contracts. There are too few available firms to test statistical significance of this underutilization.

Native Americans represent 0.68% of the available construction businesses and received 0.16% of the dollars for construction prime contracts. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 23.69% of the available construction businesses and received 2.44% of the dollars for construction prime contracts. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 12.98% of the available construction businesses and received 2.13% of the dollars for construction prime contracts. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 36.67% of the available construction businesses and received 4.58% of the dollars for construction prime contracts. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 63.33% of the available construction businesses and received 95.42% of the dollars for construction prime contracts. This overutilization is statistically significant.

**Table 7.03: Disparity Analysis: All Construction Prime Contracts,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$5,247,455	0.97%	20.96%	\$113,402,304	-\$108,154,849	0.05	< .05 *
Asian Americans	\$7,091,558	1.31%	1.59%	\$8,628,436	-\$1,536,878	0.82	not significant
Hispanic Americans	\$0	0.00%	0.46%	\$2,465,267	-\$2,465,267	0.00	----
Native Americans	\$885,718	0.16%	0.68%	\$3,697,901	-\$2,812,183	0.24	----
Caucasian Females	\$11,534,672	2.13%	12.98%	\$70,260,123	-\$58,725,451	0.16	< .05 *
Non-minority Males	\$516,366,808	95.42%	63.33%	\$342,672,179	\$173,694,629	1.51	< .05 †
TOTAL	\$541,126,211	100.00%	100.00%	\$541,126,211			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$789,688	0.15%	2.28%	\$12,326,337	-\$11,536,649	0.06	< .05 *
African American Males	\$4,457,766	0.82%	18.68%	\$101,075,967	-\$96,618,200	0.04	< .05 *
Asian American Females	\$0	0.00%	0.46%	\$2,465,267	-\$2,465,267	0.00	----
Asian American Males	\$7,091,558	1.31%	1.14%	\$6,163,169	\$928,390	1.15	**
Hispanic American Females	\$0	0.00%	0.23%	\$1,232,634	-\$1,232,634	0.00	----
Hispanic American Males	\$0	0.00%	0.23%	\$1,232,634	-\$1,232,634	0.00	----
Native American Females	\$0	0.00%	0.23%	\$1,232,634	-\$1,232,634	0.00	----
Native American Males	\$885,718	0.16%	0.46%	\$2,465,267	-\$1,579,549	0.36	----
Caucasian Females	\$11,534,672	2.13%	12.98%	\$70,260,123	-\$58,725,451	0.16	< .05 *
Non-minority Males	\$516,366,808	95.42%	63.33%	\$342,672,179	\$173,694,629	1.51	< .05 †
TOTAL	\$541,126,211	100.00%	100.00%	\$541,126,211			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$789,688	0.15%	3.19%	\$17,256,872	-\$16,467,184	0.05	< .05 *
Minority Males	\$12,435,043	2.30%	20.50%	\$110,937,036	-\$98,501,994	0.11	< .05 *
Caucasian Females	\$11,534,672	2.13%	12.98%	\$70,260,123	-\$58,725,451	0.16	< .05 *
Non-minority Males	\$516,366,808	95.42%	63.33%	\$342,672,179	\$173,694,629	1.51	< .05 †
TOTAL	\$541,126,211	100.00%	100.00%	\$541,126,211			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$13,224,731	2.44%	23.69%	\$128,193,909	-\$114,969,178	0.10	< .05 *
Caucasian Female Business Enterprises	\$11,534,672	2.13%	12.98%	\$70,260,123	-\$58,725,451	0.16	< .05 *
Minority and Caucasian Female Business Enterprises	\$24,759,403	4.58%	36.67%	\$198,454,032	-\$173,694,629	0.12	< .05 *
Non-minority Male Business Enterprises	\$516,366,808	95.42%	63.33%	\$342,672,179	\$173,694,629	1.51	< .05 †

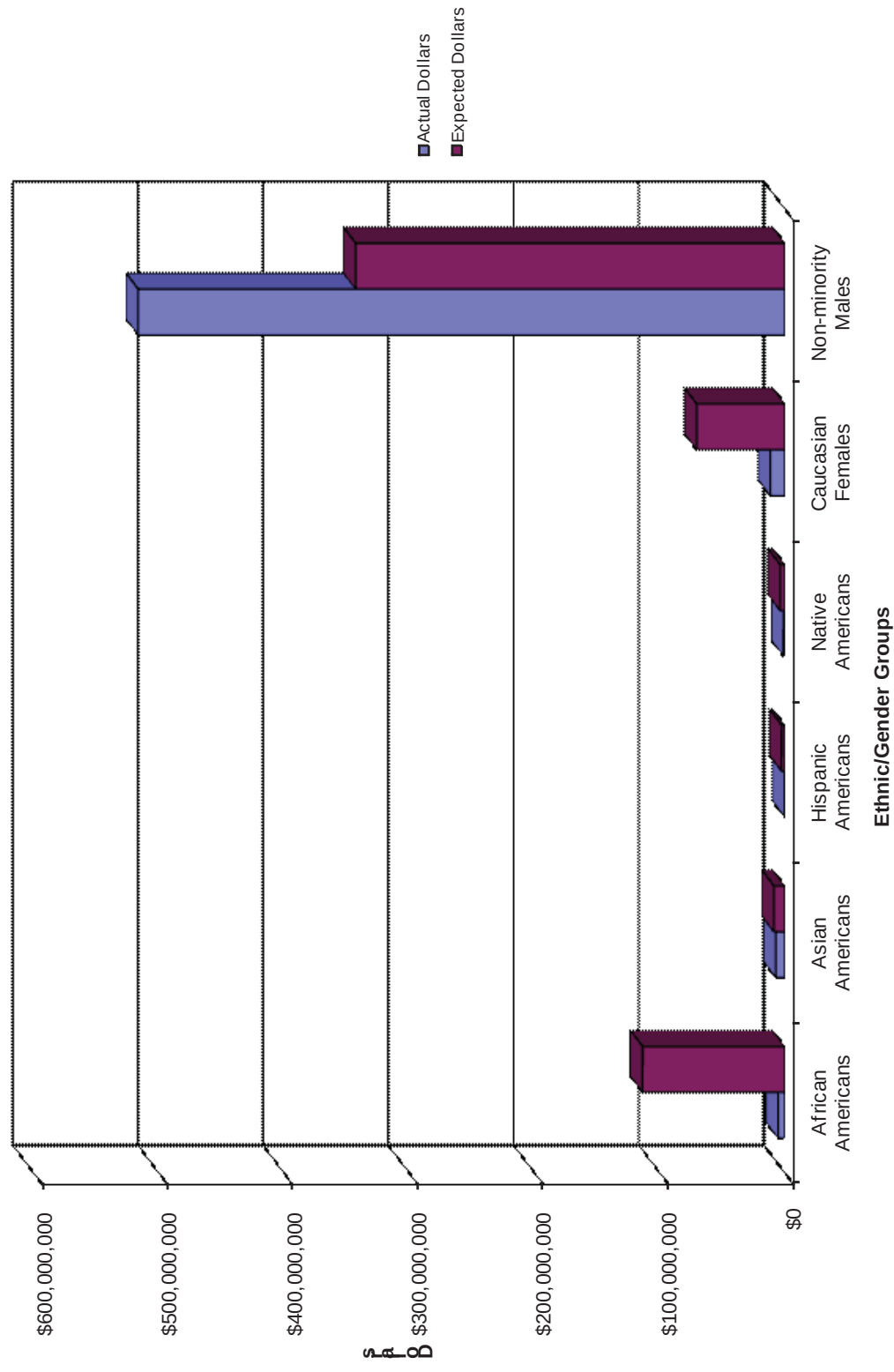
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of MMBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

**Chart 7.02: Disparity Analysis: All Construction Prime Contracts,
January 1, 2009, to December 31, 2013**



3. All Professional Services Prime Contracts

The disparity analysis of professional services prime contracts is described below and depicted in Table 7.04 and Chart 7.03.

African Americans represent 13.71% of the available professional services businesses and received 3.86% of the dollars for professional services prime contracts. This underutilization is statistically significant.

Asian Americans represent 3.08% of the available professional services businesses and received 1.70% of the dollars for professional services prime contracts. This underutilization is statistically significant.

Hispanic Americans represent 1.23% of the available professional services businesses and received 0.03% of the dollars for professional services prime contracts. This underutilization is statistically significant.

Native Americans represent 0.62% of the available professional services businesses and received 0.00% of the dollars for professional services prime contracts. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 18.64% of the available professional services businesses and received 5.59% of the dollars for professional services prime contracts. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 16.18% of the available professional services businesses and received 3.90% of the dollars for professional services prime contracts. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 34.82% of the available professional services businesses and received 9.49% of the dollars for professional services prime contracts. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 65.18% of the available professional services businesses and received 90.51% of the dollars for professional services prime contracts. This overutilization is statistically significant.

**Table 7.04: Disparity Analysis: All Professional Services Prime Contracts,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$14,349,970	3.86%	13.71%	\$50,955,790	-\$36,605,821	0.28	< .05 *
Asian Americans	\$6,312,263	1.70%	3.08%	\$11,450,739	-\$5,138,476	0.55	< .05 *
Hispanic Americans	\$104,402	0.03%	1.23%	\$4,580,296	-\$4,475,894	0.02	< .05 *
Native Americans	\$0	0.00%	0.62%	\$2,290,148	-\$2,290,148	0.00	----
Caucasian Females	\$14,499,517	3.90%	16.18%	\$60,116,382	-\$45,616,865	0.24	< .05 *
Non-minority Males	\$336,310,342	90.51%	65.18%	\$242,183,138	\$94,127,204	1.39	< .05 †
TOTAL	\$371,576,494	100.00%	100.00%	\$371,576,494			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$3,184,585	0.86%	4.01%	\$14,885,961	-\$11,701,376	0.21	< .05 *
African American Males	\$11,165,385	3.00%	9.71%	\$36,069,829	-\$24,904,444	0.31	< .05 *
Asian American Females	\$2,050,960	0.55%	1.23%	\$4,580,296	-\$2,529,335	0.45	< .05 *
Asian American Males	\$4,261,303	1.15%	1.85%	\$6,870,444	-\$2,609,141	0.62	not significant
Hispanic American Females	\$0	0.00%	0.15%	\$572,537	-\$572,537	0.00	-----
Hispanic American Males	\$104,402	0.03%	1.08%	\$4,007,759	-\$3,903,357	0.03	< .05 *
Native American Females	\$0	0.00%	0.15%	\$572,537	-\$572,537	0.00	-----
Native American Males	\$0	0.00%	0.46%	\$1,717,611	-\$1,717,611	0.00	-----
Caucasian Females	\$14,499,517	3.90%	16.18%	\$60,116,382	-\$45,616,865	0.24	< .05 *
Non-minority Males	\$336,310,342	90.51%	65.18%	\$242,183,138	\$94,127,204	1.39	< .05 †
TOTAL	\$371,576,494	100.00%	100.00%	\$371,576,494			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$5,235,545	1.41%	5.55%	\$20,611,331	-\$15,375,786	0.25	< .05 *
Minority Males	\$15,531,090	4.18%	13.10%	\$48,665,642	-\$33,134,553	0.32	< .05 *
Caucasian Females	\$14,499,517	3.90%	16.18%	\$60,116,382	-\$45,616,865	0.24	< .05 *
Non-minority Males	\$336,310,342	90.51%	65.18%	\$242,183,138	\$94,127,204	1.39	< .05 †
TOTAL	\$371,576,494	100.00%	100.00%	\$371,576,494			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$20,766,635	5.59%	18.64%	\$69,276,973	-\$48,510,339	0.30	< .05 *
Caucasian Female Business Enterprises	\$14,499,517	3.90%	16.18%	\$60,116,382	-\$45,616,865	0.24	< .05 *
Minority and Caucasian Female Business Enterprises	\$35,266,152	9.49%	34.82%	\$129,393,355	-\$94,127,204	0.27	< .05 *
Non-minority Male Business Enterprises	\$336,310,342	90.51%	65.18%	\$242,183,138	\$94,127,204	1.39	< .05 †

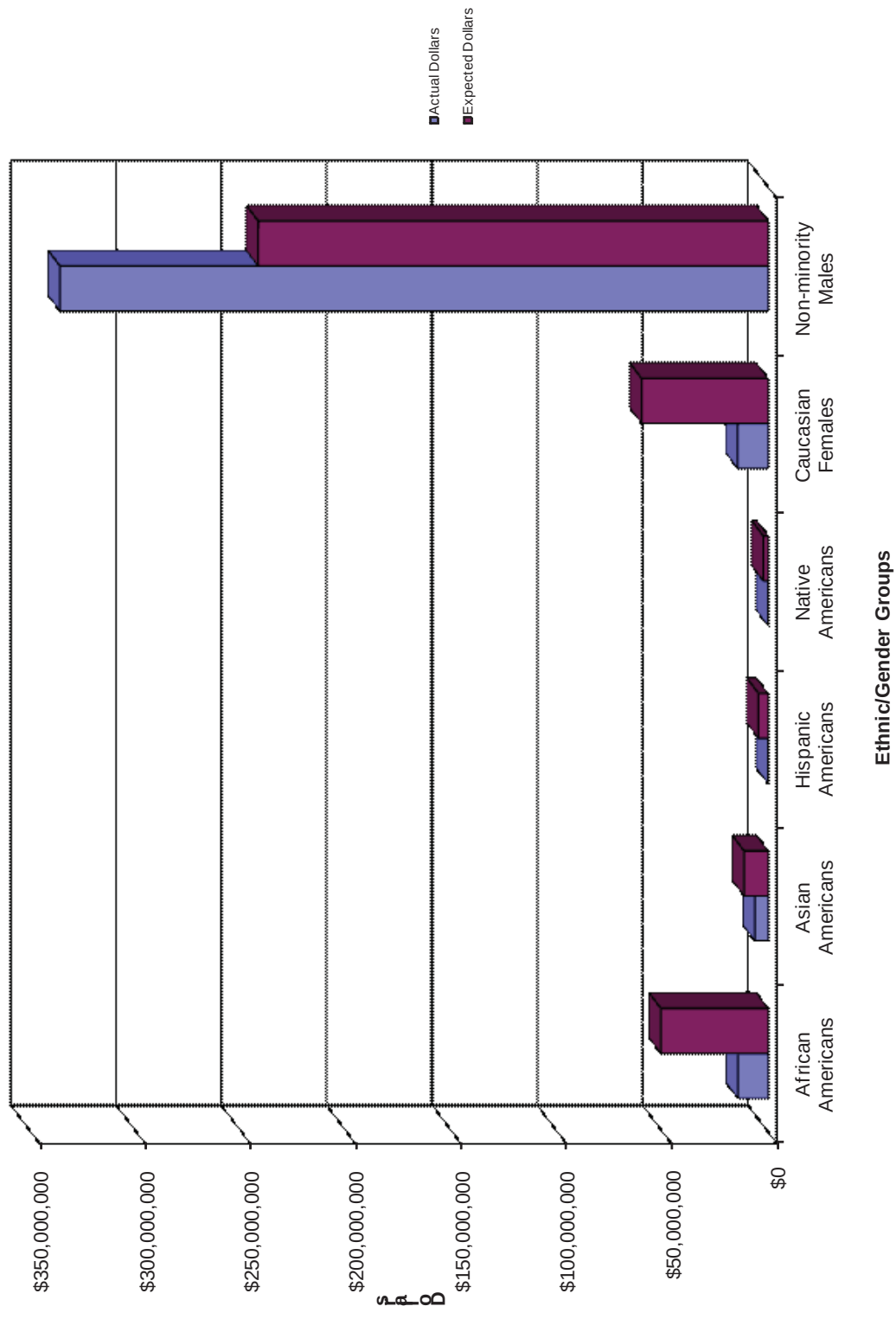
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of MMBEs or the underutilization of Non-minority Males.

(----) denotes an underutilized group with too few available firms to test statistical significance.

**Chart 7.03: Disparity Analysis: All Professional Services Prime Contracts,
January 1, 2009, to December 31, 2013**



4. All Supplies and Services Prime Contracts

The disparity analysis of all supplies and services prime contracts is described below and depicted in Table 7.05 and Chart 7.04.

African Americans represent 13.01% of the available supplies and services businesses and received 0.99% of the dollars for supplies and services prime contracts. This underutilization is statistically significant.

Asian Americans represent 1.28% of the available supplies and services businesses and received 0.13% of the dollars for supplies and services prime contracts. This underutilization is statistically significant.

Hispanic Americans represent 0.77% of the available supplies and services businesses and received 0.01% of the dollars for supplies and services prime contracts. There are too few available firms to test statistical significance of this underutilization.

Native Americans represent 0.13% of the available supplies and services businesses and received 0.00% of the dollars for supplies and services prime contracts. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 15.18% of the available supplies and services businesses and received 1.13% of the dollars for supplies and services prime contracts. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 11.86% of the available supplies and services businesses and received 1.87% of the dollars for supplies and services prime contracts. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 27.04% of the available supplies and services businesses and received 3.00% of the dollars for supplies and services prime contracts. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 72.96% of the available supplies and services businesses and received 97.00% of the dollars for supplies and services prime contracts. This overutilization is statistically significant.

**Table 7.05: Disparity Analysis: All Supplies and Services Prime Contracts,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$3,163,112	0.99%	13.01%	\$41,615,454	-\$38,452,342	0.08	< .05 *
Asian Americans	\$408,515	0.13%	1.28%	\$4,079,946	-\$3,671,431	0.10	< .05 *
Hispanic Americans	\$35,515	0.01%	0.77%	\$2,447,968	-\$2,412,453	0.01	----
Native Americans	\$0	0.00%	0.13%	\$407,995	-\$407,995	0.00	----
Caucasian Females	\$5,983,393	1.87%	11.86%	\$37,943,502	-\$31,960,109	0.16	< .05 *
Non-minority Males	\$310,277,269	97.00%	72.96%	\$233,372,938	\$76,904,331	1.33	< .05 †
TOTAL	\$319,867,803	100.00%	100.00%	\$319,867,803			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$1,881,928	0.59%	3.57%	\$11,423,850	-\$9,541,922	0.16	< .05 *
African American Males	\$1,281,184	0.40%	9.44%	\$30,191,604	-\$28,910,420	0.04	< .05 *
Asian American Females	\$102,613	0.03%	0.13%	\$407,995	-\$305,382	0.25	----
Asian American Males	\$305,902	0.10%	1.15%	\$3,671,952	-\$3,366,050	0.08	< .05 *
Hispanic American Females	\$7,250	0.00%	0.26%	\$815,989	-\$808,739	0.01	----
Hispanic American Males	\$28,265	0.01%	0.51%	\$1,631,979	-\$1,603,714	0.02	----
Native American Females	\$0	0.00%	0.00%	\$0	\$0	----	----
Native American Males	\$0	0.00%	0.13%	\$407,995	-\$407,995	0.00	----
Caucasian Females	\$5,983,393	1.87%	11.86%	\$37,943,502	-\$31,960,109	0.16	< .05 *
Non-minority Males	\$310,277,269	97.00%	72.96%	\$233,372,938	\$76,904,331	1.33	< .05 †
TOTAL	\$319,867,803	100.00%	100.00%	\$319,867,803			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$1,991,791	0.62%	3.95%	\$12,647,834	-\$10,656,044	0.16	< .05 *
Minority Males	\$1,615,351	0.51%	11.22%	\$35,903,529	-\$34,288,178	0.04	< .05 *
Caucasian Females	\$5,983,393	1.87%	11.86%	\$37,943,502	-\$31,960,109	0.16	< .05 *
Non-minority Males	\$310,277,269	97.00%	72.96%	\$233,372,938	\$76,904,331	1.33	< .05 †
TOTAL	\$319,867,803	100.00%	100.00%	\$319,867,803			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$3,607,141	1.13%	15.18%	\$48,551,363	-\$44,944,222	0.07	< .05 *
Caucasian Female Business Enterprises	\$5,983,393	1.87%	11.86%	\$37,943,502	-\$31,960,109	0.16	< .05 *
Minority and Caucasian Female Business Enterprises	\$9,590,534	3.00%	27.04%	\$86,494,865	-\$76,904,331	0.11	< .05 *
Non-minority Male Business Enterprises	\$310,277,269	97.00%	72.96%	\$233,372,938	\$76,904,331	1.33	< .05 †

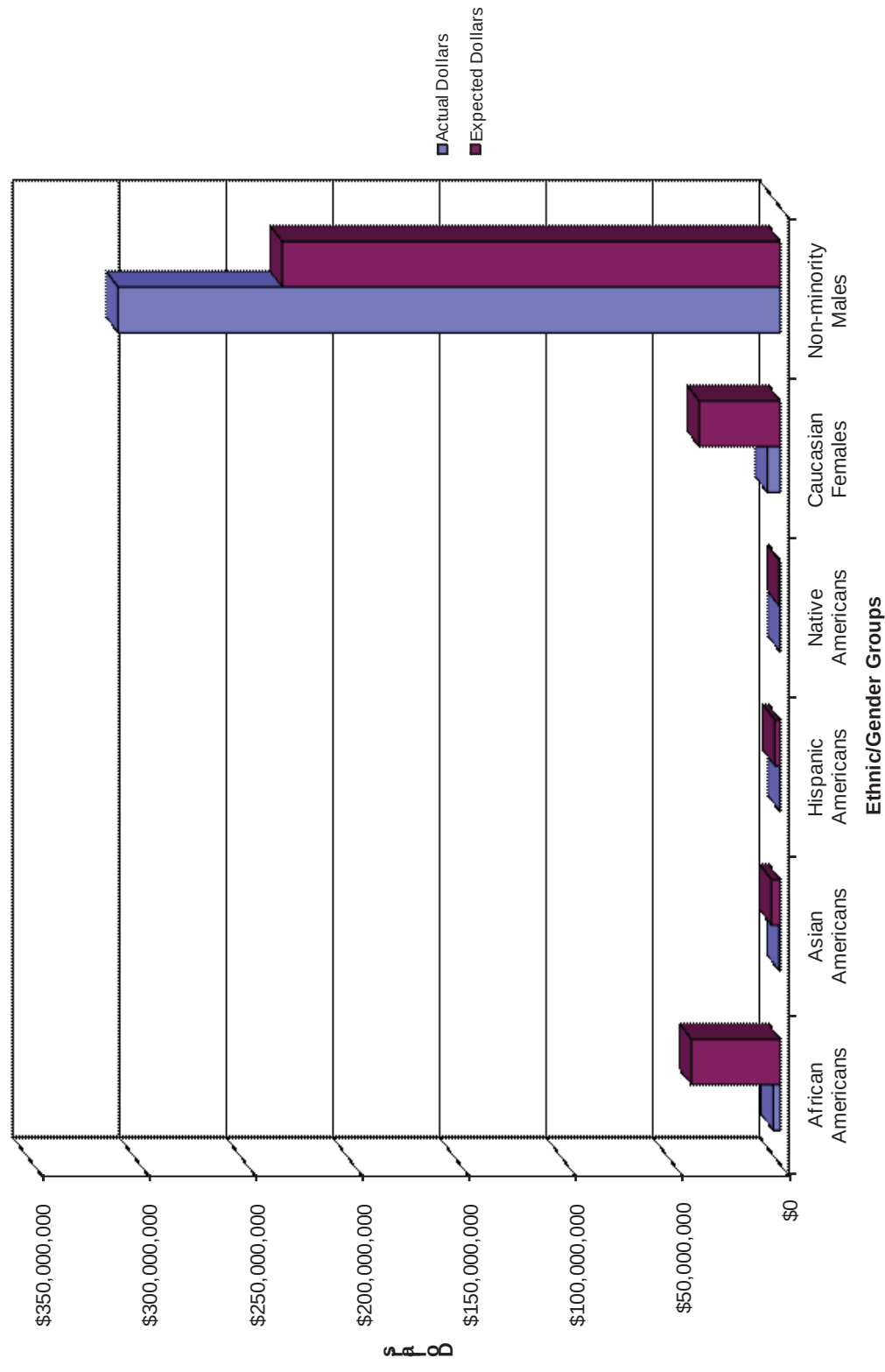
(*) denotes a statistically significant underutilization.

(†) 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 7.04: Disparity Analysis: All Supplies and Services Prime Contracts,
January 1, 2009, to December 31, 2013**



B. Disparity Analysis: All Prime Contracts \$250,000 and Over by Industry

1. All Prime Contracts \$250,000 and Over

The disparity analysis for prime contracts valued at \$250,000 and over in all industries is described below and depicted in Table 7.06 and Chart 7.05.

African Americans represent 14.90% of all available businesses and received 1.50% of the dollars for prime contracts valued at \$250,000 and over in all industries. This underutilization is statistically significant.

Asian Americans represent 1.96% of all available businesses and received 1.08% of the dollars for prime contracts valued at \$250,000 and over in all industries. This underutilization is statistically significant.

Hispanic Americans represent 0.81% of all available businesses and received 0.00% of the dollars for prime contracts valued at \$250,000 and over in all industries. There are too few available firms to test statistical significance of this underutilization.

Native Americans represent 0.40% of all available businesses and received 0.00% of the dollars for prime contracts valued at \$250,000 and over in all industries. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 18.08% of all available businesses and received 2.58% of the dollars for prime contracts valued at \$250,000 and over in all industries. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 13.75% of all available businesses and received 1.98% of the dollars for prime contracts valued at \$250,000 and over in all industries. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 31.83% of all available businesses and received 4.56% of the dollars for prime contracts valued at \$250,000 and over in all industries. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 68.17% of all available businesses and received 95.44% of the dollars for prime contracts valued at \$250,000 and over in all industries. This overutilization is statistically significant.

**Table 7.06: Disparity Analysis: All Prime Contracts \$250,000 and Over,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$16,155,269	1.50%	14.90%	\$160,142,951	-\$143,987,682	0.10	< .05 *
Asian Americans	\$11,600,941	1.08%	1.96%	\$21,104,110	-\$9,503,169	0.55	< .05 *
Hispanic Americans	\$0	0.00%	0.81%	\$8,689,928	-\$8,689,928	0.00	----
Native Americans	\$0	0.00%	0.40%	\$4,344,964	-\$4,344,964	0.00	----
Caucasian Females	\$21,289,364	1.98%	13.75%	\$147,728,769	-\$126,439,405	0.14	< .05 *
Non-minority Males	\$1,025,401,898	95.44%	68.17%	\$732,436,752	\$292,965,146	1.40	< .05 †
TOTAL	\$1,074,447,472	100.00%	100.00%	\$1,074,447,472			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$3,645,716	0.34%	3.41%	\$36,621,838	-\$32,976,122	0.10	< .05 *
African American Males	\$12,509,554	1.16%	11.50%	\$123,521,113	-\$111,011,560	0.10	< .05 *
Asian American Females	\$2,000,000	0.19%	0.64%	\$6,827,800	-\$4,827,800	0.29	----
Asian American Males	\$9,600,941	0.89%	1.33%	\$14,276,310	-\$4,675,369	0.67	not significant
Hispanic American Females	\$0	0.00%	0.17%	\$1,862,127	-\$1,862,127	0.00	----
Hispanic American Males	\$0	0.00%	0.64%	\$6,827,800	-\$6,827,800	0.00	----
Native American Females	\$0	0.00%	0.12%	\$1,241,418	-\$1,241,418	0.00	----
Native American Males	\$0	0.00%	0.29%	\$3,103,546	-\$3,103,546	0.00	----
Caucasian Females	\$21,289,364	1.98%	13.75%	\$147,728,769	-\$126,439,405	0.14	< .05 *
Non-minority Males	\$1,025,401,898	95.44%	68.17%	\$732,436,752	\$292,965,146	1.40	< .05 †
TOTAL	\$1,074,447,472	100.00%	100.00%	\$1,074,447,472			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$5,645,716	0.53%	4.33%	\$46,553,183	-\$40,907,468	0.12	< .05 *
Minority Males	\$22,110,495	2.06%	13.75%	\$147,728,769	-\$125,618,274	0.15	< .05 *
Caucasian Females	\$21,289,364	1.98%	13.75%	\$147,728,769	-\$126,439,405	0.14	< .05 *
Non-minority Males	\$1,025,401,898	95.44%	68.17%	\$732,436,752	\$292,965,146	1.40	< .05 †
TOTAL	\$1,074,447,472	100.00%	100.00%	\$1,074,447,472			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$27,756,210	2.58%	18.08%	\$194,281,952	-\$166,525,742	0.14	< .05 *
Caucasian Female Business Enterprises	\$21,289,364	1.98%	13.75%	\$147,728,769	-\$126,439,405	0.14	< .05 *
Minority and Caucasian Female Business Enterprises	\$49,045,574	4.56%	31.83%	\$342,010,721	-\$292,965,146	0.14	< .05 *
Non-minority Male Business Enterprises	\$1,025,401,898	95.44%	68.17%	\$732,436,752	\$292,965,146	1.40	< .05 †

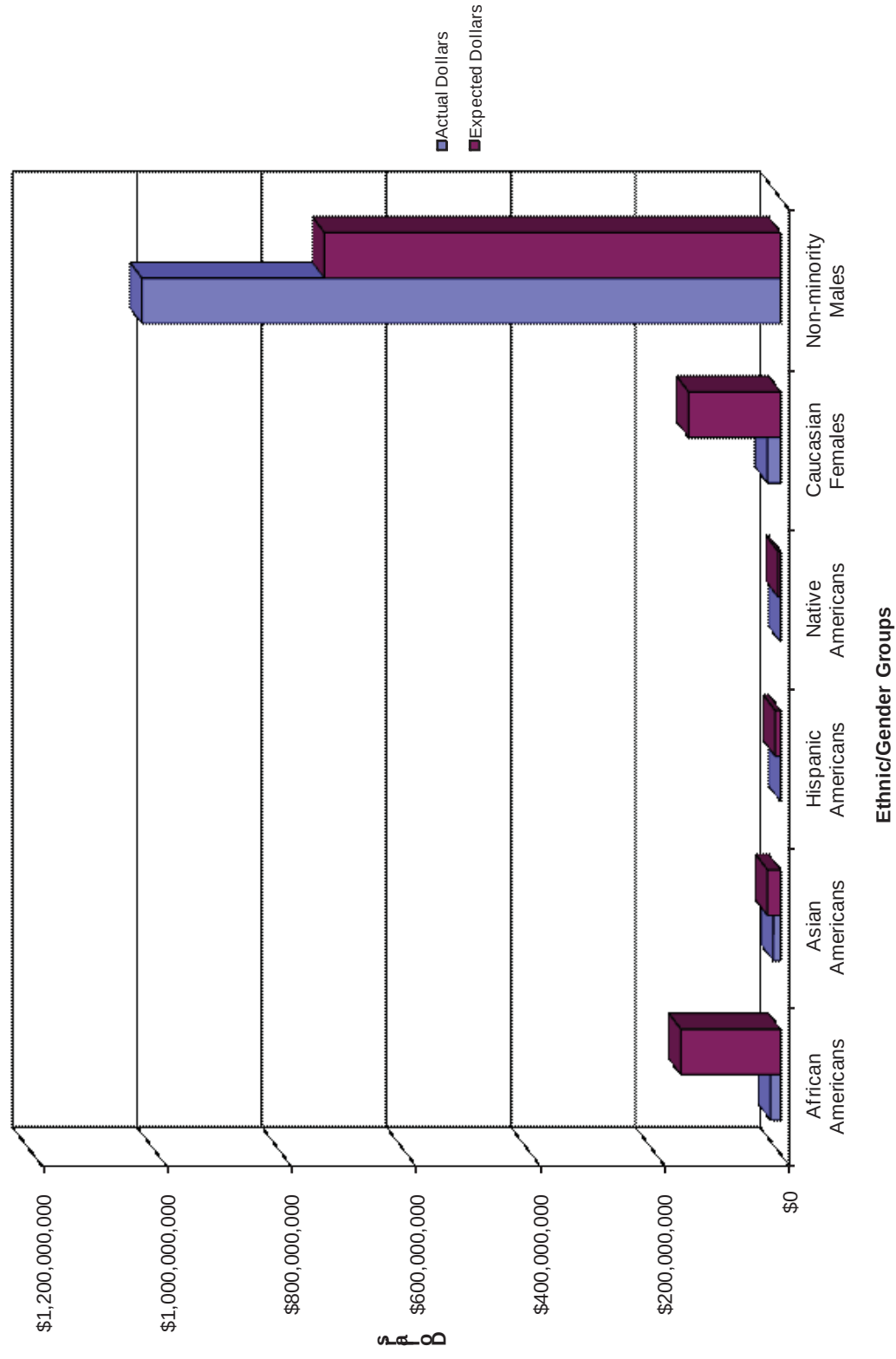
(*) denotes a statistically significant underutilization.

(†) 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 7.05: Disparity Analysis: All Prime Contracts \$250,000 and Over,
January 1, 2009, to December 31, 2013**



2. Construction Prime Contracts \$250,000 and Over

The disparity analysis of construction prime contracts valued at \$250,000 and over is described below and depicted in Table 7.07 and Chart 7.06.

African Americans represent 20.96% of the available construction businesses and received 0.67% of the dollars for construction prime contracts valued at \$250,000 and over. This underutilization is statistically significant.

Asian Americans represent 1.59% of the available construction businesses and received 1.17% of the dollars for construction prime contracts valued at \$250,000 and over. This underutilization is not statistically significant.

Hispanic Americans represent 0.46% of the available construction businesses and received 0.00% of the dollars for construction prime contracts valued at \$250,000 and over. There are too few available firms to test statistical significance of this underutilization.

Native Americans represent 0.68% of the available construction businesses and received 0.00% of the dollars for construction prime contracts valued at \$250,000 and over. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 23.69% of the available construction businesses and received 1.84% of the dollars for construction prime contracts valued at \$250,000 and over. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 12.98% of the available construction businesses and received 1.47% of the dollars for construction prime contracts valued at \$250,000 and over. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 36.67% of the available construction businesses and received 3.31% of the dollars for construction prime contracts valued at \$250,000 and over. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 63.33% of the available construction businesses and received 96.69% of the dollars for construction prime contracts valued at \$250,000 and over. This overutilization is statistically significant.

**Table 7.07: Disparity Analysis: Construction Prime Contracts \$250,000 and Over,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$3,388,276	0.67%	20.96%	\$105,562,563	-\$102,174,287	0.03	< .05 *
Asian Americans	\$5,883,762	1.17%	1.59%	\$8,031,934	-\$2,148,173	0.73	not significant
Hispanic Americans	\$0	0.00%	0.46%	\$2,294,838	-\$2,294,838	0.00	----
Native Americans	\$0	0.00%	0.68%	\$3,442,257	-\$3,442,257	0.00	----
Caucasian Females	\$7,423,434	1.47%	12.98%	\$65,402,892	-\$57,979,458	0.11	< .05 *
Non-minority Males	\$487,021,541	96.69%	63.33%	\$318,982,527	\$168,039,014	1.53	< .05 †
TOTAL	\$503,717,012	100.00%	100.00%	\$503,717,012			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$549,610	0.11%	2.28%	\$11,474,192	-\$10,924,582	0.05	< .05 *
African American Males	\$2,838,665	0.56%	18.68%	\$94,088,371	-\$91,249,706	0.03	< .05 *
Asian American Females	\$0	0.00%	0.46%	\$2,294,838	-\$2,294,838	0.00	----
Asian American Males	\$5,883,762	1.17%	1.14%	\$5,737,096	\$146,666	1.03	**
Hispanic American Females	\$0	0.00%	0.23%	\$1,147,419	-\$1,147,419	0.00	----
Hispanic American Males	\$0	0.00%	0.23%	\$1,147,419	-\$1,147,419	0.00	----
Native American Females	\$0	0.00%	0.23%	\$1,147,419	-\$1,147,419	0.00	----
Native American Males	\$0	0.00%	0.46%	\$2,294,838	-\$2,294,838	0.00	----
Caucasian Females	\$7,423,434	1.47%	12.98%	\$65,402,892	-\$57,979,458	0.11	< .05 *
Non-minority Males	\$487,021,541	96.69%	63.33%	\$318,982,527	\$168,039,014	1.53	< .05 †
TOTAL	\$503,717,012	100.00%	100.00%	\$503,717,012			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$549,610	0.11%	3.19%	\$16,063,868	-\$15,514,258	0.03	< .05 *
Minority Males	\$8,722,427	1.73%	20.50%	\$103,267,725	-\$94,545,298	0.08	< .05 *
Caucasian Females	\$7,423,434	1.47%	12.98%	\$65,402,892	-\$57,979,458	0.11	< .05 *
Non-minority Males	\$487,021,541	96.69%	63.33%	\$318,982,527	\$168,039,014	1.53	< .05 †
TOTAL	\$503,717,012	100.00%	100.00%	\$503,717,012			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$9,272,037	1.84%	23.69%	\$119,331,593	-\$110,059,556	0.08	< .05 *
Caucasian Female Business Enterprises	\$7,423,434	1.47%	12.98%	\$65,402,892	-\$57,979,458	0.11	< .05 *
Minority and Caucasian Female Business Enterprises	\$16,695,471	3.31%	36.67%	\$184,734,485	-\$168,039,014	0.09	< .05 *
Non-minority Male Business Enterprises	\$487,021,541	96.69%	63.33%	\$318,982,527	\$168,039,014	1.53	< .05 †

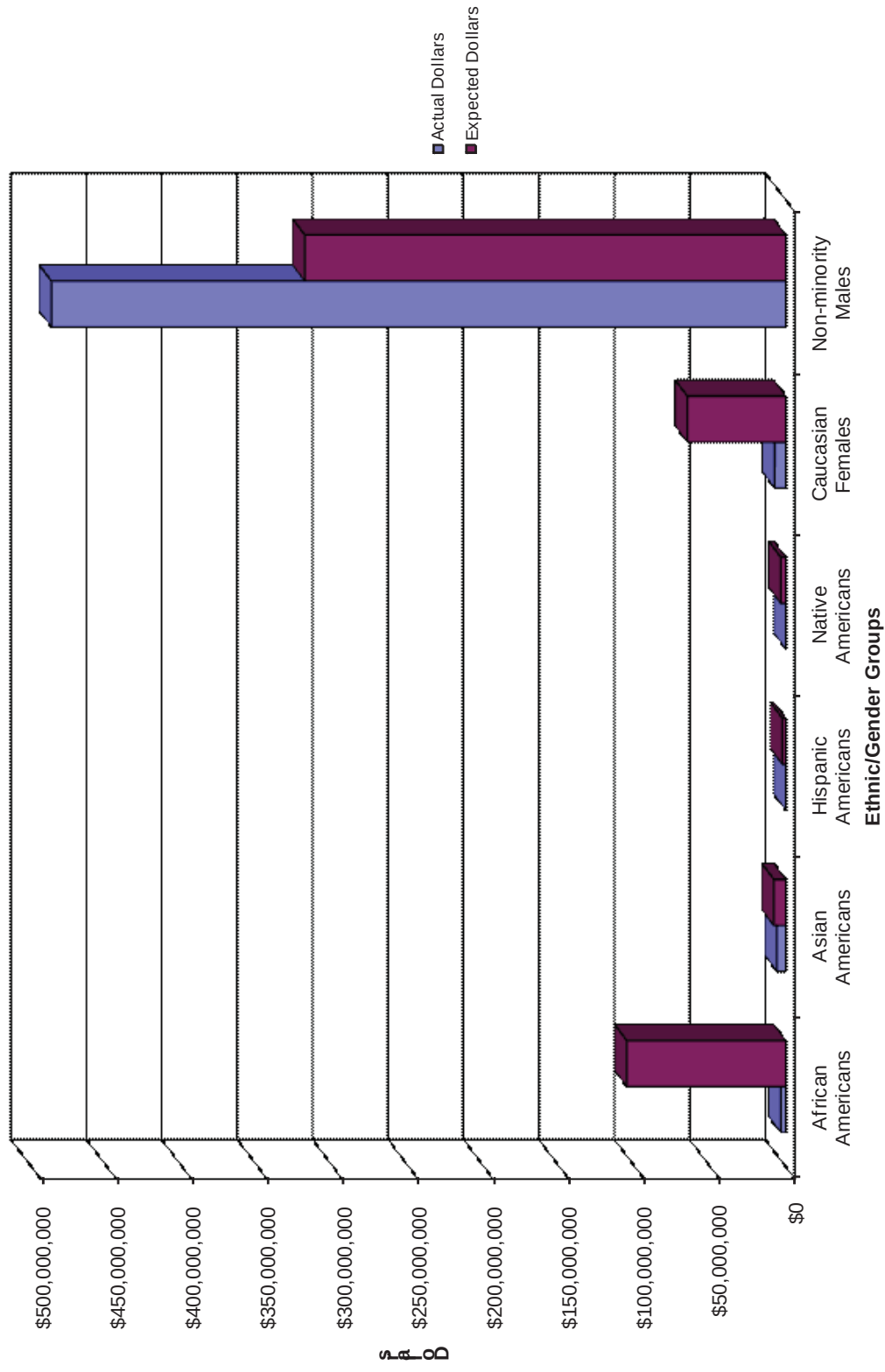
(*) denotes a statistically significant underutilization.

(†) 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 7.06: Disparity Analysis: Construction Prime Contracts \$250,000 and Over,
January 1, 2009, to December 31, 2013**



3. Professional Services Prime Contracts \$250,000 and Over

The disparity analysis of professional services prime contracts valued at \$250,000 and over is described below and depicted in Table 7.08 and Chart 7.07.

African Americans represent 13.71% of the available professional services businesses and received 3.61% of the dollars for professional services prime contracts valued at \$250,000 and over. This underutilization is statistically significant.

Asian Americans represent 3.08% of the available professional services businesses and received 1.68% of the dollars for professional services prime contracts valued at \$250,000 and over. This underutilization is not statistically significant.

Hispanic Americans represent 1.23% of the available professional services businesses and received 0.00% of the dollars for professional services prime contracts valued at \$250,000 and over. This underutilization is not statistically significant.

Native Americans represent 0.62% of the available professional services businesses and received 0.00% of the dollars for professional services prime contracts valued at \$250,000 and over. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 18.64% of the available professional services businesses and received 5.29% of the dollars for professional services prime contracts valued at \$250,000 and over. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 16.18% of the available professional services businesses and received 3.50% of the dollars for professional services prime contracts valued at \$250,000 and over. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 34.82% of the available professional services businesses and received 8.79% of the dollars for professional services prime contracts valued at \$250,000 and over. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 65.18% of the available professional services businesses and received 91.21% of the dollars for professional services prime contracts valued at \$250,000 and over. This overutilization is statistically significant.

**Table 7.08: Disparity Analysis: Professional Services Prime Contracts \$250,000 and Over,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$12,241,968	3.61%	13.71%	\$46,529,487	-\$34,287,519	0.26	< .05 *
Asian Americans	\$5,717,179	1.68%	3.08%	\$10,456,064	-\$4,738,885	0.55	not significant
Hispanic Americans	\$0	0.00%	1.23%	\$4,182,426	-\$4,182,426	0.00	not significant
Native Americans	\$0	0.00%	0.62%	\$2,091,213	-\$2,091,213	0.00	----
Caucasian Females	\$11,860,343	3.50%	16.18%	\$54,894,338	-\$43,033,995	0.22	< .05 *
Non-minority Males	\$309,479,801	91.21%	65.18%	\$221,145,763	\$88,334,037	1.40	< .05 †
TOTAL	\$339,299,291	100.00%	100.00%	\$339,299,291			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$2,571,080	0.76%	4.01%	\$13,592,884	-\$11,021,804	0.19	< .05 *
African American Males	\$9,670,888	2.85%	9.71%	\$32,936,603	-\$23,265,715	0.29	< .05 *
Asian American Females	\$2,000,000	0.59%	1.23%	\$4,182,426	-\$2,182,426	0.48	not significant
Asian American Males	\$3,717,179	1.10%	1.85%	\$6,273,639	-\$2,556,459	0.59	not significant
Hispanic American Females	\$0	0.00%	0.15%	\$522,803	-\$522,803	0.00	----
Hispanic American Males	\$0	0.00%	1.08%	\$3,659,623	-\$3,659,623	0.00	not significant
Native American Females	\$0	0.00%	0.15%	\$522,803	-\$522,803	0.00	----
Native American Males	\$0	0.00%	0.46%	\$1,568,410	-\$1,568,410	0.00	----
Caucasian Females	\$11,860,343	3.50%	16.18%	\$54,894,338	-\$43,033,995	0.22	< .05 *
Non-minority Males	\$309,479,801	91.21%	65.18%	\$221,145,763	\$88,334,037	1.40	< .05 †
TOTAL	\$339,299,291	100.00%	100.00%	\$339,299,291			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$4,571,080	1.35%	5.55%	\$18,820,916	-\$14,249,836	0.24	< .05 *
Minority Males	\$13,388,068	3.95%	13.10%	\$44,438,274	-\$31,050,206	0.30	< .05 *
Caucasian Females	\$11,860,343	3.50%	16.18%	\$54,894,338	-\$43,033,995	0.22	< .05 *
Non-minority Males	\$309,479,801	91.21%	65.18%	\$221,145,763	\$88,334,037	1.40	< .05 †
TOTAL	\$339,299,291	100.00%	100.00%	\$339,299,291			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$17,959,148	5.29%	18.64%	\$63,259,190	-\$45,300,042	0.28	< .05 *
Caucasian Female Business Enterprises	\$11,860,343	3.50%	16.18%	\$54,894,338	-\$43,033,995	0.22	< .05 *
Minority and Caucasian Female Business Enterprises	\$29,819,491	8.79%	34.82%	\$118,153,528	-\$88,334,037	0.25	< .05 *
Non-minority Male Business Enterprises	\$309,479,801	91.21%	65.18%	\$221,145,763	\$88,334,037	1.40	< .05 †

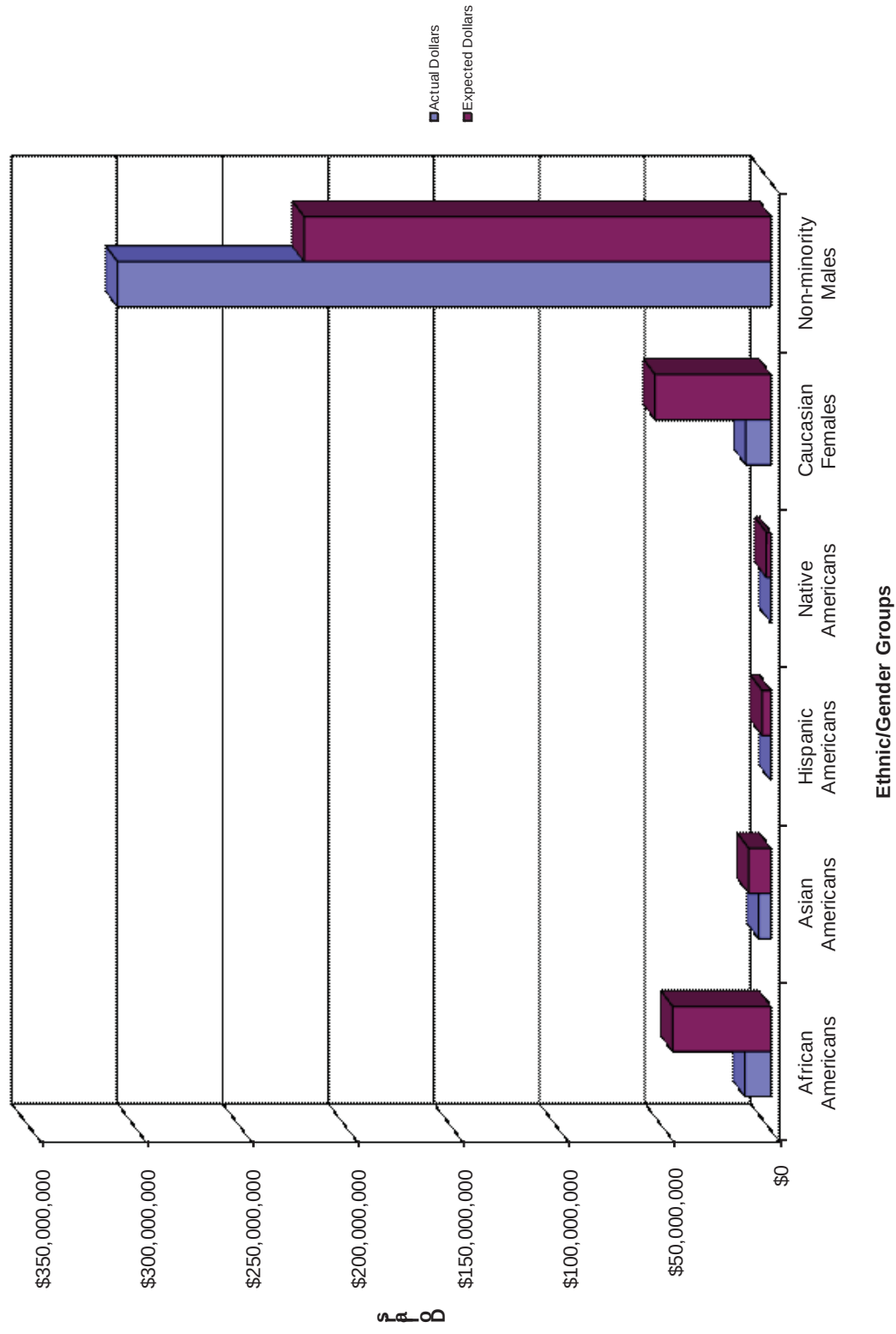
(*) denotes a statistically significant underutilization.

(†) 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 7.07: Disparity Analysis: Professional Services Prime Contracts \$250,000 and Over,
January 1, 2009, to December 31, 2013**



4. Supplies and Services Prime Contracts \$250,000 and Over

The disparity analysis of supplies and services prime contracts valued at \$250,000 and over is described below and depicted in Table 7.09 and Chart 7.08.

African Americans represent 13.01% of the available supplies and services businesses and received 0.23% of the dollars for supplies and services prime contracts valued at \$250,000 and over. This underutilization is statistically significant.

Asian Americans represent 1.28% of the available supplies and services businesses and received 0.00% of the dollars for supplies and services prime contracts valued at \$250,000 and over. This underutilization is statistically significant.

Hispanic Americans represent 0.77% of the available supplies and services businesses and received 0.00% of the dollars for supplies and services prime contracts valued at \$250,000 and over. There are too few available firms to test statistical significance of this underutilization.

Native Americans represent 0.13% of the available supplies and services businesses and received 0.00% of the dollars for supplies and services prime contracts valued at \$250,000 and over. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 15.18% of the available supplies and services businesses and received 0.23% of the dollars for supplies and services prime contracts valued at \$250,000 and over. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 11.86% of the available supplies and services businesses and received 0.87% of the dollars for supplies and services prime contracts valued at \$250,000 and over. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 27.04% of the available supplies and services businesses and received 1.09% of the dollars for supplies and services prime contracts valued at \$250,000 and over. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 72.96% of the available supplies and services businesses and received 98.91% of the dollars for supplies and services prime contracts valued at \$250,000 and over. This overutilization is statistically significant.

**Table 7.09: Disparity Analysis: Supplies and Services Prime Contracts \$250,000 and Over,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$525,026	0.23%	13.01%	\$30,109,667	-\$29,584,642	0.02	< .05 *
Asian Americans	\$0	0.00%	1.28%	\$2,951,928	-\$2,951,928	0.00	< .05 *
Hispanic Americans	\$0	0.00%	0.77%	\$1,771,157	-\$1,771,157	0.00	----
Native Americans	\$0	0.00%	0.13%	\$295,193	-\$295,193	0.00	----
Caucasian Females	\$2,005,587	0.87%	11.86%	\$27,452,932	-\$25,447,345	0.07	< .05 *
Non-minority Males	\$228,900,557	98.91%	72.96%	\$168,850,291	\$60,050,265	1.36	< .05 †
TOTAL	\$231,431,169	100.00%	100.00%	\$231,431,169			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$525,026	0.23%	3.57%	\$8,265,399	-\$7,740,373	0.06	< .05 *
African American Males	\$0	0.00%	9.44%	\$21,844,268	-\$21,844,268	0.00	< .05 *
Asian American Females	\$0	0.00%	0.13%	\$295,193	-\$295,193	0.00	----
Asian American Males	\$0	0.00%	1.15%	\$2,656,735	-\$2,656,735	0.00	not significant
Hispanic American Females	\$0	0.00%	0.26%	\$590,386	-\$590,386	0.00	----
Hispanic American Males	\$0	0.00%	0.51%	\$1,180,771	-\$1,180,771	0.00	----
Native American Females	\$0	0.00%	0.00%	\$0	\$0	----	----
Native American Males	\$0	0.00%	0.13%	\$295,193	-\$295,193	0.00	----
Caucasian Females	\$2,005,587	0.87%	11.86%	\$27,452,932	-\$25,447,345	0.07	< .05 *
Non-minority Males	\$228,900,557	98.91%	72.96%	\$168,850,291	\$60,050,265	1.36	< .05 †
TOTAL	\$231,431,169	100.00%	100.00%	\$231,431,169			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$525,026	0.23%	3.95%	\$9,150,977	-\$8,625,952	0.06	< .05 *
Minority Males	\$0	0.00%	11.22%	\$25,976,968	-\$25,976,968	0.00	< .05 *
Caucasian Females	\$2,005,587	0.87%	11.86%	\$27,452,932	-\$25,447,345	0.07	< .05 *
Non-minority Males	\$228,900,557	98.91%	72.96%	\$168,850,291	\$60,050,265	1.36	< .05 †
TOTAL	\$231,431,169	100.00%	100.00%	\$231,431,169			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$525,026	0.23%	15.18%	\$35,127,945	-\$34,602,920	0.01	< .05 *
Caucasian Female Business Enterprises	\$2,005,587	0.87%	11.86%	\$27,452,932	-\$25,447,345	0.07	< .05 *
Minority and Caucasian Female Business Enterprises	\$2,530,612	1.09%	27.04%	\$62,580,877	-\$60,050,265	0.04	< .05 *
Non-minority Male Business Enterprises	\$228,900,557	98.91%	72.96%	\$168,850,291	\$60,050,265	1.36	< .05 †

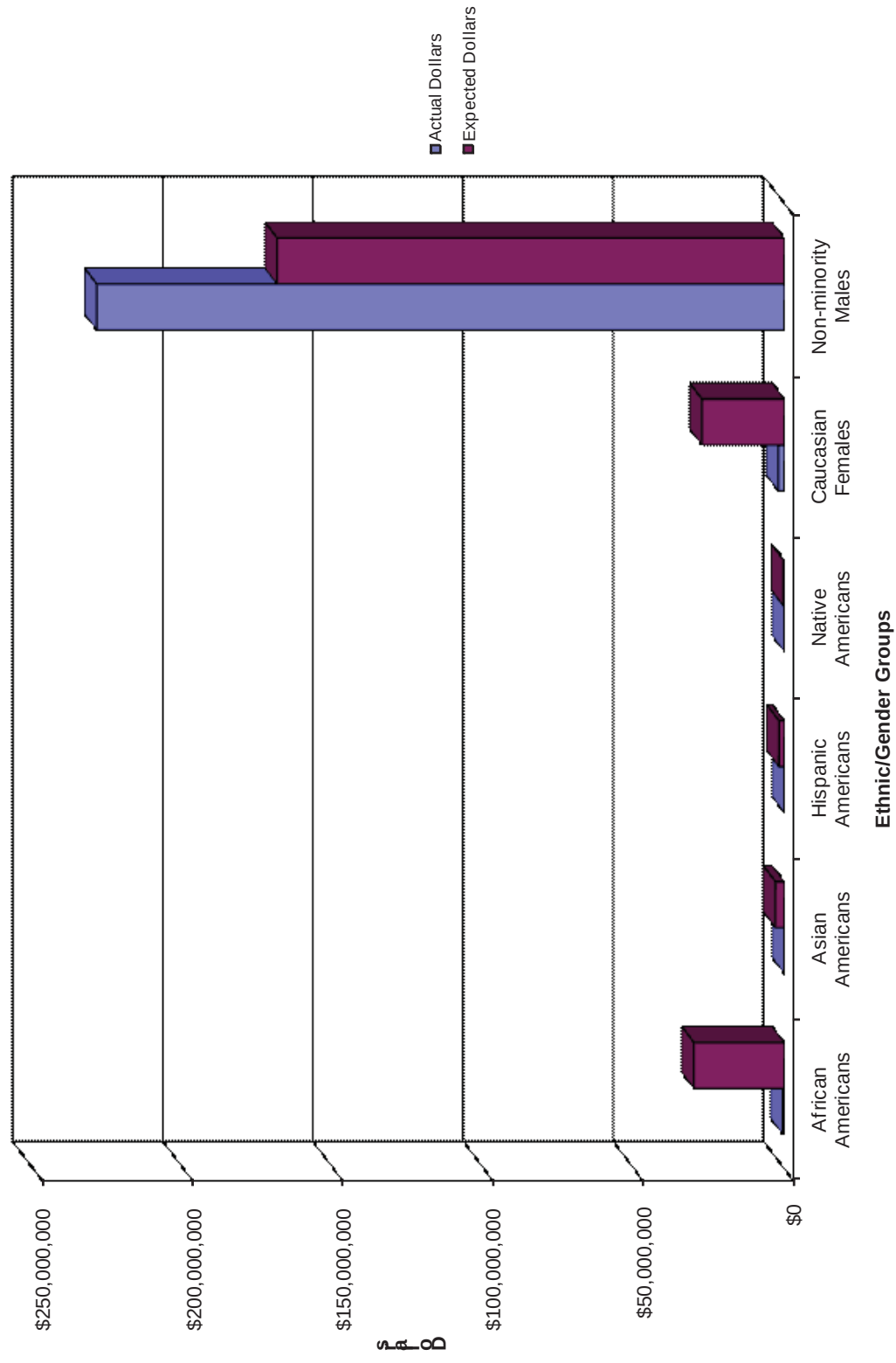
(*) denotes a statistically significant underutilization.

(†) 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 7.08: Disparity Analysis: Supplies and Services Prime Contracts \$250,000 and Over,
January 1, 2009, to December 31, 2013**



C. Disparity Analysis: All Prime Contracts \$50,001 to \$249,999 by Industry

1. All Industries Prime Contracts \$50,001 to \$249,999

The disparity analysis for prime contracts valued between \$50,001 and \$249,999 in all industries is described below and depicted in Table 7.10 and Chart 7.09.

African Americans represent 14.90% of all available businesses and received 3.83% of the dollars for all industries prime contracts valued between \$50,001 and \$249,999 in all industries. This underutilization is statistically significant.

Asian Americans represent 1.96% of all available businesses and received 1.73% of the dollars for all industries prime contracts valued between \$50,001 and \$249,999 in all industries. This underutilization is not statistically significant.

Hispanic Americans represent 0.81% of all available businesses and received 0.05% of the dollars for prime contracts valued between \$50,001 and \$249,999 in all industries. There are too few available firms to test statistical significance of this underutilization.

Native Americans represent 0.40% of all available businesses and received 0.20% of the dollars for prime contracts valued between \$50,001 and \$249,999 in all industries. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 18.08% of all available businesses and received 5.81% of the dollars for prime contracts valued between \$50,001 and \$249,999 in all industries. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 13.75% of all available businesses and received 5.42% of the dollars for prime contracts valued between \$50,001 and \$249,999 in all industries. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 31.83% of all available businesses and received 11.23% of the dollars for prime contracts valued between \$50,001 and \$249,999 in all industries. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 68.17% of all available businesses and received 88.77% of the dollars for prime contracts valued between \$50,001 and \$249,999 in all industries. This overutilization is statistically significant.



**Table 7.10: Disparity Analysis: All Prime Contracts \$50,001 to \$249,999,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$4,021,932	3.83%	14.90%	\$15,635,624	-\$11,613,692	0.26	< .05 *
Asian Americans	\$1,811,889	1.73%	1.96%	\$2,060,509	-\$248,619	0.88	not significant
Hispanic Americans	\$55,750	0.05%	0.81%	\$848,445	-\$792,695	0.07	----
Native Americans	\$210,229	0.20%	0.40%	\$424,222	-\$213,993	0.50	----
Caucasian Females	\$5,682,629	5.42%	13.75%	\$14,423,560	-\$8,740,931	0.39	< .05 *
Non-minority Males	\$93,121,698	88.77%	68.17%	\$71,511,767	\$21,609,931	1.30	< .05 †
TOTAL	\$104,904,127	100.00%	100.00%	\$104,904,127			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$1,643,029	1.57%	3.41%	\$3,575,588	-\$1,932,560	0.46	< .05 *
African American Males	\$2,378,903	2.27%	11.50%	\$12,060,035	-\$9,681,132	0.20	< .05 *
Asian American Females	\$100,000	0.10%	0.64%	\$666,635	-\$566,635	0.15	----
Asian American Males	\$1,711,889	1.63%	1.33%	\$1,393,873	\$318,016	1.23	**
Hispanic American Females	\$0	0.00%	0.17%	\$181,810	-\$181,810	0.00	----
Hispanic American Males	\$55,750	0.05%	0.64%	\$666,635	-\$610,885	0.08	----
Native American Females	\$0	0.00%	0.12%	\$121,206	-\$121,206	0.00	----
Native American Males	\$210,229	0.20%	0.29%	\$303,016	-\$92,787	0.69	----
Caucasian Females	\$5,682,629	5.42%	13.75%	\$14,423,560	-\$8,740,931	0.39	< .05 *
Non-minority Males	\$93,121,698	88.77%	68.17%	\$71,511,767	\$21,609,931	1.30	< .05 †
TOTAL	\$104,904,127	100.00%	100.00%	\$104,904,127			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$1,743,029	1.66%	4.33%	\$4,545,239	-\$2,802,211	0.38	< .05 *
Minority Males	\$4,356,771	4.15%	13.75%	\$14,423,560	-\$10,066,789	0.30	< .05 *
Caucasian Females	\$5,682,629	5.42%	13.75%	\$14,423,560	-\$8,740,931	0.39	< .05 *
Non-minority Males	\$93,121,698	88.77%	68.17%	\$71,511,767	\$21,609,931	1.30	< .05 †
TOTAL	\$104,904,127	100.00%	100.00%	\$104,904,127			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$6,099,800	5.81%	18.08%	\$18,968,799	-\$12,868,999	0.32	< .05 *
Caucasian Female Business Enterprises	\$5,682,629	5.42%	13.75%	\$14,423,560	-\$8,740,931	0.39	< .05 *
Minority and Caucasian Female Business Enterprises	\$11,782,429	11.23%	31.83%	\$33,392,359	-\$21,609,931	0.35	< .05 *
Non-minority Male Business Enterprises	\$93,121,698	88.77%	68.17%	\$71,511,767	\$21,609,931	1.30	< .05 †

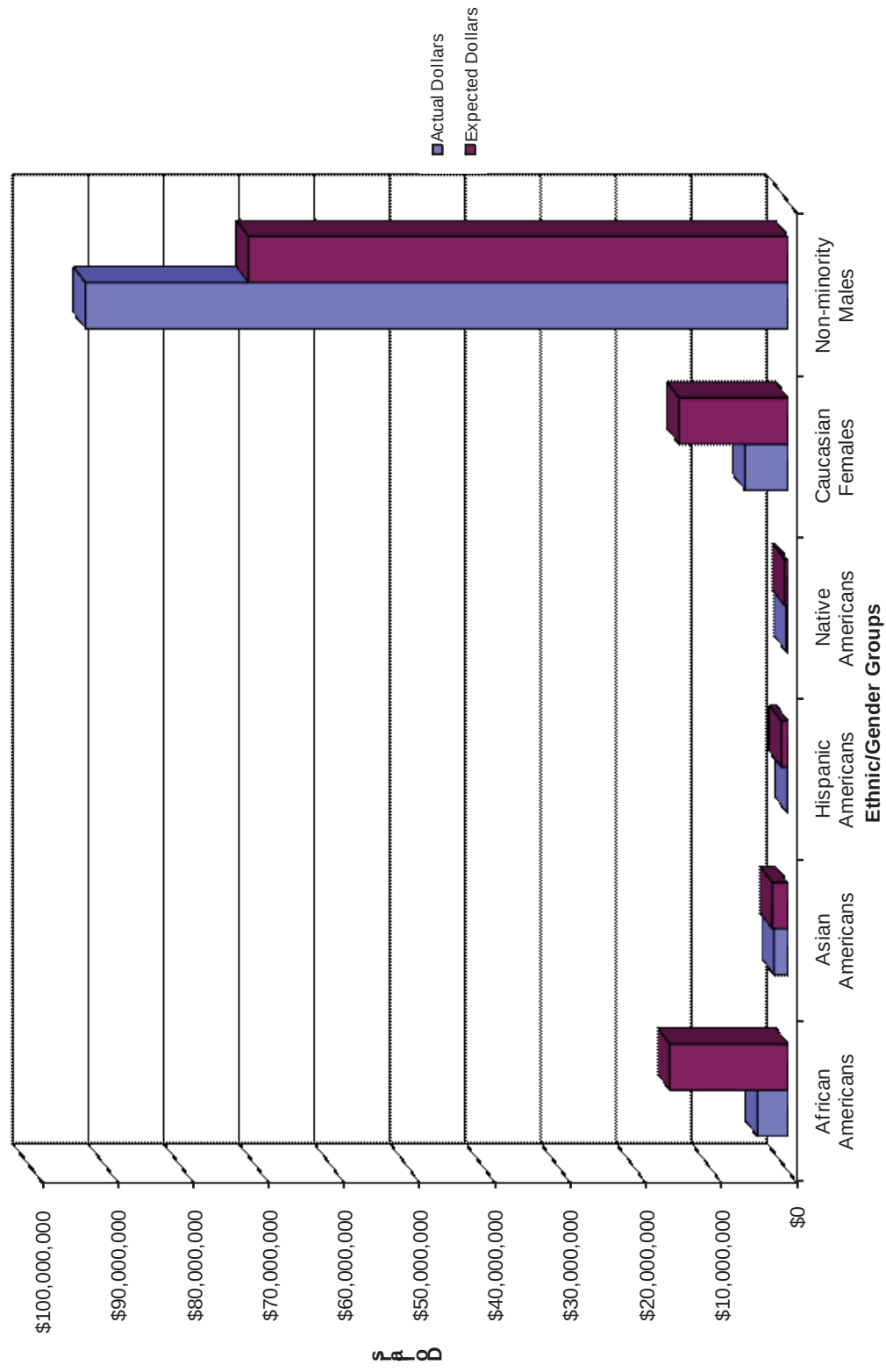
(*) denotes a statistically significant underutilization.

(†) 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 7.09: Disparity Analysis: All Industries Prime Contracts \$50,001 to \$249,999,
January 1, 2009, to December 31, 2013**



2. Construction Prime Contracts \$50,001 to \$249,999

The disparity analysis of construction prime contracts valued between \$50,001 and \$249,999 is described below and depicted in Table 7.11 and Chart 7.10.

African Americans represent 20.96% of the available construction businesses and received 2.99% of the dollars for construction prime contracts valued between \$50,001 and \$249,999. This underutilization is statistically significant.

Asian Americans represent 1.59% of the available construction businesses and received 4.38% of the dollars for construction prime contracts valued between \$50,001 and \$249,999. The statistical test is not performed for the overutilization of Asian Americans.

Hispanic Americans represent 0.46% of the available construction businesses and received 0.00% of the dollars for construction prime contracts valued between \$50,001 and \$249,999. There are too few available firms to test statistical significance of this underutilization.

Native Americans represent 0.68% of the available construction businesses and received 0.80% of the dollars for construction prime contracts valued between \$50,001 and \$249,999. The statistical test is not performed for the overutilization of Native Americans.

Minority-owned Business Enterprises represent 23.69% of the available construction businesses and received 8.17% of the dollars for construction prime contracts valued between \$50,001 and \$249,999. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 12.98% of the available construction businesses and received 6.17% of the dollars for construction prime contracts valued between \$50,001 and \$249,999. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 36.67% of the available construction businesses and received 14.33% of the dollars for construction prime contracts valued between \$50,001 and \$249,999. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 63.33% of the available construction businesses and received 85.67% of the dollars for construction prime contracts valued between \$50,001 and \$249,999. This overutilization is statistically significant.



**Table 7.11: Disparity Analysis: Construction Prime Contracts \$50,001 to \$249,999,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$789,973	2.99%	20.96%	\$5,535,863	-\$4,745,890	0.14	< .05 *
Asian Americans	\$1,157,262	4.38%	1.59%	\$421,207	\$736,055	2.75	**
Hispanic Americans	\$0	0.00%	0.46%	\$120,345	-\$120,345	0.00	----
Native Americans	\$210,229	0.80%	0.68%	\$180,517	\$29,712	1.16	**
Caucasian Females	\$1,629,169	6.17%	12.98%	\$3,429,828	-\$1,800,659	0.48	< .05 *
Non-minority Males	\$22,629,059	85.67%	63.33%	\$16,727,933	\$5,901,127	1.35	< .05 †
TOTAL	\$26,415,692	100.00%	100.00%	\$26,415,692			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$201,060	0.76%	2.28%	\$601,724	-\$400,665	0.33	not significant
African American Males	\$588,914	2.23%	18.68%	\$4,934,138	-\$4,345,225	0.12	< .05 *
Asian American Females	\$0	0.00%	0.46%	\$120,345	-\$120,345	0.00	----
Asian American Males	\$1,157,262	4.38%	1.14%	\$300,862	\$856,400	3.85	**
Hispanic American Females	\$0	0.00%	0.23%	\$60,172	-\$60,172	0.00	----
Hispanic American Males	\$0	0.00%	0.23%	\$60,172	-\$60,172	0.00	----
Native American Females	\$0	0.00%	0.23%	\$60,172	-\$60,172	0.00	----
Native American Males	\$210,229	0.80%	0.46%	\$120,345	\$89,884	1.75	**
Caucasian Females	\$1,629,169	6.17%	12.98%	\$3,429,828	-\$1,800,659	0.48	< .05 *
Non-minority Males	\$22,629,059	85.67%	63.33%	\$16,727,933	\$5,901,127	1.35	< .05 †
TOTAL	\$26,415,692	100.00%	100.00%	\$26,415,692			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$201,060	0.76%	3.19%	\$842,414	-\$641,354	0.24	< .05 *
Minority Males	\$1,956,405	7.41%	20.50%	\$5,415,518	-\$3,459,113	0.36	< .05 *
Caucasian Females	\$1,629,169	6.17%	12.98%	\$3,429,828	-\$1,800,659	0.48	< .05 *
Non-minority Males	\$22,629,059	85.67%	63.33%	\$16,727,933	\$5,901,127	1.35	< .05 †
TOTAL	\$26,415,692	100.00%	100.00%	\$26,415,692			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$2,157,464	8.17%	23.69%	\$6,257,932	-\$4,100,467	0.34	< .05 *
Caucasian Female Business Enterprises	\$1,629,169	6.17%	12.98%	\$3,429,828	-\$1,800,659	0.48	< .05 *
Minority and Caucasian Female Business Enterprises	\$3,786,633	14.33%	36.67%	\$9,687,760	-\$5,901,127	0.39	< .05 *
Non-minority Male Business Enterprises	\$22,629,059	85.67%	63.33%	\$16,727,933	\$5,901,127	1.35	< .05 †

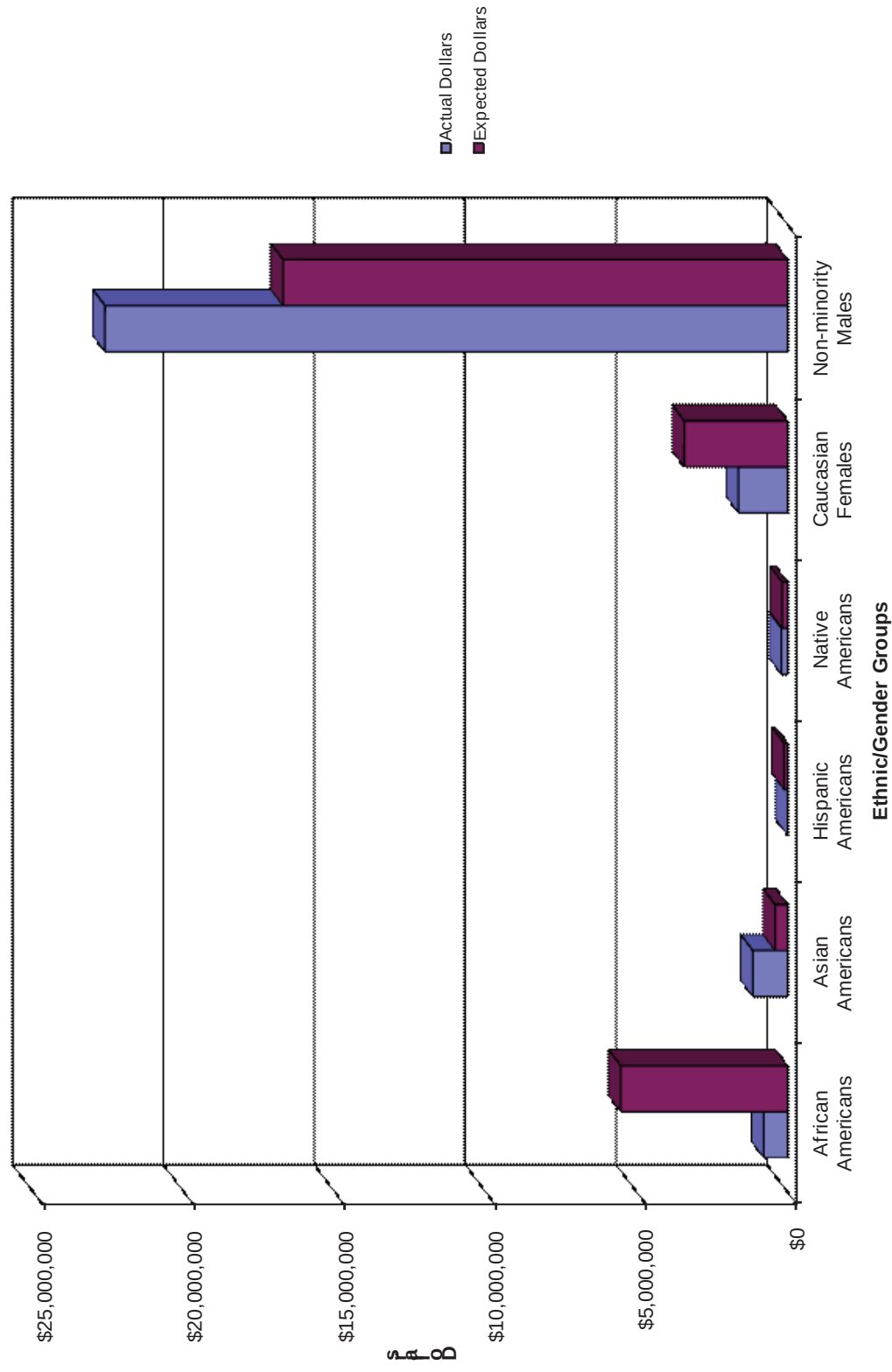
(*) denotes a statistically significant underutilization.

(†) 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 7.10: Disparity Analysis: Construction Prime Contracts \$50,001 to \$249,999,
January 1, 2009, to December 31, 2013**



3. Professional Services Prime Contracts \$50,001 to \$249,999

The disparity analysis of professional services valued between \$50,001 and \$249,999 is described below and depicted in Table 7.12 and Chart 7.11.

African Americans represent 13.71% of the available professional services businesses and received 5.56% of the dollars for professional services prime contracts valued between \$50,001 and \$249,999. This underutilization is statistically significant.

Asian Americans represent 3.08% of the available professional services businesses and received 2.06% of the dollars for professional services valued between \$50,001 and \$249,999. This underutilization is not statistically significant.

Hispanic Americans represent 1.23% of the available professional services businesses and received 0.23% of the dollars for professional services valued between \$50,001 and \$249,999. This underutilization is not statistically significant.

Native Americans represent 0.62% of the available professional services businesses and received 0.00% of the dollars for professional services valued between \$50,001 and \$249,999. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 18.64% of the available professional services businesses and received 7.85% of the dollars for professional services valued between \$50,001 and \$249,999. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 16.18% of the available professional services businesses and received 7.23% of the dollars for professional services valued between \$50,001 and \$249,999. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 34.82% of the available professional services businesses and received 15.08% of the dollars for professional services valued between \$50,001 and \$249,999. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 65.18% of the available professional services businesses and received 84.92% of the dollars for professional services valued between \$50,001 and \$249,999. This overutilization is statistically significant.



**Table 7.12: Disparity Analysis: Professional Services Prime Contracts \$50,001 to \$249,999,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$1,340,554	5.56%	13.71%	\$3,304,978	-\$1,964,424	0.41	< .05 *
Asian Americans	\$495,422	2.06%	3.08%	\$742,692	-\$247,270	0.67	not significant
Hispanic Americans	\$55,750	0.23%	1.23%	\$297,077	-\$241,327	0.19	not significant
Native Americans	\$0	0.00%	0.62%	\$148,538	-\$148,538	0.00	----
Caucasian Females	\$1,742,150	7.23%	16.18%	\$3,899,131	-\$2,156,982	0.45	< .05 *
Non-minority Males	\$20,466,469	84.92%	65.18%	\$15,707,929	\$4,758,541	1.30	< .05 †
TOTAL	\$24,100,344	100.00%	100.00%	\$24,100,344			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$397,238	1.65%	4.01%	\$965,499	-\$568,261	0.41	< .05 *
African American Males	\$943,316	3.91%	9.71%	\$2,339,479	-\$1,396,163	0.40	< .05 *
Asian American Females	\$0	0.00%	1.23%	\$297,077	-\$297,077	0.00	not significant
Asian American Males	\$495,422	2.06%	1.85%	\$445,615	\$49,807	1.11	**
Hispanic American Females	\$0	0.00%	0.15%	\$37,135	-\$37,135	0.00	----
Hispanic American Males	\$55,750	0.23%	1.08%	\$259,942	-\$204,192	0.21	not significant
Native American Females	\$0	0.00%	0.15%	\$37,135	-\$37,135	0.00	----
Native American Males	\$0	0.00%	0.46%	\$111,404	-\$111,404	0.00	----
Caucasian Females	\$1,742,150	7.23%	16.18%	\$3,899,131	-\$2,156,982	0.45	< .05 *
Non-minority Males	\$20,466,469	84.92%	65.18%	\$15,707,929	\$4,758,541	1.30	< .05 †
TOTAL	\$24,100,344	100.00%	100.00%	\$24,100,344			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$397,238	1.65%	5.55%	\$1,336,845	-\$939,607	0.30	< .05 *
Minority Males	\$1,494,488	6.20%	13.10%	\$3,156,440	-\$1,661,952	0.47	< .05 *
Caucasian Females	\$1,742,150	7.23%	16.18%	\$3,899,131	-\$2,156,982	0.45	< .05 *
Non-minority Males	\$20,466,469	84.92%	65.18%	\$15,707,929	\$4,758,541	1.30	< .05 †
TOTAL	\$24,100,344	100.00%	100.00%	\$24,100,344			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$1,891,726	7.85%	18.64%	\$4,493,285	-\$2,601,559	0.42	< .05 *
Caucasian Female Business Enterprises	\$1,742,150	7.23%	16.18%	\$3,899,131	-\$2,156,982	0.45	< .05 *
Minority and Caucasian Female Business Enterprises	\$3,633,875	15.08%	34.82%	\$8,392,416	-\$4,758,541	0.43	< .05 *
Non-minority Male Business Enterprises	\$20,466,469	84.92%	65.18%	\$15,707,929	\$4,758,541	1.30	< .05 †

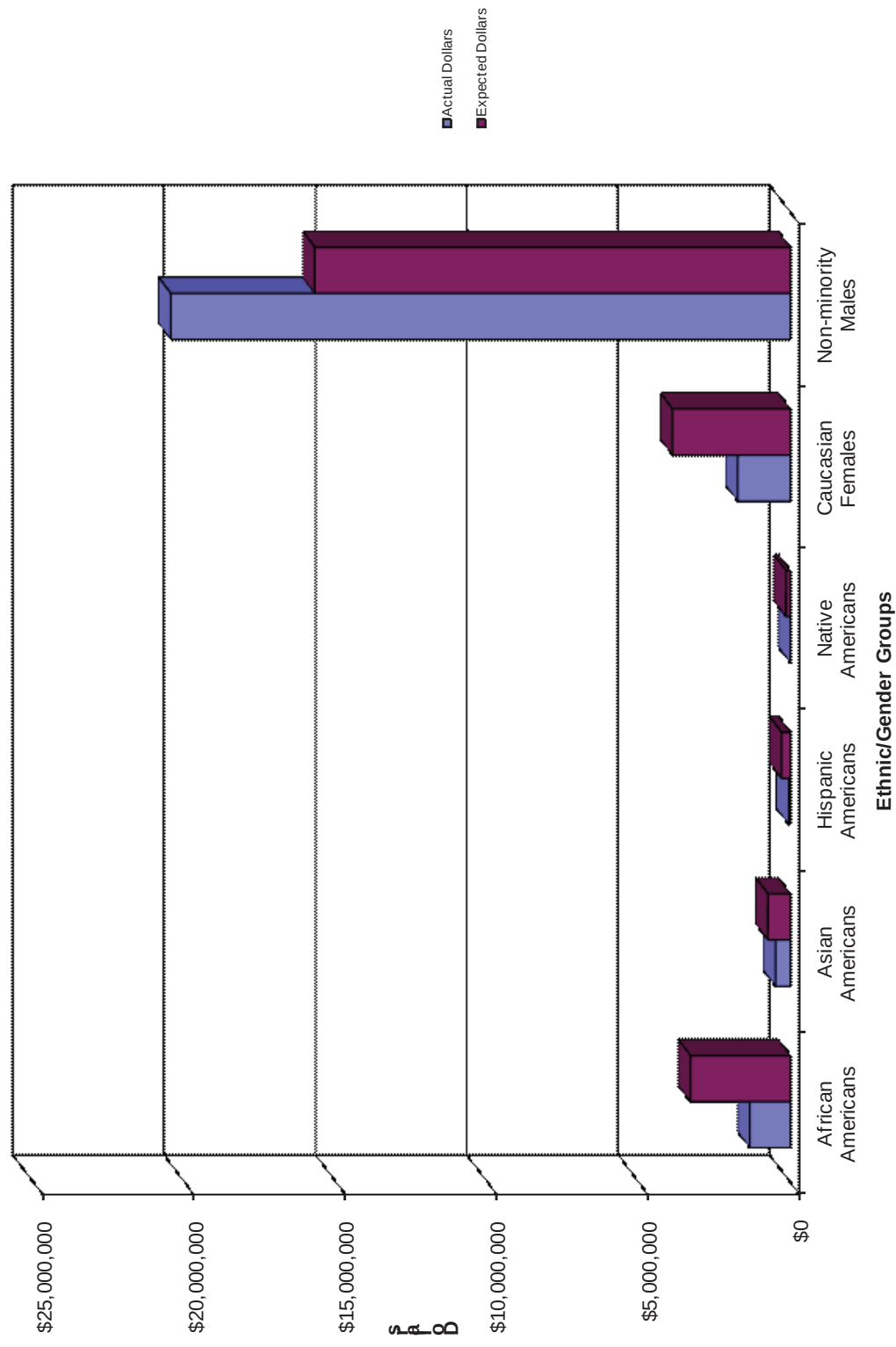
(*) denotes a statistically significant underutilization.

(†) 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 7.11: Disparity Analysis: Professional Services Prime Contracts \$50,001 to \$249,999, January 1, 2009, to December 31, 2013



4. Supplies and Services Prime Contracts \$50,001 to \$249,999

The disparity analysis of supplies and services valued between \$50,001 and \$249,999 is described below and depicted in Table 7.13 and Chart 7.12.

African Americans represent 13.01% of the available supplies and services businesses and received 3.48% of the dollars for supplies and services prime contracts valued between \$50,001 and \$249,999. This underutilization is statistically significant.

Asian Americans represent 1.28% of the available supplies and services businesses and received 0.29% of the dollars for supplies and services prime contracts valued between \$50,001 and \$249,999. This underutilization is statistically significant.

Hispanic Americans represent 0.77% of the available supplies and services businesses and received 0.00% of the dollars for supplies and services prime contracts valued between \$50,001 and \$249,999. There are too few available firms to test statistical significance of this underutilization.

Native Americans represent 0.13% of the available supplies and services businesses and received 0.00% of the dollars for supplies and services prime contracts valued between \$50,001 and \$249,999. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 15.18% of the available supplies and services businesses and received 3.77% of the dollars for supplies and services valued between \$50,001 and \$249,999. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 11.86% of the available supplies and services businesses and received 4.25% of the dollars for supplies and services valued between \$50,001 and \$249,999. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 27.04% of the available supplies and services businesses and received 8.02% of the dollars for supplies and services valued between \$50,001 and \$249,999. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 72.96% of the available supplies and services businesses and received 91.98% of the dollars for supplies and services valued between \$50,001 and \$249,999. This overutilization is statistically significant.



**Table 7.13: Disparity Analysis: Supplies and Services Prime Contracts \$50,001 to \$249,999,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$1,891,405	3.48%	13.01%	\$7,076,001	-\$5,184,597	0.27	< .05 *
Asian Americans	\$159,205	0.29%	1.28%	\$693,726	-\$534,520	0.23	< .05 *
Hispanic Americans	\$0	0.00%	0.77%	\$416,235	-\$416,235	0.00	----
Native Americans	\$0	0.00%	0.13%	\$69,373	-\$69,373	0.00	----
Caucasian Females	\$2,311,310	4.25%	11.86%	\$6,451,648	-\$4,140,338	0.36	< .05 *
Non-minority Males	\$50,026,169	91.98%	72.96%	\$39,681,106	\$10,345,063	1.26	< .05 †
TOTAL	\$54,388,090	100.00%	100.00%	\$54,388,090			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$1,044,731	1.92%	3.57%	\$1,942,432	-\$897,700	0.54	< .05 *
African American Males	\$846,674	1.56%	9.44%	\$5,133,570	-\$4,286,896	0.16	< .05 *
Asian American Females	\$100,000	0.18%	0.13%	\$69,373	\$30,627	1.44	**
Asian American Males	\$59,205	0.11%	1.15%	\$624,353	-\$565,148	0.09	< .05 *
Hispanic American Females	\$0	0.00%	0.26%	\$138,745	-\$138,745	0.00	----
Hispanic American Males	\$0	0.00%	0.51%	\$277,490	-\$277,490	0.00	----
Native American Females	\$0	0.00%	0.00%	\$0	\$0	----	----
Native American Males	\$0	0.00%	0.13%	\$69,373	-\$69,373	0.00	----
Caucasian Females	\$2,311,310	4.25%	11.86%	\$6,451,648	-\$4,140,338	0.36	< .05 *
Non-minority Males	\$50,026,169	91.98%	72.96%	\$39,681,106	\$10,345,063	1.26	< .05 †
TOTAL	\$54,388,090	100.00%	100.00%	\$54,388,090			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$1,144,731	2.10%	3.95%	\$2,150,549	-\$1,005,818	0.53	< .05 *
Minority Males	\$905,879	1.67%	11.22%	\$6,104,786	-\$5,198,907	0.15	< .05 *
Caucasian Females	\$2,311,310	4.25%	11.86%	\$6,451,648	-\$4,140,338	0.36	< .05 *
Non-minority Males	\$50,026,169	91.98%	72.96%	\$39,681,106	\$10,345,063	1.26	< .05 †
TOTAL	\$54,388,090	100.00%	100.00%	\$54,388,090			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$2,050,610	3.77%	15.18%	\$8,255,335	-\$6,204,725	0.25	< .05 *
Caucasian Female Business Enterprises	\$2,311,310	4.25%	11.86%	\$6,451,648	-\$4,140,338	0.36	< .05 *
Minority and Caucasian Female Business Enterprises	\$4,361,920	8.02%	27.04%	\$14,706,983	-\$10,345,063	0.30	< .05 *
Non-minority Male Business Enterprises	\$50,026,169	91.98%	72.96%	\$39,681,106	\$10,345,063	1.26	< .05 †

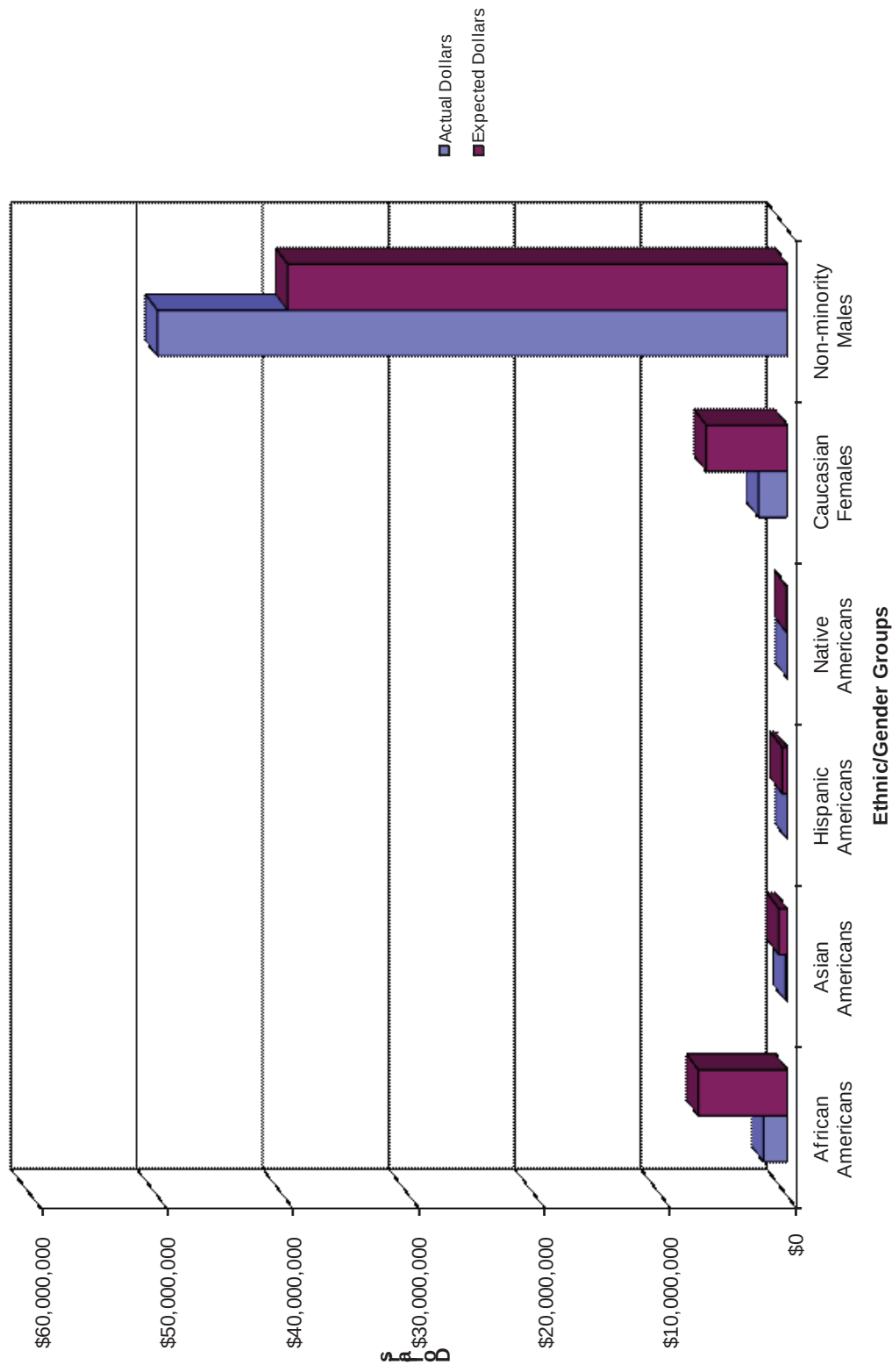
(*) denotes a statistically significant underutilization.

(†) 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 7.12: Disparity Analysis: Supplies and Services Prime Contracts \$50,001 to \$249,999,
January 1, 2009, to December 31, 2013**



D. Disparity Analysis: All Prime Contracts \$5,001 to \$50,000 by Industry

1. All Industries Prime Contracts \$5,001 to \$50,000

The disparity analysis for prime contracts valued between \$5,001 and \$50,000 in all industries is described below and depicted in Table 7.14 and Chart 7.13.

African Americans represent 14.90% of the available businesses and received 4.66% of the dollars for prime contracts valued between \$5,001 and \$50,000 in all industries. This underutilization is statistically significant.

Asian Americans represent 1.96% of the available businesses and received 0.73% of the dollars for prime contracts valued between \$5,001 and \$50,000 in all industries. This underutilization is statistically significant.

Hispanic Americans represent 0.81% of the available businesses and received 0.12% of the dollars for prime contracts valued between \$5,001 and \$50,000 in all industries. There are too few available firms to test statistical significance of this underutilization.

Native Americans represent 0.40% of the available businesses and received 1.60% of the dollars for prime contracts valued between \$5,001 and \$50,000 in all industries. This statistical test is not performed for the overutilization of Native Americans.

Minority-owned Business Enterprises represent 18.08% of the available businesses and received 7.11% of the dollars for prime contracts valued between \$5,001 and \$50,000 in all industries. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 13.75% of the available businesses and received 9.45% of the dollars for prime contracts valued between \$5,001 and \$50,000 in all industries. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 31.83% of the available businesses and received 16.56% of the dollars for prime contracts valued between \$5,001 and \$50,000 in all industries. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 68.17% of the available businesses and received 83.44% of the dollars for all industries prime contracts valued between \$5,001 and \$50,000. This overutilization is statistically significant.



**Table 7.14: Disparity Analysis: All Prime Contracts \$5,001 to \$50,000,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$1,933,446	4.66%	14.90%	\$6,184,178	-\$4,250,733	0.31	< .05 *
Asian Americans	\$301,319	0.73%	1.96%	\$814,969	-\$513,650	0.37	< .05 *
Hispanic Americans	\$51,800	0.12%	0.81%	\$335,576	-\$283,776	0.15	----
Native Americans	\$665,239	1.60%	0.40%	\$167,788	\$497,451	3.96	**
Caucasian Females	\$3,920,616	9.45%	13.75%	\$5,704,785	-\$1,784,169	0.69	< .05 *
Non-minority Males	\$34,619,103	83.44%	68.17%	\$28,284,226	\$6,334,876	1.22	< .05 †
TOTAL	\$41,491,522	100.00%	100.00%	\$41,491,522			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$347,043	0.84%	3.41%	\$1,414,211	-\$1,067,168	0.25	< .05 *
African American Males	\$1,586,402	3.82%	11.50%	\$4,769,967	-\$3,183,565	0.33	< .05 *
Asian American Females	\$50,960	0.12%	0.64%	\$263,667	-\$212,706	0.19	----
Asian American Males	\$250,358	0.60%	1.33%	\$551,303	-\$300,944	0.45	< .05 *
Hispanic American Females	\$7,250	0.02%	0.17%	\$71,909	-\$64,659	0.10	----
Hispanic American Males	\$44,550	0.11%	0.64%	\$263,667	-\$219,117	0.17	----
Native American Females	\$0	0.00%	0.12%	\$47,939	-\$47,939	0.00	----
Native American Males	\$665,239	1.60%	0.29%	\$119,848	\$545,391	5.55	**
Caucasian Females	\$3,920,616	9.45%	13.75%	\$5,704,785	-\$1,784,169	0.69	< .05 *
Non-minority Males	\$34,619,103	83.44%	68.17%	\$28,284,226	\$6,334,876	1.22	< .05 †
TOTAL	\$41,491,522	100.00%	100.00%	\$41,491,522			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$405,254	0.98%	4.33%	\$1,797,726	-\$1,392,473	0.23	< .05 *
Minority Males	\$2,546,550	6.14%	13.75%	\$5,704,785	-\$3,158,235	0.45	< .05 *
Caucasian Females	\$3,920,616	9.45%	13.75%	\$5,704,785	-\$1,784,169	0.69	< .05 *
Non-minority Males	\$34,619,103	83.44%	68.17%	\$28,284,226	\$6,334,876	1.22	< .05 †
TOTAL	\$41,491,522	100.00%	100.00%	\$41,491,522			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$2,951,803	7.11%	18.08%	\$7,502,511	-\$4,550,707	0.39	< .05 *
Caucasian Female Business Enterprises	\$3,920,616	9.45%	13.75%	\$5,704,785	-\$1,784,169	0.69	< .05 *
Minority and Caucasian Female Business Enterprises	\$6,872,419	16.56%	31.83%	\$13,207,295	-\$6,334,876	0.52	< .05 *
Non-minority Male Business Enterprises	\$34,619,103	83.44%	68.17%	\$28,284,226	\$6,334,876	1.22	< .05 †

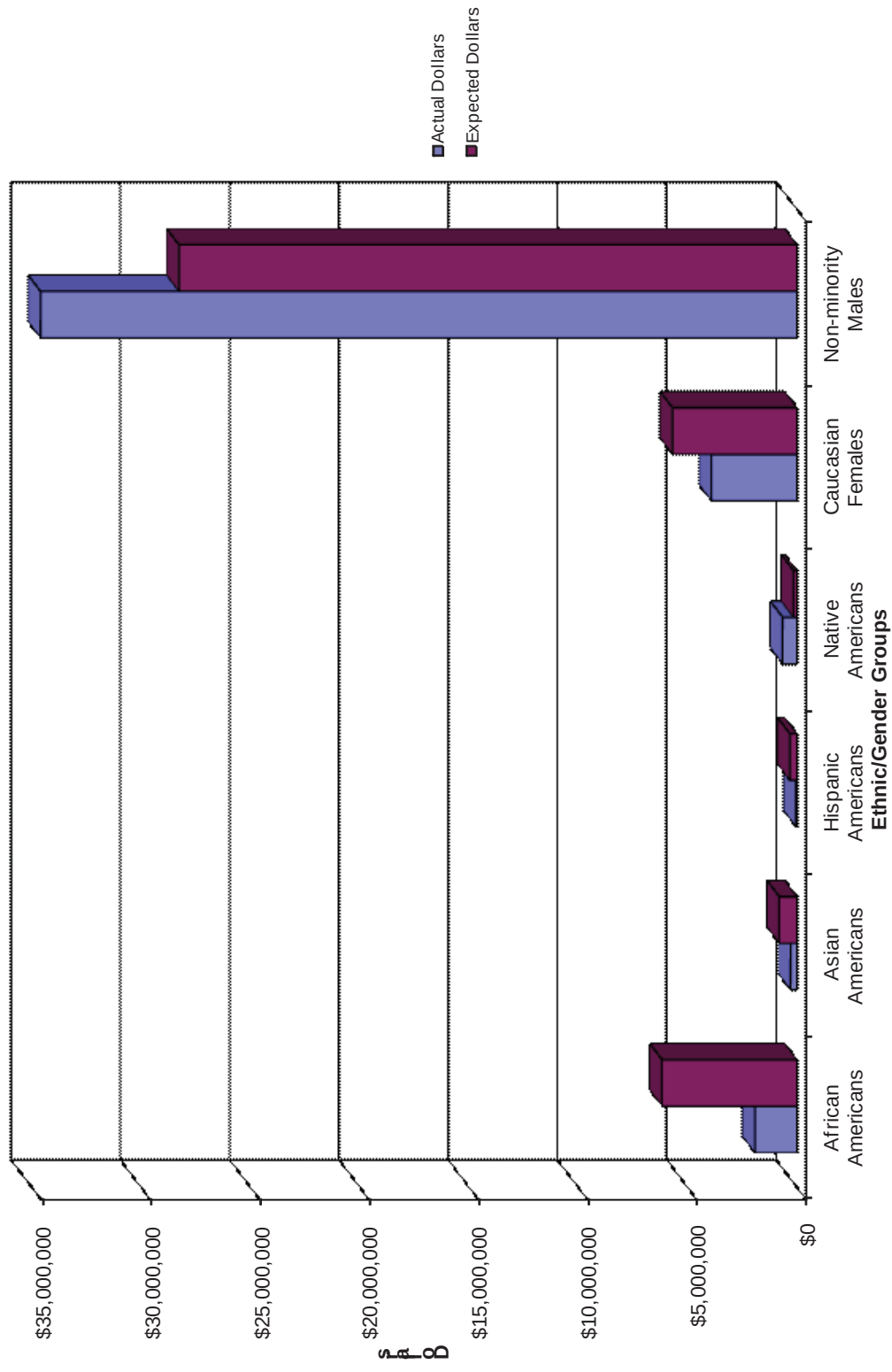
(*) denotes a statistically significant underutilization.

(†) 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 7.13: Disparity Analysis: All Prime Contracts \$5,001 to \$50,000,
January 1, 2009, to December 31, 2013**



2. Construction Prime Contracts \$5,001 to \$50,000

The disparity analysis of construction prime contracts valued between \$5,001 and \$50,000 is described below and depicted in Table 7.15 and Chart 7.14.

African Americans represent 20.96% of the available construction businesses and received 10.11% of the dollars for construction prime contracts valued between \$5,001 and \$50,000. This underutilization is statistically significant.

Asian Americans represent 1.59% of the available construction businesses and received 0.47% of the dollars for construction prime contracts valued between \$5,001 and \$50,000. This underutilization is statistically significant.

Hispanic Americans represent 0.46% of the available construction businesses and received 0.00% of the dollars for construction prime contracts valued between \$5,001 and \$50,000. There are too few available firms to test statistical significance of this underutilization.

Native Americans represent 0.68% of the available construction businesses and received 6.44% of the dollars for construction prime contracts valued between \$5,001 and \$50,000. This statistical test is not performed for the overutilization of Native Americans.

Minority-owned Business Enterprises represent 23.69% of the available construction businesses and received 17.02% of the dollars for construction prime contracts valued between \$5,001 and \$50,000. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 12.98% of the available construction businesses and received 22.99% of the dollars for construction prime contracts valued between \$5,001 and \$50,000. This statistical test is not performed for the overutilization of Caucasian Female Business Enterprises.

Minority and Caucasian Female Business Enterprises represent 36.67% of the available construction businesses and received 40.00% of the dollars for construction prime contracts valued between \$5,001 and \$50,000. This statistical test is not performed for the overutilization of Minority and Caucasian Female Business Enterprises.

Non-minority Male-owned Business Enterprises represent 63.33% of the available construction businesses and received 60.00% of the dollars for construction prime contracts valued between \$5,001 and \$50,000. This statistical test is not performed for the underutilization of Non-minority Male-owned Business Enterprises.



**Table 7.15: Disparity Analysis: Construction Prime Contracts \$5,001 to \$50,000,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$1,044,993	10.11%	20.96%	\$2,165,153	-\$1,120,159	0.48	<.05 *
Asian Americans	\$48,061	0.47%	1.59%	\$164,740	-\$116,679	0.29	<.05 *
Hispanic Americans	\$0	0.00%	0.46%	\$47,069	-\$47,069	0.00	----
Native Americans	\$665,239	6.44%	0.68%	\$70,603	\$594,636	9.42	**
Caucasian Females	\$2,374,826	22.99%	12.98%	\$1,341,453	\$1,033,373	1.77	**
Non-minority Males	\$6,198,424	60.00%	63.33%	\$6,542,526	-\$344,103	0.95	**
TOTAL	\$10,331,543	100.00%	100.00%	\$10,331,543			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$30,294	0.29%	2.28%	\$235,343	-\$205,049	0.13	<.05 *
African American Males	\$1,014,700	9.82%	18.68%	\$1,929,810	-\$915,110	0.53	<.05 *
Asian American Females	\$0	0.00%	0.46%	\$47,069	-\$47,069	0.00	----
Asian American Males	\$48,061	0.47%	1.14%	\$117,671	-\$69,610	0.41	<.05 *
Hispanic American Females	\$0	0.00%	0.23%	\$23,534	-\$23,534	0.00	----
Hispanic American Males	\$0	0.00%	0.23%	\$23,534	-\$23,534	0.00	----
Native American Females	\$0	0.00%	0.23%	\$23,534	-\$23,534	0.00	----
Native American Males	\$665,239	6.44%	0.46%	\$47,069	\$618,170	14.13	**
Caucasian Females	\$2,374,826	22.99%	12.98%	\$1,341,453	\$1,033,373	1.77	**
Non-minority Males	\$6,198,424	60.00%	63.33%	\$6,542,526	-\$344,103	0.95	**
TOTAL	\$10,331,543	100.00%	100.00%	\$10,331,543			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$30,294	0.29%	3.19%	\$329,480	-\$299,186	0.09	<.05 *
Minority Males	\$1,728,000	16.73%	20.50%	\$2,118,084	-\$390,084	0.82	<.05 *
Caucasian Females	\$2,374,826	22.99%	12.98%	\$1,341,453	\$1,033,373	1.77	**
Non-minority Males	\$6,198,424	60.00%	63.33%	\$6,542,526	-\$344,103	0.95	**
TOTAL	\$10,331,543	100.00%	100.00%	\$10,331,543			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$1,758,293	17.02%	23.69%	\$2,447,564	-\$689,270	0.72	<.05 *
Caucasian Female Business Enterprises	\$2,374,826	22.99%	12.98%	\$1,341,453	\$1,033,373	1.77	**
Minority and Caucasian Female Business Enterprises	\$4,133,119	40.00%	36.67%	\$3,789,017	\$344,103	1.09	**
Non-minority Male Business Enterprises	\$6,198,424	60.00%	63.33%	\$6,542,526	-\$344,103	0.95	**

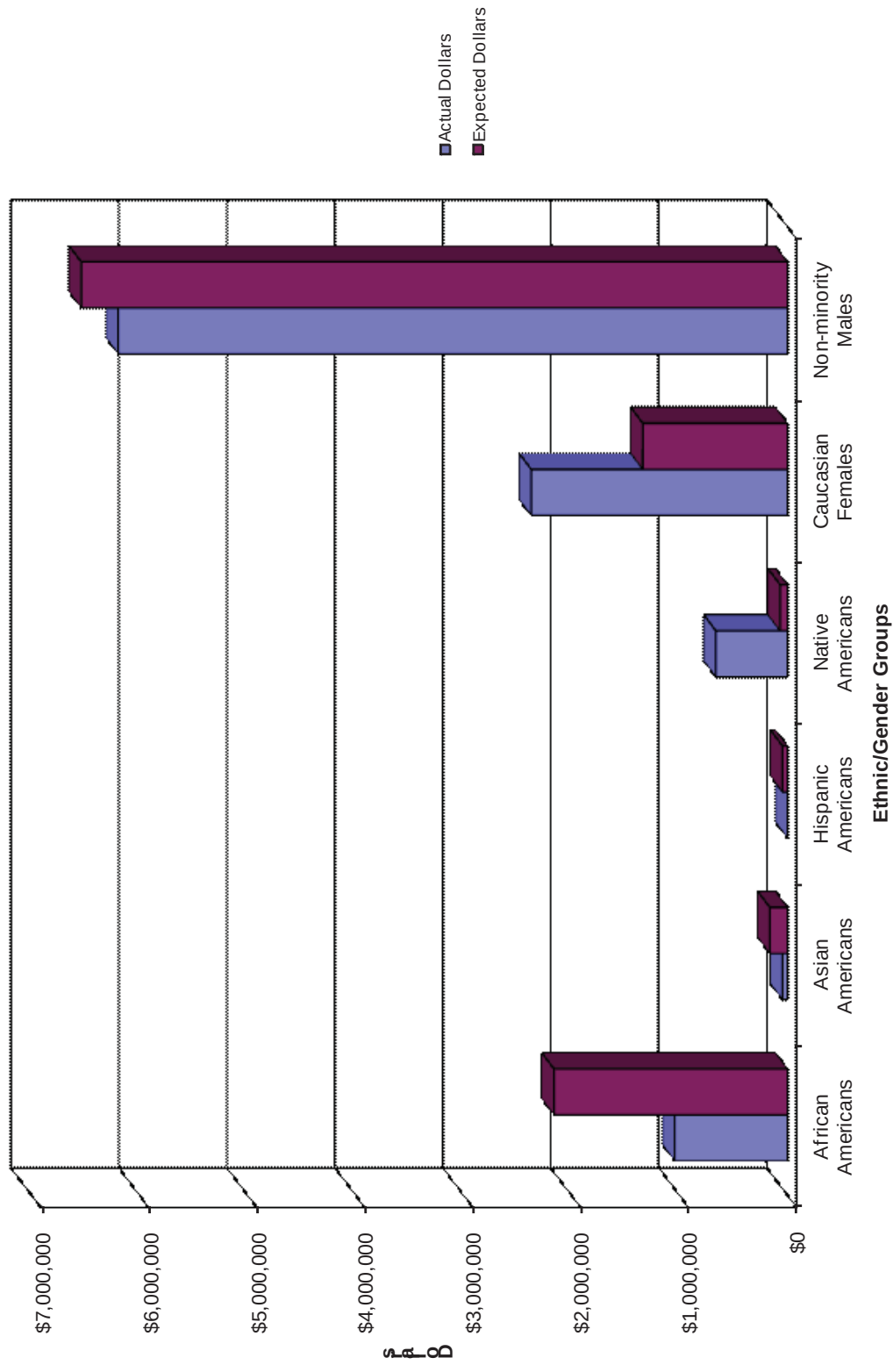
(*) denotes a statistically significant underutilization.

(+) 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 7.14: Disparity Analysis: Construction Prime Contracts \$5,001 to \$50,000,
January 1, 2009, to December 31, 2013**



3. Professional Services Prime Contracts \$5,001 to \$50,000

The disparity analysis of professional services prime contracts valued between \$5,001 and \$50,000 is described below and depicted in Table 7.16 and Chart 7.15.

African Americans represent 13.71% of the available professional services businesses and received 8.36% of the dollars for all professional services prime contracts valued between \$5,001 and \$50,000. This underutilization is statistically significant.

Asian Americans represent 3.08% of the available professional services businesses and received 1.39% of the dollars for all professional services prime contracts valued between \$5,001 and \$50,000. This underutilization is not statistically significant.

Hispanic Americans represent 1.23% of the available professional services businesses and received 0.64% of the dollars for all professional services prime contracts valued between \$5,001 and \$50,000. This underutilization is not statistically significant.

Native Americans represent 0.62% of the available professional services businesses and received 0.00% of the dollars for all professional services prime contracts valued between \$5,001 and \$50,000. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 18.64% of the available professional services businesses and received 10.39% of the dollars for all professional services prime contracts valued between \$5,001 and \$50,000. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 16.18% of the available professional services businesses and received 11.14% of the dollars for all professional services prime contracts valued between \$5,001 and \$50,000. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 34.82% of the available professional services businesses and received 21.53% of the dollars for all professional services prime contracts valued between \$5,001 and \$50,000. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 65.18% of the available professional services businesses and received 78.47% of the dollars for all professional services prime contracts valued between \$5,001 and \$50,000. This overutilization is statistically significant.



**Table 7.16: Disparity Analysis: Professional Services Prime Contracts \$5,001 to \$50,000,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$586,399	8.36%	13.71%	\$961,716	-\$375,318	0.61	< .05 *
Asian Americans	\$97,617	1.39%	3.08%	\$216,116	-\$118,499	0.45	not significant
Hispanic Americans	\$44,550	0.64%	1.23%	\$86,446	-\$41,896	0.52	not significant
Native Americans	\$0	0.00%	0.62%	\$43,223	-\$43,223	0.00	----
Caucasian Females	\$781,135	11.14%	16.18%	\$1,134,609	-\$353,474	0.69	< .05 *
Non-minority Males	\$5,503,265	78.47%	65.18%	\$4,570,854	\$932,411	1.20	< .05 †
TOTAL	\$7,012,966	100.00%	100.00%	\$7,012,966			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$143,948	2.05%	4.01%	\$280,951	-\$137,003	0.51	not significant
African American Males	\$442,451	6.31%	9.71%	\$680,766	-\$238,315	0.65	< .05 *
Asian American Females	\$50,960	0.73%	1.23%	\$86,446	-\$35,486	0.59	not significant
Asian American Males	\$46,656	0.67%	1.85%	\$129,670	-\$83,013	0.36	not significant
Hispanic American Females	\$0	0.00%	0.15%	\$10,806	-\$10,806	0.00	----
Hispanic American Males	\$44,550	0.64%	1.08%	\$75,641	-\$31,091	0.59	not significant
Native American Females	\$0	0.00%	0.15%	\$10,806	-\$10,806	0.00	----
Native American Males	\$0	0.00%	0.46%	\$32,417	-\$32,417	0.00	----
Caucasian Females	\$781,135	11.14%	16.18%	\$1,134,609	-\$353,474	0.69	< .05 *
Non-minority Males	\$5,503,265	78.47%	65.18%	\$4,570,854	\$932,411	1.20	< .05 †
TOTAL	\$7,012,966	100.00%	100.00%	\$7,012,966			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$194,908	2.78%	5.55%	\$389,009	-\$194,101	0.50	< .05 *
Minority Males	\$533,657	7.61%	13.10%	\$918,493	-\$384,836	0.58	< .05 *
Caucasian Females	\$781,135	11.14%	16.18%	\$1,134,609	-\$353,474	0.69	< .05 *
Non-minority Males	\$5,503,265	78.47%	65.18%	\$4,570,854	\$932,411	1.20	< .05 †
TOTAL	\$7,012,966	100.00%	100.00%	\$7,012,966			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$728,565	10.39%	18.64%	\$1,307,502	-\$578,937	0.56	< .05 *
Caucasian Female Business Enterprises	\$781,135	11.14%	16.18%	\$1,134,609	-\$353,474	0.69	< .05 *
Minority and Caucasian Female Business Enterprises	\$1,509,700	21.53%	34.82%	\$2,442,111	-\$932,411	0.62	< .05 *
Non-minority Male Business Enterprises	\$5,503,265	78.47%	65.18%	\$4,570,854	\$932,411	1.20	< .05 †

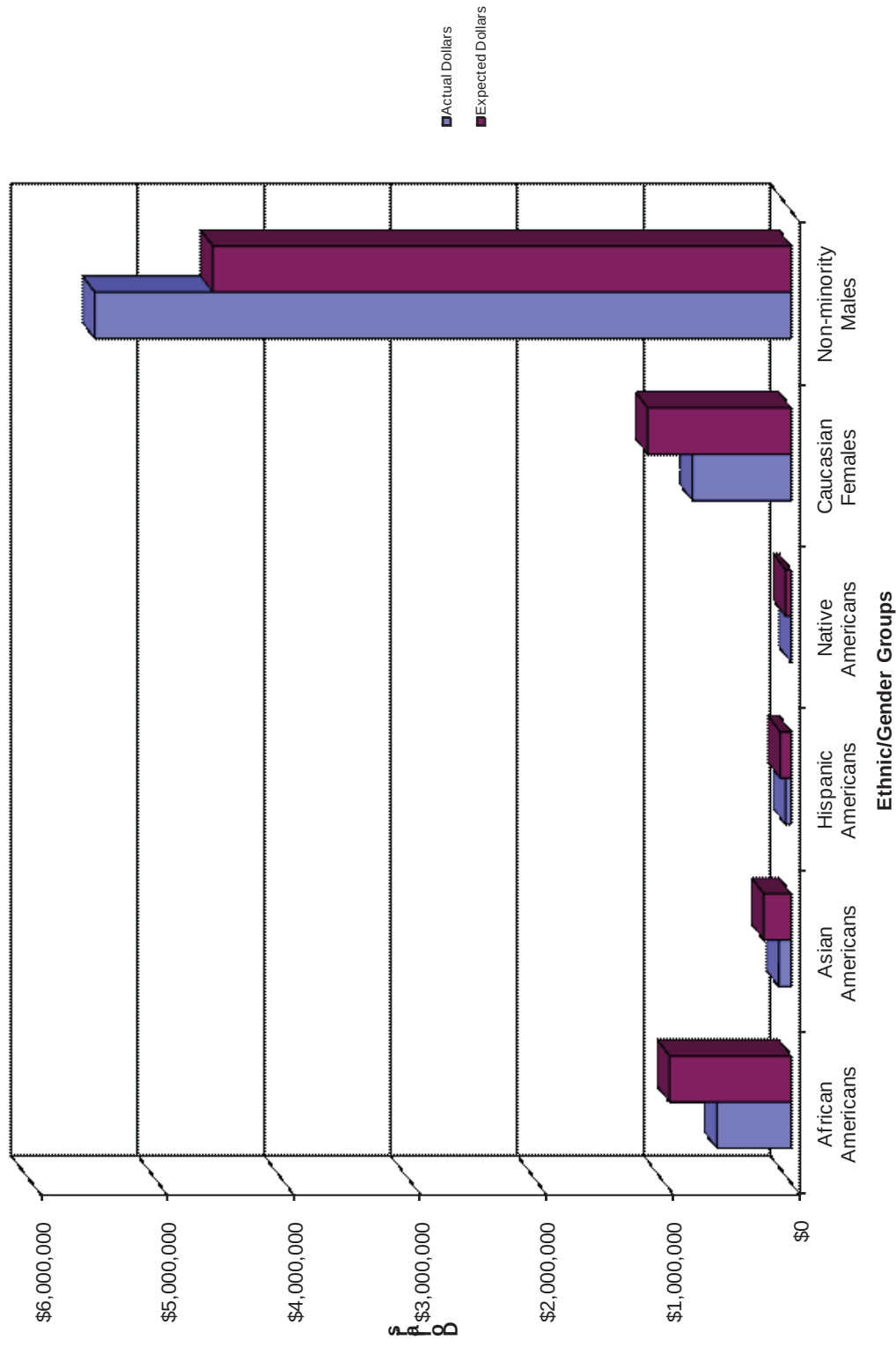
(*) denotes a statistically significant underutilization.

(†) 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 7.15: Disparity Analysis: Professional Services Prime Contracts \$5,001 to \$50,000,
January 1, 2009, to December 31, 2013**



4. Supplies and Services Prime Contracts \$5,001 to \$50,000

The disparity analysis of supplies and services prime contracts valued between \$5,001 and \$50,000 is described below and depicted in Table 7.17 and Chart 7.16.

African Americans represent 13.01% of the available supplies and services businesses and received 1.25% of the dollars for supplies and services prime contracts valued between \$5,001 and \$50,000. This underutilization is statistically significant.

Asian Americans represent 1.28% of the available supplies and services businesses and received 0.64% of the dollars for supplies and services prime contracts valued between \$5,001 and \$50,000. This underutilization is statistically significant.

Hispanic Americans represent 0.77% of the available supplies and services businesses and received 0.03% of the dollars for supplies and services prime contracts valued between \$5,001 and \$50,000. There are too few available firms to test statistical significance of this underutilization.

Native Americans represent 0.13% of the available supplies and services businesses and received 0.00% of the dollars for supplies and services prime contracts valued between \$5,001 and \$50,000. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 15.18% of the available supplies and services businesses and received 1.93% of the dollars for supplies and services prime contracts valued between \$5,001 and \$50,000. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 11.86% of the available supplies and services businesses and received 3.17% of the dollars for supplies and services prime contracts valued between \$5,001 and \$50,000. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 27.04% of the available supplies and services businesses and received 5.09% of the dollars for supplies and services prime contracts valued between \$5,001 and \$50,000. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 72.96% of the available supplies and services businesses and received 94.91% of the dollars for supplies and services prime contracts valued between \$5,001 and \$50,000. This overutilization is statistically significant.



**Table 7.17: Disparity Analysis: Supplies and Services Prime Contracts \$5,001 to \$50,000,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$302,054	1.25%	13.01%	\$3,141,576	-\$2,839,522	0.10	< .05 *
Asian Americans	\$155,641	0.64%	1.28%	\$307,998	-\$152,357	0.51	< .05 *
Hispanic Americans	\$7,250	0.03%	0.77%	\$184,799	-\$177,549	0.04	----
Native Americans	\$0	0.00%	0.13%	\$30,800	-\$30,800	0.00	----
Caucasian Females	\$764,655	3.17%	11.86%	\$2,864,378	-\$2,099,723	0.27	< .05 *
Non-minority Males	\$22,917,414	94.91%	72.96%	\$17,617,463	\$5,299,950	1.30	< .05 †
TOTAL	\$24,147,013	100.00%	100.00%	\$24,147,013			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$172,802	0.72%	3.57%	\$862,393	-\$689,592	0.20	< .05 *
African American Males	\$129,252	0.54%	9.44%	\$2,279,182	-\$2,149,930	0.06	< .05 *
Asian American Females	\$0	0.00%	0.13%	\$30,800	-\$30,800	0.00	----
Asian American Males	\$155,641	0.64%	1.15%	\$277,198	-\$121,557	0.56	not significant
Hispanic American Females	\$7,250	0.03%	0.26%	\$61,600	-\$54,350	0.12	----
Hispanic American Males	\$0	0.00%	0.51%	\$123,199	-\$123,199	0.00	----
Native American Females	\$0	0.00%	0.00%	\$0	\$0	----	----
Native American Males	\$0	0.00%	0.13%	\$30,800	-\$30,800	0.00	----
Caucasian Females	\$764,655	3.17%	11.86%	\$2,864,378	-\$2,099,723	0.27	< .05 *
Non-minority Males	\$22,917,414	94.91%	72.96%	\$17,617,463	\$5,299,950	1.30	< .05 †
TOTAL	\$24,147,013	100.00%	100.00%	\$24,147,013			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$180,052	0.75%	3.95%	\$954,793	-\$774,741	0.19	< .05 *
Minority Males	\$284,893	1.18%	11.22%	\$2,710,379	-\$2,425,486	0.11	< .05 *
Caucasian Females	\$764,655	3.17%	11.86%	\$2,864,378	-\$2,099,723	0.27	< .05 *
Non-minority Males	\$22,917,414	94.91%	72.96%	\$17,617,463	\$5,299,950	1.30	< .05 †
TOTAL	\$24,147,013	100.00%	100.00%	\$24,147,013			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$464,945	1.93%	15.18%	\$3,665,172	-\$3,200,227	0.13	< .05 *
Caucasian Female Business Enterprises	\$764,655	3.17%	11.86%	\$2,864,378	-\$2,099,723	0.27	< .05 *
Minority and Caucasian Female Business Enterprises	\$1,229,599	5.09%	27.04%	\$6,529,549	-\$5,299,950	0.19	< .05 *
Non-minority Male Business Enterprises	\$22,917,414	94.91%	72.96%	\$17,617,463	\$5,299,950	1.30	< .05 †

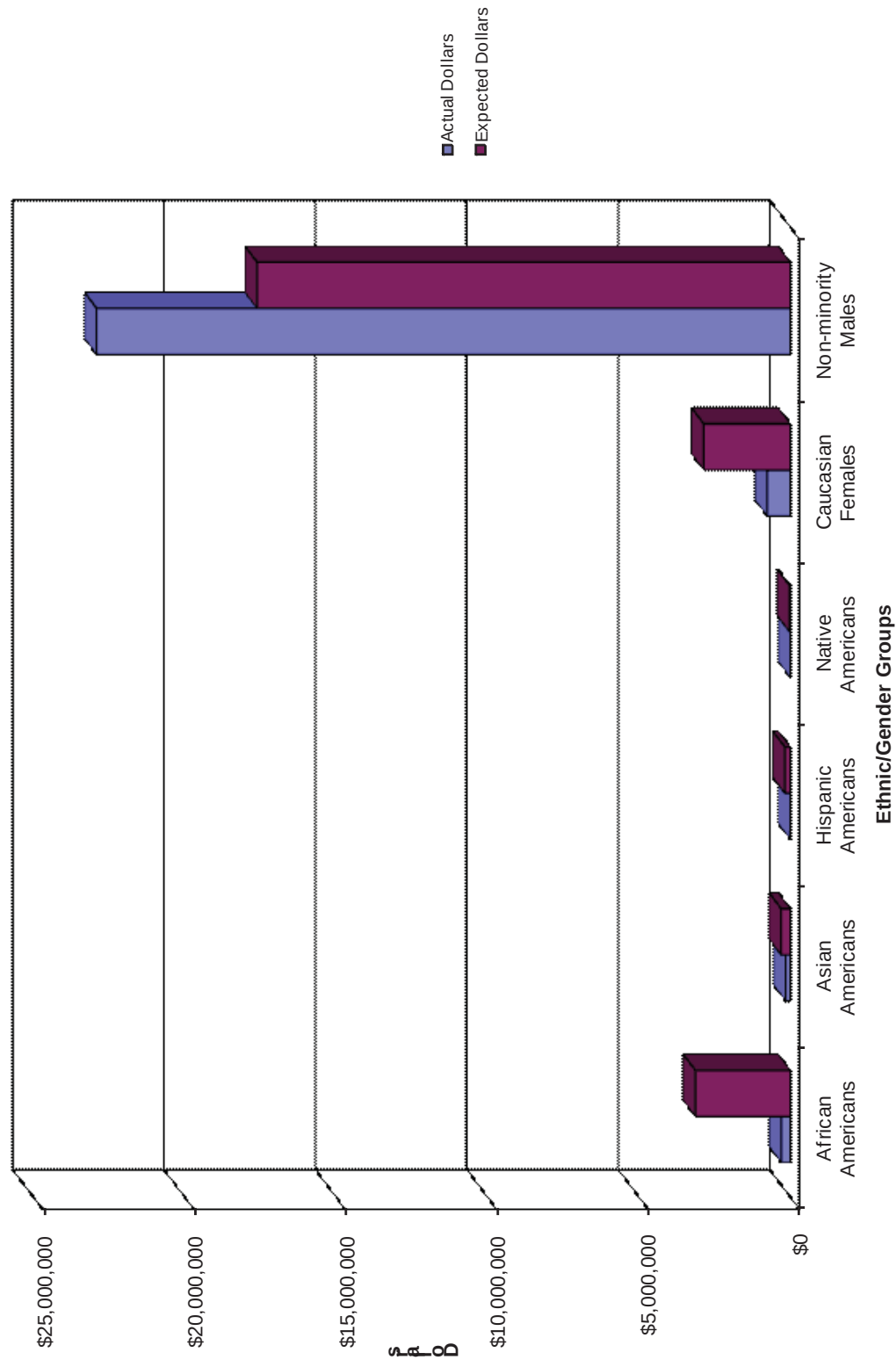
(*) denotes a statistically significant underutilization.

(†) 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 7.16: Disparity Analysis: Supplies and Services Prime Contracts \$5,001 to \$50,000,
January 1, 2009, to December 31, 2013**



E. Disparity Analysis: All Prime Contracts \$5,000 and Under by Industry

1. All Industries Prime Contracts \$5,000 and Under

The disparity analysis for prime contracts valued at \$5,000 and under in all industries is described below and depicted in Table 7.18 and Chart 7.17.

African Americans represent 14.90% of all available businesses and received 5.54% of the dollars for prime contracts valued at \$5,000 and under in all industries. This underutilization is statistically significant.

Asian Americans represent 1.96% of all available businesses and received 0.84% of the dollars for prime contracts valued at \$5,000 and under in all industries. This underutilization is statistically significant.

Hispanic Americans represent 0.81% of all available businesses and received 0.28% of the dollars for prime contracts valued at \$5,000 and under in all industries. There are too few available firms to test statistical significance of this underutilization.

Native Americans represent 0.40% of all available businesses and received 0.09% of the dollars for prime contracts valued at \$5,000 and under in all industries. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 18.08% of all available businesses and received 6.74% of the dollars for prime contracts valued at \$5,000 and under in all industries. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 13.75% of all available businesses and received 9.59% of the dollars for prime contracts valued at \$5,000 and under in all industries. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 31.83% of all available businesses and received 16.33% of the dollars for prime contracts valued at \$5,000 and under in all industries. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 68.17% of all available businesses and received 83.67% of the dollars for prime contracts valued at \$5,000 and under in all industries. This overutilization is statistically significant.



**Table 7.18: Disparity Analysis: All Prime Contracts \$5,000 and Under,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$649,889	5.54%	14.90%	\$1,747,930	-\$1,098,040	0.37	< .05 *
Asian Americans	\$98,187	0.84%	1.96%	\$230,347	-\$132,160	0.43	< .05 *
Hispanic Americans	\$32,367	0.28%	0.81%	\$94,849	-\$62,482	0.34	----
Native Americans	\$10,250	0.09%	0.40%	\$47,424	-\$37,174	0.22	----
Caucasian Females	\$1,124,974	9.59%	13.75%	\$1,612,431	-\$487,457	0.70	< .05 *
Non-minority Males	\$9,811,721	83.67%	68.17%	\$7,994,406	\$1,817,314	1.23	< .05 †
TOTAL	\$11,727,388	100.00%	100.00%	\$11,727,388			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$220,413	1.88%	3.41%	\$399,720	-\$179,307	0.55	< .05 *
African American Males	\$429,476	3.66%	11.50%	\$1,348,209	-\$918,733	0.32	< .05 *
Asian American Females	\$2,613	0.02%	0.64%	\$74,524	-\$71,911	0.04	----
Asian American Males	\$95,574	0.81%	1.33%	\$155,823	-\$60,249	0.61	< .05 *
Hispanic American Females	\$0	0.00%	0.17%	\$20,325	-\$20,325	0.00	----
Hispanic American Males	\$32,367	0.28%	0.64%	\$74,524	-\$42,157	0.43	----
Native American Females	\$0	0.00%	0.12%	\$13,550	-\$13,550	0.00	----
Native American Males	\$10,250	0.09%	0.29%	\$33,875	-\$23,625	0.30	----
Caucasian Females	\$1,124,974	9.59%	13.75%	\$1,612,431	-\$487,457	0.70	< .05 *
Non-minority Males	\$9,811,721	83.67%	68.17%	\$7,994,406	\$1,817,314	1.23	< .05 †
TOTAL	\$11,727,388	100.00%	100.00%	\$11,727,388			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$223,026	1.90%	4.33%	\$508,119	-\$285,093	0.44	< .05 *
Minority Males	\$567,667	4.84%	13.75%	\$1,612,431	-\$1,044,764	0.35	< .05 *
Caucasian Females	\$1,124,974	9.59%	13.75%	\$1,612,431	-\$487,457	0.70	< .05 *
Non-minority Males	\$9,811,721	83.67%	68.17%	\$7,994,406	\$1,817,314	1.23	< .05 †
TOTAL	\$11,727,388	100.00%	100.00%	\$11,727,388			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$790,693	6.74%	18.08%	\$2,120,550	-\$1,329,857	0.37	< .05 *
Caucasian Female Business Enterprises	\$1,124,974	9.59%	13.75%	\$1,612,431	-\$487,457	0.70	< .05 *
Minority and Caucasian Female Business Enterprises	\$1,915,667	16.33%	31.83%	\$3,732,981	-\$1,817,314	0.51	< .05 *
Non-minority Male Business Enterprises	\$9,811,721	83.67%	68.17%	\$7,994,406	\$1,817,314	1.23	< .05 †

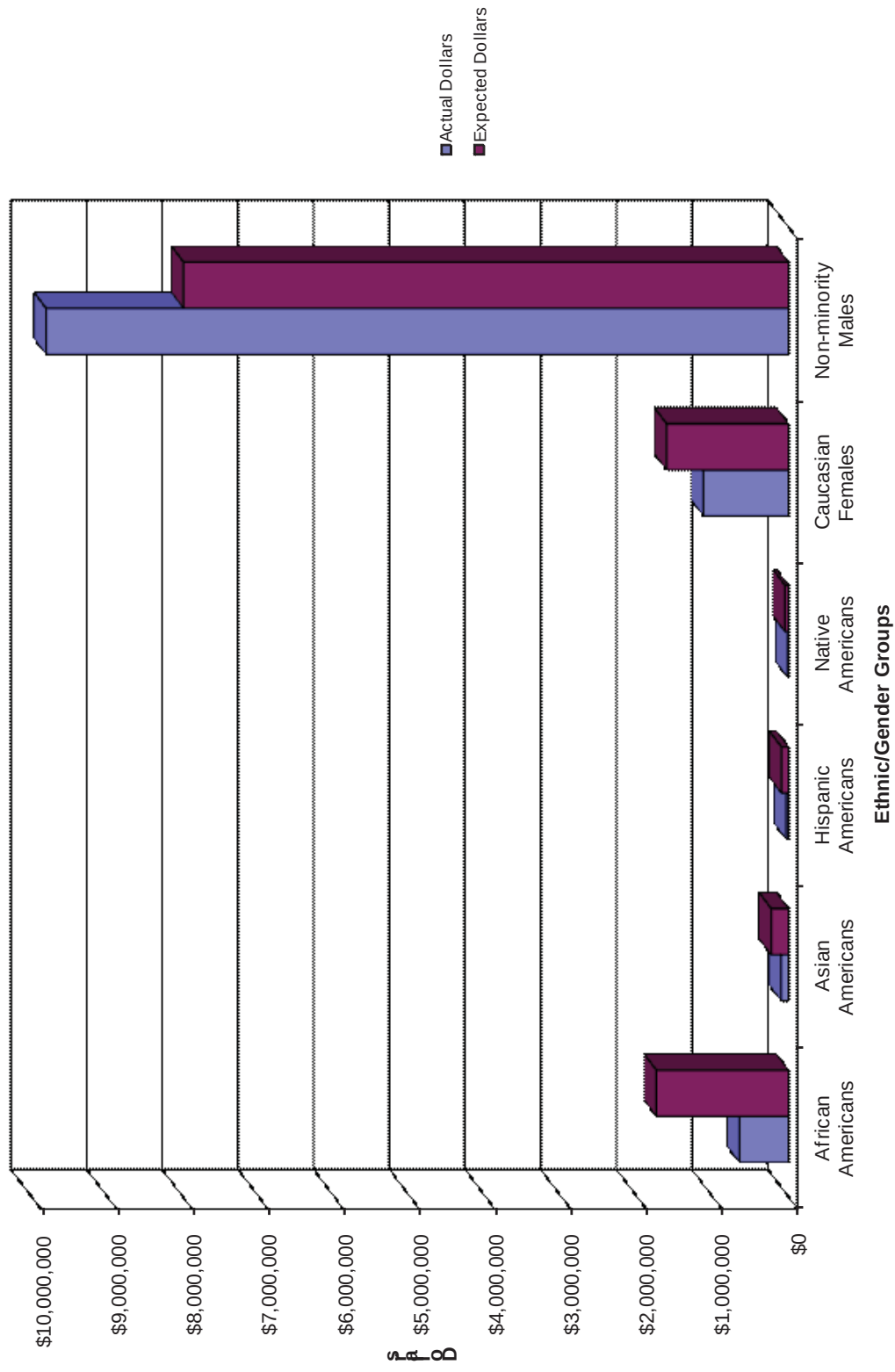
(*) denotes a statistically significant underutilization.

(†) 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 7.17: Disparity Analysis: All Prime Contracts \$5,000 and Under,
January 1, 2009, to December 31, 2013**



2. Construction Prime Contracts \$5,000 and Under

The disparity analysis of construction prime contracts valued at \$5,000 and under is described below and depicted in Table 7.19 and Chart 7.18.

African Americans represent 20.96% of the available construction businesses and received 3.66% of the dollars for construction prime contracts valued at \$5,000 and under. This underutilization is statistically significant.

Asian Americans represent 1.59% of the available construction businesses and received 0.37% of the dollars for construction prime contracts valued at \$5,000 and under. This underutilization is not statistically significant.

Hispanic Americans represent 0.46% of the available construction businesses and received 0.00% of the dollars for construction prime contracts valued at \$5,000 and under. There are too few available firms to test statistical significance of this underutilization.

Native Americans represent 0.68% of the available construction businesses and received 1.55% of the dollars for construction prime contracts valued at \$5,000 and under. The statistical test is not performed for the overutilization of Native Americans.

Minority-owned Business Enterprises represent 23.69% of the available construction businesses and received 5.58% of the dollars for construction prime contracts valued at \$5,000 and under. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 12.98% of the available construction businesses and received 16.20% of the dollars for construction prime contracts valued at \$5,000 and under. The statistical test is not performed for the overutilization of Caucasian Female Business Enterprises.

Minority and Caucasian Female Business Enterprises represent 36.67% of the available construction businesses and received 21.78% of the dollars for construction prime contracts valued at \$5,000 and under. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 63.33% of the available construction businesses and received 78.22% of the dollars for construction prime contracts valued at \$5,000 and under. This overutilization is statistically significant.



**Table 7.19: Disparity Analysis: Construction Prime Contracts \$5,000 and Under,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$24,213	3.66%	20.96%	\$138,726	-\$114,513	0.17	< .05 *
Asian Americans	\$2,473	0.37%	1.59%	\$10,555	-\$8,082	0.23	not significant
Hispanic Americans	\$0	0.00%	0.46%	\$3,016	-\$3,016	0.00	----
Native Americans	\$10,250	1.55%	0.68%	\$4,524	\$5,726	2.27	**
Caucasian Females	\$107,243	16.20%	12.98%	\$85,950	\$21,294	1.25	**
Non-minority Males	\$517,784	78.22%	63.33%	\$419,193	\$98,591	1.24	< .05 †
TOTAL	\$661,963	100.00%	100.00%	\$661,963			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$8,725	1.32%	2.28%	\$15,079	-\$6,354	0.58	not significant
African American Males	\$15,488	2.34%	18.68%	\$123,647	-\$108,159	0.13	< .05 *
Asian American Females	\$0	0.00%	0.46%	\$3,016	-\$3,016	0.00	----
Asian American Males	\$2,473	0.37%	1.14%	\$7,539	-\$5,066	0.33	not significant
Hispanic American Females	\$0	0.00%	0.23%	\$1,508	-\$1,508	0.00	----
Hispanic American Males	\$0	0.00%	0.23%	\$1,508	-\$1,508	0.00	----
Native American Females	\$0	0.00%	0.23%	\$1,508	-\$1,508	0.00	----
Native American Males	\$10,250	1.55%	0.46%	\$3,016	\$7,234	3.40	**
Caucasian Females	\$107,243	16.20%	12.98%	\$85,950	\$21,294	1.25	**
Non-minority Males	\$517,784	78.22%	63.33%	\$419,193	\$98,591	1.24	< .05 †
TOTAL	\$661,963	100.00%	100.00%	\$661,963			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$8,725	1.32%	3.19%	\$21,110	-\$12,385	0.41	< .05 *
Minority Males	\$28,211	4.26%	20.50%	\$135,710	-\$107,499	0.21	< .05 *
Caucasian Females	\$107,243	16.20%	12.98%	\$85,950	\$21,294	1.25	**
Non-minority Males	\$517,784	78.22%	63.33%	\$419,193	\$98,591	1.24	< .05 †
TOTAL	\$661,963	100.00%	100.00%	\$661,963			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$36,936	5.58%	23.69%	\$156,820	-\$119,885	0.24	< .05 *
Caucasian Female Business Enterprises	\$107,243	16.20%	12.98%	\$85,950	\$21,294	1.25	**
Minority and Caucasian Female Business Enterprises	\$144,179	21.78%	36.67%	\$242,770	-\$98,591	0.59	< .05 *
Non-minority Male Business Enterprises	\$517,784	78.22%	63.33%	\$419,193	\$98,591	1.24	< .05 †

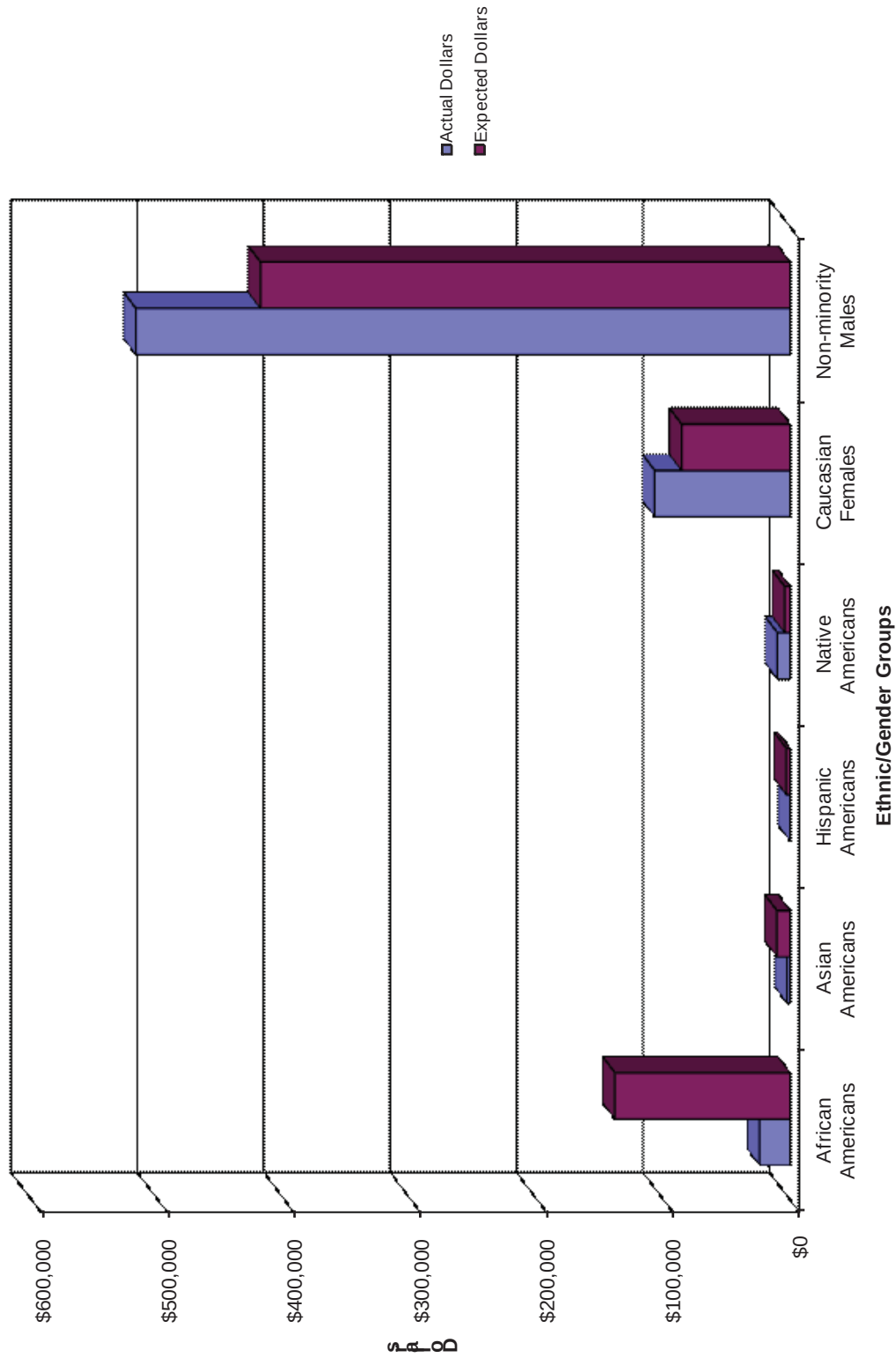
(*) denotes a statistically significant underutilization.

(†) 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 7.18: Disparity Analysis: Construction Prime Contracts \$5,000 and Under,
January 1, 2009, to December 31, 2013**



3. Supplies and Services Prime Contracts \$5,000 and Under

The disparity analysis of supplies and services prime contracts valued at \$5,000 and under is described below and depicted in Table 7.20 and Chart 7.19.

African Americans represent 13.01% of the available supplies and services businesses and received 4.49% of the dollars for supplies and services prime contracts valued at \$5,000 and under. This underutilization is statistically significant.

Asian Americans represent 1.28% of the available supplies and services businesses and received 0.95% of the dollars for supplies and services prime contracts valued at \$5,000 and under. This underutilization is statistically significant.

Hispanic Americans represent 0.77% of the available supplies and services businesses and received 0.29% of the dollars for supplies and services prime contracts valued at \$5,000 and under. There are too few available firms to test statistical significance of this underutilization.

Native Americans represent 0.13% of the available supplies and services businesses and received 0.00% of the dollars for supplies and services prime contracts valued at \$5,000 and under. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 15.18% of the available supplies and services businesses and received 5.72% of the dollars for supplies and services prime contracts valued at \$5,000 and under. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 11.86% of the available supplies and services businesses and received 9.11% of the dollars for supplies and services prime contracts valued at \$5,000 and under. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 27.04% of the available supplies and services businesses and received 14.83% of the dollars for supplies and services prime contracts valued at \$5,000 and under. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 72.96% of the available supplies and services businesses and received 85.17% of the dollars for supplies and services prime contracts valued at \$5,000 and under. This overutilization is statistically significant.



**Table 7.20: Disparity Analysis: Supplies and Services Prime Contracts \$5,000 and Under,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$444,627	4.49%	13.01%	\$1,288,210	-\$843,582	0.35	< .05 *
Asian Americans	\$93,669	0.95%	1.28%	\$126,295	-\$32,626	0.74	< .05 *
Hispanic Americans	\$28,265	0.29%	0.77%	\$75,777	-\$47,513	0.37	----
Native Americans	\$0	0.00%	0.13%	\$12,630	-\$12,630	0.00	----
Caucasian Females	\$901,841	9.11%	11.86%	\$1,174,544	-\$272,703	0.77	< .05 *
Non-minority Males	\$8,433,130	85.17%	72.96%	\$7,224,077	\$1,209,053	1.17	< .05 †
TOTAL	\$9,901,532	100.00%	100.00%	\$9,901,532			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$139,369	1.41%	3.57%	\$353,626	-\$214,257	0.39	< .05 *
African American Males	\$305,258	3.08%	9.44%	\$934,583	-\$629,325	0.33	< .05 *
Asian American Females	\$2,613	0.03%	0.13%	\$12,630	-\$10,017	0.21	----
Asian American Males	\$91,056	0.92%	1.15%	\$113,666	-\$22,609	0.80	not significant
Hispanic American Females	\$0	0.00%	0.26%	\$25,259	-\$25,259	0.00	----
Hispanic American Males	\$28,265	0.29%	0.51%	\$50,518	-\$22,254	0.56	----
Native American Females	\$0	0.00%	0.00%	\$0	\$0	----	----
Native American Males	\$0	0.00%	0.13%	\$12,630	-\$12,630	0.00	----
Caucasian Females	\$901,841	9.11%	11.86%	\$1,174,544	-\$272,703	0.77	< .05 *
Non-minority Males	\$8,433,130	85.17%	72.96%	\$7,224,077	\$1,209,053	1.17	< .05 †
TOTAL	\$9,901,532	100.00%	100.00%	\$9,901,532			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$141,982	1.43%	3.95%	\$391,515	-\$249,533	0.36	< .05 *
Minority Males	\$424,579	4.29%	11.22%	\$1,111,396	-\$686,818	0.38	< .05 *
Caucasian Females	\$901,841	9.11%	11.86%	\$1,174,544	-\$272,703	0.77	< .05 *
Non-minority Males	\$8,433,130	85.17%	72.96%	\$7,224,077	\$1,209,053	1.17	< .05 †
TOTAL	\$9,901,532	100.00%	100.00%	\$9,901,532			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$566,561	5.72%	15.18%	\$1,502,911	-\$936,350	0.38	< .05 *
Caucasian Female Business Enterprises	\$901,841	9.11%	11.86%	\$1,174,544	-\$272,703	0.77	< .05 *
Minority and Caucasian Female Business Enterprises	\$1,468,402	14.83%	27.04%	\$2,677,455	-\$1,209,053	0.55	< .05 *
Non-minority Male Business Enterprises	\$8,433,130	85.17%	72.96%	\$7,224,077	\$1,209,053	1.17	< .05 †

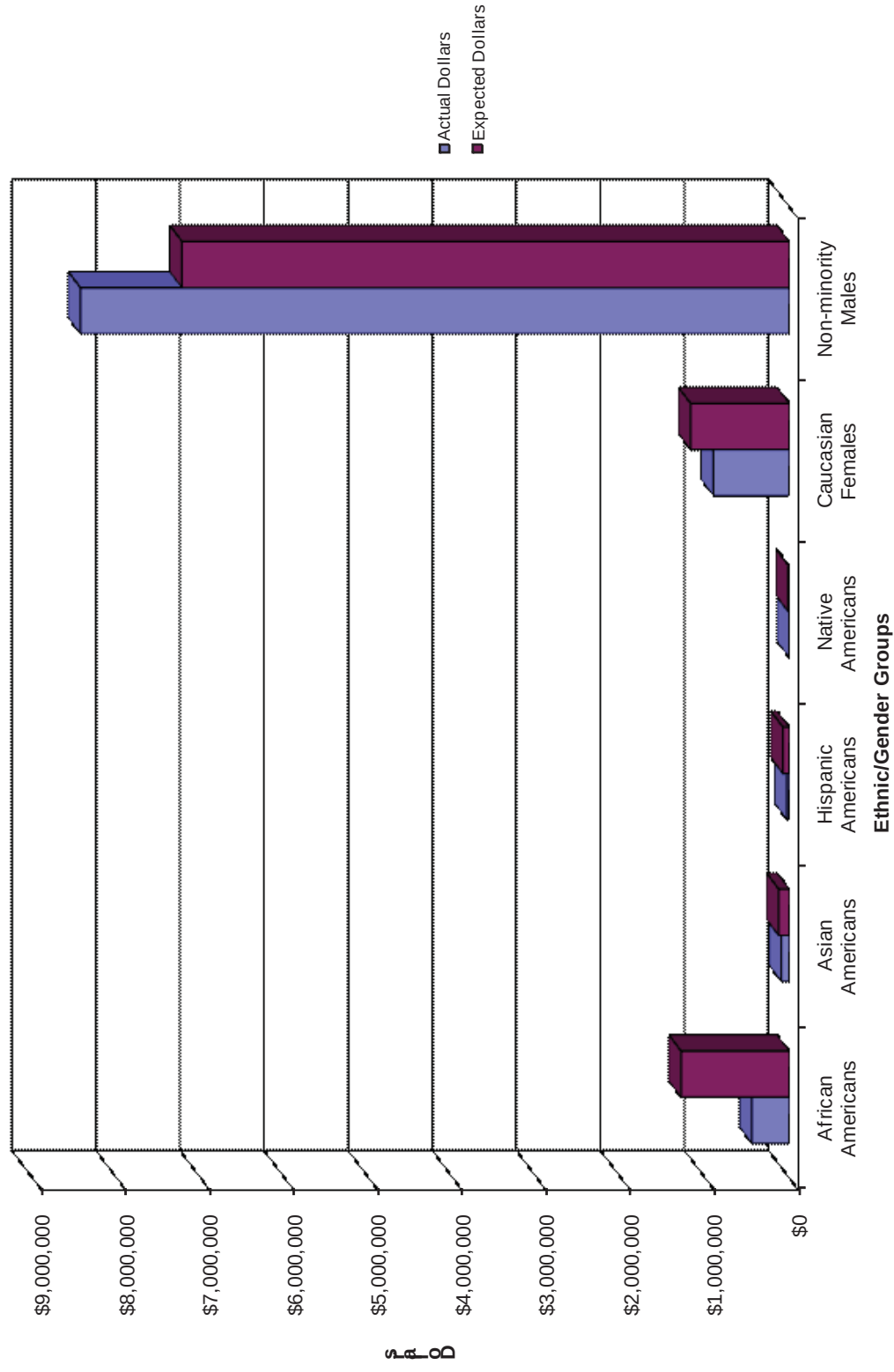
(*) denotes a statistically significant underutilization.

(†) 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 7.19: Disparity Analysis: Supplies and Services Prime Contracts \$5,000 and Under, January 1, 2009, to December 31, 2013



III. DISPARITY ANALYSIS SUMMARY

A. All Prime Contracts

As indicated in Table 7.21, disparity was found for African Americans, Asian Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises prime contractors on all prime contracts.

Disparity was found for African Americans, Asian Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises on prime contracts valued at \$250,000 and over.

Disparity was also found for African Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises on prime contracts valued between \$50,001 and \$249,999.

In addition, disparity was found for African Americans, Asian Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises on prime contracts valued between \$5,001 and \$50,000.

Finally, disparity was found for African Americans, Asian Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises on prime contracts valued at \$5,000 and under.



Table 7.21: Disparity Summary: All Industries Prime Contract Dollars
January 1, 2009, to December 31, 2013

Ethnicity/Gender	All Industries				
	All Contracts	Contracts \$250,000 and Over	Contracts \$50,001 to \$249,999	Contracts \$5,001 to \$50,000	Contracts \$5,000 and Under
African Americans	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization
Asian Americans	Statistically Significant Underutilization	Statistically Significant Underutilization	Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization
Hispanic Americans	----	----	----	----	----
Native Americans	----	----	----	**	----
Minority-owned Business Enterprises	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization
Caucasian Female Business Enterprises	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization
Minority and Caucasian Female Business Enterprises	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization

(**) 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.

B. Construction Prime Contracts

As indicated in Table 7.22 below, disparity was found for African Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises prime contractors on all contracts.

Disparity was found for African Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises on prime contracts valued at \$250,000 and over.

Disparity was also found for African Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises on prime contracts valued between \$50,001 and \$249,999.

In addition, disparity was found for African Americans, Asian Americans, and Minority-owned Business Enterprises on prime contracts valued between \$5,001 and \$50,000.

Finally, disparity was found for African Americans, Minority-owned Business Enterprises, and Minority and Caucasian Female Business Enterprises on prime contracts valued at \$5,000 and under.



Table 7.22: Disparity Summary: Construction Prime Contract Dollars
January 1, 2009, to December 31, 2013

Ethnicity/Gender	Construction				
	All Contracts	Contracts \$250,000 and Over	Contracts \$50,001 to \$249,999	Contracts \$5,001 to \$50,000	Contracts \$5,000 and Under
African Americans	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization
Asian Americans	Underutilization	Underutilization	**	Statistically Significant Underutilization	Underutilization
Hispanic Americans	----	----	----	----	----
Native Americans	----	----	**	**	**
Minority-owned Business Enterprises	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization
Caucasian Female Business Enterprises	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	**	**
Minority and Caucasian Female Business Enterprises	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	**	Statistically Significant Underutilization

(**) 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.

C. Professional Services Prime Contracts

As indicated in Table 7.23 below, disparity was found for African Americans, Asian Americans, Hispanic Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises prime contractors on all contracts.

Disparity was found for African Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises on prime contracts valued at \$250,000 and over.

Disparity was also found for African Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises on prime contracts valued between \$50,001 and \$249,999.

Finally, disparity was found for African Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises on prime contracts valued between \$5,001 and \$50,000.



Table 7.23: Disparity Summary: Professional Services Prime Contract Dollars
January 1, 2009, to December 31, 2013

Ethnicity/Gender	Professional Services			
	All Contracts	Contracts \$250,000 and Over	Contracts \$50,001 to \$249,999	Contracts \$5,001 to \$50,000
African Americans	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization
Asian Americans	Statistically Significant Underutilization	Underutilization	Underutilization	Underutilization
Hispanic Americans	Statistically Significant Underutilization	Underutilization	Underutilization	Underutilization
Native Americans	----	----	----	----
Minority-owned Business Enterprises	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization
Caucasian Female Business Enterprises	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization
Minority and Caucasian Female Business Enterprises	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization

(**) 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.

D. Supplies and Services Prime Contracts

As indicated in Table 7.24 below, disparity was found for African Americans, Asian Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises prime contractors on all prime contracts.

Disparity was found for African Americans, Asian Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises on prime contracts valued at \$250,000 and over.

Disparity was also found for African Americans, Asian Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises on prime contracts valued between \$50,001 and \$249,999.

In addition, disparity was found for African Americans, Asian Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises on prime contracts valued between \$5,001 and \$50,000.

Finally, disparity was found for African Americans, Asian Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises on prime contracts valued at \$5,000 and under.



Table 7.24: Disparity Summary: Supplies and Services Prime Contract Dollars
January 1, 2009, to December 31, 2013

Ethnicity/Gender	Supplies and Services				
	All Contracts	Contracts \$250,000 and Over	Contracts \$50,001 to \$249,999	Contracts \$5,001 to \$50,000	Contracts \$5,000 and under
African Americans	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization
Asian Americans	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization
Hispanic Americans	----	----	----	----	----
Native Americans	----	----	----	----	----
Minority-owned Business Enterprises	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization
Caucasian Female Business Enterprises	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization
Minority and Caucasian Female Business Enterprises	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization	Statistically Significant Underutilization

(**) 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.

CHAPTER 8: 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 (M/WBE), hereinafter referred to as Minority and Caucasian Female Business Enterprises, subcontractors on the City of Cincinnati's (City) contracts during the January 1, 2009, to December 31, 2013, study period. A detailed discussion of the statistical procedures for conducting a disparity analysis is set forth in *Chapter 7: Prime Contract Disparity Analysis*. The same statistical procedures are used to perform the subcontract 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 6: 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 Business Enterprises are not subjected to a statistical test.



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, 509 (1989).

II. DISPARITY ANALYSIS

As detailed in *Chapter 4: Subcontractor Utilization Analysis*, extensive efforts were undertaken to obtain subcontractor records for the City's construction, professional services including architecture and engineering (hereinafter professional services), and supplies and services contracts. The disparity analysis was performed on subcontracts issued during the January 1, 2009, to December 31, 2013, study period.

The subcontract disparity findings in the two industries under consideration are summarized below. 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 are presented below in Table 8.01.

Table 8.01: 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 M/WBES 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 8.02 and Chart 8.01.

African Americans represent 16.56% of the available construction businesses and received 3.82% of the construction subcontract dollars. This underutilization is statistically significant.

Asian Americans represent 1.25% of the available construction businesses and received 1.11% of the construction subcontract dollars. This underutilization is not statistically significant.

Hispanic Americans represent 0.47% of the available construction businesses and received 0.59% of the construction subcontract dollars. This study does not test statistically significant overutilization of Hispanic Americans.

Native Americans represent 0.63% of the available construction businesses and received 0.00% of the dollars for construction subcontracts. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 18.91% of the available construction businesses and received 5.52% of the construction subcontract dollars. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 10.47% of the available construction businesses and received 5.26% of the construction subcontract dollars. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 29.38% of the available construction businesses and received 10.78% of the construction subcontract dollars. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 70.63% of the available construction businesses and received 89.22% of the construction subcontract dollars. This overutilization is statistically significant.



**Table 8.02: Disparity Analysis: Construction Subcontracts,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$4,350,864	3.82%	16.56%	\$18,844,964	-\$14,494,100	0.23	< .05 *
Asian Americans	\$1,260,424	1.11%	1.25%	\$1,422,261	-\$161,837	0.89	not significant
Hispanic Americans	\$669,705	0.59%	0.47%	\$533,348	\$136,357	1.26	**
Native Americans	\$0	0.00%	0.63%	\$711,131	-\$711,131	0.00	----
Caucasian Females	\$5,979,952	5.26%	10.47%	\$11,911,440	-\$5,931,487	0.50	< .05 *
Non-minority Males	\$101,519,971	89.22%	70.63%	\$80,357,773	\$21,162,198	1.26	< .05 †
TOTAL	\$113,780,917	100.00%	100.00%	\$113,780,917			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$130,864	0.12%	1.88%	\$2,133,392	-\$2,002,528	0.06	< .05 *
African American Males	\$4,220,000	3.71%	14.69%	\$16,711,572	-\$12,491,572	0.25	< .05 *
Asian American Females	\$188,466	0.17%	0.31%	\$355,565	-\$167,099	0.53	----
Asian American Males	\$1,071,959	0.94%	0.94%	\$1,066,696	\$5,262	1.00	**
Hispanic American Females	\$669,705	0.59%	0.31%	\$355,565	\$314,140	1.88	**
Hispanic American Males	\$0	0.00%	0.16%	\$177,783	-\$177,783	0.00	----
Native American Females	\$0	0.00%	0.16%	\$177,783	-\$177,783	0.00	----
Native American Males	\$0	0.00%	0.47%	\$533,348	-\$533,348	0.00	----
Caucasian Females	\$5,979,952	5.26%	10.47%	\$11,911,440	-\$5,931,487	0.50	< .05 *
Non-Minority Males	\$101,519,971	89.22%	70.63%	\$80,357,773	\$21,162,198	1.26	< .05 †
TOTAL	\$113,780,917	100.00%	100.00%	\$113,780,917			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$989,035	0.87%	2.66%	\$3,022,306	-\$2,033,271	0.33	< .05 *
Minority Males	\$5,291,959	4.65%	16.25%	\$18,489,399	-\$13,197,440	0.29	< .05 *
Caucasian Females	\$5,979,952	5.26%	10.47%	\$11,911,440	-\$5,931,487	0.50	< .05 *
Non-minority Males	\$101,519,971	89.22%	70.63%	\$80,357,773	\$21,162,198	1.26	< .05 †
TOTAL	\$113,780,917	100.00%	100.00%	\$113,780,917			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$6,280,994	5.52%	18.91%	\$21,511,705	-\$15,230,711	0.29	< .05 *
Caucasian Female Business Enterprises	\$5,979,952	5.26%	10.47%	\$11,911,440	-\$5,931,487	0.50	< .05 *
Minority and Caucasian Female Business Enterprises	\$12,260,946	10.78%	29.38%	\$33,423,144	-\$21,162,198	0.37	< .05 *
Non-Minority Male Business Enterprises	\$101,519,971	89.22%	70.63%	\$80,357,773	\$21,162,198	1.26	< .05 †

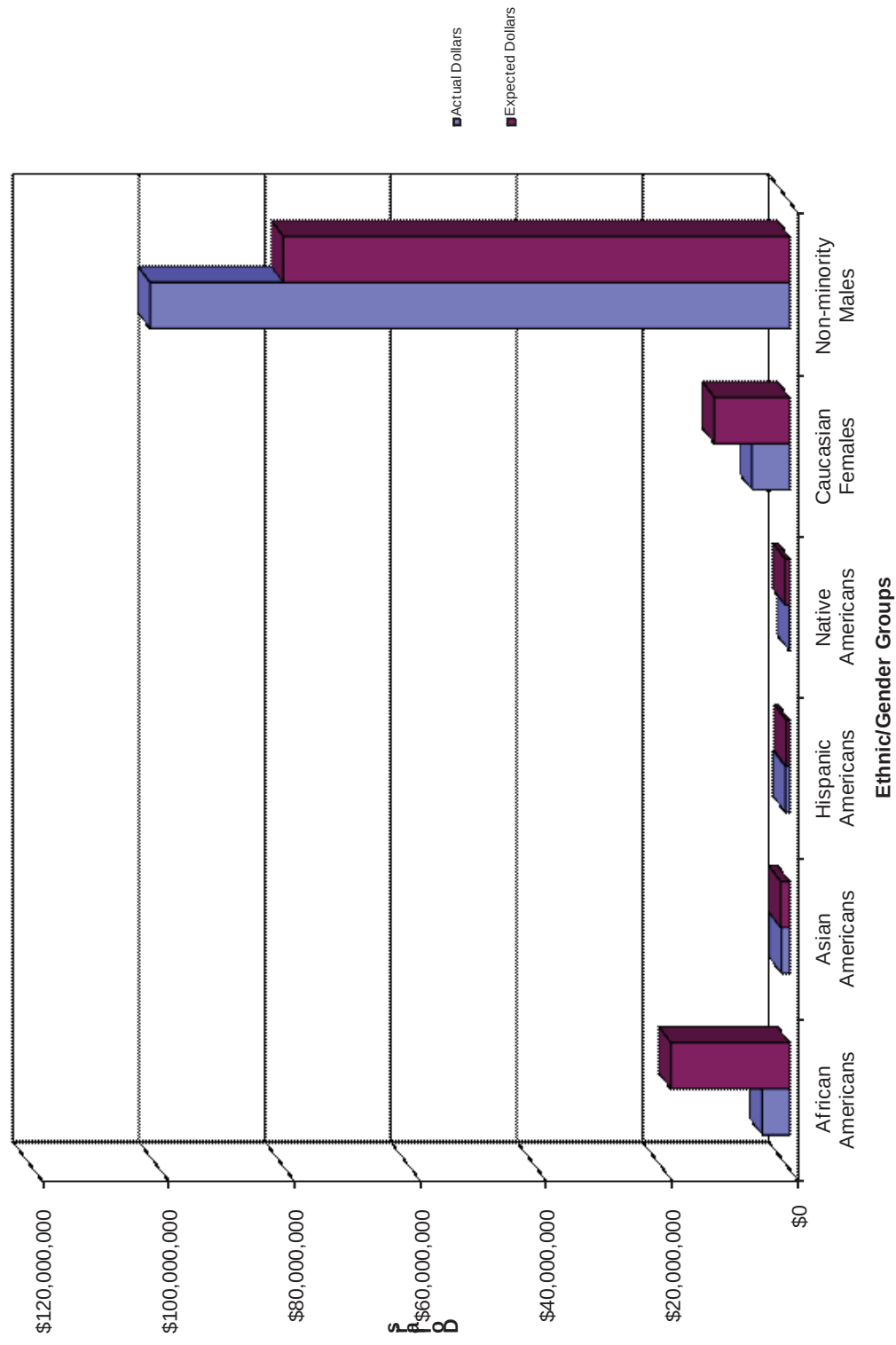
(*) denotes a statistically significant underutilization.

(†) 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 8.01: Disparity Analysis: Construction Subcontracts,
January 1, 2009, to December 31, 2013**



B. Professional Services Subcontracts

The disparity analysis of professional services subcontracts is described below and depicted in Table 8.03 and Chart 8.02.

African Americans represent 14.04% of the available professional services businesses and received 5.56% of the professional services subcontract dollars. This underutilization is statistically significant.

Asian Americans represent 3.18% of the available professional services businesses and received 6.49% of the professional services subcontract dollars. This study does not test statistically significant overutilization of Asian Americans.

Hispanic Americans represent 1.16% of the available professional services businesses and received 0.00% of the professional services subcontract dollars. This underutilization is not statistically significant.

Native Americans represent 0.58% of the available professional services businesses and received 0.00% of the professional services subcontract dollars. There are too few available firms to test statistical significance of this underutilization.

Minority-owned Business Enterprises represent 18.96% of the available professional services businesses and received 12.05% of the professional services subcontract dollars. This underutilization is statistically significant.

Caucasian Female Business Enterprises represent 15.63% of the available professional services businesses and received 5.64% of the professional services subcontract dollars. This underutilization is statistically significant.

Minority and Caucasian Female Business Enterprises represent 34.59% of the available professional services businesses and received 17.69% of the professional services subcontract dollars. This underutilization is statistically significant.

Non-minority Male-owned Business Enterprises represent 65.41% of the available professional services businesses and received 82.31% of the professional services subcontract dollars. This overutilization is statistically significant.



**Table 8.03: Disparity Analysis: Professional Services Subcontracts,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$432,067	5.56%	14.04%	\$1,091,039	-\$658,972	0.40	< .05 *
Asian Americans	\$504,672	6.49%	3.18%	\$247,452	\$257,220	2.04	**
Hispanic Americans	\$0	0.00%	1.16%	\$89,983	-\$89,983	0.00	not significant
Native Americans	\$0	0.00%	0.58%	\$44,991	-\$44,991	0.00	----
Caucasian Females	\$438,464	5.64%	15.63%	\$1,214,765	-\$776,301	0.36	< .05 *
Non-minority Males	\$6,397,044	82.31%	65.41%	\$5,084,018	\$1,313,027	1.26	< .05 †
TOTAL	\$7,772,248	100.00%	100.00%	\$7,772,248			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$0	0.00%	4.20%	\$326,187	-\$326,187	0.00	< .05 *
African American Males	\$432,067	5.56%	9.84%	\$764,852	-\$332,785	0.56	not significant
Asian American Females	\$193,661	2.49%	1.16%	\$89,983	\$103,678	2.15	**
Asian American Males	\$311,012	4.00%	2.03%	\$157,470	\$153,542	1.98	**
Hispanic American Females	\$0	0.00%	0.14%	\$11,248	-\$11,248	0.00	----
Hispanic American Males	\$0	0.00%	1.01%	\$78,735	-\$78,735	0.00	not significant
Native American Females	\$0	0.00%	0.14%	\$11,248	-\$11,248	0.00	----
Native American Males	\$0	0.00%	0.43%	\$33,743	-\$33,743	0.00	----
Caucasian Females	\$438,464	5.64%	15.63%	\$1,214,765	-\$776,301	0.36	< .05 *
Non-Minority Males	\$6,397,044	82.31%	65.41%	\$5,084,018	\$1,313,027	1.26	< .05 †
TOTAL	\$7,772,248	100.00%	100.00%	\$7,772,248			
Minority and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Females	\$193,661	2.49%	5.64%	\$438,665	-\$245,004	0.44	< .05 *
Minority Males	\$743,079	9.56%	13.31%	\$1,034,800	-\$291,721	0.72	not significant
Caucasian Females	\$438,464	5.64%	15.63%	\$1,214,765	-\$776,301	0.36	< .05 *
Non-minority Males	\$6,397,044	82.31%	65.41%	\$5,084,018	\$1,313,027	1.26	< .05 †
TOTAL	\$7,772,248	100.00%	100.00%	\$7,772,248			
Minority and Females	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
Minority Business Enterprises	\$936,740	12.05%	18.96%	\$1,473,465	-\$536,726	0.64	< .05 *
Caucasian Female Business Enterprises	\$438,464	5.64%	15.63%	\$1,214,765	-\$776,301	0.36	< .05 *
Minority and Caucasian Female Business Enterprises	\$1,375,204	17.69%	34.59%	\$2,688,231	-\$1,313,027	0.51	< .05 *
Non-minority Male Business Enterprises	\$6,397,044	82.31%	65.41%	\$5,084,018	\$1,313,027	1.26	< .05 †

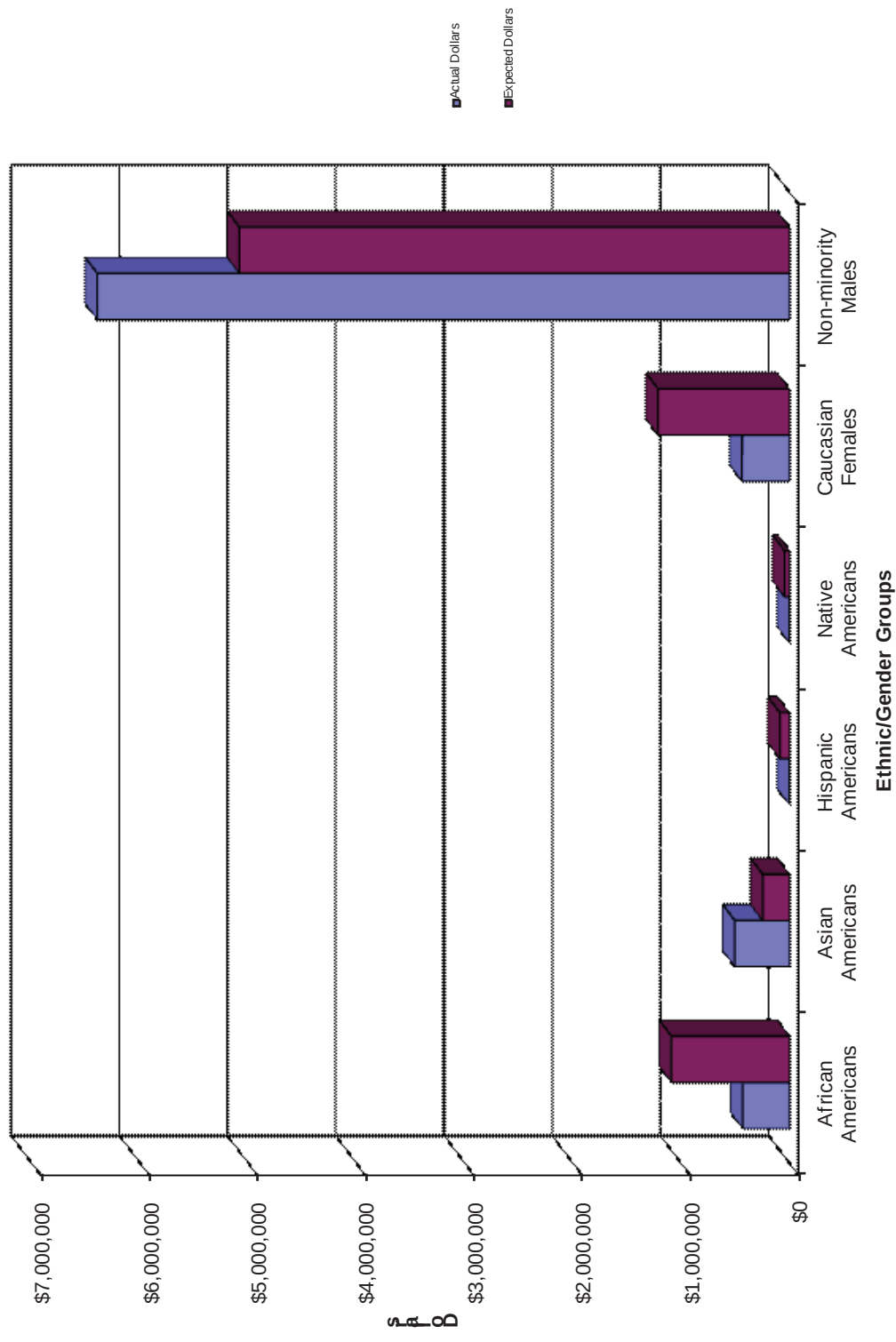
(*) denotes a statistically significant underutilization.

(†) 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 8.02: Disparity Analysis: Professional Services Subcontracts,
January 1, 2009, to December 31, 2013**



IV. SUBCONTRACT DISPARITY SUMMARY

As indicated in Table 8.04, disparity was found for African Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises construction subcontractors. Disparity was also found for African Americans, Minority-owned Business Enterprises, Caucasian Female Business Enterprises, and Minority and Caucasian Female Business Enterprises professional services subcontractors.

**Table 8.04: Subcontract Disparity Summary,
January 1, 2009, to December 31, 2013**

Ethnicity / Gender	Construction	Professional Services
African Americans	Statistically Significant Underutilization	Statistically Significant Underutilization
Asian Americans	Underutilization	**
Hispanic Americans	**	Underutilization
Native Americans	----	----
Minority-owned Business Enterprises	Statistically Significant Underutilization	Statistically Significant Underutilization
Caucasian Female Business Enterprises	Statistically Significant Underutilization	Statistically Significant Underutilization
Minority and Caucasian Female Business Enterprises	Statistically Significant Underutilization	Statistically Significant Underutilization

(**) denotes that this study does not test statistically for 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.



CHAPTER 9: REGRESSION ANALYSIS

I. INTRODUCTION

Private sector business practices that are not subject to government Minority and Caucasian Female Business Enterprise (M/WBE) requirements are indicators of marketplace conditions that could adversely affect the formation and growth of M/WBEs. The adverse marketplace conditions thereby could depress the current availability of M/WBEs. *Concrete Works of Colorado v. City of Denver (Concrete Works III)*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 III*, regression analyses were conducted to examine two outcome variables—business ownership rates and business earnings—to determine whether the City of Cincinnati (City) is passively participating in ethnic and gender discrimination. These two regression analyses examined possible impediments to minority and woman business ownership, as well as factors affecting M/WBE business earnings. A third regression analysis to examine M/WBE business loan approval rates was considered. However, there were too few M/WBEs represented in the Federal Reserve Board’s 2003 National Survey of Small Business Finances (NSSBF) dataset to conduct a valid analysis. Further details are provided in *Section IV Datasets Analyzed*.

Each regression analysis compared minority group members² and Caucasian Females to Non-minority Male-owned Businesses 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 socioeconomic conditions in the City’s market area that could adversely affect the measuring of relative availability of M/WBEs and Non-minority Male-owned Businesses. Statistically significant findings for lower M/WBE business earnings and lower likelihoods of Minority and Caucasian Female Business ownership could indicate patterns of discrimination that might result in disproportionately smaller numbers of willing and capable M/WBEs.

United States Census Public Use Microdata Sample (PUMS) data were used to compare Minorities’ and Caucasian Females’ probability of owning a business to the probability of Non-minority Males owning a business. Logistic regression was used to determine if race and gender have a statistically significant effect on the probability of business ownership. The PUMS data were 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 owner-reported incomes when controlling for race and gender-neutral factors.

¹ *Concrete Works of Colo., Inc. v. Denver*, 86 F. Supp. 2d 1042, 1057-61 (D. Colo. 2000), *rev’d on other grounds*, 321 F.3d 950 (10th Cir. 2003), *cert. denied*, 540 U.S. 1027 (2003) (“*Concrete Works III*”).

² Minority group members include both males and females.



The applicable limits of the private sector discrimination findings are set forth in *Builders Association of Greater Chicago v. City of Chicago*³ (*City of Chicago*), where the court 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. The private sector findings, however, 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 awarding 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 IV*⁵ and *City of Chicago*⁶ 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 IV* 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 decided in *Concrete Works IV* 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.⁷ 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,⁸ 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

³ *Builders Ass’n of Greater Chicago v. Chicago*, 298 F. Supp. 2d 725 (N.D. Ill. 2003).

⁴ 488 U.S. 469 (1989).

⁵ *Concrete Works of Colo., Inc. v. Denver*, 321 F.3d 950, 965-69 (10th Cir. 2003) (“*Concrete Works IV*”).

⁶ *City of Chicago*, 298 F. Supp. 2d at 738-39.

⁷ *Concrete Works IV*, 321 F.3d at 966-67.

⁸ Plaintiff had not preserved the issue on appeal. Therefore, it was no longer part of the case.



“narrowly tailored” or otherwise supported by the City’s private sector findings of discrimination.

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 IV*, 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.⁹ The court explicitly stated that certain discriminatory business practices documented by regression analyses constituted private sector discrimination.¹⁰ It is also notable that the documented discriminatory business practices reviewed by the court in *City of Chicago* were similar to those reviewed in *Concrete Works IV*. 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.¹¹ The court ordered an injunction to invalidate the City of Chicago’s race-based program.¹²

The following statements from that opinion are noteworthy:

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.¹³

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 U.S. 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 in the

⁹ *City of Chicago*, 298 F. Supp. 2d at 739.

¹⁰ *Id.* at 731-32.

¹¹ *Id.* at 742.

¹² *Id.*

¹³ *Id.* at 734-35.



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 “regarding flexibility, ‘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 is “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.¹⁴

C. 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 the City to establish a race-based M/WBE Program unless a nexus is established between the City and the private sector data. These economic indicators, albeit not a measure of passive discrimination, are illustrative of private sector discrimination and can support City-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 the City’s market area that could impact the formation and development of M/WBEs. The two regression analyses focus on construction, professional services including architecture and engineering, and supplies and services. The datasets used for the regression analyses did not allow for an exact match of the industries used in the City’s Disparity Study (Study). Therefore, the three industries were selected to most closely mirror the industries used in the City’s Study.

As noted, two separate regression analyses were conducted. They are the Business Ownership Analysis and the Earnings Disparity Analysis. A third regression analysis was considered but was not conducted due to small sample sizes and limited variability within the dataset of interest. Both analyses take 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.

¹⁴ *City of Chicago*, 298 F. Supp. 2d at 739-40.



IV. DATASETS ANALYZED

The 2008 through 2012 PUMS dataset produced by the United States Census Bureau was used to analyze business ownership and earnings disparities within Hamilton County. The 2008 through 2012 PUMS dataset represented the most recent data that most closely matched the January 1, 2009, to December 31, 2013, study period. To further match the dataset and the study period, all records from 2008 were scrubbed from the PUMS dataset. The data for Hamilton County were 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 was considered to examine business loan approval rates. These data represent the most recent information available on access to credit and contain 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 are available by Census Division, data containing the City of Cincinnati, Hamilton County, and even the Midwest Region, lacked sufficient M/WBE information to perform a statistically valid regression analysis by minority status, gender, and industry. It should be noted that the ethnicity and gender of the responding businesses were categorized based upon the ethnicity and gender of the majority owner. Table 9.01 depicts the number of Non-minority Male-owned Businesses and M/WBEs by industry and their response to whether they were always, sometimes, or never approved for a business loan.



Table 9.01: Non-minority Male and M/WBE Loan Approval

Loan Variable	Non-minority Male	Caucasian Female	Minority
Midwest and Construction Industry			
Always Denied	15	0	0
Always Approved	275	20	5
Midwest and Supplies and Services Industry			
Always Denied	45	15	5
Sometimes Approved/Sometimes Denied	40	10	5
Always Approved	1,210	120	80
Midwest and Professional Services Industry			
Always Denied	10	0	5
Sometimes Approved/Sometimes Denied	0	0	5
Always Approved	328	47	85

In the construction industry, 20 Caucasian Females and 5 Minorities were always approved for a loan, and zero Caucasian Females and zero Minorities were always denied a loan. Likewise, in the professional services industry, 47 Caucasian Females and 85 Minorities were always approved for a loan, while zero Caucasian Females and 5 Minorities were always denied a loan, and zero Caucasian Females and 5 Minorities were sometimes approved for a loan. The small number of M/WBEs and the lack of variability in their responses made the data unsuitable for a regression analysis.

V. REGRESSION MODELS DEFINED

A. Business Ownership Analysis

The Business Ownership Analysis examines the relationship between the likelihood of being a business owner and independent socio-economic variables. Business ownership, the dependent variable, includes business owners of incorporated and non-incorporated firms. 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. In this case, a logistic regression model is utilized to predict the likelihood of business ownership using independent socioeconomic variables. Three logistic models are run to predict the probability of business ownership in each of the three industries examined in the City’s Study. Categories of the independent variables analyzed include educational level, citizenship status, personal characteristics, and race/gender.

In the table below, a finding of disparity is denoted by an asterisk (*) when the independent variable is significant at or above the 95% 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 likelihood 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, an individual with children under the age of 6 has a lower likelihood of owning a business, holding all other variables constant.

For each of the three industries, the logistic regression is used to identify the likelihood that an individual owns a business given his or her background, including race, gender, and race and gender-neutral factors. The dependent variables in all regressions are binary variables coded as “1” for individuals who are self-employed and “0” for individuals who are not self-employed.¹⁵ Table 9.02 presents the independent variables used for the Business Ownership Analysis.

Table 9.02: Independent Variables Used in the Business Ownership Analysis

Personal Characteristics	Educational Attainment	Race	Gender
1. Age	9. Bachelor’s Degree	11. African American	17. Female
2. Age Squared	10. Advanced Degree	12. Asian Pacific American	
3. Home Ownership and Value		13. Subcontinent Asian American	
4. Interest and Dividends		14. Hispanic American	
5. Monthly Mortgage Payments		15. Native American	
6. Speaks English at Home		16. Other Minority Group ¹⁶	
7. Children under the Age of Six in the Household			
8. Marital Status			

B. The Earnings Disparity Analysis

The Earnings Disparity Analysis examines the relationship between the annual self-employment income and independent socioeconomic variables. “Wages” are defined as the individual’s total dollar income earned in the previous 12 months. Categories of independent socioeconomic variables analyzed include educational level, citizenship status, personal characteristics, business characteristics, and race/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

¹⁵ Note: The terms “business owner” and “self-employed” are used interchangeably throughout the chapter.

¹⁶ Other Minority includes individuals who belong to two or more racial groups.



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% 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. For example, if age is positively related to wages, this implies that older business owners tend to have higher business earnings, 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 example, if having a child under the age of 6 is negatively related to wages, this implies that business owners with children under the age of 6 tend to have lower business earnings.

An OLS regression analysis is used to assess the presence of business earning disparities. OLS regressions have been conducted separately for each industry. Table 9.03 presents the independent variables used for the Earnings Disparity Analysis.¹⁷

Table 9.03: Independent Variables Used for the Earnings Disparity Analysis

Personal Characteristics	Educational Attainment	Race	Gender
1. Age	10. Bachelor's Degree	12. African American	18. Female
2. Age Squared	11. Advanced Degree	13. Asian Pacific American	
3. Incorporated Business		14. Subcontinent Asian American	
4. Home Ownership and Value		15. Native American	
5. Monthly Mortgage Payment		16. Hispanic American	
6. Interests and Dividends		17. Other Minority Groups	
7. Speaks English at Home			
8. Children under Age Six in the Household			
9. Marital Status			

¹⁷ 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).



VI. FINDINGS

A. Business Ownership Analysis

The business ownership variable is defined by the number of self-employed individuals in each of the three industries. The analysis considered incorporated and non-incorporated businesses. The data in this section come from Hamilton County, which was specified using PUMA, a variable within the PUMS dataset that can specify the different counties within states.¹⁸ 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 Hamilton County.

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 likely to have advanced degrees and the regression results show that individuals with advanced degrees are significantly more likely 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 indirectly disadvantaged as fewer of them tend to have advanced degrees, which significantly increase one's chances of owning a business.

1. Logistic Model Results for Construction Business Ownership

Table 9.04 presents the logistic regression results for the likelihood of owning a business in the construction industry based on the 20 variables analyzed in this model. There were too few Native American records in the construction industry for the group to be included in this analysis.



¹⁸ The PUMS data were collected by the United States Census Bureau from a 5-percent sample of United States households. The observations were weighted to preserve the representative nature of the sample in relation to the population as a whole.

Table 9.04: Construction Industry Logistic Model

Business Ownership Model	Coefficient	Significance	Robust Standard Error	z-score	P> z
Age	0.0614		0.040	1.54	0.123
Age squared	-0.0001		0.000	-0.28	0.781
Bachelor's Degree (a)	0.0006		0.230	0.00	0.998
Advanced Degree	-0.1876		0.459	-0.41	0.682
Business Ownership Model	Coefficient	Significance	Robust Standard Error	z-score	P> z
Home Owner	-0.3721		0.257	-1.45	0.147
Home Value	0.0000		0.000	0.45	0.656
Interest and Dividends	0.0000		0.000	-1.09	0.275
Monthly Mortgage Payment	0.0002		0.000	1.15	0.251
Speaks English at Home	0.1672		0.436	0.38	0.702
Children under 6 in Household	0.7067		0.973	0.73	0.468
Married	0.0288		0.206	0.14	0.888
Caucasian Female	-0.6116	*	0.302	-2.03	0.043
African American	-0.3751		0.300	-1.25	0.211
Asian American	0.0479		1.085	0.04	0.965
Hispanic American	0.7746		0.773	1.00	0.316
Native American	NA				
Other	0.9164		0.858	1.07	0.285
2010 (b)	0.2180		0.246	0.89	0.376
2011	0.5377	*	0.257	2.09	0.037
2012	-0.1973		0.252	-0.78	0.434

(a) For the variables Bachelor's degree and advanced degree, the baseline variable is High School.

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

Note: P > |z| of less than 0.05 denote findings of statistical significance.

* identifies statistically significant variables.

The construction industry logistic regression results indicate the following:¹⁹

- The likelihood of construction business ownership is positively associated with increased age; older individuals are more likely to be business owners in the construction industry, but not at a significant²⁰ level. However, as individuals age, the likelihood of being a business owner decreases.
- Caucasian Females are significantly less likely to be business owners in the construction industry than Non-minority Males.

¹⁹ For the Business Ownership Analysis, the results are presented for age, education, race, and gender variables only.

²⁰ Throughout this chapter, significance refers to statistical significance.



- African Americans are less likely to be business owners in the construction industry than Non-minority Males, but not at a significant level.
- Asian Americans and Other Minority groups are more likely than Non-minority Males to be business owners in the construction industry, but not at a significant level.

2. Logistic Model Results for Supplies and Services

Table 9.05 presents the logistic regression results for the likelihood of owning a business in the supplies and services industry using the 20 variables analyzed in this model.

Table 9.05: Supplies and Services Logistic Model

Business Ownership Model	Coefficient	Significance	Robust Standard Error	z-score	P> z
Age	0.0694	*	0.020	3.44	0.001
Age squared	-0.0003		0.000	-1.63	0.104
Bachelor's Degree (a)	0.1683		0.126	1.34	0.181
Advanced Degree	-0.5632	*	0.222	-2.53	0.011
Home Owner	0.0977		0.164	0.60	0.551
Home Value	0.0000	*	0.000	3.37	0.001
Interest and Dividends	0.0000		0.000	1.48	0.138
Monthly Mortgage Payment	-0.0001		0.000	-0.89	0.372
Speaks English at Home	-0.6542	*	0.254	-2.57	0.010
Children under 6 in Household	0.3821		0.343	1.11	0.266
Married	0.5160	*	0.149	3.45	0.001
Caucasian Female	-0.4397	*	0.128	-3.44	0.001
African American	-0.5692	*	0.203	-2.80	0.005
Asian American	-0.0938		0.414	-0.23	0.821
Hispanic American	0.1473		0.674	0.22	0.827
Native American	0.0942		1.179	0.08	0.936
Other	-0.9859		0.674	-1.46	0.143
2010 (b)	0.0622		0.144	0.43	0.665
2011	-0.0276		0.160	-0.17	0.863
2012	-0.2039		0.152	-1.34	0.180

(a) For the variables Bachelor's degree and advanced degree, the baseline variable is High School.

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

Note: P > |z| of less than 0.05 denote findings of statistical significance.

* identifies statistically significant variables.



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

- The likelihood of business ownership is positively associated with an increase in age; older individuals are significantly more likely to be business owners in the supplies and services industry. However, as individuals age, they are less likely to be business owners in the supplies and services industry, but not at a significant level.
- Having an advanced degree significantly decreases the likelihood of being a business owner in the supplies and services industry.
- Caucasian Females are significantly less likely to be business owners in the supplies and services industry than Non-minority Males.
- African Americans are significantly less likely to be business owners in the supplies and services industry than Non-minority Males.
- Asian Americans and Other Minorities are less likely to be business owners in the supplies and services industry, but not at a significant level.
- Hispanic Americans and Native Americans are more likely to be business owners in the supplies and services industry, but not at a significant level.

3. Logistic Model Results for Professional Services

Table 9.06 presents the logistic regression results for the likelihood of owning a business in the professional services industry using the 20 variables analyzed in this model. There were too few Hispanic American records in the professional services industry for the group to be included in this analysis.

Table 9.06: Miscellaneous and Other Professional Services Logistic Model

Business Ownership Model	Coefficient	Significance	Robust Standard Error	z-score	P> z
Age	0.1271	*	0.0329	3.86	0.000
Age squared	-0.0009	*	0.0003	-2.64	0.008
Bachelor's Degree (a)	0.0176		0.1836	0.10	0.924
Advanced Degree	0.7718	*	0.1965	3.93	0.000
Home Owner	-0.1369		0.2289	-0.60	0.550
Home Value	0.0000	*	0.0000	3.69	0.000
Interest and Dividends	0.0000		0.0000	1.42	0.154
Monthly Mortgage Payment	-0.0001		0.0001	-1.27	0.205
Speaks English at Home	-0.3219		0.2995	-1.07	0.282
Children under 6 in Household	-0.0271		0.3353	-0.08	0.936



Business Ownership Model	Coefficient	Significance	Robust Standard Error	z-score	P> z
Married	0.3164		0.1644	1.92	0.054
Caucasian Female	-0.3855	*	0.1555	-2.48	0.013
African American	-0.7884	*	0.3106	-2.54	0.011
Asian American	-0.7980		0.4099	-1.95	0.052
Hispanic American	NA				
Native American	0.2209		1.2386	0.18	0.858
Other	-0.3079		0.9071	-0.34	0.734
2010 (b)	0.7305	*	0.1938	3.77	0.000
2011	0.4348	*	0.1898	2.29	0.022
2012	0.6101	*	0.1969	3.10	0.002

The professional services industry logistic regression results indicate the following:

- The likelihood of business ownership is positively associated with increased age; older individuals are significantly more likely to be business owners in the professional services industry. However, as older individuals age, they are significantly less likely to be business owners in the professional services industry.
- Having an advanced degree significantly increases the likelihood of being a business owner in the professional services industry.
- Caucasian Females are significantly less likely to be business owners in the professional services industry than Non-minority Males.
- African Americans are significantly less likely to be business owners in the professional services industry than Non-minority Males.
- Asian Americans and Other Minorities are less likely to be business owners in the professional services industry than Non-minority Males, but not at a significant level.
- Native Americans are more likely to be business owners in the professional services industry than Non-minority Males, but not at a significant level.



B. Business Ownership Analysis Conclusion

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

Caucasian Females experience the greatest disparity, as they are significantly less likely to own a business in the construction, supplies and services, and professional services industries than similarly situated Non-minority Males. African Americans are also significantly less likely to own a business in the supplies and services and professional services industries. In addition, they are less likely to own a business in the construction industries, but not at a significant level.

Table 9.07 depicts the business ownership regression analysis results by race, gender, and industry.

Table 9.07: Statistically Significant Business Ownership Disparities

Race / Gender	Construction	Supplies and Services	Professional Services
Caucasian Female	Significant	Significant	Significant
African American	Not Significant	Significant	Significant
Asian American	Not Significant	Not Significant	Not Significant
Hispanic American	Not Significant	Not Significant	Not Significant
Native American	Not Significant	Not Significant	Not Significant
Other	Not Significant	Not Significant	Not Significant



C. *Business Earnings Analysis*

The business earnings variable is identified by self-employment income²¹ from the year 2009 to 2012 for the three industries: construction, professional services, and supplies and services. 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 in the Construction Industry

Table 9.08 depicts the results of the OLS regression for business earnings in the construction industry based on the 21 variables analyzed in this model. There were too few Native American records in the construction industry for the group to be included in this analysis.

Table 9.08: Construction Industry OLS Regression

Earnings Disparity Model	Coefficient	Significance	Robust Standard Error	t-score	P> t
Age	1331.47	*	404.301	3.29	0.001
Age Squared	-14.07	*	4.099	-3.43	0.001
Incorporated Business	-19280.67	*	1963.149	-9.82	0.000
Bachelor's Degree	-3184.39		2603.429	-1.22	0.222
Advanced Degree	381.28		8701.921	0.04	0.965
Home Owner	1227.99		2914.660	0.42	0.674
Home Value	0.01		0.008	0.87	0.386
Monthly Mortgage Payment	3.68	*	1.749	2.10	0.037
Interests and Dividends	-0.02		0.244	-0.10	0.923
Speaks English at Home	-13687.93	*	6542.408	-2.09	0.037
Children under 6 in Household	-3042.49		7666.893	-0.40	0.692
Married	4580.15		2406.273	1.90	0.058
Caucasian Female	-7126.39	*	3430.973	-2.08	0.039
African American	-8082.51	*	3286.149	-2.46	0.015
Asian American	15359.08		9269.832	1.66	0.099
Hispanic American	-12561.43	*	5806.613	-2.16	0.032
Native American	NA				

²¹ The terms “business earnings” and “self-employment income” are used interchangeably.



Earnings Disparity Model	Coefficient	Significance	Robust Standard Error	t-score	P> t
Other	-13734.13	*	5972.267	-2.30	0.022
2010	-3785.09		3276.909	-1.16	0.249
2011	-5638.85		3671.208	-1.54	0.126
2012	-1684.57		3470.482	-0.49	0.628

Note: P > |t| of less than 0.05 denotes findings of statistical significance.

* identifies statistically significant variables.

The OLS regression results for business earnings in the construction industry indicate the following:²²

- Older business owners have significant higher business earnings in the construction industry. However, as business owners age, they have significant lower business earnings in the construction industry.
- Business owners with a bachelor's degree have lower business earnings in the construction industry, but not at a significant level. Business owners with an advanced degree have higher business earnings in the construction industry, but not at a significant level.
- Caucasian Female business owners have significant lower business earnings in the construction industry than Non-minority Males.
- African American and Hispanic American business owners have significant lower business earnings in the construction industry than Non-minority Males.
- Asian American business owners have higher business earnings in the construction industry than Non-minority Males, but not at a significant level.
- Other Minority business owners have lower business earnings in the construction industry than Non-minority Males, but not at a significant level.



²² For the Earnings Disparity Model, the results are presented for age, education, race, and gender variables only.

2. OLS Regression Results in the Supplies and Services Industry

Table 9.09 depicts the results of the OLS regression for business earnings in the supplies and services industry based on the 21 variables analyzed in this model.

Table 9.09: Supplies and Services OLS Regression

Earnings Disparity Model	Coefficient	Significance	Robust Standard Error	t-score	P> t
Age	1928.15	*	508.148	3.79	0.000
Age Squared	-19.81	*	5.016	-3.95	0.000
Incorporated Business	-25871.77	*	3223.278	-8.03	0.000
Bachelor's Degree	2614.67		3184.925	0.82	0.412
Advanced Degree	11827.10		10277.120	1.15	0.250
Home Owner	9878.57	*	3675.331	2.69	0.007
Home Value	0.00		0.011	0.17	0.864
Monthly Mortgage Payment	4.15		3.426	1.21	0.226
Interests and Dividends	0.10		0.141	0.74	0.461
Speaks English at Home	3790.65		4831.738	0.78	0.433
Children under 6 in Household	-3401.29		4956.017	-0.69	0.493
Married	-6330.19		4009.193	-1.58	0.115
Caucasian Female	-10149.02	*	3187.635	-3.18	0.002
African American	-9359.11		5523.330	-1.69	0.091
Asian American	-5890.20		7340.055	-0.8	0.423
Hispanic American	-9515.38		7844.830	-1.21	0.226
Native American	-20116.68	*	5370.138	-3.75	0.000
Other	-22791.78	*	6092.435	-3.74	0.000
2010	-1788.01		4276.289	-0.42	0.676
2011	5724.04		4507.020	1.27	0.205
2012	246.33		4369.397	0.06	0.955

Note: P > |t| of less than 0.05 denotes findings of statistical significance.

* identifies statistically significant variables.



The OLS regression results for business earnings in the supplies and services industry indicate the following:²³

- Older business owners have significant higher business earnings in the supplies and services industry. However, as business owners age, they have significant lower business earnings in the supplies and services industry.
- Business owners with a bachelor's or advanced degree have higher business earnings in the supplies and services industry, but not at a significant level.
- Caucasian Female business owners have significant lower business earnings in the supplies and services industry than Non-minority Males.
- Native American and Other Minority business owners have significant lower business earnings in the supplies and services industry than Non-minority Males.
- African American, Asian American, and Hispanic American business owners have significant lower business earnings in the supplies and services industry than Non-minority Males, but not at a significant level.

3. OLS Regression Results in the Professional Services Industry

Table 9.10 depicts the results of the OLS regression for business earnings in the professional services industry based on the 21 variables analyzed in this model. There were too few Hispanic American records in the professional services industry for the group to be included in this analysis.

Table 9.10: Professional Services OLS Regression

Earnings Disparity Model	Coefficient	Significance	Robust Standard Error	t-score	P> t
Age	3490.07	*	1332.448	2.62	0.009
Age Squared	-35.59	*	13.711	-2.60	0.010
Incorporated Business	-61778.18	*	7694.682	-8.03	0.000
Bachelor's Degree	19869.22	*	6577.331	3.02	0.003
Advanced Degree	46915.87	*	9293.195	5.05	0.000
Home Owner	-6402.12		9043.803	-0.71	0.479
Home Value	0.02		0.020	0.90	0.369
Monthly Mortgage Payment	4.38		4.423	0.99	0.323
Interests and Dividends	0.14		0.160	0.86	0.390

²³ For the Earnings Disparity Model, the results are presented for age, education, race, and gender variables only.



Earnings Disparity Model	Coefficient	Significance	Robust Standard Error	t-score	P> t
Speaks English at Home	8683.62		14813.810	0.59	0.558
Children under 6 in Household	-20504.62		10737.930	-1.91	0.057
Married	755.67		7734.102	0.10	0.922
Caucasian Female	-13881.73		7544.619	-1.84	0.067
African American	-21523.39	*	8603.550	-2.50	0.013
Asian American	53714.77		40305.840	1.33	0.183
Hispanic American	NA				
Native American	-25570.83		19980.690	-1.28	0.201
Other	-21800.15		13188.230	-1.65	0.099
2010	-14461.36		9615.100	-1.50	0.133
2011	-24550.60	*	9708.448	-2.53	0.012
2012	-12152.76		11077.970	-1.10	0.273

Note: P > |t| of less than 0.05 denotes findings of statistical significance.

* identifies statistically significant variables.

The OLS regression results for business earnings in the professional services industry indicate the following:²⁴

- Older business owners have significant higher business earnings in the professional services industry. However, as the business owners age, they have significant lower business earnings in the professional services industry.
- Business owners with a bachelor's degree or an advanced degree have significant higher business earnings in the professional services industry.
- Caucasian Female business owners have lower business earnings in the professional services industry than Non-minority Males, but not at a significant level.
- African American business owners have significant lower business earnings in the professional services industry than Non-minority Males.
- Native American and Other Minority business owners have lower business earnings in the professional services industry than Non-minority Males, but not at a significant level.
- Asian American business owners have higher business earnings in the professional services industry than Non-minority Males, but not at a significant level.



²⁴ For the Earnings Disparity Model, the results are presented for age, education, race, and gender variables only.

D. Business Earnings Analysis Conclusion

Controlling for race and gender-neutral factors, the Business Earnings Analysis documented statistically significant disparities in business earnings for minorities and females when compared to similarly situated Non-minority Males. Caucasian Females and Other Minorities have significant lower business earnings in the construction and supplies and services industries. African Americans have significant lower business earnings in the construction and professional services industries. Hispanic Americans have significantly lower business earnings in the construction industry, and Native Americans have significant lower business earnings in the professional services industry. Asian Americans had no significant findings.

Table 9.11 depicts the earnings disparity regression results by race, gender, and industry.

Table 9.11: Statistically Significant Business Earnings Disparities

Race / Gender	Construction	Supplies and Services	Professional Services
Caucasian Female	Significant	Significant	Not Significant
African American	Significant	Not Significant	Significant
Asian American	Not Significant	Not Significant	Not Significant
Hispanic American	Significant	Not Significant	NA
Native American	NA	Significant	Not Significant
Other	Significant	Significant	Not Significant

VII. CONCLUSION

Two regression analyses were conducted to determine whether there were factors in the private sector that might help explain the current levels of M/WBE availability and any statistical disparities between M/WBE availability and utilization identified in the Disparity Study. The analyses examined the following outcome variables: business ownership and business earnings.

These analyses were performed for the three industries—construction, supplies and services, and professional services—included in the City’s Disparity Study. The regression analyses examined the effect of race and gender on the two outcome variables. The Business Ownership Analysis and the Earnings Disparity Analysis used data from the 2008 through 2012 PUMS datasets for Hamilton County and compared business ownership rates and earnings for M/WBEs to those of similarly situated Non-minority Males.



The analyses of the two outcome variables document disparities that could adversely affect the formation and growth of M/WBEs within the construction, supplies and services, and professional services industries. In the absence of a race and gender-neutral explanation for the disparities, the regression findings point to racial and gender discrimination that depressed business ownership and business earnings. Such discrimination is a manifestation of economic conditions in the private sector that impede minorities' and females' efforts to own, expand, and sustain businesses. It can reasonably be inferred that these private sector conditions are manifested in the current M/WBEs' experiences and likely contributed to lower levels of willing and able M/WBEs.

It is important to note that there are limitations to using the regression findings in order to access disparity between the utilization and availability of businesses. 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 program. Therefore, caution must be exercised in the interpretation and application of the regression findings in a disparity study. Nevertheless, the findings can be used to enhance the race-neutral recommendations to eliminate identified statistically significant disparities in the City's use of available M/WBEs.



CHAPTER 10: ANECDOTAL ANALYSIS

I. INTRODUCTION

This chapter presents anecdotal testimony gathered through in-depth one-on-one interviews and an eSurvey. The anecdotal testimony was analyzed to supplement the statistical findings and to disclose any private sector or procurement practices that might affect minority and women business enterprises' (M/WBEs) access to contracts let by the City of Cincinnati (City).

The importance of anecdotal testimony in assessing the presence of discrimination in a geographic market was stated in the landmark case of *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 “evidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proofs, lend support to a [local entity’s] determination that broader remedial relief [be] justified.”²

Anecdotal testimony of individual discriminatory acts, when paired with statistical data, can document the routine practices affecting M/WBEs’ 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.

Outreach was conducted to secure potential anecdotal interviewees to perform 60 in-depth interviews. The strategies included soliciting the involvement of business owners from one of the three Disparity Study business community meetings and contacting prime contractors, subcontractors, and suppliers that had received a City contract or certified with the City as a Small Business Enterprise to determine their willingness to participate in an interview.

An eSurvey was used as an additional information-gathering technique to supplement the qualitative data collected from one-on-one anecdotal interviews with business owners. The eSurvey was administered to business owners who attended a business community meeting and/or utilized prime contractors and subcontractors, and those who confirmed their willingness to contract with the City. The survey was administered online and by telephone.

¹ *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 509 (1989).

² *Id.*



A. *Anecdotal Evidence of Discrimination - Active and 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 businesses 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/WBEs, 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- or gender-conscious remedial program.⁵

Anecdotal testimony used in combination with statistical data to support a race or gender-conscious program has value in the *Croson* framework. 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 entrepreneurs of all races."⁶ Anecdotal evidence can paint a finely detailed portrait of the practices and procedures that generally govern the award of public contracts in the relevant market area. These narratives, according to *Croson*, can identify specific generic practices that can be implemented, improved, or eliminated in order to increase contracting opportunities for businesses owned by all citizens.

B. *Anecdotal Methodology*

All of the business owners who participated in the one-on-one interviews and the eSurvey were located in the market area. The determination of the market area is described in *Chapter 4: Market Area Analysis*.

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 *Id.*



1. One-on-One Interviews

The initial stage of the interview process includes screening 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 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, including architecture and engineering, or supplies and services. 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 women-owned business enterprises (S/M/WBEs) during the January 1, 2009, through December 31, 2013, study period. A total of 60 interviews were conducted with African American, Hispanic American, Asian American, Native American, and Caucasian female, and non-minority male business owners that provide construction, professional services, or supplies and services procured by the City.

2. eSurvey

The eSurvey, administered to the 1,634 available businesses, was administered electronically. The survey was distributed using SurveyMonkey™, a web-based survey solutions provider. The determination of the available businesses is described in *Chapter 6: Prime Contractor and Subcontractor Availability Analysis*. The eSurvey contained 20 categorical questions and seven ordinal questions. A copy of the instrument can be found in the Appendix.

The survey was designed to supplement the 60 in-depth interviews and provide all available business owners, M/WBE and non M/WBEs the opportunity to provide information on any specific knowledge where the City's procurement practices had an adverse impact on S/M/SBEs. The eSurvey was also designed to solicit information on the business owners' perceptions of the City's Small Business Enterprise Program.

The 1,634 businesses that received the eSurvey were owned by African American, Asian American, Hispanic American, Native American, Caucasian Female, and Non-minority Males. The survey was emailed to 1,590 businesses; 44 businesses without an email address in their records were sent the eSurvey by facsimile. All of the surveyed businesses provided goods or services in either construction, professional services (including architecture and engineering), or supplies and services.

A profile of the survey respondents, by ethnicity and gender, is presented in Table 10.01 below. No responses were received from Native American business owners. While responses were received from Asian business owners (n=4) and Hispanic business owners (n=3), conclusions based on these responses would be unreliable due to the insufficient number of observations. Although the responses are depicted in the tables in this chapter they are not reported in the analysis.



Table 10.01: Profile of eSurvey Respondents by Ethnicity and Gender

Ethnicity/Gender	African American	Asian American	Hispanic American	Caucasian American	Ethnicity Unknown	Total
Female	14	0	1	26	15	56
Male	21	3	2	57	7	90
Gender Unknown	6	1	0	0	69	76
Total	41	4	3	83	91*	222

Neither ethnicity nor gender was provided by 91 respondents*. The responses provided by these 91 businesses whose ethnicity and gender are unknown are included in the calculation of the total number of businesses and reflected in the “*Total*” column.

A chi-square test was conducted for each eSurvey question to determine if there was a statistically significant difference in the frequency of responses from M/WBEs compared to Non-minority Males. If the *p-value* is equal to or less than 0.05, the difference is statistically significant.

II. BUSINESS OWNER RESPONSE CATEGORIES

The interviewees and eSurvey responses are categorized in the Report as follows:

- Racial Barriers
- Difficulty with the Contracting Community
- Good Old Boy Network
- Difficulty Navigating the Bid Process
- Insufficient Time to Respond to a Bid or Proposal
- Selection Committees
- Prime Contractors Avoiding SBE Program Requirements
- Problems with the SBE Certification Process
- Barriers to Financial Resources
- Late Payments from the City
- Late Payments from Prime Contractors
- Comments about the Small Business Enterprise Program
- Exemplary Business Practices by the City
- Private Sector Experiences
- Recommendations to Increase M/WBE Participation on the City’s Contracts

Anecdotal testimony derived from the in-depth interviews and data gathered from the eSurvey are presented in Table 10.02. It is noteworthy that 45.99% of the businesses in Hamilton County and 49.58% of the businesses in the state of Ohio have fewer than 5 employees, just like the national profile of businesses.



Table 10.02: Business Size Comparison

Businesses	Hamilton County	State of Ohio	United States*
Less than 5 Employees	45.99%	49.58%	54.63%
Less than 10 Employees	66.41%	70.06%	73.50%
Less than 20 Employees	81.74%	84.45%	86.21%
Over 100 Employees	3.51%	2.72%	2.31%
Minority Owned Businesses**	14.25%	9.18%	21.26%
Women Owned Businesses	28.41%	27.75%	28.76%

* results reflect data pulled from the U.S. Census

** includes Minority and Caucasian Female Business Enterprises

When considering the barriers reported in the anecdotal analysis and their potential impact on the businesses available to perform City contracts, the size of the market area businesses must be noted. 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.

A. Racial Barriers

Some minority business owners reported that their business development efforts are compounded by challenges associated with their ethnicity. A minority male owner of a professional services company agrees that there has been progress for small and minority businesses within the City, however; it is still difficult for African American and Hispanic female business owners:

I think it's difficult in my industry for small businesses. And it's even particularly difficult for African-American women. I believe that there's still a challenge for Black and Latino women to really earn the trust of decision-makers who have historically in my opinion, been either White male or White female. It is changing within the City of Cincinnati where there are many decision-makers who are African-American females. But I still think that African-American females are still negatively impacted.

This same business owner also elaborated on a situation where he believed he was treated differently because of his race:

There was a situation where I submitted a Request for Qualifications to the City and the conversations prior to submitting my response were via telephone. Later when I did identify myself as African-American the next telephone conversation changed. It was shared with me that the opportunity was closed and awarded to another vendor. Actually, the work was completed internally in the City. I don't have a lot of hard evidence but I believe that my



company's qualifications, references, and experience spoke directly to the need. I was confident that we would have been competitive. But I think that it was the identification of my race and the department which we were going to do business did not think it would be good to engage an African-American. I do think that there are situations where my race was a factor in the selection of the company.

A minority male owner of a construction company explained how he is harassed on the City's construction projects:

They can harass you by simply modifying the schedule and undermining your leadership on the job. It can come from a project manager, executive or project engineer because that's the typical chain of command on the projects that we work on.

A minority male owner of a supplies and services company reported that minority business owners are held to higher standard than their counterparts:

There is a hidden expectation amongst any African American or minority company that we better do the job and do it better than anybody else if you want to maintain that contract or do business again in the future.

A minority female owner of a professional services company reported that some networking events can be awkward for women business owners:

A woman networking in a man's world is a problem. I try to go to lunches, but when I try to network after hours a lot of men feel that it is an opportunity for them to make a pass and it puts me in a very awkward situation. I basically walk away or say that was inappropriate. But then it spoils it for the rest of the event for me.

A minority male owner of a construction company reported that certain City managers hold his work to a higher standard than his colleagues:

Some City managers will require me as a minority-owned business to do work that was not requested of others doing similar work. I did demolition work for the City. The site was supposed to be seeded and the ground should be very smooth which is how I complete my jobs. I have seen other jobs where the work was not nearly as professional as mine but they did not have to redo it.



B. Difficulty with the Contracting Community

Networking with established majority-owned companies is essential for small and minority business owners to secure subcontracting opportunities on large projects. The interviewees complained that they are excluded from business networks with majority-owned businesses despite their attempts to break into the contracting community. A minority female owner of a professional services company explained why she believes the City prefers to use the same contractors:

All of the City departments have preferred contractors. They have vendors that they use on a consistent basis that they believe provide a level of quality that they need and are willing to pay for. But some buyers don't have time to make new friends which creates a problematic situation. It makes their jobs easier if they use the same vendors over and over again. So it is very hard to break in.

A Caucasian female owner of a construction company believes that the City's Facility Management Division prefers working with the same contractors:

Networking is very important to my business because I feel that people want to do business with people they know or that have been recommended. The Facilities Division managers have preferred contractors. I would say all of the City department managers have preferred contractors.

The prime contractor utilization analysis revealed that more than half of the construction prime vendors received more than one contract. A minority male owner of a construction company reported that the same contractors are repeatedly receiving the City's street repair work:

I believe for sure that Facilities Management has preferred contractors for street repair work. The same people get the contracts. It's hard to say if it is a prejudice but the same old people end up with the same work.

The prime contractor utilization analysis revealed that 48 of 103 of construction Prime vendors worked on more than one contract valued under \$5,000. A minority male owner of a construction company believes that prior relationships with department managers are needed to secure City contracts:

There are preferred contractors across all departments. The City's managers have great relationships with people that provide them services. So when they need services they call them again and again. Contracts at a certain dollar amount don't require solicitation in order to enter into a contract. They can call them and use a card or a credit card to pay for the services. I think it's human



nature for people to buy from those that they know. Some people seem to work with people that look like their cousins. I'm not going to show up looking like anyone's cousin. They want to be comfortable when they purchase from people.

A minority male owner of a professional services company explained why he no longer seeks work from the City:

If you don't have access to the decision makers, you can't understand what they're looking for in the contractors that they select. Since we don't have access they don't know that we exist compared to others who they already have a relationship. We have much less of a chance and opportunity to do work with that person in the future. Almost all of the City departments have preferred contractors. When you look at the contractors doing work with the City they're working with the businesses that they have worked with for quite a number of years. As a business owner looking at that from the outside it seems like there aren't many opportunities at the City. I'd rather go and try to procure other work.

A minority female owner of a construction company believes that two City departments have favorite contractors:

The Heavy Highway Department has preferred contractors and the Water Works Department have their preferences too.

A minority male owner of a professional services company reported that certain contractors are preferred by the Police Department as well as other City departments:

I think there are preferred contractors in certain departments within the City. I think that the Police Department has preferred contractors, be it for equipment or other services. There are other departments within the City such as Human Resources, Public Services, and Parks that have preferred vendors and suppliers.

A minority male owner of a supplies and services company believes that some preferred contractors are privy to bid solicitations prior to advertisement:

I think the City does have preferred contractors who they normally go to first before they put the bids out. I think the Economic Department of the City goes to preferable people before they put the bid out.



A minority female owner of a supplies and services company explained why she believes her company has not been able to break into City contracting:

I feel like there have been times where there are things going on and we find out about it after the fact. We try to figure out how we could have known about the opportunity. I don't necessarily know if it's the right timing of the year or who we are supposed to reach out to. I know that there are continuous ongoing projects, but I don't know if we're missing the mark in trying to get these opportunities. I really don't know the "ins" and "out" so we're not privy to understanding how to "play the game." Since 2009 there have been a couple of challenges trying to obtain construction related work. We have had some challenges networking and communicating with general contractors who are doing City jobs. I see a lot of construction that goes on in the City and try to network and meet the right people. We've actually gone to several construction companies and had meetings with people but some way somehow things just kind of don't seem to fully come together.

A Caucasian female owner of a professional services company believes that the City utilizes preferred contractors when procuring architecture and construction services:

It seems like on some jobs it's almost always the same contractors that get the work whether it's an architect or a cement company or a general contractor. I don't know if it's because they always come in with the lowest bid or what, but you see the same names winning a lot of different jobs.

The prime contractor utilization analysis revealed that 76 of the 140 prime vendors that worked on a contract with the Parks Department received more than one prime contract. A minority female owner of a professional services company also believes that the City has preferred contractors:

I feel frustrated with the City of Cincinnati right now. It seems like for landscape architects here in the City they seem to pick the same company over and over. I'm not the only one that feels that way; there are other colleagues that feel the same way too. They definitely have preferred contractors with the Parks.



A Caucasian female owner of a construction company reported that she attempted to sell her services to the City to no avail:

We are a [type of services withheld] company that has tried to sell our product to the City of Cincinnati since 2009. But they seem to always prefer to use [company name withheld] who sells the same equipment. They do not give us an opportunity to sell our equipment to the City of Cincinnati.

A minority male owner of a construction company that believes that the City utilizes master service agreements as a tactic to award contracts to preferred contractors:

They use their preferred contractors on master service agreements. I would consider that as being preferred.

A minority male owner of a construction company explained that the City is increasingly bundling more construction contracts which is a barrier to his construction company receiving small contracts:

The only way a small business can grow is by getting awarded contracts. If you can't get the contracts, you can't grow. We can't pick up the work, but the bigger companies get all the work. The work for small businesses is shrinking. I'm trying to hold on but most of the work that I get is outside of Cincinnati. It's a problem in the industry especially for Black-owned companies.

A minority male owner of a supplies and services company reported that he no longer seeks work from the City because the departments have preferred contractors:

It has been difficult having success in winning a bid with the City. I've given up on the process. It's just a waste of time as far as I'm concerned. We tried to get work from the Cincinnati Sewer District. There is no doubt that trying to break into the clan is very difficult.

A minority female owner of a professional services company believes that the City's multiyear master agreement contracts are awarded to preferred consultants:

They release a certain request for qualifications approximately once every three years for a three year contract. The last couple of times we were approved without being interviewed. To me that's a red flag because how do they know what we have done for the last three or six years. They say, "Oh no, we know all about you," although we have not received direct contracts from the City or even a request to provide them with a proposal for a project for their master service agreements. The problem is they have their favorites and they award



or invite certain companies to submit proposals on those projects. But by having me on a list, they feel that they have done what they need to do in order to check off the box for outreach to SBEs.

C. Good Old Boys Network

The business owner interviewees reported many instances where they believe that the good old boy network operates as a barrier to their participation on the City's contracts. A minority male owner of a supplies and services company believes that the good old boy network helps large majority-owned companies maintain their status quo:

There is absolutely a good old boys network in this industry. Certain general contractors from big companies like [company name withheld] receive the majority of the work. We have tried to get business from the City, but I believe that they have their preferred network of contractors. They go through the formalities of getting the information out to the public so that they will not be hit with a discrimination charge. But I believe they already know who they're going to pick from the beginning and they just wind up going through the formality of soliciting other contractors.

A minority female owner of a supplies and services company also believes the City prefers to work with businesses that are connected to the good old boy network:

There is a good old boys network in my industry that the City is comfortable working with. The City is comfortable with using the companies that they have used forever. A new company trying to break in and take advantage of those dollars [is] limited to the set asides for the SBE program. We are not looked upon as being capable of competing for those jobs.

A Caucasian female owner of a supplies and services company also described the good old boy network as a barrier to her company receiving work from the City:

It is hard to get work with the City especially for women and African-Americans because of the good old boys network. They are all White and they know each other. They only do business with minorities if they have to, not because they want to.

A Caucasian female owner of a supplies and services company believes that the good old boy networks are evident at the City's networking events:

The good old boys are very obvious at networking events. I laugh because I always notice that all the White men are in a group on one side of the room and the rest of us are on the other side. It's funny and very apparent. It's a hard network to break into. They



don't really think women can handle anything. They think that we are emotional and not equipped to be in the construction industry. Instead, we should be home having babies.

A minority male owner of a supplies and services company believes that the good old boys network is active in his industry:

There's no question about it that the good old boy networking is definitely working and it's right in our face. It's not hidden anymore. They will be honest and tell us that they don't need us.

A Caucasian female owner of a construction company described the circumstances that have prompted her to use her male manager as the face of her company to counteract the negative impact of the good old boy network:

In the construction industry, I have personally gone to look for jobs and they don't want to talk to me or they think I don't understand my business well enough to give them a quote. I have actually taken my Vice President of Operations with me who is a White male and they will talk with him. I try not to let it bother me.

A minority male owner of a construction company explained why it is difficult for minorities to break into the good old boy network:

The good old boy network is growing every day. The people who have access to the top of any organization do business back and forth. That's how it always happens. So the good old boy network is something that we Black folks can't penetrate. If they bring one of us into it, oftentimes it's only temporary because the network has to sustain itself. There are still some cultural things that we haven't been able to bridge.

A minority male owner of a construction company believes his work is held to a higher standard as an exclusionary tactic by decision makers at the City:

I feel that certain City managers are harder on minority business owners than they are on my colleagues who are not. I have to dot every "I" and cross every "T" because my work is closely scrutinized. They have an attitude with us because we are not a White male contractor. Those who are in charge can pretty much do and think however they care to do.



The prime contractor utilization analysis revealed that 50.31% of the professional services prime vendors including architecture and engineering services received all dollars in this industry. A minority male owner of a professional services company believes that the City prefers working with the same consultants:

Our industry is pretty small and I don't want to mention any company names but the same companies have been doing business with the City. There are two to three of them that always get work from the City.

A minority male owner of a professional services company believes that the good old boy network purposely excludes minority businesses from contracting opportunities:

I do believe that the good old boy network is present in my industry, simply because at networking and socializing opportunities the City easily weeds out certain companies. I do not know about certain bid opportunities and then a vendor has been awarded the contract within one week of the deadline for the proposal. So the good old boy network is where social networking leads to business opportunities.

The prime contractor utilization analysis also revealed that 135 of the 1378 supplies and services prime vendors that received small contracts also received contracts valued over \$100,000. A minority female owner of a supplies and services company believes that the contracts for small businesses are being circumvented by the good old boys network:

I feel that there is a good old boy system within the City. They are comfortable continuing to use companies that they are familiar with and do not want to go outside of that box. Small businesses are not getting the contracts that we should. There were millions of dollars that were set aside for the SBE program and maybe a third of that money was given to SBEs which is ridiculous. They will go to [company names withheld] instead of using those dollars that the City has set aside for the SBE program for small businesses. That is why I say that there is a good old boys system that is in place with the City.

A Caucasian female owner of a professional services company reported that the good old boys network is prevalent in her industry because very few women have been able to enter her field:

Being a female business owner in my industry is extremely rare. Probably two or three percent of the 4,000 companies countrywide in my industry are female. The men have been doing things their way for so long that they don't feel women belong.



A Caucasian female owner of a construction company believes that the City's purchasing agents prefer to work with companies that they have previous relationships with:

In the construction industry, people will jump from one company to another and everyone knows each other. People that have been in it for a while know each other and I think they know the purchasing agents at the City and other municipalities. There are people who just buy from who they know.

A minority female owner of a professional services company believes that a select group of firms are receiving the majority of the work in her industry:

In my industry, there are preferred companies that do the work. I do not get the work which impacts my bottom line. It hinders my ability to retain my employees, because I've had to lay them off.

A minority male owner of a supplies and services company believes that the City should implement initiatives that will lessen the impact of the good old boys network on M/WBES:

The City needs an aggressive program so that we can break into the good old boy network so we can have an opportunity to win jobs. And I'm not saying that we should get contracts simply because of our status as African Americans, minorities, or women but at least give us an opportunity.

A minority male owner of a construction company explained why he believes the good old boy network strives to survive:

I think the good old boy network is motivated by economics and greed. If you previously have been doing all the work and then new people try to do some of the work, the established businesses do not want to share the work.

A Caucasian female owner of a professional services company credits her relationship with the good old boys network for building her client base:

I like the good old boys network because I can play that game too. I would say that 75 percent of our clients are male and I think they think of me as a sister or a buddy. I'm happy to play that role because it's all about relationships in our business. So, it's absolutely alive and well, but the good old gals club is alive and well too, which I love. I have a lot of clients that are now friends where we have gone on trips together and enjoy each other's company outside of work. So I think it goes both ways, which is great.



D. Difficulty Navigating the Bid Process

A procurement process that is uniformly administered from written policy and procedures is a requisite for a fair and equitable contracting program. Written policy and procedures are a minimum requirement for a transparency in the award of contracts. The eSurvey revealed that 40.45% of M/WBEs felt that they did not have enough knowledge of the City's procurement and purchasing policies and procedures compared to 24.56% of Non-minority Males.

Many interviewees reported that they were unable to secure information to submit a competitive bid or obtain a debriefing session from the City to improve upon their subsequent bid. A minority female owner of a professional services company reported that although she oftentimes attends debriefing sessions, she still has not been able to secure work from the City:

Every time we are denied I ask for a debriefing session. They indicated that they are not required to do the debriefing in person. This may be true but I found their attitude to be unprofessional. They did tell me some of the things that they were interested in and looking for. I just felt that they work with companies that were pretty entrenched in the work and the City renews their master bid every two years. I did think that there were some inconsistencies with the way they were doing things. I questioned them and told them that I didn't have a lot of confidence [about] integrity in the process. They told me that is how we handle master agreements but there are other opportunities I could go after.

The eSurvey revealed that there is no significant difference ($p=0.107$) in the frequencies of M/WBEs to Non-minority Males who provided a bid or a quote but did not receive a response. Although statistically there is no difference, the majority (75.28%) of M/WBEs reported submitting a bid or quote for a product or service but not receiving a response, compared to 57.89% of Non-minority Males. A minority male owner of a construction company described the difficulties he has encountered over the years trying to get on the City's bidder's list:

I think all of us in the African American community have trouble getting on the City's bidder's list. Because I hear the same story over and over again to the point that some people just quit trying to work with City. It's the way the City is set up, there are certain people who facilitate different products and contracts and it can be difficult trying to find out who they are or to get them to answer the phone. I have called down there 150 times before someone answered the phone. I sent emails and they didn't respond. I couldn't just jump in the car and go down there because that's really a no-no. So it's hard to try to find the correct person. I tried to get on the City's bidder's list for years. Every month or two, I



called downtown and even went through [City representative name withheld]. I consider myself a pretty intelligent person, but it's not easy. Also the City's Vendor Self-Service system is confusing. You have to get a password and go through a lot of stuff just to get set up.

A minority male owner of a professional services company explained why the City's bid process has made it difficult for him to provide the type of services his firm offers:

I've ran into several African American business owners who experienced problems getting on the City's bidder's list. Some of them were construction, electrical, mechanical, and plumbing contractors. This has prevented them from getting work. The work should be broken up so that the services we provide are not part of a large project. When the City prepares for a construction project they rarely separate out line items for environmental health and safety services. They are typically included in the build-out phase. When safety construction services are needed to meet OSHA compliance they do not appear as separate line items, but are hidden within the awarded contractor's package. The bids are structured in such a way that I as a service provider of environmental health and safety services solutions cannot bid as a prime consultant for the type of work that we do. We have to be associated to the awarded contractor in some sort of way and that generally doesn't happen.

A Caucasian female owner of a professional services company reported that she was unable to bid on City projects because the services she provides are normally lumped into architecture and engineering projects:

We have difficulty bidding on projects mainly because most of what we do is not put out for bid by the City. They lump our services which is testing for green and energy efficiency programs in with architecture services or in another piece of a project. So there's no real work for us to bid per se with the City. We are still experiencing this issue today because the City has not changed its way of doing business. The category that swallows up the work that we perform is architecture.



Several interviewees reported that the City's Request for Proposals is structured to benefit large majority-owned firms. As shown in Table 10.03, the eSurvey revealed that there is a significant difference ($p=0.041$) in the frequencies of M/WBEs to Non-minority Males who felt that the City's prequalification requirements posed a barrier to participation. The eSurvey also revealed that 28.09% of M/WBEs felt that the City's prequalification requirements were a barrier to participation compared to 12.28% of Non-minority Males.

Table 10.03: Pre-Qualification Requirements

Responses	African American	Asian American	Hispanic American	MBEs	Caucasian Females	M/WBEs	Non-minority Males	Total *
Yes	46.34%	25.00%	33.33%	43.75%	3.85%	28.09%	12.28%	21.17%
No	46.34%	75.00%	66.67%	50.00%	88.46%	62.92%	77.19%	67.12%
Not Sure	7.32%	0.00%	0.00%	6.25%	7.69%	8.99%	7.02%	9.91%
No Response	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.51%	1.80%
Total:	41	4	3	48	26	89	57	222

$X^2=8.283$, $df = 3$, $p \text{ value} = 0.041$ (M/WBE and Non-minority Males)

* includes 91 respondents whose ethnicity and gender are unknown

A minority male owner of a construction company explained that the bids are structured in a manner that is beneficial for larger companies:

The smaller jobs that could be broken down into smaller pieces are lumped together so that the majority contractors that are White get those jobs and smaller contractors don't. We are forced to try and subcontract with these larger contractors because the bids are too large for the ordinary small contractors.

A minority male owner of a professional services company believes that the City's Request for Proposals is designed to exclude certain consultants:

I think that their Request for Proposals is unreasonably structured because the information required is not always useful to make a particular decision. I think that the request for proposals is a means to vet pricing and capacity rather than obtain service to be provided from the vendor.

This same business owner believes he had to meet pre-proposal requirements that larger firms did not have to meet:

We were asked to meet requirements that were not required by non SBEs or minority businesses. We had to submit references that were redundant, that were required again and again. We had to



participate in multiple interviews that large majority owned firms did not have to go through.

A minority female owner of a supplies and services company reported that the specifications in the City's bids are described in a manner that can be misleading:

We don't receive adequate follow-up on our requests for very pertinent information about bids from the City. We've had a lot of problems with that issue. For example, the City of Cincinnati let a bid for janitorial services and they specified that it was a professional service for \$100,000 or more. We put in a bid for approximately \$50,000, and they actually went with a company that came in around \$18,000. We know that you can put in a bid at any amount, but we were under the impression that if you put it out there that the services are estimated for a certain amount or higher and you bid in that range, that would put you in the right standing.

This same business owner reported encountering barriers when attempting to identify the appropriate City staff to present the company's credentials:

We also ran into a lot of challenges trying to meet with the proper individual regarding the procurement for janitorial services. We were unable to get our phone calls or emails returned. So we got a little discouraged trying to work with the City because the follow-through and the communication were not strong. It was very overwhelming trying to maneuver and figure out what to do as a small business to obtain business for the City.

The business owner interviewees reported on their experiences navigating the City's Vendor Self-Service (VSS) System. As shown in Table 10.04, the eSurvey revealed that there is no significant difference ($p=0.575$) in the frequencies of M/WBE and Non-minority Male ratings of the City's self-service website for vendors. Overall, 41.89% of all businesses were neutral regarding the City's self-service website for vendors, and when disaggregated by ethnicity and gender, 34.15% of African Americans were neutral, 34.62% of Caucasian Females were neutral, and 31.58% of Non-minority Males were neutral.



Table 10.04: Vendor Self-Service Website

Responses	African American	Asian American	Hispanic American	MBEs	Caucasian Females	M/WBES	Non-minority Males	Total *
Exemplary	12.20%	0.00%	0.00%	10.42%	3.85%	6.74%	5.26%	6.76%
Satisfactory	19.51%	25.00%	0.00%	18.75%	30.77%	22.47%	24.56%	20.72%
Neutral	34.15%	25.00%	33.33%	33.33%	34.62%	35.96%	31.58%	41.89%
Adequate	21.95%	25.00%	66.67%	25.00%	19.23%	23.60%	21.05%	18.92%
Poor	12.20%	25.00%	0.00%	12.50%	11.54%	11.24%	14.04%	10.36%
No answer	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.51%	1.35%
Total:	41	4	3	48	26	89	57	222

$\chi^2=3.826$, $df = 5$, p value = 0.575 (M/WBE and Non-minority Males)

* includes 91 respondents whose ethnicity and gender are unknown

A minority male owner of a construction company reported that he has experienced difficulty navigating the City's Vendor Self-Service System:

The City's electronic bidding system is not user friendly. The technology is somewhat outdated in terms of the search category to obtain information.

A minority female owner of a supplies and services company reported that she experienced difficulty accessing the City's Vendor Self-Service system:

I couldn't get on the VSS website. We were using Google to access the website but later found out we needed to download Firefox onto all of our laptops and computers in order to see the proposals. But the website does not mention that. When we initially signed up, they don't inform you that if you're having difficulty to use a certain web browser. I had to go down to City Hall to find out.

A minority female owner of a professional services company reported that she finds it difficult to learn about upcoming bidding opportunities on the City's Vendor Self-Service System:

They have that VSS system and it is not the easiest thing to navigate. I do not think it makes you aware of anything that they might have available. The City's Parks Department goes directly to other companies who have master agreements to obtain a proposal, but they're not contacting me.



A minority male owner of a construction company explained that it is difficult for him to be competitive because he is unable to obtain a fair agreement with the supplier that provides the materials his firm needs:

It is only two suppliers in the United States that supplies rebar in bulk. And they flat out refused to sell it to me. Those suppliers are [supplier names withheld]. I'm small and [supplier name withheld] won't sell to me so I have [to] buy from the majority-owned companies that [supplier name withheld] sells to. I have to buy from a middleman, but everybody else buys from [supplier name withheld].

E. Insufficient Time to Respond to Bid or Proposal

An insufficient amount of time to respond to a Request for a Bid can greatly diminish the competitiveness of the M/WBEs bid response. One business owner believes that some prime contractors purposefully request bids from M/WBEs at the last minute. A Caucasian female owner of a construction company reported that some prime contractors have contacted her for a quote without any intent of utilizing her services:

I usually turn down quotes that require a quick turnaround. This has strictly happened with prime contractors looking for subcontractors. I think they wait until the last minute to show their good faith effort. It seems like they weren't really interested in the first place. They were just looking to fulfill a requirement which happens in the construction industry. I don't bother to even try to submit a bid on those quotes because if we put the numbers together too quick we could miss something.

The City, according to responses in the eSurvey, does not provide sufficient lead time for bidders. The eSurvey revealed that 31.46 % of M/WBEs felt that the City did not provide enough lead time compared to 28.07% of Non-minority Males as described below in Table 10.05.



Table 10.05: Insufficient Time to Prepare Bid or Quote

Responses	African American	Asian American	Hispanic American	MBEs	Caucasian Females	M/WBEs	Non-Minority Males	Total *
Yes	43.90%	0.00%	33.33%	39.58%	19.23%	31.46%	28.07%	23.42%
No	51.22%	100.00%	66.67%	56.25%	73.08%	61.80%	61.40%	65.77%
Not Sure	4.88%	0.00%	0.00%	4.17%	7.69%	5.62%	7.02%	8.11%
No Response	0.00%	0.00%	0.00%	0.00%	0.00%	1.12%	3.51%	2.70%
Total:	41	4	3	48	26	89	57	222

$\chi^2=1.206$, $df = 3$, p value = 0.752 (M/WBE and Non-minority Males)

* includes 91 respondents whose ethnicity and gender are unknown

A minority male owner of a professional services company described an instance where he received inadequate lead time to respond to a bid from the Metropolitan Sewer District:

We did not have enough time to submit a bid to the Metropolitan Sewer District. I would say about 30 percent of the bids that we receive have given only five to seven days before the bid is to be submitted. That was not sufficient time to prepare multiple copies and an original copy that required a signed affidavit by a notary. However, we rushed to create a proposal within that seven day time period. We did not have enough time to mail the proposals. We hand-delivered them and there was a gentleman that took the proposal and looked through it and noticed that the affidavit did not have an original signature, but we were unable to fix it before the due date.

This same business owner further elaborated on the effects of insufficient lead time to prepare a bid:

Inadequate lead time has affected my business because we have to expedite our process to create and develop a proposal that may not be our best effort. We are a professional organization and we like to present information that is easy to read and ultimately competitive. So a quick turnaround to respond to a proposal impacts our ability to effectively compete.



A minority male owner of a construction company reported that he is unable to provide a competitive bid without at least 10 days to respond:

Sometimes we get a notice and depending on the size of the project we don't have enough time to bid on that particular project. About 15 to 20 percent of the bids from the City do not have sufficient lead time to respond. Anything that requires less than 10 days is insufficient. It takes quite a bit of time to prepare an adequate bid. If we don't have a sufficient amount of time to respond we are unable to prepare an adequate response because there is a lot of information that is required in order to be competitive.

A minority female owner of a professional services company explained why she believes the City does not provide adequate notice to respond to certain proposals:

I think inadequate lead time occurs because of the entrenched relationships that the City has with certain consultants. It seems that the City is comfortable working with firms whom they have a previous relationship [with]. Other municipalities throughout the state have a more deliberate outreach effort than the City to companies who are registered as MBEs or WBEs. They will reach out and let us know about opportunities that we might want to submit a proposal. The City of Cincinnati has a Vendor Self-Service system that requires vendors to search through which is hard to navigate and determine if there is a procurement opportunity currently available or within the next two weeks.

F. Selection Committee

Several interviewees described their experiences with the City's selection committees. As shown in Table 10.06, the eSurvey revealed that there is no significant difference ($p=0.113$) in the frequencies of M/WBEs to Non-minority Males who felt that their lack of personnel posed a barrier to participation on the City's contracts. While the majority of companies felt that they had enough personnel to contract with the City, 12.36% of M/WBEs did not, compared to 7.02% of Non-minority Males.



Table 10.06: Lack of Personnel

Responses	African American	Asian American	Hispanic American	MBEs	Caucasian Females	M/WBEs	Non-minority Males	Total *
Yes	17.07%	25.00%	0.00%	16.67%	0.00%	12.36%	7.02%	9.01%
No	78.05%	75.00%	100.00%	79.17%	100.00%	84.27%	82.46%	84.23%
Not Sure	4.88%	0.00%	0.00%	4.17%	0.00%	3.37%	5.26%	4.95%
No Response	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.26%	1.80%
Total:	41	4	3	48	26	89	57	222

$\chi^2=5.966$, $df = 3$, p value = 0.113 (M/WBE and Non-minority Males)

* includes 91 respondents whose ethnicity and gender are unknown

A minority female owner of a professional services company believes that she was not treated fairly by a selection committee because they favored the incumbent:

I believe I was treated unfairly by the selection committee at MSD. It was due to an ongoing relationship with the incumbent vendor. I think the recommendation was made based on the working relationship with the people at MSD on the project. I don't think people are willing to go out and make new friends. I think they want the same people to do it because they want the same kind of results. My qualifications were equal to the incumbent.

A minority male owner of a professional services company described the efforts he made to submit a responsive RFQ to the City but was surprised at the response of the selection committee:

When we filled out the RFQ we did our homework. We reviewed other similar approved RFQs and mimicked those. We also spoke to a contract manager and received great insight and feedback as to what was needed. However, the feedback from the selection committee insinuated that we did not meet the minimum standards and that there was much more that was needed to be done. So although I used the advice of that contract manager and applied it directly to our submittal, in their eyes we still came in subpar compared to our majority larger counterpart. That was actually stated to us. I was shocked that the feedback was the way it was.

G. Prime Contractors Circumvent the SBE Program Requirements

A minority female owner of a professional services company reported that she was contacted to partner as a SBE on a City project although the company did not want her firm to provide any services:

I got a late request from someone looking for us to qualify for a specific statement of work. They wanted us to partner with them



and I told them sure I would. Then once we talked it was clear that they wanted to do all the work and use me as a front for them.

A minority male owner of a supplies and services company also reported that he was approached to work as a pass-through company:

I have been contacted to act as a pass-through. A White company asked me to bid on a job and put up my certification credentials so they could meet the SBE participation requirement to get the job.

H. Problems with the SBE Certification Process

The resources required to complete the certification application and evaluation process can be costly. Excessive and time-consuming certification requirements can be a major obstacle for small and minority business owners. The eSurvey revealed that there is no significant difference ($p=0.297$) in the frequencies of M/WBEs' and Non-minority Males' ratings of the City's business certification process. Overall, 35.59% of all businesses were neutral regarding the City's small business certification process.

Table 10.07: Certification Process

Responses	African American	Asian American	Hispanic American	MBEs	Caucasian Females	M/WBEs	Non-minority Males	Total *
Exemplary	9.76%	0.00%	0.00%	8.33%	11.54%	8.99%	5.26%	6.76%
Satisfactory	31.71%	100.00%	33.33%	37.50%	42.31%	37.08%	26.32%	31.53%
Neutral	26.83%	0.00%	33.33%	25.00%	34.62%	30.34%	36.84%	35.59%
Adequate	17.07%	0.00%	0.00%	14.58%	3.85%	12.36%	17.54%	12.61%
Poor	14.63%	0.00%	33.33%	14.58%	7.69%	11.24%	10.53%	12.16%
No answer	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.51%	1.35%
Total:	41	4	3	48	26	89	57	222

$\chi^2=6.1$, $df = 5$, p value = 0.297 (M/WBE and Non-minority Males)

* includes 91 respondents whose ethnicity and gender are unknown

The interviewees described their experiences with the City's SBE certification and re-certification process. A minority male owner of a construction company explained why he believes the SBE certification process is ineffective:

The application to renew the Small Business Enterprise certification with the City of Cincinnati is a long drawn out process. It seems like we are applying for a federal grant. It's a useless and unnecessary process that takes way too long. And because of some of their doggone rules if you are two days late you can't recertify as if something drastically changed within the two days we were late. I



have refused to apply to be a certified SBE in the City of Cincinnati because of the ridiculous application process.

A minority male owner of a construction company reported that the SBE certification process should be streamlined to incorporate the certifications of other local business enterprise programs:

The SBE certification application takes a tremendous amount of time, energy, and effort to complete. The process should be simpler. They should allow all of the different certifications from other local agencies to be acceptable. That would make the SBE certification process more user friendly.

A Caucasian female owner of a construction firm believes reciprocity between local agencies in the City's market area would lessen the time and effort needed to complete the SBE certification application:

I wish that all the local municipalities would recognize one program. Then we could just register one time to be a WBE or a SBE. It is very confusing because [we] have to apply with the City of Dayton, the City of Cincinnati, and the City of Columbus. It's just a lot of paperwork and confusing. Since we are EDGE certified, every two years we complete the same paperwork for that. So if there was reciprocity it would make it so much easier for a small business.

A Caucasian female owner of a professional services company also believes the City should consider reciprocity with other local agencies:

I wish that the City had reciprocity with other cities, or the EDGE because we certify with them and then we have to do it again and again. A lot of the paperwork required for the different agencies [is] extremely similar.

A minority male owner of a professional services company reported that he believes the SBE re-certification requirements seek duplicate information:

I think that the SBE re-certification requirements are a little redundant. The same information required for there-certification application is also required for the initial application.



A Caucasian female owner of a supplies and services company also reported that she was required to submit duplicate information during the SBE certification process:

I had a very difficult time obtaining my SBE certification. I really got the runaround. I submitted my paperwork and then I was asked to provide additional paperwork. I provided the additional paperwork and was then asked to submit the exact same document a month later. They wanted an explanation on a shareholder in my business that had only seven percent interest. But they wanted a very detailed explanation. They asked for the same financials that I had already provided. They asked for it twice.

A minority female owner of a construction company reported that the SBE certification requirements are excessive:

I think that process requires a lot of paperwork. It is especially difficult for a new business.

A Caucasian female owner of a professional services company also reported that the SBE certification application process needs to be streamlined:

The process is too cumbersome because of all the documents they require and there are way too many pages to mail. We had to separate the documents into several packets to mail or fax them. It took a good week or more to put all those documents together for submission.

A minority female owner of a professional services company also believes reciprocity is needed to streamline the City's certification process:

It's just requires a whole lot of paperwork that I also need to fill out the application for the EDGE program.

A minority male owner of a construction company described several instances where he believes certain companies received an SBE certification fraudulently:

Since we are associated with a minority business environment, we talk and try to figure out how to compete. There is a minority rebar company that is owned by a majority-owned company. So they get the same buying power as the majority-owned company. Also, there are women-owned companies that are really majority-owned companies that were switched into their husband's name. So they too get the same buying power as majority owned companies. There is no monitoring or penalties behind what's going on. In my particular SIC code, it is understood that if you put your business in your wife's name it will make it more competitive as a WBE.



This same business owner further elaborated on a situation where he informed the City about a company he believed was a front:

I informed the City regarding a company that I knew was owned by the husband but was now in the wife's name. Also the business was not located in the City of Cincinnati. The City checked on it and they found out that the office that they claimed was in the City was actually a lawyer's office.

I. Barriers to Financial Resources

1. Difficulty Obtaining Financing

Adequate financing is vital to business survival and is especially to the solvency of small, minority, and new businesses. The eSurvey revealed that 24.72% of M/WBEs felt that obtaining financing was a barrier to participation compared to 8.77% of Non-minority Males.

Table 10.08: Financing

Responses	African American	Asian American	Hispanic American	MBEs	Caucasian Females	M/WBEs	Non-minority Males	Total *
Yes	43.90%	0.00%	33.33%	39.58%	0.00%	24.72%	8.77%	14.86%
No	48.78%	100.00%	66.67%	54.17%	96.15%	69.66%	78.95%	74.77%
Not Sure	7.32%	0.00%	0.00%	6.25%	3.85%	5.62%	10.53%	9.01%
No Response	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.75%	1.35%
Total:	41	4	3	48	26	89	57	222

$\chi^2=7.859$, $df = 3$, p value = 0.049 (M/WBE and Non-minority Males)

* includes 91 respondents whose ethnicity and gender are unknown

The institutional barriers to securing finance both new and mature minority business owners reported as a limitation on the growth of their businesses. A minority male owner of a professional services company reported that he was denied a line of credit despite his good credit rating:

I felt that with our personal creditworthiness and our customer base that we should have been extended larger lines of credit than what was approved by the bank. Our business history and our qualifications apparently had no merit and neither did our grade "A" credit rating. Since we were growing at such a fast rate, we needed a larger line of credit but we were told to come back in a couple of quarters. It really put a strain on our cash flow.



A minority male owner of a supplies and services company reported that he also was denied credit despite his favorable credit score:

I went to the Score Program to learn how to make a business plan. After I learned how to make a business plan, I submitted it to [bank name withheld] and a few other places but it was not accepted at any of the banks. I guess I did not have enough income. I had a great credit score and had been in business for about 10 years, but they still wouldn't give me a good explanation. I felt that I was not treated fairly. I don't believe I was given the proper opportunity. I think it was maybe racism. I still have not received financing.

A Caucasian female owner of a professional services company reported that she sought financing at several banks and was eventually offered a line of credit with an extremely high rate of interest:

My company is a LLC and therefore is tied directly to my personal finances. I had to use my credit cards as a line of credit. Our balances were high and we have not been able to get financing or a line of credit for our company. We have asked for it a couple of times from different banks. Even though we have over \$120,000 out in invoices we can't get \$2,500 to \$25,000 line of credit. We spoke to a lady at [bank name withheld] and she talked a good game as far as what she could get us, but it took way too long for her to come back with a definite no. We missed out on other possible opportunities because of this situation. We still have not been successful.

2. Barriers to Bonding

The eSurvey revealed that 21.35% of M/WBEs felt that the City's bonding requirements were a barrier to participation compared to 10.53% of Non-minority Males.

Table 10.09: Bonding Requirements

Responses	African American	Asian American	Hispanic American	MBEs	Caucasian Females	M/WBEs	Non-minority Males	Total *
Yes	34.15%	0.00%	33.33%	31.25%	3.85%	21.35%	10.53%	14.41%
No	53.66%	75.00%	66.67%	56.25%	88.46%	68.54%	77.19%	72.07%
Not Sure	12.20%	25.00%	0.00%	12.50%	7.69%	10.11%	10.53%	12.16%
No Response	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.75%	1.35%
Total:	41	4	3	48	26	89	57	222

$\chi^2=4.306$, $df = 3$, p value = 0.23 (M/WBE and Non-minority Males)

* includes 91 respondents whose ethnicity and gender are unknown



Many business owners reported that they were unable to secure bonding from local surety companies. A Caucasian female owner of a construction company explained that she is unable to secure bonding valued over \$250,000:

We do not have difficulty getting bonding for under \$250,000 but if more than \$250,000 is required we experience problems. The problem was that we needed to put up some kind of collateral in order to get that size of a bond. They said we needed to put up \$50,000 or some kind of collateral. The inability to obtain bonding has kept us from bidding on larger jobs.

A Caucasian female owner of a supplies and services company believes that it is harder for African American companies, than other ethnic groups, to obtain bonding:

Obtaining bonding especially for Black minority companies is difficult. I feel like they could be more successful and receive better jobs if they could obtain the bonding they needed.

A minority male owner of a construction company reported that the bonding he is offered by surety companies is too small to maintain his firm:

I couldn't get bonded for the work amount I was seeking. I can [get] a \$100,000 bond, but I can't get a million dollar bond for work that I can actually do. Even though I can get the \$100,000 bond, my company can do more than a \$100,000 job. I can't go after the two to three million dollar jobs. So the bond that I can get will not support the volume of work that I need to maintain my company.

J. Late Payments from the City

Late payments by prime contractors and the City can be devastating to a small business which relies on positive cash flow to operate. The majority of companies that responded to the eSurvey, 62.92% of M/WBEs, and 59.65% of Non-minority Males, reported substantial delays in receiving their invoice payments after their goods and services are received and approved.

Table 10.10: Provided a Service or Commodities, but Payment Substantially Delayed

Responses	African American	Asian American	Hispanic American	MBEs	Caucasian Females	M/WBEs	Non-minority Males	Total *
Yes	63.41%	50.00%	66.67%	62.50%	61.54%	62.92%	59.65%	55.41%
No	36.59%	50.00%	33.33%	37.50%	34.62%	35.96%	36.84%	36.49%
Not Sure	0.00%	0.00%	0.00%	0.00%	3.85%	1.12%	1.75%	6.76%
No Response	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.75%	1.35%



Responses	African American	Asian American	Hispanic American	MBEs	Caucasian Females	M/WBEs	Non-minority Males	Total *
Total:	41	4	3	48	26	89	57	222

$\chi^2=1.73$, $df=3$, p value = 0.63 (M/WBE and Non-minority Males)

* includes 91 respondents whose ethnicity and gender are unknown

Difficulties paying creditors and employees, as well as other operating expenses, are hurdles these business owners face when they are paid late. A Caucasian female owner of a construction company reported that approximately 75% of her payments are late from the City and her prime contractors:

Actually we deal with late payments a lot. It seems like it is taking longer and longer to get paid. I feel like we deal with this all the time. Probably 75 percent of our payments are late with the City and prime contractors. There were two main reasons given for the late payments such as it being the end of their fiscal year or their financial system is shut down.

A minority male owner of a construction firm reported that the City has a reputation in the business community for not paying their vendors in a timely manner:

The City is known for not paying on time. It is a known fact that they are not going to pay on time. If they are supposed to pay in 30-days we do not expect payment until after 50 days. From the first payment to the last payment, they never paid us on time. I don't know what they are doing down there. It seems like they don't think it's important to pay people on time even though they have and are using our products. We want our money at the agreed upon time.

A minority male owner of a professional services company reported on the late payments he receives from the Metropolitan Sewer District:

I have experienced late payments with the City. My definition of late payments is anything outside the standard net 30 day payment. I believe that 30 percent of our payments were late. It was usually with the Metropolitan Sewer District. The reason given for late payment was that the accounts payable was shut down. I was unable to pay my sub-contractors and it affected my cash flow. It also prevented me from growing my business because I was unable to get the supplies or materials to do business with other clients.

A minority female owner of a construction company reported that she waited 18 months to receive a payment from the City:

It takes too long to get paid. After we perform a portion of our work the City is obligated to write an estimate for the completed work. It



seems that after we perform the work, the estimate doesn't get written promptly by the City's engineer. In some instances, we have completed the work and it took up to 18 months to get paid. So it takes forever to get paid and on average we wait three to four months for payment. At least 50 percent of our payments are late.

A minority male owner of a construction company also reported experiencing delays when they sought payment from the City:

I did several jobs for the City of Cincinnati and all of them were paid later than the net 30 day agreement. We will turn our bill in and then had to jump through all kind of hoops. It was always something to delay us getting paid. At least 90 percent of our payments were late. Most of our projects were with the Community Development Department. They jerked us around claiming that something was missing or that there were more documents for us to complete. It cost me money because my bills were not being paid timely.

A Caucasian female owner of a professional services company reported that she came close to shutting down her business because of chronic late payments from the City's Health Department:

We have worked with the Health Department and we have never received a payment that was on time. In fact, they have gotten very close to shutting us down on more than one occasion. I mean they almost brought us to a screeching halt. The Health Department's payment process is broken. We had to send an invoice to a person at the Health Department and then it is sent to all eight clinics. All eight clinics have to sign off on that invoice and send it back to the Health Department. Next, it is sent to a manager who then signs off on it. If you think this happens smoothly, it does not. I have to meet payroll every two weeks. That is a heavy burden when you have no money coming in. Like I said they have come very close to shutting us down.

A minority male owner of a construction company reported waiting two years for payment from a prime contractor on a City project:

I completed a job about two years ago and I recently received my final payment from a prime contractor. This happens quite often and it limits the size of my company because my money is tied up so long with the prime contractor. It does not allow me to go do more work. I would tell you the name of the prime contractors but I probably wouldn't get any more business from them. The City has an electronic notification system that informs us when the prime



contractor is paid and when we should receive payment. But when we remind the prime contractor that they have received payment from the City, they will say that we didn't do this or that and still don't pay us. I don't think the City is looking out for subcontractors.

K. Late Payments from Prime Contractors

A minority male owner of a construction company reported that it took more than four years to receive payment as a subcontractor on a City project:

As a subcontractor, I waited over four years to get paid from a prime contractor. They owed me over a quarter of a million dollars and [company name withheld] still get other jobs.

A minority female owner of a professional services company explained why she believes certain prime consultants purposely allow her invoices to languish:

We receive late payments all the time. Anything over three months is late. I have waited for payments for six to nine months. I sent letters and received excuses like we're working on it when we clearly know that they have already been paid. The money has been spent and they are stringing me out. I am basically their free lender until they are ready to pay me. If they owe me \$10,000, they will send me a check for \$2,000 to appease me a little bit. This has happened over and over during the last four or five years. I would say at least 80 percent of their payments are late. It is difficult to keep my employees and to make sure their checks cleared the bank. I would stake my reputation on the fact that architects or engineers are playing with my money.

A minority male owner of a construction company explained how a project engineer's decision regarding the approval of a subcontractor's change order can affect payment received for services rendered:

I can only speak as a subcontractor, but the prime contractor is only paid whatever the engineer agrees to pay. So if our invoice differs from the engineer's pay estimate, we can't get our fee modified. The prime contractor will rarely reimburse us for more than what they are getting from the City.

This same business owner also reported that it can take up to 120 days to receive payment from prime contractors for approved services:

For instance, we may work 30 days and bill the prime contractor and then they have a 30-day period to approve the invoice. If they



don't approve the invoice for 60 days then we can wait from 90 to 120 days to receive payment. As a subcontractor I have to take into consideration the prime contractor's goof-up that could delay my payment. Late payments create cash flow problems because I owe people and I can't pay them versus what I need to pay my current employees. So it's a rob-Peter-to-pay-Paul situation.

L. Comments about the City's SBE Program

The City's Small Business Enterprise Program (SBE) was implemented to provide contracting opportunities for small, minority and women-owned businesses. The Program encourages all City contractors to subcontract with SBE vendors. Certain bid proposals require prime contractors to submit evidence of a good faith effort to contact and solicit bids from SBEs.

As shown in Table 10.11, the eSurvey revealed that there is no significant difference ($p=0.08$) in the frequencies of M/WBE and Non-minority Male ratings of the City's SBE Program. Overall, 40.99% of all businesses were neutral regarding the SBE Program; however, when disaggregated by ethnicity and gender, 41.46% of African Americans rate the program poorly, 46.15% of Caucasian Females rate the program satisfactory, and 40.35% of Non-minority Males were neutral.

Table 10.11: Small Business Enterprise Program

Responses	African American	Asian American	Hispanic American	MBEs	Caucasian Females	M/WBEs	Non-Minority Males	Total *
Exemplary	7.32%	25.00%	0.00%	8.33%	11.54%	8.99%	7.02%	7.21%
Satisfactory	12.20%	75.00%	0.00%	16.67%	46.15%	23.60%	24.56%	23.42%
Neutral	34.15%	0.00%	0.00%	29.17%	38.46%	37.08%	40.35%	40.99%
Adequate	4.88%	0.00%	0.00%	4.17%	0.00%	6.74%	17.54%	10.36%
Poor	41.46%	0.00%	100.00%	41.67%	3.85%	23.60%	8.77%	17.57%
No answer	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.75%	0.45%
Total:	41	4	3	48	26	89	57	222

$\chi^2=9.823$, $df = 5$, p value = 0.08 (M/WBE and Non-minority Males)

* includes 91 respondents whose ethnicity and gender are unknown

The minority interviewees suggested the implementation of an M/WBE program to complement the SBE program in order to increase the participation of M/WBEs on the City's contracts. A minority male owner of a construction company explained why he believes an M/WBE program is needed:

If you look at the data it reveals that minorities are not getting much of anything from the SBE program. If you look at the billions that the City spends, not many people of color or small businesses are



getting much of anything from the City. And the ones that are getting some work are the same contractors. I don't want anybody to take this wrong way, but women businesses deal with different types of issues. They are winning business like crazy compared to people of color. And I think the SBE program is very weak for Black people but for others it's very strong for female-owned businesses. They absolutely should implement an M/WBE program. The reason I say that is because the SBE program is race neutral. When you look at the number of people who live in the City, Black folks probably consist of over 50 percent. Shouldn't they be able to get a piece of the pie? They're paying taxes. They're paying for stuff and not getting anything in return. So with a MBE program, they would at least be able to identify these people who pay taxes and are good citizens to make sure they are getting some of the opportunities. I would definitely prefer an M/WBE program.

A minority male owner of a professional services company reported that the SBE program has been very beneficial for his company but also explains why an M/WBE program is needed:

I believe the SBE program enables small business enterprises to develop a capacity to compete for the City of Cincinnati contracts and other municipalities. The City should implement an M/WBE program because there is a difference between an SBE and a minority-owned business. I have known of businesses that change their ownership, at least on paper, to a White female. Now, this company is suddenly a woman-owned business. Even though it's not a small business, this same business can apply to be a SBE. This is what I like to call business gerrymandering. It actually disadvantages authentic small businesses who are trying to grow. The disadvantage happens when companies that do not necessarily need the program or the benefits of the SBE program are still able to participate. Some of my White counterparts have no knowledge of the challenges that I face as a minority, in particular, an African-American owned business. A minority and women business enterprise program can help me understand and develop the skills needed to grow my business.

A minority female owner of a supplies and services company explained why an M/WBE program would be more effective at increasing the participation of minority and women businesses on the City's contracts:

I believe the SBE program is valuable for the right person, meaning if you are a part of the network that gets the jobs. The only time our WBE certification has been helpful to us is when one of our clients is meeting a goal, but in general I don't believe it's helpful. The



City should implement an M/WBE program. It would be great if minorities could actually receive contracts or jobs from the City. The program would be wonderful for companies that are functioning at the “disadvantage” level whether it’s a MBE or WBE.

A minority male owner of a supplies and services company believes that an M/WBE program could be more beneficial for minority suppliers:

I question the value of the SBE program because I feel like it does not have much weight to it. I would like to see the City start an MBE program. There needs to be more minority participation in the City’s construction and services contracts.

A minority male owner of a professional services company believes that that the SBE program does not address the issues impacting minority and women business owners:

The SBE program is not directly valuable to us since we really have not received much work being certified as an SBE. I believe that because of the number of MBE and diverse companies within the City an M/WBE program is needed. We are disproportionately doing a lot less work with the City than we would if we were non-minority businesses. The SBE program does not address that disparity. There needs to be a M/WBE program with specific goals for minorities and specific goals for woman-owned businesses.

A minority female owner of a professional services company believes that an M/WBE program is needed to even the playing field for minority business owners:

The SBE program does a very good job at making known opportunities that [we] would not know about otherwise. But an M/WBE program is something that will help level the playing field. There are a lot of best practices around the country that could be used to identify work categories to increase opportunities for MBEs and WBEs.

A minority male owner of a construction company also believes a MBE program is needed to even the playing field for minority contractors:

The SBE program has gotten worse. Back when they had the MBE program there were quite a few Black contractors getting work. Now with the SBE program, we see the same contractors doing residential work even they don’t pay as much money. But that is what we can afford to do. The heavy highway work like the curbs, driveways, and sidewalks are not being done by Black contractors. They do have some Black people working for them but not as Black



contractors. I am 100 percent sure that they don't want to work with Black contractors. They will work with Black people but not Black contractors. There is only one Black engineer, a lady in heavy highway and from what I know all the inspectors who inspect heavy highway work and there are a bunch of them, are all White.

This same business owner also recommends breaking up large projects into smaller contracts:

There were smaller jobs that were broken down by the City's engineers so smaller contractors could bid and get bonding. But now what's going on is the smaller jobs that could be broken down are now lumped together so that the larger contractors that are White can get those jobs. So basically we have to subcontract with these larger contractors. What has happened is the bigger contractors have been certified as small business enterprises like [company name withheld] in Cincinnati. Some of them are too large to be a small contractor. When they had the MBE program they would separate the contract so that Black contractors could get smaller pieces of the job.

A Caucasian female owner of a construction company believes the SBE program is valuable for small businesses but is ambivalent about whether an M/WBE program is needed:

I believe the SBE program is valuable because it's almost like being prequalified to work with the City. So any time you can be prequalified with a client, it has its advantages. I don't know how I feel about an M/WBE program. I know they have the SBE program that is not tied to women or minorities, but I don't know if that's enough in itself.

A minority male owner of a construction company does not believe the SBE program is beneficial for minority businesses and explained why an M/WBE program should be implemented:

Being certified with the City of Cincinnati doesn't give you anything. The SBE certification has no value. I got certified because someone advised me that it would open up opportunities that I didn't previously have. But I don't know whether the job I did receive was worth the money that I made because of all of the aggravation of getting paid late. I think an M/WBE program is needed because there is enough work to go around and the population of Cincinnati is deserving of it. I think the minority and women population of contractors, suppliers, and vendors have been harmed over the years. And we pay taxes. If there was a program I



think some of this discrimination would not be as prevalent as it is now.

A minority female owner of a supplies and services company explained why the SBE program has not been successful at increasing the participation of small businesses on the City's contracts and her skepticism on the efficacy of implementing an M/WBE program:

I believe the SBE program could be valuable if it's used in the manner in which it was intended. But the way they currently operate it I would have to say it is not valuable for minorities. It's supposed to be set up where small businesses can do business with the City and receive the dollars that the City set aside for small business. But after looking at the report that the City put out last year, only a third of those dollars were given to small businesses. This tells me that the City's departments are not using the program the way it was set up to be used. They are going outside of the SBE program and using other companies on the small contracts. If they implement an M/WBE program and not structured it according to its objectives then it would be pointless. And, it shouldn't cost an arm and a leg in order to participate in the M/WBE program.

A minority male owner of a supplies and services company explained why he believes the SBE program does not level the playing field for minority businesses:

For the longest time I could never understand why the City accepted SBE certifications instead of MBE certifications. A small business such as mine competing against other SBEs has been difficult and these companies are defined as less than 200 people. I don't know the dollar amount, but it's in the millions. A five person company competing against a company with 199 employees is not equal. It's just not going to work. An M/WBE would at least give us an opportunity to compete on a level playing field. In my opinion and many other African American entrepreneurs ... the SBE program is a joke in that it's an un-level playing field.

A Caucasian female owner of a professional services company explained what she believes are the pros and cons of an M/WBE program:

An M/WBE program is supposed to educate you on how to properly provide services to match those that are needed by the City. So I like the education part of it. In my mind, it's been the paperwork part of it that takes too much time for what we could get out of it.



A Caucasian female owner of a professional services company supports the implementation of an M/WBE program:

An SBE program is valuable because it provides small businesses a little bit of an advantage to break into City contracting. If Cincinnati doesn't have an M/WBE program, I think they should.

A minority female owner of a professional services company also supports an M/WBE program:

We were able to get a nice project under the SBE program years ago, and that's why I appreciate the program. An M/WBE program would be great because it could be another avenue that I could be part of and receive work.

A Caucasian female owner of a supplies and services company believes an M/WBE program is needed to counteract the negative impact of the good old boys network:

The SBE program is valuable, especially for minorities. If there weren't an SBE or an MBE program in place I don't think that we would ever get work with the City especially in the construction industry. After listening to a lot of my colleagues I really feel that there is a good old boys network in the construction industry in Cincinnati. I don't think that M/WBEs are receiving as much work as they really should. If there was an M/WBE program in place things may be different.

A Caucasian female owner of a construction company explains why she believes the SBE program is needed to gain work in her industry:

The SBE program seems to be working for us in our industry otherwise the City would only use one supplier. I think it helps small businesses get in the door with the City of Cincinnati. It also helps small businesses learn about the bid process to acquire work.

A minority male owner of a construction company believes the SBE program is valuable for small businesses but not minority-owned firms:

The SBE program is valuable for small businesses but not necessarily for minority businesses. I don't think it's effective because they don't manage and monitor it like it should be. But even if they did it would still leave minority companies out because they would still be just another small company.



A minority female owner of a professional services company believes that the SBE program requirements should be revised to limit the program to smaller firms:

I know that the SBE program was implemented because the City of Cincinnati had an MBE program that was either sued or concerned about a lawsuit. Now companies that are male and White that are actually substantial in size can meet the SBE requirements. As a Hispanic woman, I think the SBE program defeats its purpose. My competitors that are male and White are SBE businesses and are helping the City meet their goals. I hope someday the City considers taking another look at the SBE requirements and make it more stringent in terms of the qualifications. Right now it's not allowing a lot of minority and women-owned firms to sell their services to the City. The program could provide small, women, and/or minority owned businesses an opportunity to gain experience and work on City projects. It could be an opportunity to stabilize and even encourage new business formation by minorities and women.

A minority male owner of a supplies and services company believes the SBE program should have stronger enforcement ability:

I question the value of the SBE program because the program does not have much weight to it. I would like to see the City start an MBE program. But just an MBE program not WBE. I do not believe there is much minority participation on the City's construction projects.

A minority female owner of a supplies and services company explained why the implementation of an M/WBE program should be considered:

I believe the SBE program is valuable for those that are a part of the network that get the jobs. I think they should implement an M/WBE program. It would be great if people actually receive jobs through enforcement requirements. It would be great for companies who are functioning at the "disadvantage" level whether they are minorities or women.

M. Exemplary Business Practices by the City

Some of the interviewees lauded the City's managers for their dedication and support to small, minority, and women-owned businesses. A Caucasian female owner of a construction company reported on the positive relationship she developed with a City manager:

Well, [name withheld] who worked as the contract compliance officer was always very helpful to me. I became familiar with her



because she came to my office for a site visit when I applied for an SBE certification. I have seen her at various City functions and she asked me to participate on their cable program and talk about my company. She has always been helpful with whatever I needed.

A Caucasian female owner of a construction company also spoke highly of the Office of Contract Compliance:

At the SBE Program, [name withheld] is someone there that have always been really helpful. I met [name withheld] at one of the meet and greets. She was very personable and nice person. Every question I ever had they were right on it. They are on the ball.

A minority male owner of a professional services company reported that he was able to get on a vendor's list with the assistance of a City manager:

[Name withheld] at the Office of Contractor Compliance responded to me very quickly; within a 48 hour time period. She also coached and assisted me through the process to become listed on one of the vendors list. Prior to contacting [name withheld] I was not able to get on the list. I was also not able to speak to anyone to coach me through the process. She was very instrumental in assisting me through the process. Also, there was a technical support program that I found helpful that was sponsored by the Metropolitan Sewer District. They provided training and conferences to assist with budgeting and networking. I've found them to be very helpful too. I took advantage of those conferences. But I must say that the Office of Contractor Compliance has provided access to networking opportunities that have been very helpful.

A minority male owner of a professional services company gave kudos to managers at the City's Metropolitan Sewer District:

We received a lot of help from three managers that work at the Sewer District. [Names withheld] have been very helpful to our company.

A minority male owner of a supplies and services company also developed a positive relationship with a City manager:

[Name withheld] invited me to submit a bid on the railing system when it first started back in 2010. He was a very good manager.



A minority female owner of a supplies and services company reported on the assistance she received from the Purchasing Department in response to her inquiries:

Once we had a problem and we reached out to the Purchasing Department to get answers regarding our proposal. We met with [name withheld] in the Purchasing Division and she was very helpful. She actually sat us down and walked us through the entire proposal. She explained how the whole process works in regards to purchasing. She explained what they were looking for to make their decision. She gave us a very thorough meeting and was very helpful in that arena.

This same business owner also reported on the technical assistance she received as a result of a seminar sponsored by the City for small businesses:

I can't remember what group she was with, but [name withheld] would hold seminars about doing business with the City. They would share what challenges minority contractors typically faced. They provided a semblance of hope for minority contractors. The seminars were for new or startup businesses.

A minority male owner of a construction company reported on the assistance he received from the City manager who supervised his project:

The Supervisor of Economic Development has been helpful at times. He has given me pointers on how to do this or that and information on their expectations. Also, his boss was very helpful about sharing information.

A Caucasian female owner of a professional services company spoke highly of several City managers:

I would like to share a positive experience with a gentleman who works with the City. He handles the City's Vendor Self-Service electronic service. His name is [name withheld] and he was very nice, just wonderful. There was one time where we couldn't access the system to pay our fee for three days in a row. He took care of us and has always been very pleasant. I find most of the people at the City to be helpful. Health Department managers [names withheld] are wonderful to work with. But they are just a little bit old school and do everything by paper.



A Caucasian female owner of a professional services company credits the City's Economic Development Department for helping to grow the capacity of her firm:

I believe [name withheld] works in economic development. He's been extremely helpful. He calls on us quite a bit for our insight and on things he wants us to do. Actually everybody in the economic development office has been extremely helpful. The City also has an extremely good property tax abatement program that has helped my business tremendously because I certify homes for that program. If that program had not been in place, my business would not have grown the way it has.

N. Private Sector Experiences

The interviewees were asked to compare their experiences seeking work in the private and the public sectors. A minority female owner of a professional services company reported that she has been more successful in the private sector than the public sector:

The private sector is just a lot more seamless and they seem to treat firms fairly equal. There are more opportunities in the private sector.

A minority male owner of a supplies and services company reported that timely payments make the private sector more appealing than the public sector:

I am paid quicker in the private sector. When the job is complete we normally are paid. With the public sector, the City in particular, you finish your work and then wait for your money. Also there are fewer requirements in the public sector such as prevailing wages and other regulations.

A minority female owner of a supplies and services company prefers working in the private sector because she has been unable to secure work in the public sector.

We have more experience in the private sector. The public sector is very challenging. We have been in business for several years and I'm just as ignorant on how the bidding procedures work with the City as when I first started my company. It's almost to the point to where it's so discouraging that I really don't want to be bothered with seeking work from the City.



A Caucasian female owner of a supplies and services company reported that the clarity of the scope of work and payment schedule on public sector projects is preferable to working on private sector projects:

I would rather do business with the City or with government entities than with private sector companies. On public sector jobs I know that I will get the work and receive payment. The private sector clients may give me work but I may or may not receive payment. I might have to argue with them to get my money, whereas with the City I don't have those issues. It is completely understood what they expect and when we will receive payment.

A minority female owner of a construction company believes the playing field is level in the public sector compared to the private sector when seeking contracting opportunities:

We find the public sector to be a good sector to work in. We are treated more fairly than in the private sector. We are at a disadvantaged in the private sector because it is a subjective environment.

A minority male owner of a professional services company explained why he believes the public sector is not effective:

In my work experience it seems that the public sector identifies issues and challenges quickly, but they move slowly to resolve the issues. I believe that this is the case because of the bureaucracy and individuals are not held accountable as readily as they are in the private sector.

0. Recommendations to Increase SBE Participation on the City's Contracts

The interviewees provided recommendations that they believe will enhance the City's SBE Program. The eSurvey revealed that there is no significant difference in the frequencies of M/WBE and Non-minority Male ratings of the City's technical assistance resources. Overall, 40.09% of all businesses were neutral regarding the City's technical assistance resources; however, when disaggregated by ethnicity and gender, 41.46% of African Americans rate the technical assistance resources poorly, 46.15% of Caucasian Females were neutral, and 40.35% of Non-minority Males were neutral.



Table 10.12: Technical Assistance Resources

Responses	African American	Asian American	Hispanic American	MBEs	Caucasian Females	M/WBES	Non-Minority Males	Total *
Exemplary	2.44%	25.00%	0.00%	4.17%	7.69%	4.49%	7.02%	4.95%
Satisfactory	17.07%	75.00%	0.00%	20.83%	26.92%	21.35%	21.05%	22.52%
Neutral	19.51%	0.00%	0.00%	16.67%	46.15%	33.71%	40.35%	40.09%
Adequate	19.51%	0.00%	0.00%	16.67%	3.85%	11.24%	15.79%	11.26%
Poor	41.46%	0.00%	100.00%	41.67%	11.54%	28.09%	10.53%	18.02%
No answer	0.00%	0.00%	0.00%	0.00%	3.85%	1.12%	5.26%	3.15%
Total	41	4	3	48	26	89	57	222

$\chi^2=8.603$, $df = 5$, p value = 0.126 (M/WBE and Non-minority Males)

* includes 91 respondents whose ethnicity and gender are unknown

The interviewees recommended strategies to increase the participation of M/WBES on the City's contracts and build the businesses' capacity. The strategies included more networking events, stricter monitoring procedures, and seminars on "How to do Business with the City." A minority male owner of a construction company recommends that the City provide more networking opportunities for small businesses to meet City managers with procurement authority:

One of the things that make it difficult to work with the City for firms like mine is we don't know who the buyers are. The City is a closed organization, like a clique. They have the same people doing the same work and working with the same companies. So it's like a mystery to a lot of us on the outside how the City works. We know they spend a lot of money, but we also know that we are not getting a lot of it.

A minority female owner of a supplies and services company suggests that the City's procurement process be more transparent:

I believe they should improve their communication process. We haven't submitted anything this past year because we haven't received any solicitation for [service name withheld] services. In the past all of our solicitations went through one person. Now we are very discouraged trying to get work from the City. We do not receive any responses to our questions. They are not forthcoming with information. A lot of times we feel like if we knew more we would have done better, but we are not privy to certain information. It is a challenge trying to communicate with the City. When you have a company that is reaching out to get help or clarification it would be helpful if they responded to our questions.



A minority male owner of a supplies and services company recommends more transparency to encourage new businesses to seek work from the City. A streamlined bid notification process is also recommended:

I don't think the City makes the efforts like other entities to at least make the appearance that they welcome new companies to do business with them. When we get emails indicating that there are bid opportunities with the City we have to sift through an Excel spreadsheet that is so convoluted that it literally takes too much time to go through each row click on a particular job to find out whether they apply to what we provide.

A minority male owner of a professional services company suggests the implementation of a Mentor-Protégé program and departmental M/WBE goals:

I recommend connecting our business with companies that the City directly procures the type of services that we provide. Departmental minority goals would be great too.

A minority male owner of a construction company recommends the City do more to include minority contractors on their construction projects:

I think that the City should work harder to assist minority contractors to work on their highway and water works projects. They should really work harder to get minority included in those contracts. They will have twenty guys working on those projects and at least 18 of them are White with a very small portion of Black contractors.

A minority male owner of a professional services company recommends workshops on “How to do Business with the City” and debriefing sessions:

The number one thing that would help my business compete more effectively for City work is to be more knowledgeable of their contracting opportunities via RFPs or RFQs. They should communicate more be it through networking events. Also, it would help us win business if we knew what we were doing wrong or the mistakes we possibly have made during the proposal process. That would be very helpful.

A minority male owner of a supplies and services company also recommends seminars on “How to do Business” with the City:

It would be great if we could learn how to fill out the proper paperwork on how to bid for City jobs. For example, I do not know the difference between the best bid and the lowest bid. I'd like for



the City to have a seminar to show SBEs and MBEs how to properly fill out a bid sheet for the City. Also, more seminars on upcoming jobs with the City are needed.

A Caucasian female owner of a professional services company recommends broadcasting upcoming contracting opportunities in a newsletter and seminars on “How to do Business with the City”:

I recommend a quarterly newsletter or e-newsletter that lists bids that are open and a semi-annual education program on how to work with the City. That would be very helpful.

A minority female owner of a construction company recommends that the City pay its contractors in a timely manner:

My only complaint is late payments. I wish the City would do something about paying more promptly.

A minority female owner of a professional services company recommends the City create more opportunities for SBEs to work on their architecture and engineering projects:

It would be very beneficial if the City did not take the position that they do not need to interview companies that have submitted proposals in the past. What happens is the same four or five landscape architecture firms get all the contracts. I don't know if any of them are even interviewed. They keep approving the same four or five firms every three years.

This same business owner recommends the City require that its prime consultants have their subconsultants execute an affidavit verifying receipt of payment for services rendered:

It would be great if the City required as a condition for payment to a prime contractor that they can demonstrate that the subconsultants have been paid. Some sort of affidavit that should be executed confirming that the subconsultant has been paid.

III. SUMMARY



The interviewees’ anecdotes revealed experiences working with or seeking work from the City. They reported on their personal knowledge of barriers they perceive as preventing contractors from successfully competing for public contracts. The interviewees also identified exemplary practices in utilizing M/WBEs. Recommendations by business owners to improve access for M/WBEs and other small businesses were also offered.

The eSurvey supplemented the interviews collected from 60 business owners during the anecdotal assessment.



CHAPTER 11: RECOMMENDATIONS

I. INTRODUCTION

This chapter describes race- and gender-conscious and race- and gender-neutral recommendations for the City of Cincinnati's (City's) consideration. The recommendations are offered to maximize the use of Minority and Woman-owned Business Enterprises (M/WBEs) and other small businesses. The recommendations are based on the following: (a) an analysis of the Disparity Study's (Study's) statistical findings, (b) an assessment of the effectiveness of the City's Small Business Enterprise (SBE) Program generated from an analysis of comparable agencies' best management practices, and (c) a review of the City's *Purchasing Policies and Procedures Manual* and *Understanding the Procurement Process*.

The disparity analysis included a review of construction, professional services including architecture and engineering (hereinafter professional services), and supplies and services contracts awarded during the study period – January 1, 2009, to December 31, 2013. The statistical findings provide evidence of the utilization of M/WBEs compared to their availability in the City's market area. The best management practices were derived from a review of the City of Tampa, Florida, City of St. Louis, Missouri, and City of Memphis, Tennessee, inclusion programs.

This chapter is organized into five (5) sections. The first section is this *Introduction*. The second section, *Disparity Analysis Findings*, presents the statistical results of the disparity analysis. *Race and Gender-Conscious Recommendations*, which reflect the findings of statistically significant disparity, are provided in section three. Section four, *Small Business Enterprise Program Analysis Findings*, provides an assessment of the effectiveness of the City's SBE Program. *Race and Gender-Neutral Recommendations*, contained in section five, include administrative, data management, and website enhancements.

II. DISPARITY ANALYSIS FINDINGS

The 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 the City's market area. According to the United States Supreme Court, the statistically significant underutilization of an ethnic or gender group constitutes a disparity.¹ Race- and gender-specific recommendations are proposed where a statistically significant disparity was documented.

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



The prime contract disparity was analyzed at four different dollar thresholds, as set forth in the City's procurement process. The findings are presented by ethnicity and gender within each industry at both the formal and informal contract threshold. There was also an additional analysis of informal contracts under \$250,000.

A. Prime Contracts

As depicted in Table 11.01, the City issued 10,228 prime contracts during the January 1, 2009, to December 31, 2013, study period. The 10,228 prime contracts included 1,563 for construction, 1,229 for professional services, and 7,436 for supplies and services.

The payments made by the City during the study period totaled \$1,232,570,508 for all 10,228 prime contracts. Payments included \$541,126,211 for construction, \$371,576,494 for professional services, and \$319,867,803 for supplies and services contracts.

**Table 11.01: Total Prime Contracts and Dollars Expended:
All Industries, January 1, 2009, to December 31, 2013**

Industry	Total Number of Contracts	Total Dollars Expended
Construction	1,563	\$541,126,211
Professional Services	1,229	\$371,576,494
Supplies and Services	7,436	\$319,867,803
Total Expenditures	10,228	\$1,232,570,508



B. Subcontracts

As depicted in Table 11.02 below, 1,469 subcontracts were analyzed, which included 1,328 construction and 141 professional services subcontracts.

The subcontract dollars expended during the January 1, 2009, to December 31, 2013, study period totaled \$121,553,166. These included \$113,780,917 for construction subcontracts and \$7,772,248 for professional services subcontracts.

Table 11.02: Total Subcontracts Awarded and Dollars Expended: All Industries, January 1, 2009, to December 31, 2013

Industry	Total Number of Subcontracts	Total Amount Expended
Construction	1,328	\$113,780,917
Professional Services	141	\$7,772,248
Total	1,469	\$121,553,166

C. Prime Contractor Disparity Findings

1. Construction Contracts

Table 11.03 depicts the disparity found at three different thresholds: all prime contracts, formal contracts, and informal contracts. As indicated in Table 11.03 below, disparity was found for African American and Caucasian Female Business Enterprises on all prime contracts. Disparity was also found for African American and Caucasian Female Business Enterprises on formal prime contracts valued at over \$250,000. Finally, disparity was found for African American and Caucasian Female Business Enterprises on informal prime contracts valued under \$250,000.



**Table 11.03: Disparity Summary: Construction Prime Contract Dollars,
January 1, 2009, to December 31, 2013**

Ethnicity/Gender	Construction		
	All Contracts	Formal Contracts \$250,000 and Over	Informal Contracts Under \$250,000
African Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Asian Americans	No Disparity	No Disparity	No Disparity
Hispanic Americans	No Disparity	No Disparity	No Disparity
Native Americans	No Disparity	No Disparity	No Disparity
Caucasian Females	<i>Disparity</i>	<i>Disparity</i>	No Disparity

Table 11.04 depicts the disparity levels found at the three different informal threshold levels. Disparity was found for African American and Caucasian Female Business Enterprises on prime contracts valued at over \$250,000 and between \$50,001 and \$249,999. In addition, disparity was found for African American and Asian American Business Enterprises on prime contracts valued between \$5,001 and \$50,000. Finally, disparity was found for African American Business Enterprises on prime contracts valued at \$5,000 and under.

**Table 11.04: Disparity Summary: Construction Prime Contract Dollars by Informal
Threshold, January 1, 2009, to December 31, 2013**

Ethnicity/Gender	Informal Construction		
	Contracts \$50,001 to \$249,999	Contracts \$5,001 to \$50,000	Contracts \$5,000 and Under
African Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Asian Americans	No Disparity	<i>Disparity</i>	No Disparity
Hispanic Americans	No Disparity	No Disparity	No Disparity
Native Americans	No Disparity	No Disparity	No Disparity
Caucasian Females	<i>Disparity</i>	No Disparity	No Disparity



2. Professional Services Prime Contracts

Table 11.05 depicts the disparity found as a result of the analysis at three different thresholds: all prime contracts, all formal contracts, and all informal contracts. As indicated in Table 11.05 below, disparity was found for African American, Asian American, Hispanic American, and Caucasian Female Business Enterprises on all prime contracts. Disparity was also found for African American and Caucasian Female Business Enterprises on formal prime contracts valued at \$250,000 and over. Finally, disparity was also found for African American, Asian American, Hispanic American, and Caucasian Female Business Enterprises for all informal contracts valued under \$250,000.

Table 11.05: Disparity Summary: Professional Services Prime Contract Dollars, January 1, 2009, to December 31, 2013

Ethnicity/Gender	Professional Services		
	All Contracts	Formal Contracts \$250,000 and Over	Informal Contracts Under \$250,000
African Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Asian Americans	<i>Disparity</i>	No Disparity	<i>Disparity</i>
Hispanic Americans	<i>Disparity</i>	No Disparity	<i>Disparity</i>
Native Americans	No Disparity	No Disparity	No Disparity
Caucasian Females	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>

Table 11.06 depicts the disparity levels found at the three different informal threshold levels. As indicated in Table 11.06 below, disparity was found for African American and Caucasian Female Business Enterprises on prime contracts valued between \$50,001 and \$249,999. Disparity was also found for African American, Asian American, and Caucasian Female Business Enterprises on prime contracts valued at \$5,001 and \$50,000.

Table 11.06: Disparity Summary: Professional Services Prime Contract Dollars by Informal Threshold, January 1, 2009, to December 31, 2013

Ethnicity/Gender	Informal Professional Services	
	Contracts \$50,001 to \$249,999	Contracts \$5,001 to \$50,000
African Americans	<i>Disparity</i>	<i>Disparity</i>
Asian Americans	No Disparity	No Disparity
Hispanic Americans	No Disparity	No Disparity
Native Americans	No Disparity	No Disparity
Caucasian Females	<i>Disparity</i>	<i>Disparity</i>



3. Supplies and Services Prime Contracts

As indicated in Table 11.07 below, disparity was found for African American, Asian American, and Caucasian Female Business Enterprises on all prime contracts. Table 11.07 depicts the disparity found as a result of the analysis at three different thresholds: all prime contracts, all formal contracts, and all informal contracts. Disparity was found for African American, Asian American, and Caucasian Female Business Enterprises on all formal prime contracts valued at \$250,000 and over. Finally, disparity was found for African American, Asian American, and Caucasian Female Business Enterprises on all informal contracts valued under \$250,000.

Table 11.07: Disparity Summary: Supplies and Services Prime Contract Dollars, January 1, 2009, to December 31, 2013

Ethnicity/Gender	Supplies and Services		
	All Contracts	Formal Contracts \$250,000 and Over	Informal Contracts Under \$250,000
African Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Asian Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Hispanic Americans	No Disparity	No Disparity	No Disparity
Native Americans	No Disparity	No Disparity	No Disparity
Caucasian Females	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>

Table 11.08 depicts the disparity levels found at the three different informal threshold levels. As indicated in Table 11.08 below, disparity was found for African American, Asian American, and Caucasian Female Business Enterprises on prime contracts valued at \$250,000 and over, prime contracts valued between \$50,001 and \$249,999, prime contracts valued between \$5,001 and \$50,000, and prime contracts valued at \$5,000 and under.

Table 11.08: Disparity Summary: Supplies and Services Prime Contract Dollars by Informal Threshold, January 1, 2009, to December 31, 2013

Ethnicity/Gender	Informal Supplies and Services		
	Contracts \$50,001 to \$249,999	Contracts \$5,001 to \$50,000	Contracts \$5,000 and Under
African Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Asian Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Hispanic Americans	No Disparity	No Disparity	No Disparity
Native Americans	No Disparity	No Disparity	No Disparity
Caucasian Females	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>



D. Subcontractor Disparity Findings

Extensive efforts were undertaken to obtain subcontracting records for the City's construction and professional services contracts. The City's supplies and services subcontract records were not available. Thus, a subcontract analysis for the supplies and services industry could not be performed. The subcontract disparity findings are summarized below.

As indicated in Table 11.09, disparity was found for African American and Caucasian Female Business Enterprises in the award of both construction and professional services subcontracts.

**Table 11.09: Subcontractor Disparity Summary,
January 1, 2009, to December 31, 2013**

Ethnicity/Gender	Construction	Professional Services
African Americans	<i>Disparity</i>	<i>Disparity</i>
Asian Americans	No Disparity	No Disparity
Hispanic Americans	No Disparity	No Disparity
Native Americans	No Disparity	No Disparity
Caucasian Females	<i>Disparity</i>	<i>Disparity</i>

III. RACE AND GENDER-CONSCIOUS RECOMMENDATIONS

The applicable parameters for implementing race and gender-conscious remedies for a local government are set forth in the *City of Richmond v. J.A. Croson Construction Co.*,² where the Court applied the strict scrutiny standard. Strict scrutiny is the required legal standard that must govern the formulation of any race-based remedial program. Under the strict scrutiny standard, an affirmative action construction contracting program is constitutional when justified by a “compelling government interest” and the resulting remedies are “narrowly tailored” to accomplish that interest.³

² 488 U.S. at 469.

³ *Id.* at 491-92.



Pursuant to *Croson* and its progeny, the City must present a “strong basis in evidence for its conclusion that remedial action [is] necessary.”⁴ A local government’s race-conscious program must be supported by current findings that document the statistically significant underutilization of minority businesses available in the jurisdiction’s market area. Additionally, any race-conscious remedies must be “narrowly tailored” to address the specific identified discrimination. The *Croson* court proclaimed that “where there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality’s prime contractors, an inference of discriminatory exclusion could arise.”⁵

Gender-based affirmative action programs are reviewed under a lesser standard than strict scrutiny. The City may implement gender-conscious remedies if the remedies serve an important governmental objective, and the governmental actions taken are substantially related to achieving that objective.⁶ This lower standard does not require the same level of statistical proof as required for race-conscious remedies. The race- and gender-conscious recommendations outlined below are supported by statistical findings of disparity reported in *Chapter 7: Prime Contract Disparity Analysis* and *Chapter 8: Subcontract Disparity Analysis*.

A. Promulgate a Diversity and Inclusion Program

To address the documented disparity found in the City’s award of prime contracts and prime contractors’ award of subcontracts, and in order to oversee the implementation of the race- and gender-conscious program, a Diversity and Inclusion Program should be established. The program should have both race- and gender-conscious and race- and gender-neutral program components. It should be authorized under the City’s Municipal Code. The race and gender-conscious remedies would apply to the ethnic and gender groups that were underutilized at a statistically significant level and the administrative remedies would apply to all small businesses.

1. Enact Diversity and Inclusion Policy

A Diversity and Inclusion Program should be enacted to include race- and gender-conscious components. The race- and gender-conscious components of the program should be narrowly tailored and predicated on the Study findings. The program should have a sunset provision and include a term for conducting a disparity study update. The Diversity and Inclusion Program should sunset five (5) years after implementation of the program. An updated disparity analysis should be conducted prior to the sunset date to determine whether there is a factual predicate for extending the program.

⁴ *City of Richmond v. J.A. Croson Co.*, at 500 (quoting *Wygant v. Jackson Board of Education*, 476 U.S. 267, 277 (1986)).

⁵ *Id.* at 469.

⁶ *Craig v. Boren*, 429 U.S. 190 (1976).



2. Develop Diversity and Inclusion Program Management Component

The recommended Diversity and Inclusion Program should have a management component to ensure that the program's objectives and policies are implemented by staff in each City department. The management responsibilities should include: (1) formulating procedures to implement the program and modifying them as necessary, (2) training City staff on the program's requirements, and (3) managing the day-to-day activities of the program and monitoring and reporting on its effectiveness.

3. Adopt Eligibility Standards

The designations for MBEs and WBEs in the City's Municipal Code Chapter 323, Sections 323-1-M1 and 323-1-W should be adopted for the Diversity and Inclusion Program.

- **Minority Business Enterprise Definition**

Pursuant to Section 323-1-M1, a business owned by an individual who is African American, Hispanic American, Asian American, or Native American is defined as a minority business enterprise. The business must be 51% owned and controlled by one or more minorities.

- **Women Business Enterprise Definition**

Pursuant to Section 323-1-W, a business that is owned and controlled by one or more women is defined as a women's business enterprise. The business must also be 51% owned and controlled by one or more women.

- **Business Location**

Eligible businesses must be domiciled in the market area. Proof of a permanent office in Hamilton County, Ohio, must be required.

4. Create an M/WBE Directory

The City should maintain a listing of all certified M/WBEs with business addresses, telephone numbers, websites, and specialties as well as contact persons' names, addresses, telephone numbers, and email addresses. The directory must be updated within thirty (30) days of each business's certification and it must be updated within ten (10) days of revocation or denial of certification. The directory must also be maintained, made available to interested individuals, and posted on the City's website. The website should reflect the date that the directory was most recently updated.



B. Prime Contract Remedies

To address the demonstrated disparity that exists in the City's formal and informal procurement processes, Mason Tillman promulgated prime contract remedies to meet the needs of underutilized M/WBEs. The proposed prime contract remedies address both the formal prime contracts and informal prime contract process. Informal contract goals should uniformly apply to all contracts under the \$250,000 threshold.

1. Enhance the Construction and Professional Services Solicitation Process

There was a finding of statistically significant disparity in the award of construction and professional services (which includes architecture and engineering) prime contracts. Currently, professional services contracts are awarded to the consultant whose proposal is considered to be the most advantageous to the City based on price, delivery schedule, the terms of the contract, and any other criteria delineated in the solicitation. Construction contracts are awarded to the lowest and best bid. Administrative Regulation 23 requires, among other things, that all solicitations identify the minimum qualifications required for the successful completion of the proposed work, generate open and fair competition to the maximum extent practicable, and achieve the City's SBE goals. The City Manager or the appropriate Board or Commission is authorized to approve the award.

The solicitation should clearly delineate the evaluation criteria, and each criterion should have assigned points. The short list, or alternatively the recommendation for award if a short list is not produced, should include a narrative report explaining the assignment of points for each proposer. Each evaluator's scores and comments should be attached to the narrative report.

When soliciting proposals and statements of qualifications, department managers should be required to adhere to the following affirmative steps:

- Ensure that the gender and ethnic groups that were found to have a disparity are solicited for construction and professional services prime contracts
- Request lists of potential proposers from the Office of Diversity and Inclusion
- Perform Community Outreach to the identified M/WBEs before the request for proposals is released to notify them of the upcoming opportunity
- Email the notice of the opportunity to the listed potential proposers
- Encourage, where economically and technically feasible, the formation of joint ventures, partnerships, and other similar arrangements among the ethnic and gender groups with a disparity
- Maintain an email log of all M/WBEs solicited for professional services contracts
- Post the professional services solicitations valued at \$250,000 or less on the City's website on a regular basis and on the same day(s) each month



2. Establish a Designated Professional Services Selection Committee for Professional Services Prime Contracts

The Professional Services Selection Committee should reflect the City's ethnic and gender diversity. In addition to staff, the City should ensure that the Committee includes minority and women panel members who are architecture and engineering professionals, or have professional experience in the related fields. The Committee members should not be actively engaged in professional consulting or employed by a design consulting firm. The Diversity and Inclusion Program manager should be an appointed member of the Committee. All panel members should be required to sign a conflict of interest statement to foster transparency in the City's procurement process.

The Committee should review proposals and statements of qualifications submitted in response to the criteria published in the solicitation. The Committee's recommendation should be based upon the published criteria which should include the percent and scope of MBE and WBE participation on the proposed team. The panel should also consider the number of previous awards to the proposers to avoid repeated awards to highly used prime contractors. All panel members should be charged with the responsibility of increasing diversity on the City's professional services contracts. The Committee's recommendations should be reviewed by the Office of Diversity and Inclusion annually to monitor the level of diversity in its selections.

3. Establish Incentive Credits for Professional Service Prime Contracts

Incentive credits should be offered to increase the participation of M/WBEs on professional services prime contracts. Incentive credits would be incorporated in the evaluation process for the awarding of prime contracts. The incentive credits would be given to professional services prime consultants who are members of the statistically significant underutilized groups. The incentive credits would apply only to awards that are based on qualifications and not the lowest bid. Fifteen to 20% of the evaluation points could be comprised of incentive credits when the selection process includes a proposal or statement of qualifications. Including incentive credits in the evaluation criteria may counterbalance the competitive disadvantage experienced by these groups. Offsetting this disadvantage has the potential to mitigate the disparity in this industry.



4. Apply Bid Discounts to Supplies and Services Prime Contracts

The City should apply a 5% bid discount for evaluation purposes on supplies and services prime contracts. The bid discount, when applied, would reduce the bidder's price by 5% for evaluation purposes. The groups that are eligible for bid discounts and the relevant procurement thresholds are listed in Table 11.10.

Table 11.10: Groups Eligible for Supplies and Services Bid Discounts

BID DISCOUNT ELIGIBLE GROUPS	
Supplies and Services	Threshold
African Americans	Formal and Informal Levels
Asian Americans	Formal and Informal Levels
Caucasian Females	Formal and Informal Levels

5. Revise Informal Bid Process for Construction Contracts

For informal construction solicitations, City departments should be required to obtain at least one quote from M/WBEs that were found to have a statistically significant disparity. The quotes should come from a certified M/WBE. The City should also inform M/WBEs of informal construction contract opportunities via email distribution to increase the number of quotes from certified M/WBEs. Any informal contract awarded to a non-M/WBE should be approved by the Diversity and Inclusion Program. The award should also be reported to the City Council with an explanation for the decision to award to a non-M/WBE.

6. Implement an Oversight Committee

The City should create an Oversight Committee to serve as an advisory group with the responsibility of reviewing the relevant documentation concerning the attainment of the M/WBE goals. The Oversight Committee should be comprised of representatives from the Diversity and Inclusion Program, M/WBEs, small business owners, and trade and business organizations. The Oversight Committee should submit a Monthly Utilization Report to the City Manager, including the M/WBE goal attainment on the City's construction, professional services, and supplies and services contracts. Prime contracts awarded to M/WBEs should also be reported monthly.



C. Subcontract Remedies

1. Set Subcontract M/WBE Goals

African American and Caucasian Female Business Enterprises had a statistically significant disparity on the City's construction and professional services subcontracts. Specific overall MBE and WBE subcontract goals should be set to eliminate the documented disparity. The MBE goal should apply to African Americans while the WBE goal should apply to Caucasian and African American Females.

Separate MBE and WBE subcontract goals should be set for construction and professional services prime contracts. To meet the narrowly tailored standard, the MBE and WBE subcontract goals should be based on the availability levels for each ethnic and gender group that was determined to be underutilized at a statistically significant level. The MBE and WBE subcontracting goals for the professional services and construction contracts should reflect the availability of African American and Caucasian Female Business Enterprises. Table 11.11 below depicts the subcontractor availability documented in the Study.

Table 11.11: Subcontractor Availability

M/WBE Subcontractor Availability		
Ethnicity/Gender	Construction	Professional Services
African Americans	16.56%	14.04%
Caucasian Females	10.47%	15.63%

2. Quantify Good Faith Effort Criteria

A contractor that fails to meet the contract goal with a certified M/WBE must document that a good faith effort was made to meet the goal. Bidders should submit documentation of a good faith effort with the bid. If a bidder fails to meet specified goals, the City should determine whether the contractor has complied with all requirements of the solicitation documents and made the required good faith effort.

While the City currently provides guidelines for reasonable actions made in a good faith effort, the City should expand its good faith effort policy. The City would improve upon the attainment of the subcontracting goals by assigning a value to each good faith effort element, thus quantifying good faith effort analysis. The maximum score should be 100 points. A prime contractor should achieve a minimum score of 80 points to demonstrate a bona fide good faith effort. The following are examples of good faith elements and recommended point assignments:



- Advertising (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 the City waives this requirement due to time constraints.

Documentation: The advertisement should include the project name, name of the bidder, areas of work available for subcontracting, contact person's name and phone number, information on the availability of plans and specifications, date that the subcontractor's written bid is due to the prime contractor, and bidder's assistance available to subcontractors, suppliers, and vendors in obtaining bonds, financing, and/or insurance.

- Bidders Outreach to Identify M/WBEs (15 points)

Effort: Contractors should communicate with M/WBEs through personal, frequent, and persistent contact. The contractor should also be required to promptly return phone calls, facsimiles, and emails.

Documentation: Correspondence logs should list the names of the businesses, the representatives who have been contacted, and the dates of contact. Copies of correspondence provided to the contacted businesses and the responses received should be provided. Documentation can also include facsimile transmittal confirmation slips and written confirmation of receipt via email with the date of the transmission. The contractor should contact at least three businesses. However, the number should be sufficient to reasonably result in a viable subcontract.

- Attending the Pre-bid Meeting (5 points)

Effort: Attendance at the pre-bid meeting(s) should be mandatory to comply with the good faith effort requirement.

Documentation: The contractor's name on the pre-bid meeting sign-in sheet can serve as documentation.

- Providing Timely Written Notification (20 points)

Effort: Contractors should solicit subcontract bids and material quotes from relevant eligible businesses in writing at least two (2) weeks prior to the bid opening. Relevant firms are those that could feasibly provide the goods or services required for completing the scope of services provided in the bid document. In soliciting sub-bids, quotes, and proposals, the contractor should furnish: project name, name of the bidder, areas of work available for subcontracting, contact person's name and phone number, information on the availability of plans and specifications, date that the subcontractor's written bid is due



to the prime contractor, and bidder's assistance available to subcontractors, suppliers, and vendors in obtaining bonds, financing, and/or insurance.

Documentation: Written notification should include verification of the transmission date, the recipient's name, and the company name. Documentation can also include facsimile transmittal confirmation slips and written confirmation of receipt via email with the date of the transmission.

- Contact Follow-up (15 points)

Effort: Contractors should return telephone calls, facsimiles, and emails promptly after the initial solicitation. The follow-up should take the form of a telephone call, facsimile, or email during normal business hours and must occur at least two (2) weeks prior to the bid opening. The contact should be within a reasonable amount of time to allow the prospective subcontractor an opportunity to submit a competitive sub-bid, but not less than two (2) weeks prior to the bid opening.

Documentation: Correspondence logs should contain the list of subcontractors who were contacted, including results of that contact, and should be documented with a telephone log, email print-out, or facsimile transmittal confirmation slip. The list should also include names of the eligible businesses, telephone numbers, contact persons, dates of contact, and outcome of the contact. The record should also identify the scope of work each contacted subcontractor was asked to bid.

- Identifying Items of Work (15 points)

Effort: Subcontracts should be broken down into discrete items or packages that M/WBEs may find economically feasible to perform. Smaller portions or quantities of work should be identified in order to maximize M/WBE participation.

Documentation: The documentation should include a list with description of the specific items of work, which were solicited from eligible firms. Documentation can include notices and advertisements targeting M/WBE subcontractors.

- Negotiating in Good Faith (15 points)

Effort: Contractors should negotiate fairly with interested M/WBEs even if the selection of an M/WBE would increase costs or the contractor could self-perform the work. A contractor should not unjustifiably reject sub-bids, quotes, or proposals prepared by eligible businesses based on the subcontractor's standing within its industry, membership in a specific group, organization, or association, and political or social affiliation.

Documentation: A written statement with the names, addresses, and telephone numbers of subcontractors contacted and the negotiated price and services should be submitted. This list should include dates of the negotiations and the results, and document the bids received from the businesses that could provide a commercially useful function.



- Offer Assistance in Securing Financing, Bonding, Insurance, or Competitive Supplier Pricing (10 points)

Effort: Contractors must provide M/WBEs with technical assistance regarding plans, specifications, and requirements of the contract in a timely manner to respond to a solicitation. Contractors should not deny a subcontract solely because a necessary and certified M/WBE cannot obtain a bond. In addition, the contractor should also advise and make efforts to assist interested businesses in obtaining bonds, financing, and insurance required by the City, as well as competitive pricing.

Documentation: The contractor should provide a written description of the type of assistance, the name, contact person, and telephone number of the agency, the name of the person who provided the assistance, and the supplier that offered competitive pricing.

D. Establish Community Benefits Initiative

The City should establish a Community Benefits Initiative, heeding President Obama’s My Brother’s Keeper Program, with the goal of challenging local municipalities to “build ladders of opportunity for all our youth, including those who are too often left behind or left out in our schools, our economy, and our society.” According to the *My Brother’s Keeper Report to the President* in 2013, approximately 50% of young African American men in the United States between the ages of 20 and 24 were employed, compared to over two-thirds of young Caucasian men. The Report also indicated that this employment gap persists as men get older.⁷

In 2010, the unemployment rate among African Americans in Cincinnati was 20%, which is twice the unemployment rate for the Cincinnati Metropolitan Statistical Area (MSA).⁸ The American Community Survey data revealed that 16% of African Americans ages 25 or older obtained a bachelor’s or graduate degree, while 29% of Cincinnati MSA residents ages 25 or older achieve the same level of education.⁹

The City could implement strategies offered in the *My Brother’s Keeper Report* to increase workforce opportunities for millennial African Americans. Bid discounts could be given to prime contractors that provide entry level on-the-job training, job shadowing, pre-apprentice, and apprenticeship opportunities for African Americans on the City’s construction and professional services projects. The participation of the financial institutions that are City contractors, philanthropic organizations, and athletic foundations could be funding sources for the program.



⁷ *My Brother’s Keeper Report to the President*, Broderick Johnson, Assistant to the President and Cabinet Secretary, and Jim Shelton, Deputy Education Secretary, May 2014.

⁸ *Health of African Americans in Greater Cincinnati*, Health Foundation for Greater Cincinnati, 2012.

⁹ *Id.*

A community benefit could also be defined as participation in the Mayor's summer internship program or Entrepreneurship Program.¹⁰ The City, working in collaboration with local organizations such as the Cincinnati-Hamilton County Community Action Agency, Blueprint for Success, Youthbuild Construction and Training Program, Neighborhood Community Councils, Super Jobs, and the Urban League, could prepare young African American candidates for hire by City contractors. The Initiative could also incorporate an Entrepreneurship Program, where young African Americans between 20 and 24 years of age would have the opportunity to learn how to become entrepreneurs. Entrepreneurship Program participants could shadow successful minority and woman business owners as another community benefit program. The Community Benefits Initiative institutionalized in any combination of these collaborations could allow African Americans to gain job skills as a pathway to employment and greater participation in the City's economy.

1. Weighted M/WBE Goals

To increase the participation of M/WBEs on City contracts, weighted M/WBE goals should be considered for evaluating Requests for Proposal and Requests for Bid. The City's evaluation criteria should include a separate M/WBE criterion that carries the weight of at least 15 points out of 100. For example, the points could be awarded as follows:

Table 11.12: M/WBE Participation Percentage

M/WBE Participation Percentage	Evaluation Points Earned
0%	0
1% to 10%	5
11% to 19%	10
20% or more	15

IV. SMALL BUSINESS ENTERPRISE PROGRAM ANALYSIS FINDINGS

The City's SBE Program, which was in operation during the study period, was established in 2002. In 2012 and 2013 it was revised in an effort to mitigate discrimination against local and small businesses and to increase contracting with M/WBEs. The Program has SBE goals set at 30% for construction and 15% for professional services and supplies and services contracts and a number of race-neutral components. This overview summarizes the race and gender-neutral components of the program.

¹⁰ *My Brother's Keeper Report to the President*, Broderick Johnson, Assistant to the President and Cabinet Secretary, and Jim Shelton, Deputy Education Secretary, May 2014.



A. SBE Program Review

1. SBE Program Eligibility

To qualify as an SBE, the business must have met the requisite guidelines for the previous three (3) years. The business's gross revenue or a specified number of employees as defined in 13 Code of Federal Regulations (CFR) Section 121.103, must not exceed the size standards set forth in 15 United States Code (USC) Section 632 and 13 CFR Section 121.101, et seq. In addition, the business must be established for at least one (1) year and have maintained a fixed office within Hamilton County at least one (1) year prior to the submission of the SBE application.

The business must perform a commercially useful function and each owner's net worth must not exceed \$750,000 at the time the application is submitted and during the term of certification. A commercially useful function is defined as being responsible for performing, managing, and supervising the work.¹¹

2. SBE Certification

The City certifies small, minority, and women-owned businesses as SBEs. A firm may also be certified as a SBE through (1) self-certification if the contract value is less than \$50,000; or (2) the State of Ohio EDGE Program or the Federal 8(a) Business Development Program. Applicants may be required to submit documentation demonstrating active participation in the control, operation, and management of the small business. The business certification must be completed within 90-days or must receive a written justification for denial. Applications may be denied based on any of the following grounds:

- Failure to meet the requirements of the definition of an SBE
- Incomplete application
- Submission of false information

SBEs must recertify every two years.



¹¹ Cincinnati, Ohio, Municipal Code § 323-1-C1.

3. SBE Program Management

The Office of Contract Compliance (OCC) is charged with the SBE Program administration pursuant to Section 323-15 of the City's Municipal Code. Specifically, the responsibilities, functions and duties of the OCC include the following:

- Certify, recertify, and decertify SBEs
- Disseminate information and communicate with SBEs
- Solicit input from representatives of SBEs, trade associations, and community organizations
- Hold quarterly outreach events for SBEs and potential SBEs
- Publish bi-annual newsletters regarding small business matters
- Produce video programming targeting small businesses
- Publicly inform SBEs and potential SBEs of the City's procurement forecast
- Assist SBEs with business management and technical assistance resources
- Maintain records and reports submitted by contractors
- Monitor SBE participation levels on projects throughout the duration of the contract in conjunction with other City agencies
- Investigate alleged violations of the SBE Program rules and regulations and provide written results of the investigation including the reasons for the determination and any penalty imposed
- Determine whether a bidder or offeror made good faith efforts as defined in the SBE Program rules and regulations to include SBEs in its bid or proposal
- Provide SBEs' contact information upon request by potential bidders on City contracts
- Notify the appropriate City departments if a contractor has not complied with the SBE Program rules and regulations
- Provide ongoing monitoring and oversight functions to determine successful bidders' continuing compliance with the SBE Program Rules and Regulations

B. SBE Program Effectiveness

Table 11.13 details the City's use of certified SBEs by ethnicity. SBEs received 11.08% of the City contract dollars while non-SBEs received 88.92% of the dollars. Caucasian Females and Non-minority Males received the overwhelming majority of SBE contracts. These data also show that Caucasian Female and Native American SBEs were used more frequently than certified SBEs owned by other ethnic groups. African American-owned SBEs received a significantly larger number of contracts, albeit substantially less in value compared to the contracts received by African American-owned non-SBEs.



**Table 11.13: SBE Certified Prime Contractor Utilization by Ethnicity,
All Industries, January 1, 2009 to December 31, 2013**

Ethnicity	Certified Firms			Non-Certified Firms		
	Number of Contracts	Total Certified Dollars	Percent of Total Dollars	Number of Contracts	Total Non-Certified Dollars	Percent of Total Dollars
African Americans	375	\$12,036,683	0.98%	81	\$10,779,602	0.87%
Asian Americans	21	\$8,707,028	0.71%	75	\$5,105,308	0.41%
Hispanic Americans	15	\$68,337	0.01%	5	\$15,830	0.00%
Native Americans	56	\$885,718	0.07%	0	\$0	0.00%
Caucasian Females	657	\$23,150,512	1.88%	387	\$8,867,070	0.72%
Non-minority Males	683	\$91,747,936	7.44%	7,873	\$1,071,206,483	86.91%
TOTAL	1,807	\$136,596,213	11.08%	8,421	\$1,095,974,294	88.92%

Table 11.14 details the City's use of certified SBEs by contract threshold. In accordance with the City's procurement policies, construction and supplies and services contracts valued at \$5,000 and under are procured without competition. The awards must be to an SBE, unless it is determined by the City Purchasing Agent to be impractical or not in the best interest of the City. Despite this provision, non-SBEs were awarded the vast majority of the small contracts valued \$5,000 and under.

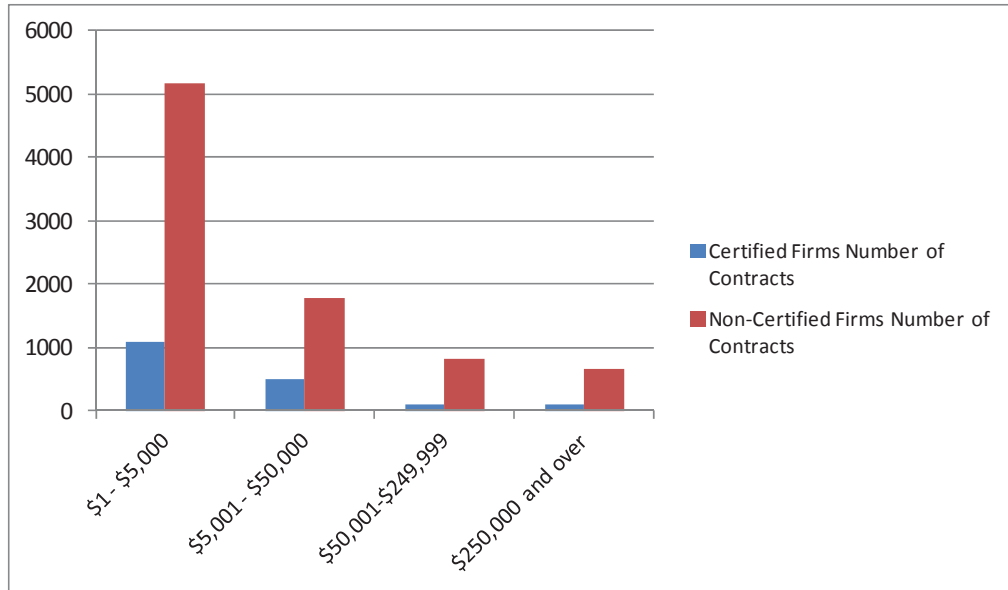
**Table 11.14: Non-Certified Prime Contractor Utilization, by Threshold,
All Industries, January 1, 2009 to December 31, 2013**

Contract Threshold	Certified Firms			Non-Certified Firms		
	Number of Contracts	Total Certified Dollars	Percent of Total Dollars	Number of Contracts	Total Non-Certified Dollars	Percent of Total Dollars
\$1 - \$5,000	1,097	\$ 2,062,211.91	0.17%	5,164	\$ 9,665,175.67	0.78%
\$5,001 - \$50,000	512	\$ 7,705,613.44	0.63%	1,774	\$ 33,785,908.14	2.74%
\$50,001 - \$249,999	108	\$ 12,628,392.88	1.02%	812	\$ 92,275,733.63	7.49%
\$250,000 and over	90	\$114,199,995.21	9.27%	671	\$ 960,247,477.00	77.91%
Total	1,807	\$136,596,213.44	11.08%	8,421	\$1,095,974,294.44	88.92%



Chart 11.01 below illustrates the size of contracts awarded to SBEs and non-SBEs.

Chart 11.01: SBE Certified and Non-Certified Firms Contract Awards by Threshold, All Industries



C. SBE Prime Contracts by Threshold

Table 11.15 illustrates the distribution of SBE contracts by size, ethnicity, and gender. Non-minority Male-owned SBEs received 63.33% of contracts \$250,000 and over. Caucasian Females received 15.56% of the contracts \$250,000 and over; African American, Asian American, Hispanic American, and Native American-owned SBEs combined received 21.11%.

Despite the City's best race-neutral efforts, Non-minority Male-owned firms received the vast majority of contracts valued at \$250,000 and over.

It is also noteworthy that 346 out of 375 contracts received by African American-owned SBEs are valued at \$50,000 and under. Meaning that, while African Americans were utilized in the SBE program, these firms primarily received small contracts and they received more small contracts than any of the other ethnic groups.

The following tables present the distribution of the largest and smallest contracts which are subject to the SBE Program requirements. The largest SBE contracts are formal procurement valued at \$250,000 and over, and the smallest SBE contracts are informal procurement valued at \$5,000 and under.



Table 11.15: SBE Certified Prime Contractor Utilization by Threshold and Ethnicity, All Industries, January 1, 2009 to December 31, 2013

Contract Threshold	Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
\$1 - \$5,000	African Americans	235	21.42%	\$537,804	26.08%
	Asian Americans	4	0.36%	\$5,842	0.28%
	Hispanic Americans	14	1.28%	\$23,787	1.15%
	Native Americans	3	0.27%	\$10,250	0.50%
	Caucasian Females	409	37.28%	\$587,736	28.50%
	Non-minority Males	432	39.38%	\$896,794	43.49%
	TOTAL	1,097	100.00%	\$2,062,212	100.00%

Contract Threshold	Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
\$5,001 - \$50,000	African Americans	111	21.68%	\$1,696,250	22.01%
	Asian Americans	4	0.78%	\$90,817	1.18%
	Hispanic Americans	1	0.20%	\$44,550	0.58%
	Native Americans	51	9.96%	\$665,239	8.63%
	Caucasian Females	201	39.26%	\$2,736,560	35.51%
	Non-minority Males	144	28.13%	\$2,472,198	32.08%
	TOTAL	512	100.00%	\$7,705,613	100.00%

Contract Threshold	Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
\$50,001-\$249,999	African Americans	19	17.59%	\$2,784,401	22.05%
	Asian Americans	4	3.70%	\$670,841	5.31%
	Hispanic Americans	0	0.00%	\$0	0.00%
	Native Americans	2	1.85%	\$210,229	1.66%
	Caucasian Females	33	30.56%	\$3,523,263	27.90%
	Non-minority Males	50	46.30%	\$5,439,659	43.07%
	TOTAL	108	100.00%	\$12,628,393	100.00%

Contract Threshold	Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
\$250,000 and Over	African Americans	10	11.11%	\$7,018,229	6.15%
	Asian Americans	9	10.00%	\$7,939,529	6.95%
	Hispanic Americans	0	0.00%	\$0	0.00%
	Native Americans	0	0.00%	\$0	0.00%
	Caucasian Females	14	15.56%	\$16,302,952	14.28%
	Non-minority Males	57	63.33%	\$82,939,285	72.63%
	TOTAL	90	100.00%	\$114,199,995	100.00%

Contract Threshold	Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
All Dollars	African Americans	375	20.75%	\$12,036,683	8.81%
	Asian Americans	21	1.16%	\$8,707,028	6.37%
	Hispanic Americans	15	0.83%	\$68,337	0.05%
	Native Americans	56	3.10%	\$885,718	0.65%
	Caucasian Females	657	36.36%	\$23,150,512	16.95%
	Non-minority Males	683	37.80%	\$91,747,936	67.17%
	TOTAL	1,807	100.00%	\$136,596,213	100.00%



1. Formal Procurement (\$250,000 and Over)

The City's formal procurements of construction and supplies and services valued at \$250,000 and over are procured using either a Request for Proposal (RFP) or Invitation to Bid (ITB). SBE-awarded formal procurements are detailed in Table 11.15.

African Americans received 10 or 11.11% of the formal procurements during the study period, representing \$7,018,229 or 6.15% of the formal procurement contract dollars.

Asian Americans received 9 or 10% of the formal procurements during the study period, representing \$7,939,529 or 6.95% of the formal procurement contract dollars.

Hispanic Americans received none of the formal procurements during the study period.

Native Americans received none of the formal procurements during the study period.

Caucasian Female Business Enterprises received 14 or 15.56% of the formal procurements during the study period, representing \$16,302,952 or 14.28% of the formal procurement contract dollars.

Non-minority Male Business Enterprises received 57 or 63.33% of the formal procurements during the study period, representing \$82,939,285 or 72.63% of the formal procurement contract dollars.

2. Informal Procurement (\$5,000 and Under)

The City's informal procurements of construction and supplies and services valued at \$5,000 and under are procured without competition. SBE-awarded informal procurements are detailed in Table 11.15.

African Americans received 235 or 21.41% of the informal procurements during the study period, representing \$537,804 or 26.08% of the informal procurement contract dollars.

Asian Americans received 4 or 0.36% of the informal procurements during the study period, representing \$5,842 or 0.28% of the informal procurement contract dollars.

Hispanic Americans received 14 or 1.28% of the informal procurements during the study period, representing \$23,787 or 1.15% of the informal procurement contract dollars.

Native Americans received 3 or 0.27% of the informal procurements during the study period, representing \$10,250 or 0.50% of the informal procurement contract dollars.

Caucasian Female Business Enterprises received 409 or 37.28% of the informal procurements during the study period, representing \$587,736 or 28.50% of the informal procurement contract dollars.



Non-minority Male Business Enterprises received 432 or 39.38% of the informal procurements during the study period, representing \$896,794 or 43.49% of the informal procurement contract dollars.

This analysis illustrates that even in the SBE Program, African American, Asian American, Hispanic American, and Native American-owned SBEs are still not awarded larger, competitively bid contracts, when compared to Non-minority Male-owned SBEs. The proposed race and gender-conscious program may provide Minority-owned SBEs with additional opportunities to competitively bid on larger contracts.

D. Comparative Analysis of Other Cities' Inclusion Programs

The SBE, SLBE, and M/WBE programs of three cities, comparable in size, location, or demographics to the City, were reviewed. The profiles of all four cities included in the analysis are described in Table 11.16 below:

Table 11.16: U.S. Census Demographic Data for City of Cincinnati, Tampa, St. Louis, and Memphis

	City of Cincinnati, Ohio	City of Tampa, Florida	City of St. Louis, Missouri	City of Memphis, Tennessee
Total Number of Businesses	26,491	38,662	23,632	52,130
African American	18.29%	11.32%	21.43%	38.16%
Hispanic American	1.19%	20.56%	1.38%	1.74%
Asian American	2.14%	4.01%	5.14%	3.02%
Native American	0.88%	---	0.62%	0.45%
Caucasian Female	29.47%	27.93%	28.29%	31.76%
Total Population	297,498	352,981	318,416	653,450

Source: U.S. Census Bureau, 2007 Survey of Business Owners, 2013 American Community Survey

--- The U.S. Census Bureau suppressed the findings due to insufficient data.

Two of the four cities in this comparative analysis had race and gender-neutral and race and gender-conscious programs, while one city had only a race and gender-conscious program. The components of the City's SBE Program were compared to the City of Tampa's SBE and Small Local Business Enterprise (SLBE) Program, the City of Memphis's SBE and SLBE Program, and the City of St. Louis's M/WBE Program. The City of Tampa's M/WBE and Disadvantaged Minority and Disadvantaged Women Business Enterprise (D/M/DWBE) Program, the City of Memphis's M/WBE Program, and the City of St. Louis's Disadvantaged Business Enterprise (DBE) Program were not included in the analysis.

The recommendations to enhance the City of Cincinnati's SBE Program are discussed in the *Race and Gender-Neutral Recommendations* and *Race and Gender-Conscious Recommendation* sections in this chapter. The findings of the analysis indicated that the City's SBE Program is comprehensive. However, the City's SBE Program may benefit from enhancements of the Good Faith Efforts policies, such as breaking down



subcontracts into smaller contracts, keeping a log of plan room deliveries, having prime contractors provide a staff liaison for SBE subcontractors and coordinate with local business organizations, or additional guidance to maintain the most comprehensive SBE directory.

V. RACE AND GENDER-NEUTRAL RECOMMENDATIONS

The race and gender-neutral recommendations presented in this section apply to the three industries studied in the disparity study – construction, professional services, and supplies and services. By applying the proposed recommendations to the procurement process, the City could address the barriers that minority, women, and small businesses encounter while doing business within the market area where the City infuses contract dollars.

A. Pre-Award Recommendations

1. Revise Business Location Requirement

The SBE Program should be amended to be a Small Local Business Enterprise (SLBE) Program. Currently, the City requires that a SBE vendor must have had a fixed office in Hamilton County for at least one (1) year in order to be eligible for the SBE Program. This requirement should be revised for the SLBE Program to stipulate that a vendor must have a fixed office in one of the city ZIP codes for at least one (1) year.¹² The City should consider the SLBE Program as an incentive to attract businesses to the City. Other economic incentives should be considered to attract small businesses that would employ City residents.

2. Expand Unbundling Policy

The City should expand its efforts to unbundle large and multi-year contracts into smaller ones to provide additional opportunities for S/M/WBEs. While the City has implemented measures to unbundle its contracts, 96 of the City's 1,985 vendors received 69.99% or \$862,727,733 of the total prime contract dollars. The 96 vendors represented only 4.84% of the 1,985 vendors. The 96 vendors received \$862,727,733. Given the concentration of contract awards with a few contractors, the City should make a greater effort to unbundle its contracts to increase the number of businesses participating at both the prime contract and subcontract levels. Smaller prime contracts would result in smaller first tier subcontracts and reduce the use of second tier subcontracts. The City should review all solicitations involving large or multi-year contracts to determine if they can be unbundled.



¹² City of Cincinnati Street Listings Guide, <http://www.cincinnati-oh.gov/finance/income-taxes/resources-references/street-listings-guide/> (last visited Feb. 24, 2015).

Table 11.17: Unbundling Criteria

CRITERIA TO BE USED IN UNBUNDLING
Size and complexity of the project
Number of locations in the project
Sequencing and delivery of the work
Similarity of the supplies and services procured
Availability of S/M/WBES to perform parts of the procurement

3. Eliminate Master Agreements

I just felt that they work with companies that were pretty entrenched in the work and the City renews their master bid every two years.

City departments can procure construction and supplies and services through master agreements. A master agreement can be used by more than one department to award multiple projects for the duration of three (3) months to one (1) year, with additional multi-year renewal options. The City should eliminate the use of master agreements and follow the competitive bidding

standards for all contracts.

4. Establish a Direct Purchase Program for Construction Contracts

This program would reduce the amount of a construction bid subject to a bond. On procurements where the City is statutorily allowed to purchase material supplies directly from vendors, the prime contractor would bid the material and supplies, itemize the cost in their bid, and the City would purchase them directly from the vendor. For the purpose of bonding, the cost of material and supplies would be subtracted from the bid, thereby reducing the amount of the contractor's bond that would be obligated for the job.

A direct purchase program can be beneficial to the City and to the prime contractors, especially S/M/WBES. The surety bond premium would be reduced by the value of the material cost. In addition, more competitive pricing should be available from the supplier because the City would make the payment directly. Savings on the direct cost of supplies would be beneficial to the City and to the contractor. The City's supply costs, which the contractors pass through in their bids, would be reduced, and the contractor's cash flow requirement to pay suppliers in advance of receiving reimbursement from the City would be eliminated.

5. Publish Evaluation Documents for Each Solicitation

Proposals, statements of qualifications, and bids should be released upon request at the time the Notice of Intent to Award is published. In addition, the evaluators' names and scores should be made available when the award is announced. Providing such information timely creates greater transparency and allows unsuccessful bidders to improve their future bids to the City.



6. Publish Informal Contracts

Informal contracts should be posted on the City's website, and small businesses should be requested to express their interest in performing the small contracts. Email notices of contracting opportunities should also be targeted to certified businesses that provide the supplies or services being solicited.

7. Maintain Virtual Plan Room

The City should consider purchasing software that would allow bidders to obtain plans and specifications on the City's website. 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.

8. Publish Short-lists

Once the proposal finalists have been selected for further review, the City should notify all bidders via mail and a posting on its website of the decision of the Committee prior to the awarding of the contract. The level of MBE and WBE participation should also be posted.

9. Revise Bonding Requirements

Bonding requirements can be a significant disincentive to bidders and act as a barrier to small and M/WBE bidders. Surety premiums are an indirect cost to the City that the prime contractors and subcontractors pass through in their bids. Therefore, the City should 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.

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, the City should implement standard risk management provisions that reflect reasonable risks for all of its contracts.



10. Establish a Business Enterprise Center

Networking is very important to my business because I feel that people want to do business with people they know or that have been recommended. The Facilities Division managers have preferred contractors. I would say all of the City department managers have preferred contractors.

The City should expand its support of business creation and employment by providing value-added resources and services to S/M/WBEs. The Business Enterprise Center would provide S/M/WBEs the following services:

- Business consulting
- Educational seminars
- Network access
- Funding access

The Business Enterprise Center should include training, conference room rentals, and online services, such as online training, business development programs, and a

procurement technology kiosk.

11. Extend Minimum Response Time for Bid or Proposal Submission

Inadequate lead time has affected my business because we have to expedite our process to create and develop a proposal that may not be our best effort. We are a professional organization and we like to present information that is easy to read and ultimately competitive.

The City's publicized bids valued between \$50,001 and \$250,000 for construction and supplies and services are published in the *City Bulletin* for one (1) week. Formal construction, supplies and services, and professional services procurements valued at \$250,000 and over are published for a minimum of two (2) weeks in the *City Bulletin*.

The City should extend the proposal and bid submission due date at both the formal and informal level to a minimum of three (3) weeks, except for emergency or sole source procurements.

12. Promote Direct Supplier Requirement

The City should require manufacturers doing business with the City to document that it has SBE and M/WBE distributors authorized to sell its product line at the regional or the national level. This should be a minimum requirement to be prequalified by the City.

13. Remove Brand Name Requirements in Solicitations

The City should refrain from specifying brand names in their solicitations in order to avoid restricting competition because the named brands may not be available to S/M/WBEs or offered at a competitive price.



14. Give Five-Day Notice of Invoice Disputes

Invoice disputes are a source of delayed invoice payments. While the City has informal means to resolve payment disputes, the resolution process should be formalized. Within five (5) days of receiving a disputed invoice, the City should provide the contractor with an Invoice Dispute Notification detailing all 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 receiving a disputed invoice. The prime contractor should pay the subcontractor within five (5) days of receiving payment from the City. The prime contractor should be penalized if the subcontractor is not paid timely.

15. Implement Dispute Resolution Standards

Dispute resolution standards should be established to allow businesses to resolve issues relating to work performance after a contract award. A dispute resolution process should apply to disputes between prime contractors and the City, as well as disputes between subcontractors and prime contractor, SBE and M/WBE certification denials, and other contract issues. The dispute resolution process should include provisions for an ombudsperson. The ombudsperson could handle disputes, as needed, to achieve timely and cost-effective resolution. A dispute resolution meeting should be mandatory in the event a dispute cannot be resolved by the ombudsperson within twenty (20) working days.

The first step in the dispute resolution process would be the submission of an oral or written complaint by the aggrieved party to the ombudsperson. The ombudsperson would then aid the parties in resolving the dispute by investigating the claim and making initial contact with the City, prime contractor, or subcontractor. If the dispute is not resolved through these means within twenty (20) working days, the ombudsperson will assist the aggrieved party in filing a request for a dispute resolution meeting. Any party that does not respond to requests by the ombudsman will be placed on a suspension list until the matter is resolved. The suspension list should be monitored and approved by the Office of Contract Compliance.

The meeting would be the second step in the resolution process. Neither party may involve legal representation during this initial informal process in order to avoid significant legal costs for both parties. If the parties are not able to reach a mutually agreed upon resolution through meeting, the dispute may proceed to formal mediation or arbitration. A dispute must be taken to mediation 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 mediation or arbitration process.



A vendor who is found to be in non-compliance with the procurement rules, regulations, relevant laws, SBE Program, or Diversity and Inclusion Program will be debarred for a minimum of two (2) years.

16. Develop an Expedited Payment Program

The City is known for not paying on time. It is a known fact that they are not going to pay on time. If they are supposed to pay in 30-days we do not expect payment until after 50 days.

Expedited payment standards should be implemented in order to remove the most significant barrier to small businesses—late payments from prime contractors. Payments to prime contractors would be made within fifteen (15) days of the City receiving an undisputed invoice, and prime contractors would be required to pay their subcontractors within five (5) days of receipt of their invoice payment. The City should also implement

measures that encourage prime contractors to quickly resolve disputed invoices between the subcontractor and prime contractor.

17. Pay Mobilization to Subcontractors

Whenever a mobilization payment is made to a prime contractor as the first payment of its bid amount, the subcontractor should be paid the appropriate share of its bid when directed to mobilize and prior to commencing work. Subcontractors should receive the mobilization payment because project start-up costs are also significant for a subcontractor. The City should provide mobilization payments on construction projects to cover preparatory costs including equipment, supplies, trailers, and other operations which must be performed or cost incurred prior to beginning work on the project site.

18. Conduct a Diversity and Inclusion Program Campaign Outreach

There should be a comprehensive outreach campaign to promote the Diversity and Inclusion Program. A Communication and Marketing Outreach Plan that includes the following initiatives should be implemented:

- Work with the City Public Information Officer and City departments to disseminate press releases and public service announcements to inform the media and community regarding the Diversity and Inclusion Program
- Conduct quarterly interviews with local radio and television stations and partner with local business organizations to discuss opportunities for collaboration that will benefit M/WBEs
- Make printed and online information on the Diversity and Inclusion Program available
- Provide e-notification announcing the Diversity and Inclusion Programs
- Provide e-flyers with hotlinks to the Diversity and Inclusion Program on the City's website
- Promote cross-marketing strategies regarding the Diversity and Inclusion Program with other entities



B. Post-Award Recommendations

1. Publish M/WBE Utilization Reports

The City should publish quarterly utilization reports resulting from the Diversity and Inclusion Program. Utilization reports should present payment and award data organized by industry, department, ethnicity, gender, and certification status in an effort to measure the effectiveness of the Diversity and Inclusion Program. Change orders and substitutions should be identified in the reports, and any modifications to the listed subcontractors or the subcontract award amount should be tracked.

The M/WBE utilization reports should be submitted to the City Council on a quarterly basis. The fourth-quarter report should also include an assessment of Diversity and Inclusion Program activities and recommendations for improvement. Exemplary practices and achievements in each department should also be noted in the fourth-quarter report. The utilization reports should be posted on the City website and made available to businesses by email.

2. Provide Debriefing Sessions for Unsuccessful Bidders

When we filled out the RFQ we did our homework. We also spoke to a contract manager and received great insight and feedback as to what was needed. However, the feedback from the selection committee insinuated that we did not meet the minimum standards and that there was much more that was needed to be done.

Debriefing sessions for unsuccessful bidders should be held by the project manager or the appropriate City department. These sessions could provide vital information to help businesses to prepare more competitive submittals in the future.

VI. ADMINISTRATIVE RECOMMENDATIONS

A. Website Enhancements

The City of Cincinnati's business-related website (<http://www.cincinnati-oh.gov/cityofcincinnati/businesses/>) was evaluated in November 2014 as part of the Study to assess its usability, functionality, and informational value for contractors inquiring about doing business with the City. The goal of the review was to assess the presentation of contractor-relevant information (content) and the ease of use (structure). The website was found to be visually appealing, professionally formatted, and informative. There was a good use of color, easily readable text, and a consistent layout. The website was quick-loading; it loaded within 20 seconds using Google Chrome™, Google Chrome for Mobile™, Mozilla Firefox™, Microsoft Internet Explorer™, and Apple Safari™. The website was error-free. No spelling or grammatical errors were



detected. All copy was found to be concise, explanatory, and on a Flesch-Kincaid 5th grade reading level. Given its Flesch-Kincaid rating, the copy is accessible to the vast majority of end users. The homepage required minimal scrolling, with important descriptive information prominently placed at the top of the website. The City of Cincinnati logo links back to the homepage and has prominent placement. However, while the website does provide useful information, presented in a clear and organized manner, there are two modifications that could enhance its functionality for business owners.

1. Structural Enhancements

a. Enable Website Interaction

Creating an interactive portal for businesses to submit required data and documents would make the website more useful for the full range of contracting activities. Users could be allowed to upload, update, and submit records of subcontractor payments, Utilization Plan Forms, Subcontractor Utilization Forms, and prevailing wage forms. This feature could provide immediate feedback regarding the processing of the submissions, thereby reducing staff time to process each document. The website currently allows users to provide comments on each page, which is a great feedback tool. However, this feature could also be enhanced to facilitate two-way communication with City employees.

Mason Tillman conducted a review of the Vendor Self Service (VSS) website. It was found to be a comprehensive one-stop location for businesses seeking to work with the City. VSS loaded quickly in both Google Chrome™ and Firefox™ browsers. The search function allowed for users to search for solicitations using keywords. Solicitation documents were easy to locate and download. Also, the bulletin board feature was found to be an exemplary feature to allow two-way communication between vendors and City staff. One recommendation that may increase usability for vendors is to list all open and closed solicitations by industry. If this feature was available, it would lessen the amount of time required to search through solicitations.

2. Content Enhancements

a. Advertise Technical Assistance Workshops and Training

The City has links on the website to different government entities, third party organizations, and nonprofits that offer services to aid minority and women contractors. Ethnic/trade organizations often offer workshops and training sessions free of charge to small businesses. These events and services could be posted on the *Business* page. An event calendar containing contractor-relevant events would be useful to small businesses.



B. Data Management Enhancements

1. Modify the Financial Management System

The prime contract data was retrieved from the City's Oracle Financial System (CFS) and subcontract data was captured from the subcontrak.com system maintained by MAE Consulting. The City's CFS tracks several types of contract records. The four types of contracts retrieved from the CFS for the analysis were Master Agreements (MAs), General Accounting Encumbrances (GAEs), Purchase Orders (POs), and Decentralized Purchase Orders (PDQs).

- *Master Agreements* allow multiple encumbrances by different departments. Each encumbrance may include one or more projects. The MA number consists of a unique alpha-numeric identifier. However, the City did not have a reliable means to identify the projects issued by the various departments under an MA. Extensive research had to be conducted to identify the projects awarded under each MA.
- *General Accounting Encumbrance* can be a unique agreement with a single vendor and single department or multiple vendors and multiple departments. It can also be a single agreement with one vendor issued under an MA. Extensive research had to be conducted to identify the projects awarded under each GAE.
- *Purchase Orders* are unique to an agreement with a single vendor.
- *Decentralized Purchase Orders* can be an agreement with multiple vendors and different departments. No additional research was required to identify unique contracts with each vendor.

The subcontrak.com system, which is the database used to track subcontract awards and payments, only contained subcontract data for construction contracts. Furthermore, the system was not validated against the prime contract data in the City's CFS. Therefore, not all of the construction subcontract records contained a unique number that linked the record to a prime contract. Extensive research had to be conducted to link all subcontract records to their prime contracts. Additional research was undertaken to compile a dataset of professional service subcontracts since they were not tracked in subcontrak.com. Subcontract records for professional services were collected from individual City departments, including the Metropolitan Sewer District of Greater Cincinnati, Transportation and Engineering Department, Department of Public Services, Department of Trade and Development, Parks Department, Health Department, Finance Department, and City Manager's Office. The research included a review of project files and the solicitation of subcontract records from the prime contractors.

Complete ethnicity and gender data were not available in the City's records. The ethnicity and gender for M/WBE prime contractors were captured in the City's CFS. In order to classify all prime contracts and subcontract records by ethnicity and gender, businesses were surveyed. Where necessary, Internet research was conducted.



2. Track Type of Work Performed by NAICS

The City should utilize the North American Industry Classification System (NAICS) commodity codes to describe the specific nature of work performed on each prime and subcontract. Currently, the financial system does not record commodity codes. Contracts should be assigned the appropriate NAICS code at the time the contract is awarded and entered into the financial system when the contract record is set up.

3. Use a Unique Identifier for All Contracts

The City has indicated that the CFS is in the process of being improved and enhanced. The following recommendations may guide the City in better managing contract data in its CFS:

- Establish a standard by which each MA and GAE is assigned a unique contractor and contract number used uniformly by all departments that issue an encumbrance against an agreement. The department that uses the contract should be identified in a unique field in CFS.
- The record created for each project issued under an MA and GAE should contain the total award and payment amounts issued per project.
- The assignment of a unique contract number should be made by one department that is responsible for maintaining all agreements in a consistent manner.
- The unique contract number should be included in the agreement with the prime contractor in order to allow both the City and the prime contractor to track each contract in a consistent manner. The numbering system should also allow prime contracts to be linked to purchase orders, task orders, and subcontracts.
- Ethnicity and gender of each prime contractor should be verified and captured in the contract record at the time of award.

4. Track Subcontracts for Each Prime Contract

The prime contract in the City's CFS should link to the system that captures the subcontracts. The subcontractor tracking system should capture SLBE, M/WBE, and Non-minority Male subcontractors used on all prime contracts. The information should be collected on the 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.



Table 11.18 below identifies the data fields that should be captured to report subcontractor utilization by the City's prime contracts.

Table 11.18: Sample Subcontract Database Structure

Recommended Data Field	Description of Data
Contract Number	Unique number assigned to prime contract/purchase order
Project Name	Project title or description of the prime contract
Subcontractor Name	Primary name of subcontractor, supplier, or trucker
Vendor ID	Unique vendor number assigned to the prime contractor by accounts payable
Contract Status	P = Prime Contractor S = Subcontractor
Vendor Ethnicity	Ethnicity of subcontractor
Vendor Gender	Gender of subcontractor
Six-Digit NAICS	North American Industry Classification System codes for types of work
Award Date	Date of subcontract award for prime contract approval
Award Amount	Amount of each award, input total amount initially awarded)
Contract Modification Date	Date of each subcontract modification (MMDDYY)
Contract Modifications Amount	Amount of each subcontract modification or total modifications
Payment	Total payment made to subcontractor (may be different from award)
Street	Subcontractor company street address
City	Subcontractor company city
State	Subcontractor company state (two letter state code) OH = Ohio
User Department	Department that awarded the project
Initiating Department	Department that issued the initial requisition for the prime contract



I. SUMMARY

This chapter provided a summary of the statistical findings and an assessment of the effectiveness of the City's SBE Program. Given the finding of statistically significant disparity in the award of both prime contracts and subcontracts, race and gender-neutral recommendations have been offered to increase the level of contracting with small businesses regardless to race or gender. Since the City may implement race and gender-neutral recommendations without reliance on the statistical results, these proposed enhancements to the SBE Program could benefit all small businesses. The race and gender-conscious recommendations, on the other hand, are applicable only to the ethnic groups where statistical 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