

City of Raleigh

DISPARITY STUDY

April 2023

FINAL REPORT



PREPARED BY:

Miller³ Consulting, Inc.
400 Pryor St., Suite 4068, Atlanta, GA 30302
404-827-9019 • www.miller3group.com



Contents

CHAPTER 1: INTRODUCTION..... 1-1

- 1.1 SCOPE OF THE DISPARITY STUDY1-1
- 1.2 ORGANIZATION OF THE DISPARITY STUDY.....1-2

CHAPTER 2: LEGAL ANALYSIS..... 1

- 2.1 INTRODUCTION2-1
- 2.2 CONSTITUTIONALITY OF RACE AND GENDER-CONSCIOUS PROGRAMS 2-2
- 2.3 FACTUAL PREDICATE STANDARDS (CONDUCTING THE DISPARITY STUDY).... 2-30
- 2.4 SUMMARY OF FINDINGS.....2-44

CHAPTER 3: PROCUREMENT ANALYSIS3-1

- 3.1 INTRODUCTION3-1
- 3.2 BEST PRACTICES IN PUBLIC SECTOR PROCUREMENT 3-2
- 3.3 RALEIGH’S ORGANIZATIONAL STRUCTURE AND PROCUREMENT PROCESS3-6
- 3.4 ANALYSIS OF RALEIGH’S DIVERSITY, INCLUSION, AND ASSISTANCE INITIATIVES.....3-25
- 3.5 IMPACT OF THE CITY OF RALEIGH’S POLICIES, PROCEDURES, AND PRACTICES ON M/WBES..... 3-30
- 3.6 SUMMARY OF FINDINGS AND RECOMMENDATIONS3-32

CHAPTER 4: STATISTICAL METHODOLOGY..... 4-1

- 4.1 INTRODUCTION4-1
- 4.2 STATISTICAL METHODOLOGY4-1
- 4.3 DATA SOURCES UTILIZED FOR STATISTICAL ANALYSIS FOR THE CITY OF RALEIGH..... 4-16
- 4.4 SUMMARY OF FINDINGS..... 4-23

CHAPTER 5: STATISTICAL ANALYSIS OF M/WBE DISPARITY IN CONTRACTING..... 5-1

- 5.1 INTRODUCTION5-1
- 5.2 AVAILABILITY DEFINITION5-6
- 5.3 TOTAL AVAILABILITY.....5-9
- 5.4 AVAILABILITY IN AES-DESIGN SERVICES... 5-12
- 5.5 AVAILABILITY IN CONSTRUCTION..... 5-14
- 5.6 AVAILABILITY IN PROFESSIONAL SERVICES..... 5-16
- 5.7 AVAILABILITY IN NONPROFESSIONAL SERVICES..... 5-18
- 5.8 AVAILABILITY IN GOODS & SUPPLIES..... 5-20
- 5.9 SUMMARY OF FINDINGS.....5-22

CHAPTER 6: STATISTICAL ANALYSIS OF M/WBE UTILIZATION..... 6-1

- 6.1 INTRODUCTION6-1
- 6.2 TOTAL UTILIZATION BASED ON CONTRACT AWARDS, PURCHASE ORDERS AND PAYMENTS.....6-2
- 6.3 UTILIZATION BY PROCUREMENT TYPE.....6-8
- 6.4 AES-DESIGN SERVICES UTILIZATION6-9
- 6.5 CONSTRUCTION AND CONSTRUCTION-RELATED SERVICES UTILIZATION 6-13
- 6.6 PROFESSIONAL SERVICES UTILIZATION ... 6-18
- 6.7 NONPROFESSIONAL SERVICES UTILIZATION6-22
- 6.8 GOODS & SUPPLIES UTILIZATION 6-26
- 6.9 UTILIZATION THRESHOLDS6-30
- 6.10 TOP TEN BIDDERS AND AWARDEES 6-42
- 6.11 SUMMARY OF FINDINGS..... 6-62

Contents (cont'd)

CHAPTER 7: STATISTICAL ANALYSIS OF M/WBE DISPARITY IN CONTRACTING.....7-1

7.1	INTRODUCTION	7-1
7.2	DISPARITY RATIOS METHODOLOGY	7-1
7.3	DISPARITIES IN AES-DESIGN SERVICES.....	7-2
7.4	DISPARITIES IN CONSTRUCTION AND CONSTRUCTION-RELATED SERVICES.....	7-6
7.5	DISPARITIES IN NONPROFESSIONAL SERVICES.....	7-10
7.6	DISPARITIES IN PROFESSIONAL SERVICES.....	7-14
7.7	DISPARITIES IN GOODS & SUPPLIES.....	7-18
7.8	SUMMARY OF FINDINGS.....	7-21

CHAPTER 8: CAPACITY AND REGRESSION ANALYSIS..... 8-1

8.1	INTRODUCTION	8-1
8.2	CAPACITY ANALYSIS.....	8-1
8.3	MULTIVARIATE REGRESSION ANALYSIS....	8-64
8.4	DISPARITIES IN BUSINESS FORMATION: PUMS ANALYSIS.....	8-69
8.5	SUMMARY OF FINDINGS.....	8-83

CHAPTER 9: ANECDOTAL COMMENTS FROM THE MARKETPLACE 9-1

9.1	INTRODUCTION	9-1
9.2	ANECDOTAL INTERVIEW METHODOLOGY	9-3
9.3	ANECDOTAL INTERVIEW FINDINGS.....	9-3
9.4	SUMMARY OF FINDINGS.....	9-16

CHAPTER 10: MARKETPLACE ANALYSIS10-1

10.1	INTRODUCTION	10-1
10.2	DEMOGRAPHIC AND ECONOMIC PROFILE OF THE RELEVANT MARKET	10-1
10.3	EDUCATION AND TRAINING: PATHWAYS TO THE CONSTRUCTION SECTOR	10-4
10.4	ANALYSIS OF DODGE GENERAL CONSTRUCTION DATA.....	10-15
10.5	CITY OF RALEIGH BUILDING PERMITS ANALYSIS	10-22
10.6	CITY OF RALEIGH BUILDING LICENSE ANALYSIS	10-30
10.7	SUMMARY OF FINDINGS.....	10-33

CHAPTER 11: RACE NEUTRAL ANALYSIS11-1

11.1	INTRODUCTION	11-1
11.2	METHODOLOGY	11-2
11.3	MASTER LIST OF RACE-NEUTRAL PROGRAMS	11-3
11.4	ANECDOTAL INTERVIEWS WITH EXECUTIVE DIRECTORS.....	11-14
11.5	ANECDOTAL INTERVIEW FINDINGS.....	11-16
11.6	SUMMARY OF FINDINGS.....	11-22

CHAPTER 12: RECOMMENDATIONS12-1

12.1	INTRODUCTION	12-1
12.2	CONCLUSIONS ON RACE- AND GENDER-CONSCIOUS GOAL POSSIBILITIES.....	12-2
12.3	RECOMMENDATIONS	12-3
12.4	SUMMARY	12-27

Figures

Figure 3.1.	10 Components of an Inclusive and Sustainable Procurement System	3-3
Figure 3.2.	M ³ Consulting Six Essential M/WBE and SBE Program Elements	3-5
Figure 3.3.	City of Raleigh Organizational Chart.....	3-9
Figure 3.4.	City of Raleigh Department of Equity and Inclusion (DEI) Organizational Chart	3-10
Figure 3.5.	City of Raleigh Procurement Functions.....	3-12
Figure 3.6.	Authorization Matrix—Contract Actions	3-14
Figure 3.7.	Authorization to Award Contracts	3-15
Figure 3.8.	Analysis of Policies and Procedures.....	3-16
Figure 3.9.	Informal Procurement or Small Purchases: Goods (supplies, apparatus, and equipment including leases and purchases).....	3-18
Figure 3.10.	Professional Services (only for architectural, engineering, design-build, surveying, and construction management at risk, and public-private partnership construction).....	3-19
Figure 3.11.	All Other General Services (excludes architectural, engineering, design-build, surveying, construction management at risk, and public-private partnership construction).....	3-19
Figure 3.12.	Construction And Repairs	3-19
Figure 3.13.	M ³ Consulting Six Essential M/WBE and SBE Program Elements	3-26
Figure 4.1.	RWA SM Availability Model.....	4-7
Figure 4.2.	City of Raleigh Specific RWA SM Availability Levels.....	4-8
Figure 4.3.	RWA SM Availability Estimate Venn Diagram	4-8
Figure 4.4.	Disparity Ratio Indicating Areas of Significant and Nonsignificant Disparity and Overutilization	4-14
Figure 5.1.	RWA SM Availability Model.....	5-7
Figure 5.2.	Raleigh Specific RWA SM Availability Levels	5-8
Figure 5.3.	Raleigh Bidder Frequency.....	5-8

Tables

Table 4.1.	Summary of Bid Activity on City of Raleigh Solicitations Above \$300,000, FY 2017 to FY 2021	4-17
Table 4.2.	Contract Awards, Commercial Activities	4-21
Table 5.1.	Summary of Relevant Market Determination	5-4
Table 5.2.	Relevant Market Summary: AES-Design Services, FY 2017–FY 2021	5-4
Table 5.3.	Relevant Market Summary: Construction and Construction-Related Services, FY 2017–FY 2021	5-4
Table 5.4.	Relevant Market Summary: Professional Services, FY 2017–FY 2021	5-5
Table 5.5.	Relevant Market Summary: Nonprofessional Services, FY 2017–FY 2021	5-5
Table 5.6.	Relevant Market Summary: Goods & Supplies, FY 2017–FY 2021	5-6
Table 5.7.	RWA SM Availability: Levels 1–2 Total Availability City of Raleigh. Nationwide, FY 2017–FY 2021	5-10
Table 5.8.	Data Axle Availability Total Availability Raleigh-Durham-Cary, NC (CBSA), FY 2021	5-11
Table 5.9.	RWA SM Availability: Levels 1–2 AES-Design Services City of Raleigh, Raleigh-Cary, NC MSA, FY 2017–FY 2021	5-12
Table 5.10.	Data Axle Availability, AES-Design Services, Raleigh-Durham-Cary, NC (CBSA), 2021	5-13
Table 5.11.	RWA SM Availability: Levels 1–2 Construction and Construction-Related Services City of Raleigh, State of North Carolina, FY 2017–FY 2021	5-14
Table 5.12.	Data Axle Availability, Construction and Construction-Related Services, Raleigh-Durham-Cary, NC (CBSA), 2021	5-15
Table 5.13.	RWA SM Availability: Levels 1–2 Professional Services City of Raleigh, State of North Carolina, FY 2017–FY 2021	5-16
Table 5.14.	Data Axle Availability Professional Services Raleigh-Durham-Cary, NC (CBSA), 2021	5-17
Table 5.15.	RWA SM Availability: Levels 1–2 Nonprofessional Services City of Raleigh, State of North Carolina, FY 2017–FY 2021	5-18
Table 5.16.	Data Axle Availability Nonprofessional Services Raleigh-Durham-Cary, NC (CBSA), 2021	5-19
Table 5.17.	RWA SM Availability: Levels 1–2. Goods & Supplies City of Raleigh, Nationwide, FY 2017–FY 2021	5-20
Table 5.18.	Data Axle Availability Goods & Supplies Raleigh-Durham-Cary, NC (CBSA), 2021	5-21
Table 5.19.	Summary Table—RWA SM Level 2 Availability Percentage Representation City of Raleigh Relevant Market; FY 2017–FY 2021	5-23
Table 5.20.	Summary Table—Marketplace Availability Relevant Market, 2021	5-24
Table 6.1.	Total Utilization, Contract Awards—Dollars, City of Raleigh, Nationwide, FY 2017–FY 2021	6-5
Table 6.2.	Total Utilization, Purchase Orders—Dollars, City of Raleigh, Nationwide, FY 2017–FY 2021	6-6

Tables (cont'd)

Table 6.3.	Total Utilization, Payments—Dollars, City of Raleigh, Nationwide, FY 2017–FY 2021.....	6-7
Table 6.4.	Summary of Relevant Market Determination	6-8
Table 6.5.	AES-Design Services Utilization, Purchase Order—Dollars, City of Raleigh, Raleigh-Cary, NC MSA FY 2017–FY 2021	6-10
Table 6.6.	AES-Design Services Utilization Comparison, Contract Awards, Purchase Orders, Payments—Dollars, City of Raleigh, Raleigh-Cary, NC MSA FY 2017–FY 2021	6-12
Table 6.7.	Construction and Construction-Related Services Utilization, Contract Awards—Pure Prime + Subcontractor Dollars, City of Raleigh, State of North Carolina, FY 2017–FY 2021	6-14
Table 6.8.	Construction and Construction-Related Services, Contract Awards Breakdown of Pure Prime + Subcontractor Dollars, City of Raleigh, Raleigh-Cary, NC MSA FY 2017–FY 2021	6-15
Table 6.9.	Construction and Construction-Related Services Utilization Comparison, Contract Awards, Purchase Orders, Payments—Dollars, City of Raleigh, State of North Carolina, FY 2017–FY 2021.....	6-17
Table 6.10.	Professional Services Utilization, Purchase Order—Dollars, City of Raleigh, State of North Carolina, FY 2017–FY 2021	6-19
Table 6.11.	Professional Services Utilization Comparison, Contract Awards, Purchase Orders, Payments—Dollars, City of Raleigh, State of North Carolina, FY 2017–FY 2021	6-21
Table 6.12.	Nonprofessional Services Utilization, Purchase Order—Dollars, City of Raleigh, State of North Carolina, FY 2017–FY 2021	6-23
Table 6.13.	Nonprofessional Services Utilization Comparison, Contract Awards, Purchase Orders, Payments—Dollars, City of Raleigh, State of North Carolina, FY 2017–FY 2021.....	6-25
Table 6.14.	Goods & Supplies Utilization, Purchase Order—Dollars, City of Raleigh, Nationwide, FY 2017–FY 2021.....	6-27
Table 6.15.	Goods & Supplies Utilization Comparison, Contract Awards, Purchase Orders, Payments—Dollars, City of Raleigh, Nationwide, FY 2017–FY 2021.....	6-29
Table 6.16.	AES-Design Services Utilization Thresholds, Purchase Orders—Dollars, City of Raleigh, Nationwide, FY 2017–FY 2021	6-32
Table 6.17.	Construction and Construction-Related Services Utilization Thresholds, Purchase Orders—Dollars, City of Raleigh, Nationwide, FY 2017–FY 2021.....	6-34
Table 6.18.	Professional Services Utilization Thresholds, Purchase Orders—Dollars, City of Raleigh, Nationwide, FY 2017–FY 2021	6-36
Table 6.19.	Nonprofessional Services Utilization Thresholds, Purchase Orders—Dollars, City of Raleigh, Nationwide, FY 2017–FY 2021	6-38
Table 6.20.	Goods & Supplies Utilization Thresholds, Purchase Orders—Dollars, City of Raleigh, Nationwide, FY 2017–FY 2021	6-40
Table 6.21.	Top Ten Bidders, AES-Design Services, Raleigh-Cary, NC MSA FY 2017–FY 2021	6-43

Tables (cont'd)

Table 6.22.	Top Ten Awardees, AES-Design Services, Contract Awards, Raleigh-Cary, NC MSA FY 2017–FY 2021.....	6-44
Table 6.23.	Success Rate of Top Ten Bidders: AES-Design Services, Raleigh-Cary, NC MSA FY 2017–FY 2021	6-45
Table 6.24.	Top Ten Bidders, Construction and Construction-Related Services, State of North Carolina, FY 2017–FY 2021	6-47
Table 6.25.	Top Ten Awardees, Construction and Construction-Related Services, Contract Awards, State of North Carolina, FY 2017–FY 2021.....	6-48
Table 6.26.	Success Rate of Top Ten Bidders: Construction and Construction-Related Services, State of North Carolina, FY 2017–FY 2021.....	6-49
Table 6.27.	Top Ten Bidders, Professional Services, State of North Carolina, FY 2017–FY 2021	6-51
Table 6.28.	Top Ten Awardees, Professional Services Utilization, Awards, State of North Carolina, FY 2017–FY 2021.....	6-52
Table 6.29.	Success Rate of Top Ten Bidders: Professional Services, State of North Carolina, FY 2017–FY 2021	6-53
Table 6.30.	Top Ten Bidders, Nonprofessional Services State of North Carolina, FY 2017–FY 2021.....	6-55
Table 6.31.	Top Ten Awardees, Nonprofessional Services, Contract Awards State of North Carolina, FY 2017–FY 2021	6-56
Table 6.32.	Success Rate of Top Ten Bidders: Nonprofessional Services, State of North Carolina, FY 2017–FY 2021	6-57
Table 6.33.	Top Ten Bidders, Goods & Supplies Nationwide, FY 2017–FY 2021.....	6-59
Table 6.34.	Top Ten Awardees, Goods & Supplies, City of Raleigh Nationwide, FY 2017–FY 2021	6-60
Table 6.35.	Success Rate of Top Ten Bidders: Goods & Supplies, Nationwide, FY 2017–FY 2021.....	6-61
Table 6.36.	M/WBE Utilization in Percent of Dollars of Purchase Orders, Payments, and Contract Awards, City of Raleigh, Summary of M/WBE Utilization by Relevant Market, FY 2017–FY 2021	6-64
Table 6.37.	Total Utilization, Purchase Orders—Dollars, City of Raleigh, Nationwide, FY 2017–FY 2021.....	6-65
Table 7.1.	Purchase Order Utilization vs. RWA SM Availability Level 2, AES-Design Services, City of Raleigh, Raleigh-Cary, NC MSA, FY 2017–FY 2021.....	7-3
Table 7.2.	Summary Disparity Ratios by Race, Ethnicity and Gender, Utilization vs. RWA SM Availability Level 2	7-4
	AES-Design Services, City of Raleigh, Raleigh-Cary, NC MSA, FY 2017–FY 2021	7-4
Table 7.3.	Purchase Order Utilization vs. Data Axle Availability, AES-Design Services, City of Raleigh, Raleigh-Cary, NC MSA, FY 2017–FY 2021.....	7-5
Table 7.4.	Contract Awards Utilization vs. RWA SM Availability Level 2, Construction and Construction- Related Services, City of Raleigh, State of North Carolina, FY 2017–FY 2021	7-7
Table 7.5.	Summary Disparity Ratios by Race, Ethnicity and Gender, Utilization vs. RWA SM Availability Level 2, Construction and Construction-Related Services, City of Raleigh, State of North Carolina, FY 2017–FY 2021	7-8

Tables (cont'd)

Table 7.6.	Contract Awards Utilization vs. Data Axle Availability, Construction and Construction-Related Services, City of Raleigh, State of North Carolina, FY 2017–FY 2021.....	7-9
Table 7.7.	Purchase Order Utilization vs. RWA SM Availability Level 2, Nonprofessional Services, City of Raleigh, State of North Carolina, FY 2017–FY 2021.....	7-11
Table 7.8.	Summary Disparity Ratios by Race, Ethnicity and Gender, Utilization vs. RWA SM Availability Level 2, Nonprofessional Services, City of Raleigh, State of North Carolina, FY 2017–FY 2021.....	7-12
Table 7.9.	Purchase Order Utilization vs. Data Axle Availability, Nonprofessional Services, City of Raleigh, State of North Carolina, FY 2017–FY 2021.....	7-13
Table 7.10.	Purchase Order Utilization vs. RWA SM Availability Level 2, Professional Services, City of Raleigh, State of North Carolina, FY 2017–FY 2021.....	7-15
Table 7.11.	Summary Disparity Ratios by Race, Ethnicity and Gender, Utilization vs. RWA SM Availability Level 2, Professional Services, City of Raleigh, State of North Carolina, FY 2017–FY 2021	7-16
Table 7.12.	Purchase Order Utilization vs. Data Axle Availability, Professional Services, City of Raleigh, State of North Carolina, FY 2017–FY 2021.....	7-17
Table 7.13.	Purchase Order Utilization vs. RWA SM Availability Level 2, Goods & Supplies, City of Raleigh, Nationwide, FY 2017–FY 2021.....	7-18
Table 7.14.	Summary Disparity Ratios by Race, Ethnicity and Gender, Utilization vs. RWA SM Availability Level 2, Goods & Supplies, City of Raleigh, Nationwide, FY 2017–FY 2021.....	7-19
Table 7.15.	Purchase Order Utilization vs. Data Axle Availability, Goods & Supplies, City of Raleigh, Nationwide, FY 2017–FY 2021	7-20
Table 7.16.	Summary Disparity Ratios by Race, Ethnicity and Gender, Utilization vs. RWA SM Availability Level 2, City of Raleigh, Relevant Market, FY 2017–FY 2021	7-22
Table 8.1.	Census Capacity, Construction, Raleigh-Cary, NC MSA, 2020	8-3
Table 8.2.	Census Capacity Goods & Supplies, Raleigh-Cary, NC MSA, 2020	8-4
Table 8.3.	Census Capacity, Nonprofessional Services, Raleigh-Cary, NC MSA, 2020	8-5
Table 8.4.	Census Capacity, Professional Services, Raleigh-Cary, NC MSA, 2020.....	8-6
Table 8.5.	Data Axle, Capacity Based on Total Number of Employees, Total, Raleigh-Durham-Cary, NC (CBSA), FY 2021	8-9
Table 8.6.	Data Axle, Capacity Based on Total Number of Employees, AES Design Services, Raleigh-Durham-Cary, NC (CBSA), FY 2021.....	8-11
Table 8.7.	Data Axle, Capacity Based on Total Number of Employees, Construction and Construction-Related Services, Raleigh-Durham-Cary, NC (CBSA), FY 2021	8-13
Table 8.8.	Data Axle, Capacity Based on Total Number of Employees, Goods & Supplies, Raleigh-Durham-Cary, NC (CBSA), FY 2021	8-15

Tables (cont'd)

Table 8.9.	Data Aisle, Capacity Based on Total Number of Employees, Nonprofessional Services, Raleigh-Durham-Cary, NC (CBSA), FY 2021	8-17
Table 8.10.	Data Aisle, Capacity Based on Total Number of Employees, Professional Services, Raleigh-Durham-Cary, NC (CBSA), FY 2021	8-19
Table 8.11.	Data Aisle, Capacity Based on Sales Volume, Total, Raleigh-Durham-Cary, NC (CBSA), FY 2021	8-22
Table 8.12.	Data Aisle, Capacity Based on Sales Volume, AES Design Services, Raleigh-Durham-Cary, NC (CBSA), FY 2021.....	8-24
Table 8.13.	Data Aisle, Capacity Based on Sales Volume, Construction and Construction-Related Services, Durham-Cary, NC (CBSA), FY 2021	8-26
Table 8.14.	Data Aisle, Capacity Based on Sales Volume, Goods & Supplies, Raleigh-Durham-Cary, NC (CBSA), FY 2021.....	8-28
Table 8.15.	Data Aisle, Capacity Based on Sales Volume, Nonprofessional Services, Raleigh-Durham-Cary, NC (CBSA), FY 2021	8-30
Table 8.16.	Data Aisle, Capacity Based on Sales Volume, Professional Services, Raleigh-Durham-Cary, NC (CBSA), FY 2021.....	8-32
Table 8.17.	Q12a: What is his/her current marital status?.....	8-35
Table 8.18.	Q12b: What is his/her current marital status?	8-35
Table 8.19.	Q12: What is the highest degree or level of education that your principal has completed?	8-36
Table 8.20.	Q14: Prior to the principal's involvement with your company, how many years did he or she work in the same profession that the company specializes in presently?.....	8-36
Table 8.21.	Q18: Which of the following categories best describes your company's total gross receipts from all sources for fiscal year (FY) 2021?	8-37
Table 8.22.	Q26: Which of the following programs to obtain company funding/financing, if any, has your company used in the past five years? (Multiple answers were accepted.).....	8-38
Table 8.23.	Q19: Which, if any, of the following has your company applied for in the past five years? (Multiple answers were accepted.)	8-38
Table 8.24.	Q20: How many times in the past five years has your company applied for a bond?.....	8-39
Table 8.25.	Q21: How many times in the past five years has your company been denied a bond?	8-39
Table 8.26.	Q22: How many times in the past five years has your company applied for a loan/line of credit?	8-40
Table 8.27.	Q23: How many times in the past five years has your company been denied a loan/line of credit?	8-40
Table 8.28.	Q24: What challenges, if any, did your company encounter in attempting to secure a loan or line of credit from a financial institution in the past five years. (Multiple answers were accepted.).....	8-41

Tables (cont'd)

Table 8.29.	Q26a: Does your company bid on projects as a prime or subcontractor?	8-41
Table 8.30.	Q27a: Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a prime contractor (or consultant), what percentage has gone to each of the following agency or company types? — City of Raleigh.....	8-42
Table 8.31.	Q27b: Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a prime contractor (or consultant), what percentage has gone to each of the following agency or company types? — Other public sector agencies in North Carolina.....	8-43
Table 8.32.	Q27c. Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a prime contractor (or consultant), what percentage has gone to each of the following agency or company types? — Other public sector agencies outside of North Carolina.....	8-44
Table 8.33.	Q27d. Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a prime contractor (or consultant), what percentage has gone to each of the following agency or company types? — Private sector agencies/companies.....	8-45
Table 8.34.	Q27aa. If you did not submit a bid as a prime contractor/consultant to the City of Raleigh in the past two years, why not?	8-46
Table 8.35.	Q29a: Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a subcontractor (or subconsultant), what percentage has gone to each of the following agency or company types? — City of Raleigh.....	8-47
Table 8.36.	Q29b: Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a subcontractor (or subconsultant), what percentage has gone to each of the following agency or company types? — Other public sector agencies in North Carolina.....	8-48
Table 8.37.	Q29c: Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a subcontractor (or subconsultant), what percentage has gone to each of the following agency or company types? — Other public sector agencies outside of North Carolina.....	8-49
Table 8.38.	Q29d: Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a subcontractor (or subconsultant), what percentage has gone to each of the following agency or company types? — Private sector agencies/companies.	8-50
Table 8.39.	Q29aa. If you did not submit a sub-bid as a subcontractor/subconsultant to a prime contractor/consultant on a City of Raleigh project in the past two years, why not? (Multiple answers were accepted.)	8-51
Table 8.40.	Q28: In the past two years, has your company won a contract or been awarded a contract as a prime contractor (consultant) on contracts in or with any of the following? (Multiple answers were accepted.)	8-52
Table 8.41.	Q30: In the past two years, has your company won a contract or been awarded a contract as a subcontractor (subconsultant) on contracts for any of the following? (Multiple answers were accepted.)	8-52
Table 8.42.	Q31: Which of the following categories best describes the average bid range that your company has submitted in the past two years?	8-53
Table 8.43.	Q32: Which of the following categories best describes the single largest contract dollar award received as a prime contractor (consultant) from the City of Raleigh?	8-53

Tables (cont'd)

Table 8.44.	Q33: Which of the following categories best describes the single largest contract dollar award received as a subcontractor (subconsultant) for a City of Raleigh contract?	8-54
Table 8.45.	Q34: Which of the following categories best describes the single largest contract dollar award received as a prime contractor from a private sector agency or company?	8-55
Table 8.46.	Q35: Which of the following categories best describes the single largest contract dollar award received as a subcontractor from a private sector agency or company?	8-56
Table 8.47.	Q36: Which of the following categories best describes the single largest contract dollar award received as a prime contractor from a public sector agency or company?	8-57
Table 8.48.	Q37: Which of the following categories best describes the single largest contract dollar award received as a subcontractor from a public sector agency or company?	8-58
Table 8.49.	Q38: The City of Raleigh administers a program targeted to promote inclusion of DBEs and SBEs. What is the general consensus of opinion in your company's leadership as to the general fairness of this policy?	8-58
Table 8.50.	Q38: The City of Raleigh administers a program targeted to promote inclusion of DBEs and SBEs. What is the general consensus of opinion in your company's leadership as to the general fairness of this policy?	8-59
Table 8.51.	Q42: Has your company ever experienced any of the following issues while bidding as a prime contractor or subcontractor?	8-60
Table 8.52.	Q42: Has your company ever experienced any of the following issues while bidding as a prime contractor or subcontractor?	8-61
Table 8.53.	Q44a: Please use the space below to record any other comments you may wish to share on the subject of the City of Raleigh and bidding and award opportunities for DBEs or SBEs. (Responses were coded from an open-ended question.).....	8-62
Table 8.54.	Q10: Is at least 51% of your firm owned and controlled by one or more women?	8-62
Table 8.55.	Q11: Is at least 51% of your firm owned and controlled by a member of one of the following racial/ethnic/gender groups? Please select which group.....	8-63
Table 8.56.	Final Designation	8-63
Table 8.57.	All respondents.....	8-65
Table 8.58.	Non-WMSBE	8-66
Table 8.59.	WMSBE	8-67
Table 8.60.	Non-M/WBE vs. M/WBE	8-68

Tables (cont'd)

Table 8.61.	“Odds Ratio” For Self-Employment for Minority Groups Relative to Nonminority Males Controlling for Economic and Demographic Factors.....	8-73
Table 8.62.	Results of the Binary Logistic Regression Analysis for the Full Sample.....	8-73
Table 8.63.	“Odds Ratio” For Self-Employment for Minority Groups Relative to Nonminority Males Controlling for Economic and Demographic Factors – Construction Industry Only	8-75
Table 8.64.	Results of the Binary Logistic Regression Analysis for Construction Industry only.....	8-75
Table 8.65.	“Odds Ratio” For Self-Employment for Minority Groups Relative to Nonminority Males Controlling for Economic and Demographic Factors – Professional, Scientific and Technical Services Only.....	8-76
Table 8.66.	Results of the Binary Logistic Regression Analysis for Professional, Scientific and Technical Services Only.....	8-77
Table 8.67.	Linear Regression Results for the Determinants of Self-Employment Income by Race and Gender for the Full Sample.....	8-79
Table 8.68.	Linear Regression Results for the Determinants of Self-Employment Income by Race and Gender for Construction Only.....	8-81
Table 8.69.	Linear Regression Results for the Determinants of Self-Employment Income by Race and Gender for Professional, Scientific and Technical Services Only	8-82
Table 9.1.	1-on-1 Interview and Focus Group Participants, Race and Gender Distribution	9-1
Table 9.2.	1-on-1 Interview and Focus Group Participants, Industry Distribution	9-2
Table 10.1.	Total Population 16 Years and Older by Race and Hispanic Origin, Census 2019.....	10-2
Table 10.2.	Civilian Labor Force Total Population 16 Years and Older by Race and Hispanic Origin Census 2019	10-3
Table 10.3.	Employment in Selected Apprenticeable EEO Construction Occupations by Hispanic Origin and Race, 2014–2018, North Carolina	10-5
Table 10.4.	Employment in Selected Apprenticeable EEO Construction Occupations by Hispanic Origin and Race, 2014–2018, Raleigh, NC, Metro Area	10-6
Table 10.5.	Employment in Selected Apprenticeable EEO Construction Occupations by Hispanic Origin and Race, 2014–2018, City of Raleigh, NC.....	10-7
Table 10.6.	Employment in Selected Apprenticeable EEO Professional Occupations by Hispanic Origin and Race, 2014–2018, North Carolina	10-9
Table 10.7.	Employment in Selected Apprenticeable EEO Professional Occupations by Hispanic Origin and Race, 2014–2018, Raleigh, NC, Metro Area	10-11
Table 10.8.	Employment in Selected Apprenticeable EEO Professional Occupations by Hispanic Origin and Race, 2014–2018, City of Raleigh, North Carolina.....	10-13
Table 10.9.	Counts and Project Value of Unique Projects by Project Owner, State of North Carolina, 2021.....	10-15

Tables (cont'd)

Table 10.10.	Firm Availability by Role, State of North Carolina, FY 2021	10-17
Table 10.11.	Distribution of M/WBEs by Bidder Ranking by Project Owner: Public, State of North Carolina, FY 2021.....	10-19
Table 10.12.	Distribution of M/WBEs by Bidder Ranking by Project Owner: Private, State of North Carolina, FY 2021.....	10-20
Table 10.13.	Count of Bids Rank #1 by Project Owner, State of North Carolina, FY 2021	10-21
Table 10.14.	Contractor Data, Count of Commercial Building Permits, City of Raleigh, FY 2017–FY 2021.....	10-22
Table 10.15.	Contractor Data, Valuation (\$) of Commercial Building Permits, City of Raleigh, FY 2017–FY 2021	10-23
Table 10.16.	Contractor Data by Threshold, Valuation (\$) of Commercial Building Permits, City of Raleigh, FY 2017–FY 2021	10-24
Table 10.17.	Count of Discrete Contractors by Threshold, Public and Private Sector, City of Raleigh, FY 2017–FY 2021	10-26
Table 10.18.	Count of Discrete Contractors, City of Raleigh, FY 2017–FY 2021	10-28
Table 10.19.	Top 20 Awardees Based on Count of Building Permits Received, City of Raleigh, FY 2017–FY 2021.....	10-29
Table 10.20.	City of Raleigh Business License Data, FY 2017–FY 2021	10-31
Table 11.3.	Master List of Race-Neutral Programs.....	11-3
Table 12.1.	Inference of Discrimination Based on Findings of Statistically Significant Disparity, By Race/Ethnicity/Gender, By Procurement Type, For the City of Raleigh.....	12-2
Table 12.2.	Categories for Race/Ethnicity/Gender-Conscious and Race/Ethnicity/Gender-Neutral Means of Addressing Disparity, By Procurement Type	12-13
Table 12.3.	M ³ Consulting Six Essential M/WBE and SBE Program Elements.....	12-18

Glossary of Terms

Actual availability—refers to firms that have affirmatively shown interest in doing business with the City of Raleigh in one or more of the following ways: bidding for a City contract; being awarded a City contract; or, being included on the City’s vendor or plan holder’s list. The difference between “actual availability” and “potential availability” may help identify and narrow down the area of availability that may be affected by discrimination, lack of outreach, lack of interest, lack of specific expertise required by the public entity, and lack of capacity.

Active discrimination—refers to any government entity which has directly discriminated against minority- and women-owned businesses through its contracting and procurement activities, or any other of its activities (e.g. employment).

Anecdotal Interview—interview conducted with a business owner within a particular industry, or who has contracted with a public entity, to ascertain his/her personal experiences in doing business within that industry or with that public entity.

Annual Aspirational Goal or Annual Goal—non-mandatory annual aspirational percentage goal for overall DBE prime and subcontract participation established by a public entity each year for the public entity’s identified industry categories.

Annual Survey of Entrepreneurs—A Census database that provides annual data on select economic and demographic characteristics of employer businesses and their owners by gender, ethnicity, race, and veteran status.

Architecture and Engineering Services—professional services of an architectural or engineering nature that are associated with research, planning, development, design, construction, alteration, or repair of real property. For the purposes of this Disparity Study, Construction Management services are included in Construction and Construction-Related Services.

Availability—the percentage of firms by race and gender in an industrial category and available to do business with a government entity.

Awardees—firms that receive a contract award from the City as reflected through contract awards, purchase orders and payments data.

Bidders—firms that submitted a bid or sub-bid on a City formal purchasing opportunity or submitted a quote for a the City informal procurement opportunities.

Capacity—a measure of additional work a firm can take on at a given point in time.

Census—a complete enumeration, usually of a population, but also of businesses and commercial establishments, farms, governments, and so forth.

Certification—process of qualifying a firm as being at least 51 percent owned, managed and controlled by minorities and/or females.

City Certified DBE—firms certified by the City’ Office of Economic Development as a DBE.

Compelling Governmental Interest—compelling reasons by a public entity to remedy past discriminatory treatment of racial or ethnic groups.

Construction and Construction-Related Services—Capital construction projects and contracts that cover general construction trade services.

Contract award data—data gleaned from the City’ bid history data and contract logs that were provided to M³ Consulting in a shared folder. Access to the shared folder was provided by the City’s Point of Contact. The contract logs represent the universe of formal competitive contracts let by the City.

Croson Requirements—guidelines which govern any state or local political body’s attempt to enact a minority/ female business enterprise program which uses set-asides, preferences, goals or other race-conscious measures on condition that a compelling government interest exists and that the program elements are narrowly tailored.

Glossary of Terms (cont'd)

Data Axle—offers comprehensive and accurate business and consumer databases, with almost 400 distinct attributes across businesses and consumers in the United States and Canada.

Disadvantaged Business—new, small or local business, whether a sole proprietorship, partnership, corporation, or other entity, or any business that is at least 51 percent owned and controlled by one or more socially disadvantaged individuals who, in fact, control the management and daily business operations of that business.

Discrete Contractor—within the data analysis process, a contractor is counted only once, and duplicates are removed.

Disparate Impact—a policy or practice that, although neutral on its face, falls more harshly on a protected group. This impact may be viewed as discriminatory behavior in certain instances. The statistical analysis seeks to determine if there is any disparate impact of an agency's policy(ies) or practice(s), intended or unintended, on protected classes.

Disparity Ratio—ratio of the percentage of receipts received by M/WBEs from a particular public entity in a specific category of work (e.g. construction), to the percentage of firms that are M/WBEs available to do business with that public entity; also, the public entity's M/WBE utilization divided by M/WBE availability.

Dodge Construction Data—a construction market data resource that tracks construction activity by project and location. The data set also provides project specific information which includes owner of the project, value of project, type of project, general contractor, etc.

Factual Predicate—an analysis to determine whether there are any identified instances of past discrimination which must be particularized in a manner that provides guidance for the legislative body to determine the precise scope of the injury it seeks to remedy. It is utilized to determine whether a compelling governmental interest exists to support the utilization of race and gender-

conscious remedies. The disparity study is utilized to develop the factual predicate.

Formal Purchases—competitive purchasing is required for contracts over \$60,000. Formal purchasing at the City is done using Invitations for Bid and Requests for Proposals.

Goods and Supplies—those traditional purchases that are “non-service” based (computers, food, parts, equipment, furniture, fixtures, etc.)

Informal Procurement—purchases not requiring advertising and valued at less than \$60,000.

Intermediate Scrutiny—is applied to gender and age distinctions and requires the public entity to prove there is a fair and substantial relationship between the classification and the objective of the legislation.

Local Business—any entity with its headquarters' office or principal place of business within the city boundaries and in the tax year preceding application for certification has (1) earned at least 25 percent of its gross receipts from work performed on construction projects within the city boundaries; or (2) employed a workforce of which at least 25 percent were economically disadvantaged individuals or were residents of a targeted business development area within the city boundaries.

Marketplace Availability—all firms' available in the City' marketplace, as measured by Data Axle and Dodge Construction data.

Master S/M/W/DBE List—list of certified SBEs, MBEs, WBEs and DBEs from the City of Raleigh, State of North Carolina, and the following directories: City of Raleigh Certified M/WBE; State of NC HUB; NC DOT DBE Directory; NC DOT SBE Directory; SC DOT Unified Certification Program DBE Directory; SC DOT DBE Directory; NC DOT Prequalified Consultants Directory (only those identified as having a minority certification were included); and NC DOT Prequalified Bidders and Subcontractors Directory (only those identified as having a minority certification were included).

Glossary of Terms (cont'd)

Matchmaking—efforts to bring together potential DBEs, Non-DBEs and City personnel on specific opportunities that encourages an environment of relationship building.

Metropolitan Statistical Area (MSA)—an area, defined by the US Census Bureau, which is an integrated economic and social unit with a population nucleus of at least 50,000 inhabitants. Each MSA consists of one or more counties meeting standards of metropolitan character. The Raleigh-Cary MSA metropolitan area consists of: Wake, Johnston and Franklin counties.

Minority Business Enterprise (MBE)—firms that are at least 51% owned and controlled by minority individuals. Minority individuals are defined as: African Americans, Asian Americans, Native Americans, and Hispanic Americans.

Multivariate Regression—analyzes whether multiple variables, including race and gender, impact an outcome.

Narrowly Tailored—a law must be written to specifically fulfill only its intended goal. Race and gender-conscious remedial action be “narrowly tailored” to identify past or present discrimination. At least three characteristics were identified by the court as indicative of a narrowly tailored remedy:

1. The program should be instituted either after, or in conjunction with, race-neutral means of increasing minority business participation; a governmental entity does not have to enact race-neutral means if they are not feasible or conducive to remedying past discrimination;
2. The plan should avoid the use of rigid numerical quotas; and,
3. The program must be limited in its effective scope to the boundaries of the governmental entity.

Non-DBEs—for computation of availability, utilization and disparity tables, represents all other firms, exclusive of DBEs.

Other Minority-owned Business—Firms certified as a Minority-owned businesses without specific race or ethnic designations.

Outreach—any effort to communicate with minority or female-owned businesses regarding procurement or contracting opportunities.

Passive Discrimination—participating in the discriminatory or exclusive actions of other agents in the public and private sector.

Passive Participant—refers to any government entity which has indirectly discriminated against minority or female businesspersons by doing business with an industry or business that directly engages in discriminatory practices.

Political Jurisdiction—the geographical area of a political body's power and authority.

Potential Availability—refers to firms present in the City's market beyond those “actually available,” to include those that have not bid on the City work or taken other affirmative steps toward doing business specifically with the City (as opposed to other public and private sector clients) during the study period. This availability includes firms identified under both public-sector availability and marketplace availability.

Procurement Forecasting—an organization and its departments determine their procurement needs for a set period.

Public Sector Availability—Includes lists of available firms known to various public sector agencies, including, but not limited to, the City in the relevant market region. These firms are closer to RWASM, having expressed an interest in contracting opportunities with other public sector agencies with similar standards and limitations as the City.

Glossary of Terms (cont'd)

Pure Prime Utilization—the value of prime contracts net of subcontract value.

Practical Significance—the most commonly used practical significance measure in the EEO context is the 4/5th or 80 percent rule, which indicates how large or small a given disparity is. An index less than 100 percent indicates that a given group is being utilized less than would be expected based on its availability, and courts have adopted the Equal Employment Opportunity Commission's "80 percent" rule, that is, that a ratio less than 80 percent presents a prima facie case of discrimination.

Procurement—the acquisition of any good or services in the categories of A&E, construction, professional services, other services and procurement.

PUMS (Public-Use Microdata Samples)—contains records for a sample of housing units with information on the characteristics of each unit and each person in the unit. Files are available from the American Community Survey and the Decennial Census.

Purchase Order—a procurement vehicle used by a government entity to acquire goods or services by opening an order for the goods and services for a specified amount.

Race- and Gender-Conscious—any business development plan or program which uses race and gender as a criterion for participation.

Race- and Gender-Neutral—any business development plan or program in which race and gender is not among the criteria for participation.

Rational Basis Standard—tests economic programs that do not make distinctions based on race, ethnic origin or gender. Under this standard, the moving party is required to show that the classification is not rationally related to a valid state purpose.

Ready, Willing and Able Availability Estimate (RWASM Estimate)—the number of DBEs ready and willing to perform a particular scope of work and with the ability

to expand (or contract) to do the type of work required. Derived from the U.S. Supreme Court's statement 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.*

The first component of the model, "ready", simply means a business exists in the market area. The second component, "willing", suggests a business understands the requirements of the work being requested, and wants to perform the work. The third component, "able", defines the group of firms with capacity to do the job.

Relevant Market—the geographic area reflecting a preponderance of commercial activity pertaining to an entity's contracting activity based on where bidders, vendors, or awardees are located. A typical range fitting this definition is approximately 70 percent. Relevant Market categories for the City:

- City of Raleigh
- Raleigh-Cary, NC MSA
- State of North Carolina
- Nationwide

Regression Analysis—a statistical method that analyzes how a single dependent variable may change or vary based on values of one or more independent variables. For example, the contract dollars awarded to DBEs vary based on characteristics such as race, gender, years of experience, and gross annual receipts.

Services—includes any provider of services, both professional and non-professional (attorney, consultant, training, landscaper, security, transportation etc.).

Set-Aside—government policy in which competition for certain contracts/bid opportunities is restricted to certain firms.

Glossary of Terms (cont'd)

Small Business Enterprise—an entity that has had less than \$500,000 of gross revenues in each of its last two fiscal years.

Statistical Significance—how large or small the disparity ratio is in comparison with the observed percentages based on the statistical confidence level; also, the likelihood that a statistic will vary from a given value by more than a certain amount due to chance.

Strict Scrutiny Standard—is evoked if the classification is suspect, in particular, one based on race, ethnic or alien distinctions or infringements upon fundamental rights. The strict scrutiny test is the most rigorous of the three, requiring the public entity to show compelling governmental interests for making such classifications.

Sunset Clause—a legal or regulatory provision that stipulates the periodic review of a government agency or program to determine the need to continue its existence. For race and gender-conscious programs, this can involve: a) a graduation program, b) a definite date to end the program; or c) an annual review of DBE program efficacy, goals, and utilization.

Systemic Barrier—entrenched discriminatory practices or policies that effectively prevent participation in economic opportunities.

Technical Assistance—the transfer of skills or information from one party or entity to another, through on-site consultation, conferences, brokering

of services, training, or general dissemination of information.

T-Test—assesses whether the means of two groups are statistically different from each other.

Unknown DBE—Firms certified as a DBE business without specific race or ethnic designations.

Utilization—the percentage of receipts in an industrial category that are spent with a given class of firms (e.g., M/WBEs).

Vendor—any person or business entity who has come forth to a governmental entity and registered with the entity identifying the products and services they would like to supply/render.

Veteran Business Enterprise Program—A race- and gender-neutral program designed to benefit veteran-owned businesses.

Woman-owned Business—firms that are at least 51% owned and controlled by female individuals.



E.1 INTRODUCTION

E.1.1 Purpose of Disparity Study

On November 22, 2021, the City of Raleigh (Raleigh) commissioned Miller³ Consulting, Inc. (M³ Consulting) to conduct a Disparity Study (the Study). The purpose of the study is to determine if there is evidence showing disparity among ready, willing, and able Minority- and Women-Owned Business Enterprises (M/WBEs) in AES-Design Services, Construction and Construction-Related Services, Professional Services, Nonprofessional Services and Goods & Supplies from FY 2017 through FY 2021.

E.1.2 Overview of the City of Raleigh's Current Race and Gender-Conscious and Race and Gender-Neutral Programs

Brief History and Background

The precursor to Raleigh's current M/WBE Program was placed under the direction of the Raleigh Department of Administrative Services and was itself executed as a purely administrative function. An M/WBE Program Manager worked under an Assistant City Manager. There is no definitive detail regarding the origin of or the decision process that originated the aspirational M/WBE participation goal of 15% for City construction and repair projects of \$300,000 or more (or \$100,000 or more with

state funding). This percentage has been an official SOP since becoming effective on September 3, 2002.

Over time, Raleigh contemplated a further delineation of the 15% aspirational goal to break out as 8% participation by Minority-owned firms and 7% participation by Non-minority female-owned firms. This split approach was presented to the Raleigh City Council but never completed the official City Management approval process and was relegated to an unofficial practice. The split approach is not consistently invoked or enforced. The M/WBE program was later transitioned to be housed within the Housing and Neighborhoods Department, with the M/WBE program manager continuing to run the program without additional staffing support.

An M/WBE Workgroup was established in December 2017 and was directed by the Economic Development and Innovation Department. The charge of the M/WBE Workgroup, which had representation from various Raleigh departments, was to strengthen the M/WBE program and ensure the implementation of the existing policy. After prolonged advocacy for a dedicated M/WBE program manager, one was hired in September 2018. The M/WBE Workgroup had no official charter but ushered in changes such as amendments to the contract routing process (July 2018); a requirement for an M/WBE

Participation Letter to accompany all construction contracts of \$300,000 and over (or construction contracts of \$100,000 or more with State funding); and updates to the M/WBE SOP (March 2021). Although there are currently no participation goals on professional services contracts, M/WBE staff began tracking M/WBE participation on professional services contracts as of Raleigh's FY19–20 fiscal year. Departmental data request forms were implemented as of March 2021.

M/WBE Program

The stated goal of Raleigh's M/WBE program is to increase contracting opportunities for historically underutilized businesses (HUBs). Raleigh defines HUBs as those that have been categorized as such by the North Carolina Department of Administration's HUB Office or HUB Office as well as NCDOT's Disadvantaged Business Enterprise Program. It was noted that as per Raleigh SOP 501-3, Public Bidding, City departments defer to the State of North Carolina's more stringent guidelines for M/WBE participation in construction projects when the contracting opportunity includes state funding and requires associated on contracts awarded by the City for (i) construction and building projects of \$300,000 or more and (ii) construction and building projects of \$100,000 or more that include any state funding.

The City of Raleigh currently has an aspirational goal of 15% of the total contract values to be performed by certified M/WBE businesses in contracts awarded by the City of Raleigh for construction and building projects of \$300,000 or more. This goal also applies to construction and building projects of \$100,000 or more, if the funding sources supporting the project include any North Carolina State funding.

Disadvantaged Business Enterprise Program

The City of Raleigh also has a separate Disadvantaged Business Enterprise (DBE) Office embedded within its Transportation Department. The DBE Office manages a 13% DBE inclusion goal that is underpinned by their Federal Transportation Administration (FTA) triennial goal-setting activity and the requirement to enter contractor and payment data annually into the Federal Transit Award Management System (TrAMS), FTA's

platform to award and manage federal grants. An analysis of the most recent TrAMS report shows that during the federal fiscal reporting periods of 2017–2020 Raleigh either met or exceeded its participation goal with a range of achievements between a floor of 13% (2018) and a high of 20% (2019)

E.1.3 Croson and Fourth Circuit Standards

In *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 109 S.Ct. 706 (1989), the U.S. Supreme Court established a two-pronged "strict scrutiny" test for any governmental entity seeking to redress discrimination through race-conscious means:

- The governmental entity must demonstrate that there is a compelling governmental interest supported by a strong basis in evidence that consideration and use of race- and gender-conscious programs or policies is necessary to remedy discrimination.
- Any such race- and gender-conscious program must be narrowly tailored to remedy identified discrimination.

The requirements of the strict scrutiny test can be met by establishing a factual predicate. Disparity study evidence is a key component of such a factual predicate. The City of Raleigh can use the methodology, findings, conclusions and recommendations of this study to determine whether it has a basis for using some form of a race- and gender-conscious program consistent with the U.S. Supreme Court requirements of *City of Richmond v. Croson*.

Narrow tailoring is a crucial element in crafting appropriate *Croson* remedies.² Courts have struck down many M/WBE programs due to the failure of local jurisdictions to narrowly tailor their remedies. Once government policymakers have established and relied upon a factual predicate in devising M/WBE programs, post-*Croson* case law provides more detailed guidance for crafting M/WBE programs:

²Narrow tailoring elements include good faith consideration of race-neutral alternatives for elimination of barriers to M/WBE participation; project-specific goal setting; flexibility in the size of goals based upon the relative availability of qualified, ready, and willing M/WBEs; and limiting the scope of such remedies to those specific firms that are significantly underutilized within an industry segment.

- Race- and gender-conscious M/WBE programs should be instituted only after, or in conjunction with, race- and gender-neutral programs.
- M/WBE programs should not be designed as permanent fixtures in a governmental purchasing system without regard to eradicating bias in standard purchasing operations, or in the private sector contracting arena in which the governmental entity is a participant. Consequently, each M/WBE program should have a sunset provision and provisions for regular review. In addition, there is the implication that purchasing systems should be reformed.
- M/WBE programs should have sensible graduation provisions for M/WBEs that have largely overcome the effects of discrimination and are no longer in need of a remedy.
- Rigid numerical quotas are at considerable risk of being overturned by judicial review; flexible, rational, contract-specific goals are more legally defensible.
- Race- and gender-conscious goals should be tied to the relative M/WBE availability of qualified firms to perform a given contract and to addressing identified discrimination within an industry.
- M/WBE programs should limit their adverse impact on the rights and operations of innocent third parties.
- M/WBE programs should be limited in scope to only those group(s) and firms that suffer the ongoing effects of past or present discrimination.
- Public entities cannot establish across-the-board goals with no regard for specific race/gender and industry variables.
- Waiving bonding, insurance and corporate experience requirements is considered race-conscious if directed only to M/WBES.
- Acceptable variables in calculating availability include vendor lists with approved subcontractors, subcontractors that performed on a contract and contractors who have been qualified to perform on an entity's contracts.
- Challengers of race-based remedial measures must provide credible, particularized evidence to rebut the public entity's showing of a strong basis in evidence for the necessity for remedial action. Race- and gender-conscious goals should be tied to the relative M/WBE availability of qualified firms to perform a given contract and to addressing identified discrimination within an industry.
- M/WBE programs should limit their adverse impact on the rights and operations of innocent third parties.
- M/WBE programs should be limited in scope to only those group(s) and firms that suffer the ongoing effects of past or present discrimination.

Croson requirements were extended to federal government programs in *Adarand v. Peña*.

In applying the *Croson* standard, the Fourth Circuit has developed several distinctive standards. Key findings that have evolved from *Croson* case law in the Fourth Circuit are:

- There must be a strong basis in evidence that race-conscious remedial action is necessary.
- The strong basis in evidence must be satisfied by pre-enactment evidence; post-enactment evidence can be used to show that the race-conscious program is narrowly tailored.
- Contractor associations have standing to challenge set-aside programs.
- Post-enactment evidence may be considered in evaluating the legality of a program preference.
- Any preference for any specified group must be supported by evidence of discrimination or an inference of discrimination against that particular group.

Croson requirements were extended to federal government programs in *Adarand v. Peña*.

The Third Circuit has developed several distinctive standards as discussed above. The foundation of current Third Circuit standards was established from the *Croson* decision in 1989 through 1996 in the *Contractors I, II, III and Independent* cases. The Third Circuit's relevant standards from *Contractors I, II, III and Independent* are summarized here:

- For equal protection analysis, the party challenging the government action bears the ultimate burden of persuasion.
- Instances where contractors that were awarded government contracts were also members of contractor associations that discriminated against minority contractors did not amount to passive participation in private discrimination by the relevant government actors.
- Post-enactment evidence may be sufficient as a basis for race- and gender-conscious programs but must also address other potential causes for disparity.
- A “narrowly tailored” program must correlate any race-conscious program to the identified discrimination or inferences of discrimination.
- Any numeric goal must be supported by evidence.
- Race-conscious initiatives can only be used after consideration of race-neutral alternatives.
- Nondiscrimination efforts can include the use and analysis of race/sex information without being subject to *Croson* standards.
- The factual predicate for any constitutional race-conscious relief may consist of proper statistical evidence of disparity and anecdotal evidence:
 - Proper statistical evidence of disparity for any race-conscious relief must assess the “relevant statistical pool”—the percentage of minority businesses engaged in the local construction industry.
 - Availability, for disparity purposes, is defined by the proportion of minority-owned businesses that were available or qualified to perform the contracts or work at issue.
 - Proper statistical evidence of disparity includes the “disparity index.” This index consists of the percentage of minority contractor participation in City contracts divided by the percentage of minority contractor availability in the relevant statistical pool.
 - Evidence of marketplace or private sector discrimination offered by way of general testimony of discrimination is insufficient as a basis for race-conscious relief. Generalized affidavits will not satisfy the “compelling government interest” required by *Croson*.
 - Race-neutral efforts, including any revolving loan fund, technical assistance and training, and bonding assistance, must also be assessed and considered prior to the use of race-conscious relief.



E.2 M³ CONSULTING'S APPROACH AND METHODOLOGY

M³ Consulting's exclusive study methodology includes 10 analyses, which lead to overall conclusions and recommendations.

E.2.1 M³ Consulting's 10-Part Disparity Study Methodology

M³ Consulting's 10-part study methodology provides a complete factual predicate consistent with evolving case law and the City of Raleigh's regulatory environment. The statistical analysis—relevant market, availability, utilization, disparity and capacity—conforms with the requirements of *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 109 S. Ct. 706 (1989), *Adarand Contractors, Inc. v. Federica Peña*, 515 U.S. 200, 115 S. Ct. 2097 (1995) and Fourth Circuit progeny, and determines if there are statistically significant disparities from which an inference of discrimination may be drawn. The remaining industry and market analysis assists in determining if organizational factors (active discrimination or exclusion) or private sector and marketplace factors in which the City of Raleigh participates (passive discrimination or exclusion) cause any disparity. Together, these findings allow the City of Raleigh to determine if there is a compelling governmental interest in using race- and gender-conscious remedies for any statistically significant disparity. The combined analysis also leads to a set of customized recommendations that includes race- and gender-neutral initiatives and narrowly tailored race- and gender-conscious initiatives.

The City of Raleigh Disparity Study

INDUSTRY ANALYSIS	STATISTICAL ANALYSIS	MARKET ANALYSIS	CONCLUSIONS	RECOMMENDATIONS
<ul style="list-style-type: none"> Legal Analysis Procurement and DBE Program Operational Analyses 	<ul style="list-style-type: none"> Relevant Market Analysis Availability Analysis Utilization Analysis Disparity Ratios Regression and Capacity Analyses 	<ul style="list-style-type: none"> Anecdotal and Survey Analyses Race- and Gender-Neutral Analysis Marketplace Analysis 	<ul style="list-style-type: none"> Finding of Passive or Active Discrimination, if Any Identification of Barriers to DBE Participation 	<ul style="list-style-type: none"> Procurement and DBE Programmatic Initiatives Goal-setting Nondiscrimination Initiatives Management and Technical Assistance

Description of Disparity Study Components

- Legal Analysis** outlines the legal standards of *City of Richmond v. J.A. Croson Company*, *Adarand v. Peña* and their progeny in the Fourth Circuit as well as around the country. Such a legal analysis provides critical insight to current judicial opinions relevant to both M/WBE program design and study analysis.
- Procurement and M/WBE Program Operational Analyses** examine Raleigh's contracting history to determine the impact of the City of Raleigh's policies, procedures and practices on M/WBEs' ability to do business with the City of Raleigh and the effectiveness of the M/WBE operations on increasing M/WBE participation.
- Relevant Market Analysis** determines the geographic boundaries within which the City of Raleigh performs the substantial part (about 70%) of its business activities. The identification of the bounds is also guided by legal criteria that require the City of Raleigh to refine its efforts to impact M/WBE business activity in its market area.
- Availability Analysis** determines the available M/WBEs and Non-M/WBEs that are available to do business with the City of Raleigh within the determined relevant market.
- Utilization Analysis** quantitatively examines the City of Raleigh's contracting history and determines the number of contracts and levels of expenditures with M/WBEs.
- Disparity Ratios** determine the difference between the availability of M/WBEs and their utilization by the City of Raleigh, and whether any disparity is statistically significant.
- Regression and Capacity Analyses** examine differences in capacity of firms based on race and gender, using established statistical methods, and examine if race, gender and ethnicity still impact the participation decision once a set of variables that represent capacity are controlled for. Further, the survey provides information on business characteristics, such as owner qualifications, years in business, capacity and credit market experiences.
- Anecdotal and Survey Analyses** determine the experiences of M/WBEs and Non-M/WBEs attempting to do business with the City of Raleigh and in the business community overall.
- Race- and Gender-Neutral Analysis** determines the effectiveness of race- and gender-neutral programs in increasing M/WBE participation in both public and private sector opportunities.
- Marketplace Analysis** determines M/WBE participation in the marketplace, which consists of both public and private sector opportunities. Factors that impact business formation and self-employment are also assessed in this analysis.

The methodology components M³ Consulting deploys reflect the continuing development of case law, which has increased the level and sophistication of the statistical analysis necessary to comply with *Croson* and *Adarand* standards.

E.2.2 Statistical Methodology

The statistical methodology below discusses in more detail relevant market, availability, utilization and disparity. It includes various definitions of availability and M³ Consulting's "Ready, Willing and Able" (RWASM) model. M³ Consulting has adapted this model to data sources specific to Raleigh that were available for this study. Also discussed are the types of utilization analysis M³ Consulting performed. The statistical methodology section concludes by defining the disparity ratio and significance tests, crucial for drawing conclusions regarding any disparity in Raleigh's recent history of contracting with M/WBEs.

To conduct the analysis, M³ Consulting collected vendor, bidder, contract award, purchase order (PO) and payments data for years FY 2017 through FY 2021.

A. Relevant Market

The *Croson* statistical analysis begins with the identification of the relevant market. The relevant market establishes geographical limits for the calculation of M/WBE availability and utilization. Most courts and disparity study consultants characterize the relevant market as the geographical area encompassing most of a public entity's commercial activity. The *Croson* Court required that an MBE program cover only those groups that have been affected by discrimination within the public entity's jurisdiction.³

Two methods of establishing the relevant market area have been used in disparity studies. The first utilizes vendor and contract awardee location of dollars expended by an entity in the relevant industry categories. In the second method, vendors and contractors from an entity's vendor or bidder list are surveyed to determine their location. The former is based on approaches implemented under the U.S. Justice Department guidelines for defining relevant geographic markets in antitrust and merger cases. M³ Consulting has developed an alternative method for determining an entity's relevant market by combining the above methods and using an entity's bidder lists, vendor lists, and awardee lists as the foundation for market definition.

By examining the locations of bidders, vendors and awardees, M³ Consulting seeks to determine the area containing a preponderance of commercial activity

pertaining to an entity's contracting activity. While case law does not indicate a specific minimum percentage of vendors, bidders or awardees that a relevant market must contain, M³ Consulting has determined a reasonable threshold is somewhere around 70% for bidders, vendors and contract award winners. Further analysis may be necessary if there are "large" differences in the percentages of these three measures.

B. Availability Analysis

The fundamental comparison to be made in disparity studies is between M/WBEs and Non-M/WBEs ready, willing and able to perform a specific service (i.e., "available"), and the number of such businesses being utilized by the locality or its prime contractors. This section presents a discussion of the availability estimates for M/WBEs who are ready, willing and able to perform work on contracts for the City of Raleigh.

Availability is the most problematic aspect of the statistical analysis of disparity. It is intrinsically difficult to estimate the number of businesses in the marketplace that are ready, willing and able to perform contracts for or provide services to a specific public entity. In addition to determining an accurate head count of firms, the concomitant issues of capacity, qualification, willingness and ability complicate the production of accurate availability estimates.

1. M³ Consulting Availability Model

M³ Consulting employs two general approaches to measuring availability: the RWASM Availability Model and marketplace availability. The availability measures can fall into the following categories:

- **RWASM**—Those firms that are ready, willing and able to do business with Raleigh;
- **Public Sector Availability**—Those firms that are ready, willing and able to do business with similar public sector agencies within Raleigh's marketplace⁴; and
- **Marketplace Availability**—All firms available in Raleigh's marketplace, as measured by Census, Data Axle, Dun & Bradstreet, Dodge Data & Analytics and/or business license data.

³*City of Richmond v. J.A. Croson*, 488 U.S. 469, 505-506 (1989).

⁴This analysis requires inter-governmental cooperation between public entities providing bidder, vendor and awardee data, thus is not performed, unless such agreement is developed for individual agencies, or a consortium of agencies conducted a consortium disparity study

The matrix in Figure E.1 outlines M³ Consulting's Availability Model. The matrix starts with the optimum availability measure of those firms ready, willing and able to do business with Raleigh and descends to less

optimum measures. Factors that determine which level of availability best suits Raleigh's environment include quality of available data, legal environment, and previous levels of inclusion of M/WBE in bidding and contracting activity.

Figure E.1.
RWASM Availability Model

Availability of firms ready, willing and able to do business	City of Raleigh RWA SM Availability
	1. Prime and sub-bidders by contract category for each year of study period
	2. Prime and sub-bidders by contract category for fewer years
	3. Prime bidders, sub-awardees, prime awardees (informal purchases) for each year of study period
	4. Prime bidders, sub-awardees, prime awardees (informal purchases) for fewer years period
	5. Prime bidders, sub-awardees, prime awardees (informal purchases) + vendors + certified M/W/DBEs for fewer years period
	Public Sector SM Availability
	6. City of Raleigh RWA measure + similar public entity prime and sub-bidders
	7. City of Raleigh RWA measure + similar public entity prime and sub-awardees
	8. City of Raleigh RWA measure + similar public entity prime, sub awardees and vendors + Master M/W/DBEs List
	Marketplace Availability
	9. Census
	10. Data Axle

Source: M³ Consulting, Inc.

M³ Consulting's RWASM Availability Model is further tailored to the robustness of Raleigh's specific databases available for analysis. RWASM availability is defined at Level

2 for the years FY 2017–FY 2021, which includes prime and sub-bidders, informal and noncompetitive awardees, and prime and sub-awardees.

Figure E.2.
City of Raleigh Specific RWASM Availability Levels

RWA SM Availability Level	RWA SM Availability Definition
Level 1	City of Raleigh Bidders and Sub-bidders
Level 2	City of Raleigh Bidders and Sub-bidders + AP/PO firms

Source: M³ Consulting; * list with requisite data elements was not available for analysis

C. Utilization Analysis

Utilization represents the contracting and subcontracting history of Non-M/WBEs and M/WBEs with the City of Raleigh. In developing the contract database to be used as the basis for determining utilization, there are three alternative measures of utilization that can be taken in each procurement category. These are:

1. The numbers of contracts awarded;
2. The dollar value of contracts actually paid or received; and
3. The numbers of firms receiving contracts.

The current report presents two of the three measures of utilization: the number of contracts awarded and the dollar value of the contract awards. Both dollar values and number of contracts are reported to determine if there are any outliers or large single contracts that cause utilization dollar values to be at reported levels. These were preferred over the third measure, the number of firms, which is less exact and more sensitive to errors in measurement.

For instance, if one Non-M/WBE received 30 contracts for \$5 million, and 10 African American-owned firms received one contract each worth \$100,000, then measured by the number of firms (one Non-M/WBE vs. 10 African American-owned firms), African American-owned firms would appear to be overutilized and Non-M/WBEs underutilized. Using the number of contracts (30 contracts vs. 10 contracts) and the dollar value of contracts awarded (\$5 million vs. \$1 million), the result would reverse, depending on relative availability.

D. Disparity Analysis

A straightforward approach to establishing statistical evidence of disparity between the availability of M/WBEs and the utilization of M/WBEs by Raleigh is to compare the utilization percentage of M/WBEs with their availability percentage in the pool of total businesses in the relevant market area. M³ Consulting's specific approach, the "disparity ratio," consists of a ratio of the percentage of dollars spent with M/WBEs (utilization) to the percentage of those businesses in the market (availability).

Disparity ratios are calculated by actual availability measures. The following definitions are used in the M³ Consulting ratio:

A = Availability proportion or percentage

U = Utilization proportion or percentage

D = Disparity ratio

N_w = Number of women-owned firms

N_m = Number of minority-owned firms

N_t = Total number of firms

Availability (A) is calculated by dividing the number of minority- and/or women-owned firms by the total number of firms. Utilization (U) is calculated by dividing total dollars expended with minority- and women-owned firms by the total expenditures.

$A_w = N_w / N_t$

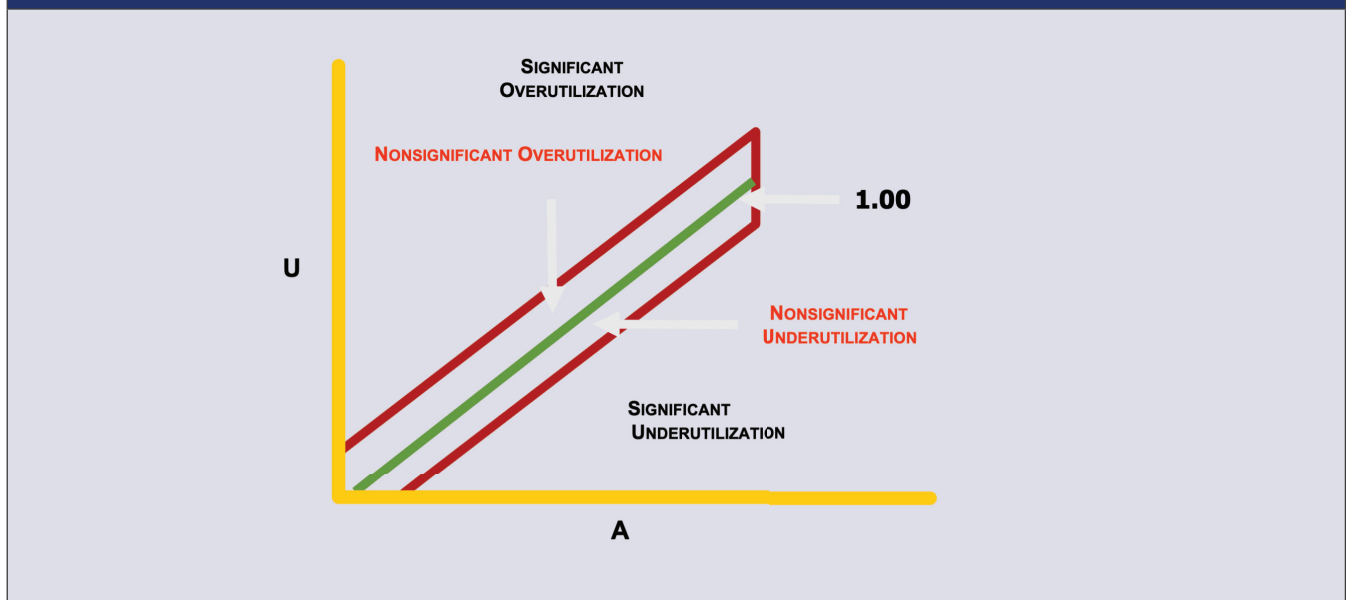
$A_m = N_m / N_t$

D = U/A

When D=1, there is no disparity (i.e., utilization equals availability). As D approaches zero, the implication is that utilization is disproportionately low compared to availability. As D gets larger (and greater than one), utilization becomes disproportionately higher compared to availability. Statistical tests are used to determine if the difference between the actual value of D and 1 are statistically significant (i.e., if it can be stated with confidence that the difference in values is not due to chance [see Figure E.3]).

Figure E.3.

Disparity Ratio Indicating Areas of Significant and Nonsignificant Disparity and Overutilization



Source: M³ Consulting, Inc.

The statistical disparity ratio used in this study measures the difference between the proportion of available firms and the proportion of dollars those firms received. Therefore, as the proportion of contract dollars received becomes increasingly different from the proportion of available M/WBEs, an inference of discrimination can be made.

The concept of statistical significance as applied to disparity analysis is used to determine if the difference between the utilization and availability of M/WBEs could be attributed to chance. Significance testing often employs the t-distribution to measure the differences between the two proportions. The number of data points and the magnitude of the disparity affect the robustness of this test. The customary approach is to treat any variation greater than two standard deviations from what is expected as statistically significant.

A statistically significant outcome or result is one that is unlikely to have occurred as the result of random chance alone. The greater the statistical significance, the smaller the probability that it resulted from random chance alone. P-value is a standard measure used to represent the level of statistical significance. It states the numerical probability that the stated relationship is due to chance alone. For example, a p-value of 0.05, or 5% indicates that the chance a given statistical difference is due purely to chance is 1 in 20.



E.3 FINDINGS AND CONCLUSIONS

E.3.2 Statistical Finding Impacting Statistically Significant Disparity

A. Relevant Market

M³ Consulting tested the four relevant market categories below to determine where approximately 70% of Raleigh's commercial activity fell in bidders, awardees, POs and payments. Results are presented in Table E.1.

- City of Raleigh
- Raleigh-Cary, NC MSA
- State of North Carolina
- Nationwide

For AES-Design Services, M³ Consulting concluded the MSA as the relevant market, based primarily on PO dollars, which represented 84.60% of AES-Design Services transactions. For Construction and Construction-Related Services, the relevant market is clearly the State of North Carolina when viewing the measures in totality. All measures reflected over 70% of Construction activity in the State; only PO counts reflected over 70% in the MSA. Similar to Construction and Construction-Related Services, PO dollars for Professional Services and Nonprofessional Services point to the State of North Carolina. For Professional Services, PO dollars reach 75% activity in the State, while PO counts reflect 70% activity in the State. For Nonprofessional Services, PO dollars and bidders/awardees are just shy of 70%, while PO counts are over 75% in the State. Goods & Supplies for the City of Raleigh are procured from bidders and sub-bidders across the nation. Less than 60% of bidders/awardees and PO dollars are within the State of North Carolina, and slightly under 40% of the dollars are invoiced and paid from within the State. Therefore, relevant market for Goods & Supplies is defined as the nation for this study period.

Table E.1.
Summary of Relevant Market Determination

	City	MSA	State	Nationwide
AES-Design Services		✓		
Construction and Construction-Related Services			✓	
Professional Services			✓	
Nonprofessional Services			✓	
Goods & Supplies				✓

Source: M³ Consulting; City of Raleigh contracts data, PeopleSoft PO and AP data, City of Raleigh vendor payment data ; P-Card data

B. Availability Analysis

Table E.2 summarizes the availability estimates for M/WBEs within the relevant market for the City of Raleigh. It also provides the source of the information. M³ Consulting typically relies upon RWASM estimates derived from bidders, sub-bidders and awardees in that order of importance. Marketplace availability measures, based on Data Axle and reflected in Table E.3, are presented as a benchmark of Minority- and woman-owned firm availability and for the City of Raleigh to consider when looking for potential firms for outreach.

For all procurement categories, WBEs have higher representation than Minority-owned firms. Except for Construction and Construction-Related Services, Marketplace total M/WBE availability as a percentage of available firms in a particular industry group is higher than total RWASM M/WBE availability.

For AES-Design Services, RWASM Availability reflects total M/WBE representation of 20.12%. WBEs account for most of this representation at 15.38%, with Minority-owned firms representing only 4.74%. Total M/WBE Marketplace Availability was significantly higher at 38.85%, with WBE representation at 31.65% and total Minority-owned firm representation at 7.19%.

WBE and Minority-owned businesses RWASM Availability is close for Construction and Construction-Related Services. WBE availability is 17.63% and Minority-owned business availability is 15.96% for overall M/WBE availability of 33.59%. As a percentage, RWASM M/WBE

Availability is almost double that of Marketplace M/WBE Availability at 18.10%. Both WBEs at 9.85% and Minority-owned firms at 8.25% reflected a significant percentage decline in Marketplace Availability. The higher RWASM Availability may reflect more intensive outreach efforts on the part of the City, particularly at the subcontractor level. Construction and Construction-Related Services is the only measure that includes sub-bidders and is based on contract awards. The contract award data was not robust for other procurement categories and thus reflects a prime-level analysis.

Professional Services and Nonprofessional Services reflected similar results as AES-Design Services. For Professional Services, WBEs represented 6.33% of total RWASM firms, while Minority-owned firms represented 3.67% of the total. Conversely, M/WBE Marketplace available firms represented 41.13% of the 3,085 total firms in the Marketplace. WBEs represented 32.45% of these firms, compared to 6.33% for RWASM Availability. Minority-owned firms were 8.69% for Marketplace Availability compared to 3.67% for RWASM Availability.

Total M/WBE RWASM Availability for Nonprofessional Services was 7.35%, higher than only Goods & Supplies. WBEs reflected 4.62% availability, while Minority-owned firms were at 2.59%. On the other hand, M/WBEs made up 39.52% of Marketplace Nonprofessional Availability, with WBEs accounting for 31.84% and Minority-owned firms 7.68% of total availability.

While Goods & Supplies had the highest level of Non-M/WBE RWASM Availability for Goods and Services at

Table E.2.
Summary Table – RWASM Level 2 Availability Percentage Participation
City of Raleigh
Relevant Market; FY 2017 – FY 2021

Ethnicity	AES-Design Services ²		Construction and Construction-Related Services ³		Professional Services ³		Nonprofessional Services ³		Goods & Supplies ¹		Total Firms ¹	
	#	%	#	%	#	%	#	%	#	%	#	%
Non-M/WBE	134	79.29	352	65.31	269	89.67	1,315	92.02	1,998	96.34	3,932	91.53
African American	1	0.59	48	8.91	6	2.00	20	1.40	7	0.34	77	1.79
Asian American	3	1.78	5	0.93	2	0.67	3	0.21	2	0.10	15	0.35
Hispanic American	3	1.78	28	5.19	2	0.67	11	0.77	5	0.24	48	1.12
Native American	1	0.59	5	0.93	1	0.33	2	0.14	1	0.05	6	0.14
Other Minority	-	0.00	-	0.00	-	0.00	1	0.07	-	0.00	1	0.02
Total Minority	8	4.74	86	15.96	11	3.67	37	2.59	15	0.73	147	3.42
Woman-Owned (WBEs)	26	15.38	95	17.63	19	6.33	66	4.62	57	2.75	199	4.63
Unknown M/WBE	-	0.00	-	0.00	0	0.00	2	0.14	1	0.05	3	0.07
Total M/WBE	34	20.12	181	33.59	30	10.00	105	7.35	73	3.53	349	8.12
SBE	-	0.00	4	0.74	1	0.33	7	0.49	3	0.14	9	0.21
SDV/VBE	1	0.59	2	0.37	-	0.00	2	0.14	-	0.00	6	0.14
Grand Total	169	100.00	539	100.00	300	100.00	1,429	100.00	2,074	100.00	4,296	100.00

Source: M³ Consulting; City of Raleigh contracts data, PeopleSoft PO and AP data; City of Raleigh vendor payment data; Other Minority is a firm identified as M/WBE with no specific race/ethnicity identified;

Unknown M/WBE is a firm identified as M/WBE with no specific race/ethnicity/gender identified.

¹Nationwide

²Raleigh-Cary, NC MSA

³State of North Carolina

Table E.3.
Summary Table—Marketplace Availability
Relevant Market, 2021

Ethnicity	AES-Design Services ²		Construction and Construction-Related Services ³		Professional Services ³		Nonprofessional Services ³		Goods & Supplies ¹		Total Firms ¹	
	#	%	#	%	#	%	#	%	#	%	#	%
Non-M/WBE	255	61.15	1,122	81.90	1,816	58.87	3,598	60.48	1,546	67.04	8,340	63.51
African American	11	2.64	20	1.46	52	1.69	107	1.80	41	1.78	232	1.77
Asian American	7	1.68	10	0.73	110	3.57	106	1.78	79	3.43	312	2.38
Hispanic American	12	2.88	81	5.91	103	3.34	236	3.97	107	4.64	539	4.10
Native American	-	0.00	2	0.15	3	0.10	8	0.13	1	0.04	14	0.11
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Total Minority	30	7.19	113	8.25	268	8.69	457	7.68	228	9.89	1,097	8.35
Woman-Owned (WBEs)	132	31.65	135	9.85	1,001	32.45	1,894	31.84	532	23.07	3,694	28.13
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	162	38.85	248	18.10	1,269	41.13	2,351	39.52	760	32.96	4,791	36.49
SBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
SDV/VBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Grand Total	417	100.00	1,370	100.00	3,085	100.00	5,949	100.00	2,306	100.00	13,131	100.00

Source: Data Axle Firms as of February 2021; M³ Consulting

¹Nationwide

²Raleigh-Cary, NC MSA

³State of North Carolina

96.34%, followed by Nonprofessional Services at 92.02%. Professional Services was not far behind at 89.67%. Total M/WBE availability did not reach 4% with WBEs representing 2.75%. All Minority groups combined represented less than 1% of Goods & Supplies RWASM availability. The picture changes with Marketplace Availability. M/WBEs account for 32.96% of available firms. WBEs account for 23.07% of Marketplace Availability compared to 2.75% for RWASM Availability. Minority-owned firms represent almost 10% of Marketplace Availability, while less than 1% for RWASM Availability.

C. Utilization Analysis

Table E.4 summarizes utilization of M/WBEs by the three utilization measures: purchase orders, accounts payable, and contract awards.

The most robust measure for AES-Design Services is POs, which M³ Consulting relied upon, with AES-Design Services M/WBEs securing 5.80%. During the study period FY 2017–FY 2021, M/WBEs achieved their highest utilization based on accounts payable data at 10.50%, followed by contract awards at 8.63%. Across all utilization measures for AES-Design Services, WBEs represented the majority of M/WBE participation. Minority-owned AES-Design Services firms achieved their highest utilization percentage in contract awards, where the achievement was based on a relatively small number of firms that accounted for over 90% of W/MBE utilization. Raleigh primarily engaged and contracted with Non-M/WBEs for AES-Design Services.

Utilization of M/WBEs in Construction and Construction-Related Services, proportionately, yielded the largest participation across contract awards, POs and payments. Based on contract awards, where subcontractor utilization is considered, M/WBEs received 21.45% of the \$522M during the study period FY 2017–FY 2021. When assessing M/WBE participation based on contract awards, the majority of the utilization stems from WBEs. In fact, WBEs represented 78% of the total M/WBE participation in contract awards. Based on POs and payments in Construction and Construction-Related Services, WBEs received 90% and 86% of total M/WBE encumbrances and expenditures, respectively. Overall, Minority-owned firm utilization at 4.60% based on contract awards data suggest an impact of M/WBE subcontractor activity. Comparatively, Minority-owned firm participation based on payments

and POs, which only reflect prime contractors that provide services directly to the City, was below 2%.

Within Professional Services, M/WBE participation was above 10% based on accounts payable data only. For POs and contracts, M/WBE participation was 5.06% and 8.87%, respectively. M³ Consulting relied upon POs for conclusions because they captured the bulk of encumbered dollars. Minority-owned firms exceeded WBE participation in contract awards for professional services, and they were nearly even based on accounts payable data. Overall, Non-M/WBE utilization accounted for the lion's share of utilization in Professional Services irrespective of the measure, eclipsing 90% in POs and contract awards.

Table E.4 illustrates M/WBE utilization of Nonprofessional and Goods & Supplies, for which M/WBEs accounted for on average of 8% and less than 1%, respectively. Raleigh has a wealth of opportunity to improve its efforts to attract, engage, utilize and support increased participation of M/WBEs in Nonprofessional Services and Goods & Supplies.

Table E.5 presents utilization by race/ethnicity/gender for each procurement type. Utilization for AES-Design Services, Professional Services, Nonprofessional Services, and Goods & Supplies is based on PO data. Utilization for Construction and Construction-Related Services is based on contract awards data. Given Raleigh's primary focus on M/WBE inclusion at the subcontractor level, Construction and Construction-Related Services utilization is much larger proportionately than the other procurement types. Specifically, when considering the \$112M (21.45%) utilization of M/WBEs in Construction and Construction-Related Services, \$45.8M (41%) is from subcontractor opportunities on those projects valued over \$300K, which is tracked by the City's M/WBE Office. The balance of the M/WBE utilization at the pure prime level, which reflects less subcontractor participation, is primarily attributed to WBEs. Minority-owned firms at the pure prime level based on Construction and Construction-Related Services received 0.90% (see Table 6.8 in Chapter VI). African American- and WBE-owned firms had the highest levels of participation in Construction and Construction-Related Services at 3.13% and 16.85%, respectively. Hispanic American-owned firms followed at 1.29.

Based on POs, M/WBE utilization was 5.80% in AES-Design Services, 5.06% in Professional Services, 9.46% in Nonprofessional Services and 1.19% in Goods and Supplies.

E.3 Findings and Conclusions

WBEs also had about 5% participation in Nonprofessional Services, followed by African American-owned firms at 2.78% and Hispanic American-owned firms at 1.62%.

Among M/WBEs, only WBEs reached 1% participation in Goods and Supplies. Minority-owned firms garnered only 0.11% participation.

Table E.4.
M/WBE Utilization in Percent of Dollars of POs, Payments, and Contract Awards
City of Raleigh
Summary of M/WBE Utilization by Relevant Market, FY 2017–FY 2021

Procurement Category	M/WBE Utilization Based on POs (in percent)			M/WBE Utilization Based on Accounts Payable (in percent)			M/WBE Utilization Based on Contract Dollars (in percent)		
	Minority-owned firm	WBE	M/WBE ⁴	Minority-owned firm	WBE	M/WBE ⁴	Minority-owned firm	WBE	M/WBE ⁴
AES-Design Services²	0.41	5.39	5.80	0.18	10.32	10.50	1.94	6.70	8.63
Construction and Construction-Related Services³	1.46	9.40	10.86	1.12	10.24	11.36	4.60	16.85	21.45
Professional Services³	1.89	3.17	5.06	4.72	6.60	11.32	8.87	0.00	8.87
Nonprofessional Services³	4.51	4.93	9.46	2.11	4.16	6.28	8.22	2.66	10.88
Goods & Supplies¹	0.11	1.08	1.19	0.07	0.91	0.98	0.00	0.00	0.00

Source: M³ Consulting, Raleigh Contracts data, PeopleSoft PO and AP data, Raleigh Vendor Payments data; Relevant Market; Other Minority is a firm identified as a Minority-owned firm with no specific race/ethnicity identified; Unknown M/WBE is a firm identified as an M/WBE with no specific race/ethnicity/gender identified.

¹Nationwide

²Raleigh-Cary, NC MSA

³State of North Carolina

⁴Includes unknown M/WBEs

Table E.5.
Utilization Summary by Race/Gender
City of Raleigh
Nationwide, FY 2017–FY 2021

Race/Ethnicity/Gender	Architecture & Engineering ^{2,5}		Construction and Construction-Related Services ^{3,4}		Professional Services ^{3,5}		Nonprofessional Services ^{3,5}		Goods & Supplies ^{1,5}	
	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	283,862,762	94.15	410,260,996	78.48	62,776,399	94.94	307,696,863	90.32	392,526,208	98.78
African American	-	0.00	16,352,394	3.13	193,050	0.29	9,481,778	2.78	171,722	0.04
Asian American	-	0.00	632,839	0.12	476,703	0.72	96,297	0.03	21,513	0.01
Hispanic American	625,542	0.21	6,752,187	1.29	340,376	0.51	5,516,570	1.62	232,280	0.06
Native American	595,568	0.20	288,833	0.06	240,404	0.36	97,216	0.03	4,301	0.00
Other Minority	-	0.00	-	0.00	-	0.00	188,479	0.06	-	0.00
Total Minority	1,221,110	0.41	24,026,254	4.60	1,250,533	1.89	15,380,341	4.51	429,816	0.11
WBE	16,256,280	5.39	88,085,310	16.85	2,094,154	3.17	16,805,099	4.93	4,300,694	1.08
Unknown M/WBE	-	0.00	-	0.00	-	0.00	57,633	0.02	804	0.00
Total M/WBE	17,477,390	5.80	112,111,564	21.45	3,344,687	5.06	32,243,073	9.46	4,731,314	1.19
SBE	-	0.00	-	0.00	3,314	0.01	272,926	0.08	99,710	0.03
SDV/VBE	155,046	0.05	396,406	0.08	-	0.00	451,449	0.13	-	0.00
Grand Total	301,495,198	100.00	522,768,965	100.00	66,124,400	100.00	340,664,311	100.00	397,357,232	100.00

Source: City of Raleigh contracts data, Peoplesoft data, M³ Consulting

¹Nationwide

²Raleigh-Cary, NC MSA

³State of North Carolina

⁴Contract awards

⁵Purchase orders

D. Disparity Analysis

Table E.6 summarizes the disparity ratios discussed in this report for each procurement category at the race/ethnic/gender group level for Raleigh procurements for the period FY 2017–FY 2021. Based on the foregoing analysis and the summary below, findings of statistically significant disparity are made for the following groups in the following procurement categories:

- **AES-Design Services**—Asian American-owned firms, Hispanic American-owned firms, WBEs
- **Construction and Construction-Related Services**—African American-owned firms, Asian American-owned firms, Hispanic American-owned firms, Native American-owned firms
- **Nonprofessional Services**—Asian American-owned firms, Native American-owned firms
- **Professional Services**—African American-owned firms, WBEs
- **Goods & Supplies**—African American-owned firms, Asian American-owned firms, Hispanic American-owned firms, Native American-owned firms, WBEs

Table E.6.
Summary Disparity Ratios by Race, Ethnicity and Gender
Utilization vs. RWASM Availability Level 2
City of Raleigh
Relevant Market, FY 2017–FY 2021

Ethnicity	AES-Design Services ² (POs)		Construction & Construction-Related Services ³ (Contract Awards)		Nonprofessional Services ³ (POs)		Professional Services ³ (POs)		Goods & Supplies ¹ (POs)	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	1.19	S	1.20	S	0.98	S	1.06	S	1.03	S
African American	0.00	NS	0.35	S	1.99	S	0.15	S	0.13	S
Asian American	0.00	S	0.13	S	0.13	S	1.08	NS	0.06	S
Hispanic American	0.12	S	0.25	S	2.10	S	0.77	NS	0.24	S
Native American	0.33	NS	0.06	S	0.20	S	1.09	NS	0.02	S
Other Minority	0.00	S	0.00	S	0.79	NS	0.00	S	0.00	S
Total Minority	0.09	S	0.29	S	1.74	S	0.52	S	0.15	S
WBE	0.35	S	0.96	NS	1.07	NS	0.50	S	0.39	S
Unknown M/WBE	0.00	S	0.00	S	0.12	S	0.00	S	0.00	S
Total M/WBE	0.29	S	0.64	S	1.29	S	0.51	S	0.34	S
SBE	0.00	S	0.00	S	0.16	S	0.02	NS	0.17	S
VBE/DVOB	0.09	NS	0.20	NS	0.95	NS	0.00	S	0.00	S

Source: Raleigh Contracts Data, PeopleSoft PO and AP data; M³ Consulting
 Significance is S and Ratio is Less than 1 –Statistically Significant Underutilization; Significance is S and Ratio is Greater than 1 –Statistically Significant Overutilization.

¹Nationwide

²Raleigh-Cary, NC MSA

³State of North Carolina

African American- and Asian American-owned firms had no participation in AES-Design Services, while WBEs reflected 5.39% of the total 5.80% M/WBE participation.

E. Capacity Analysis

The purpose of this analysis is to determine if there are any differences in the capacity of race, gender and ethnic groups, and after accounting for any differences in the capacity of firms, if race and gender are contributing factors to any disparities found.

Capacity Based on Census Annual Survey of Entrepreneurs

Based on U.S. Census Annual Survey of Entrepreneurs, Minority- and Women-owned firms in Construction were about a quarter of the firms with paid employees, with Hispanic American-owned firms and WBEs largely representing them. Goods & Supplies had WBEs and Asian American-owned firms with the highest capacity among the M/WBEs, although Minority-owned firms only represented 14.53% of firms with paid employees. Nonprofessional Service firms had a greater representation from M/WBEs at 34% with Asian American-owned and WBEs representing a majority of these firms with paid employees. Professional Services had a little less than a quarter of WBEs and 18.56% Minority-owned firms with paid employees. Among Minority-owned firms in Professional Services, Asian American- and African American-owned firms constituted the largest proportion of firms with paid employees. The percentage of Minority-owned firms with annual payroll is smaller across all procurement types compared to the firms with paid employees, implying that not all Minority-owned firms have paid employees.

Capacity Based on Data Axle

Data Axle data presenting average employees shows that overall M/WBES are concentrated in the lower range of employees with over 4,000 M/WBE firms with 1–19 employees. This number drops as the number of employees increases, with only eight M/WBEs with over 100–249 employees. This varied by procurement type with two African American-owned firms and one Hispanic American-owned firm in Construction at the 250–499 employee range; one African American-owned firm with 50–99 employees in Architecture and Engineering; one African American-owned firm in the 1,000–4,999-employee

range in Goods & Supplies procurement; one Asian American-owned firm with employees in the 100–249 range in Nonprofessional Services; and one Hispanic American-owned firms with 100–249 employees in Professional Services.

Using sales volume, one African American-owned firm has the capacity over \$50 million in Architecture and Engineering with most Minority-owned firms in the less than \$5 million in sales. In Construction Minority-owned firms and WBEs have a maximum capacity of \$20 million in sales. While Hispanic American-owned firms are represented across the various sales ranges, they are concentrated in the lower range of less than \$2.5 million, and African American-owned firms are concentrated in the less than \$500K range. Goods & Supplies have at least four WBEs and one African American-owned firm with a capacity of \$500 million, whereas in Non-Professional Services, except for African American- and Native American-owned firms, all other race/gender/ethnic groups had a capacity of \$20 million and WBEs had a capacity of \$100 million. In Professional Services, one Native American-owned firm has the capacity of \$100 million among the Minority-owned firms, and one WBE has the capacity of \$50 million. Other race/gender/ethnic groups had an upper limit of \$20 million in sales with the majority of them concentrated at the \$2.5 million mark or less in sales.

Capacity Based on Survey Regressions

Based on a survey conducted to gather data on capacity, M³ Consulting conducted regression analysis to examine differences in capacity based on race/gender/ethnicity, if any, on a final sample of 422 firms. A majority of Minority- and Women-owned firms had average gross receipts in the \$200,000 or lower range, although the average was closer to \$1 million. Minority-owned business are more likely to use small business loan programs to obtain financing, and a majority of Minority-owned businesses were not denied a bond while about a third were denied a loan or line of credit at least one or more times. The survey results also showed that Minority- and Women-owned businesses were more likely to bid on projects as subcontractors than as prime contractors.

Employing the Blinder-Oaxaca decomposition, a method for exploring discrimination between groups, M³ Consulting estimates the extent of disparity in the revenues between Non-M/WBE and M/WBE companies

after accounting for other influencing factors such as number of full-time employees, age of business, principal's experience and the average two-year bid size. The results find that on average, the total gross receipts were \$5,306,349 and \$1,460,893 for Non-M/WBE and M/WBE, respectively. Some of the difference can be explained by education, experience or other firm characteristics, while the remaining can be attributed to discrimination. The results note that the M/WBE group received 13.14% less in total gross receipts from all sources in 2021 than it would have if discrimination had not occurred.

Capacity Based on PUMS

Entrepreneurship is often a means to upward economic mobility for Minorities and Women, but disparities in business formation often limit the development and growth of these firms. Data from the U.S. Census (PUMS) is used to analyze the impact of race and gender, along with other demographic and economic factors on (1) the choice of self-employment and (2) the level of self-employment income.

Overall, African Americans, American Indians, Asian Americans and White Females are significantly less likely to be self-employed in the State of North Carolina. Self-employment is more likely in Construction, Professional and Financial Services industry. In Construction, White Females, Asian Americans, American Indians and Hispanic Americans are significantly less likely to be self-employed, whereas in Professional Services White Females, Asian Americans and African Americans are significantly less likely to be self-employed.

In the State of North Carolina, older individuals, non-natives and those with higher property values are more likely to be self-employed. While this holds true in Construction as in Professional Services, the latter finds graduate education and personal earned income as factors that increase the likelihood of self-employment.

Estimating the impact of race and gender on self-employment earnings and controlling for economic and demographic characteristics, we find that a self-employed African American will earn about \$8,769 less than a similarly situated nonminority Male and a self-employed White Female will earn \$3,888 less than similarly situated nonminority Male in the State of North Carolina. In the Construction industry, however, a self-employed Hispanic

American will earn about \$20,084 more than a similarly situated nonminority Male, but in Professional Services, a self-employed White Female will earn about \$10,154 less than a similarly situated nonminority Male.

E.3.3 Qualitative Findings Impacting Statistically Significant Disparity

A. Procurement and M/WBE Program Analysis

This procurement analysis seeks to determine if there are any systemic barriers within Raleigh's procurement policies, procedures, processes, and daily practices that impact a qualified vendor's access to the City of Raleigh (hereinafter, "Raleigh") procurement opportunities based on that vendor's race, ethnicity, and/or gender. This assessment will further assist in determining if any barriers found are a result of inherent, systemic, or purposeful discrimination or exclusion. In performing this analysis, the foundational doctrine, mission, and impact of Raleigh's current procurement practices on all prospective bidders were considered. To that end, the following three-pronged analysis and review was performed:

- Consideration of public sector procurement best practices
- A review of Raleigh's procurement policies and procedures
- A review of the impacts of Raleigh's procurement structure, policies, procedures, and practices on the ability of Minority and Women-Owned Business Enterprises (M/WBEs) to do business with Raleigh

Based on the analysis, M³ Consulting found that, while Raleigh has attempted to promote greater community and vendor inclusion in its public messaging with regard to the City's Vendor Connection Portal, aspirational M/WBE goals, Strategic Plan focus areas, and mission and vision, there are still processes and practices that may create barriers to M/WBE participation in Raleigh's contracting and procurement opportunities. The following represents Raleigh's Procurement and M/WBE Program policies, procedures and practices that may adversely impact the ability of M/WBEs to participate in Raleigh's procurement and contracting opportunities.

Lack of integration of a more formalized diversity and inclusion model throughout Raleigh's Strategic Plan minimizes organizational focus on achievement of M/WBE inclusion in Raleigh opportunities as a policy objective.

By not directly connecting its inclusive procurement objectives, which include M/WBE participation, in the Strategic Plan, Raleigh forgoes the opportunity to change its organizational culture from viewing these initiatives as an auxiliary appendage attached to the organization's mission to a compulsory component for achieving Raleigh's mission. This lack of connectivity lessens the opportunity for Raleigh to achieve its "stable platform of evolving services" mission, as well as its diversity, equity, and inclusion objectives through current race- and gender-neutral procurement means. This disconnect further reduces Raleigh's influence on its vendors who otherwise agree to partner with the City in achieving Raleigh's mission on the subset of procurements where good faith efforts for diverse vendor inclusion are required.

Perceived bias toward larger familiar firms.

Staff interviews suggest that Raleigh may tend to gravitate more toward larger established firms with whom they are familiar and have worked with previously. As one Raleigh staff interviewee stated, "I think, in my opinion, it could be too if you're more familiar with a vendor—or, I mean, a contractor or a consultant, you normally going to probably want to continue to use the same contractor and stuff." Another Raleigh staff interviewee said that until a couple of new firms finally moved into the market, "these older firms kind of had a stranglehold and would get all the jobs and we were kind of beholden to them."

The lack of more robust procurement forecasting reduces Raleigh's ability to engage in effective planning to maximize inclusive vendor engagement through its procurement opportunities.

The documents provided did not speak to Raleigh's forecasting frequency or how far in advance they assess upcoming procurement needs. M³ Consulting holds that truncated forecasting periods negatively impact the lead times that Raleigh would have to create for effective and inclusive outreach or vendor matchmaking strategies. In addition, the documents provided did not indicate any process for forecasting small dollar purchases that Raleigh anticipates in an upcoming fiscal year. It appears that firms

only become aware of these small dollar opportunities if there is a direct inquiry from a buyer seeking vendor quotes. Given that small purchases are reflective of procurements where small firms have the greatest capacity and ability to perform, lack of notice of these opportunities reduces small firms' ability to submit timely, well-informed, thorough quotes.

Decentralized procurement function reduces Raleigh's ability to develop an inclusive and sustainable procurement operation; lack of robust Enterprise Resource Planning (ERP) integration further exacerbates problems caused by decentralization.

Any organization or municipality may choose a centralized or decentralized procurement operation and achieve sustainable inclusive procurement. However, once the organization or municipality has made that choice, the organization—to be effective, efficient, and inclusive—must intentionally build a procurement infrastructure that supports its choice of centralization or decentralization. Raleigh operates in a decentralized procurement environment steered by user department project management needs. There is no ERP-driven mandate that requires all procurement response components—particularly bid tab data—be electronically uploaded. Raleigh still receives handwritten procurement responses, often filed as hardcopies at the department level, with no unified repository.

Raleigh's decentralized environment and current procurement operations reduce the City's ability to define vendor availability and utilization with respect to M/WBEs in their current race- and gender-neutral environment. Raleigh's inclusive procurement initiatives appear to be primarily subcontractor-based, with no process in place for capturing nonminority subcontractor spend and little provisioning for enhancing M/WBE engagement at the prime level. In addition, no documents were provided during this review indicate that Raleigh's staff is held responsible for or evaluated on how and whether they are meeting the aspirational objectives of their inclusive procurement environment.

M/WBE Office engagement in post-award contract management and compliance oversight.

The M/WBE Office has minimal engagement in some essential post-award contract administration functions, such as vetting contract change orders/amendments,

participation audits, audits of payments or after milestones, contract expirations and renewals, M/WBE vendor quality assurance, disputes and claims, vendor performance analysis/assessments, stakeholder communication, and contract closeout vendor scorecards. Without a line of sight into prime contractor/subcontractor behavior, there is potential for prime contractor and consultant behavior to become inconsistent with the spirit and intent of North Carolina laws and regulations, as well as Raleigh's desired inclusion model regarding subcontractor engagement. The M/WBE Office should be given appropriate resources to continue developing specific policy and procedures to address compliance, audit, and oversight issues. Otherwise, Raleigh risks a growing perception that its daily procurement actions and activities are counter to one of Raleigh's stated key focus areas regarding *Economic Development & Innovation by maintaining and growing a diverse economy to support large and small businesses and entrepreneurs*.

B. Anecdotal Analysis

As part of the disparity study process, M³ Consulting sought to explore the experiences of business owners in the Raleigh and Research-Triangle Area who seek business opportunities with the City of Raleigh. This chapter contains a categorized summary of anecdotal evidence collected concerning the issues and barriers small, minority and women business owners face as they attempt to transact business with the City of Raleigh.

Anecdotal interviews were scheduled with 21 businesses and completed with 20 businesses. One business chose to include two company representatives in their interview; they will be noted as interviewees 15A and 15B. Additionally, a small focus group with two participants was held to discuss the themes raised in individual interviews. The two focus group interviewees also completed individual interviews. Interviews were held with a cross-section of minority, women business, and non-minority male business owners. In two instances, the business owner designated a company representative to complete the interview. Interviewees included small businesses that have been established for a variety of time, ranging from less than two years to nearly 40 years.

After analyzing the experiences of those interviewed and considering all anecdotal evidence, the following observations illustrate the possible barriers that interviewees perceive to exist for small, minority and

women business owners as they attempt to transact business with the City of Raleigh:

- Interviewees detailed that they have trouble when attempting to access loans and grant funding, which can tremendously help small businesses grow and thrive.
- Small business owners, especially M/WBEs, struggle to get clear instruction/direction on how to navigate the process of finding work with the City and how to sustain visibility among City departments where their services are a fit. From initial start-up to attempts to scaling, many small businesses do not have a reliable go-to source for clear guidance regarding how to succeed in doing business with Raleigh.
- The Raleigh vendor community identified fostering relationships as being critical to being able to start a business, secure financing and establish public and private contracts. Small business owners reported struggling to network with City officials and foster the types of relationships that could support their growth.
- M/WBE owners often work within exceedingly small profit margins which impact how effectively they can compete with large and national firms. Programs and opportunities that could ultimately benefit them, such as obtaining M/WBE certification, competing for public sector contracts and seeking HUB certifications, are frequently time-consuming, take already limited staff resources away from other revenue-generating activities and often result in un-rewarded efforts.

The benefits of obtaining certifications to access opportunities with the City are a mixed bag as detailed by the interviewed members of the Raleigh vendor community. However, whether they reported tangible benefits or none, most interviewees relayed that there is a need for City officials to be more available and responsive when they reach out with questions about the perceived “arduous” certification process.

C. Marketplace Analysis

To gain a better understanding of factors outside of the City of Raleigh that may limit participation of M/WBEs in Raleigh's procurement process, we examine the role of the

E.3 Findings and Conclusions

private sector and overall marketplace. To the extent the data allows, this analysis may offer some evidence of the existence of passive participation, if any, in discriminatory acts in the private sector by the City of Raleigh.

The demographic configuration may explain in part the differences in the market availability and utilization of M/WBEs. The City of Raleigh has a large White population, while African Americans make up the second-largest group in terms of participation at the three geographical perspectives.

Taking a gauge of the civilian labor force, 69.5% of Whites, 71.0% of African Americans, 77.3% of Hispanic Americans and 67.5% of Asian Americans are part of the labor force in the City of Raleigh, and all 179 (100%) Native Americans are active in the labor force within the City of Raleigh. While White Americans, African Americans, Native Americans and Hispanic Americans see a drop in the percentage within the MSA and the State, Asian Americans maintain a nearly similar participation in the State and the MSA.

The EEO occupational breakdown provides a picture of Construction and Professional opportunities in the marketplace. In the City of Raleigh, Construction and Extraction occupations are dominated by Black or African American males, followed by White and Hispanic males. Among females, Black females (39.0%) dominate in Production Occupations, followed by Hispanic females (29.8%) and Asian American females (28.1%). In Transportation and Material Moving Occupations, Asian American females dominate with 34.3%, followed by Hispanic female (28.0%). Most male Laborers and Helpers are African American, Asian American, White and Hispanic American. In Installation, Maintenance and Repair occupations, only Hispanic males participate, followed by Whites and African Americans.

In Professional Services occupations, the City of Raleigh shows Management, Business and Financial occupations as well as Sales and related occupations are even across gender for all race and ethnic groups. In Computer Engineering and Science occupations, Whites, Hispanic Americans and Asian Americans see a greater male participation, whereas African Americans and American Indians see almost even participation among men and women within the City of Raleigh. Healthcare participants are similar to the Raleigh-Cary, NC MSA, with females dominating in all race and ethnic groups. Over 70% female participation is seen in technical occupations among all

racial and ethnic groups, with the lowest participation among Asian American females at 59%.

Using Dodge data, we examined M/WBE participation in Marketplace Construction activity. For the State of North Carolina, the data indicates that M/WBEs have limited penetration except in General Contracting, Consultant and Designer.

A comparison of bid activity and bidders across private and public owners of projects with their ranking provides insight about the winning bidders (awardees). Within the State of North Carolina, 2.43% of M/WBEs were ranked #1 (winner) in private sector projects, while 9.83% were ranked #1 in public sector projects. While Non-M/WBEs win about 96.7% of all private sector bids in the State of North Carolina, 1.28 were won by minority-owned firms and 1.15% were won by women-owned firms in FY 2021.

Building permits are an additional indicator of potential contracting activity. Based on the count of commercial building permits, M/WBEs had a distinctly greater percentage of public sector contracts compared to private sector contracts (6.87% versus 2.69%). For WBEs, the count and the dollars awarded in the private sector were much larger (at \$17.2 million or 0.62%) compared to the public sector (at \$702,201 or 0.28%). M/WBEs, however, won greater value in private commercial building permits (at \$24.6 million or 0.88%) compared to public sector building permits (valued at \$1.86 million or 0.73%). Furthermore, the largest value of building permits by MBEs is in the \$1 million to \$5 million range, whereas WBEs include Contractors with permits in the \$5 million to \$10 million range.

Using business license data to measure firm marketplace availability for both the private and public sector in the City of Raleigh shows that 99.6% of total business licenses in the City of Raleigh are held by Non-M/WBE firms. Minority-owned Businesses held 0.15% and WBEs held 0.10%.

D. Race Neutral

There are a significant number of race-neutral programs that aid and support M/WBEs. M³ Consulting reviewed the offerings of 44 organizations in the categories of:

- Goal-Based and Other Targeted Procurement Programs;

- Management and Technical Assistance Providers;
- Financial Assistance Providers;
- Community and Economic Development Organizations;
- Chambers of Commerce;
- Trade Organizations and Business Associations; and
- Other Advocacy Groups.

M³ Consulting interviewed Executive Directors of five organizations to determine their experiences working with small, minority and women-owned businesses. The Executive Directors identified the following issues/themes impacting the M/WBEs that they service:

- Using M/WBEs to check the box on participation requirements;
- Raleigh community just starting to appreciate economic value/impact of diverse businesses;
- Lack of information, resources and financial backing to allow M/WBEs to compete for government contracting opportunities;
- Lack of networking opportunities and opportunities to build relationships;
- Lack of candidness and transparency as to how prime contractors select subcontractors;
- Need for advocacy at local, state and federal level for M/WBE participation; and
- Need for review of procurement policies, procedures and practices to determine impact on M/WBEs.

Though race-neutral programs within the City of Raleigh and throughout North Carolina have made some progress in improving M/WBEs management skills, access to capital and greater exposure to the larger business community, M/WBEs still face some difficulty in gaining access to public- and private-sector contracting opportunities.

The results of the program review and interviews revealed that, while race-neutral efforts may have contributed in some degree to increased capacity and participation in contract awards, race-neutral programs alone have not been fully effective in increasing availability, capacity or utilization of M/WBEs or eliminating disparity.

Given this result, the provision of management, finance and technical assistance via race-neutral programs, in and of itself, does not appear to adequately address all issues and barriers faced by M/WBEs in the City of Raleigh.



E.4 RECOMMENDATIONS

E.4.1 Conclusions on Race- and Gender-Conscious Goal Possibilities

Based on the statistical findings in the disparity chapter, the utilization of qualified firms as reflected by the percentage of contracts or POs awarded and payments made, when compared to the availability of RWASM firms, appears to be less inclusive than warranted, thus M³ Consulting draws an inference of discrimination against the following race, ethnicity and gender groups.

Table E.7.
Inference of Discrimination Based on Findings of Statistically Significant Disparity
By Race/Ethnicity/Gender
By Procurement Type
For the City of Raleigh

	AES-Design Services (POs)	Construction & Construction- Related Services (Contract Awards)	Nonprofessional Services (POs)	Professional Services (POs)	Goods & Supplies (POs)
African American	Disparity	Disparity*	No Disparity*	Disparity*	Disparity*
Asian American	Disparity*	Disparity*	Disparity*	No Disparity*	Disparity*
Hispanic American	Disparity*	Disparity*	No Disparity*	Disparity	Disparity*
Native American	Disparity	Disparity*	Disparity*	No Disparity	Disparity*
WBE	Disparity*	Disparity	No Disparity	Disparity*	Disparity*

Source: M³ Consulting

*Statistically significant

Considering the findings discussed in the previous chapters and the disparity conclusions above, M³ Consulting is providing the following recommendations to the City of Raleigh. The recommendations contain both race- and gender-neutral and race- and gender-conscious elements. The recommendations are grouped within the following categories:

- Organizational and Procurement Adjustment Recommendations;
- Recommendations for Targeted Initiatives—Race- and Gender-Conscious and Race- and Gender-Neutral; and
- Diverse Supplier Program Recommendations.

These recommendations consist of a listing of pertinent options from which Raleigh may select in narrow tailoring its efforts in response to the findings of this report. The options combine agency specific and best practices recommendations that are legally defensible considering the factual findings of this study. The City of Raleigh should consider adoption of those recommendations that are considered most appropriate in terms of cost, resources required, likely effectiveness, community acceptance and organizational feasibility.

E.4.2 Organizational and Procurement Adjustment Recommendations

Below are recommendations to Raleigh for organizational, cultural, structural and programmatic changes that will lead to transformative and sustainable change in Raleigh's procurement operations and that will bring Raleigh into an inclusive procurement environment that ensures regulatory compliance and alignment with best practices.

A. Procurement Systems and Culture Changes

A.1 Change inclusion focus from programmatic (compliance with M/WBE regulations) to organizational (commitment to inclusive procurement environment)

Much of the focus at Raleigh has been on meeting the State of North Carolina's 10% M/WBE goals on building opportunities at \$300,000 or greater (or building projects at

\$100,000 or more with State funding). These efforts, while important to the issues of inclusion, are programmatic (related to operation of a specific program) and functional (focused on departmental function) in nature and not focused on organizational and City-wide change.

Many of the recommendations below focus on City-wide organizational changes that can lead to the transformation of Raleigh's procurement system to become more inclusive. Many of the recommendations for inclusion do not depend on Raleigh's decision to employ race- and gender-conscious or race- and gender-neutral programmatic initiatives. When implemented, these recommendations will also enhance the effectiveness of many recent M/WBE programmatic initiatives.

The importance of leadership commitment and organization-wide implementation cannot be underestimated in either a race- and gender-conscious or race- and gender-neutral environment. Most of Raleigh's major vendors perform work statewide, nationally and/or internationally and are intimately familiar with responding to various public sector inclusion efforts at the local, state and federal levels. The degree of responsiveness often correlates to the public entity's degree of commitment to inclusion in which these firms are pursuing opportunities.

A.2 Four Pillars of Inclusive Procurement

To achieve the Vision, Mission and Goals as established by the Mayor and City Council, procurement plays a pivotal role, along with proper planning and budgeting, which starts the execution and implementation of the process that actualizes leadership's objectives. The Procurement Division and the M/WBE Office must operate in a manner that is both consistent with the policy objectives established by the Mayor and City Council and programmatically sound. Raleigh can do so through striving toward inclusive procurement, which will incorporate the following elements:

- **Mission Driven**—The procurement and M/WBE objectives are tied directly to the overall Vision, Mission and Goals of Raleigh.
- **Opportunity Driven**—The M/WBE Office, along with the Procurement Division, is driven by Raleigh's opportunities—identifying them, understanding them, managing them and communicating them.

- **Relationship Driven**—With the foundation that being opportunity driven provides, Raleigh will be in the relationship development business. The Procurement Division and the M/WBE Office will know its businesses that are capable of doing Raleigh's work and ask the business community to share its goal of inclusive economic development.
- **Data Driven**—Sound data and fully integrated systems will provide senior management with the information it needs to report on successfully meeting its objectives and maximizing economic development, equity and organizational performance, along with the other objectives established by the Superintendent.

A.3. Culture Audit

M³ Consulting recommends that Raleigh conduct a culture audit to assist it in moving toward an organizational culture that will more readily support the Mayor and City Council's Vision and Mission, as well as a more inclusive procurement environment. The culture audit will allow examination and explanation of the common rules of behavior and underlying beliefs of Raleigh that drive its organization and the way people approach their work. It also will assist in determining whether Raleigh's current organizational culture is an asset or liability in achieving its Vision and Mission and provides actual evidence for establishing the appropriate direction for Raleigh.

A.4. Training and Development

Many organizations engage their staff in diversity training and sensitivity training. However, skills-based training is needed to create an inclusive procurement environment. We must emphasize that inclusivity is an integral part of an efficient procurement process. As such, to create a baseline of knowledge, the following training should occur:

- All Procurement Division, M/WBE Office and other appropriate Departmental staff should be provided basic training on procurement operations as well as M/WBE operations. If feasible, some staff members in the M/WBE Office should become certified buyers through organizations such as the National Institute of Government Purchasing (NIGP) and certified compliance officers through organizations such as the American Contract Compliance Association.

- All procurement staff and Departmental staff engaged in procurement activity should attend a seminar on the components of the M/WBE program and established strategies for achieving established objectives.
- Once the Procurement Division, M/WBE Office and other appropriate Departmental staff have baseline training, the Chief Procurement Officer and the M/WBE Program Manager are then positioned to train on higher-level negotiating strategies and tactics in the various procurement categories and for types of goods and services that can be deployed, consistent with the tenets of sound procurement laws and regulations at both the formal and informal levels.

A.5. Address Decentralized Nature of Raleigh Procurement Process and Impact on M/WBE Participation

M³ Consulting does not advocate for a centralized or decentralized procurement process. We seek to determine the impact of either process on the ability of M/WBEs to contract with a public entity. Without appropriate infrastructure, management and operational support, an unwieldy bureaucracy can be created that serves as a de facto barrier to M/WBEs. It appears that Raleigh operates in a decentralized procurement environment that has the overall effect of decreasing accountability and transparency as it relates to M/WBE participation, resulting from lack of robust infrastructure and integration, coordination, and delegation. As such, Raleigh should ensure that the Procurement Division has the authority and ability to:

1. Report to the Mayor and City Council on the way Raleigh's annual procurement spend has assisted Raleigh to achieve its mission to build a stable platform of evolving services for the Raleigh community, thereby championing positive and sustainable growth, and realize visionary ideas for all;
2. Report to the Mayor and City Council, in conjunction with the M/WBE Office, on the way Raleigh has met stated M/WBE targets at both the prime and subcontractor levels across procurement categories, inclusive of change orders and work plans, as well as other inclusive procurement objectives; and

3. Make recommendations for the utilization of procurement techniques and contracting vehicles that best meet the Mayor's and City Council's objectives as it relates to community economic development and inclusive procurement, as well as User Department needs.

While the Procurement Division should have the authority necessary to achieve the recommendations above, based on Raleigh's decentralized system, the Procurement Division will need to work collaboratively with department leadership within the M/WBE Office, Engineering Services, Integrated Facility Services, Fleet Management, Roadway Design/Construction, Transportation and Raleigh Water. This group can form the participants in **Raleigh's Inclusive Procurement Committee**, which would be critical to procurement planning, budgeting and forecasting, utilization of appropriate contract vehicles, opportunity identification at prime and subcontractor levels, unbundling, contracting plan and goal-setting. Raleigh can also consider whether representative members from the business community and other User Departments should be included.

Raleigh's Inclusive Procurement Committee will also be responsible for developing Raleigh's Action Plan in response to the recommendations contained herein.

A.6. Budgeting, Forecasting and Scheduling

On an annual basis, Raleigh should develop a budgeting and forecasting process appropriate for each procurement category that provides project information necessary for planning its activities as it relates to M/WBE participation. Master construction schedules should also be available. From these sources, Raleigh can make transparent:

- Type of possible opportunities at prime and subcontractor levels, as well as formal and informal levels;
- Funding source; and
- Timeframe that opportunity may be available.

With this information, Raleigh can begin to (a) project the impact of Raleigh's purchases on economic, business and employment growth in the Raleigh-Durham-Cary Core-Based Statistical Area (CBSA), (b) conduct matchmaking, and (c) identify areas where local capacity is needed among

both M/WBEs and Non-M/WBEs and begin pre-bid capacity building efforts.

A.7. Contracting Vehicles

The types of contracting vehicles utilized by Raleigh and the degree to which they are utilized can impact the level of M/WBE participation pre- and post-award.

For many of the lower dollar threshold purchases, Raleigh's procurement vehicles do not include any policy-mandated consideration of race, ethnicity or gender when conducting outreach or evaluating respondents to select the awardee for the opportunity. Raleigh relies on leadership recommendations and staff culture to suffice when soliciting bids or proposals/qualifications to include submission responses from small or diverse-owned firms with no audit function in place to determine if quotes are being solicited and received from small and M/WBE firms.

Raleigh should review the usage of all its contracting vehicles for ways to:

- Ensure that the best contract vehicle for achieving Raleigh's inclusion policies, procurement and project objectives is a part of their contract vehicle selection process.
- Determine the best level of engagement regarding the Procurement Division's involvement in the post solicitation development of final execution of work plans. This should include the ability for Procurement to sign off on final M/WBE participation within the approved work plans and give final authorization or permission before approved plans are altered.
- Identify and deploy other management tools, such as rotating lists of successful firms and implementing "Sheltered Market" reserved competition solicitations to promote a greater distribution of vendor utilization.
- Dedicate resources to elevate post award M/WBE monitoring, auditing and tracking tasks.

A.8. Monitor Contracts for Issue of Concentration

Modeling 49 CFR Part 26.33, Raleigh should monitor its contracts to ensure that M/WBEs are not overly concentrated in certain product areas as a means of

Raleigh meeting its M/WBE goals. Contracts should be continuously reviewed to ensure that (1) the same Non-M/WBEs and M/WBEs are not securing a significant percentage of Raleigh contracts and that (2) the same M/WBEs are not accounting for a significant percentage of Raleigh M/WBEs participation.

Concentration can be addressed in the following ways:

- Ensure that there is no steering of contracts at the prime or subcontractor levels;
- Expand pool of available firms;
- Expand capacity of available firms; and
- Ensure that firms repeatedly submitting low bids are not requesting change orders post-award or providing substandard work.

Due to policies like prequalification and practices like awarding contracts to a few firms in certain instances, Raleigh has limited competition on its opportunities. Raleigh should constantly monitor its contracting activity to determine whether contract awards are concentrated among a small group of firms and design strategies to increase the level of competition on Raleigh procurement and contracting opportunities.

A.9. Deeper Dive of Bid/RFP/RFQ, Award and Payment Process

Raleigh should consider a deeper dive into bid, Request for Proposal (RFP)/Request for Quotation (RFQ), selection and evaluation results to ensure that the outcomes reflected in the Availability and Utilization chapters reflect a procurement process that is open, fair, transparent and inclusive. This deeper dive to review actual practices would include a review by an independent party of:

- **Pre-award activity**—Bid/RFP/RFQ and award documents for individual opportunities, including vendor solicitation, bid tabulations, inclusiveness of persons chosen, selection committee, evaluation score sheets, GMP and other contract negotiation documents, prime contractor selection and evaluation score sheets for subcontractors, and prime contractor solicitation list for subcontractors.

- **Post-award activity**—Selection process on multi-awardee contracts, M/WBE utilization through phases of project, payments to sub-contractors, impact of bonding on both prime and sub-contractors.

We emphasize that this deeper dive is not an audit of policies and procedures but the execution of those policies and procedures (actual practices) and their impact on the outcomes reflected in the Disparity Study.

This deeper dive would also provide greater insight into the competitiveness of different race/gender/ethnic groups and provide the M/WBE Office with additional information on which to target and customize its support efforts.

A.10 Conduct Economic Impact Analysis

A Disparity Study provides critical quantitative and qualitative data on the participation of M/WBEs in Raleigh opportunities and the factors impacting their ability to do so. An Economic Impact Analysis shows the impact on economic growth in a locale of procurement spend and of major capital improvement projects. This economic impact analysis can be conducted to further reflect the impact on economic growth in minority communities of Raleigh procurement and contracting dollars flowing to minority businesses. The analysis would assist in changing the outlook on supporting minority communities from one of simply addressing discrimination to one of promoting growth and development. While relatively new, some cities and states, such as the State of Maryland, have conducted economic impact analysis by race/gender to determine whether the benefits of tax dollars utilized for procurement and contracting of goods and services is benefiting its citizens in an equitable manner.

B. Address Data Capture/ERP Issues

Critical to creating an inclusive procurement operation at Raleigh is an efficient and integrated procurement data infrastructure. These data recommendations are necessary because:

- Poor data systems can mask discriminatory actions or disparate impact, even where race and gender-conscious goals are utilized. Immediately addressing data issues is critical to protecting against unfairly discontinuing Raleigh's M/WBE programs due to temporary or permanent injunctions or internal decisions based on incomplete data that may allow the organization to continue to discriminate. Sound, accurate and complete data supports the Mayor, City Council and City Attorney's Office in fairly balancing all legal and regulatory implications, potential challenges, etc. arising from Raleigh's ability to sufficiently state, in this disparity study and any time thereafter, the level of M/WBE participation in its procurement and contracting activity at prime and subcontractor levels.

- We note that in the EEO environment, under 29 CFR Ch. XIV, Part 1607.4.D, a finding of an inference of adverse impact can be drawn from poorly maintained data system not in conformance with data tracking requirements of the regulations. While 49 CFR Part 26 does not have similar language, Section 26.47 covers Bad Faith Administration of the DBE Program.

- More refined and detailed procurement spend analysis cannot be performed without better data capture and tracking. This inability limits programmatic activity, including expansion of the pool of available firms through outreach; setting project-based goals; determining participation at the purchase code level (NIGP/North American Industry Classification System [NAICS]/Commodity) and tracking decision-making activities at procurement solicitation, evaluation, awards and commitments, and post-award utilization.
- To operate a race- and gender-neutral procurement operation, Raleigh must be able to adequately track levels of M/WBE participation to anticipate necessary adjustments. Further, under a race- and gender-conscious M/WBE program, tracking allows for proactive and real-time responses that allow Raleigh to utilize race- and gender-conscious programs when necessary and to respond quickly when tracking reveals that participation is dropping in a race- and gender-neutral environment.

- Data efficiency promotes Raleigh's ability to respond to M/WBE opportunities and challenges quickly and nimbly, such that it does not unnecessarily and perhaps unintentionally perpetuate "government inertia" referenced by Justice Sandra Day O'Connor in the Croson decision.

M³ Consulting recommends that Raleigh address the following data issues outlined below to support transparent monitoring, tracking and reporting. Once these changes are implemented, M³ Consulting recommends that Raleigh update the statistical portion of the disparity study to capture FY 2017 through FY 2021 data to provide both a more accurate reflection of M/WBE utilization at prime and subcontractor levels and as a test case for its M/WBE data capture process.

1. Expand data capture on vendor portal
2. Assign commodity codes to bids
3. Consider utilizing e-procurement or online bid portal to capture bid and quote information
4. Employ ERP systems that offer integrated procurement, project management and payments data modules
5. Consider utilizing an off-the-shelf M/WBE/DBE/SBE tracking system
6. Develop computerized formats for evaluation score sheets
7. Track awards, commitments and payments separately
8. Appropriate departmental access through a dashboard

E.4.3 Recommendations for Targeted Initiatives—Race-/Gender-Conscious and Race-Gender-Neutral

A. Race-/Gender-Conscious Initiatives

A1. Establishment of Race- and Gender-Conscious Goals

The existence of established goals is an effective mechanism for establishing objectives for Raleigh and

E.4 Recommendations

in achieving the desired outcome of increasing M/WBE participation, when effectively implemented. If operations are inflexible, it falls into a quota.

The concept of an annual aspirational goal for M/WBE participation, which is tied to the availability of M/WBE firms, should be utilized by Raleigh to periodically evaluate the effectiveness of its overall M/WBE program and its project-specific efforts, as well as to gauge whether it is appropriate to increase or decrease the mix of more aggressive remedies. The annual aspirational goal can be used to inform more specifically tailored goals by procurement category, department, etc. To be legally defensible, the annual goal should be a minimum achievable standard for M/WBE inclusion and not a maximum barometer of exclusion.

In certain categories and for certain groups, race- and gender-conscious means are supportable activities toward the achievement of established goals, based on the findings of statistically significant disparity, reflected in Table E.8 below.

As significant disparity is eliminated in the race- and gender-conscious categories, the utilization of race- and gender-neutral means in attaining the established goals should be increased. However, in all instances where

race- and gender-neutral means are utilized, if significant disparity reemerges, then race- and gender-conscious techniques can be utilized on a nonpermanent basis to correct identified disparities.

While Raleigh should utilize race- and gender-neutral means to address participation of groups where there is no statistically significant disparity, that does not mean or condone passive or no outreach to these groups, as significant disparity can emerge or reemerge with lack of focus by Raleigh to be inclusive. Raleigh should continuously focus on an inclusive procurement environment that considers M/WBEs and narrow the focus, when necessary, based on meeting established goals.

Availability, Utilization and Disparity measures should be tracked on an annual basis and annual goals set as discussed above, as the recommendations below are implemented. RWASM Availability is significantly impacted by bidding patterns and practices. Raleigh's RWASM Availability analysis revealed that 58% of its bids had one bidder and 75% had three or fewer bidders. If the bidding patterns of Raleigh vendors are altered, due to internal adjustments within Raleigh or marketplace factors, the impact of those changes should be captured. Similarly, Utilization reflects issues that require further analysis and potential changes to increase competitiveness, provide

Table E.8.
Categories for Race-/Ethnicity-/Gender-Conscious and Race-/Ethnicity-/Gender-Neutral Means of Addressing Disparity by Procurement Type

	Race- and Gender-Conscious	Race- and Gender-Neutral
AES-Design Services	<ul style="list-style-type: none"> Asian American Hispanic American WBEs 	<ul style="list-style-type: none"> African American Native American
Construction and Construction-Related Services	<ul style="list-style-type: none"> African American Asian American Hispanic American Native American 	<ul style="list-style-type: none"> WBEs
Nonprofessional Services	<ul style="list-style-type: none"> African American WBEs 	<ul style="list-style-type: none"> Asian American Hispanic American Native American
Professional Services	<ul style="list-style-type: none"> African American WBEs 	<ul style="list-style-type: none"> Asian American Hispanic American Native American
Goods & Supplies	<ul style="list-style-type: none"> African American Asian American Hispanic American Native American WBEs 	<ul style="list-style-type: none"> None

Source: M³ Consulting

opportunities where capacity is not an issue and eliminate issues of concentration brought about by the low number of bidders.

Raleigh employs both a M/WBE Goal program and a DBE Goal Program. Raleigh's M/WBE program has an aspirational goal of 15% of the total contract values to be performed by certified M/WBE businesses in contracts awarded by the City for construction and building repair projects of \$300,000 or more. This goal also applies to construction and building repair projects of \$100,000 or more if the funding sources supporting the project include any North Carolina State funding. Its DBE goal program, under the Department of Transportation, has a 13% DBE inclusion goal that is underpinned by their Federal Transportation Administration (FTA) triennial goal setting activity. Our goal findings here are primarily related to Raleigh's M/WBE goal program.

To continuously test the need for race- and gender-conscious goals and as part of sunset provisions, we suggest removing a portion (e.g., 10%) of all contracts let each year within certain industry segments no longer experiencing widespread M/WBE underutilization from the assignment of race- and gender-conscious goals, evaluation preferences and remedies and carefully monitoring them on a quarterly basis to ensure that significant disparities in M/WBE utilization do not reappear. The City Council would determine the period that this gradual sunset review process would occur. This process would assist the Mayor and City Council to confirm whether race- and gender-conscious goals should be sunset for a particular group.

A.2. Goal-Setting Formulas And Techniques

Raleigh has at its disposal a wide-array of goal-setting formulas and techniques, including:

- M/WBE Bid Preferences;
- M/WBE Goals;
- SBE Set-Asides and Sheltered Markets; and
- M/WBE evaluation factors.

The actual setting of race- and gender-conscious or race- and gender-neutral goals is a policy decision that requires action by the City Council. The Council can establish overall annual policy goals by industry. Project-by-project goals could then be established by staff based upon the relative M/WBE availability for performance of the specific

contract. This type of goal setting would probably be considered the most legally defensible flexible form of goal setting available to Raleigh. The U.S. Department of Transportation (DOT), under 49 CFR Part 26, allows five approaches to establishing DBE goals/availability:

- DBE Directory + U.S. Census;
- Bidders List;
- Disparity Study data;
- Goal from Another DOT recipient; and
- Alternative Methods.

M³ Consulting adds to this list of offerings its own goal-setting formula, which is described below.

ATMSM Formula—The Annual Target Method (ATMSM) formula, developed exclusively by M³ Consulting, allows entities to develop goals based on both market conditions (availability) and actual levels of participation by Raleigh (utilization). The ATMSM formula also allows Raleigh to forecast the necessary M/WBE participation levels to achieve the desired outcome, correcting for stated disparity, by an established date. This methodology has been designed to assist Raleigh to determine its goals through a realistic and statistically valid model.¹²

To ensure that goals properly reflect the opportunity being solicited and that goals do not appear to be set-asides because the same goal for a procurement category is applied to every trade or commodity area within that procurement category, M³ Consulting recommends that Raleigh implement project-by-project goals. The ATMSM formula can still be used, but availability should be computed for each project type and then that availability measure used in the ATMSM formula. To calculate availability by project-type, Raleigh must have a well-functioning Central Bidder Registry or Vendor Registry List.

In the ATMSM formula, G_p or the target goal is either availability, weighted availability or a goal established above availability. When calculating the project goal using the ATMSM formula, the project goals become a function of correcting disparity and bringing overall utilization in line with overall availability for a particular procurement category. As such, the project goal will reflect the volume of dollars in a particular trade, commodity or project area

and thus calculate its appropriate weight in assisting in correcting overall disparity.

A3. Race- and Gender-Conscious Tools

Raleigh should first exhaust all race- and gender-neutral means to achieve any established target, goal or benchmark. Again, to be legally defensible, race- and gender-conscious contract goals should be subject to a variety of limitations:

- Race- and gender-conscious goals, where allowable at Raleigh, should not be applied to every contract across all purchasing types.
- Race- and gender-conscious goals should generally be “good faith efforts” subject to waivers.
- Race- and gender-conscious goals should be reviewed by the Procurement Division and the M/WBE Office to ensure that such goals do not disproportionately fall on one class. For example, awards of all painting subcontracts to minority firms would impose an undue burden on Non-M/WBE painting subcontractors.
- Race- and gender-conscious goals (in purchasing) for subcontracting should apply to both Non-M/WBE and M/WBE prime contractors.
- Firms eligible to benefit from race- and gender-conscious goals at Raleigh should be subject to graduation provisions.
- Raleigh race- and gender-conscious elements should be subject to annual review and sunset provisions.

A.4 Goal Setting by Threshold

M³ Consulting’s threshold utilization analysis suggests that, where capacity is not an issue, certain race/ethnic/gender groups are still reflecting disparity. The threshold utilization analysis was based on PO data. We acknowledge that some POs that appear “small” may be part of a requirements contract awarded to one or more vendors. As such, a deeper spend analysis is required before goal setting is conducted.

In conducting this spend analysis, Raleigh will obtain a greater understanding of the individual opportunities and the dollar values associated with them. The spend analysis allows Raleigh to review these individual opportunities

by size. This process is different from unbundling, where the organization starts with the larger contracts and attempts to break them down into component parts or smaller contracts. When individual opportunities are sorted by size, appropriate programmatic efforts by the M/WBE Office can be established. Furthermore, there is more transparency in contracts awarded, particularly on contracts where more firms are fully capable of competing.

B. Race-/Gender-Neutral Initiatives

The City of Raleigh should utilize race- and gender-neutral programs to the extent possible and utilize race- and gender-conscious programs when demonstrably needed to address any disparity found. Race- and gender-neutral goal-based programs are an important tool to be utilized. Use of these programs and race- and gender-conscious initiatives are not an either/or decision on the part of the jurisdictions. Many public entities utilize race- and gender-neutral programs in conjunction with their race- and gender-conscious initiatives. By so doing, these public entities maximize the opportunity for inclusion and work to ensure that M/WBEs who reflect overutilization or nonsignificant disparity do not slip to a state of disparity because the public entity has focused all its efforts on M/WBEs where there is significant disparity. Race- and gender-neutral goal-based and set-aside programs and related initiatives include the following:

- **Small Business Enterprises/Micro Business Enterprises (SMBE)**—Establishes small business and/or micro goals on an annual basis, as well as goals, bid preferences, sheltered markets/set-asides or points on a project-by-project basis. Many small business and micro business programs are designed to ensure greater SMBE availability, capacity development and contract participation in the public entity’s procurement and contract opportunities.
- **Local Business Enterprises**—Establishes goals, bid preferences, points, and sheltered markets/set-asides targeted to local firms within the public entity’s jurisdiction. These programs are usually focused on spurring economic growth and development of locally based firms competing against non-native, larger state, national and international firms, thereby supporting the public entity in growing its own local economy.

- **Disadvantaged Business Enterprise/ Socioeconomic Enterprises**—Depending on the definition utilized for DBE and Socioeconomic Business Enterprise, these programs can be race- and gender-neutral. If inclusive of socioeconomically disadvantaged Non-M/WBEs, the program will be considered race- and gender-neutral. Additionally, these programs can establish small business goals and set-asides as a means of meeting its DBE goals.
- **Veteran/Service-Disabled Veteran Enterprise Program**—Establishes goals, bid preferences, points, sheltered markets and/or set-asides targeted to veterans or service disabled veteran programs, which are not members of a protected class subject to strict scrutiny.
- **Disabled Person Business Enterprise programs**—Establishes goals, bid preferences, points, sheltered markets and/or set-asides targeted to disabled business owners, which are not members of a protected class subject to strict scrutiny.
- **Lesbian, Gay, Bisexual, Transgender, Questioning (LGBTQ) Business Enterprise Programs**—Establishes goals, bid preferences, points, sheltered markets and/or set-asides targeted to LGBTQ Businesses, which are not members of a protected class subject to strict scrutiny.
- **Good faith efforts**—Includes actions by a business to identify its efforts to remove barriers to M/WBEs to participate in the business's procurement and contracting (and employment) opportunities or to expand procurement and contracting (and employment) opportunities. Examples of good faith efforts include but are not limited to:
 - **Pre-bid meetings**—Bidders should attend pre-bid meeting or matchmaking session.
 - **Identification of subcontracting opportunities**—Bidders must identify work categories for subcontracting opportunities and certified and capable M/WBEs within these work categories; bidder must document its efforts.
 - **Advertisement**—Bidder must advertise subcontracting opportunities no less than 21 days prior to bid opening date, public entity's bid schedule permitting; advertisements must be placed in daily or weekly minority or women focused trade organization newspapers, publications, or other media.
 - **Communications with M/WBEs**—Bidder will mail registered or certified letters no less than 21 days before bid opening to no less than 10 (or 100% of those available) M/WBEs capable of performing the identified work categories with which the bidder is willing to subcontract; email blasts are also utilized to fulfill this requirement.
 - **Follow-up of initial solicitation**—A bidder representative with knowledge of the project will follow up with M/WBEs within 10 days of mailing of solicitation letter; proper documentation of follow-up should be maintained.
 - **Responses from interested DBEs**—Bidder must maintain an appropriate record of responses.
 - **Bidder evaluation of interested M/WBEs**—Each bidder will submit documentation of its evaluation of bids or proposals received.
- **Non-discrimination program**—The purpose of a nondiscrimination program is to ensure that contractors do not discriminate in the award of subcontracts based on race, national origin, color, ethnicity or gender. Under a nondiscrimination program, elements may include, but are not limited to, the following:
 - Determining whether bidders have included M/WBE sub-bidders at anticipated availability targets, and if not, determining why not;
 - Requiring evidence of good faith efforts; and
 - Reviewing and/or investigating bids to determine whether any discrimination has occurred.

E.4.4 Diverse Supplier Program Recommendations

M³ Consulting has established six elements of an M/WBE program. We reviewed Raleigh's M/WBE program

against these six elements. Based on the model and the procurement findings, M³ Consulting recommends the following:

Figure E.4. M ³ Consulting Six Essential M/WBE and SBE Program Elements	
	Race- and Gender-Conscious
1. Outreach and Matchmaking	Efforts to increase the business community's awareness of an entity's procurement and contract opportunities and match M/WBEs and SBEs to specific contract opportunities at prime and subcontracting levels.
2. Certification	Eligibility criteria for M/WBE participants.
3. Technical Assistance	Informational and strategic support of businesses to meet the entity's M/WBE plan objectives.
4. M/WBE Inclusion in Bid Opportunities	The mechanism by which the entity assures that material consideration of M/WBE participation is given in the award of a contract.
5. Contract Compliance	Ensuring adherence to M/WBE plan goals on all contracts after execution of the contract.
6. Organizational Performance Evaluation	A comparison of performance results to the entity's goals to determine policy successes, strengths and weaknesses, and performance improvement areas.

Source: M³ Consulting

A. Outreach and Matchmaking

A1. Outreach

As reported in the Availability Analysis, there is a significant difference, in terms of numbers and sometimes percentages, between potential availability and actual availability (RWASM). Additionally, the majority of Raleigh's contracts had only one bidder. Raleigh should thus focus its outreach efforts on expanding the total vendor and bidder pools to include potentially available firms from sources such as other agency certified lists, business license data and Data Axle lists. These firms would have to meet Raleigh certification requirements to be counted toward Raleigh's goal-based program targets. Furthermore, the inclusive outreach should pay special attention to ensuring that firms capable of bidding on informal contracts, small contracts and sheltered market opportunities are included in the vendor/bidder pool.

A.2 Matchmaking

Matchmaking is fundamental to a successful inclusive procurement program, whether race- and gender-conscious or race- and gender-neutral. Central to matchmaking is advance notice of the universe (pipeline) of upcoming contracting opportunities, as determined during forecasting, budgeting and scheduling.

Currently, Raleigh has not implemented a full matchmaking process. Matchmaking programs must be tailored to the dynamics of a particular procurement operation. We emphasize that the matchmaking session is not for the purpose of steering vendors to buyers. Raleigh purchasing and M/WBE personnel will be required to have detailed knowledge of the capabilities of certified M/WBEs to fully maximize the matchmaking process. The matchmaking session can include only M/WBEs, Non-M/WBEs or both. The matching sessions should include the following:

- Coordinate matchmaking sessions with construction schedules and plans, forecast release and/or solicitation schedule, and hold session as early as possible. Matchmaking sessions can also be utilized to identify available firms for projects in planning stages. While not called matching sessions, the federal government often allows vendors to provide qualification information in pre-bid research to determine the level of competitiveness it can expect once the bid is let.
- Focus on specific commodity areas in the procurement categories, allowing vendors specializing in specific goods and services to have the opportunity to meet with buyers responsible for those commodities.
- Buyers and contract specialists should have procurement projections such that they can discuss specific upcoming opportunities and the requirements and procurement mechanisms that will be utilized to procure the good or service. This specificity is the key factor that distinguishes matchmaking sessions from outreach and vendor fairs.
- Identify informal and formal opportunities during the matching session so that vendors can determine where they have the greatest likelihood of successfully marketing to Raleigh.

Matchmaking at the subcontractor level—Matchmaking takes on a team-building dynamic at this level. Prime contractors/consultants can identify potential M/WBEs team members on upcoming opportunities to be let by Raleigh. To be most effective, Raleigh personnel will be required to have an in-depth knowledge of the capabilities of the pool of certified M/WBEs. The M/WBE Office also needs to have strong business development skills. The matchmaking session should focus on a particular project, either in planning or prior to bid. It is critical for success that matchmaking occur as early in the planning process as possible. Prime contractors, construction managers and large consultants' planning process begins well in advance of the actual Invitation to Bid or RFP.⁸ At the time of bid letting, prime vendors and contract managers have often already identified team members to address

commercially viable opportunities at the subcontractor/subconsultant level that build a firm's capacity and portfolio. Conformance to M/WBEs requirements often does not produce quality and high levels of M/WBEs participation, because these firms are an "appendage" to the team already developed.

In addition to establishing matchmaking initiatives planned around budgets and forecasts, Raleigh should consider the legality of including responsiveness to matchmaking efforts as a factor of good faith efforts under Raleigh's M/WBE initiatives. Anecdotal interviews in other locales suggest that, while prime vendors attend sponsored matchmaking sessions, prime vendors often do not communicate with or make themselves available to M/WBEs after the sessions, thus opportunities for M/WBE groups do not often materialize.

A.3 Availability and Capacity-Building Initiatives

To increase opportunities for M/WBEs, Raleigh should start with the consideration of increasing the pipeline of available firms. M/WBEs face discriminatory or exclusive practices in the general marketplace that inhibit their growth and development and thus their capacity. Raleigh should take great care to ensure its practices are not inhibiting growth and encourage inclusion in its procurement and contracting opportunities. The recommendations in this section are focused on how Raleigh can utilize both its resources and opportunities to contribute to the growth and development of M/WBEs, in addition to increasing the number of contract awards.

Impact of Prequalification and Certification on Availability Pipeline

Prequalification processes can be exclusive and limit the number of available firms, even though required under State of North Carolina law for Construction procurements. Project managers must utilize prequalified firms on construction or repair projects (regardless of cost) that are bid under the single-prime, separate-prime (multi-prime) or dual-bidding methods. This can cause problems when Raleigh is seeking to identify M/WBEs to compete at the prime level in Construction. As such, in Construction, prequalification is one of the contributory factors to low M/WBE attainment at the prime contractor level, as well

⁸See Chapter VIII, *Capacity and Regression Analysis*, p. 8–65. Raleigh, working with local school systems, is in an invaluable position to impact values, behaviors and attitudes toward discrimination and bias and to cultivate a culture of entrepreneurship. By inculcating students early, it allows minority and women communities to expand their social capital and the Raleigh community to begin the change the narrative of the historical, social and economic factors that have ultimately stunted the natural growth and development of minority and women entrepreneurs

as why most M/WBE participation is primarily at the sub-contractor level. The combination of certification requirements and prequalification requirements can deter M/WBEs from even attempting to do business with Raleigh.

While a necessary part of Raleigh initiatives, the M/WBE Office should work to ensure that prequalification and certification processes are promoting inclusion. To do so, M/WBE Office should start by identifying all small and minority- and women-owned firms in the Raleigh-Durham-Cary CBSA. The Disparity Study assists with this effort by its compilations in availability spreadsheets using data sources from Raleigh, Data Axle and Business Licenses, along with the Master Small/M/W/DBE certification list. While all these firms may not meet the RWASM standard, the firms on these lists represent the starting point of the Raleigh pipeline of available firms. Before proceeding to other initiatives of certification and prequalification, the M/WBE Office should:

- Review compiled list with community organizations, Chambers of Commerce and M&TA providers to determine whether firms of which they are aware are listed in this “phone book.” Organizations with private membership lists should also be encouraged to participate to construct the most exhaustive list of firms.
- For firms on the list that are not certified, conduct survey to obtain data on type of goods and services provided and interest in doing business with Raleigh.
- Measure Raleigh progress in increasing the number of firms certified and number of firms prequalified against this list of identified firms.
- For those available firms that do not meet M/WBE and prequalification requirements, work to include as many available firms as possible on the Raleigh vendor registry and in Raleigh’s race- and gender-neutral programs, and then develop these race- and gender-neutral goals and initiatives accordingly.

Additionally, because certification and prequalification both request very similar information, Raleigh should consider streamlining the application processes, such that M/WBEs are not required to submit the same information in a duplicative fashion when avoidable.

The Starting Point: Youth Entrepreneurship

Croson makes it clear that public entities cannot address social discrimination through legal race- and gender-conscious remedies. However, Raleigh is positioned to support local school systems to begin to reshape some of the social dynamics that impact their success.

Entrepreneurship requires a certain skill set that is cultivated over time. Young people with no access to entrepreneurial education and training are less likely to obtain these skill sets on their own. And by the time that these young people may have an opportunity to obtain these skills, they are close to adulthood and well behind young people who have access to parents with entrepreneurial and/or managerial skill sets. As discussed previously in Chapter VIII, Capacity Analysis, Fairlie and Robb (2007) found that Black business owners were much less likely than White counterparts to have had a self-employed family-member owner prior to starting their business and are less likely to have worked in that family member’s business. Fairlie and Robb noted that the lack of prior work experience in a family business among Black business owners, perhaps by limiting their acquisition of general and specific business human capital, negatively affects Black business outcomes.³

Efforts can include:

- Youth entrepreneurship and financial literacy programs.
- Mentorship and apprenticeship programs with Raleigh vendors/contractors/consultants.
- Targeted entrepreneurship career tracks—with emphasis on exposure to entrepreneurs, as opposed to large corporations—in conjunction with local technical colleges. We note that the State of North Carolina has one of the strongest two-year college programs in the country.
- Expanded access to entrepreneurship and financial literacy programs to students’ parents/family members.

- Ultimately, providing graduates of the Wake County Public School System who become entrepreneurs with access to Raleigh opportunities through SMBE programs, such as set-asides, sheltered markets and mentor/protégé. Initiatives focused on students that have matriculated at a Wake County public school would be considered race- and gender-neutral, with a desired outcome of promoting economic and social development.

These initiatives should be combined with strong diversity initiatives. Focus should not simply be on antibias, but multiculturalism efforts that build social capital.

B. Certification

B.1. Refocus Certification and Prequalification Efforts to Identification of Qualified Firms

The City of Raleigh does not certify M/WBEs and accepts certifications from the North Carolina Department of Administration's Historically Underutilized Business (HUB) Office and the North Carolina Department of Transportation's (NCDOT) Disadvantaged Business Enterprise Program. Certification of firms as minority- or woman-owned is part of narrow tailoring, designed to ensure that only firms discriminated against have access to goal-based remedies. Because of a few Non-M/WBEs that have attempted to illegally access these programs, over time, the certification application process has become increasingly burdensome to the M/WBEs that public entities are trying to reach. As a result, the certification process is increasingly seen as a bar that M/WBEs should reach to gain access to these race- and gender-conscious "benefits." Goals are a remedy, not a benefit. This framing of goals and how the certification process supports the "remedy" should be included in the City's training protocols.

Furthermore, a burdensome certification process can reduce the number of available M/WBEs. As a matter of practice, when Raleigh staff and prime vendors search for available minority- and women-owned businesses, they are searching Raleigh certified M/WBEs, not the list of available M/WBEs. As such, as a matter of practice, while there is a larger pool of M/WBEs that are available, many of these firms may not be considered because they cannot be counted toward goal attainment or achievement. We note there were 174 certified firms on the M/WBE Office's

list, compared to 4,791 on the Data Axle Availability list refined to the Raleigh area and 7,475 M/WBEs on the State of North Carolina list.

C. Technical Assistance

Technical, Financial and Management assistance (TF&MA) providers can support M/WBEs in increasing their capacity, obtaining critically needed financial assistance, networking and even responding to the City of Raleigh's procurement and contracting opportunities. Raleigh's M/WBE Office has established relationships with TF&MA providers. The City also provides technical assistance directly with simplification of bidding procedures, relaxation of bonding requirements, financial aid through the Division of Community & Small Business Development, prompt pay and training on doing business with the City of Raleigh.

M³ Consulting suggests below additional technical assistance initiatives for Raleigh's consideration:

C.1. Bonding Assistance

Four approaches may be taken to remove the barrier that bonding requirements sometimes can represent. The efficacy of these programs must be reviewed considering bonding requirements from the State of North Carolina. North Carolina law requires payment and performance bonds for a local government construction contract that exceeds \$300,000. In that case, the bonding requirement cannot be waived. The approaches include waiving bonding requirements, removing customary bonding stipulations at the subcontract level, reducing bonding and phasing bonding. Each is described below:

- **Waiving bonding requirements**—While bonding may be required by local, state or federal statute in particular instances, all governmental entities have some latitude in requiring a bond in the first place. Typically, small dollar-value contracts are not required to have bonds. An honest assessment of the actual risk involved to the owner ought to be performed before deciding to always require a bond on every job. Bid bonds, when required, are due with submittal of the bid.

- **Removing bonding stipulations at subcontract level**—Typically, on larger construction jobs, the owner requires bonds of the prime contractor. This means, essentially, that the total job is bonded. The practice of requiring bonds of subcontractors is just that, a practice. It is not required by the owner. Therefore, the owner may develop a policy that does not permit a prime's requirement of a subcontract bond to constitute a barrier to M/WBE participation. Both the owner and the prime contractor should be willing to undertake special activities to monitor subcontractors' performance and lend technical assistance, if necessary. Currently, Raleigh does not require subcontractor bonding on its projects and discourages its use. According to anecdotal interviews, this has a negative impact on M/WBE prime contractors. Raleigh should review its processes to ensure that it is providing the appropriate support to ensure that its policy can continue in a manner that is fair to both prime and subcontractors.
- **Reducing bonding**—Rather than requiring a 100% payment and performance bond, consideration also can be given to reducing the dollar coverage of the bond. A 50% bond, for example, can be required, thus reducing the size and cost of bonding. In this way, a company's bonding capacity is not reached so quickly, and bonding is made more affordable. The owner benefits by still being protected by a bond and in the form of lower bids since the cost of bonding is built into contractor's bids.
- **Phasing bonding**—This technique can be used in instances where bonding cannot be waived but where there are limitations of the low bidder to obtain a full bond. For example, the owner can divide the job into three phases, each requiring a separate notice to proceed. The successful bidder is then required to obtain a bond for each phase. Upon completion of the first phase of the work, the bond is released, and the contractor is required to provide a second bond in a like amount. This process is then repeated for a third time. The owner thereby accommodates a M/WBE that might not otherwise qualify, the owner is still protected from risks, and the contractor builds a track record of completing work under three bonds, thereby building bonding capacity and lowering the cost of bonding. (Note that on local government construction contracts in excess of \$300,000, State law requires 100% payment and performance bonds. The amount of these bonds cannot be reduced for these contracts.)

In addition to the above, several governmental bodies across the country have worked with local banking and other financial institutions to create bonding programs underwritten by the local government. A key to the success of such programs is establishing a contractor performance monitoring function to provide an early warning to any problems being encountered by covered contractors. The monitors are empowered to mobilize necessary assistance to ensure completion of the work and to minimize financial and other risk to the underwriter.

C.2. Wrap-Up Insurance

This represents an approach to affording all contractors the necessary insurance to perform public work, while guaranteeing the owner that needed insurance coverage is in place in all critical areas of contracting. Under a wrap-up insurance plan, the owner establishes a subsidiary organization, usually made up of a consortium of insurance brokers. Insurers are normally eager to compete for this business and will offer competitive rates to secure it. The arrangement also represents an excellent opportunity to involve M/WBEs and SMBEs in this business. Once in place, the owner offers blanket insurance coverage to all contractors through the wrap-up program.

C.3. Working Capital Loan Programs

The tenets of a well-structured Working Capital Loan Program allow a public entity to leverage its contracting activity with M/WBEs to secure bids from banks to provide those M/WBEs with Working Capital Loans against their awarded contract. Many study participant vendors pointed to capital and cash flow as a major inhibitor to their firms being positioned to pursue Raleigh opportunities and promote the further growth of their businesses.

M³ Consulting also recommends that Raleigh should increase its marketing and promotion of its partnerships with the Carolina Small Business Development Fund (CSBDF) because currently very few in their community have any awareness of the programs' existence.

C.4. Prompt Pay

Prompt Payment Programs provide a framework for the timing of payments to M/WBEs and Small Businesses by both the public entity and its prime contractors. The time frame is usually a short period (i.e., 7–14 days) after receipt of invoice. For the prime contractor, the period begins when it receives payment from the public entity. We note that Raleigh currently employs prompt pay measures.

D. M/WBE Inclusion in Bid Opportunities

D.1. M/WBE Program Which Addresses Requirements of Large Construction and Development Projects

Developing project-based M/WBE goals for large capital improvement/development projects requires an understanding of construction planning and budgeting, construction scheduling and the opportunities that are available on those projects. To facilitate opportunity identification and goal setting, M³ Consulting developed the Seven Phases of a Development ProjectSM that allows Raleigh to meet its planning, procurement and M/WBE needs across the life cycle of the development project.

The Seven Phases of a Development ProjectSM, along with possible opportunities (list intended to provide examples, not be exhaustive) at each stage are:

- **Planning**—Opportunities exist in the acquisition of right-of-way, acquisition of property, legal services, environmental studies, land use studies, geotechnical studies and feasibility studies.
- **Financing**—Opportunities may include investment banking, lobbyists, grant proposers and legal services.
- **Designing**—Design services include both architectural and engineering services, with other additional services that may be required such as geotechnical services and environmental services. Design services may also include the development of a bulk purchasing plan. Construction Management services would also be included here.
- **Constructing**—These services include prime contractor/subcontractor activities, including general contractors, tradesmen and soil testing.
- **Equipping**—Involves the furnishing of facilities and buildings.
- **Maintaining**—Involves the maintenance of equipment, facilities, and buildings.
- **Operating**—Covers the provision of those services that contribute to the overall continued function of the facility and buildings.

When M/WBE participation is viewed within the construct of the phases of a development project, unbundling becomes a natural part of the project planning process.

D.2. Promoting M/WBE Participation at the Prime Contractor Level

Raleigh had very small levels of M/WBE participation at the prime level, even at smaller procurement thresholds where capacity is not an issue. To ensure that the responsibility for M/WBE participation is shared by both Raleigh and its prime vendors, Raleigh should take steps to ensure that M/WBEs are involved in Raleigh's procurement opportunities at the prime levels. Below is a listing of those efforts that Raleigh can undertake:

- Identify prime-level procurement opportunities where a significant pool of M/WBEs are available;
- Establish prime-level participation targets to ensure that Raleigh is focused on securing participation at the prime level, as well as subcontracting level;
- Improve procurement forecasting to allow for inclusive planning, matchmaking and outreach;

- Utilize race- and gender-conscious initiatives, such as goals, evaluation factors, joint venture incentives, price preferences, and targeted solicitation;
- Increase the utilization of SDBE set-asides and sheltered market opportunities, where SDBE availability supports doing so;
- Provide notice of small business opportunities (below \$50,000) and ensure that M/WBEs are included in pool of firms being solicited;
- Consistently review pool of M/WBEs sub-bidders and subcontractors to determine those that have done a significant level of subcontracting with Raleigh and/or other public agencies, thereby building a track record to support prime level awards;
- Unbundle contracts into commercially viable units;
- Optimize joint ventures, develop and encourage mentor/protégé program and recognize prime opportunities for distributors;
- Review and revise all technical specifications to exclude proprietary language that discourage SDBEs and M/WBEs from bidding; and,
- Develop evaluation mechanisms for measuring Raleigh senior management commitment and staff's efforts toward SDBE and M/WBE participation in Raleigh contracting opportunities.

D.3. Increase Small Business Set-Asides and Sheltered Market Projects

Several recommendations above should assist Raleigh in increasing the success of its small business set-aside programs. Raleigh should:

- Consistently establish SDBE goals, small business set-asides and sheltered market projects;
- Forecast and publish annually list of anticipated small business purchases on website, based on current and historical purchases, to minimize small business need to consistently check for upcoming bids;

- Provide notice of small business opportunities on its website;
- Allow for online submission of quotes and bids/proposals; and
- Work collaboratively with and provide incentive to (where allowable) prime vendors to refer small businesses capable of performing small prime-contracting opportunities.

D.4. Joint Ventures, Mentor-Protégé Programs and Distributorships

Raleigh should develop specific procedures for verifying, counting and tracking the participation of M/WBEs in:

- Joint Ventures;
- Mentor-Protégé; and
- Distributorships.

The M/WBE Office should review and sign off on any teaming arrangements where the team anticipates receiving M/WBEs participation credit. Raleigh may look to FAA advisory documents available online for guidance.

E. Contract Compliance

Earlier, under Data Issues/ERP, M³ Consulting outlined issues that should allow Raleigh to enhance its ability to monitor and track bid/proposal/qualifications, award, and payment data to ensure that vendors are complying with stated M/WBE objectives. Also, as suggested previously, Raleigh should always be able to determine that procurement and contracting decision making is executed in a non-discriminatory manner. We believe it is useful to view RWASM tracking from the standpoint of statistical data-supporting applicant flow and compliant reporting:

EEO Applicant Flow	RWA SM and Disparity Analysis Equivalent
Labor Force	Potential Availability from Data Axle Firms, Firms Receiving Building Permits and/or Business License, certified SMBEs and M/WBE firms, noncertified SMBEs and M/WBE firms, trade organization membership; yellow pages
Potential Applicants	Registered Vendors, Plan Holders, Prequalified Vendors
Actual Applicants	Bidders and Sub-bidders (inclusive of quotes)
Actual Hires	Awardees and Payees
Actual Promotions	Difference between prime and subcontracting opportunities; vendor performance
Actual Terminations	Contract terminations, for convenience and for cause; substitutions

Source: M³ Consulting

In annual reporting on the achievement of M/WBE efforts to the Mayor and City Council, Procurement Division and M/WBE reports should also include the degree to which Raleigh's efforts have:

- Promoted and strengthened economic prosperity in Raleigh-Durham-Cary CBSA;
- Enhanced competition;
- Expanded business capacity; and
- Removed barriers and reduced or eliminated disparities.

F. Organizational Performance Evaluation—Assess Performance of Personnel with Buying Authority

At the end of the day, increasing M/WBE participation in Raleigh falls to Raleigh personnel making the buy decision. Raleigh should be able to track the performance of individuals with buying authority to determine the degree to which they are making inclusive procurement decisions such as measuring the effort by buyers in contacting RWASM-certified vendors, as well as any effort to identify new sources. The individual track record can be considered in annual or semiannual performance evaluations. We noted in the Statistical Methodology Chapter that, in EEO Disparate Impact analysis, failure to maintain records necessary to monitor the race/gender of an organization's workforce can be deemed as adverse impact.



E.5 SUMMARY

In summary, M³ Consulting found that Raleigh purchasing activities suggest that M/WBEs continue to have some difficulties obtaining significant contracts with Raleigh. In submitting specific findings within the Disparity Study for Raleigh, M³ Consulting formulated recommendations that allow Raleigh to rely upon race- and gender-conscious means when necessary to address ongoing hindrances to eliminate disparities, while also addressing M/WBE participation through race- and gender-neutral efforts. Our economic and statistical utilization analyses could serve as part of the policy and procedure-making decisions needed to ensure enhanced and legally defensible M/WBE participation in Raleigh's purchasing processes.

Chapter 1: Introduction

1.1 Scope of the Disparity Study

On November 22, 2021, the City of Raleigh (Raleigh) commissioned Miller³ Consulting, Inc. (M³ Consulting) to conduct a Disparity Study (the Study). In conducting this Study, M³ Consulting collected and developed data to determine what disparities, if any, existed between the availability and utilization of small, minority- and women-owned businesses for contracts awarded by the City of Raleigh (the City). The Study involved the following areas of analysis:

- Collection and analysis of historical purchasing, contracting records and levels of Minority and Women-owned Business Enterprise (M/WBE) participation in the procurement categories of Architectural, Engineering & Survey Services (AES)-Design Services, Construction and Construction-Related Services, Professional Services, Nonprofessional Services and Goods & Supplies from fiscal year (FY) 2017 through FY 2021;
- Compilation of bidder, vendor, M/WBE certification and other lists to determine relative availability of contractors and vendors;
- A market survey analysis to determine capacity;
- An assessment of procurement and M/WBE policies and procedures that included the following: an analysis of the organizational structures of the City of Raleigh; a review of past and present procurement, as well as M/WBE laws, policies, procedures and practices; and interviews with the Procurement Division (Procurement), Departmental and M/WBE Program personnel;
- Anecdotal interviews and surveying of minority, women and Non-M/WBE business owners;
- Examination of Non-M/WBE and M/WBE participation in the private sector in Raleigh's market areas; and
- Analysis of race- and gender-neutral alternatives to minority- and women-owned business goal-based programs.

This Study contains the results of M³ Consulting's research and provides conclusions based on our analyses.

1.2 Organization of the Disparity Study

This report consists of two volumes. Volume I includes the Executive Summary and twelve chapters. Volume 2 contains additional statistical tables and relevant appendices. A brief description of each chapter is outlined below.

Chapter 1—Introduction includes a synopsis of the contents of each chapter.

A. Industry Analysis

Chapter 2—Legal Analysis presents a discussion of the *City of Richmond v. J.A. Croson Co.* decision and lower court cases interpreting and applying the *Croson* decision, including a discussion of the United States Court of Appeals for the Fourth Circuit’s review of race- and gender-conscious programs.

Chapter 3—Procurement Analysis reviews the City’s Procurement and M/WBE procedures, policies, and practices in relation to their effect on M/WBE participation.

B. Statistical Analysis

Chapter 4—Statistical Methodology provides a detailed discussion of the statistical methods used in the Study for determining availability and utilization of M/WBEs and in calculating disparity. The chapter begins with a brief review of (a) the relevant market; (b) definition of businesses’ *readiness, willingness, ability* and how they affect measurement of availability; (c) measures of utilization and disparity; and (d) statistical significance. This chapter also reviews the task of data collection and includes a summary of data sources that are relied upon for relevant market, availability, utilization, and capacity determinations.

Chapter 5—Statistical Analysis of Relevant Market and M/WBE Availability presents data on M/WBE availability in the relevant market based on the *Ready, Willing and Able Model* and Data Axle data.

Chapter 6—Statistical Analysis of M/WBE Utilization presents data on M/WBE, small business enterprise and Service Disabled Veteran/Veteran-owned Business Enterprise utilization in awards and payments for FY 2017–FY 2021 based on contract awards, accounts payable and purchase order data.

Chapter 7—Statistical Analysis of M/WBE Disparity in Contracting presents disparity ratios, which are a comparison of the availability measures in Chapter 5 and the utilization measures in Chapter 6.

Chapter 8—Capacity and Regression examines factors impacting firm capacity. The purpose of this analysis is to determine if, after accounting for any differences in the capacity of firms, race and gender are contributing factors to any disparities found. In addition, access to financing is also analyzed in this chapter through survey data.

C. Market Analysis

Chapter 9—Anecdotal Analysis includes a description of anecdotal data collected and a synopsis of comments during interviews made by minority, women and Non-M/WBE business owners. The interviews focus on personal experiences in conducting business within a specified industry or with the City.

Chapter 10—Marketplace Analysis examines M/WBE participation in public/private sector opportunities and factors impacting their growth and development. It includes U.S. Bureau of Census Self-Employment and Apprenticeship data, Census Equal Employment Opportunity data (EEO), Dodge Construction data, the City’s building permits data and local business license data.

Chapter 11—Race-Neutral Alternatives analyzes race and gender-neutral programs to determine if they stimulate the utilization of M/WBEs without reliance upon characteristics of race, ethnicity or gender.

D. Recommendations

Chapter 12—Recommendations presents policy and program recommendations that flow from the findings presented in the report. These recommendations range from race and gender-conscious initiatives for the City to substantive suggestions that pertain to the enhancement of inclusive procurement operations and M/WBE programs.

The findings in each of the report’s chapters are interdependent. This statistical analysis, when viewed in totality, provides the City with a picture of M/WBE participation in contracting and procurement activity involving prime contracts and subcontracts for the period FY 2017–FY 2021.

Chapter 2: Legal Analysis

2.1 Introduction

The purpose of this chapter is to review the legal construct governing the City of Raleigh's (the "City's") efforts to include minority- and women-owned firms in its procurement and contracting opportunities. The analysis is intended to be a comprehensive overview of the requirements of *City of Richmond v. J. A. Croson Company* and its progeny¹ and their application to the City.

The chapter is divided into three sections, with the following subsections.

2.2. Constitutionality of Race- and Gender-Conscious Programs

2.2.1 City of Richmond v. J. A. Croson Company Analysis

- *Adarand v. Peña*—Strict Scrutiny Applied to Federally Funded Programs

2.2.2 Judicial Review of *Croson* Cases in the Fourth Circuit and Summary of NCGS § 143-128.2

2.3 Factual Predicate Standards (Conducting the Disparity Study)

2.3.1 Relevant Market vs. Jurisdictional Reach

2.3.2 Availability

2.3.3 Utilization

2.3.4 Disparity Ratios

2.3.5 Capacity and Regression

2.3.6 Anecdotal

2.3.7 Marketplace and Private Sector Analysis

2.3.8 Race-Neutral Alternatives

2.4 Conclusions

2.4.1 *Croson* Standards

2.4.2 Fourth Circuit Standards and § 143-128.2

2.4.3 Elements of Factual Predicate

This legal construct is instrumental in not only defining the parameters for a constitutionally defensible disparity study but also in guiding the analysis of the constitutionality of the City's current race-conscious and gender-conscious initiatives.

¹ Progeny are legal cases that follow an original opinion, setting legal precedent.

2.2 Constitutionality of Race and Gender-Conscious Programs

2.2.1 City of Richmond v. J. A. Croson Analysis

The legal basis for adoption and application of a government race-conscious program was considered by the U.S. Supreme Court in the precedent-setting case *City of Richmond v. J. A. Croson Company (Croson)*.² The following sections of this chapter discuss the *Croson* case and both the United States Court of Appeals for the Fourth Circuit Court's and the State of North Carolina courts' interpretation of the Supreme Court's constitutional analysis of government-sponsored race and gender-conscious programs.

Background

In 1983, the City of Richmond, Virginia enacted an ordinance that established a Minority Business Enterprise Utilization Plan (MBE plan) requiring nonminority-owned prime contractors awarded city contracts to subcontract at least 30 percent of the dollar amount to minority business enterprises (MBEs). According to the MBE plan, MBEs were defined broadly as companies with at least 51 percent ownership and control by U.S. citizens who were Black, Spanish-speaking, Asian, Indian, Eskimo, or Aleut. Under this definition, the MBE plan had no geographic boundaries in that the MBEs eligible to participate in the plan could be located anywhere in the United States. The MBE plan was touted as a solution for promoting greater participation by minority businesses in construction contracting. The operation of the MBE plan included a waiver for contractors who demonstrated to the director of the Department of General Services that the plan's set-aside requirements could not be achieved. There was no administrative appeal of the director's denial of a waiver.

The MBE plan was adopted after a public hearing at which no direct evidence was presented that: (1) the City had discriminated based on race in awarding contracts, or that (2) prime contractors had discriminated against minority subcontractors. In the creation of its program, the City Council relied upon a statistical study indicating that, in a city where the population was 50 percent Black, less than one percent of the contracts had been awarded to minority businesses in recent years.

In 1983, the same year the MBE plan was adopted, J. A. Croson Company lost a contract to install plumbing fixtures in the city jail because of a failure to satisfy the 30 percent set-aside requirement. Croson determined that to meet the City's requirements, an MBE would have to supply fixtures that would account for 75 percent of its contract price. After contacting several MBEs on two separate occasions, one MBE expressed interest but was unable to submit a bid to Croson due to credit issues. Upon bid opening by the City of Richmond, Croson was the only bidder. After bid opening, Croson provided additional time for the MBE to submit a bid, which was to no avail. Croson then requested a waiver from the City, which was denied.

Croson sued the City of Richmond in the U.S. District Court for the Eastern District of Virginia, alleging the plan was unconstitutional because it violated the Equal Protection Clause of the Fourteenth Amendment. The District Court upheld the plan, which was affirmed by the Court of Appeals for the Fourth Circuit in reliance on *Fullilove v. Klutznick*, 448 U.S. 448 (1980). Croson sought certiorari from the U.S. Supreme Court, which granted the writ of certiorari, vacated the Court of Appeals opinion, and remanded for further consideration considering the decision in *Wygant v. Jackson Board of Education*, 476 U.S. 267 (1986) in which it applied the "strict scrutiny" in invalidating the local school board's race-conscious layoff policy. On remand, the Court of Appeals struck down

² 488 U.S. 469 (1989).

Richmond's set-aside program as violating both prongs of the strict scrutiny test under the Equal Protection Clause.³ The U.S. Supreme Court, in an opinion in which Justice O'Connor was joined by four other Justices, affirmed the Fourth Circuit's opinion, holding that the Equal Protection Clause of the Fourteenth Amendment of the U.S. Constitution was violated by the City of Richmond's set-aside ordinance because:

- a. Richmond had failed to demonstrate a compelling governmental interest in apportioning public contracting opportunities based on race; and,
- b. The plan was not narrowly tailored to remedy the effects of prior or present discrimination.⁴

The Supreme Court stated there was no proof in the record upon which to base a *prima facie* case of a constitutional or statutory violation by any contractors in the Richmond construction industry. The Supreme Court further held that the inclusion of Spanish-speakers, Asians, American Indians, Alaskans, and Aleuts, where there was absolutely no evidence of past discrimination against such persons in the Richmond construction market, demonstrated that the City's purposes were not, in fact, to remedy past discrimination. Finally, the Supreme Court held that the 30 percent set-aside was not narrowly tailored to remedy the past effects of any prior alleged discrimination.

Standard of Scrutiny Analysis

The *Croson* case falls under the protection of the Equal Protection Clause of the Fourteenth Amendment, which prohibits states from denying any person within its jurisdiction the equal protection of the laws and is usually invoked when a state makes distinctions or classifications. There are three levels of scrutiny under which a state statute, regulation, policy, or practice can be examined: strict scrutiny, intermediate scrutiny, or rational basis.

- a. The **strict scrutiny** standard is evoked if the classification is suspect—in particular, one based on race, ethnic, or alien distinctions or infringements upon fundamental rights. The strict scrutiny test is the most rigorous of the three, requiring the state to show that the subject legislation is narrowly tailored to meet a compelling governmental interest.
- b. **Intermediate scrutiny** is applied to gender and age distinctions and requires the state to prove there is an important government interest and substantial relationship between the classification and the objective of the legislation.⁵
- c. The **rational basis** standard tests economic programs that do not make distinctions based on race, ethnic origin, or gender. Under this standard, the moving party is required to show that the classification is not rationally related to a valid state purpose.

Croson and Strict Scrutiny

In reviewing the Richmond ordinance, the Supreme Court applied the analysis used to evaluate an affirmative action program that made distinctions based on race. Although the court was deeply divided, the majority opinion in *Croson* interpreted the Equal Protection Clause as providing the same protection against discrimination and unequal treatment provided to Blacks and other minorities as to nonminority individuals.⁶ The court reasoned that protection of the individual rights guaranteed by the Equal Protection Clause requires

³ *Id.* at 485.

⁴ *Id.* at 470.

⁵ Lower courts have not agreed upon the standard to be applied to physical and mental handicaps; however, intermediate and rational basis have been employed.

⁶ *Croson*, 488 U.S. at 493.

strict judicial scrutiny of the facts and circumstances surrounding the adoption of race-based preferences to “smoke out” possible illegitimate motivations such as simple race politics or racial stereotyping.⁷

Justice O’Connor, writing the majority opinion, favored this heightened scrutiny of race-conscious programs, basing her opinion on Justice Powell’s opinions in *University of California Regents v. Bakke*⁸ and *Wygant v. Jackson Board of Education*,⁹ in which he applied the strict scrutiny standard to race-based preferences related to student admissions and employment, respectively. The use of a heightened scrutiny was necessary, O’Connor reasoned, because the majority Black population in the City of Richmond raised the concern of the court that a political majority will more easily act to the disadvantage of a minority based on “unwarranted assumptions or incomplete facts...”¹⁰ Although Justice O’Connor relied on *Wygant* to define the strict scrutiny standard for *Croson*, it is important to note that her concurring opinion in *Wygant* acknowledges the lack of consensus among the members of the court regarding the appropriate interpretation of the strict scrutiny standard. Four members of the court dissented on the standard set forth in the O’Connor opinion.

While the majority in *Croson* subjected race-based preferences adopted by state and local governments to the most stringent test of constitutionality, the court apparently did not intend to sound a complete retreat from attempts by state and local governments to remedy racial injustice. In her opinion, Justice O’Connor stated:

“It would seem equally clear, however, that a state or local subdivision (if delegated the authority from the State) has the authority to eradicate the effects of private discrimination within its own legislative jurisdiction. This authority must, of course, be exercised within the constraints of § 1 of the Fourteenth Amendment.”¹¹

Justice Kennedy, in his concurring opinion, went further, stating that a government, upon intentionally causing wrongs, has an “absolute duty” to eradicate discrimination.¹² Even so, the court concluded that, in the enactment and design of its MBE plan, the City of Richmond failed both prongs of the strict scrutiny test.

Compelling Governmental Interest

In some instances, public entities have compelling reasons to remedy past discriminatory treatment of racial or ethnic groups. In *Croson*, the court noted that a municipality has a compelling interest in redressing discrimination committed by the municipality or private parties within the municipality’s legislative jurisdiction if the municipality in some way perpetuated the discrimination to be remedied by the program.¹³ The court makes clear that a state or local government may use its legislative authority in procurement policies to remedy private discrimination, if that discrimination is identified with the “particularity required by the Fourteenth Amendment.”¹⁴

In *Grutter v. Bollinger*,¹⁵ the U.S. Supreme Court further expounded on the compelling governmental interest test, stating that, “[we] have never held that the only governmental use of race that can survive strict scrutiny is remedying past discrimination... Not every decision influenced by race is equally objectionable and strict scrutiny

⁷ *Id.*

⁸ *University of California Regents v. Bakke*, 438 U.S. 265 (1978).

⁹ *Wygant v. Jackson Board of Education*, 476 U.S. 267 (1986).

¹⁰ *Croson*, 488 U.S. at 495-496.

¹¹ *Croson*, 488 U.S. at 491-492.

¹² See *id.* at 518.

¹³ *Id.* at 492.

¹⁴ *Id.*

¹⁵ *Grutter v. Bollinger*, 539 U.S. 306 (2003).

is designed to provide a framework for carefully examining the importance and the sincerity of the reasons advanced by the governmental decision-maker for the use of race in that particular context.”¹⁶

Factual Predicate (Findings of Discrimination or Disparate Treatment Prior to Adoption of Race-Conscious Solutions)

Race-conscious measures can be adopted when a governmental entity establishes, through a factual predicate, identified instances of past discrimination. There must be documentation of specific past instances of discrimination to provide guidance for the “legislative body to determine the precise scope of the injury it seeks to remedy.”¹⁷ A factual predicate is required before a government has a compelling interest in race-conscious programs.¹⁸

The City of Richmond justified its enactment of its plan based on five factors: (1) the plan declared its purpose to be “remedial”; (2) at public hearings in connection with enacting the plan, proponents stated there had been past discrimination in the construction industry locally, throughout the state and the country; (3) based on a study conducted for the City, minority businesses received 0.67 percent of prime contracts from the City, while minorities constituted 50 percent of Richmond’s population; (4) minority contractors were grossly under-represented in local contractors’ associations; and (5) U.S. Congressional studies have concluded that minority participation in the construction industry nationally was stifled by the present effects of past discrimination.¹⁹

The *Croson* court rejected the foregoing factors as inadequate, either singularly or in concert, to establish a “strong basis in evidence” to justify Richmond’s plan for the following reasons:

- *Remedial Purpose Recitation*: The mere recitation of a “remedial” purpose for a racial classification is insufficient, particularly where an examination of the history of the legislation and its legislative scheme suggests that its goal was other than its asserted purpose.²⁰
- *Statements Regarding Past Discrimination*: The generalized assertions of plan proponents that there had been past discrimination in the construction industry were highly conclusive in nature and of no sufficient evidence or probative value in establishing past discrimination by anyone in the construction industry in the City of Richmond.²¹
- *Disparity in Contracts Awarded*: Where special qualifications were required, the comparisons to the general population, rather than to the special smaller group of qualified individuals, may have little probative value. Thus, the relevant statistical pool for demonstrating discriminatory exclusion was the number of MBEs qualified to undertake the task, as opposed to the percentage of minority individuals in

¹⁶ *Grutter*, 539 U.S. at 308. Please note that *Sherbrooke* and *Hershell Gill* have concluded that the holdings of the *Gratz v. Bollinger*, 539 U.S. 244 (2003) and *Grutter v. Bollinger*, 539 U.S. 306 (2003) cases in no way disturb the holdings of *Croson*. See *Sherbrooke Turf, Inc. v. Minnesota DOT*, 345 F. 3d 964 (8th Cir. 2003) and *Hershell Gill Consulting Engineers v. Miami-Dade County*, 333 F. Supp. 2d 1305 (S.D. Fla. 2004).

¹⁷ *Croson*, 488 U.S. at 498.

¹⁸ *Id.* at 497.

¹⁹ *Id.* at 499. It is important to note that the City of Richmond attempted in part to predicate its program on the studies cited by the Supreme Court in *Fullilove v. Klutznick*, 448 U.S. 448 (1980). The Court in *Fullilove* noted that the Equal Protection component of the Fifth Amendment was not violated when Congress established a set-aside program since it was substantially related to the achievement of an important national goal of remedying the past acts of racial discrimination in the area of public contracts. The Congressional authority to establish a set-aside program is greater than that of a state and is subjected to less judicial scrutiny by the courts. However, the Court in *Adarand Constructors, Inc. v. Federico Peña* held that “all racial classifications, imposed by whatever federal, state, or local government actor, must be analyzed under strict scrutiny.” 515 U.S. 200, 227 (1995).

²⁰ *Croson*, 488 U.S. at 500.

²¹ *Croson*, 488 U.S. at 500.

the general population. While the plan contemplated minority subcontractor participation, the City did not know how many MBEs in the local area were qualified to do the work or the percentage of MBE participation in city projects.²²

- *Low Participation in Contractors' Association*: A low percentage of minorities in the local contractors' associations did not provide sufficient evidence without proof that this low percentage was due to discrimination against, as opposed to the free choice, of Blacks to pursue alternate employment or interests.²³
- *Congressional Findings*: The finding by Congress that past discrimination accounted for the low number of minority contractors in the country had little or no probative value with respect to establishing discrimination in the City of Richmond. A more particularized showing of past discrimination by the City was required, such as a pattern of discrimination in the local industry that the City could act to eradicate, or discrimination in which the City was a "passive participant."²⁴

The court concluded that a more specific inquiry and discovery would be required to support a constitutionally permissible set-aside program. The factual inquiry must be local in nature and the statistical analysis must address a relevant comparison. In *Croson*, Justice O'Connor relied heavily on her opinion and that of Justice Powell in *Wygant*, when specifying the requirement that "judicial, legislative or administrative findings of constitutional or statutory violation" must be found before a government entity has a compelling interest in favoring one race over another.²⁵

For example, in *Wygant*, the U.S. Supreme Court considered the validity of a collective bargaining agreement that provided special protection for minority teachers in layoffs. The school board argued that the board's interest in providing minority teacher role models for its minority students, as an attempt to alleviate societal discrimination, was sufficiently important to justify the use of a racial classification embodied in the layoff provision.²⁶ The Justices rejected the role model theory and held that it could not be used to support a remedial measure, such as a layoff provision. The disparity between teachers and students, according to the court, had no probative value in demonstrating discrimination in hiring and promotion that necessitated corrective action. Substantially, the same conclusion had been reached by the Supreme Court in 1978 in *Bakke*.²⁷

The factual predicate presented by the City of Richmond depended upon generalized assertions that could lead to an attempt to match contract awards to MBEs to the minority population. The *Croson* court decided that the factual predicate offered by the City of Richmond—in its failure to show particularized instances of discrimination—suffered the same flaws as the factual predicate presented in *Wygant*. In analyzing the *Croson* factual predicate, the U.S. Supreme Court did not provide a set of standards or guidelines describing the kind of MBE plan that would pass constitutional muster. It simply provided a stringent burden of proof for proponents of MBE laws to meet. The court also did not give legislatures much guidance on the parameters of a factual predicate that would show evidence of discrimination. There are, however, some indications of the measures the Court will accept:

²² *Id.* at 501-502.

²³ *Id.* at 503-504.

²⁴ *Id.* at 504.

²⁵ *Id.* at 497.

²⁶ See *Wygant*, 476 U.S. at 274.

²⁷ *Cone Corp. v. Hillsborough County*, 908 F.2d 908, 913 (11th Cir. 1990). See *University of California Regents v. Bakke*, 438 U.S. 265 (1978).

1. A pattern of discrimination shown through an appropriate disparity analysis can raise an inference of discrimination;
2. A relevant market in which the public entity conducts business must be established; and
3. Qualitative evidence of discrimination, such as anecdotal testimony, may also be acceptable.

The court, however, leaves a great deal of room for interpretation in the development of models to satisfy these standards.

Because the *Croson* court left the task of further establishing a factual predicate to the lower courts, the lower courts have been experiencing difficulties in navigating the complexities in this area of constitutional law. In response, state and local governmental entities use independent consultants to assess if they have the factual predicate or a statistically significant disparity necessary to justify remedial race-conscious and/or gender-conscious programs under *Croson*.

Narrowly Tailored

The court in *Croson* made it clear that the second prong of the “strict scrutiny” test demands that remedial action be “narrowly tailored” to remedy past or present discrimination. At least three characteristics were identified by the court as indicative of a narrowly tailored remedy:

1. The program should be instituted either after, or in conjunction with, race-neutral means of increasing minority business participation; a governmental entity does not have to enact race-neutral means if they are not feasible or conducive to remedying past discrimination;²⁸
2. The plan should avoid the use of rigid numerical quotas;²⁹ and
3. The program must be limited in its effective scope to the relative market of the governmental entity.³⁰

Croson found the 30 percent quota in Richmond to be a rigid numerical quota without justification.³¹ Given that the City considered bids and waivers on a case-by-case basis, the court found no need for the rigid quotas.³² In creating a plan, a public entity cannot employ quotas simply to avoid “the bureaucratic effort necessary to tailor remedial relief to those who truly have suffered the effects of prior discrimination.”³³

Yet, based on the discovery of 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,” the public entity can then institute measures to end the “discriminatory exclusion.”³⁴ In fact, in some showings of discrimination, goals, quotas, or set-asides could be employed: “in the extreme case, some form of narrowly tailored racial preference might be necessary to break down patterns of deliberate exclusion.”³⁵ Any plan of action containing racial preferences should be grounded in the statistical assessment of disparity.

²⁸ See *Croson*, 488 U.S. at 507-508.

²⁹ *Id.*

³⁰ *Id.* at 504.

³¹ *Id.* at 471-472, 499.

³² *Id.* at 508.

³³ *Id.*

³⁴ *Id.* at 509.

³⁵ *Id.*

Several lower courts have sought to expound upon the components of narrow tailoring dictated by the Supreme Court. In doing so, the following findings have been made:

1. Flexible and aspirational goals should be demonstrated by being tied to availability, set project by project and achieved through good faith efforts.³⁶ Goals can be set for small minority groups where discrimination may have negatively impacted their numbers, causing the inability to reach statistical significance.³⁷ Race-conscious goals within federal contracts should be used to achieve the portion of Disadvantaged Business Enterprise (DBE) participation that cannot be achieved through race- and gender-neutral means.³⁸
2. Waivers and good faith efforts should be an integral component of the program. If MBEs are not available, or submit unreasonably high price quotes, the prime contractor should be granted a waiver.³⁹
3. A sunset clause is also a component of a narrowly tailored MBE program. This can involve: (a) a graduation program,⁴⁰ (b) a definite date to end the program;⁴¹ or (c) an annual review of Minority and Women Business Enterprise (hereinafter M/WBE) program efficacy, goals, and utilization. M/WBE programs should not be designed as permanent fixtures in a purchasing system without regard to eradicating bias in standard purchasing operations or in private sector contracting.
4. Additionally, any race-conscious program or other remedial action should not extend its benefits to MBEs outside the political jurisdiction's relevant market, unless the MBEs can show that they have suffered discrimination within the locale.⁴² M/WBE programs should be limited in scope to groups and firms that suffer the ongoing effects of past or present discrimination.⁴³
5. Race- and gender-conscious M/WBE programs should be instituted only after, or in conjunction with, race and gender-neutral programs.
6. M/WBE programs should limit their impact on the rights and operations of third parties.

In *Grutter v. Bollinger*⁴⁴ and *Gratz v. Bollinger*,⁴⁵ which addressed the standards for using race-conscious measures in public education, the U.S. Supreme Court reviewed the utilization of goals in affirmative action cases. The court appears to conclude that race can be used as more of a "plus" factor, as opposed to a defining

³⁶ *Cone Corp. v. Hillsborough County*, 908 F.2d 908 (11th Cir. 1990), *Associated General Contractors of Ohio v. Drabik*, 214 F.3d 300 (6th Cir. 2000).

³⁷ *Concrete Works v. County of Denver (Concrete Works I)*, 823 F. Supp. 821, 843 (D. Colo. 1993).

³⁸ *Western States Paving Co. v. Washington DOT*, 407 F.3d 983 (Ninth Cir. 2005).

³⁹ *Coral Construction Company v. King County*, 941 F.2d 910, 924 (Ninth Cir. 1991), *Associated General Contractors of Ohio v. Drabik*, 214 F.3d 300 (6th Cir. 2000), *Hershell Gill Consulting Engineers v. Miami-Dade County*, 333 F. Supp.2d 1305 (S.D. Fla. 2004), *Western States Paving Co. v. Washington DOT*, 407 F.3d 983 (Ninth Cir. 2005)

⁴⁰ *Associated General Contractors of California, Inc. v. Coalition for Economic Equality*, 950 F.2d 1401,1417 (Ninth Cir. 1991), *Associated General Contractors of Ohio v. Drabik*, 214 F.3d 300 (6th Cir. 2000), *Hershell Gill Consulting Engineers v. Miami-Dade County*, 333 F. Supp.2d 1305 (S.D. Fla. 2004).

⁴¹ *Associated General Contractors v. San Francisco*, 748 F. Supp. 1443, 1454 (N.D. Cal. 1990), *Associated General Contractors of Ohio v. Drabik*, 214 F.3d 300 (6th Cir. 2000).

⁴² *Concrete Works I*, 823 F. Supp. at 843. This was true even if the statistical evidence shows discrimination by contractors in cities in other locales. *Coral Construction Company v. King County*, 941 F.2d 910, 925 (Ninth Cir. 1991).

⁴³ In *Jana-Rock Construction v. N.Y. State Department of Economic Development*, 438 F.3d 195 (2nd Cir. 2006), the Second Circuit considered the issue of under-inclusiveness regarding New York State Department of Economic Development's exclusion of Portuguese and other European Spanish-speaking persons from its definition of Hispanic in its affirmative action programs. While the court found that strict scrutiny and narrow tailoring required that programs not be over-inclusive, the Court of Appeals did not believe that *Croson* intended to subject under-inclusiveness to the strict scrutiny standard.

⁴⁴ *Grutter v. Bollinger*, 539 U.S. 306 (2003).

⁴⁵ *Gratz v. Bollinger*, 539 U.S. 244 (2003).

feature of the application. The utilization of race should allow for individualized consideration and be applied in a flexible, nonmechanical way.

In *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation* and *Gross Seed Company v. Nebraska Department of Roads*,⁴⁶ the Eighth Circuit U.S. Court of Appeals has interpreted these two cases “in light of” the U.S. Supreme Court’s decision in *Croson*. The court found that the Department of Transportation’s (DOT’s) goal programs were consistent with the requirements of *Gratz* and *Grutter*, as they were flexible and individualized and emphasized race-neutral means.

In *Western States Paving Co., Inc. v. Washington State Department of Transportation*,⁴⁷ the Ninth Circuit U.S. Court of Appeals reached a similar conclusion in finding that Washington DOT met the compelling governmental interest test; specifically, the Ninth Circuit concluded that it was unnecessary for Washington DOT to establish that its program was premised on a compelling interest independent of Congress’s nationwide remedial objective. However, the Ninth Circuit found that Washington failed the narrow tailoring test because Washington DOT did not present any evidence of discrimination within the state’s transportation construction market. The Ninth Circuit stated that the following were missing: (1) a statistical analysis that considered capacity of disadvantaged firms within Washington DOT’s market, and (2) anecdotal testimony.⁴⁸

Overconcentration

The Federal District Court of Minnesota considered whether a Disadvantaged Business Enterprise (DBE) program was narrowly tailored due to overconcentration in *Geyer Signal, Inc. v. Minnesota DOT*.⁴⁹ In this case, Geyer sought a permanent injunction of Minnesota DOT’s DBE program, arguing the DBE program was unconstitutional on its face and as applied. A major argument made by Geyer was that the DBE program was not narrowly tailored because DBE goals were satisfied through just a few areas of work on construction projects or overconcentrated, which burdens non-DBEs in those sectors and does not address problems in other areas.⁵⁰ Under the federal requirements, DBE programs are required to monitor and address issues of overconcentration. The court first held that plaintiffs failed to establish that the DBE program will always be fulfilled in a manner that creates overconcentration, as is required under a facial challenge. Goals are established based on DBEs that are ready, willing, and able to participate, thus accounting for work that DBEs are unable to perform. Furthermore, the Minnesota DOT Program established mechanisms to address any issues of overconcentration through the following mechanisms:

- Flexible contract goals that allow Minnesota DOT to change focus from overconcentrated areas;
- Ability of prime contractors to subdivide projects that would typically require more capital and equipment than a DBE can acquire;
- Waivers; and
- Incentives, technical assistance, business development programs, mentor-protégé programs, and other measures to assist DBEs to work in other areas where there is not overconcentration.⁵¹

The as-applied challenge failed as well. On the issue of overconcentration, the district court held that there is “no authority for the proposition that the government must conform its implementation of the DBE Program to

⁴⁶ *Sherbrooke Turf, Inc. v. Minnesota DOT*, 345 F.3d 964 (8th Cir. 2003) (the two cases were combined and heard together).

⁴⁷ *Western States Paving Co., Inc. v. Washington State DOT*, 407 F.3d 983 (Ninth Cir. 2005).

⁴⁸ *Id.* at 1000-1001.

⁴⁹ *Geyer Signal, Inc. v. Minnesota DOT*, Civil No. 11-321 (JRT/LIB)(D. Minn. 2014).

⁵⁰ *Id.* at 11.

⁵¹ *Id.* at 16-17.

every individual business' self-assessment of what industry group they fall into and what other businesses are similar."⁵² Because Geyer did not demonstrate that identifying businesses using the North American Industry Classification System (NAICS) code was unreasonable or that overconcentration exists in its type of work. It did not show that Minnesota DOT's program failed to meet the narrow tailoring test.⁵³

Race-Neutral Alternatives

The court in *Croson* held that the MBE program should be instituted either after, or in conjunction with, race-neutral means of increasing minority business participation.⁵⁴ The *Croson* court stated that, in Richmond, there did "not appear to have been any consideration of the use of race-neutral means to increase minority participation in city contracting."⁵⁵ The Court further stated that, in upholding the federal set-aside in *Fullilove*,⁵⁶ the Court found that "Congress had carefully examined and rejected race-neutral alternatives before enacting the MBE set-aside."⁵⁷ This was because "by the time Congress enacted [the MBE set-aside] in 1977, it knew that other remedies had failed to ameliorate the effects of racial discrimination in the construction industry."⁵⁸

While *Croson* does not define race-neutral programs or what constitutes a consideration of race-neutral programs, other passages in *Croson* shed some light on the Court's opinion on these two issues. The Supreme Court noted that the City of Richmond had at its disposal a wide array of race-neutral measures that could "increase the accessibility of city contracting opportunities to small entrepreneurs of all races. Simplification of bidding procedures, relaxation of bonding requirements, and training and financial aid for disadvantaged entrepreneurs of all races would open the public contracting market to all those who have suffered the effects of past societal discrimination or neglect."⁵⁹

The court also suggested that the City may act "to prohibit discrimination in the provision of credit or bonding by local suppliers and banks. Business as usual should not mean business pursuant to the unthinking exclusion of certain members of our society from its rewards."⁶⁰ Thus, wherein there are private industries awarded city contracts, cities can attempt to thwart discrimination against minority contractors in the subcontracting associated with such city contracts.⁶¹

What constitutes an adequate consideration of race-neutral programs is more vague. *Fullilove* held that Congress made a thorough investigation of the inadequacy of race-neutral measures to promote MBEs.⁶² While *Croson* held that Richmond could not rely on the congressional findings referred to in *Fullilove*, presumably Richmond could have relied on a similar quantum of evidence that Congress relied upon in *Fullilove*. However, congressional findings in *Fullilove* were remarkably thin with no hearings held to document the discrimination that the statute in *Fullilove* set out to rectify.⁶³ While *Fullilove* has been in large part superseded by *Adarand v.*

⁵² *Id.* at 20.

⁵³ *Id.* at 40-41.

⁵⁴ *Croson*, 488 U.S. at 507, citing *U.S. v. Paradise*, 480 U.S. 149, 171 (1987).

⁵⁵ *Croson*, 488 U.S. at 507.

⁵⁶ In *Fullilove v. Klutznick*, 448 U.S. 448 (1980), the U.S. Supreme Court found that the United States government could use its spending power to remedy past discrimination in the construction industry by establishing that 10 percent of federal funds could go to minority-owned firms under a set-aside program. *Fullilove v. Klutznick* was overruled by *Adarand Constructors, Inc. v. Peña (Adarand III)*, 515 U.S. 200 (1995), bringing federal programs in line with *Croson*.

⁵⁷ *Croson*, 488 U.S. at 507.

⁵⁸ *Id.*

⁵⁹ *Croson*, 488 U.S. at 509-510.

⁶⁰ *Id.* at 510.

⁶¹ However, the court did not say whether this influence should be exercised through legislative enactment.

⁶² See *Fullilove*, 448 U.S. at 453-472.

⁶³ *Id.*

Peña, Adarand was also largely silent on what constituted an adequate consideration of race-neutral alternatives.

Subsequent federal case law has provided some illumination on the question of what constitutes adequate consideration of race-neutral measures:

1. As stated previously, a governmental entity does not have to enact race-neutral means if they are not feasible or conducive to remedying past discrimination.⁶⁴
2. If race-neutral programs and legislation were in place prior to the establishment of a race-conscious program and had been attempted in good faith, and yet M/WBE participation in public procurement remains low relative to availability, then an inference is created that race-neutral programs were inadequate to relieve the impact of past discrimination.⁶⁵

Scrutiny Applied to Federally Funded Programs

1. Background of *Adarand v. Peña*

In *Adarand Constructors, Inc. v. Peña*⁶⁶ (“*Adarand III*”) the U.S. Supreme Court analyzed the constitutionality of a federally funded race-conscious DBE program. The facts of *Adarand III* are as follows. The Central Federal Lands Highway Division (CFLHD), which is part of the United States Department of Transportation (U.S. DOT), awarded the prime contract for a highway construction project in Colorado to Mountain Gravel & Construction Company in 1989. Mountain Gravel then solicited bids from subcontractors for the guardrail portion of the contract. Petitioner *Adarand*, a Colorado-based highway construction company that specialized in guardrail work, submitted the lowest bid. *Gonzales Construction Company* also submitted a bid to complete the guardrails.⁶⁷ *Gonzales* was a certified DBE, however *Adarand* was not.⁶⁸ Mountain Gravel awarded the subcontract to *Gonzales*, even though *Adarand* had the lowest bid.⁶⁹

Federal law requires a subcontracting clause “be inserted which states that [the] contractor shall presume that socially and economically disadvantaged individuals include Blacks, Hispanics, American Indians, Asians, and other minorities, or any other individual found to be disadvantaged by the [Small Business] Administration pursuant to section 8(a) of the Small Business Act.”⁷⁰ *Adarand* filed suit in the United States District Court for the District of Colorado against various federal officials, claiming that the race-based presumptions involved in the use of subcontracting compensation clauses violated *Adarand’s* right to equal protection. In addition to its general prayer for “such other and further relief as to the court seems just and equitable,” *Adarand* specifically sought declaratory and injunctive relief against any future use of subcontractor compensation clauses.⁷¹ The

⁶⁴ *Coral Construction Company v. King County*, 941 F.2d 910, 923 (Ninth Cir. 1991), *Associated General Contractors of California v. Coalition of Economic Equity*, 950 F. 2d 1401,1417 (Ninth Cir. 1991), *Engineering Contractors v. Dade County*, 122 F. 3d. 895 (11th Cir. 1997), *Concrete Works of Colorado, Inc. v. City and County of Denver (Concrete Works I)*, 823 F. Supp. 821 (D. Colo. 1993), *Western States Paving Co., Inc. v. Washington State DOT*, 407 F.3d 983 (Ninth Cir. 2005).

⁶⁵ *Concrete Works I*, 823 F. Supp. 821 at 841.

⁶⁶ *Adarand Constructors, Inc. v. Peña* (*Adarand III*), 515 U.S. 200 (1995).

⁶⁷ *Id.* at 205.

⁶⁸ *Id.*

⁶⁹ *Id.* Note that in *Western States Paving*, the Ninth Circuit concluded that a DBE program is not rendered unconstitutional because it sometimes results in bids by non-DBE firms being rejected in favor of higher bids from DBEs. “Although this places a very real burden on non-DBE firms, this fact alone does not invalidate TEA 21. If it did, all affirmative action programs would be unconstitutional because of the burden on non-minorities.” 407 F.3d at 995.

⁷⁰ *Adarand III*, 515 U.S. at 205.

⁷¹ *Id.* at 210. A subcontractor compensation clause gives a prime contractor a financial incentive to hire subcontractors certified as small businesses controlled by socially and economically disadvantaged individuals, and requires the contractor to presume that such individuals include minorities or any other individuals found to be disadvantaged by the Small Business Administration (SBA).

federal district court ruled against *Adarand* (*Adarand I*), granting the government’s motion for summary judgment. The Court of Appeals affirmed (*Adarand II*).⁷²

2. Discussion of U.S. Supreme Court Ruling

Before the U.S. Supreme Court could decide on the merits of the case, it had to determine if *Adarand* had standing to seek forward-looking relief. For *Adarand* to have standing, it would have to allege that the use of subcontractor compensation clauses in the future constitutes “an invasion of a legally protected interest which is (a) concrete and particularized, and (b) actual or imminent, not conjectural or hypothetical.”⁷³ The court determined that *Adarand*’s claim met this test. The court further stated that *Adarand* need not demonstrate that it has been, or will be, the low bidder on a government contract.⁷⁴ The injury in cases of this kind is that a “discriminating classification prevent[s] the plaintiff from competing on an equal footing.” The aggrieved party “need not allege that he would have obtained the benefit but for the barrier in order to establish standing.”⁷⁵

The next issue the court addressed was the standard of review for federal racial classifications in determining the viability of programs to address discrimination. The court concluded “that any person, of whatever race, has the right to demand that any governmental actor subject to the Constitution justify any racial classification subjecting that person to unequal treatment under the strictest judicial scrutiny,”⁷⁶ thereby holding “that all racial classifications, imposed by whatever federal, state, or local governmental actor, must be analyzed by a reviewing court under strict scrutiny.”⁷⁷ Such classifications are constitutional only if they have narrowly tailored measures that further compelling governmental interests.⁷⁸ The court, in its decision, recognized the persistence of the practice and lingering effects of racial discrimination against minority groups and the government’s ability to act in response to it.⁷⁹ Further, the court wanted to dispel the notion that strict scrutiny is “strict in theory, but fatal in fact.”⁸⁰

3. *Adarand* on Remand to the Lower Courts

The court remanded the case to the 10th Circuit U.S. Court of Appeals to address several issues:

- To determine if the governmental interests served using subcontractor compensation clauses are properly described as “compelling”;
- To address narrow tailoring in terms of strict scrutiny cases by exploring the use of race-neutral means to increase minority business participation in government contracting;
- To determine if the program is appropriately limited, so it will not outlive the discriminatory effects it was designed to eliminate;
- To review the discrepancy between the definitions of which socially disadvantaged individuals qualify as economically disadvantaged for the 8(a) and 8(d) programs under the Small Business Act; and

⁷² *Id.*

⁷³ *Adarand III*, 515 U.S. at 211.

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Id.* at 224.

⁷⁷ *Id.* at 227.

⁷⁸ *Id.*

⁷⁹ *Id.* at 202.

⁸⁰ *Fullilove*, 448 U.S. at 519.

- To determine if 8(d) subcontractors must make individualized showings, or if the race-based presumption applies to both socially and economically disadvantaged businesses.

The 10th Circuit U.S. Court of Appeals remanded the case to the district court for action on the issues raised by the U.S. Supreme Court.⁸¹ The federal district court in *Adarand* (*Adarand IV*) accepted the Federal Government's evidence of compelling interest but rejected the federal DBE program as applied in Colorado as not being narrowly tailored.⁸² The court, although acknowledging the U.S. Supreme Court's pronouncement that strict scrutiny is not "fatal in fact," found it "difficult to envisage a race-based classification" that would ever be narrowly tailored, thereby effectively pronouncing strict scrutiny fatal in fact.⁸³

Following *Adarand IV*, the 10th Circuit U.S. Court of Appeals, in *Adarand V*, considered subsequent events that the court deemed to have rendered the case moot.⁸⁴ During the course of the litigation, *Adarand* applied for and was granted DBE certification by the Colorado DOT.⁸⁵ The appellate court concluded that *Adarand* could no longer demonstrate an injury stemming from the Subcontractors Compensation Clause (a federal subcontracting program) and, therefore, the case was moot.⁸⁶

In the U.S. Supreme Court's review of the Court of Appeals decision in *Adarand VI*, the court reversed the lower court, holding that "it was 'far from clear' that federal DOT would not initiate proceedings to revoke *Adarand's* status and because 'it is impossible to conclude that respondents have borne their burden of establishing that it is 'absolutely clear that the allegedly wrongful behavior could not reasonably be expected to recur', petitioner's cause of action remains alive."⁸⁷ The Supreme Court remanded the case back to the appellate court for consideration on the merits.

On remand, the appeals court found that the government's evidence more than satisfied the compelling interest prong of the strict scrutiny test, thus affirming the district court's holding in *Adarand IV*.⁸⁸ The appeals court then considered if the programs currently before the court were narrowly tailored using the following factors: (1) the availability of race-neutral alternative remedies, (2) limits on the duration of the subcontractors' compensation clause program and the DBE certification program, (3) flexibility, (4) numerical proportionality, (5) the burden on third parties, and (6) over- or under-inclusiveness.⁸⁹ Taking all these factors into consideration, the appeals court found the amended and revised federal subcontracting program and DBE certification programs to be narrowly tailored.⁹⁰ On November 27, 2001, in *Adarand Constructors v. Mineta*, the U.S. Supreme Court dismissed the writ of certiorari on the 10th Circuit's decision as improvidently granted.⁹¹

4. Intermediate Scrutiny

The courts examine programs that give preference to women-owned businesses under a different standard than race-conscious programs. A gender-conscious program created by a governmental entity is examined under the

⁸¹ *Adarand Constructors, Inc. v. Peña* (*Adarand IV*), 965 F. Supp. 1556 (D.Colo. 1997).

⁸² *Id.* Similarly, a Texas District court, in *Rothe Development Corp v. U.S. Department of Defense*, Civ. Act No. SA-98-CV-1011-EP (1999), upheld the federal government benchmark study as an adequate factual predicate for the small, disadvantaged business program of the U.S. Department of Defense. See also *Concrete Works of Colorado, Inc. v. City and County of Denver, Co.* Civil Action No: 92-M-21 (March 7, 2000).

⁸³ See *Adarand IV*, 965 F. Supp. at 1580 (D. Colo. 1997).

⁸⁴ See *Adarand Constructors, Inc. v. Slater* (*Adarand V*), 169 F.3d 1292 (10th Cir. 1999).

⁸⁵ *Id.* at 1296.

⁸⁶ *Id.* at 1296-1297.

⁸⁷ *Adarand Constructors, Inc. v. Slater* (*Adarand VI*), 528 U.S. 216, 223-224 (2000).

⁸⁸ *Adarand Constructors, Inc. v. Slater* (*Adarand VII*), 228 F.3d 1147, 1176 (10th Cir. 2000).

⁸⁹ *Adarand VII*, 228 F.3d 1147 at 1176-1178.

⁹⁰ *Id.* at 1187.

⁹¹ *Adarand Constructors v. Mineta*, 534 U.S. 103 (2001). See also *Gratz v. Bollinger*, 539 U.S. 244 (2003) and *Grutter v. Bollinger*, 539 U.S. 306 (2003).

intermediate scrutiny test, rather than the strict scrutiny test employed for racial classifications.⁹² Under intermediate scrutiny review, the actions of the state are valid if they are “substantially related” to important governmental objectives, supported by sufficiently probative evidence or exceeding persuasive justification.⁹³

In *Coral Construction Company v. King County*,⁹⁴ the Ninth Circuit employed the intermediate scrutiny test to review King County’s Women Business Enterprise (hereinafter WBE) program by examining the validity of a sex-based preference.⁹⁵ Under the test, the court noted that the gender classification must serve an important governmental objective, and there must be a “direct, substantial relationship” between the objective and the means chosen to accomplish that objective.⁹⁶ A governmental entity may use gender-based preferences “only if members of the gender benefited by the classification actually suffered a disadvantage related to the classification.”⁹⁷

According to the Court of Appeals, unlike the strict standard of review applied to race-based programs, intermediate scrutiny does not require any showing of governmental involvement, active or passive, in the discrimination it seeks to remedy.⁹⁸ The court concluded that King County had legitimate and important interests in remedying the many disadvantages that confronted women business owners.⁹⁹ Further, the means chosen were substantially related to the objective.¹⁰⁰ The court determined there was adequate evidence to show discrimination against women in King County after reviewing an affidavit from a woman business owner detailing that less than seven percent of her firm’s business came from private contracts with the majority coming from gender-based set-aside programs.¹⁰¹

The Ninth Circuit revisited this issue in *Western States Paving v. Washington State*,¹⁰² where it essentially applied the intermediate scrutiny standard to gender discrimination.¹⁰³ The court determined that conducting a separate analysis for sex discrimination under intermediate scrutiny was not necessary: “in this case, intermediate scrutiny would not yield a different result than that obtained under strict scrutiny’s more stringent standard.”¹⁰⁴

The U.S. Court of Appeals for the Third Circuit noted that the Supreme Court’s gender discrimination cases are inconclusive and that the Supreme Court has never squarely ruled on the necessity of statistical evidence in gender discrimination cases.¹⁰⁵ However, the Court of Appeals found that the City of Philadelphia, in *Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia*, must be able to rely on less evidence in enacting

⁹² See, for example, *City of Cleburne, Texas v. Cleburne Living Center*, 473 U.S. 432, 440-441 (1985).

⁹³ *Id.* at 441. See also *Associated General Contractors of America, Inc. v. California Department of Transportation (Caltrans)*, 713 F.3d 1187, 1195 (Ninth Cir. 2013); *Western States Paving*, 407 F.3d at 990 n. 6; *Coral Construction Co. v. King County*, 941 F.2d at 931-932 (Ninth Cir. 1991); *Engineering Contractors Association*, 122 F.3d at 905, 908, 910; *U.S. v. Virginia*, 518 U.S. 515, 532 and n. 6 (1996) (“exceedingly persuasive justification”).

⁹⁴ *Coral Construction Company v. King County*, 941 F.2d 910 (Ninth Cir. 1991).

⁹⁵ See *Coral Construction Company v. King County*, 941 F.2d 910, 931 (Ninth Cir. 1991); *Contractors Association Eastern Pennsylvania, Inc. v. City of Philadelphia*, 6 F.3d 990 (3rd Cir. 1993). The Sixth Circuit Court of Appeals employed the intermediate scrutiny review in *Michigan Road Builders Association v. Milliken*, 834 F. 2d 583 (6th Cir. 1987), *aff’d* 49 U.S. 1061 (1989). However, after *Croson*, the Sixth Circuit seemingly applied a strict scrutiny test when considering a gender-based affirmative action program.

⁹⁶ *Coral Construction*, 941 F.2d at 931.

⁹⁷ *Id.* at 931.

⁹⁸ *Id.* at 932.

⁹⁹ *Coral Construction*, 941 F.2d at 932.

¹⁰⁰ *Id.*

¹⁰¹ *Id.* at 932-933. In *Construction Association of Eastern Pennsylvania, Inc. v. City of Philadelphia*, *supra* n. 76, the Court of Appeals for the Third Circuit also applied the intermediate standard to a gender-based preference program.

¹⁰² *Western States Paving v. Washington State*, 407 F.3d 983 (Ninth Cir. 2005).

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ *Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia*, 6 F.3d 990, 1010 (3rd Cir. 1993).

a gender preference than a racial preference, because the intermediate scrutiny standard is less stringent than the strict scrutiny test applied in *Croson*.¹⁰⁶

The City of Philadelphia, in support of its gender preference program for construction, as described in *Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia*, relied on general statistics and one affidavit from a woman in the catering business.¹⁰⁷ Because there was not a disparity index for women-owned construction businesses in the Philadelphia market, and given the absence of anecdotal evidence establishing discrimination in the construction industry in the Philadelphia market, the Court of Appeals affirmed the grant of summary judgment to the Contractors Association, invalidating the City of Philadelphia's gender preference for construction contracts.¹⁰⁸

In *Engineering Contractors Association of South Florida Inc. v. Metropolitan Dade County (Engineering Contractors)*, the 11th Circuit U.S. Court of Appeals held that the intermediate scrutiny standard remains the applicable constitutional standard in gender discrimination cases.¹⁰⁹ The level of evidence that is sufficient to meet the intermediate scrutiny test is "one of degree, not of kind."¹¹⁰ This test requires less evidence than a race-conscious constitutional review.¹¹¹ The 11th Circuit U.S. Court of Appeals, however, noted that the difficulty in determining the adequacy of evidence in gender-conscious cases is determining how much evidence is permissible.¹¹² In an attempt to resolve this issue, the 11th Circuit looked to the Third Circuit U.S. Court of Appeals' review of the City of Philadelphia's gender-conscious program in *Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia* for guidance and applied the same analysis to its review of the Dade County WBE program.¹¹³

Citing case law from other jurisdictions, the Fourth Circuit U.S. Court of Appeals, in *HB Rowe Co., Inc. v. Tippet*,¹¹⁴ also adopted the intermediate scrutiny standard for gender. The court recognized that the showing of evidence was lower than the strict scrutiny standard that requires a strong basis in evidence. The Fourth Circuit defined:

what constitutes "something less" than a "strong basis in evidence," the courts, though diverging in their choice of words, also agree that the party defending the statute must "present sufficient probative evidence in support of its stated rationale for enacting a gender preference, i.e., ... the evidence [must be] sufficient to show that the preference rests on evidence-informed analysis rather than on stereotypical generalizations." *Engineering Contractors*, 122 F.3d at 910; *Concrete Works*, 321 F.3d at 959 ("[T]he gender-based measures ... [must be] based on 'reasoned analysis rather than [on] the mechanical application of traditional, often inaccurate, assumptions.'" [quoting *Hogan*, 458 U.S. at 726, 102 S.Ct. 3331]; *Contractors Association I*, 6 F.3d at 1010; *Coral Construction*, 941 F.2d at 932; see also *Mich. Rd. Builders Association, Inc. v. Milliken*, 834 F.2d 583, 595 (6th Cir. 1987)).¹¹⁵

¹⁰⁶ *Id.* Another example of this double standard was in *RGW Construction v. San Francisco BART*, Case No. C92-2938 TEH (N.D. CA). In this case, an injunction was issued against the race-conscious but not the gender-conscious program area of BART's DBE program for non-federally funded contracts because of the lack of a factual predicate for the program. The injunction was later partially lifted based on evidence in two disparity studies in counties where BART operated.

¹⁰⁷ *Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia*, 6 F.3d 990 at 1010.

¹⁰⁸ *Id.* at 1010-1011.

¹⁰⁹ *Engineering Contractors Association of South Florida Inc. v. Metropolitan Dade County*, 122 F.3d 895 (11th Cir. 1997).

¹¹⁰ *Id.* at 909.

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ *Id.* at 909-910.

¹¹⁴ *HB Rowe Co., Inc. v. Tippet*, 615 F.3d 233 (4th Cir. 2010).

¹¹⁵ *Id.* at 242.

5. Rationally Related Standard of Scrutiny

Race-neutral economic development and local business programs are evaluated under the rationally related test.¹¹⁶ That is, a legitimate state interest must exist, and the means employed to further the interest must be rationally related to the legislation's purpose.¹¹⁷

In the 1987 case of *Associated General Contractors of California Inc. v. City and County of San Francisco*,¹¹⁸ in reviewing the City's Local Business Enterprise (LBE) preference, the Ninth Circuit U.S. Court of Appeals held that the City of San Francisco had a legitimate governmental interest in encouraging businesses to locate and remain in the City.¹¹⁹ The court stated that the City "may rationally allocate its own funds to ameliorate disadvantages suffered by local business, particularly where the city itself creates some of the disadvantages."¹²⁰ Two factors were used to substantiate the City's legitimate governmental interest. First, the court noted the higher administrative costs of doing business within the City, such as higher rents, taxes and wages, incurred by local businesses.¹²¹ Second, the court noted that the public interest was best served by encouraging businesses to be located within the City.¹²² The court also noted that foreign businesses could be LBEs by acquiring offices within the City and paying permit and license fees from a City address.¹²³

In *Gary Concrete Products, Inc. v. Riley*¹²⁴ the Supreme Court of South Carolina held that an LBE bid preference was constitutional, as South Carolina has a legitimate interest in directing the benefits of its purchases to its citizens.¹²⁵ The Supreme Court of South Carolina concluded that bid preferences for residents encourage local industry, which increases the tax base and helps the state economy.¹²⁶ The statute was held to be rationally related to the legitimate interest of supporting the state's economy, even though non-residents could qualify for the preference if they maintain an office in the state, as well as a representative inventory, and pay all assessed taxes.¹²⁷

In *CS-360, LLC v. U.S. Department of Veterans Affairs*,¹²⁸ the U.S. District Court for the District of Columbia upheld the Veteran Administration's denial of CS-360's application for verification as a Service-Disabled Veteran-Owned Business because CS-360 worked closely with a non-service-disabled Veteran company and the Administration wanted to contract with service-disabled veterans.¹²⁹ The court found that the standard of law was very "deferential" and that the decision was not "arbitrary or capricious, unsupported by substantial evidence or otherwise contrary to law."¹³⁰ The court further found that, using the established legal standard, there was a "rational connection between the facts found and the choice made."¹³¹

¹¹⁶ See, for example, *City of New Orleans v. Dukes*, 427 U.S. 297, 303 (1976).

¹¹⁷ *Id.*

¹¹⁸ *Associated General Contractors of California Inc. v. City and County of San Francisco*, 813 F. 2d 922 (Ninth Cir. 1987).

¹¹⁹ *Id.* at 943.

¹²⁰ *Id.* at 943.

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.* at 943-944.

¹²⁴ *Gary Concrete Products v. Riley*, 331 S.E.2d 335 (1985).

¹²⁵ *Gary Concrete Products*, 331 S.E.2d at 339.

¹²⁶ *Id.*

¹²⁷ *Id.*

¹²⁸ *CS-360, LLC v. U.S. Department of Veterans Affairs*, 101 F. Supp. 3d 29, 32-33 (D. Ct. DC 2015).

¹²⁹ *Id.* at 32-34.

¹³⁰ *Id.* at 35.

¹³¹ *Id.* at 33.

6. Burden of Proof

Under the *Croson* strict scrutiny analysis, the governmental entity has the initial burden of showing that there was a “strong basis in evidence” supporting its race-conscious program.¹³² This evidentiary burden is met by satisfying *Croson*’s two-pronged test of showing both a compelling governmental interest and narrow tailoring.¹³³ *Croson* established that a factual predicate consisting of statistically significant disparity and anecdotal interviews was important to show a compelling governmental interest in enacting race-conscious remedial contracting programs.¹³⁴ Several lower courts have since held that disparity studies are important to establishing the factual predicate that supports *Croson*’s two-pronged test.¹³⁵

Once the governmental entity has met the *Croson* two-pronged test, the burden of proof shifts to the plaintiff to rebut the showing.¹³⁶ The plaintiff cannot simply state that the evidence submitted by the governmental entity is insufficient or flawed. According to the 11th Circuit, the plaintiff has the ultimate burden of persuading the court that the defendant’s evidence “did not support an inference of prior discrimination and thus a remedial purpose, or that the plan instituted on the basis of this evidence was not sufficiently ‘narrowly tailored.’”¹³⁷ The court stated that the plaintiff could rebut the inference of discrimination with a neutral explanation by showing that the government’s statistics were flawed, that the disparities are not significant or actionable, or by presenting contrasting data.¹³⁸

In *Rowe v. Tippet*, the Fourth Circuit held that:

Those challenging race-based remedial measures must “introduce credible, particularized evidence to rebut” the state’s showing of a strong basis in evidence for the necessity for remedial action. See *Concrete Works of Colorado v. City & County of Denver (Concrete Works III)*, 321 F.3d 950, 959 (10th Cir. 2003) [internal quotation marks omitted]. Challengers may offer a neutral explanation for the state’s evidence, present contrasting statistical data, or demonstrate that the evidence is flawed, insignificant, or not actionable. See *Engineering Contractors*, 122 F.3d at 916; *Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia*, 6 F.3d 990, 1007 (3d Cir. 1993) (*Contractors Association I*); *Coral Construction Company v. King County*, 941 F.2d 910, 921 (Ninth Cir. 1991). However, mere speculation that the state’s evidence is insufficient or methodologically flawed does not suffice to rebut a state’s showing. See *Concrete Works III*, 321 F.3d 950 at 991.¹³⁹

2.2.2 Judicial Review of Croson Cases in the Fourth Circuit

The following is a summary of cases in the Fourth Circuit that have considered the constitutional permissibility of M/WBE programs.

¹³² See *Croson*, 488 U.S. at 500.

¹³³ See *Croson*, 488 U.S. at 485-486.

¹³⁴ See *Croson*, 488 U.S. at 509.

¹³⁵ See *Associated General Contractors of America, Inc. v. California Department of Transportation (Caltrans)*, 713 F.3d at 1195-1200; *Concrete Works of Colorado, Inc. v. City and County of Denver (Concrete Works II)*, 36 F.3d 1513, 1522 (10th Cir. 1994).

¹³⁶ *Engineering Contractors Association of South Florida Inc. v. Metropolitan Dade County*, 122 F.3d 895, 916 (11th Cir. 1997).

¹³⁷ *Engineering Contractors Association*, 122 F.3d at 916.

¹³⁸ *Id.*

¹³⁹ *HB Rowe Co., Inc. v. Tippet*, 615 F.3d 233, 241-242, (4th Cir. 2010).

Maryland Highways Contractors Association, Inc. v. State of Maryland

In *Maryland Highways Contractors Association, Inc. v. State of Maryland*,¹⁴⁰ the Maryland Highways Contractors' Association sought declaratory and injunctive relief against the State of Maryland, alleging that Maryland's MBE statute violated the constitutional rights of its membership.

The history of the Maryland statute is as follows. In 1978, the state legislature adopted an MBE statute designed to provide certified MBEs with a "fair share of contracts." In 1988, the state established a 10 percent goal for the Interagency Committee on School Construction, the Maryland Food Center Authority, the Maryland Stadium Authority, and the University of Maryland System. The Maryland DOT was to achieve the same goal on contracts of \$100,000 or more. In July 1990, in response to a district court ruling and the U.S. Supreme Court's *City of Richmond v. Croson* decision, the State of Maryland commissioned a Minority Business Utilization Study. As a result, the legislature repealed the existing MBE statute and replaced it with a new statute covering American Indians, Asians, Blacks, Hispanics, women, and physically or mentally disabled individuals.¹⁴¹

As a consequence of the repeal of the existing statute, the case brought by the Maryland Highways Contractors Association was rendered moot by the Fourth Circuit.¹⁴² Because the Court of Appeals believed that another case would probably ensue, it nevertheless addressed the issue of standing, finding that the Association had no standing to sue in its own right, as the Association had not alleged a sufficient personal stake in the outcome of the matter to warrant its invocation of federal court jurisdiction.¹⁴³ The court went on to determine whether the Association had representational standing, which is determined by a three-pronged test established in *Hunt v. Washington State Apple Advertising Commission*.¹⁴⁴

- Its own members would have standing to sue in their own right;
- The interests the organization seeks to protect are germane to the organization's purpose; and,
- Neither the claim, nor the relief sought, requires the participation of individual members in the lawsuit.¹⁴⁵

The court found that the Association did not meet the first prong of the test, as the mere passing mention of economic harm in a letter of questionable reliability was not enough evidence that any member suffered an injury. The court also found that the Association did not meet the third prong of the test, as the membership, which included some MBEs, had conflicting interests, which would require individual members to enter the lawsuit to protect their interests. This was buttressed by the secrecy under which the Board of the Association, which included no MBEs, determined to bring this lawsuit, announcing the intent to litigate after the suit had already been filed.¹⁴⁶

Concrete General, Inc. v. Washington Suburban Sanitary Commission

Concrete General, Inc. challenged the constitutionality of the Washington Suburban Sanitary Commission's (WSSC's) Minority Procurement Policy (MPP) in *Concrete General, Inc. v. Washington Suburban Sanitary Commission*.¹⁴⁷ WSSC is a state agency that regulates the construction, maintenance, and operation of the water

¹⁴⁰ *Maryland Highways Contractors Association, Inc. v. State of Maryland*, 933 F.2d 1246 (4th Cir. 1991).

¹⁴¹ *Maryland Highways Contractors Association*, 933 F.2d at 1249-1250.

¹⁴² *Id.*

¹⁴³ *Id.* at 1253.

¹⁴⁴ *Hunt v. Washington State Apple Advertising Commission*, 432 U.S. 333 (1977).

¹⁴⁵ *Maryland Highways Contractors Association*, 933 F.2d at 1252.

¹⁴⁶ *Id.* at 1253-1254.

¹⁴⁷ *Concrete General, Inc. v. Washington Suburban Sanitary Commission*, 779 F. Supp. 370 (D. Ct. Md. 1991).

supply, sewer, and drainage systems for the Washington Suburban Sanitary District, which is in Prince George's County and Montgomery County, Maryland. WSSC adopted a resolution in 1978 pledging to support the increased participation of MBEs in contracting opportunities. This was in response to a fact-finding mission that concluded that MBEs were not winning many contracts. In 1985, the WSSC established goals for MBEs at 25 percent of total dollar value of all procurements awarded each year, based on additional evidence not outlined in this case. In 1987, the MPP was revised to set out six different procedures that could be used to increase MBE participation:

- Require at least 10 percent of the total contract value to be awarded to MBE subcontractors;
- Require the award of the contract to an MBE within 10 percent of the lowest bid;
- Require a procurement be restricted to MBEs only (restricted bidding procedure);
- Require that contracts be negotiated directly with one or more MBE firms;
- Waive or reduce bonding and/or insurance requirements for MBEs; and
- Waive corporate experience requirements for MBEs if the firm has at least one year's relevant corporate experience and the firm's principals have corporate experience.¹⁴⁸

MBEs were defined as an entity at least 51 percent owned and controlled by a Black, Hispanic, American Indian, Alaskan Native, Asian or Pacific Islander, female, or physically or mentally disabled person. The MPP had no geographical limitation.¹⁴⁹

Two roadway paving contracts came under question in this case. On Contract A, WSSC had determined to award the contract to an MBE within 10 percent of the lowest bid. Contract B would be restricted to MBEs only. Under Contract A, after internal disagreement on the award, the contract ultimately went to the lowest bidder. Under Contract B, the bid was awarded to the lowest-bidding MBE. Concrete General filed a bid protest, challenging the restricted bidding procedure.¹⁵⁰

Upon considering all of the evidence, the federal district court held that "WSSC exceeded the scope of its legislative authority when it enacted the MPP's restricted bidding provision."¹⁵¹ The district court explained that the establishment of the MPP was not "proper and necessary" for the WSSC to carry out its duties of regulating the construction, operation, and maintenance of the water supply.¹⁵² Further, the court found that no evidence presented suggested that the Maryland General Assembly had ever anticipated that WSSC would assess MBE participation in its contracting opportunities. Such a delegation generally has been done by the legislature through a grant of specific legislative authority. A suggestion of implied authority goes too far, according to the court.¹⁵³

The district court also held that the program was unconstitutional under the *Croson* framework. First, under the compelling governmental interest test, the court held that WSSC had submitted the type of evidence anticipated by *Croson*. WSSC provided Procurement Department Activity Reports that showed a comparison of bidders on its bid list to firms that received contracts. However, because Concrete General challenged the statistical

¹⁴⁸ *Concrete General, Inc. v. Washington Suburban Sanitary Commission*, 779 F. Supp. 370 at 372-373.

¹⁴⁹ *Id.* at 372.

¹⁵⁰ *Id.* at 372-373.

¹⁵¹ *Id.* at 374.

¹⁵² *Id.* at 376.

¹⁵³ *Id.*

findings, the court found “the issue to be a disputed question of fact, which cannot be resolved within the summary judgment context.”¹⁵⁴

Furthermore, the court held that, even if WSSC met the compelling governmental interest test, it did not meet the narrow tailoring test. Under the narrow tailoring test, the district court found that the MPP was over-inclusive, as it applied to racial and ethnic groups for which it had no evidence of discrimination. Based on data collected by WSSC, it could only justify supporting African Americans. Further, the MPP lacked a geographical limitation, allowing firms coverage from outside of Prince George’s and Montgomery Counties.¹⁵⁵

Lastly, the court found that WSSC had not considered race-neutral alternatives. The court outlined the following:

- The program permitted less drastic alternatives than the restricted bidding procedure that were not utilized or considered. “While the provisions relating to bonding, insurance, and corporate experience requirements are less intrusive than the restricted bidding procedure, no evidence exists to indicate whether, in this instance, WSSC considered using those provisions, or the less intrusive price-preference or subcontractor goal provisions of the MPP, before resorting to the most drastic method, the restricted bidding provision.”
- The MPP does not contain individualized waiver provisions or graduation and termination provisions. As such, the court considered the MPP not to be sufficiently flexible or temporary.
- The goal appears to relate to the overall population (20–25 percent), as opposed to the labor market (6.54 percent).¹⁵⁶

The court also noted that programs that focused on waiving bonding, insurance, and corporate experience requirements are considered race-conscious activity, if directed only to MBEs.¹⁵⁷

Maryland Minority Contractors Association, Inc. v. Maryland Stadium Authority

In *Maryland Minority Contractors Association, Inc. v. Maryland Stadium Authority*,¹⁵⁸ the Maryland Minority Contractors Association, Inc. (MMCA) and three of its members alleged civil rights violations under the Fourteenth Amendment as it relates to the Maryland Stadium Authority’s (MSA’s) procurement practices. Of the six claims alleged by MMCA, the federal district court dismissed three of the claims for lack of standing and three for failure to state a claim upon which relief could be granted. On the issue of the failure to state a claim, the court found the following:

- MMCA failed to state a claim of intentional discrimination in alleging that MSA’s prequalification requirements were discriminatory because they applied to particularly large MSA construction contracts for which many of its members may have been too small to comply and thus were discouraged from bidding. The MSA’s desire to determine those factors that ensure a contractor’s ability to perform are not, standing alone, a pretext for discrimination;¹⁵⁹
- MMCA’s claim that the Maryland MBE statute is unconstitutional is without merit. MMCA alleged that the statute was over-inclusive and was used as a pretext for discrimination against African American and

¹⁵⁴ *Concrete General, Inc. v. Washington Suburban Sanitary Commission*, 779 F. Supp. 370 at 378.

¹⁵⁵ *Id.* at 380-381.

¹⁵⁶ *Id.* at 381-383.

¹⁵⁷ *Id.* at 381.

¹⁵⁸ *Maryland Minority Contractors Association, Inc. v. Maryland Stadium Authority*, 70 F. Supp. 2d 580 (D. Ct. MD 1998).

¹⁵⁹ *Id.* at 591-592.

Hispanic contractors by granting contracts to firms owned by White women to meet the goals; further, the MMCA appears to be arguing that while the statute benefits them, MMCA should not have to share the benefits with women and other minorities;¹⁶⁰ and

- The claim that the statute has been administered as a pretext for discrimination by allowing White males to create fronts for their wives is not supported by any facts.¹⁶¹

Maryland Minority Contractors Association, Inc. v. Columbia Construction Company and Lynch, Cullen and Cook

The Maryland Department of General Services let an \$11.8 million renovation contract at Morgan State University with a goal of 20 percent of the value of the contract to be awarded to MBEs. Two members of the Maryland Minority Contractors Association, Inc. (MMCA), Colon and Jones, bid on the subcontracting opportunities but were not the low bidders. Colon's bid was \$108,430 higher than the nonminority low bidder on the first subcontract, and Jones' bid was \$40,000 higher than the low bidder on the second subcontract. The case did not identify the race or gender of the low bidder in the second subcontract. However, the Maryland Department of General Services found that the general contractor, Columbia Construction Company, had met the 20 percent goal.¹⁶²

in *Maryland Minority Contractors Association, Inc. v. Columbia Construction Company and Lynch, Cullen and Cook*, the MMCA challenged Columbia Construction Company and three officials of the Maryland Department of General Services.¹⁶³ The MMCA alleged violation of its civil rights. It argued that there was no compelling interest to include other minorities beyond African Americans and Hispanics in the state's goal program. Further MMCA argued that the goal program was erroneously enforced, as MBEs that "were not bona fide and legitimate MBEs" were used to meet the MBE goal. Columbia moved to dismiss, stating that it was not a state actor under Section 1983 or the Fourteenth Amendment and that the plaintiffs had failed to state a viable claim.¹⁶⁴

Based on these facts, the Fourth Circuit made the following findings:

- MMCA failed to show that Columbia was a state actor. No facts were submitted that show that Columbia was "under extensive state regulation or control or that Columbia had a sufficiently symbiotic relationship with Maryland to convert it into a state actor."¹⁶⁵
- The complaint did not have sufficient facts to support a claim under Section 1981, given that Jones and Colon could not show that they were "equivalent to, or relatively close to, the lowest bid."¹⁶⁶
- Jones and Colon did not state an injury that could be redressed. Jones and Colon conceded that they had no right to be awarded the subcontract but simply the right to bid. According to the court, they were permitted that right, and they were not the low bidder.¹⁶⁷

¹⁶⁰ *Id.* at 594-597.

¹⁶¹ *Id.*

¹⁶² *Minority Contractors Association, Inc. v. Columbia Construction Company and Lynch, Cullen and Cook*, Docket No. 98-2655 and Docket No. 99-1272, 2000 U.S. App. LEXIS 1636, pp. 3-4 (4th Cir. February 7, 2000) (unpublished).

¹⁶³ *Minority Contractors Association, Inc. v. Columbia Construction Company and Lynch, Cullen and Cook*, Docket No. 98-2655 and Docket No. 99-1272, 2000 U.S. App. LEXIS 1636, pp. 3-4 (4th Cir. February 7, 2000) (unpublished).

¹⁶⁴ *Id.* at 4

¹⁶⁵ *Id.* at 5-6.

¹⁶⁶ *Id.* at 6.

¹⁶⁷ *Id.* at 7.

- Even if they did show injury in fact, they have not shown sufficient facts to establish causation or the likelihood that the relief they requested would redress their injuries. In fact, the MBE goals made it easier for them to compete “by eliminating an entire class of potential bidders from competition for at least 20 percent of the value of the contract.”¹⁶⁸
- Given that Jones and Colon did not have standing, neither did MMCA.¹⁶⁹

Associated Utility Contractors of Maryland, Inc. v. The City of Baltimore¹⁷⁰

In 1986, the City of Baltimore implemented its first MBE Ordinance, which established goals of subcontracting 20 percent for MBEs and 3 percent for WBEs of the contract values for all City contracts. In response to *Croson*, the City Council sought to determine whether there was support for race-based and gender-based remedial action. Based on the findings of the City Council, a new ordinance was developed in 1990 that required the establishment of yearly set-asides by procurement type to be determined by the City’s Chief of Equal Opportunity Compliance and Contract Authorities.¹⁷¹ The yearly goals were to be based on the following:

- Existence and extent of past discrimination against M/WBEs in city contracting and the likelihood of continuing discrimination without a goal;
- The level of participation of M/WBEs on city contracts that contained M/WBE requirements;
- The level of participation of M/WBEs with other governmental agencies in the Baltimore area that used M/WBE requirements; and
- The availability and capacity of M/WBEs.¹⁷²
- The City then established “across-the-board set-aside goals of 20 percent MBE and 3 percent WBE for all city contracts with no variation by market. Thus, the record shows, without dispute, that the city simply readopted the 20 percent MBE and 3 percent WBE subcontractor participation goals from the prior law.”¹⁷³ The City did not dispute that: (1) it had not undertaken any disparity studies until the lawsuit, (2) it had not undertaken annual studies to support the implementation of its program, and (3) it had not collected data to permit any findings to support its goal program.¹⁷⁴

The Associated Utility Contractors of Maryland, Inc. challenged the constitutionality of the City of Baltimore’s 1990 MBE Ordinance in *Associated Utility Contractors of Maryland, Inc. v. The City of Baltimore*.¹⁷⁵ In 1999, the district court granted, in part, the Associated Utility Contractors’ motion for summary judgment resulting in an enjoinder of the program.¹⁷⁶ The federal district court denied, in part, the constitutionality of the ordinance, finding that there was a dispute of material fact as to whether the ordinance was supported by a factual record of discrimination warranting race- and gender-based remedial action. It made the following findings:

¹⁶⁸ *Id.*

¹⁶⁹ *Id.* at 8-9.

¹⁷⁰ *Associated Utility Contractors of Maryland, Inc. v. The City of Baltimore*, 83 F. Supp.2d 613 (D. Md. 2000).

¹⁷¹ *Associated Utility Contractors of Maryland, Inc. v. The City of Baltimore*, 83 F. Supp.2d 613, 614-615 (D. Md. 2000).

¹⁷² *Id.* at 615.

¹⁷³ *Id.*

¹⁷⁴ *Id.* at 615-616.

¹⁷⁵ *Id.* at 613.

¹⁷⁶ *Id.* at 614.

- *Croson* allows governments to eradicate and remedy private discrimination in private subcontracting “inherent in the letting of City construction contracts.”¹⁷⁷
- The Fourth Circuit interprets the compelling governmental interest test by a standard of a “strong basis in evidence” for any conclusion that remedial action is necessary.¹⁷⁸
- The “strong basis in evidence” test must be satisfied by pre-enactment evidence; post-enactment evidence can be considered in determining whether a program is narrowly tailored.¹⁷⁹

Accordingly, the district court further held that the city had considered no evidence in 1999 to support its set-aside goals of 20 percent and 3 percent, respectively. Any information considered in 1990 would not serve to justify goals 10 years later. Even though the city was in the process of conducting a disparity study, the city provided no precedent that stated that the court should wait until that study was completed before making a ruling. As such, the injunction remained in full effect.¹⁸⁰

Associated Utility Contractors of Maryland, Inc. v. The City of Baltimore¹⁸¹

Two years after the first case, Associated Utility Contractors of Maryland, Inc. (AUC) filed an action challenging the implementation of the new City of Baltimore affirmative action plan set forth in Baltimore City Ordinance 00-98. The city then filed a motion to dismiss AUC’s amended complaint, on the grounds that AUC did not have representational standing to challenge Ordinance 00-98.¹⁸²

The same federal district court judge as the earlier case, found that Ordinance 00-98 “differs in significant respects from the [c]ity’s prior affirmative action plan. Whereas under the prior ordinance, the [c]ity simply declared across-the-board set-aside percentages for all [c]ity public works contracts, the present affirmative action plan strives for a far more nuanced approach.”¹⁸³ In the first plan, the city set across-the-board set-aside percentages of 20 percent MBE and 3 percent WBE for all city public works contracts.¹⁸⁴ Under Ordinance 00-98, the City established goals on a contract-by-contract basis and took into consideration the following factors:

1. The availability in various industry classifications and professions of MBEs and WBEs that are qualified and willing to provide goods, expertise, and services on the particular contract;
2. The level of utilization of those firms in past contracts awarded by the city;
3. The contract specifications;
4. The adverse impact on non-MBEs and -WBEs; and
5. Any other relevant factors.¹⁸⁵

The judge found that because of the structure of Ordinance 00-98, any constitutional challenge would involve a very fact-intensive inquiry; as such, AUC could not demonstrate that its membership would be injured, particularly given that no specific company was joined with AUC.¹⁸⁶ The judge did find that the city’s Executive

¹⁷⁷ *Id.* at 619.

¹⁷⁸ *Id.*

¹⁷⁹ *Associated Utility Contractors of Maryland, Inc. v. The City of Baltimore*, 83 F. Supp.2d 613, 620-621 (D. Md. 2000).

¹⁸⁰ *Id.* at 621-622.

¹⁸¹ *Associated Utility Contractors of Maryland, Inc. v. The City of Baltimore*, 218 F. Supp.2d 749 (D. Md. 2002).

¹⁸² *Id.*

¹⁸³ *Id.* at 751.

¹⁸⁴ *Id.*

¹⁸⁵ *Id.* at 752.

¹⁸⁶ *Associated Utility Contractors of Maryland, Inc. v. The City of Baltimore*, 218 F. Supp.2d 749, 755 (D. Md. 2002).

Order requiring 35 percent participation of all city contracting dollars to minority-owned and women-owned businesses on development projects suffered the same flaws as the first affirmative action plan, despite having no enforcement mechanisms.¹⁸⁷ However, since AUC would have to demonstrate that the city had actually applied the Executive Order as it alleged, the judge determined that the City's motion to dismiss was not the appropriate manner to resolve this issue.¹⁸⁸ Accordingly, the City's motion to dismiss was denied and the case moved forward to make a factual determination as to whether the ordinance and Executive Order would pass constitutional muster under the Equal Protection Clause and survive a strict scrutiny analysis.¹⁸⁹

HB Rowe Co., Inc. v. Tippet¹⁹⁰

MGT of America (MGT), commissioned by the North Carolina General Assembly, performed a disparity study in 1998 that concluded that minority and women subcontractors remained underutilized in state-funded road construction.¹⁹¹

In 2002, HB Rowe Co., Inc. (HB Rowe) submitted the lowest bid for a road relocation project in Iredell County, North Carolina.¹⁹² Its bid included 6.6 percent WBE subcontractor participation and 0 percent participation for MBEs. The North Carolina Department of Transportation (NCDOT) participation goals were 10 percent for minority subcontracting firms and 5 percent for women subcontracting firms. HB Rowe's bid was rejected in favor of a bidder whose higher bid included 9.3 percent WBE subcontractor participation and 3.3 percent MBE subcontractor participation.¹⁹³ NCDOT found that HB Rowe failed to demonstrate "good faith" efforts to achieve the minority participation goals as its bid contained discrepancies as to the number of MBEs solicited, failed to adequately solicit MBEs, failed to adequately describe the subcontractor work that was available for the project, and included no discernible strategy to meet the state's minority participation goals.¹⁹⁴ HB Rowe's appeal to the State Highway Administrator was denied, and the litigation followed.¹⁹⁵

In 2003, HB Rowe sought declaratory relief that the program at issue was invalid under the Equal Protection Clause of the Fourteenth Amendment, sought injunctive relief against the continued use of the program, and sought damages.¹⁹⁶

By 2004, the State had commissioned its third study from MGT as to the utilization of subcontractors in the North Carolina highway construction industry. That study highlighted the continued underutilization of MBEs. As a result of the study, the General Assembly modified its relevant M/WBE statute, with the amended statute codified in 2006.¹⁹⁷ The new law modified the previous law by:

1. Conditioning the implementation of any participation goals on the findings of the 2004 study;
2. Eliminating the previous statute's 5 and 10 percent annual participation goals for women and minority subcontracting firms, respectively, and changing to establish aspirational goals for overall participation in contracts by disadvantaged minority-owned and women-owned businesses, as well as contract-

¹⁸⁷ *Id.* at 757.

¹⁸⁸ *Id.* at 758.

¹⁸⁹ *Id.* at 758.

¹⁹⁰ *HB Rowe Co., Inc. v. Tippet*, 615 F.3d 233 (4th Cir. 2010).

¹⁹¹ *Id.* at 237.

¹⁹² *Id.*

¹⁹³ *Id.*

¹⁹⁴ *Id.* at 238.

¹⁹⁵ *Id.*

¹⁹⁶ *Id.*

¹⁹⁷ *Id.*

specific goals or project specific goals for each disadvantaged minority-owned and women-owned business group that has demonstrated significant disparity;

3. Narrowing the definition of “minority” to include only those found to have suffered discrimination as per the study;
4. Requiring NCDOT to reevaluate the program over time and respond as necessary; and
5. Including a sunset provision with the program set to expire in 2009 (subsequently extended to August 31, 2010).¹⁹⁸

The State of North Carolina argued that no relief was appropriate as the amended law purportedly mooted HB Rowe’s claims. The federal district court disagreed, holding that the amended law did not moot HB Rowe’s claim regarding the alleged “use of remedial race- and gender-based preferences without valid evidence of past racial and gender discrimination.” However, the federal district court ultimately did dismiss many of the claims against the individual defendants and, after much discovery and a four-day bench trial, found that the State of North Carolina’s M/WBE program was constitutional in all regards.¹⁹⁹

The 2004 MGT study found that African Americans and Native Americans were markedly underutilized as subcontractors in state-funded construction contracts. Women subcontractors were found to be overutilized. The study also found that, on average, nonminority male subcontractors won more valuable subcontracts than minority and women subcontractors. The study further found that minority or women ownership universally had a more negative effect on a firm’s gross revenues out of factors such as company age, number of full-time employees, the owners’ years of experience, and the owners’ level of education.²⁰⁰

HB Rowe argued that the 2004 study’s use of vendor data, as opposed to bidder data, weakened the study’s findings and that prime contractors should assess subcontractor qualifications.²⁰¹ The district court held that “neither Rowe nor its expert has demonstrated that the vendor data used in the 2004 study was unreliable, or that bidder data would have yielded less support for the conclusions reached.”²⁰² As such, Rowe had not shown that the 2004 study’s availability analysis was inadequate and had not provided an alternative, citing *Concrete Works*, 321 F. 3d at 991, that a challenger “cannot meet its burden of proof through conjecture and unsupported criticisms of [the state’s] evidence.”²⁰³

HB Rowe also argued that as the 2004 study showed African American subcontractors were 16.45 percent of the available pool for NCDOT projects and represented 14.9 percent of the firms participating in NCDOT subcontracts, this was evidence disproving discrimination.²⁰⁴ The State, however, argued that “the number of minority subcontractors working on state-funded projects does not effectively rebut the evidence of discrimination in terms of subcontracting dollars,”²⁰⁵ noting the evidence that prime contractors have used minority subcontractors on low-dollar work just to comply with the State’s participation goals. The State further rebutted Rowe’s argument by presenting evidence that MBEs had the capacity to perform higher-value work (by dollar). The State also argued that during a suspension of the program, from 1991 to 1993, M/WBE subcontractors were awarded “substantially fewer subcontracting dollars” while “the share of subcontracting

¹⁹⁸ *Id.* at 238-239.

¹⁹⁹ *Id.* at 240.

²⁰⁰ *Id.* at 245-246.

²⁰¹ *Id.* at 246.

²⁰² *Id.*

²⁰³ *Id.*

²⁰⁴ *Id.* at 247.

²⁰⁵ *Id.*

dollars awarded to non-minority male subcontractors increased.”²⁰⁶ The Fourth Circuit found the State of North Carolina’s arguments compelling, particularly the nearly 38 percent decline in the total amount of subcontracting dollars awarded to minority and women subcontractors during the program’s two-year suspension.²⁰⁷

The district court also considered anecdotal evidence presented by the State of North Carolina, including a telephone survey, personal interviews and focus groups that discussed, inter alia an informal “good old boy” network (corroborated by almost half of the nonminority male respondents) of White contractors; double standards as to qualifications and performance; a view of M/WBE firms being less competent than nonminority firms; nonminority firms changing their bids when M/WBE participation is not required; M/WBE subcontracting firms being dropped after contract awards; and unfair treatment by prime contractors.²⁰⁸ HB Rowe argued that this anecdotal evidence was not verified, that the anecdotal evidence oversampled the MBE community, and that many MBEs reported positive experiences with prime contractors.²⁰⁹

The district court held the State of North Carolina’s M/WBE program to be valid under the Equal Protection Clause of the Fourteenth Amendment, finding that the 2004 study identified the underutilization of MBE subcontractors by prime contractors on state-funded highway projects; the General Assembly relied on the evidence of a nearly 38 percent decline in the total amount of subcontracting dollars awarded to minority and women subcontractors during the earlier program suspension; that anecdotal information in the 2004 study supplemented the 2004 study’s data-based conclusions with respect to the underutilization of MBE subcontractors on state-funded highway projects; and that the average contracts awarded to WBEs are significantly smaller than those awarded to other subcontractors.

After the federal district court found the program to be valid in all regards and denied HB Rowe’s requests for relief, HB Rowe appealed the decision to the Fourth Circuit U.S. Court of Appeals.²¹⁰

Upon review, the Fourth Circuit affirmed in part, reversed in part, and remanded the case for further review.

In its “strict scrutiny” analysis, the Fourth Circuit found that the State of North Carolina presented a “strong basis in evidence” for its conclusion that minority participation goals were necessary to remedy discrimination against African American and Native American subcontractors but not for Hispanic American and Asian American subcontractors.²¹¹

The Fourth Circuit found the MGT study-based disparities for these groups to be statistically significant and that this was bolstered by regression analysis that demonstrated African American ownership correlated with a significant and negative impact on firm revenue. The Fourth Circuit also noted the decline in the utilization of MBEs during the earlier two-year program suspension.²¹²

The Fourth Circuit also noted that the State of North Carolina supplied anecdotal evidence that supplemented the statistical data evidencing a significant disparity between the availability of qualified African American and Native American subcontractors and the amount of subcontracting dollars awarded to such firms on state-funded highway projects. As to the anecdotal evidence presented, the Fourth Circuit found that the various concerns expressed by MBEs, *supra*, indicated that “racial discrimination is a critical factor underlying the gross statistical disparities presented in the 2004 study.” In finding a compelling governmental interest, the Fourth

²⁰⁶ *Id.*

²⁰⁷ *Id.* at 248.

²⁰⁸ *Id.* at 248-249.

²⁰⁹ *Id.* at 249.

²¹⁰ *Id.* at 249.

²¹¹ *Id.* at 250.

²¹² *Id.*

Circuit held that “the State [of North Carolina] ... presented substantial statistical evidence of gross disparity, corroborated by disturbing anecdotal evidence.”²¹³

As to “narrow tailoring,” the Fourth Circuit found that the 2004 study detailed numerous alternative race-neutral measures that have been used by the State of North Carolina and were aimed to aid small or otherwise disadvantaged businesses in North Carolina, including the Small Business Enterprise program that permitted NCDOT to waive bonding and licensing requirements for highway construction contracts of \$500,000 or less. It also found that NCDOT contracted for support services to aid small businesses in such areas as bookkeeping and accounting, taxes, marketing, bidding, and other aspects of business development.²¹⁴ The Fourth Circuit found that despite these race-neutral measures, disparities persisted in the use of qualified African American and Native American subcontractors on state-funded highway projects in North Carolina. The Fourth Circuit also found the program, as it applied to African American and Native American firms, to be “narrowly tailored” because it had a sunset provision and because it required a new disparity study every five years.²¹⁵ The Fourth Circuit also noted that the participation goals were determined on a project-by-project basis, and that there were certain contracts let with 0 percent MBE participation and that the program provides for waiver of participation goals with demonstrated good faith efforts (as of July 2003, only 13 of 878 good faith submissions failed to demonstrate good faith efforts).²¹⁶

The Fourth Circuit found the program to be narrowly tailored as to African American and Native American subcontractors.²¹⁷

Turning to the intermediate scrutiny analysis required for review of gender-based preferences, the Fourth Circuit found that the overutilization of WBEs as evidenced by the statistical analysis included in the 2004 MGT study, and corroborated by the fact that the State of North Carolina failed to provide anecdotal evidence that WBE subcontractors that had successfully bid on state highway projects faced any private sector discrimination, meant that the State of North Carolina failed to present sufficient evidence of an important governmental interest to support any WBE preferences as to goal setting within the program.²¹⁸

The Fourth Circuit thus upheld the program on its face; upheld the program as to its application to African American and Native American subcontractors; reversed the district court as to the lower court’s ruling that the application of the program to WBEs and Asian American and Hispanic American subcontractors was constitutional;²¹⁹ and remanded the case to the district court to fashion a remedy consistent with the Fourth Circuit’s opinion.²²⁰

State of North Carolina MBE Statute, §143-128.2

The State of North Carolina requires a 10% verifiable MBE goal on the total value of work for each State building project, including those completed by a private entity on a facility to be leased or purchased by the State.²²¹ Similarly, a local government or other public or private entity that receives State appropriations for building

²¹³ *Id.* at 251.

²¹⁴ *Id.* at 252.

²¹⁵ *Id.* at 253.

²¹⁶ *Id.* at 253-254.

²¹⁷ *Id.* at 254.

²¹⁸ *Id.* at 254-256.

²¹⁹ In determining the unconstitutionality of the program for Asian American and Hispanic American subcontractors, the Fourth Circuit, in discussing compelling governmental interest, stated: “In sum, the State has met its burden of producing a ‘strong basis in evidence’ for its conclusion that minority participation goals were necessary to remedy discrimination against African American and Native American (but not Asian American or Hispanic American) subcontractors.” *Id.* at 251.

²²⁰ *Id.* at 258.

²²¹ §143-128.2(a)

projects is to establish a 10% verifiable goal when project cost is \$100,000 or more.²²² The local government may apply a different goal if that goal was adopted prior to December 1, 2001 and there is a continuing strong basis in evidence to justify the use of the goal.

Public entities subject to this statute are to make good faith efforts to recruit minority participation in accordance with this section or G.S. 143-131(b).²²³ The public entity shall establish good faith efforts requirements prior to the solicitation of bids.

First-tier subcontractors under a construction management at-risk project must comply with these good faith efforts requirements. Each bidder must identify the MBEs that it will use, the total dollar value of the bids to be performed by MBEs, and a list of good faith efforts it made. If the bidder intends to perform the scope of work with their own workforce, the bidder must provide an affidavit to that effect with its bid.²²⁴

The apparent lowest responsible and responsive bidder is required to file an affidavit that provides a description of the portion of work to be performed by MBEs, expressed as a percentage of the total contract price and is equal to or greater than the applicable goal. This affidavit will provide a presumption of good faith efforts.²²⁵ If the goal is not met, then the bidder must provide documentation that reflects evidence of its good faith efforts to meet the goal. This documentation must include any advertisements, solicitations, and evidence of other actions reflecting recruitment and selection of MBEs to participate on the contract. All subcontractors that the contractor will use on the contract must be provided to the applicable public entity within 30 days after award of the contract. Failure to provide the required affidavit or the other appropriate documentation can lead to bid rejection.²²⁶

Subcontractors identified and listed on a bidder's bid cannot be replaced with a different subcontractor unless the subcontractor's bid is later deemed to be nonresponsive or nonresponsive; the subcontractor refuses to enter a contract for complete performance of the work; or the public entity provides approval the removal of the subcontractor upon good cause shown. Good faith efforts apply to the substitution of a subcontractor. Prior to substituting, the contractor has to identify the substitute subcontractor and inform the public entity of its good faith efforts.²²⁷

Public entities are required to take the following actions before awarding a contract that is subject to the requirements of G.S. 143-128.2:

- Develop and implement an MBE participation outreach plan to identify minority businesses that can perform public building projects and to implement outreach efforts to encourage MBE participation in these projects that include education, recruitment, and interaction between MBEs and non-MBEs.
- Attend scheduled pre-bid conferences.

²²² *Id.*

²²³ §143-128.2 (b) All public entities shall solicit minority participation in contracts for the erection, construction, alteration, or repair of any building awarded pursuant to this section. The public entity shall maintain a record of contractors solicited and shall document efforts to recruit minority business participation in those contracts. Nothing in this section shall be construed to require formal advertisement of bids. All data, including the type of project, total dollar value of the project, dollar value of minority business participation on each project, and documentation of efforts to recruit minority participation, shall be reported to the Department of Administration, Office for Historically Underutilized Business, upon the completion of the project. (1931, c. 338, s. 2; 1957, c. 862, s. 5; 1959, c. 406; 1963, c. 172; 1967, c. 860; 1971, c. 593; 1981, c. 719, s. 1; 1987 (Reg. Sess., 1988), c. 1108, s. 6; 1997-174, s. 5; 2001-496, s. 5.1; 2005-227, s. 2.)

²²⁴ §143-128.2 (c)

²²⁵ §143-128.2 (c)(1)

²²⁶ §143-128.2 (c)(1a)-2

²²⁷ §143-128.2 (d)

- Notify MBEs that have requested notices of public construction or repair work at least 10 days prior to scheduled bid opening. Notification shall include a description of the work; the date, time, and location where bids are to be submitted; the name of the individual within the public entity that can answer questions about the project; where bid documents may be reviewed; and any special requirements that may exist.
- Utilize other media likely to inform potential MBEs of the bid being sought.²²⁸

Public entities also must require bidders to make good faith efforts to include the following:

1. Contacting MBEs that could submit a quote and that either are known to the contractor or are on State or local maintained government lists at least 10 days before bid or proposal due date and notifying them of the nature and scope of work.
2. Making construction plans, specifications, and requirements available for review by prospective MBEs or providing them with these documents at least 10 days before bid or proposals are due.
3. Breaking down or combining elements of work into economically feasible units.
4. Working with minority trade, community, or contractor organizations identified by the State's Office of Historically Underutilized Business and included in bid documents as aiding in recruitment of minority businesses.
5. Attending pre-bid meetings scheduled by public entity.
6. Aiding in getting required bonding or insurance for subcontractors or providing alternatives to bonding and insurance for subcontractors.
7. Negotiating in good faith with interested MBEs and not rejecting them as unqualified without sound reasons based on their capabilities. Any determination of lack of qualifications should be in writing.
8. Aiding qualified MBEs in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisting MBEs to obtain the same unit pricing with the bidder's suppliers to help MBEs with establishing credit.
9. Negotiating joint venture and partnership arrangements with MBEs to increase opportunities for MBE participation on public construction or repair projects when possible.
10. Providing quick pay agreements and policies to enable MBE contractors and suppliers to meet cash-flow demands.

The Secretary is to assign points to the 10 items above, with the public entity not to require a bidder to earn more than 50 points.

²²⁸ §143-128.2 (e)

2.3 Factual Predicate Standards (Conducting the Disparity Study)

The factual predicate is used to determine if a compelling governmental interest exists to support the utilization of race-conscious remedies. A disparity study is used to develop the factual predicate. Below is a discussion of the courts' review of the sufficiency of several components of the disparity study in establishing a factual predicate.

2.3.1 Relevant Market vs. Jurisdictional Reach

Relevant market establishes geographical limits to the calculation of M/WBE availability and utilization. Most courts and disparity study consultants characterize the relevant market as the geographical area encompassing most of a public entity's commercial activity. Relevant market can be different from jurisdictional reach, which defines the reach of the race- and gender-conscious program implemented. Relevant market has not been litigated much.

In *Croson*, the U.S. Supreme Court did not provide specific guidance on the estimation of relevant market for the purposes of conducting a factual predicate study. While *Croson* did not provide particularized guidance on the estimation of the relevant market, the *Croson* court did require that an M/WBE program cover only those groups that have been affected by discrimination within the public entity's jurisdiction.²²⁹ A similar position was taken by the U.S. District Court for the District of Colorado. In *Concrete Works I*, the consultant found that over 80 percent of Denver's construction and design contracts were awarded to vendors located in the Denver MSA.²³⁰ The federal district court found the Denver MSA to be relevant to determining the jurisdiction of Denver's contract awards. The district court cited the Ninth Circuit opinion in *Coral Construction Company v. Kings County*:

Concrete Works also overlooks the fact that the court of appeals found even the ultimately rejected Pierce County evidence to be probative, even though it was from a separate jurisdiction, because:

"It is, however, immediately adjacent to King County and is part of the same metropolitan area. Likewise, the world of contracting does not conform itself neatly to jurisdictional boundaries. In this regard, contracting differs markedly from a school system, which conducts its business in relative isolation from other school systems."²³¹

We conclude that Denver is not acting outside its jurisdiction but is applying a policy to those contractors who have been found to choose to enter Denver's boundaries to seek work and win Denver's tax dollars.²³²

²²⁹ *Croson*, 488 U.S. at 505-506.

²³⁰ *Concrete Works v. City and County of Denver*, 823 F. Supp. 821, 836 (D. Colo. 1993).

²³¹ *Id.*

²³² *Id.* The district court also cited *AGC v. City of San Francisco*. See *Associated General Contractors of California v. City and County of San Francisco*, 813 F.2d 922, 934 (Ninth Cir. 1987) (*AGCC I*) (noting that any plan that extends race-conscious remedies beyond territorial boundaries must be based on very specific findings that actions the City has taken in the past have visited racial discrimination on such individuals).

2.3.2 Availability

Availability calculations determine the number of firms that are ready, willing, and able to do business with a public entity. Disparity ratios are determined by comparing availability to actual utilization. Availability measures are the most questioned and litigated portions of a disparity study, given the challenges in developing an accurate head count of firms in the marketplace, accounting for issues of capacity, qualification, willingness, and ability. As such, this section explores the evolution of judicial opinions on availability.

We note that the judiciary's view of availability within a jurisdiction is heavily influenced by the disparity methodology used to justify the DBE or M/WBE program under review. In many cases, the judge determines the validity of a particular methodology without declaring it as the only acceptable availability methodology.

The *Croson* decision did not turn on the evaluation of data in a disparity study. Consequently, *Croson* did not provide a detailed discussion of permissible data sources. Instead, the court admonished local agencies to compare contract awards to M/WBEs to the number of "available" and "qualified" minority firms seeking public sector work, and not to the minority population of each such jurisdiction.²³³ The source of this availability data was never addressed. Early case law following *Croson* did not cover the issue of competing measures of M/WBE availability. Several cases did not cite the sources of availability data.²³⁴

In the mid-1990s, cases applying *Croson* began to address the use of Census data as a measure of M/WBE availability. The basic criticism the courts had of Census data is that Survey of Minority-owned Business Enterprises (SMOBE) and Survey of Women-owned Business Enterprises (SWOB) data did not indicate which firms were seeking public sector work.²³⁵ For example, in *Engineering Contractors Association of South Florida v. Metropolitan Dade County*,²³⁶ the federal district court stated:

"The census [SMOBE] data used in both [disparity] studies simply represent individuals or firms located in Dade County, which list themselves as being in the business of construction. The census data do not identify whether these entities have ever done work specifically for the county, or to what degree their reported sales or income stems from private sources versus public sources, much less whether the earnings are primarily the result of work done for Dade County versus Broward County, Palm Beach County or some other Florida locale, or even sites outside of Florida. This lack of specificity makes it difficult, if not impossible, to draw accurate conclusions concerning whether Dade County is itself a participant in gender, racial or ethnic discrimination to the extent that it justified its use of race, ethnicity, and gender-conscious remedies."²³⁷

The Census Bureau's Public Use Micro Sample (PUMS) data has been criticized for similar reasons. One of Miami's disparity studies used PUMS data to study business formation among minorities. The federal district court concluded that, because PUMS did not look at public sector contracting, the PUMS "is not the type of particularized evidence that is required to provide a strong basis in evidence for the County's race- and ethnicity-conscious contract award process, which is aimed at M/WBEs which are already in business and qualified to perform work."²³⁸

²³³ *Croson*, 488 U.S. at 505-506.

²³⁴ See, for example, *Cone Corp. v. Hillsborough County*, 908 F.2d 908 (11th Cir. 1990).

²³⁵ Census no longer produces these sources of data.

²³⁶ *Engineering Contractors Association of South Florida, Inc. v. Metropolitan Dade County*, 943 F. Supp. 1546 (S.D. Fla. 1996).

²³⁷ *Id.* at 1572-1573.

²³⁸ *Id.* at 1574.

The U.S. District Court for the Southern District of Ohio had similar criticisms of the use of Census data. The court stated, “it is apparent, however, that not all construction firms in the Columbus MSA are qualified, willing and able to bid on City construction contracts.”²³⁹ The court went on to state that “census data probably overstates the proportions of available [M/WBEs]...”²⁴⁰ Nevertheless, the court still preferred Census data to study disparities among subcontractors. The court concluded that, “[w]hile the Census total industry data have limitations, it appears to be the best data considered by [the disparity study consultant] for use in determining availability of M/WBEs as subcontractors.”²⁴¹ In fact, the federal district court in Ohio rejected the use of the bidder registration file list because it was not consistent with the SMOBE data.²⁴²

The U.S. District Court for the Eastern District of Pennsylvania in Philadelphia also had similar criticisms of SMOBE and SWOB data. In its review of the evidence of disparity presented, the court stated:

[The evidence of disparity] never measured the number of contractors actually engaged by the City to perform particular services... Without measuring the number of contractors actually engaged by the City to perform particular services, it is impossible to determine whether Black firms were excluded from performing these services. In addition, it is impossible to determine whether Black companies even existed to perform these services required by the City. Without examining this information, it is impossible to draw any conclusions about discrimination in City public works contracting. In sum, the court finds that [the disparity study consultant] failed to measure the “relevant statistical pool” necessary to perform an accurate disparity study in accordance with the standards set forth in *Croson*.²⁴³

Upon review of the lower court decision, the Third Circuit U.S. Court of Appeals was more lenient on the use of SMOBE and SWOB data. The appeals court rejected the argument that census data did not measure those willing to undertake public sector contracting. The court stated, “in the absence of some reason to believe otherwise, one can normally assume that participants in a market with the ability to undertake gainful work will be ‘willing’ to undertake it.”²⁴⁴ The court went so far as to state “the census data offer a reasonable approximation of the total number of firms that might vie for City contracts.”²⁴⁵ The Third Circuit further suggested that census data might *understate* MBE availability, because “past discrimination in a marketplace may provide reason to believe the minorities who would otherwise be willing are discouraged from trying to secure this work.”²⁴⁶

The general criticism of SMOBE and SWOB data is the lack of detail and specificity in qualifications. For example, in criticizing the disparity study in Miami, the U.S. District Court for the Southern District of Florida stated “[t]he major drawback of this analysis [disparity ratios] is that the SMOBE data relied upon do not include information such as firm size, number of employees, etc., thus the Brimmer Study does not contain regression analyses to control for neutral variables that could account for these disparities.”²⁴⁷ The district court did not suggest an

²³⁹ *Associated General Contractors of America v. City of Columbus*, 936 F. Supp. 1363, 1390 (S.D. Ohio 1996). (This case was overturned on jurisdictional grounds.)

²⁴⁰ *Id.* at 1391.

²⁴¹ *Id.* at 1396.

²⁴² *Id.*

²⁴³ *Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia*, 893 F. Supp. 419, 433 (E.D. Pa. 1995).

²⁴⁴ *Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia*, 91 F.3d 586, 603 (3rd Cir. 1996).

²⁴⁵ *Id.* at 604.

²⁴⁶ *Id.* at 603.

²⁴⁷ *Engineering Contractors Association of South Florida, Inc. v. Metropolitan Dade County*, 943 F. Supp. 1546, 1573 (S.D. Fla. 1996).

alternative data source to provide the specificity it was seeking. This omission was not unusual because courts generally did not provide guidance in determining valid or invalid sources of M/WBE availability data.

Similarly, geographical mismatching of the data sets raised concerns for some courts about the use of SMOBE data. A federal district court in Ohio, for example, criticized mixing SMOBE data with *County Business Patterns*, because of the different geographical scopes (one covers seven counties and the other covers one county), and one is a measure of firms and the other is a measure of establishments.²⁴⁸

Other courts have not been concerned with the absence of such detail in Census data. For example, the Third Circuit U.S. Court of Appeals was not concerned by the lack of qualification data in the SMOBE data set. The appeals court noted that the “issue of qualifications can be approached at different levels of specificity, however, and some consideration of the practicality of various approaches is required. An analysis is not devoid of probative value simply because it may theoretically be possible to adopt a more refined approach.”²⁴⁹ The appeals court accepted the mixture of census data with city purchasing data, although the data differed in geographical scope.²⁵⁰ Similarly, the 10th Circuit, in which Denver is located, stated, “[w]e agree with other circuits which have interpreted [that] *Croson* implied to permit a municipality to rely, as does Denver, on general data reflecting the number of MBEs and WBEs in the marketplace to defeat the challenger’s Summary Judgment motion or request for a preliminary injunction.”²⁵¹

The principal alternative to using Census data to measure M/WBE availability in *Croson* factual predicate studies is using lists of marketplace participants, primarily vendor, bidders, pre-qualification, and certification lists. The *Ready, Willing and Able* (RWASM) approach is a list-based approach to the estimation of M/WBE availability. In the late 1990s, partly in response to the *Engineering Contractors v. Metropolitan Dade County* case, list-based approaches were used.²⁵² As such, courts began to focus on these types of availability analysis.

In 2007, in *Northern Contracting, Inc. v. Illinois Department of Transportation*,²⁵³ the Seventh Circuit U.S. Court of Appeals found that a valid statistical methodology was presented to justify that a DBE program was narrowly tailored.²⁵⁴ This methodology included six steps: (1) identify the geographic market for contracting as the State of Illinois; (2) identify the product markets (e.g., highways, transportation, engineering, housing); (3) identify all available contractors in each product market regardless of race, using Dun & Bradstreet; (4) identify the number of DBE contractors in each product market and break the numbers down by geographical location; (5) correct errors by updating the qualified DBE firm list to eliminate firms that are no longer qualified; and (6) correct errors by accounting for DBE firms that are not listed on the qualified directory.²⁵⁵

The availability analysis in *Northern Contracting* represented what is commonly called “custom census” availability. A similar methodology was employed in the Caltrans disparity study. In *Caltrans*, the Ninth Circuit U.S. Court of Appeals, citing *Northern Contracting*, held that federal guidelines state the availability analysis should not separate contracts by construction and engineering and by prime and subcontractor because there

²⁴⁸ *Associated General Contractors of America v. City of Columbus*, 936 F. Supp. 1363, 1386 (S.D. Ohio 1996). (This case was overturned on jurisdictional grounds.) A firm is an enterprise that may have several establishments at various locations.

²⁴⁹ *Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia*, 91 F.3d 586, 603 (3rd Cir. 1996).

²⁵⁰ *Id.*

²⁵¹ *Concrete Works v. City and County of Denver (Concrete Works II)*, 36 F.3d 1513, 1529 (10th Cir. 1994).

²⁵² *Engineering Contractors Association of South Florida, Inc. v. Metropolitan Dade County*, 122 F.3d 895, 921 (11th Cir. 1997). D.J. Miller & Associates, Inc. (now Miller³ Consulting, Inc.) has used a Ready, Willing and Able list-based approach from its inception in 1988.

²⁵³ *Northern Contracting, Inc. v. Illinois DOT*, 473 F.3d 715 (7th Cir. 2007).

²⁵⁴ *Id.* at 717.

²⁵⁵ *Id.* at 718-719.

was already substantial overlapping in these areas.²⁵⁶ Furthermore, the appeals court found the consultant had adjusted availability for the capacity of firms to do the work.²⁵⁷

Conversely, the Federal Circuit Court in *Rothe Development Corp. v. U.S. Department of Defense* found the appropriate measure of availability is to determine those firms “ready, willing, and able” to do business with the government.²⁵⁸ The circuit court found the following sources as tending to establish a business’ qualifications—awardees, bidders, and certification lists.²⁵⁹ The reliance on lists compiled by local business associations, by community outreach, from vendor lists, and from self-affirmation of qualification and ability is more questionable.²⁶⁰

In *HB Rowe Co., Inc. v. Tippet*,²⁶¹ the Fourth Circuit U.S. Court of Appeals found acceptable an availability analysis that depended on the following variables: “a vendor list comprising (1) subcontractors approved by the Department [of Transportation] to perform subcontract work on state-funded projects, (2) sub-contractors that performed such work during the study period, and (3) contractors qualified to perform prime construction work on state-funded contracts.”²⁶² The appeals court agreed with the consultant’s explanation of why prime and subcontractors were not separated.²⁶³

2.3.3 Utilization

Utilization analysis measures the actual dollars awarded and paid to firms doing business with the public entity, by race and gender. The utilization analysis is rather straightforward; thus, there is limited discussion in case law on standards for utilization. The *Croson* decision specifically mentions the number of qualified firms “willing and able to perform... and the number of such contractors actually engaged.”²⁶⁴

In *Concrete Works III*, the 10th Circuit stated that the presentation of both goal and non-goal contracts provided a clearer picture of MBE participation.²⁶⁵ In fact, the appeals court found that “non-goal projects were a better indicator of discrimination in City contracting.”²⁶⁶

The Illinois Department of Transportation (IDOT), in *Northern Contracting*, tried to test for the impact of race-conscious programs on DBE participation with its Zero-Goal Program. This program dropped the DBE goal from select construction contracts to see if there would be a decrease in the number of DBE participants compared to those projects with a DBE goal.²⁶⁷ However, the Seventh Circuit suggested the experiment was flawed because the State of Illinois did not provide the number of DBEs that actually bid on these projects or the dates during which these experiments took place.²⁶⁸ As such, the appeals court was unable to conclude that the drop in DBE participation was due to the lack of an affirmative action program.²⁶⁹

²⁵⁶ *Associated General Contractors of America, Inc. v. California Department of Transportation (Caltrans)*, 713 F.3d 1187 (Ninth Cir. 2013). See also *Mountain West Holding v. State of Montana*, CV 13-49-BLG-DLC (D. Mont. Jan. 30, 2018); *Geyer Signal, Inc. v. MnDOT*, Civil No. 11-321 (JRT/LIB)(D. Minn. 2014).

²⁵⁷ *Caltrans*, 713 F.3d at 1199.

²⁵⁸ *Rothe Development Corp v. U.S. Department of Defense*, 545 F.3d 1023, 1042 (Fed. Cir. 2008).

²⁵⁹ *Id.*

²⁶⁰ *Id.*

²⁶¹ *HB Rowe Co., Inc. v. Tippet*, 615 F.3d 233 (4th Cir. 2010).

²⁶² *Id.* at 244.

²⁶³ *Id.* at 244-245.

²⁶⁴ *Croson*, 488 U.S. at 509.

²⁶⁵ *Concrete Works III*, 321 F. 3d 950, 988 (10th Cir. 2003).

²⁶⁶ *Id.*

²⁶⁷ *Northern Contracting*, 473 F.3d at 719.

²⁶⁸ *Id.*

²⁶⁹ *Id.*

In *Caltrans*, the Ninth Circuit noted that the disparity consultant used state-funded contracts, which did not have goals, to determine if the affirmative action program for federally funded contracts skewed the data.²⁷⁰ The appeals court further found that the consultant appropriately accounted for women, by combining minority women with the requisite minority group, thus the women category only included White women.²⁷¹

2.3.4 Disparity Ratios

The most important part of the statistical analysis is the disparity ratio, which is a comparison of availability to utilization. An inference of discrimination can be drawn from statistically significant disparity. The courts agree on the calculation of disparity and statistical significance, as discussed below.

In *Adarand VII*, the 10th Circuit U.S. Court of Appeals noted that “the disparity between minority DBE availability and market utilization in the subcontracting industry raises an inference that the various discriminatory factors the government cites have created that disparity... Of course, it would be ‘sheer speculation’ to even attempt to attach a figure to the hypothetical number of minority enterprises that would exist without discriminatory barriers to minority DBE formation. *Croson*, 488 U.S. at 499. However, the existence of evidence indicating that the number of minority DBEs would be significantly (but unquantifiable) higher but for such barriers is nevertheless relevant to the assessment of whether a disparity is sufficiently significant to give rise to an inference of discriminatory exclusion.”²⁷²

In *Rowe*, the Fourth Circuit U.S. Court of Appeals noted that several courts have followed a similar methodology:

After *Croson*, a number of our sister circuits have recognized the utility of the disparity index in determining statistical disparities in the utilization of minority- and women- owned businesses. See, for example, *Rothe II*, 545 F.3d at 1037-38; *Concrete Works*, 321 F.3d at 962-63; *W.H. Scott*, 199 F.3d at 218; *Engineering Contractors*, 122 F.3d at 914; *Contractors Association I*, 6 F.3d at 1005; *Associated General Contractors of California, Inc. v. Coalition for Economic Equity*, 950 F.2d 1401, 1413-14 (Ninth Cir. 1991). Generally, courts consider a disparity index lower than 80 as an indication of discrimination. See *Rothe II*, 545 F.3d at 1041; *Engineering Contractors*, 122 F.3d at 914; see also 29 C.F.R. § 1607.4(D) (2010) (directing federal agencies to regard a “selection rate” of lower than 80 percent as evidence of disparate impact employment discrimination).²⁷³

Further, the appeals court found that the application of a t-test²⁷⁴ was appropriate, as a standard deviation test allows a determination of whether any disparity found is merely due to chance or due to some other reason.²⁷⁵ The court supported its argument by citing a mid-1990s case, *Engineering Contractors*, 122 F.3d at 914.²⁷⁶

In finding the disparity study sufficient in *Caltrans*, the Ninth Circuit U.S. Court of Appeals noted that the disparities were assessed across a variety of contracts based on funding source (state or federal), type of contract (prime or subcontract) and type of project (engineering or construction).²⁷⁷

²⁷⁰ *Caltrans*, 713 F.3d at 1198.

²⁷¹ *Id.*

²⁷² *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147 (10th Cir. 2000).

²⁷³ *HB Rowe Co., Inc. v. Tippet*, 615 F.3d 233, 243-244 (4th Cir. 2010).

²⁷⁴ A t-test determines statistical significance of any disparity found by assessing whether two groups are statistically different from each other.

²⁷⁵ *Rowe*, 615 F.3d at 244-246.

²⁷⁶ *Rowe*, 615 F.3d at 244.

²⁷⁷ *Caltrans*, 713 F.3d at 1192.

2.3.5 Capacity and Regression

Parties seeking to explain what the U.S. Supreme Court meant in *Croson* usually raise the capacity issue of qualified minorities. A Capacity and Regression analysis seeks to determine the factors, including size, race, and gender, among others, that are contributing to any disparity found as a result of comparing availability and utilization.

In *Concrete Works I*, the federal district court in Colorado reviewed the challenged availability/utilization analysis submitted by the City and County of Denver. The Concrete Works Company (CWC) challenged the use of availability measures and suggested that the appropriate standard was capacity.²⁷⁸ The district court provided a lengthy discussion of the capacity arguments:

Capacity, as Concrete Works' expert economist points out, is ideally measured by the total amount of business that could be handled by MBEs. There are typically three measures used to predict the amount of business that W/MBEs can handle: the number of W/MBE companies relative to the total number in the industry (also known as "availability"), W/MBE revenue as a percent of industry revenue, and the number of W/MBE employees as a percent of the industry total... [A]s evidenced both by Concrete Works' failure to suggest an alternative way to measure capacity and the admission of its expert that availability is more often used in actual practice, the ability of a firm to handle any given amount of business is exceedingly difficult to define and even more difficult to quantify. Capacity is a function of many subjective, variable factors. Second, while one might assume that size reflects capacity, it does not follow that smaller firms have less capacity; most firms have the ability and desire to expand to meet demand. A firm's ability to break up a contract and subcontract its parts makes capacity virtually meaningless... Finally, Concrete Works can cite no authority for its assertion that its amorphous, ambiguous conception of capacity is required. No court to date has required a comparison of a firm's "ability to handle work."²⁷⁹

In *Concrete Works III*, the 10th Circuit U.S. Court of Appeals reviewed those variables that CWC alleged the disparity studies had not controlled for and made the following findings:

1. **Size and experience:** CWC did not conduct its own disparity study that controlled for firm size and experience.²⁸⁰ "Denver is permitted to make assumptions about capacity and qualification of M/WBEs to perform construction services if it can support those assumptions. The assumptions made in this case are consistent with the evidence presented at trial and support the city's position that 1) a firm's size does not affect its qualifications, willingness, or ability to perform construction services and 2) that the smaller size and lesser experience of M/WBEs are, themselves, the result of industry discrimination."²⁸¹
2. **Specialization:** CWC offered no support for its view that M/WBEs are clustered in certain construction specialties and did not demonstrate that disparities are eliminated when there is control for firm specialization.²⁸² On the other hand, the disparity study consultant controlled for Standard Industrial Classification (SIC) code subspecialty and still showed disparities.²⁸³

²⁷⁸ *Concrete Works I*, 823 F. Supp. 821, 837 (D. Colo. 1993).

²⁷⁹ *Id.*

²⁸⁰ *Concrete Works III*, 321 F. 3d 950, 982 (10th Cir. 2003).

²⁸¹ *Id.*

²⁸² *Id.*

²⁸³ *Id.* at 983.

3. **Bidding:** Disparity studies must make the same assumptions about availability for *all* firms. It is unnecessary to consider only those firms bidding on Denver’s projects because it does not indicate qualification.²⁸⁴

The Ninth Circuit has also discussed the issue of capacity. In *Western States Paving v. Washington State (Western Paving)*,²⁸⁵ the Ninth Circuit found Washington DOT’s capacity analysis to be flawed because:

1. It considered contracts that had affirmative action components and, thus, did not reflect “the performance capacity of DBEs in a race-neutral market.”²⁸⁶
2. While Washington DOT could only rely on a comparison of the proportion of State DBE firms/percentage of awards to DBEs on race-neutral contracts, this “oversimplified statistical evidence is entitled to little weight, however, because it does not account for factors that may affect the relative capacity of DBEs to undertake contracting work.”²⁸⁷
3. The State’s analysis does not control for any capacity factors, such as size and experience.²⁸⁸

The Ninth Circuit noted that under 49 Code of Federal Regulations (CFR) Part 26, the U.S. DOT has established that availability can be adjusted upward or downward, based on the capacity of DBEs to perform work, as measured by the volume of work allocated to DBEs in recent years.²⁸⁹ While it disagreed with the manner in which Washington DOT relied on capacity information to defend its DBE program, the appeals court did find that Washington DOT had closely tracked U.S. DOT regulations.²⁹⁰

The Ninth Circuit contrasted the analysis performed by the Washington DOT and that performed by the California DOT in the *Caltrans* case.²⁹¹ In *Caltrans*, the Ninth Circuit found the statistical analysis valid, as the California DOT in *Caltrans* had adjusted availability for capacity and controlled for previously administered affirmative action programs.²⁹²

As discussed earlier, in *Engineering Contractors*, the 11th Circuit U.S. Court of Appeals found acceptable as a valid explanation for disparities found, Census data showing that, on average, non-MBE/WBE firms were larger than MBE/WBE firms.²⁹³ It found unreliable the data submitted by Metropolitan Dade County to explain disparities found.²⁹⁴ The County presented an analysis of a sample of 568 firms out of 10,462 that had filed a certificate of competency with Dade County as of January 1995. The County’s expert collected data on these firms related to race, ethnicity, and gender, as well as total sales and receipts and sought to determine if there was a meaningful relationship between the two pools of data. The expert conducted a regression analysis, using number of employees as a proxy for size.²⁹⁵

The 11th Circuit found the statistical pool of firms relied upon by the County was significantly larger than the actual number of firms willing, able, and qualified to do the work, particularly given that the firms represented

²⁸⁴ *Id.*

²⁸⁵ *Western States Paving v. Washington State*, 407 F.3d 983 (Ninth Cir. 2005).

²⁸⁶ *Id.* at 1000.

²⁸⁷ *Id.*

²⁸⁸ *Id.* at 1000-1001.

²⁸⁹ *Id.* at 989.

²⁹⁰ *Id.* at 999.

²⁹¹ *Associated General Contractors of America, Inc. v. California Department of Transportation (Caltrans)*, 713 F.3d 1187, 1196 (Ninth Cir. 2013).

²⁹² *Caltrans*, 713 F.3d at 1196.

²⁹³ *Engineering Contractors*, 122 F. 3d at 917.

²⁹⁴ *Id.* at 919.

²⁹⁵ *Id.* at 920.

were simply licensed as construction contractors.²⁹⁶ Further, the appeals court held that, after controlling for firm size, neither Black Business Enterprise (BBE) nor WBE data revealed statistically significant disparities and that the federal district court was not required to assign any disparities controlling weight.²⁹⁷

In *Rothe*, the Federal Circuit Court found the most reliable way to account for firm size, without changing the disparity-ratio methodologies, was to employ “regression analysis to determine whether there was a statistically significant correlation between the size of a firm and the share of contract dollars awarded to it.”²⁹⁸

In *Rowe*, the Fourth Circuit also found the State of North Carolina’s regression analysis useful.²⁹⁹ In that study, the State of North Carolina studied the impact of certain business characteristics on a firm’s gross revenues.³⁰⁰ These characteristics included company age, number of full-time employees, owners’ years of experience, level of education, race, ethnicity, and gender.³⁰¹ The State of North Carolina supported the capacity analysis by reviewing the participation of minorities at different contract thresholds.³⁰²

2.3.6 Anecdotal

The U.S. Supreme Court in *Croson* did not directly address or provide a clear picture on the type and quantum of anecdotal evidence that could support a finding of discrimination. However, many lower courts have reviewed and assessed the quality and quantity of anecdotal evidence submitted. In *Concrete Works I*, the federal district court in Colorado accepted the testimony of 21 people at a public hearing and the interview results of 38 M/WBEs as enough anecdotal evidence for *Croson* purposes.³⁰³

In *Caltrans*, the consultant included 12 public hearings, received letters from business owners and trade associations, and interviewed 79 owners/managers of transportation firms. The Ninth Circuit in that case found that “the statistical evidence from the disparity study is bolstered by anecdotal evidence supporting an inference of discrimination.”³⁰⁴

The Federal Circuit Court in *Rothe* criticized the disparity analysis because it did not include direct testimony from MBEs regarding their experience with the U.S. Department of Defense (DoD) or its prime contractors.³⁰⁵ The court sought anecdotal testimony that demonstrated some link between the DoD’s spending practices and discrimination.³⁰⁶

Opponents have long argued that anecdotal testimony should be verified. However, more and more circuits are concluding as the 10th Circuit did in *Concrete Works III*:

“Anecdotal evidence is nothing more than a witness’ narrative of an incident told from the witness’ perspective and including the witness’ perceptions. In this case, the anecdotal evidence was not subject to rigorous cross-examination... Denver was not required to present corroborating evidence and CWC was free to present its own witnesses to either refute the

²⁹⁶ *Id.* at 921.

²⁹⁷ *Id.*

²⁹⁸ *Rothe*, 545 F.3d 1023 at 1044.

²⁹⁹ *Rowe*, 615 F.3d at 245-246.

³⁰⁰ *Id.* at 246.

³⁰¹ *Id.* at 246.

³⁰² *Id.* at 247.

³⁰³ *Concrete Works I*, 823 F. Supp. 821, 833-834.

³⁰⁴ *Caltrans*, 713 F.3d at 1192.

³⁰⁵ *Rothe*, 545 F.3d 1023 at 1048.

³⁰⁶ *Id.*

incidents described by Denver’s witnesses or to relate their own perceptions on discrimination in the Denver construction industry.”³⁰⁷

In *Caltrans*, the Ninth Circuit made it clear that anecdotal testimony did not need to be verified, particularly considering case law in the Fourth and Tenth Circuits.³⁰⁸ Additionally, the appeals court rejected the Associated General Contractors’ argument that Caltrans needed to show that every minority-owned business is discriminated against, stating that it “is enough that the anecdotal evidence supports Caltrans’ statistical data showing a pervasive pattern of discrimination.”³⁰⁹

In *Engineering Contractors*, the 11th Circuit considered the sufficiency of the anecdotal evidence submitted, which consisted of interviews with two county employees responsible for the M/WBE program, 23 M/WBE prime and subcontractors, and a survey of Black-owned construction firms. While the appeals court found “the picture painted by the anecdotal evidence is not a good one,” the anecdotal evidence could not overcome the deficiencies of the statistical analysis and cannot alone support findings of discrimination sufficient to support the implementation of race- and gender-conscious programs.³¹⁰ “While such evidence can doubtless show the perception and, on occasion, the existence of discrimination, it needs statistical underpinnings or comparable proof to show that substantial amounts of business were actually lost to minority or female contractors as the result of the discrimination.”³¹¹

The U.S. District Court for the Northern District of Georgia, in *Webster v. Fulton County*,³¹² examined anecdotal evidence presented by Fulton County. In that case, consultants for Fulton County conducted public hearings, 76 one-on-one interviews, and a random survey of 183 M/WBEs. As with *Engineering Contractors*, the federal district court found that while the anecdotal evidence “reflects the honest and concerned beliefs of many in the Atlanta and Fulton County area that they have been or are the victims of discriminatory practices,” anecdotal evidence was “insufficient to offset the weaknesses of Fulton County’s statistical evidence.”³¹³ Furthermore, much of the anecdotes referred to the firms’ experiences in the private sector, and not with Fulton County.³¹⁴

Per *Rowe*, in the Fourth Circuit, statistical evidence of racial discrimination must be “corroborated by significant anecdotal evidence of racial discrimination.”³¹⁵ The 2004 Disparity Study relied on three sources of anecdotal data: telephone survey; interviews; and focus groups.³¹⁶ Rowe challenged the methodology used to gather anecdotal data, arguing that the data was unverified and that the consultant oversampled for MBEs.³¹⁷ The Fourth Circuit found Rowe’s contention regarding unverified anecdotal comments to be unwarranted.³¹⁸ Rowe offered no rationale as to why a fact finder could not rely on the State’s “unverified” anecdotal data. Indeed, a fact finder could very well conclude that anecdotal evidence need not—and indeed cannot—be verified because it “is nothing more than a witness’ narrative of an incident told from the witness’ perspective and including the witness’ perceptions” (*Concrete Works*, 321 F.3d at 989).³¹⁹ The Fourth Circuit also found Rowe’s second

³⁰⁷ *Concrete Works III*, 321 F. 3d at 989. See also *Rowe*, 615 F.3d at 249, and *Caltrans*, 713 F.3d at 1197.

³⁰⁸ *Caltrans*, 713 F.3d at 1197.

³⁰⁹ *Caltrans*, 713 F.3d at 1198.

³¹⁰ *Engineering Contractors*, 122 F.3d at 925-926.

³¹¹ *Id.*

³¹² *Webster v. Fulton County, Ga.*, 51 F. Supp.2d 1354 (N.D. Ga. 1999).

³¹³ *Id.* at 1379.

³¹⁴ *Id.*

³¹⁵ *Rowe*, 615 F.3d at 241, quoting *Maryland Troopers Association, Inc. v. Evans*, 993 F.2d 1072 (Fourth Cir. 1993).

³¹⁶ *Id.* at 248.

³¹⁷ *Id.* at 249.

³¹⁸ *Id.*

³¹⁹ *Id.*

argument to be without merit, stating that its precedent demonstrates that anecdotal evidence simply supplements statistical evidence.³²⁰ In reviewing the anecdotal data in detail, the court opined that:

“Here, however, majorities of African American and Native American respondents agreed that prime contractors have higher standards for minority subcontractors, view minority subcontractors as being less competent than nonminority businesses, change their bidding practices when not required to hire minority subcontractors, and drop minority subcontractors after winning contracts. Together, these responses suggest strongly that the underutilization of African American and Native American subcontractors is more than a mere byproduct of misguided yet color-blind cronyism. Rather, they indicate that racial discrimination is a critical factor underlying the gross statistical disparities presented in the 2004 study.”³²¹

2.3.7 Marketplace and Private Sector Analysis

The Marketplace and Private Sector Analysis seeks to determine if there are discriminatory practices or disparity in the private marketplace and if the public entity is a passive participant in any such discrimination found. The decision in *Croson* speaks to the importance of the effects of private sector disparities for justifying M/WBE programs. In *Croson*, the U.S. Supreme Court suggested several ways that a public entity might be involved in private sector discrimination:

1. **Discrimination in subcontracting opportunities:** “If the City of Richmond had evidence before it that nonminority contractors were systematically excluding minority businesses from subcontracting opportunities it could take action to end the discriminatory exclusion.”³²²
2. **Discrimination in the construction industry:** “[I]f the city could show that it had essentially become a ‘passive participant’ in a system of racial exclusion practiced by elements of the local construction industry, we think it clear that the city could take affirmative steps to dismantle such a system.”³²³
3. **Discrimination in professional trade organizations:** “In such a case, the city would have a compelling interest in preventing its tax dollars from assisting [those] organizations in maintaining a racially segregated construction market.”³²⁴
4. **Discrimination in the provision of credit or bonding by local suppliers and banks:** “[a]ct to prohibit discrimination in the provision of credit or bonding by local suppliers and banks. Business as usual should not mean business pursuant to the unthinking exclusion of certain members of our society from its rewards.”³²⁵

The *U.S. Supreme Court in Croson* also implied that evidence of employment discrimination or discrimination in subcontracting would also strengthen the argument for an MBE program: “The city points to no evidence that its prime contractors have been violating the [city race discrimination] ordinance in either their employment or subcontracting practices.”³²⁶

³²⁰ *Id.*

³²¹ *Id.* at 251.

³²² *Croson*, 488 U.S. at 509.

³²³ *Id.* at 492.

³²⁴ *Id.* at 503.

³²⁵ *Id.* at 510.

³²⁶ *Id.* at 511, fn. 3.

*Webster v. Fulton County*³²⁷ suggests, however, that a nexus must exist between private sector discrimination and the public agency.³²⁸ Per the federal district court in the Northern District of Georgia, the County's study "does not show that the County's spending practices are exacerbating identified discrimination in the private sector. The County may rely upon a showing of discrimination in the private sector if it provides a linkage between private sector discrimination and the County's contracting policies. *Concrete Works*, 36 F.3d at 1529. No such linkage is provided by the data in the Brimmer-Marshall Study."³²⁹

In *Concrete Works III*, the 10th Circuit found that Denver could meet its burden by showing marketplace or private sector discrimination and linking its spending practices to the private discrimination. This could be done through:

1. Anecdotal evidence of city contractors subject to Denver's goals who are not using M/WBEs on private sector contracts.
2. Evidence of discriminatory barriers to business formation by M/WBEs and fair competition.
3. Evidence of lending discrimination.³³⁰

In *Rowe*, the Fourth Circuit found that the State of North Carolina failed to establish any correlation between public road construction subcontracting and private general construction subcontracting, thereby severely limiting the private data's probative value.³³¹

Standards for demonstrating private sector discrimination must be viewed considering the U.S. Supreme Court's ruling in *Texas Department of Housing and Community Affairs v. Inclusive Communities Project, Inc.*³³² The U.S. Supreme Court indicated that private developers should be given "leeway to state and explain the valid interest served by their policies" and that disparate impact liability must be sure not to "displace valid governmental and private priorities, rather than solely 'remov[ing]... artificial, arbitrary, and unnecessary barriers.'"³³³

2.3.8 Race Neutral

As part of narrow tailoring, public entities are required to consider the efficacy of race-neutral measures in addressing any disparity or discrimination. The race-neutral analysis seeks to determine the ability of existing race-neutral efforts in eliminating disparity in the marketplace.

Lower courts have considered what constitutes adequate consideration of race-neutral measures. For example, in *Coral Construction Company v. King County*, the Ninth Circuit considered race-neutral measures but stated they do not have to be exhaustive.³³⁴ The appeals court stated that, "*Associated General Contractors* requires only that a state exhaust race-neutral measures that the state is authorized to enact, and that it has a reasonable possibility of being effective. Here, the record reveals that [King] County considered alternatives but determined that they were not available as a matter of law... [King] County cannot be required to engage in

³²⁷ *Webster v. Fulton County, Ga.*, 51 F. Supp.2d 1354 (N.D. Ga. 1999).

³²⁸ *Id.* at 1369.

³²⁹ *Id.* at 1369.

³³⁰ *Concrete Works III*, 321 F. 3d at 976-978.

³³¹ *Rowe*, 615 F.3d at 256.

³³² *Texas Department of Housing and Community Affairs v. The Inclusive Communities Project, Inc. (Inclusive Communities Project)*, 576 U.S. 519 (2015).

³³³ *Id.* at 541 and 544.

³³⁴ *Coral Construction v. King County*, 941 F.2d at 923.

conduct that may be illegal; nor can it be compelled to expend precious tax dollars on projects where potential for success is marginal at best.”³³⁵

In *Concrete Works I*, the city had already enacted several race-neutral measures, including breaking down projects to facilitate small business participation; outreach; a prompt payment ordinance; good faith measures; seminars on procurement procedures; bond guarantee; and contractor mentor and pre-apprenticeship programs. Certain race-neutral measures could not be implemented because of state requirements for bonds, lowest bidder, and prevailing wages.³³⁶ The federal district court in Colorado noted, however, “strict scrutiny requires only good faith, not exhaustion of all alternatives.”³³⁷

The Ninth Circuit in *Caltrans* stated that narrowly tailoring requires only “serious, good faith consideration of workable race-neutral alternatives” (*Grutter v. Bollinger*, 539 U.S. 306, 339 [2003]). The court found that the Caltrans program considered an increasing number of race-neutral alternatives, starting at 45 in 2008 and reaching 150 in 2010.”³³⁸

In contrast, in *Engineering Contractors*, the 11th Circuit expressed concern that Dade County had not considered race-neutral alternatives. The types of initiatives that the appeals court believed that the County was obligated to attempt included:

1. Adjusting its procurement processes and ferreting out instances of discrimination within its own contracting process; take steps to “inform, educate, discipline, or penalize its own officials and employees responsible for the misconduct.”³³⁹
2. Passage of ordinances outlawing discrimination by local contractors, subcontractors, suppliers, bankers, or insurers.³⁴⁰
3. Serious efforts at management, financial, and technical assistance programs and evaluations of their effectiveness.³⁴¹

According to the 11th Circuit, “The first measure every government ought to undertake to eradicate discrimination is to clean its own house and to ensure that its own operations are run on a strictly race- and ethnicity-neutral basis... Instead of turning to race- and ethnicity-conscious remedies as a last resort, the County has turned to them as a first resort.”³⁴²

In summary, the case law suggests:

1. If race-neutral programs and legislation were in place prior to the establishment of a race-conscious program, and yet M/WBE participation in public procurement remains low relative to availability, then an inference is created that race-neutral programs were inadequate to relieve the impact of past discrimination.
2. All race-neutral programs do not have to be considered.

³³⁵ *Id.*

³³⁶ *Concrete Works I*, 823 F. Supp. 821, 841 (D. Colo. 1993).

³³⁷ *Id.* at 841.

³³⁸ *Caltrans*, 713 F.3d at 1199.

³³⁹ *Engineering Contractors Association of South Florida Inc. v. Metropolitan Dade County*, 122 F.3d 895, 928-929 (11th Cir. 1997).

³⁴⁰ *Id.* at 929.

³⁴¹ *Id.* at 928.

³⁴² *Id.* at 929.

3. Low participation by M/WBEs in race-neutral programs is evidence that the race-neutral programs do not provide an adequate remedy for past discrimination.

These standards have been buttressed in cases such as *Western Paving v. Washington State Department of Transportation*, *Concrete Works of Colorado v. City and County of Denver*, and *Associated General Contractors of America, Inc. v. California Department of Transportation (Caltrans)*.

2.4 Summary of Findings

2.4.1 *Croson* Standards

If the City chooses to continue to use race- and gender-conscious techniques, it will need to meet the U.S. Supreme Court's requirements in *City of Richmond v. Croson*. The U.S. Supreme Court established a two-pronged test: (1) that a governmental entity had to show a compelling governmental interest to utilize race-conscious remedies, and (2) that any such remedies must be narrowly tailored. A factual predicate or disparity study is used to show if there is a compelling governmental interest. Narrow tailoring is the crucial element in crafting appropriate *Croson* remedies.

Courts have struck down many MBE programs for failure of local jurisdictions to narrowly tailor their remedies. Once a factual predicate has been established, post-*Croson* case law presents several broad guidelines for crafting recommendations for MBE programs by a public entity, based on the factual predicate findings:

- Race- and gender-conscious MBE programs should be instituted only after, or in conjunction with, race- and gender-neutral programs.
- MBE programs should not be designed as permanent fixtures in a procurement system without regard to eradicating bias in standard procurement operations or in private sector contracting. Consequently, each MBE program should have a sunset provision and provisions for regular review. In addition, there is the implication that reform of procurement systems should be undertaken.
- MBE programs should have graduation provisions for the M/WBEs themselves.
- Rigid numerical quotas run a greater risk of being overturned by judicial review than flexible goals.
- Race- and gender-conscious goals, if any, should be tied to M/WBE availability and to addressing identified discrimination.
- MBE programs should limit their impact on the rights and operations of third parties.
- MBE programs should be limited in scope to only those groups that have suffered from discrimination within public entity's legislative jurisdiction enacting the program.

Croson requirements were extended to federal programs in *Adarand v. Peña*.

2.4.2 Fourth Circuit and State of North Carolina Standards

The Fourth Circuit has developed several distinctive standards, as discussed above. The following are key findings that have evolved from *Croson* case law in the Fourth Circuit:

- The strong basis in evidence must be satisfied by pre-enactment (before enactment of a race-conscious program) evidence; post-enactment evidence (after enactment of a race-conscious program) can be used to show that the race-conscious program is narrowly tailored;
- Public entities cannot establish across-the-board goals with no regard for specific race/gender and industry variables;

- Acceptable variables in calculating availability include vendors lists with approved subcontractors, subcontractors that performed on a contract, and contractors who have been qualified to perform on a public entity's contracts;
- Statistical evidence of racial discrimination must be corroborated by significant anecdotal evidence of racial discrimination; and
- Challengers of race-based remedial measures must provide credible, particularized evidence to rebut the public entity's showing of a strong basis in evidence for the necessity for remedial action.

The State of North Carolina under §143-128.2 has also established regulatory requirements for the establishment of MBE programs for building projects.

- A verifiable 10% MBE goal on the total value of work for each State building project, including those completed by a private entity to lease or sell to the State; on local government or other public or private entity projects of \$100,000 or greater that receives State appropriations; the local government may use a different verifiable MBE goal if adopted prior to December 1, 2001 and if there is sufficiently strong basis in evidence to justify the continuing use of this difference verifiable MBE goal.
- Public entities must make good faith efforts to recruit minority participation.
- First-tier subcontractors under a construction management at risk project must comply with these requirements.

2.4.3 Elements of a Factual Predicate

While *Croson* did not speak directly to the requirements of the factual predicate, lower courts interpreting *Croson* have suggested the following elements should be included:

- Relevant market
- Availability
- Utilization
- Disparity with statistical significance
- Capacity and regression
- Anecdotal data
- Private sector nexus
- Consideration of race-neutral efforts

As the City considers the findings of this disparity study and develops race- and gender-conscious and race- and gender-neutral programmatic initiatives in response to these findings, the City should ensure that the above legal parameters established by *City of Richmond v. Croson* and its progeny are fully considered.

Chapter 3: Procurement Analysis

3.1 Introduction

This procurement analysis seeks to determine if there are any systemic barriers within Raleigh’s procurement policies, procedures, processes, and daily practices that impact a qualified vendor’s access to the City of Raleigh (hereinafter, “Raleigh”) procurement opportunities based on that vendor’s race, ethnicity, and/or gender. This assessment will further assist in determining if any barriers found are a result of inherent, systemic, or purposeful discrimination or exclusion. In performing this analysis, the foundational doctrine, mission, and impact of Raleigh’s current procurement practices on all prospective bidders were considered. To that end, Miller³ Consulting, Inc. (M³ Consulting) performed the following three-pronged analysis and review was performed:

- Consideration of public sector procurement best practices
- A review of Raleigh’s procurement policies and procedures
- A review of the impacts of Raleigh’s procurement structure, policies, procedures, and practices on the ability of Minority and Women-Owned Business Enterprises (M/WBEs) to do business with Raleigh

This procurement analysis is organized into the following sections:

- Best Industry Practices Review
- Review of Raleigh’s Organizational Structure and Procurement Process
- Analysis of Raleigh’s Diversity, Inclusion, and Assistance Initiatives
- Impact of Raleigh’s Procurement Process and M/WBE Programs on M/WBE Participation
- Conclusion

Operational characteristics within the procurement process that hinder the involvement of M/WBEs in Raleigh procurement opportunities may necessitate fundamental changes to the overall procurement and contracting activities in Raleigh to ensure inclusiveness, transparency, accountability, and efficiency as related to M/WBE participation and is consistent with Raleigh’s strategic Mission and Vision. M³ Consulting may recommend changes to the City’s procurement operation that enhance the ability of M/WBEs to do business with Raleigh in Chapter 12: Conclusions and Recommendations.

3.2 Best Practices in Public Sector Procurement

3.2.1 Inclusive and Sustainable Procurement

Best practices in public sector procurement begin with inclusive and sustainable procurement processes. Public procurement represents 10%–45% of a nation’s gross domestic product (GDP), with the average percentage in developed countries around 15%–20%. This percentage represents only public sector procurement. When private sector procurement is included, institutional purchasing accounts for 30%–60% or more of a nation’s GDP; therefore, our economies are significantly driven by the decisions made by purchasing agents (PAs).¹

Public sector procurement systems are responsible to the citizens within their jurisdiction. Prier, McCue, and Bevis² state that the public entity, through its procurement process, is responding to the “Triple Bottom Line—the simultaneous delivery of economic, environmental, and social policies that facilitate an integrated community development strategy.”³ Within this focus, the procurement team is also responsible for the efficient and cost-effective procurement of goods and services. However, cost-effectiveness should not be achieved to the detriment of certain groups within a public entity’s jurisdiction. Prier, McCue, and Bevis say that “continued participation by these targeted groups”—small and historically underutilized businesses (HUBs)—“is a necessary precursor to a robust community economic development strategy that leads to prosperity.”⁴

The objective of the procurement operation, therefore, is one of inclusive and sustainable procurement and economic development (SPED).⁵ The execution and implementation of a public entity’s community economic development objectives begin with the procurement process. M³ Consulting asserts that the degree to which the public entity achieves its community economic development objectives through procurement depends on whether the public entity starts with a public policy approach, supported by project execution.

¹ “Playing the Game,” Sherry J. Williams, Esq., MBE Magazine, July/August 2013.

² “Making It Happen: Public Procurement’s Role In Integrating Economic Development and Sustainability Strategies For Local Governments In The U.S.A.,” Eric Prier, Clifford P. McCue, and Michael E. Bevis,* 3rd International Public Procurement Conference Proceedings, 28-30 August 2008; Eric Prier, Ph.D., is an Associate Professor, Department of Political Science, Florida Atlantic University. Clifford P. McCue, Ph.D., is Associate Professor, and Director, Public Procurement Research Center, School of Public Administration, Florida Atlantic University. Michael E. Bevis, CPPO, C.P.M., PMP, is Chief Procurement Officer, City of Naperville, Illinois, USA.

³ *Ibid.* at 639.

⁴ *Ibid.*

⁵ *Ibid.* at 642.

3.2.2 Comprehensive Procurement Systems

M³ Consulting has reviewed numerous public sector procurement operations and has developed an overview of best practices as it relates to creating an inclusive and sustainable procurement environment that promotes the participation of all firms in a nondiscriminatory manner. A comprehensive procurement system includes the 10 components detailed in Figure 3.1.

Figure 3.1. 10 Components of an Inclusive and Sustainable Procurement System

1. Organizational Structure	Effective organizational structure provides for checks and balances and encourages collaboration and broad input from a variety of perspectives. An organizational analysis provides an assessment of the open and competitive nature of the procurement system. To make this determination, M ³ Consulting gauges the degree of centralization or decentralization of the procurement process, the sufficiency and interrelationship of the written policies and procedures, and the transparency of the procurement process.
2. Budgeting and Forecasting	Effective budgeting and forecasting are essential elements in the development of successful procurement programs that enhance bidder participation and utilization of M/WBEs and Small Business Enterprises (SBEs). Budgeting and forecasting allow greater and more in-depth planning for the inclusion of M/WBEs and SBEs in a public entity's opportunities at the prime and subcontractor levels. M ³ Consulting reviews the degree to which an agency engages in procurement forecasting and determines how forecasting is used to promote inclusion.
3. Informal Procurement	Informal procurement provides the greatest opportunity for procurement personnel to impact the choice of vendors selected. These purchases are below a certain dollar threshold and are not subject to a formal contracting process or an advertised competitive bid process. M ³ Consulting reviews the way buyers or procurement agents use their discretion in the identification of those vendors from whom they will solicit quotes and who will be selected to receive the final award.
4. Formal Procurement	Formal purchases usually allow procurement personnel less discretion in vendor selection, particularly in jurisdictions that must select the lowest bidder. Some discretion, however, typically exists within formal purchasing processes, such as when a selection criterion, like the "lowest bidder," can be modified to include terms such as the "lowest responsive and responsible" bidder. M ³ Consulting reviews the formal procurement process to determine how available discretion is exercised.
5. Bid Opening and Evaluation	Objective and thorough bid opening and evaluation procedures ensure the fair and fully vetted consideration of bid and proposal submittals. Analysis of these procedures allows M ³ Consulting to determine whether there is any subjectivity in the selection of contractors and vendors.
6. Contract Administration	Effective contract administration includes comprehensive and consistent management of the contract, payment practices, contract life cycle, and reviews of contractor performance. A considerable amount of vendor contact occurs at this phase of the procurement process. A review of contract administration procedures allows M ³ Consulting to determine overall fairness and consistency as well as how inspectors, engineers, and other personnel

	interact with the prime contractor and subcontractors while the contract is being performed.
7. Noncompetitive Purchases	In some instances, noncompetitive purchases are warranted for very specialized goods or services. However, in an effective procurement system, these instances are limited. M ³ Consulting reviews sole-source, emergency purchases, change orders, and contract amendment policies to determine whether this component of the procurement process is being used appropriately or whether competitive bidding procedures are being avoided inadvertently or intentionally.
8. Bonding and Insurance	Bonding and insurance are contract requirements that protect the interest of the municipality (Owner). These contract requirements ensure that the Owner can complete the project regardless of nonperformance by a contractor and provide protection against site accidents and other mishaps that may occur during construction or during the provision of services. M ³ Consulting reviews rules and regulations regarding bonding and insurance to ensure that they are not overly burdensome to M/WBEs.
9. Comprehensive and Efficient Enterprise Systems	Enterprise systems are critical to monitoring and tracking organizational performance. Without effective enterprise systems, the public entity cannot effectively monitor and evaluate organization procurement operations and decision-making, particularly in a decentralized procurement environment. M ³ Consulting reviews these enterprise systems to ensure that procurement systems capture data to the degree necessary to not only track levels of participation but also to determine areas of disparity in real time.
10. Race-/Gender-Focused Initiatives	See Figure 3.2

Source: M³ Consulting

3.2.3 Small, Disadvantaged, Minority, and Women-Owned Business Programs

In addition to the above-mentioned components of an inclusive and sustainable procurement system, M³ Consulting has identified six essential program elements of successful and comprehensive M/WBE programs. These program elements should be fully integrated and work in collaboration with the overall procurement system while supporting the tenets of the organization's Mission and Strategic Plan and its community economic development objectives. When these six essential program elements are used consistently, these elements tend to increase the opportunity for M/WBE success to participate in business and sustainable community economic development opportunities:

Figure 3.2. M³ Consulting Six Essential M/WBE and SBE Program Elements

1. Outreach and Matchmaking	Efforts to increase the business community’s awareness of an entity’s procurement and contract opportunities and match M/WBEs and SBEs to specific contract opportunities at prime and subcontracting levels
2. Certification	Eligibility criteria for M/WBE participants
3. Technical Assistance	Informational and strategic support of businesses to meet the entity’s M/WBE plan objectives
4. M/WBE Inclusion in Bid Opportunities	The mechanism by which the entity assures that material consideration of M/WBE participation is given in the award of a contract
5. Contract Compliance	Ensuring adherence to M/WBE plan goals on all contracts after execution of the contract
6. Organizational Performance Evaluation	A comparison of performance results to the entity’s goals to determine policy successes, strengths and weaknesses, and performance improvement areas

Source: M³ Consulting

3.3 Raleigh's Organizational Structure and Procurement Process

Commensurate to our effort to conduct a thorough analysis, M³ Consulting reviewed the following procurement policy and procedure documents, Raleigh planning documents, and applicable referenced laws and regulations of the State of North Carolina:

- Raleigh Standard Operating Procedure (SOP) 501-1 Purchasing Policy – Statutory Authority
- Raleigh SOP 505-1 Purchasing Procedures
- Raleigh SOP 502-5 Contract Change Order
- Raleigh SOP 501-3 Public Bidding
- Raleigh SOP 505-3 Procurement Card Program
- Raleigh SOP 502-4 Retention of Professional and Other Services
- Raleigh Citizen Participation Plan
- Raleigh Biennial Community Survey Results Report (2020)
- Raleigh FY21 Strategic Plan
- Raleigh FY21 Performance Report
- Raleigh Procurement Processes Internal Audits
- M/WBE Office Procedures Documents
- Raleigh M/WBE Annual Report Data FY17–FY21
- Raleigh Disadvantaged Business Enterprise (DBE) Triennial Goal-Setting Methodology
- Raleigh DBE Transit Award Management System (TrAMS) Report Data FY21
- Raleigh Construction Bid Prequalification Policy
- Sec. 6.10 of the City of Raleigh Code of Ordinances, “Division of Purchases and Contracts”
- North Carolina General Statutes 143-128-135.9

In addition to considering the organizational structure and written policies and procedures, M³ Consulting interviewed Procurement Office staff and stakeholder departments across the City of Raleigh's operational structure, including but not limited to Procurement, Department of Equity & Inclusion (DEI), M/WBE Office, Engineering Services, Raleigh Water, and Parks, Recreation, and Cultural Resources.

These interviews assist M³ Consulting to determine if actual practices are consistent with written policies and procedures and if written policies are unclear. This review of policies, procedures, and practices provides an understanding of procurement operations to determine the impact of Raleigh's current operations on the inclusion of Small, Minority, Disadvantaged, and Women-Owned Businesses in its procurement opportunities. This analysis is not intended to be a procurement audit or personnel performance review. Rather, the following analysis reflects the results of the review of Raleigh's current procurement policies, procedures, and practices as compared to the best practice comprehensive 10 components outlined above.

3.3.1 Organizational Analysis

A. Raleigh's Strategic Mission and Vision

The City of Raleigh Strategic Mission and Vision has six key focus areas:

- 1) **ARTS & CULTURAL RESOURCES** – Embrace Raleigh's diverse offerings of arts, parks, and cultural resources as iconic celebrations of our community that provide entertainment, community, and economic benefit.
- 2) **ECONOMIC DEVELOPMENT & INNOVATION** – Maintain and grow a diverse economy through partnerships and innovation to support large and small businesses and entrepreneurs, while leveraging technology and providing equitable employment opportunities for all community members.
- 3) **GROWTH & NATURAL RESOURCES** – Encourage a diverse, vibrant built environment that preserves and protects the community's natural resources, strives for environmental equity and justice, and encourages sustainable growth that complements existing development.
- 4) **ORGANIZATIONAL EXCELLENCE** – Foster a transparent, nimble organization of employees challenged to provide high quality, responsive, and innovative services efficiently, effectively, and equitably.
- 5) **SAFE, VIBRANT & HEALTHY COMMUNITY** – Promote a clean, engaged community environment where people feel safe and enjoy access to affordable housing and community amenities that support a high quality of life.
- 6) **TRANSPORTATION & TRANSIT** – Develop an equitable and accessible citywide transportation network for pedestrians, cyclists, automobiles, and transit that is linked to regional municipalities, rail, and air hubs.

These key focus areas fold into Raleigh's Mission and Vision, as stated on the City of Raleigh's Official Website⁶ and updated as of January 12, 2022. An effective Strategic Plan should have a clearly stated Mission and Vision, provide structure to an organization, and lead to a practice that includes not only internal workforce diversity but also integrated planning nodes and collaborative departmental efforts that enhance the diversity of vendor/contractor awards and inclusion to reduce and/or eliminate the risk of discrimination. Raleigh's Mission and Vision are articulated as follows:

Mission

To build a stable platform of evolving services for our community through which we champion positive and sustainable growth and realize visionary ideas for all.

Vision

To pursue a world-class quality of life by actively collaborating with our community toward a fulfilling and inspired future for all.

Raleigh's adopted FY21 Strategic Plan seeks to translate its vision and goals into an actionable strategy that guides the organization's focus, work, and resource alignment. The FY21 plan's overarching key focus areas and underlying objectives, initiatives, and performance measures communicate an effort to be transparent about their goals, focused on their efforts, and accountable for the results that arise from the plan's execution.

⁶ <https://raleighnc.gov/SupportPages/Mission-and-Vision>

Raleigh’s current Strategic Plan was a collaborative effort that was led by Raleigh City Council’s vision and leadership but encompassed the influence and “will of the people” that can only be infused through City resident feedback, which was obtained through a Biennial Community Survey. A snapshot view of progress is available online.⁷ The Strategic Plan provides a solid foundation on which Raleigh hopes to continue to build an intentional, inclusive, and prosperous future. Furthermore, the Strategic Plan, Mission, and key focus areas recognize that policies and procedures are admirable guides, but the ultimate measure of effectiveness lies in the extent to which people execute them. To that end, a mission- and value-driven workforce must understand their individual roles in carrying out the Raleigh mission, be accountable for accomplishing them in a manner consistent with Raleigh’s values and be recognized and rewarded for excellence.

M³ Consulting overlaid the current Raleigh procurement policies, procedures, and practices on the Mission and Vision commitments as expressed in Raleigh’s Strategic Plan as part of the overall analysis to determine to what extent procurement policies can be effective strategies in facilitating inclusive community economic development—in part by promoting inclusion of all firms in the region into the various Raleigh procurement and contracting opportunities in a nondiscriminatory manner.

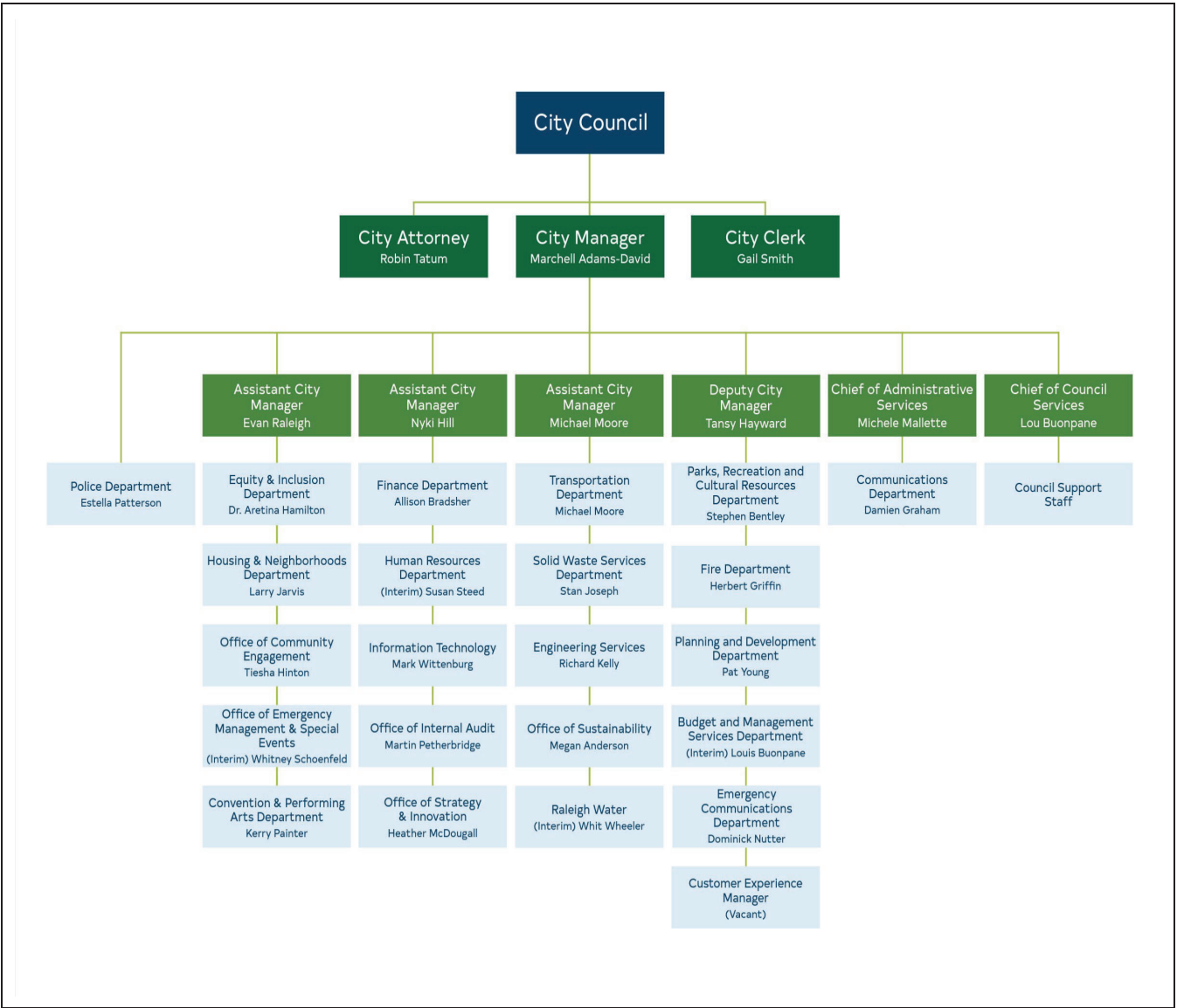
B. Organizational Structure

M³ Consulting was provided with Organizational Structure Charts for the City of Raleigh (Figure 3.3) as and its Department of Equity and Inclusion (DEI) (Figure 3.4). Raleigh SOP 501-1 states that the Division of Purchases and Contracts (P&C) resides within Raleigh’s Department of Finance, and Raleigh City Charter Section 6.10 provides that the Division of P&C be established in the Department of Finance.⁸

⁷ <https://raleighnc.gov/government/strategic-plan>

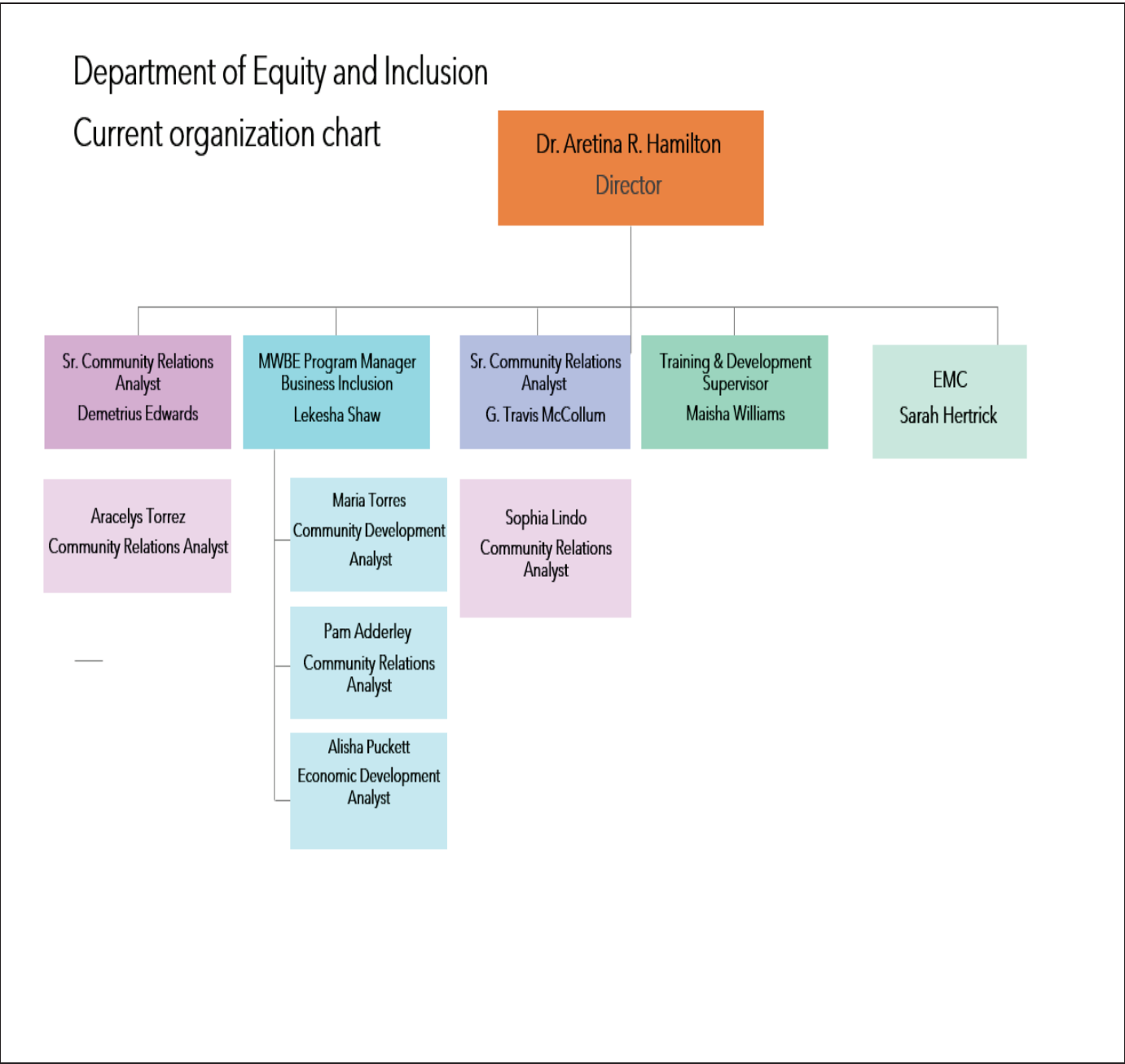
⁸ City Charter Section 6.10

Figure 3.3. City of Raleigh Organizational Chart



Source: City of Raleigh

Figure 3.4. City of Raleigh Department of Equity and Inclusion (DEI) Organizational Chart



Source: City of Raleigh

Upon review and examination of the two organizational charts referenced above, M³ Consulting found that:

- The Purchasing/Procurement Division does not appear individually on the overarching City of Raleigh Organizational Chart.
- The previously provided DEI Organizational chart showed that 50% of the 14 positions listed were vacant. The seven vacancies on the initially provided document included the Department Director. The subsequently provided organizational chart (above received May 18, 2022) shows several relatively new hires (including Department Director) and two remaining vacancies.

C. Procurement Functionality

The functionality of Raleigh procurement processes begins with the Raleigh Chief Financial Officer (CFO) certifying that a requisitioning department has sufficient unencumbered funds in its budget to pay for the goods, construction and/or repair, professional services, equipment lease/purchase, and other items that the City department seeks to procure. The Procurement Officer is hired by the CFO/Finance Department and the authority includes contracting for, purchasing and distribution of all supplies, materials, and equipment for all City departments.⁹ The PA is responsible for establishing and enforcing specifications with respect to supplies, materials, and equipment required by the City government in cooperation with City department and division directors and ensuring the inspection of all deliveries of supplies, materials, and equipment to determine their quality, quantity, and conformance with the PA's specifications. The PA has purview over storage facilities and warehouses as provided by the City Council via ordinance. Moreover, the PA oversees interoffice/interdepartmental supply/material/equipment transfers, or the sale of surplus, obsolete, or unused supplies, materials, or equipment (subject to City Council authorization).

In terms of real-world application, the Raleigh procurement function for goods, construction and/or repair, professional services, non-professional services, and maintenance/maintenance-related professional services are executed mostly in a decentralized manner. The various user departments, with input from Engineering Services and/or third-party consultants (as warranted), generally lead the procurement efforts. The departments' interaction with the Procurement Division and the M/WBE Office is limited to providing reference materials that are woven into the solicitation documents and ensuring that proper templates are being used. The departments also have representatives that serve on a Raleigh Procurement Advisory Committee. This committee is comprised of representatives from multiple departments that have significant responsibility for procurement activities. The committee discusses processes, policies, and other procurement concerns that may arise.

Raleigh recognizes its responsibility to minimize negative impacts on human health and the environment while supporting a diverse, equitable, and vibrant community and economy. According to its sustainable procurement policy,¹⁰ Raleigh recognizes that the types of products and services the City buys have inherent social, human health, environmental, and economic impacts and that the City should make procurement decisions that embody the City's commitment to sustainability whenever possible. Although Raleigh seeks to demonstrate a robust interest in the incorporation of sustainable procurement practices, the City's actual guiding documentation focuses on the primary function of the Procurement Division, which is for the overall conduct or oversight of all purchases of City of Raleigh equipment, supplies, and services.

⁹ Charter of the City of Raleigh Article VI – Municipal Functions – Sec. 6.10 – Division of Purchases and Contracts.

¹⁰ <https://cityofraleigh0drupal.blob.core.usgovcloudapi.net/drupal-prod/COR17/CoRSustainableProcurement.pdf>

Raleigh Departmental Staff Responsibilities

Raleigh has attempted to ensure transparency and budgetary accountability by requiring that all department directors to provide estimates—upon PA request—of all supplies, materials, and equipment that each department needs. These estimates are to be provided on forms provided by the PA and for periods designated by the PA or City Council. The PA consolidates these cross-departmental estimates to determine if the quantities exceed a maximum threshold that allows purchases through an informal bid process as provided for in Article 8 of the North Carolina General Statutes, Sec. 143-129-131 and Sec. 143-231.

The individual role and responsibilities of the various departmental units in the purchasing process as outlined in the Procurement SOP documents were not detailed; however, information gleaned from the documents and from staff interviews were used to create Figure 3.5, which summarizes the responsibilities of the Procurement Division, user departments, and DEI.

Figure 3.5. City of Raleigh Procurement Functions

Purchasing Agent (PA)/Officer/Manager Responsibilities	<ul style="list-style-type: none"> • City Purchasing Agent shares responsibility with Purchasing and Departmental leadership to develop Procurement objectives, policies, programs, and procedures for the negotiation and acquisition of materials, equipment, supplies, and services. • Coordinate Procurement procedures with other City Departments and City officers. • Act as City representative on all matters pertaining to Procurement. • Initiate reports necessary for the analysis of Procurement performance. • Make minor edits to bid specifications as needed. • Arrange for the disposal or negotiation for the sale of surplus materials and equipment. • Work with other City Departments to establish standardization of materials, supplies, and equipment where practicable. • Support departments' efforts to promote goodwill between the City and its suppliers. • Tabulate bids and determine responsiveness with respect to formal and informal bids.
Procurement Division Responsibilities	<ul style="list-style-type: none"> • Review technical specifications for bids for goods/commodities developed by user departments. • Review and approve purchase requisition from departments. • Request informal quotes/proposals. • Review and assist departments with technical specifications and scope of work, identifying specific work elements. • Reviews user department-established evaluation criteria templates and evaluation points for bids and Request For Proposals (RFPs) in coordination with user departments. • Determine the lowest responsive and responsible bidder. • Perform contract process administration.
User Department Responsibilities	<ul style="list-style-type: none"> • Prepare technical specifications and scope of work, request informal quotes/proposals. • Collaborate with Procurement Division to determine construction delivery method (e.g., CMR, CM, Design-Build, ITB) • Create bid, RFP, and RFQ packages. • Solicit design and construction firms.

	<ul style="list-style-type: none"> • Perform contract administration/management. Furnish the PA estimates of all supplies, materials, and equipment needed for a budget period in advance. • Bid tabulation and review of bids for responsive and responsible bidder. • Submit paper or electronic requisition documents including any preliminary pricing information obtained. • Make check requests, which requires the submission of Form 301-1 along with a copy of the vendor's invoice.
The Division of Community & Small Business Development Responsibilities	<ul style="list-style-type: none"> • Provide various professional services to promote business activity and enhance the quality of life in Raleigh. • Work closely with state and local economic development partners to promote growth within the City. • Collaborate with Raleigh's M/WBE Office to raise awareness of opportunities. • Refer businesses to various services.
Department of Equity and Inclusion (DEI) Responsibilities	<ul style="list-style-type: none"> • Leads Raleigh's efforts to embed equity internally within Raleigh's organization and within the greater Raleigh community. • Assists Raleigh departments in developing equitable policies. • Manages all equity-related assessments, reporting, and action planning. • Owns/oversees Raleigh's Equity & Inclusion Action Plan.
M/WBE Program Unit Responsibilities	<ul style="list-style-type: none"> • Within the DEI, responsibilities of the Equal Opportunity/Contract Compliance Office (EO/CCO) are assumed by the City of Raleigh's M/WBE Unit within DEI. • Helps small and minority-owned firms with resources and capital needs and assists with other business challenges. Assistance includes matching them up with technical assistance with one of Raleigh's partner organizations, or state and federal small business administration programs, such as their local Small Business Administration office. • Analyze information received from user departments on applicable projects to see trade areas for possible M/WBE inclusion. • Lead efforts to identify diverse suppliers and perform outreach efforts to increase M/WBE participation. • Attend pre-bid meetings, bid openings, and pre-construction meetings to speak on M/WBE inclusion. • Create a letter for applicable projects verifying that a prime contractor is following an aspirational goal or good faith efforts.

Source: Raleigh Procurement Manual, M³ Consulting

The SOP document 502-4 indicated that during Raleigh's process of evaluating proposals for professional and other services, Raleigh's determination of the best qualified firm considers:

- Qualifications of the proposed project team members assigned to the contracting opportunity;
- Time schedule for providing services;
- The level of work that was performed by the proposed project team on previous assignments comparable to the current contracting solicitation; and
- Feedback and reviews from previous clients detailing their satisfaction level.

Contract Authority

Figure 3.6 lists authorization levels for contract actions, and Figure 3.7 lists details regarding authorization to award contracts.

Figure 3.6. Authorization Matrix—Contract Actions

Procurement Type	Authorization Threshold	Required Approvers
Informal Purchase	\$1,000 to \$5,000	Assigned Departmental Approvers
Soliciting for Professional and Other Services	More than \$5,000 to \$300,000	PA/City Manager
Soliciting for Professional and Other Services	Above \$300,000	City Council
Informal Bidding for purchases/lease-purchases of apparatus, supplies, materials, or equipment	\$5,000 to \$89,999.99	City Manager
Informal Bidding for Construction/Repair Work	\$5,000 to \$499,999.99	City Manager (With Awards Report to City Council)
Formal Bidding for purchases/lease-purchases of apparatus, supplies, materials, or equipment	\$90,000 to \$300,000	City Manager
Formal Bidding for purchases/lease-purchases of apparatus, supplies, materials, or equipment	Above \$300,000	City Council
Formal Bidding For Professional and Other Service	\$300,000 and Above	City Council
Formal Bidding for Construction/Repair Work	\$500,000 and Above	City Council

Source: Raleigh Procurement SOPs 501-3, 502-4, and 505-3

Figure 3.7. Authorization to Award Contracts

Procurement Method	Document	Authorization Limit	Required Approvers
Procurement Card (P-Card)	N/A	Up to \$1,000	Department Head
Informal Purchase	Purchase Order (PO)	\$1k to \$5k	Assigned Departmental Approvers
Informal quotation for Construction/ Repair	PO	Up to \$5,000	City Manager
Purchase/Lease of Supplies, Materials, or Equipment	Formal Contract	\$90,000 and Above	City Manager
Informal Bidding for Construction/ Repair	Formal Contract	\$5,000 to \$499,999.99	City Manager (With Awards Report to City Council)
Formal Bidding for Construction/ Repair	Formal Contract	\$500,000 and Above	City Council
Informal Solicitation Professional and Other Services	PO or Formal Contract	Up to \$5,000	City Manager (delegated authority to the CFO to make the determinations on a case-by-case basis for the City to exempt itself from RFQ advertising)
Informal Solicitation Professional and Other Services	PO or Formal Contract	\$5,000 to \$50,000	City Manager (delegated authority to the CFO to make the determinations on a case-by-case basis for the City to exempt itself from RFQ advertising)
Formal Solicitation Professional and Other Services	Formal Contract	Up to \$300,000	City Manager
Formal Solicitation Professional and Other Services	Formal Contract	Over \$300,000	City Council
Formal Bidding For Purchases of Apparatus, Supplies, Materials, or Equipment	Formal Contract	\$90,000 and Above	City Manager

Source: Raleigh Procurement SOPs 501-3, 502-4, and 505-3

D. Enterprise Systems Supporting the Procurement Functions

While Raleigh has implemented some PeopleSoft Financial modules, other procurement and program management modules have not been fully integrated. Feedback from staff also indicated that Small, Minority, Woman-owned, or Disadvantaged Business Enterprise(M/WBE) commitment/payment tracking, and diversity inclusion monitoring can now be accomplished through their vendor payment tracking system via PeopleSoft. With respect to M/WBE Certification, Raleigh maintains a vendor registry but does not perform a certification

function. Rather, the City relies on certification at the State level as the State now provides a single Uniform Certification Program (UCP). Raleigh requires vendors to submit their certificate as proof of M/WBE status. Currently, it appears that the receipt of bid and quote submissions have not yet been ubiquitously computerized or made accessible online. Data for successful bidders is uploaded to their electronic enterprise resource planning (ERP) system. However, data for unsuccessful bidders is maintained in hardcopy formats at the sponsor department level and must be collected manually to perform any meaningful analysis.

3.3.2 Policies and Procedures

In reviewing the Procurement Division Policies and Procedures to determine their consistency with the attributes of well-written policies, M³ Consulting made the following observations:

Figure 3.8. Analysis of Policies and Procedures

1. Clearly defined functions of all personnel involved in procurement decisions	A procurement manual titled “Purchasing Business Process Workbook” (circa 2008) was provided as the most recent written handbook document. The workbook contained the various procurement process workflows and the functions and tasks of the responsible staff to execute those workflows.
2. Clear protocol for how and when to use various procurement methods	The above-referenced “Purchasing Business Process Workbook” includes processes for various procurement methods, but it is not evident that the 2008 document is current or used as a standard across the enterprise. However, the Raleigh website ¹¹ contains postings that detail a clear protocol for how and when to use various procurement methods.
3. Clear definitions of procurement terms	The documents reviewed contained sufficient definitions for procurement, contract, and diversity inclusion terms generally used in the profession, such as vendor list, bid, bidder, certified minority business (M/WBE), bid agent, affiliate, commercially useful function (CUF), exempt contract, purchase order, tabulation sheet, bidder, proposer, and responsible and responsive bidder.
4. Criteria for selection and evaluation of bidders by the major categories of procurement	Bidder selection and evaluation criteria were not defined in the documents provided.
5. Criteria for evaluation of vendor/contractor performance after contract award	The documents provided did not outline criteria for vendor performance evaluation post-award.
6. Clear delineation of the sources of procurement definitions, particularly if municipal, state, or federal codes are involved	The “Purchasing Business Process Workbook” does not contain procurement term definitions but does contain clear delineations of process workflows and event mapping. The workbook also indicates that State statutes and City policies require the user department representative and prime vendors to outreach to M/WBE businesses on construction projects. Raleigh user departments must also report details (total cost) of the project and M/WBE participation to the State Historically Underutilized Business (HUB) office for all building projects valued at \$30,000 or greater.

Source: M³ Consulting

¹¹ <https://raleighnc.gov/services/doing-business/become-city-vendor-or-supplier>

3.3.3 Budgeting and Forecasting

The documents provided do not include much detail of the Raleigh budgeting process. However, Purchasing Policy SOP 501-1 indicates that department directors must furnish the PA, when requested, forecasted estimates of all supplies, materials, and equipment that the particular department needs for periods of time in advance as may be designated by the PA or the City Council. SOPs do not indicate whether procurement forecasting is an official component of the annual budgeting process or indicate a specific period for any forecasting processes. Staff interviews indicate that some project forecasts are shared with the bidding community during an annual outreach event. Outside this event, no public-facing forecasting documents are made available to the bidding community to give them advance notification.

3.3.4 Vendor Registration, Notification, Solicitation, and Bid Opening

A. Vendor Registration

Raleigh facilitates its vendor registration process via a Vendor Registration Portal online. Dubbed “The Raleigh Supplier Connection,” the [self-service portal](#) is represented as a single source of information for companies looking to do business with the City of Raleigh. Registrants are informed that the information provided during the registration process will increase the visibility of their company to all City departments. The registration portal allows vendors to:

- Update their business information.
- Upload and/or update any M/WBE Certification certificate for the vendor company.
- Acknowledge POs dispatched through Raleigh’s electronic e-procurement system known as “RPOD Market.”
- View announcements and upcoming events.

Although the Raleigh website still currently references the ability for vendors to track payment activity for their own contracts, Staff feedback indicated that the referenced tracking function is not available.

B. Specification Development

Specification development was not detailed in the provided policy documents, but discussions with various Raleigh staff members indicated that user departments or requesting agencies that submit requisitions are responsible for providing the specifications to be included in a bid document. The applicable City departments, along with third-party consultants (as required), collaborate to develop specifications for design and construction solicitations. A subset of Raleigh’s projects include grant funding that is funneled through the North Carolina Department of Transportation (NCDOT). Raleigh leverages NCDOT specifications for the delivery of those projects.

C. Notification and Solicitation

The notification process commences once a requisition is received from a user department. Current City solicitations (Bids, RFPs, and RFQs) for construction, supplies, materials, apparatus/equipment, and professional and general services are posted on the North Carolina Interactive Purchasing System (IPS). When a solicitation is posted to IPS, an email notification is automatically sent to each supplier that is registered in IPS for the category

code or codes related to the solicitation. Notification summaries for construction bids are also posted to IPS. Prospective proponents are responsible for:

- Checking the IPS website to obtain all solicitations documents for goods and services and addenda that may be issued to the solicitations;
- Contacting the Bid Agent listed on IPS or within the solicitation documents with any questions or clarifications; and
- Contacting the City Department for the complete Construction Bid documents.

Select solicitations require proponents to attend a mandatory pre-bid conference or other qualifying event. The determination of which contracting opportunities are to be posted to IPS could not be determined from the provided documents. According to staff interview feedback: “the advertisement process starts at a department level. So, they’re driving that initial advertisement, which gets posted at IPS, so interactive purchasing system.”

As detailed by a staff person during interviews, the M/WBE Office receives a notification via “email from Raleigh’s RPOD (Raleigh eProcurement eMarket basket shopping) system that says Hey, this project, because they’ve been notified, is getting ready to be advertised and hit IPS. When we receive that, M/WBE staff will go and post a project notification to our GovDelivery listserv, where we have 4,000-plus M/WBE firm subscribers to that listserv. So, we will go ahead and push that project information out. And it can be construction. It doesn’t matter if it’s RFQ/RFP. While we don’t have goals for RFPs/RFQs, we still will push out project notifications for construction, whether it’s informal or formal RFPs/RFQs, etc.”

3.3.5 Procurement Levels and Methodologies

The procurement method varies based on the threshold value of the purchase. Figures 3.9–3.12 summarize the contract thresholds and requirements.

Figure 3.9. Informal Procurement or Small Purchases: Goods (supplies, apparatus, and equipment including leases and purchases)

TOTAL AMOUNT OF PURCHASE	PROCUREMENT METHOD	SOLICITATION REQUIREMENTS
Less than \$5,000	Informal Quote	User department obtains one or more online quotes.
\$5,000 to <\$30,000	Informal Quote	User department attempts to obtain at least three written quotes.
\$30,000 to <\$90,000	Informal Bid	Procurement Division attempts to obtain at least three written bids.
\$90,000 and above	Formal Bid	Procurement Division attempts to obtain at least three sealed bids.

Figure 3.10. Professional Services

(only for architectural, engineering, design-build, surveying, and construction management at risk, and public-private partnership construction)

TOTAL AMOUNT OF PURCHASE	PROCUREMENT METHOD	SOLICITATION REQUIREMENTS
All	Requests for Qualifications (RFQ)	User department solicits qualifications and selects the highest-ranked firm. The city manager delegated authority to the CFO to decide on a case-by-case basis to exempt the City from the RFQ advertising requirement for certain professional services under the Mini-Brooks Act, when such professional services are expected to cost less than \$50,000.

Figure 3.11. All Other General Services

(excludes architectural, engineering, design-build, leases, surveying, construction management at risk, and public-private partnership construction)

TOTAL AMOUNT OF PURCHASE	PROCUREMENT METHOD	SOLICITATION REQUIREMENTS
Up to \$5,000	Informal Quote	User department obtains one or more verbal, fax, or online quotes.
\$5,000.01 to <\$50,000	Informal RFP	User department obtains one or more documented written quotes.
\$50,000 and above	Formal RFP	User department solicits sealed proposals to conduct RFP process and selects the highest-ranked proposer.

Figure 3.12. Construction And Repairs

TOTAL AMOUNT OF PURCHASE	PROCUREMENT METHOD	SOLICITATION REQUIREMENTS
Less than \$5,000	Informal Quote	User department obtains one or more verbal, fax, or online quotes.
\$5,000 to \$299,999.99	Informal Bid	User department obtains one or more documented written bids.
\$300,000 to \$499,999.99	Formal Bid	User departments solicits sealed proposals to conducts RFP process and selects highest-ranked proposer.
\$500,000 and above	Formal Bid	User department attempts to obtain at least three sealed bids. If at least three bids are not received by the bid due date, the user department must advertise again.

Source: City of Raleigh Web¹²

INFORMAL PURCHASES

According to the supplied documentation, the City of Raleigh procures goods, commodities, construction/repair, and professional, and other general services using methodologies in accordance with the above-referenced thresholds:

A. Procurement Cards

Select City employees are issued a City of Raleigh P-Card—a specialized credit card that gives the staff cardholders authorization to make certain purchases (less than \$1,000) in accordance with the City’s purchasing procedures. Department directors may propose personnel to be cardholders by completing a “Cardholder Enrollment Form.” The current policy does not limit the level of employee that may be proposed as a cardholder. The P-Card program provides a more rapid turnaround of purchases for low dollar-value purchases.

Bank of America is the current service provider for the P-Card service for the City, and the cards can be used with suppliers that accept Visa credit cards. The program is administered out of the Finance Department and provides that the cards may only be used for official City of Raleigh business. A department director has the authority to determine the types of items and/or services to be purchased using a P-Card, and this is approved by the Finance Department. All P-Cards have a standard dollar spending limit that is approved by the city manager based upon a recommendation by the Finance Department. Any upward adjustment of the spending limit on the recommendation of a department director must be approved by the Finance Department.

B. Purchase Orders

The Procurement Division issues POs for the procurement of equipment, supplies, and some services. The City’s PO terms and conditions apply to all purchases of supplies, equipment, and services that have been procured using POs and must be considered as part of any quotation or bid. To help expand its electronic ordering and payment capabilities, the City of Raleigh selected Jaggaer, a Research Triangle Park, NC firm. Jaggaer’s eProcurement software includes eMarket shopping-cart functionality that all City departments are directed to use whenever purchasing thresholds dictate. The City’s deployment of its “RPOD Market” attempts to make ordering and requesting purchase orders easier and improve the efficiency of the City’s accounting and payment system through the use of electronic methods to deliver POs and receive supplier invoices.

New and previous vendors or suppliers that are awarded Raleigh City contracts are requested to contact the Procurement Division to discuss the use of the RPOD web-based application for the electronic delivery and receipt of POs and invoices. There are no fees or costs to suppliers for the use of the RPOD application. Feedback from internal City users of the RPOD system indicated a mixed bag in terms of the convenience and efficiency of the eMarket shopping cart functionality. Many users report that they prefer using big-box online providers such as Amazon due to expedience and convenience. Moreover, the diversity status of the vendors and suppliers that reside in the RPOD system is not a consideration during a buyer’s purchase decision.

3.3.6 Formal Procurement

In accordance with North Carolina General Statute 143-129, formal purchasing or competitive purchasing is required for procurement opportunities valued at \$90,000 or greater, and for construction/repair work valued at \$500,000 or greater. In addition, for construction/repair projects, the Procurement Division must communicate with department leadership to decide as to whether a formal bidding procedure is still required

¹² <https://raleighnc.gov/services/doing-business/become-city-vendor-or-supplier>

for construction/repair opportunities valued between \$300,000 and \$500,000. Raleigh's SOP 502-4 holds that the formal solicitation process shall apply to all professional and other services contracting opportunities valued at \$50,000 or more. Formal purchasing at Raleigh is done using Invitations for Bid and Requests for Proposals.

For professional services contracts involving architectural services, engineering, surveying, construction management at risk services, design-build services, and public-private partnership construction, a process involving RFQs is mandated regardless of the expected contract value. The formal professional services solicitation is uploaded into IPS and advertised for two or four weeks, and a presubmittal conference is held for prospective proponents.

A committee evaluates the RFQ statements of qualifications, scores on an objective matrix, and makes a recommendation for award. Per City Code section 2-4003, the city manager has the authority to award service contracts that are valued at \$300,000 or less. If the solicitation results in a service contract that is valued at more than \$300,000, City Council awards the contract. The supplied policy and procedural documents did not indicate any criteria for how evaluation committee members are selected. The City Council has given the city manager authorization to execute contracts pursuant to Raleigh City Code Sec. 2-4004.

A similar process is engaged for formal construction and repair solicitations in which sealed bids (dollar value-based rather than qualification-based) are received, opened publicly, and a recommendation transmitted along with M/WBE good faith efforts to the City Council for award and authorization to the city manager to execute the contract. The M/WBE Office has the responsibility to evaluate all submitted documents for applicable solicitations to determine good faith efforts for M/WBE utilization before the award recommendation.

A. Bid Evaluations and Responsiveness Determination

Raleigh's bid evaluation, responsiveness, and responsibility determination processes and procedures are not explicitly outlined in the SOP documents. However, interviews with Raleigh's user departments provided the high-level account of Raleigh's evaluation and bid solicitation responsiveness determination process, of which, responsiveness to the good faith efforts requirements on construction/repair projects of \$300,000 or more (\$100,000 or more in State funding) is a component. Some department staff interviewees reported that M/WBE status is not part of the evaluation process (depending on the solicitation process). Others indicated varying numbers of Raleigh staff persons being selected to serve on evaluation committees ("... it's a minimum of three people, and it can be more than three. And, I don't know that there's a maximum. I think the most I've ever seen on one of those groups was seven."). Regardless of the committee size, each evaluation committee member has a scoring sheet; the criteria that they score the proposals on is provided to proponents up front as the criteria is included in the solicitation advertisement. The evaluators score individually, and then all the individual scores are combined. An evaluation team lead for the proposal compiles the data. Regarding RFPs vs. hard bid solicitations: "The only real difference in a request for proposal is that there can be a cost element is included (for evaluation) in a request for proposal. It is usually weighted at 20% of the overall score. So, someone else could potentially be awarded the contract even if I had a lower proposed cost..." When detailing the logistics/makeup of evaluation committees engaged during their procurement processes, none of the interviewees identified or drew the distinction among:

- The formal procurement of general services where the RFP can contain cost as a component of the evaluation;
- Raleigh's RFQ process for certain professional services as prescribed in North Carolina's Mini-Brooks Act, which also contains an evaluation of the submitted qualifications; or
- The formal procurement of goods and construction/repair, which is purely based on the lowest responsive and responsible bidder.

With respect to any evaluation of the M/WBE component of applicable solicitations, staff feedback was uneven and varied from department to department and by solicitation type. It was clear, however, that the M/WBE office is responsible for good faith efforts evaluation with respect to construction or repair bids valued at \$300,000 or more (or \$100,000 or more with State funding), where the major component is simply ensuring that the respondents included their “M/WBE letter.”¹³ When asked about the responsibility for any further vetting, departmental staff all referred to the M/WBE office. M/WBE Office staff indicated: “It’s solely on the M/WBE Office to vet those good faith efforts. If we have any questions or concerns, we usually will loop in the City Attorney, but that’s it...” The M/WBE Unit also revealed that their vetting focus for good faith efforts and the attainment of their 15% aspirational M/WBE participation goal is limited to the required construction or repair contracts at \$300,000 or higher (or \$100,000 or higher with State funding). Although Raleigh City administration directs departments to also make attempts to include small, minority-owned, women-owned business enterprises in competitive procurement processes for non-construction/repair solicitations (as part of their culture), it is not mandated. As such, it is possible for contracts to move forward without any look into M/WBE inclusion efforts if the solicitation is for a department outside of their four major departments or is not construction or repair-related.

B. Insurance and Bonding Requirements

Outside of the Raleigh Purchase Order Terms and Conditions document and the language contained in Raleigh SOP 501-3, no other contracting insurance and bonding policies, processes, and procedures were outlined during this review. Staff interview feedback points out that Raleigh’s risk manager sets the insurance requirements for City contracts. Bonding requirements are dictated to the City as per the requirements codified in the North Carolina State statute.¹⁴ The State statute is duplicated in Raleigh’s Public Bidding policy (SOP 501-3), which makes the requirements, in effect, standard, depending upon the type of solicitation and associated risk-level for the work/project. Consequently, these requirements are pre-entered into the various contract templates that Raleigh’s Procurement Division makes available electronically for departmental use. All City construction bids will contain the same or similar boilerplate bonding information that becomes required based on the amount of the bid. Raleigh does not require performance bonds for service contracts (excluding design services) with a value of less than \$100,000. For service contracts at \$100,000 and above, a performance bond of at least 5% of the value of the contract is required unless waived by the city manager.

Typical bonding and insurance requirements for Raleigh contracts fall within the following parameters:

- Insurance (all construction contracts): Minimum coverage for construction contracts has been increased since Raleigh’s original issuance of SOP 501-3. Their requirements vary and are based on the type of contract.
- Performance bonds: Not less than 100% of the total amount payable to the contractor for complete performance of the work scope. (Bonds must remain in place until one year after Substantial Completion.)
- Payment bonds: Not less than 100% of the total amount payable to the contractor as security to ensure the payment(s) to all persons/firms performing labor and furnishing material in connection with the work scope. (Bonds must remain in place until one year after Substantial Completion.)

¹³ The M/WBE letter is a form included in applicable solicitations that gives proponents the opportunity to list their M/WBE firm participation and state self-performance credit or good faith outreach efforts.

¹⁴ https://www.ncleg.net/EnactedLegislation/Statutes/HTML/ByArticle/Chapter_44A/Article_3.html

C. Change Orders, Contract Amendments, and Work Directives/Task Orders

Changes to a contract are allowable when the dollar amount increase is within the appropriated or budgeted funds of the project and administrative budget transfers are permitted to ensure that encumber-able funds are available. Raleigh's change order process is detailed in the supplied SOP 502-5 document. This SOP provides that all changes are to be approved by the Owner's representative before work execution, except in the case of extreme emergency as defined in the SOP. All contracts change orders require both the consultant/contractor and the City project manager to justify in detail the reason or reasons the change is necessary. According to supplied SOP documents, the city manager (or City Council, depending on contract value) then authorizes immediate action to execute change orders. The M/WBE Unit is not made aware when change orders occur. Their office captures the M/WBE commitments at contract award. The final M/WBE participation level is adjusted when the project is completed and reported.

D. M/WBE Subcontractor Substitutions

The Raleigh DEI M/WBE Office reviews contractor substitution/termination requests related to M/WBE subcontractors. The M/WBE procedures indicate that contractors cannot terminate, replace, or reduce the work of an M/WBE subcontractor that the contractor has counted toward its Committed Subcontracting Goal unless the specific conditions—which are detailed in the procedure document—exist. Furthermore, there is a requirement that the contractor must provide the applicable Raleigh user department (i.e., the department project manager) and Raleigh's M/WBE program manager with written notice (on the City's official form) of the proposed termination, replacement, or reduction of the work of an M/WBE subcontractor, including any additional explanation to Raleigh that must be on the company's letterhead, before the contractor can terminate, replace, or reduce the work of an M/WBE subcontractor on a City construction contract.

Moreover, before an M/WBE subcontractor can be terminated or replaced or its work reduced by the contractor, the contractor first must obtain the approval of the City based upon good cause shown. The procedure does not detail the M/WBE Office's review and approval/denial process. Feedback from staff across departments consistently maintained that department involvement in prime contractor attempts to substitute, supplement, or replace any subcontractor are very rare, and although there are no formal auditing processes for subcontractor supplementation or replacements, they indicated that their sense is that there are very few occurrences. Comments included feedback such as: "Generally, the (Raleigh) project managers don't get involved with subcontractors. Our contract is with the prime contractor. So, we don't really have leverage or interaction with the subcontractors, again, unless they were to reach out to us, which rarely happens."

3.3.7 Noncompetitive Procurement

A. Cooperative Purchase Agreements

Raleigh user departments may purchase from contracts awarded by the State of North Carolina or from contracts that were awarded through a competitive bidding group purchasing program as provided for by North Carolina General Statute 143-129 (e) (3). The procurement division must determine that the exact items from the purchase agreement are included in the requisition and attach a copy of the State contract or applicable group purchasing program to the requisition.¹⁵

¹⁵ Procurement Manual, p. 15.

B. Emergency Purchases

When an emergency occurs, the procurement requirements in NCGS 143-129 (e) (2) are waived. Emergency purchases are those purchases that occur:

- When there is a breakdown/interruption in essential goods and/or services;
- When the essential goods and/or services are so compelling that the time necessary for the applicable bidding procedures would cause undue delay in restoring services; or
- When not supplying the essential goods and/or would have serious results to the City and/or its Citizens.

The Procurement Manual emphasizes that emergency purchases cannot be made because of negligence and failure by City departments to properly anticipate normal needs. Only authorized representatives of the Department involved can make emergency purchases, after contacting the Procurement Division to determine if a true emergency exists.¹⁶

C. Sole Source

Sole source justification with total value below \$90,000 are authorized by the Procurement Division. If the total the value exceeds \$90,000, a City Council Approval is required. Comments from various interviewees included: “I have not done a sole source in my three years here” and “I would say that’s fairly infrequent. Maybe just a couple of years at the most. Again, it’s very project-specific. For example, we may want to use a certain type of screen or pumps or mechanical kind of equipment for continuity with the operating divisions...” Staff feedback detailed that with respect to any deviation from standard formal bid procedures (bid waivers), “we would need to take that prior to the bid ahead to council for a bid waiver authorization. But that doesn’t happen very often...”

D. Exceptions

In addition to emergency purchases, the Procurement Manual identifies two areas of exceptions to procurement policies and procedures: professional services agreements and bid waivers. Raleigh's procedures provide that Professional Service Agreements (PSAs) be solicited either under Mini-Brooks or in accordance with their Standard Operating Procedure (SOP502-4).nCity Manager approval is required for bid waiver exceptions.

Professional Services Agreements

While a competitive process is encouraged, professional services are not subject to the formal solicitation procedures under the City Charter. The director of the user department is responsible for leading the procurement effort with the City Attorney’s Office engagement to approve the final agreement as to form. For professional services not listed in the Mini-Brooks Act, a competitive procurement process is encouraged by Raleigh’s SOP 502-4 and applies to any services \$50,000 or more in value using an RFP process.

¹⁶ Ibid. at 17.

3.4 Analysis of Raleigh’s Diversity, Inclusion, and Assistance Initiatives

3.4.1 Review of the City of Raleigh’s M/WBE and DBE Program

Brief History and Background

The precursor to Raleigh’s current M/WBE Program was placed under the direction of the Raleigh Department of Administrative Services and was executed as purely an administrative function. The M/WBE program manager had no staff support and was expected to work closely with the assistant city manager. A long-tenured employee provided general administrative support. There is no definitive detail regarding the origin of, and decision process, that originated the aspirational M/WBE participation goal for City construction and repair projects. However, it is reported that the M/WBE program manager at the time met with a group of external stakeholders to arrive at 15% to be applicable on City construction and repair projects of \$300,000 or more (or \$100,000 or more with state funding). This percentage has been an official SOP since becoming effective on September 3, 2002.

Over time, Raleigh contemplated a further delineation of the 15% aspirational goal to break out as 8% participation by minority-owned firms and 7% participation by non-minority female-owned firms. This split approach was presented to the Raleigh City Council but never was made official by the city management approval process. The split approach is an unofficial practice and not consistently invoked or enforced. The M/WBE program was later transitioned to be housed within the Office of Housing and Neighborhoods, and the city manager continued to run the program without staffing support.

In 2015, after the M/WBE program manager left, the community relations analyst solely performed all day-to-day tasks until new staff was hired later in 2015. The newly hired staff person assumed the role of assistant director for Housing and Neighborhood Services with the initial thought being that he could also manage the M/WBE program.

An M/WBE Workgroup was established in December 2017 and was directed by the Economic Development and Innovation Department. The charge of the M/WBE Workgroup, which had representation from various Raleigh departments, was to strengthen the M/WBE program and ensure the implementation of the existing policy. After prolonged advocacy for a dedicated M/WBE program manager, one was hired in September 2018. The M/WBE Workgroup had no official charter but ushered in changes such as amendments to the contract routing process and a requirement for an M/WBE Participation Letter to accompany all construction contracts of \$300,000 and over - or construction contracts of \$100,000 and up including State funding (July 2018); and updates to the M/WBE SOP (March 2021). Although there are currently no participation goals on professional services contracts, M/WBE staff began tracking M/WBE participation on professional services contracts as of Raleigh’s FY19–20 fiscal year. Departmental data request forms were implemented as of March 2021.

M/WBE Program

The stated goal of Raleigh’s M/WBE program—that is, their mission—is to increase contracting opportunities for historically underutilized businesses (HUBs). Raleigh defines HUBs as those that have been categorized as such by the North Carolina Department of Administration’s HUB Office or HUB Office as well as NCDOT’s Disadvantaged Business Enterprise Program. It was noted that as per Raleigh SOP 501-3, Public Bidding, City departments defer to the State of North Carolina’s more stringent guidelines for M/WBE participation in construction projects when the contracting opportunity includes state funding and requires associated good faith efforts. The documents provided for analysis indicate that the level of funding that triggers this deferment is contracts awarded by the City for (i) construction and building projects of \$300,000 or more, and (ii) construction and building projects of \$100,000 or

greater that include any state funding. During Raleigh staff interviews, however, suggested less of a focus on the M/WBE program goal and mission referenced above and more toward having the comfort that the work would be completed in a competent and timely fashion: “...if you’re more familiar with a vendor—or, I mean, a contractor or a consultant, you normally going to probably want to continue to use the same contractor and stuff...” Another Raleigh staff interviewee said that until a couple of new firms finally moved into the market, “these older firms kind of had a stranglehold and would get all the jobs and we were kind of beholden to them...” These dynamics stands counter to the M/WBE program mission.

The City of Raleigh currently has an aspirational goal of 15% of the total contract values to be performed by certified M/WBE businesses in contracts awarded by the City for construction and building projects of \$300,000 or more. This goal also applies to construction and building projects of \$100,000 or more, if the funding sources supporting the project include any North Carolina State funding.

Disadvantaged Business Enterprise Program

The City of Raleigh also has a separate DBE Office embedded within its Transportation Department. The DBE Office manages a 13% DBE inclusion goal that is underpinned by their Federal Transportation Administration (FTA) triennial goal-setting activity and the requirement to enter contractor and payment data annually into the Federal TrAMS, FTA’s platform to award and manage federal grants. The FTA’s TrAMS portal was created to provide greater efficiency and improved transparency and accountability for grant expenditures. As a result, Raleigh solicitations that include federal grant funding appear to be more formally managed with respect to DBE participation and oversight. An analysis of the most recent TrAMS report shows that during the federal fiscal reporting periods of 2017–2020 Raleigh either met or exceeded their participation goal with a range of achievements between a floor of 13% (2018) and a high of 20% (2019). Staff feedback indicates that the mere presence of the federal mandates and guidelines is what is principally driving prime contractor and Raleigh staff behavior/efforts around achieving DBE inclusion on federally assisted contracts.

Review Of Raleigh’s M/WBE Program

M³ Consulting sought to analyze Raleigh’s M/WBE programmatic initiatives. As discussed previously, M³ Consulting reviewed Raleigh’s M/WBE efforts to determine its effectiveness in the context of the Six Essential M/WBE and SBE Program Elements.

Figure 3.13. M³ Consulting Six Essential M/WBE and SBE Program Elements

1. Outreach and Matchmaking	Efforts to increase the business community’s awareness of an entity’s procurement and contract opportunities and match M/WBEs and SBEs to specific contract opportunities at prime and subcontracting levels.
2. Certification	Eligibility criteria for M/WBE participants.
3. Technical Assistance	Informational and strategic support of businesses to meet the entity’s M/WBE plan objectives.
4. M/WBE Inclusion in Bid Opportunities	The mechanism by which the entity assures that material consideration of M/WBE participation is given in the award of a contract.
5. Contract Compliance	Ensuring adherence to M/WBE plan goals on all contracts after execution of the contract.
6. Organizational Performance Evaluation	A comparison of performance results to the entity’s goals to determine policy successes, strengths and weaknesses, and performance improvement areas.

Source: M³ Consulting

A. Outreach and Matchmaking

Outreach and matchmaking were not detailed in the provided Raleigh procurement documents. Feedback from staff interviews indicates that Raleigh engages in an annual outreach event (interrupted the last few years by the COVID-19 pandemic and did not resume until the month of March in Raleigh’s 2023 operating year.

In additionally, according to an interviewee: “...every month, we host a HUB and DBE certification session in partnership with the North Carolina Department of Administration and North Carolina Department of Transportation. ...” This collaborative monthly effort paused during the pandemic, but never stopped completely. Staff from the participating entities present monthly information sessions targeted to minority-owned firms. In the sessions, M/WBE firms learn about certification processes for the HUB Office, the DBE Office, and they learn about the City of Raleigh’s M/WBE Program and its benefits. The Raleigh M/WBE Unit sends out invitations to firms included in its listserv [the M/WBE Unit’s vendor database] every month so that people can register via Eventbrite.

The Raleigh M/WBE Office also participates in other events that are hosted by partner organizations, but staff feedback indicates that City departments other than the M/WBE Office rarely participate. Raleigh does participate in the Women’s Business Center’s event each June, where the City’s M/WBE Office will have an exhibitor table and share information about Raleigh’s M/WBE Program. Staff feedback also detailed that the M/WBE Office frequently receives calls and emails from the minority community with inquiries regarding the certification process/issues or assistance with starting a business. In terms of impact, staff reports included: “Absolutely. When I first came to the city, if I can recall correctly, we were around 3,000 somewhere. And so over this time span, we’ve grown to over 4,000. So just in the three years, because we continue to market this... have seen an increase in our listserv. And also, like I said, we routinely get emails and calls with the community asking, ‘Tell me more about the program and certification,’ and etc. as well...”

In three consecutive years (2018–2022), the M/WBE Office reported M/WBE contactor participation levels in the City’s solicitations continued to increase: “But let’s just say, for instance, 17, 18 [we achieved] our citywide [aspirational goal] 15%. We achieved it 18. 2019, it was up to 16.3, and then the last year that we published, it was around 18%. So, we’ve seen an increase over the last three years in the citywide overall participation level and keeping in mind that’s just from a construction-and-repair-project-of-\$300,000-or-more standpoint...”

B. Certification

Raleigh does not certify M/WBEs and accepts certifications from the North Carolina Department of Administration’s HUB Office and the NCDOT DBE Program. Raleigh’s M/WBE Office uses the links to those two certifying entities to vet certifications. Prime proponents looking for certified firms can access the links to the two certified firm lists via links on the City of Raleigh M/WBE Office page. In addition, Raleigh’s M/WBE Office maintains an internal database of certified minority firms (174 of them) that have registered directly with the City of Raleigh to do business. The internal database Raleigh Supplier Connect allows firms to register to do business with the City, upload a completed W-9 form, and, once certified by one of the two certifying bodies referenced above, upload their proof of certification. The firm is then automatically considered to be registered as a City vendor. City of Raleigh internal department staff looking for M/WBE-certified firms can now use the Raleigh Supplier Connect database and run a query for those M/WBE firms, or they can navigate to the M/WBE Office’s page on the Raleigh website and click on either the HUB or NCDOT DBE link.

C. Technical Assistance

The City of Raleigh’s various procurement and other related documents supplied during this review do not document technical assistance that Raleigh provides to its community of M/WBE firms. Staff interview feedback indicates that much of the assistance that Raleigh provides is accomplished via referrals to other agencies. Specific staff comments regarding the technical assistance that Raleigh provides either directly or via referrals

included: “Methods of assistance include simplification of bidding procedures, relaxation of bonding requirements, financial aid through the Division of Community & Small Business Development, prompt pay, and training on doing business with the City of Raleigh.”

D. M/WBE and SBE Inclusion in Bid Opportunities

Even though there is an established aspirational goal for M/WBE participation in City construction and repair projects with a value of \$300,000 or more (or \$100,000 or more in state funding), there is no formally mandated diversity and inclusion program embedded in Raleigh’s procurement framework for City-funded solicitations. A review of Raleigh’s annual M/WBE reports indicates that Raleigh routinely achieves its aspirational 15% diversity firm inclusion targets for eligible contracts globally. The M/WBE office indicated that very few DBE projects are folded into their annual report. The administrator within the DBE Office manages separate reporting for DBE attainment. The M/WBE staff will review a few projects as reported from the four major user departments that may include FTA funds. The reports show that during Raleigh’s annual fiscal reporting periods of 2017–2021 Raleigh reported global (primes contractors and subcontractors across all eligible construction and repair contracts) achievements in a range between a low of 15.66% (2019) and a high of 18.54% (2021). MWBE utilization data for professional services contracts was included in the M/WBE annual reports (FY19-20 and FY20-21) for information purposes only. However, further analysis into its globally reported achievement numbers shows that, in the absence of a mandate of any formalized requirements, Raleigh departments are not achieving any noteworthy diversity firm participation in the professional service areas such as construction management, integrated facility services, engineering services related to stormwater, transportation and traffic engineering services, or the Raleigh Water Capital Improvement Program (CIP) (4.77% average M/WBE participation across these six areas).

E. Contract Compliance

Because Raleigh does not currently have a formal compliance program, there is no formalized and structured process to ensure continued adherence to any M/WBE commitments made by successfully awarded prime proponents after execution of the contract when contract administration begins.

As such, aside from a singular annual report from the M/WBE Office that covers eligible construction and repair projects, there were no other review reports, audits, or report card processes included in the supplied documents to facilitate real-time analysis of Raleigh’s performance toward its 15% aspirational goal. During the execution phases of Raleigh’s contracts and service agreements, there does not appear to be any focus on course-correction mandates if a contractor is falling short of its diversity and inclusion commitments.

F. Contract Administration

Raleigh contract administration policies, processes, and procedures were not specifically outlined in the SOP documents provided. However, the M/WBE procedure document detailed several post-award contract administration requirements related to M/WBE firm participation, control, and affiliate status and commercially useful function (CUF) performance for contractors, without indicating who within the City has the responsibility for verifying and/or auditing that contractors follow those stated requirements over the life of the contract. Staff interviews indicate that there is an enterprise-wide need to deploy more resources to contract administration tasks. Regarding monthly reporting, some departments indicated that they have no monthly reporting requirement while others indicated that on applicable contracts, “there are the forms from the M/WBE Office that they [prime contractors] fill out and submit with every pay application each month that reflects how much they’ve used that month of the subcontractors.”

G. Organizational Performance

In reviewing Raleigh’s existing inclusion initiatives, the SOP documents did not speak to any organizational performance evaluation protocols that hold City staff responsible or reward them based on their aspirational inclusion goal achievement, improvements, successes, or strengths, or highlight areas in need of improvement in a performance review environment.

3.5 Impact of the City of Raleigh's Policies, Procedures, and Practices On M/WBEs

While Raleigh has attempted to promote greater community and vendor inclusion in its public messaging with regard to the City's Vendor Connection Portal, aspirational M/WBE goals, Strategic Plan focus areas, and mission and vision, there are still processes and practices that may create barriers to M/WBE participation in Raleigh's contracting and procurement opportunities. Based on the preceding analysis and findings, the following represents Raleigh's Procurement and M/WBE Program policies, procedures, and practices that may adversely impact the ability of M/WBEs to participate in Raleigh's procurement and contracting opportunities.

A. Lack of integration of a more formalized diversity and inclusion model throughout Raleigh's Strategic Plan minimizes organizational focus on achievement of M/WBE inclusion in Raleigh opportunities as a policy objective.

By not directly connecting its inclusive procurement objectives, which include M/WBE participation, in the Strategic Plan, Raleigh foregoes the opportunity to change its organizational culture from viewing these initiatives as an auxiliary appendage attached to the organization's mission to a compulsory component for achieving Raleigh's mission. This lack of connectivity lessens the opportunity for Raleigh to achieve its "stable platform of evolving services" mission, as well as its diversity, equity, and inclusion objectives through current race- and gender-neutral procurement means. This disconnect further reduces Raleigh's influence on its vendors who otherwise agree to partner with the City in achieving Raleigh's mission on the subset of procurements where good faith efforts for diverse vendor inclusion are required.

B. Perceived bias toward larger familiar firms

Staff interviews suggest that Raleigh may tend to gravitate more toward larger established firms with whom they are familiar and have worked with previously. Raleigh staff interviewee repeatedly indicated that there is a propensity to be more familiar with a particular vendor, contractor or consultant which results in defaulting to wanting to continue to use the same contractor repeatedly

C. The lack of more robust procurement forecasting reduces Raleigh's ability to engage in effective planning to maximize inclusive vendor engagement through its procurement opportunities.

The documents provided did not speak to Raleigh's forecasting frequency or how far in advance they assess upcoming procurement needs. M³ Consulting holds that truncated forecasting periods negatively impact the lead times that Raleigh would have to create for effective and inclusive outreach or vendor matchmaking strategies. In addition, the documents provided did not indicate any process for forecasting small dollar purchases that Raleigh anticipates in an upcoming fiscal year. It appears that firms only become aware of these small dollar opportunities if there is a direct inquiry from a buyer seeking vendor quotes. Given that small purchases are reflective of procurements where small firms have the greatest capacity and ability to perform, lack of notice of these opportunities reduces small firms' ability to submit timely, well-informed, thorough quotes.

D. Decentralized procurement function reduces Raleigh’s ability to develop an inclusive and sustainable procurement operation; lack of robust ERP integration further exacerbates problems caused by decentralization.

Any organization or municipality may choose a centralized or decentralized procurement operation and achieve sustainable inclusive procurement. However, once the organization or municipality has made that choice, the organization—to be effective, efficient, and inclusive—must intentionally build a procurement infrastructure that supports its choice of centralization or decentralization. Raleigh operates in a decentralized procurement environment steered by user department project management needs. There is no ERP-driven mandate that requires all bid response components—particularly bid tab data—be electronically uploaded. Raleigh still receives hardcopy bid responses, often filed as hardcopies at the department level, with no unified repository.

Raleigh’s decentralized environment and current procurement operations reduce the City’s ability to define vendor availability and utilization with respect to M/WBEs in their current race- and gender-neutral environment. Raleigh’s inclusive procurement initiatives appear to be primarily subcontractor-based, with no process in place for capturing non-minority subcontractor spend and little provisioning for enhancing M/WBE engagement at the prime level. In addition, no documents were provided during this review indicate that Raleigh’s staff is held responsible for or evaluated on how and whether they are meeting the aspirational objectives of their inclusive procurement environment.

E. M/WBE Office engagement in post-award contract management and compliance oversight

The M/WBE Office has minimal engagement in some essential post-award contract administration functions, such as vetting contract change orders/amendments, participation audits, audits of payments or after milestones, contract expirations and renewals, M/WBE vendor quality assurance, disputes and claims, vendor performance analysis/assessments, stakeholder communication, and contract closeout vendor scorecards. Without a line of sight into prime contractor/subcontractor behavior, there is potential for prime contractor and consultant behavior to become inconsistent with the spirit and intent of North Carolina laws and regulations, as well as Raleigh’s desired inclusion model regarding subcontractor engagement. The M/WBE Office should be given appropriate resources to continue developing specific policy and procedures to address compliance, audit, and oversight issues. Otherwise, Raleigh risks a growing perception that its daily procurement actions and activities are counter to one of Raleigh’s stated key focus areas regarding Economic Development & Innovation by maintaining and growing a diverse economy to support large and small businesses and entrepreneurs.

3.6 Summary of Findings and Recommendations

M³ Consulting asserts that the execution and implementation of a public entity's community economic development objectives starts with the procurement process. Achievement of a public entity's community economic development objectives through procurement begins with a public policy approach to procurement and community economic development that extends beyond Mission, Value, and Strategic Plans to everyday actionable policy and procedures supported by project execution. Often, this stands in contrast to employing an approach based purely on cost, schedule, and project efficiency. M³ Consulting's review of the supplied documents leads us to assert that some operational characteristics within the procurement structure as referenced in this document hinder the optimal involvement of M/WBE firms.

In the absence of specific policy documents provided for this review stating to the contrary regarding the contract administration phase of Raleigh's procurement cycle, M³ Consulting believes that Raleigh's procurement will have exposure in terms of the level of awareness it has of its complete contract inventory until all contract data is entered and maintained in its ERP system. All active contracts should be included in a combined report segregated by division with regularly updated contract statuses.

The current Raleigh procurement model may necessitate fundamental changes to its overall procurement and contracting activities to ensure inclusiveness, transparency, accountability, and efficiency as it relates to M/WBE participation and consistency with Raleigh's strategic mission and vision. Raleigh has a guiding mission statement, a reasonable overall organizational structure, and a number of reasonable policies and procedures in place. It has also implemented (or partially implemented) many of the best practices found in the procurement industry for large institutions. However, if the areas of exposure in its current policies, procedures, and practices are not mitigated, the M/WBE vendor community will continue to perceive that there are barriers to their ability to participate in Raleigh's contracting and procurement opportunities. Addressing these areas will help Raleigh minimize any risk of inherent, unintentional, or intentional exclusionary or discriminatory practices in the City's procurement program.

Chapter 4: Statistical Methodology

4.1 Introduction

This chapter discusses the statistical methodology employed by M³ Consulting in the City of Raleigh Disparity study in two parts:

- 4.2 Statistical Methodology**—The first part is a conceptual discussion of the statistical methodology for analysis of Minority and Women-Owned Business Enterprises (M/WBEs).
- 4.3 Data Sources Utilized for Statistical Analysis for the City of Raleigh**—The second part is a discussion of data sources, data collection procedures, data gaps and implications of the gaps on the statistical analysis for the City of Raleigh.

The chapter closes with a brief summarization of the Statistical Methodology with 4.4 Summary of Findings.

4.2 Statistical Methodology

This section discusses availability, utilization, and disparity. It includes a presentation of the two types of availability: “actual availability” and “potential availability”; various definitions of availability; and M³ Consulting’s “Ready, Willing and Able” (RWASM) model. M³ Consulting has adapted this model to the specific data sources available for this study from the City of Raleigh. Also discussed are the types of utilization analysis that were performed. The statistical methodology section concludes by defining the disparity ratio and significance tests, crucial for drawing conclusions regarding any disparity in the City of Raleigh’s recent history of contracting with M/WBEs.

4.2.1 Disparate Impact Analysis

The statistical analysis conducted in this Disparity study is a key component of the Disparate Impact Analysis to determine if there is any discrimination against M/WBEs by a public entity. Under a *Croson* Disparate Impact Analysis, a public entity may be involved in “active discrimination,” which is caused by its own direct action, or “passive discrimination,” which involves participating in the discriminatory or exclusive actions of other agents in the public or private sector.

Disparate Impact is defined as a policy or practice that, although neutral on its face, falls more harshly on a protected group. This impact may be viewed as discriminatory behavior in certain instances. The statistical analysis seeks to determine if there is any Disparate Impact Analysis of an agency’s policies or practices, intended or unintended, on protected classes.

In response to *Croson*, statistical methodologies related to the analysis of procurement and contracting policies and practices continue to evolve as litigation occurs. Because the legal cases are fact-specific and the courts can only review evidence put before them, it is useful to review *Croson* statistical methodologies against the well-tested and even more extensively litigated Disparate Impact Analysis established under Equal Employment Opportunity (EEO) law, from which the Disparate Impact and disparate treatment tests and analysis evolved. The comparison will reveal the course that the two different types of Disparate Impact Analysis have taken.

- EEO Disparate Impact Analysis requires a deeper analysis and testing of an institution’s specific EEO policies, procedures, and practices, with emphasis on active participation in discrimination.
- *Croson* Disparate Impact Analysis is moving toward broader analysis, with ever-increased focus on passive participation, as opposed to active participation in discrimination, therefore with a lesser focus on the actual decision-making policies, procedures and practices of the public entity itself and its vendors.

M³ Consulting’s statistical methodology, which includes an analysis of active and passive participation, is described and the methodology is compared to the more evolved active participation requirements of EEO analysis.

A. Brief Overview of EEO Disparate Impact Analysis

A Disparate Impact Analysis under EEO involves three distinct analyses. Below is a brief overview of the analysis, as stated in “The Role of Two Statistical Approaches in EEO Cases” by Richard E. Biddle, and a comparison to methodologies deployed under *Croson* Disparate Impact Analysis.

In the first burden of a Disparate Impact Analysis, up to three tests are performed to determine adverse impact:

1. The “threshold” analysis (also called the initial inquiry) to see if gender and racial composition (i.e., percentages) of the at-issue job is underutilized compared to the composition of the qualified population in the relevant labor market.
2. A “barriers” analysis to see if there are barriers or practices which disproportionately deter gender or racial group members from applying; and,
3. The “selection” analysis to see if a practice, procedure, or test is disproportionately impacting a gender or racial group, unless the practices, procedures or tests are not capable of separation for analysis, then the entire decision-making process can be evaluated as one practice.

If a practice, procedure, or test is found to be a “barrier” as defined above, an adverse impact finding could be expected on the cause of the barrier. However, even if the cause of the “barrier” to an at-issue job is not involved in the action, it still can be a “barrier” for statistical purposes. If a barrier is found, a binomial statistical test will be needed in the “selection” analysis and a “proxy” group for actual applicants will need to be determined. If no barriers are found (i.e., applicant flow is very similar to availability), then actual applicants can be used in the “selection” analysis and a hypergeometric statistic is used.¹

B. Threshold Analysis

Under a *Croson* analysis, the EEO threshold analysis is akin to a disparity analysis in contracting. A disparity ratio is computed by comparing available firms, as determined by ready, willing and able model, to firms utilized by a public entity. This is an important inquiry that sets the stage to determine if there is cause for additional Disparate Impact Analysis to determine if the inference of discrimination resulting from this analysis is remedial. As such, the methodology utilized for the computation of the pool of ready, willing and able firms takes on significant importance in disparity analysis. Under U.S. DOT 49 CFR Part 26, this threshold analysis could be considered Step 1: Baseline Availability.

While relying on a threshold-type analysis appears straightforward, under *Croson* analysis, it is not, principally due to the issues of willingness and qualifications of the firms in question. Firms in the marketplace may be ready, but not willing and/or able.

¹ Richard E. Biddle, “The Role of Two Statistical Approaches in EEO Cases,” 1995. See also 29 CFR Ch. XIV, Part 1607, §1607.17(2).

As relates to Marketplace Availability, firms may not be “able,” despite having North American Industry Classification System (NAICS) or National Institute of Governmental Purchasing (NIGP) codes that have been refined to those representing goods and services procured by the public entity. Regressions and capacity analysis ~~not~~ conducted on this pool of firms indirectly provides some indication of capacity but does not directly relate to the individual firm’s qualifications or to a firm’s qualification determined by the public entity during the bidding process. Relying solely on Marketplace Availability does not adequately reveal a pool of firms that are ready, willing and able to do business with the City of Raleigh. Thus, a comparison of Marketplace Availability to the City of Raleigh’s utilization does not conclusively reveal if the City of Raleigh and its prime vendors’ “policies or practices” are impacting prime and subcontractor selection.

In *Croson* disparity analysis, many consultants forego any consideration of bidder data and simply establish a basis for race- and gender-conscious goals on disparity from Marketplace or Custom Census Availability (for M/WBE programs, adjusted under Step 2 of the U.S. DOT’s availability analysis).

The U.S. Supreme Court has shown increasing impatience with this lack of specificity in Disparate Impact Analysis. In the June 2015 U.S. Supreme Court case, *Texas Department of Housing and Community Affairs v. Inclusive Communities Project*,² in upholding the applicability of the Disparate Impact liability to the Fair Housing Act, the Court state that,

In a similar vein, a disparate-impact claim that relies on a statistical disparity must fail if the plaintiff cannot point to a defendant’s policy or policies causing that disparity. A robust causality requirement ensures that “[r]acial imbalance ... does not, without more, establish a prima facie case of disparate impact” and thus protects defendants from being held liable for racial disparities they did not create. *Wards Cove Packing Co. v. Antonio*, 490 U. S. 642, 653 (1989), superseded by statute on other grounds, 42 U. S. C. §2000e–2(k).³

...Were standards for proceeding with disparate-impact suits not to incorporate at least the safeguards discussed here, then disparate-impact liability might displace valid governmental and private priorities, rather than solely “remov[ing] ... artificial, arbitrary, and unnecessary barriers.” *Griggs*, 401 U. S., at 431. And that, in turn, would set our Nation back in its quest to reduce the salience of race in our social and economic system.⁴

The U.S. Supreme Court’s analysis is applicable to the current state of most disparity analysis. However, under EEO, this type of analysis is not normally used for the establishment of race- and gender-conscious EEO goals. The barrier analysis and selection analysis are usually performed prior to that determination.

C. Barrier Analysis

A barrier analysis, using the EEO definition, would result in a comparison between M³ Consulting’s Marketplace Analysis and RWASM analyses. This analysis may also be akin to the elusive “but-for discrimination” analysis pursued and attempted under *Croson* analysis. While the barrier analysis computation is simple, interpreting the causes of any differences is quite complex.

For example, RWASM Availability often yields higher percentages or proportions of availability than a Marketplace or Custom Census analysis. The differences may be caused simply by the differences in the two

² 135 S. Ct. 2507 (2015)

³ *Id.* at 2523.

⁴ *Id.* at 2524.

sample sizes. For example, for a public entity that used Dun & Bradstreet for Marketplace Analysis, the pool contained 6.88% M/WBEs of a total of 28,701 firms after refining the sample to extract relevant NAICS codes and limiting it to the relevant market, while the public entity's bidder pool (inclusive of awardees for which bid data was not available) consisted of 14.82% M/WBEs in comparison.

Some argue that the cause of larger RWASM Availability measures could be the impact of race- and gender-conscious programs on the bidder pool. However, in some instances, public entities with mature race- and gender-conscious programs have discouraged M/WBE bidders due to the continuous and repeated use of the same vendors or continued discriminatory policies and practices, even considering the existence of race- and gender-conscious goals.⁵ M/WBE bidders often view this type of procurement environment as a "closed shop."

Alternatively, M/WBEs often pursue opportunities in the public sector because public entities may be seen as more inclusive, based on their mission and their diverse makeup of political representatives, and not simply the presence of race- and gender-conscious goals. For example, in reviewing building permits data for a particular public entity, we found that only 8.96% of building permits were obtained by M/WBEs in the private sector, as opposed to 19.59% M/WBEs in the public sector for the study period.

Additionally, other economic factors can impact firm choices of who to do business with. After the recession of 2008, many large private sector firms around the country, including those who rarely worked in the public sector, turned to the public sector for opportunities, pushing many M/WBEs out of contention for opportunities in the competitive bidding process.

Thus, findings from a barrier analysis under *Croson* necessitate a **deep dive** into the public entity's procurement operation and selection processes to determine whether the barriers are caused by internal or external factors or active vs. passive discrimination. This deep dive also encompasses the public entity's prime vendors who select sub-vendors to participate in the public entity's opportunities. This deep dive into the procurement and contracting activity of prime vendors is a direct means of measuring "passive participation" in private sector discrimination. Under 49 CFR Part 26, a barrier analysis is somewhat anticipated under Step 2: Adjusted Baseline Availability.

D. Selection Analysis

M³ Consulting's RWASM Availability analysis, a primarily bidder-based analysis, is most akin to the Selection Analysis under EEO, established to determine if the public entity's policies and procedures are producing any noted disparity. M³ Consulting draws conclusions of disparity that the public entity may need to address through race- and gender-conscious goals from this analysis, not its Marketplace Analysis. In the EEO environment, if disparity is found under the Selection Analysis and an employer:

...has reason to believe that its selection procedures have the exclusionary effect described in paragraph 2 above, it should initiate affirmative steps to remedy the situation. Such steps, which in design and execution may be race, color, sex, or ethnic "conscious," include, but are not limited to, the following: (a) the establishment of a long-term, and short-range, interim goals and timetables for specific job-classifications, all of which should take into account the availability of basically qualified persons in the relevant job market...⁶

⁵ In response to the *Western Paving* case, DOT appears to have addressed this concern by stating that "the study should not rely on numbers that may have been inflated by race-conscious programs that *may not have been narrowly tailored*." [Emphasis added]. <https://www.transportation.gov/osdbu/disadvantaged-business-enterprise/western-states-paving-company-case-q-and-a>, Q. What should recipients' studies include? (Posted—1/12/06)

⁶ Part 1607—Uniform Guidelines on Employee Selection Procedures (1978) 1607.17 Policy statement on affirmative action.

While some would argue that Marketplace or Custom Census represents a proxy group under a Selection Analysis for incomplete bidder data or bidder data impacted by discrimination, these firms may not meet the “ready, willing and able” definition. Furthermore, Marketplace Availability can also be impacted by discrimination and exclusion, particularly in the construction industry. M³ Consulting’s RWASM Availability Model, discussed supra, is a cascading model, designed to be extended beyond ready, willing and able firms (actual availability) only when necessary. If earlier levels were deemed completely unreliable, prior to moving to Public Sector or Marketplace Availability augmented by M/WBE lists (firms that are “ready”), M³ Consulting would focus on a public entity’s vendor registration list augmented by its M/WBE lists (firms that are “ready and willing.”). U.S. DOT seeks to address this issue through Step 2: Adjusted Baseline Availability.

Further, when calculating a disparity ratio using RWASM Availability, M³ Consulting is using Actual Utilization compared to actual availability. If potential availability is utilized instead of actual availability, the resulting disparity ratio assumes that, if outreach was done, more available firms would be included in actual availability. This could be akin to “but-for-discrimination,” but it could also be “but-for-outreach” and have nothing to do with discrimination. Furthermore, it is possible that there is disparity purely due to random chance, which is the essence of the significance tests.

4.2.2 Relevant Market Measurements

The *Croson* statistical analysis begins with the identification of the relevant market. The relevant market establishes geographical limits for the calculation of M/WBE availability and utilization. Most courts and disparity study consultants characterize the relevant market as the geographical area encompassing most of a public entity’s commercial activity. The *Croson* Court required that an Minority Business Enterprise (MBE) program cover only those groups that have been affected by discrimination within the public entity’s jurisdiction.⁷

Two methods of establishing the relevant market area have been used in disparity studies. The first utilizes vendor and contract awardee location of dollars expended by an entity in the relevant industry categories. In the second method, vendors and contractors from an entity’s vendor or bidder list are surveyed to determine their location. The former is based on approaches implemented under the U.S. Justice Department guidelines for defining relevant geographic markets in antitrust and merger cases. M³ Consulting has developed an alternative method for determining an entity’s relevant market by combining the above methods and using an entity’s bidder lists, vendor lists, and awardee lists as the foundation for market definition.

By examining the locations of bidders, vendors and awardees, M³ Consulting seeks to determine the area containing a preponderance of commercial activity pertaining to an entity’s contracting activity. While case law does not indicate a specific minimum percentage of vendors, bidders or awardees that a relevant market must contain, M³ Consulting has determined a reasonable threshold is somewhere around 70% for bidders, vendors and contract award winners. Further analysis may be necessary if there are large differences in the percentages of these three measures.

4.2.3 Availability Analysis

The fundamental comparison to be made in disparity studies is between M/WBEs and Non-M/WBEs ready, willing and able to perform a specific service (i.e., “available”), and the number of such businesses being utilized by the locality or its prime contractors. This section presents a discussion of the availability estimates for M/WBEs who are ready, willing and able to perform work on contracts for the City of Raleigh.

⁷ City of Richmond v. J.A. Croson Company, 109 S.Ct. 706, at 725 (1989).

Availability is the most problematic aspect of the statistical analysis of disparity. It is intrinsically difficult to estimate the number of businesses in the marketplace that are ready, willing and able to perform contracts for or provide services to a specific public entity. In addition to determining an accurate head count of firms, the concomitant issues of capacity, qualification, willingness and ability complicate the production of accurate availability estimates.

A. M3 Consulting Availability Model

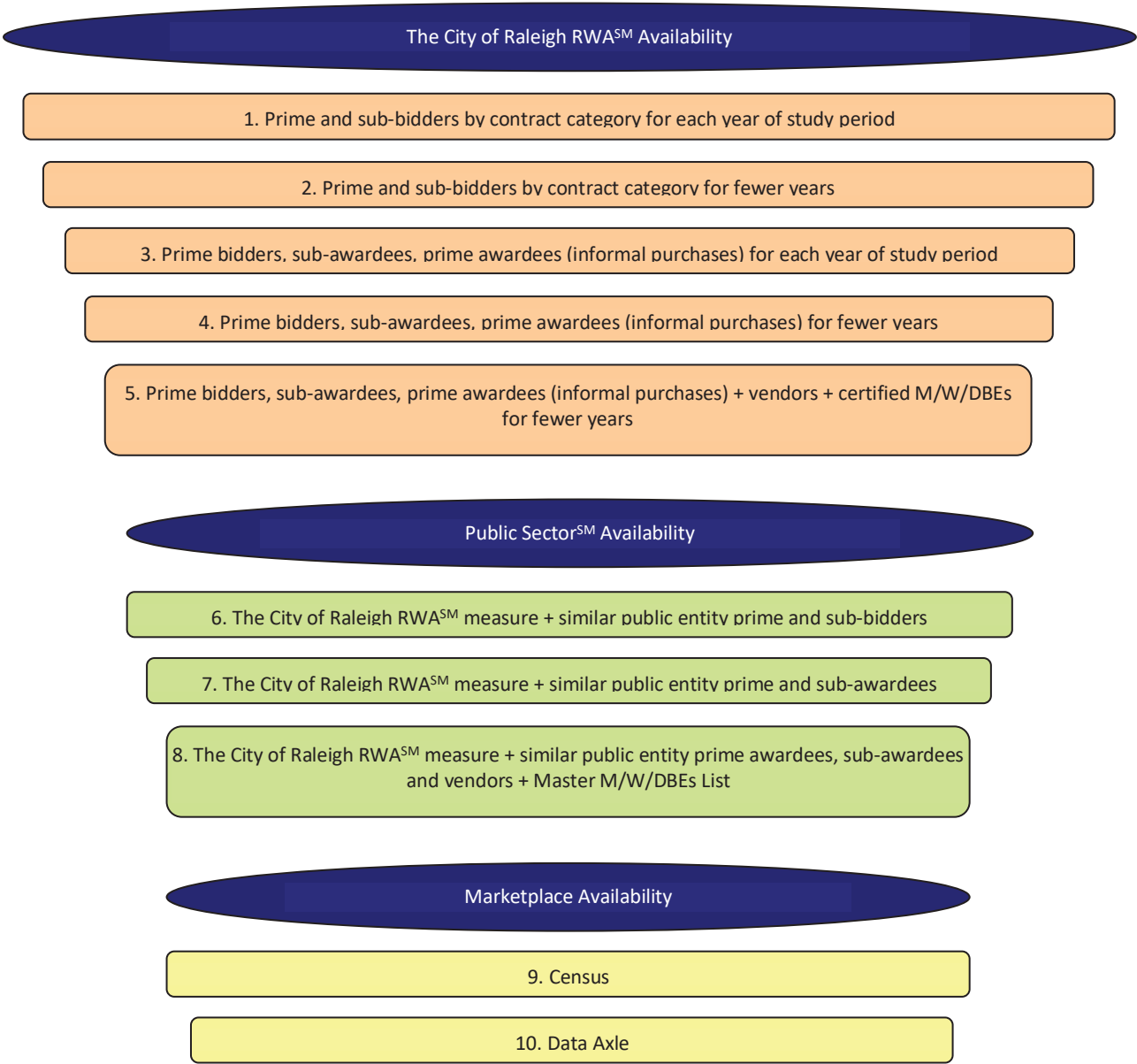
M³ Consulting employs two general approaches to measuring availability: the RWASM Availability Model, and Marketplace Availability. In summary, the availability measures can fall into the following categories:

- **RWASM**—Those firms who are ready, willing and able to do business with the City of Raleigh;
- **Public Sector AvailabilitySM**—Those firms who are ready, willing and able to do business with similar public sector agencies within the City of Raleigh’s marketplace⁸; and
- **Marketplace Availability**—All firms available in the City of Raleigh’s marketplace, as measured by U.S. Census Annual Survey of Entrepreneurs (ASE), Data Axle or Dun & Bradstreet and Dodge Construction.

The Availability matrix in Figure 4.1 outlines M³ Consulting’s RWASM Availability Model. The matrix starts with the optimum availability measure of those firms ready, willing and able to do business with the City of Raleigh and cascades down to less optimum measures. Factors that determine which level of availability best suits the City of Raleigh’s environment include quality of available data, legal environment, and previous levels of inclusion of M/WBEs in bidding and contracting activity.

⁸ This analysis requires inter-governmental cooperation between public entities providing bidder, vendor and awardee data, and thus is not performed, unless such agreement is developed for individual agencies, or a consortium of agencies conducted a consortium disparity study.

Figure 4.1. RWASM Availability Model



Source: M³ Consulting, Inc.

When refined to the City of Raleigh’s data, the RWASM Availability Model levels are defined as shown in Figure 4.2.

Figure 4.2. City of Raleigh Specific RWASM Availability Levels	
RWASM Availability Level	RWASM Availability Definition
Level 1	City of Raleigh Bidders and Sub-bidders
Level 2	City of Raleigh Bidders and Sub-bidders + AP/PO firms
Level 3	The City of Raleigh Active Suppliers Directory* + M/W/DBE Master List

Source: M³ Consulting, Inc.

*List with requisite data elements was not available for analysis.

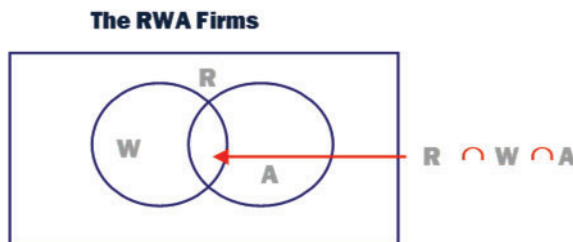
B. RWASM Availability Model⁹

The concept of the RWASM Availability Model is derived from the U.S. Supreme Court’s statement 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 engaged by the locality or the locality’s prime contractors, an inference of discriminatory exclusion could arise.¹⁰

The basic assumption underpinning RWASM estimates is that, to be included in the pool of businesses “actually available” to perform on the entity’s contracts, a business must exist, actively seek to do business with a specific entity and have the capacity to perform contracts of the types that the entity awards. The M³ Consulting RWASM estimate is illustrated in Figure 4.3.

Figure 4.3. RWASM Availability Estimate Venn Diagram



Source: M³ Consulting, Inc.

The first component of the model, “ready,” simply means a business exists in the market area. The second component, “willing,” suggests a business understands the requirements of the work being requested and wants to perform the work. The third component, “able,” defines the group of firms with capacity to do the job.

⁹ M³ Consulting developed the RWASM model in 1992.

¹⁰City of Richmond v. J.A. Croson Company, 109 S.Ct. 706, at 729 (1989).

Readiness

“Readiness,” as used in the City of Raleigh’s Disparity study, is an indication that a firm is present in the market area studied. M³ Consulting uses Census ASE and Data Axle estimates of the number of firms in a specific area to measure firms ready to do business with the City of Raleigh.

Willingness

“Willingness” to engage in procurement opportunities with a public entity, as understood for purposes of this study, is a concept that cannot be observed directly, but must be inferred through volitional behavior on the part of a firm. It is possible that not all existing (ready) firms want to contract in the public sector in general and with the City of Raleigh specifically. The “willing” requirement reduces the Census ASE and Data Axle estimate to the number of firms interested in doing business with the City of Raleigh, as discussed later in this chapter. Willingness can be affected greatly by the type of service area under which a potential project may be classified, the general level of market demand, previous contracting and management practices utilized by a contracting entity, legal and other administrative requirements that must be adhered to, as well as other factors.

Ability

The third component, “ability,” defines the group of firms with the capacity to perform the tasks necessary to complete the job. The “able” requirement further reduces the number of firms available to do business with an entity. “Ability,” as used in this study, is synonymous with “capacity,” and refers to the measure of additional work a firm can take on at a given point in time.¹¹ Ability is only imperfectly observable directly and must also largely be inferred through external proxies such as number of employees, size of past revenues, and number of years in business. A firm may have the “ability” to perform a contract either because it already has the staff and resources to perform the work, or because it can readily hire sufficient staff and acquire sufficient resources for that purpose.

Parties who are seeking to explain what the U.S. Supreme Court meant usually raise the capacity issue of qualified minorities. In *Concrete Works v. Denver* 823 F. Supp. 821 (D.Colo.1993), the Colorado federal district court reviewed the challenged availability and utilization analysis submitted by the City of Denver and County of Denver. The Concrete Works Company challenged the use of availability measures and suggested that the appropriate standard was capacity. The court provided a lengthy discussion of the capacity arguments, stating that:

Capacity is a function of many subjective, variable factors. Second, while one might assume size reflects capacity, it does not follow that smaller firms have less capacity; most firms have the ability and desire to expand to meet demand. A firm’s ability to break up a contract and subcontract its parts make capacity virtually meaningless.¹²

In *Rothe Development Co. v. U.S. Department of Defense and the U.S. Department of the Air Force*, the Federal District Court found the most reliable way for accounting for firm size without changing the disparity-ratio methodologies was to employ “regression analysis to determine whether there was a statistically significant correlation between the size of a firm and the share of contract dollars awarded to it.”¹³ Utilizing survey data, M³ Consulting conducts regression analysis to buttress its RWASM Availability and Disparity findings.

M³ Consulting’s RWASM Availability Model focuses on firms “actually available” to do business with the City of Raleigh. The overriding consideration for specifying availability estimates for the City of Raleigh’s disparity

¹¹ The appropriate definition of capacity should be closely related to objective criteria used to determine qualifications, as discussed above. Ideally, one wants to identify and use “discrimination-free” measures of capacity in determining the pool of available firms.

¹² *Concrete Works v. Denver*, 823 F. Supp. 821 (D.Colo.1993).

¹³ *Rothe Development Corporation v. U.S. Department of Defense*, 545 F.3d 1023 at 1044 (Fed. Cir. 2008).

analysis is to include firms that have actively sought to contract or provide goods and services to the City of Raleigh. “Actual availability” refers to firms that have affirmatively shown interest in doing business with the City of Raleigh in one or more of the following ways: bidding for a City contract, being awarded a City contract by the City of Raleigh, or being included on the City of Raleigh’s vendor or plan holder’s list. Additionally, M³ Consulting’s RWASM methodology seeks to define similarly those M/WBEs and Non-M/WBEs to be included in the availability analysis.

The RWASM estimates define availability conservatively and include only those firms that have presented themselves to the City of Raleigh as ready, willing and able to conduct the work requested by the City.

In the arena of City contracting, based on available data, M³ Consulting conducted an RWASM Availability analysis (i.e., an analysis of actual availability) using lists of prime bidders, prime awardees, sub-bidders and sub-awardees for FY 2017–FY 2021. The databases used in the RWASM Availability analysis are further discussed in Section 4.3.2 Data Sources for Availability.

C. Potential Availability Calculations

In contrast to “actually available” firms, M³ Consulting also defines firms that may exist in the relevant market and may in the future express an interest in doing business with the City of Raleigh. Hence, we treat these firms as “potentially available.”

“Potential availability” refers to firms present in the City of Raleigh’s market beyond those “actually available,” including those that have not bid on City of Raleigh work or taken other affirmative steps toward doing business specifically with the City of Raleigh (as opposed to other public and private sector clients) during the study period.

M³ Consulting discusses two types of “potential availability”: “Public Sector Availability”¹⁴ and “Marketplace Availability.” These measures may be used as benchmarks in setting targets or in developing outreach initiatives to encourage firms to come forward and express an interest in City of Raleigh contracting opportunities. M³ Consulting primarily focuses on Marketplace Availability because of the limitations of Public Sector Availability.¹⁵

- **Public Sector AvailabilitySM**—Includes available firms known to various public sector agencies, including the City of Raleigh, in the relevant market region. These firms are closer to RWASM, having expressed an interest in contracting opportunities with other public sector agencies with similar standards and limitations as the City of Raleigh. This availability measure includes a compilation of:
 - Lists of public agencies’ bidders, vendors and awardees; and
 - List of M/WBEs certified by other public agencies.
- **Marketplace Availability**—Including these firms in the availability measure expresses the “universe” of all firms in the relevant market. These firms may or may not be considered RWASM. The lists that represent this availability measure are:
 - Census Data;
 - Data Axle Data; and
 - Dodge Data.

¹⁴ M³ Consulting developed the “Public Sector Availability” Model in 2006.

¹⁵ Public Sector Availability requires intergovernmental cooperation; thus, M³ Consulting performs this analysis only upon the request of the client and the proper implementation of appropriate agreements among affected public entities.

U.S. Census Bureau Potential Availability Data

Measures of “potential availability” may be found in data provided by the Bureau of the Census. The standard source of evidence for firms owned by minorities and women is the 2016 Economic Census—ASE.

M³ Consulting typically develops census-based availability estimates using data provided by the U.S. Census Bureau. Its estimates are determined by firms with paid employees, which is a more conservative estimate of availability than the total set of firms (i.e., including firms without employees) and ensures a better baseline level of firm capacity. The Census database utilized is the ASE Survey, which is broken down by category descriptions into the appropriate industry.¹⁶ The ASE survey has been discontinued by the U.S. Census Bureau. The Annual Business Survey (ABS) replaces the five-year Survey of Business Owners (SBO) for employer businesses, the ASE, and the Business R&D and Innovation for Microbusinesses (BRDI-M) surveys. The new ABS was not utilized for this study because it does not break down the data to a detailed level like the ASE does. The 2016 ASE data is utilized for this analysis.

1. Data Axle Availability Data

Data Axle is a good alternate source of business data. M³ Consulting analyzes this data set as a potential availability measure that reflects all businesses, inclusive of micro-businesses in the Raleigh-Durham-Cary, NC, core-based statistical area (CBSA). The Data Axle data includes capacity data, such as average sales revenues and average full-time employees, and is discussed in Chapter 9, Capacity and Regression Analysis.

We note that small and micro home-based businesses are difficult to identify and are thus somewhat less likely than other businesses to be included in Data Axle listings. Many small and micro home-based businesses are more likely than large businesses to be Minority- or Women-owned, which suggests that M/WBEs might be underrepresented in this availability database.

Both the U.S. Census Bureau and Data Axle lists include the “universe” of firms in the Raleigh, NC Metro Area and the CBSA potentially available to do business with the City of Raleigh.

2. Dodge Availability Data

In addition to the two sources discussed above, Dodge maintains a database of construction activity across the country that includes construction projects in the planning phase, with information on the owner of the project, description, value and location of the project. If the project comes to fruition, the general contractor, subcontractors and the architect and engineer that bid are listed with the projects, thus creating an additional list of “potentially available” firms. This analysis is included in Chapter 10, Marketplace Analysis.

3. Other Lists

Other lists, such as certification lists, chamber of commerce lists, and licensing lists are often not compiled by any statistical technique and are not reliable in terms of the accuracy of the information presented. Therefore, M³ Consulting does not rely upon these lists of availability for calculating disparity.

D. Actual Availability vs. Potential Availability

In summary, the difference between actual availability and potential availability may help identify and narrow down the area of availability that may be affected by discrimination, lack of outreach, lack of interest, lack of specific expertise required by the public entity, and lack of capacity. See also 4.2.1 (A)(2) Barriers Analysis *infra*.

¹⁶ M³ Consulting has utilized Census Survey of Business Owners in the past for the Census Availability Analysis. However, this database has been discontinued, and the most recent data available is 2012.

4.2.4 Utilization Analysis

Numbers of Contracts, Dollar Value of Contracts, or Numbers of Firms

Utilization represents the contracting and subcontracting history of Non-M/WBEs and M/WBEs with the City of Raleigh. In developing the contract database to be used as the basis for determining utilization, there are three alternative measures of utilization that can be taken in each procurement category. These are:

- The number of contracts awarded;
- The dollar value of contracts received; and
- The raw numbers of firms receiving contracts.

The current report presents two of the three measures of utilization: the number of contracts awarded and the dollar value of the contract awards. Both dollar values and number of contracts are reported to determine if there are any outliers or large single contracts that cause utilization dollar values to be at reported levels. These were preferred over the third measure, the number of firms, which is less exact and more sensitive to errors in measurement.

For instance, if a single Non-M/WBE firm received 30 contracts for \$5 million, and 10 African American-owned firms received one contract each worth \$100,000, then measured by the number of firms, African American-owned firms would appear to be overutilized and Non-M/WBEs underutilized. Using the number of contracts and the dollar value of contracts awarded, the result would reverse (depending on relative availability).

M³ Consulting's position regarding percentage estimates of utilization is that discrimination would more likely affect the amount of dollars awarded than the number of contracts awarded to M/WBEs or the number of M/WBEs utilized. This position is particularly true if there are stereotypical attitudes that M/WBEs cannot handle large-dollar contracts, and thus the largest volume of contracts awarded to M/WBEs are small-dollar contracts.

Prime Contracting and Subcontracting

Because prime contractors, especially in Construction and Construction-Related Services and AES-Design Services, often subcontract work to other contractors/consultants and because the utilization of M/WBEs in the absence of a set-aside or goal provision usually occurs at the subcontract level, assembling data on subcontract work is critical to utilization analysis.

In the area of Construction and Construction-Related Services and AES-Design Services contracting, the standard presentation of utilization data by M³ Consulting is to show Total "Pure Prime + Subcontractor" utilization and Subcontractor utilization in separate tables, if data allows. "Pure Prime utilization" based on dollar value of contracts is defined here differently from "prime contract award value" due to the necessity to avoid double-counting of subcontract awards when examining subcontractor utilization. "Pure prime utilization" is correctly defined as the value of prime contracts *net of subcontract value*. This value, when added to the value of subcontractor utilization, results in a correct measurement of "total" utilization, by the M/WBE category. The results of the "Pure Prime + Subcontractor" utilization are highly contingent upon the completeness of contracts data provided to M³ Consulting. In a situation where the data is not fully available in electronic format, M³ Consulting tries to capture this data through a data collection process. The completeness of this data collection process is also dependent on hard copy data available to be collected.

We note that, for this disparity study, the City of Raleigh provided access, through ImageNow and PeopleSoft, to contracting and subcontracting data, based on the procurement categories under review: AES-Design Services,

Construction and Construction-Related Services, Goods & Supplies, Non-Professional Services and Professional Services. This will be discussed further in Section 4.3.

4.2.5 Disparity Analysis

The Notion of Disparity: The Concept and Its Measurement

A straightforward approach to establishing statistical evidence of disparity between the availability of M/WBEs and the utilization of M/WBEs by the City of Raleigh is to compare the utilization *percentage* of M/WBEs with their availability *percentage* in the pool of total businesses in the relevant market area. M³ Consulting's specific approach, the "Disparity Ratio," consists of a ratio of the percentage of dollars spent with M/WBEs (utilization) to the percentage of those businesses in the market (availability).¹⁷

Disparity ratios are calculated by actual availability measures. The following definitions are utilized in the M³ Consulting ratio:

A= Availability proportion or percentage

U= Utilization proportion or percentage

D= Disparity ratio

N_w= Number of Women-owned firms

N_m = Number of Minority-owned firms

N_t= Total number of firms

Availability (A) is calculated by dividing the number of Minority and/or Women-owned firms by the total number of firms. Utilization (U) is calculated by dividing total dollars expended with Minority- and Women-owned firms by the total expenditures.¹⁸

$$A_w = N_w / N_t$$

$$A_m = N_m / N_t$$

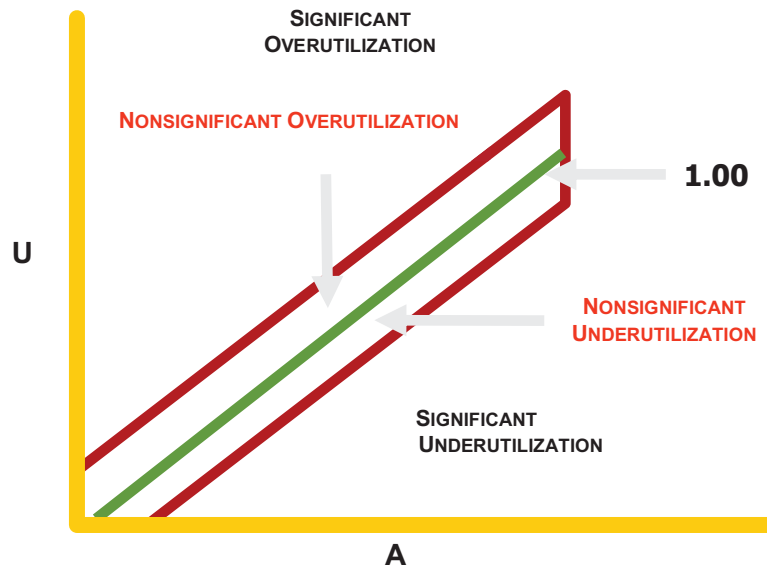
$$D = U / A$$

When D=1, there is no disparity (i.e., utilization equals availability). As D approaches zero, the implication is that utilization is disproportionately low compared to availability. As D gets larger (and greater than 1), utilization becomes disproportionately higher compared to availability. Statistical tests are used to determine whether the difference between the actual value of D and 1 is statistically significant (i.e., whether it can be stated with confidence that the difference in values is not due to chance (see Figure 4.4).

¹⁷See DJMA, A Fact Finding Study Prepared for the New York Metropolitan Transit Authority (January 1990).

¹⁸ Alternative utilization measures based on numbers of firms and numbers of contracts can be calculated in a similar fashion.

Figure 4.4. Disparity Ratio Indicating Areas of Significant and Nonsignificant Disparity and Overutilization



Source: M³ Consulting, Inc.

The statistical disparity ratio used in this study measures the difference between the proportion of available firms and the proportion of dollars those firms received. Therefore, as the proportion of contract dollars received becomes increasingly different than the proportion of available M/WBEs, an inference of discrimination can be made.

1. Statistical Significance

The concept of statistical significance as applied to disparity analysis is used to determine if the difference between the utilization and availability of M/WBEs could be attributed to chance. Significance testing often employs the t-distribution to measure the differences between the two proportions. The number of data points and the magnitude of the disparity affect the robustness of this test. The customary approach is to treat any variation greater than two standard deviations from what is expected as statistically significant.

A statistically significant outcome or result is one that is unlikely to have occurred as the result of random chance alone. The greater the statistical significance, the smaller the probability that it resulted from random chance alone. P-value is a standard measure used to represent the level of statistical significance. It states the numerical probability that the stated relationship is due to chance alone. For example, a p-value of 0.05, or 5%, indicates that the chance a given statistical difference is due purely to chance is one in twenty.

2. Practical Significance

The concept of statistical significance should not be confused with practical significance. According to Mansfield, even if there is a statistically significant difference between a sample value and a postulated value of a parameter, the difference may not really matter.¹⁹ This means disparities not statistically significant are not necessarily caused by chance. It also means that chance cannot be ruled out as a cause.

¹⁹ Mansfield, Edwin, *Statistics for Business and Economics*, p. 322. Two standard deviations imply 95% confidence level, which is the norm of the courts.

The most used practical significance measure in the EEO context is the 4/5 or 80% rule, which indicates how large or small a given disparity is. An index less than 100% indicates that a given group is being utilized less than would be expected based on its availability, and courts have adopted the Equal Employment Opportunity Commission's (EEOC's) "80%" rule, that is, that a ratio less than 80% presents a *prima facie* case of discrimination.²⁰

Under the EEOC's "four-fifths" rule, a disparity ratio is substantively significant if it is 0.8 or less on a scale of zero to one or eighty or less on a scale of one to one hundred (i.e., Group A selection rate divided by Group B selection rate). Codified in the Uniform Guidelines on Employee Selection Procedures (UGESP, Section 4D), the rule is described as follows:

A selection rate for any race, sex, or ethnic group which is less than four-fifths (4/5) (or eighty percent) of the rate for the group with the highest rate will generally be regarded by the Federal enforcement agencies as evidence of adverse impact, while a greater than four-fifths rate will generally not be regarded by Federal enforcement agencies as evidence of adverse impact. Smaller differences in selection rate may nevertheless constitute adverse impact, where they are significant in both statistical and practical terms and where a user's actions have discouraged applicants disproportionately on grounds of race, sex, or ethnic group. Greater differences in selection rate may not constitute adverse impact where the differences are based on small numbers and are not statistically significant.

Thus, the 4/5th rule is a measure of the size of the disparity but may need to be interpreted considering context (e.g., sample size, in combination with statistical significance testing). However, case law suggests that the 4/5th rule can be interpreted as adequate stand-alone evidence in some situations, although it is unclear exactly what circumstances warrant such interpretation. The 80% rule is a general rule, and other factors such as statistical significance, sample size, discouraged applicants, etc., should be analyzed. The rationale for combining practical and statistical significance results is an intuitive one. In situations where the measures come to identical conclusions, the analyst can usually feel very confident in a finding of meaningful impact or no impact. In other situations, context may play an important role when statistical and practical significance measures produce different conclusions (i.e., when a standard deviation analysis is greater than 2.0 but the 4/5th rule is not violated).²¹

²⁰ *Engineering Contractors II*, 122 F3d at 914; see 29 C.F.R. § 1607.4(D) ("A selection rate for any race, sex, or ethnic group which is less than four-fifths (4/5) (or eighty percent) of the rate for the group with the highest rate will generally be regarded by the Federal enforcement agencies as evidence of adverse impact, while a greater than four-fifths rate will generally not be regarded by Federal enforcement agencies as evidence of adverse impact.")

²¹ See Tables 1 and 2 that explain this in, "A Consideration of Practical Significance in Adverse Impact Analysis," Eric M. Dunleavy, July 2010, <http://dciconsult.com/whitepapers/PracSig.pdf>

4.3 Data Sources Utilized for Statistical Analysis for the City of Raleigh

To conduct the statistical analysis, M³ Consulting collected and analyzed data from the City of Raleigh for the period covering FY 2017 through FY 2021. The City of Raleigh’s fiscal year extends from July 1 to June 30, so FY 2017 covers a period of July 1, 2016, to June 30, 2017, and FY 2021 covers July 1, 2020, to June 30, 2021. This section discusses the degree of completeness of the data sources, data sources used, and the data collection process, including the issues, if any, M³ Consulting encountered with these data sources. For this disparity study, M³ Consulting collected and analyzed electronic and hard copy files.

M³ Consulting sought to verify data provided to the degree possible within the time constraints of the study. Under employment discrimination law, a finding of adverse impact and inference of discrimination may be issued if data is not maintained in formats that allow for ongoing analysis of decisions made that may be impacted by race, gender or ethnicity.²² The question remains whether a similar holding of adverse impact and inference of discrimination based on poor data tracking systems or lack of data required for disparity analysis may be issued under a *Crosby* analysis.

Contract Log

Relevant Market, RWASM Availability and utilization data sources primarily come from the City of Raleigh. The exception for RWASM Availability is the Master S/M/WBE list. In addition to this list, data sources include:

- Bidders and sub-bidders on formal purchases, along with quotes on informal purchases;
- Awardees and sub-awardees; and
- Suppliers.

To start the data collection process for both bids and awards, M³ Consulting sought to determine the volume of contracts let during the study period, by requesting a contract log from the City of Raleigh.

The City of Raleigh maintains a contracts list, as well as records of bid and contract award data. The City of Raleigh does not track quotes—written or verbal—on informal contracts. M³ Consulting received two solicitation logs from the City:

- Clerk’s Contract Log, which reflected all formal contracts let by the City of Raleigh pre-PeopleSoft migration (FY 2017 to FY 2020)²³; and
- Contracts in PeopleSoft solicitation log, which reflected all formal contracts let by the City of Raleigh during the study period year of mid-FY 2020 to FY 2021.

The Clerks Contract Log contained contracts information by department, while the Contracts in PeopleSoft log was provided as a single list. Both logs contained contracts outside the study period. Only entries within FY 2017 through FY 2021 were analyzed in the study. Both logs included contract title, contract number, contract value and awarded prime information. The total number of contracts contained in the combined solicitation logs was 25,411, of which 8,687 were let between FY 2017 and FY 2021. Contracts represented in both the Clerks Log and

²² 29 CFR §1607.4.D.—“Where the user has not maintained data on adverse impact as required by the documentation section of applicable guidelines, the Federal enforcement agencies may draw an inference of adverse impact of the selection process from the failure of the user to maintain such data, if the user has an underutilization of a group in the job category, as compared to the group’s representation in the relevant labor market or, in the case of jobs filled from within, the applicable work force.”

²³ The City of Raleigh integrated a document management tool, ImageNow, to its PeopleSoft ERP system in 2020. The tool allows for the attachment of scanned documents/images to financial records.

the PeopleSoft log were identified and counted only once. Due to the volume of contracts involved, M³ Consulting focused on contracts with a value of \$300,000²⁴ and above in the data collection efforts. Using this threshold, 1,016 of the 8,687 contracts represented 88% of commercial and non-commercial dollars. Of these contracts, bidder/sub-bidder and awardee/sub-awardee data was manually collected for 657 commercial contracts. A total of 279 non-commercial contracts²⁵ were excluded from the analysis. Of the 657 contracts reviewed, 238 (36.23%) had more than one bidder, and 151 (22.98%) had subcontractors.

Table 4.1. Summary of Bid Activity on City of Raleigh Solicitations \$300,000 and Above FY 2017 to FY 2021

	#	%
Commercial	737	72.54
Bids Awarded	657	89.15
Bids Canceled	8	1.09
Duplicate Bids*	72	9.77
Non-commercial	279	27.46
Total Bids	1,016	100.00

Source: M³ Consulting, Combined Solicitation Log, ImageNow, PeopleSoft

*Duplicate bids are those that occurred in both Clerks Contract Log and Contracts in PeopleSoft log.

Using the two contract logs as the lists of contracts to be reviewed for more detailed data, M³ Consulting collected bidder and award information from ImageNow and PeopleSoft financial management systems, as discussed below under the sections on data sources for each analysis.

4.3.1 Data Sources for Relevant Market

In calculating relevant market, M³ Consulting sought to determine where about 70% of firms were located based on the source of data being reviewed—bidders, awardees and vendors. We utilized the following market areas by procurement type to determine where the bulk of commercial activity by the City of Raleigh occurs:

- City of Raleigh, NC;
- Raleigh-Cary, NC, metropolitan statistical area (MSA)—consists of the following three counties: Wake County, NC, Franklin County, NC, and Johnston County, NC;
- State of North Carolina; and
- Nationwide.

Within these market areas, M³ Consulting determined the percentage of firms meeting the 70% threshold based on:

- Bidder and awardees—Counts of bidders, sub-bidders, awardees, and sub-awardees; and

²⁴ The threshold for informal bidding starts at \$5,000 for Goods & Supplies while the threshold for formal bidding for Goods & Supplies begins at \$90,000. The threshold for informal bidding starts at \$5,000 for Construction and Construction-Related activities while the threshold for formal bidding for Construction and Construction-Related activities begins at \$500,000.

²⁵ Commercial contracts are contracts of a commercial and profit nature while non-commercial contracts are contracts with other governmental agencies (cities, counties, towns, public school systems, NC DOT), non-profits or contracts awarded using grants.

- Purchase order (PO) and accounts payable (AP) data—Dollar values and counts of PO and payments.

Contract dollars and counts, while reported, often did not fully represent all the procurement categories for this report, thus making the PO and payment data more reliable to determine relevant market, except for Construction and Construction-Related activities, where the contracts data was utilized, as it includes sub-bidders and subcontractor data.

4.3.2 Data Sources for Availability

As discussed previously, two levels of availability are considered in this disparity study: RWASM Availability (actual availability) and Marketplace Availability (potential availability). Below is a discussion of the data sources supporting these two measures of availability.

RWASM Data Sources

1. Bidders

By bidding, firms demonstrate that they are “ready” and “willing” and assert that they are “able.” The City of Raleigh determines “ability” through its bid review, ranking, and decision-making process for responsive and responsible bidders, and its evaluation of proposal responses to RFPs and RFQs

Using the solicitation lists, M³ Consulting searched and collected hard copy data, in this case, PDF formats on bidder activity and award activity from ImageNow and PeopleSoft for 657 contracts. The bid tabulations contained details of bid solicitation, prime bidders and proposed sub-bidders, along with the identification of the winning bidder (awardee). Some solicitations during this period were canceled. Data on these bids, where the information was available, was captured to ensure bidder availability robustness.

M³ Consulting assigned procurement categories using the project’s title. Bidder and award activity was defined in the procurement categories of AES-Design Services, Goods & Supplies, Construction and Construction-Related Services, Professional Services and Non-Professional Services. The bidders and sub-bidders were cross-matched against the City of Raleigh’s Certified M/WBE List (see *infra*), Active Suppliers List (see *infra*), and the Master S/M/WBE List (see *infra*) to identify the race, gender or ethnicity of firms. In situations where the bidder or sub-bidder is not available as a M/WBE firm on these lists, M³ Consulting defaulted to assigning such firms as Non-M/WBEs.

2. Awardees

Awardees satisfy the same RWASM criteria as bidders. However, the availability pool is smaller because it only includes bidders who received an award. The awardees availability pool was derived from the contract awards data (formal) and PO and AP data (formal and informal).

Awardees collected from contract awards data (winning bidder) are discussed above under “1. Bidders.”

Additional awardees were culled from the City’s financial management systems. All firms paid by the City of Raleigh were captured in PeopleSoft, which tracks informal and formal PO commitments and payments. M³ Consulting flagged all activity related to non-commercial vendors (i.e., nonprofits, governmental entities, and employees) within the two data sources and did not include these non-commercial activities in the analysis.

M³ Consulting deemed the PO data in the financial management system as the most comprehensive source of firm award/commitment data at the formal and informal level. While Payments data is accurate based on actual disbursements, it may not include all firms under contract during the study period if they have yet to be paid and may include firms contracted outside of the study period.

3. Vendors

M³ Consulting seeks a vendor registry as part of its RWASM Availability analysis. Enrollment as a vendor interested in receiving solicitations from the City of Raleigh is an additional criterion that may be used to measure availability. Companies included on the supplier list (“suppliers”) are a broader measure of availability than bidders and awardees.

The City of Raleigh does not maintain a vendor registry list. The City of Raleigh utilizes and maintains a vendor payment directory in PeopleSoft, the Active Suppliers’ Directory, which consists of active suppliers (active, one time pay, self-service, stop and temporary) that have been paid. The Active Supplier’s Directory has 3,821 records and contains information on suppliers such as name, location, and, where available, email and phone number. However, the Active Supplier’s Directory does not indicate the goods or services the supplier would like to provide to the City of Raleigh. Thus, M³ Consulting was unable to conduct a supplier-level availability analysis.

4. City of Raleigh Certified Firms

The City of Raleigh provided a list of 174 M/WBE suppliers who are certified as eligible to participate in its M/WBE programmatic efforts. While certified M/WBEs undergo significant vetting and meet the “ready, willing and able” criteria, only M/WBEs are subject to the certification process. There is no such equivalent listing of Non-M/WBEs. Using the certification list alone to measure availability would cause bias in the availability measurement.

5. Master S/M/WBE List

M³ Consulting sought certified lists from public agencies within the Raleigh-Cary, NC, MSA business area. Typically, membership lists from nonprofits or private organizations are not available to non-members or without paying a fee. In compiling the Master S/M/WBE list, M³ Consulting utilized the following directories:

- City of Raleigh Certified M/WBE;
- State of NC HUB;
- NC DOT DBE Directory;
- NC DOT SBE Directory;
- SC DOT Unified Certification Program DBE Directory;
- SC DOT DBE Directory;
- NC DOT Prequalified Consultants Directory - only those identified as having a minority certification were included; and
- NC DOT Prequalified Bidders and Subcontractors Directory - only those identified as having a minority certification were included.

There was a total of 9,522 firms on the list. When using the Master S/M/WBE list to identify the race, ethnicity or gender of a business owner, for firms with multiple agency certifications, precedence was given in the order in which the certifying bodies are listed above, with the City of Raleigh M/WBE certification taking precedence over all other lists.

This Master S/M/WBE List was used to identify the race or gender of firm owners in other databases where such information was missing.

Potential (Marketplace) Availability Data Sources

1. U.S. Census Bureau ASE Data

The U.S. Census Bureau conducts the ASE. The ASE collects statistics on the characteristics of businesses and their owners. Additionally, estimates are produced for employer businesses on the number of firms, sales and receipts, annual payroll, and employment. Data is presented by gender, ethnicity, race and veteran status for the United States by two-digit 2012 NAICS, states, the top 50 MSAs, employment size, receipts size, and number of years in business. Content of the ASE includes questions from the 2012 SBO (form SBO-1). M³ Consulting removed Standard Industrial Classification (SIC) and NAICS codes that were not relevant to the City of Raleigh's procurement activity, such as agriculture and mining. M³ Consulting utilized data for the Raleigh, NC, Metro Area.

2. Data Axle

Data Axle provided a list of firms from its database for the Raleigh-Durham-Cary, NC, CBSA. The database consists of 22,278 discrete registered firms by SIC and NAICS code, ethnicity and gender, when available. Of these 22,278 firms, only 13,131 had defined race/ethnicity. All 22,278 firms were classified into procurement categories using the primary NAICS code provided by Data Axle. M³ Consulting sorted the SIC and NAICS codes into the categories of AES-Design Services, Construction and Construction-Related Services, Goods & Supplies, Non-Professional Services and Professional Services to calculate Marketplace Availability. The Data Axle database also provided data for these firms on sales volumes and employees. M³ Consulting utilized this data as a measure of firm capacity.

3. Dodge Construction Data

Dodge maintains a database of construction activity across the country. The database includes the following information for publicly owned and privately owned construction projects:

- Owner of project, with address;
- Description of project;
- Value of project; and
- Location of project.

The Dodge database also includes information on the general contractor, subcontractors, and the architect and engineer that bid on each project. M³ Consulting collected data for FY 2016–FY 2022, covering construction activity captured by Dodge in bid activity for the State of North Carolina. In terms of the value of the work, the only available information was the overall value of each project. The specific value of work performed by subcontractors was not available.

The project description, prime contractor, subcontractor, bidders, and architect/engineer, when available, were provided in Microsoft Excel spreadsheets, with the common link being a unique Dodge-assigned number for each project in their database. Since Dodge does not track the race or gender of the contractors, such information had to be added to the database by manual comparison of names to the Master S/M/WBE list.

4.3.3 Data Sources for Utilization

Utilization measures the distribution of dollars and contracts to commercial M/WBEs and Non-M/W/D/SBEs by the City of Raleigh. The sources of data sought from the City of Raleigh on M/WBE utilization for this report were

contract awards, subcontractor data, POs, AP and P-Card data. The following are descriptions of utilization databases.

Contract Awards and Subcontractor Data

M³ Consulting obtained the City of Raleigh’s prime contract awards data from the combined solicitations list, comprising the Clerks Contract Log and the Contracts in PeopleSoft log for the study period of FY 2017–FY 2021, which included contract title, contract number, contract value and awarded prime information. M³ Consulting concentrated data collection efforts on 657 contracts that represented contract amounts of \$300,000 and above.

M³ Consulting searched hard copy bid tabulations that were in PDF formats from both ImageNow and PeopleSoft, and manually entered in additional information such as prime bidders’ information, awarded prime bidder and sub-bidder information where available. For subcontractors, data elements, where available, included subcontractor name, ethnicity, certification status, award status, subcontracted amount, type of work to be performed, subcontractor address, email and phone.

Based on the solicitation name, M³ Consulting classified each contract award into the procurement categories of Goods & Supplies, Professional Services, Non-Professional Services, Construction and Construction-Related Services and AES-Design Services. The classifications determined the allocation of the contract award dollars within each procurement category. The distribution across procurement categories, based on this allocation, is shown in Table 4.2.

Table 4.2. Contract Awards				
Commercial Activities				
	Amount		Contract Awards	
	\$	%	#	%
AES-Design Services	188,463,236	17.80	149	22.68
Construction	604,558,335	57.09	260	39.57
Goods & Supplies	1,882,355	0.18	2	0.30
Non-Professional Services	117,422,369	11.09	104	15.83
OMIT	65,596,151	6.19	70	10.65
Professional Services	81,057,009	7.65	72	10.96
Grand Total	1,058,979,456	100.00	657	100.00

Source: M³ Consulting, Combined Solicitation Log, ImageNow, PeopleSoft

OMIT – Includes security bonds, surety agreements

The bid tabulation, when available, was used to confirm the award amount for each solicitation. In a situation where there was a variance, the amount provided by the City of Raleigh in the solicitation logs took precedence. The awarded firm would subsequently have a PO issued for the contracted amount.

It is important to note that prime bidder information and sub-bidder information were not available in all cases. Contract award information is most robust for the category of Construction and Construction-Related Services and Professional Services. Therefore, the contract analysis for the City of Raleigh can only be considered as a best effort analysis based on data that was available to be captured.

Purchase Orders

POs represent the total value of a specific good or service for which payments may be made. These are contract commitments representing the actual firm with which the City of Raleigh executed a contract, as compared to contract award, which represents vendors identified as the winning bidder resulting from the bid and evaluation process. Unless there is a justifiable and legitimate business reason (i.e., negotiations with the winning bidder that may have caused changes in scope and final cost), the winning bidder and winning bid amount (contract award) and the contracted firm and contracted amount (POs), should be the same. Differences may necessitate a deeper dive and further analysis to ensure that these differences are not due to discriminatory reasons. M³ Consulting leaned toward relying upon PO data commitments, as these included all change orders, informal purchases commitments and other procurement opportunities not competitively bid.

M³ Consulting collected PO data from the City of Raleigh for the study period FY 2017–FY 2021 from PeopleSoft. The PO data contained category codes that were used in assigning procurement categories. The vendors were cross-matched against the City of Raleigh’s certified M/WBE list and the Master M/WBE list to identify the race, gender or ethnicity of firms. In situations where the awardee is not available as a M/WBE firm on these lists, M³ Consulting defaulted to assigning such firms as Non-M/WBE firms. This allocation served as the basis of PO distribution presented in the statistical chapters.

Accounts Payable

AP data conducted utilization analysis based on actual payments to the City of Raleigh’s suppliers. M³ Consulting historically allocates payments into procurement types using commodity codes, NAICS, SIC or object codes. For the PO data, M³ Consulting was able to utilize the category code to allocate POs into procurement types. The PeopleSoft AP data did not provide category codes but included the corresponding PO number. Given that each payment by the City of Raleigh must have an underlying PO, the same category code classifications used for the POs were used to allocate payments among the procurement types.

M³ Consulting requested that all payments to non-commercial vendors (governmental entities, nonprofit entities, or employees) be excluded from the analysis. To ensure that the non-commercial transactions were not included, M³ Consulting randomly selected vendors to ensure, to the degree possible, that they were not governmental entities, nonprofit entities, or employees.

4.4 Summary

This statistical methodology and data collection discussion provides the foundation for subsequent statistical chapters. It details the types of analysis used in Disparate Impact studies, as well as disparity analysis in contracting. The basic comparison to be made in disparity studies is between M/WBEs and Non-M/WBE firms ready, willing and able to perform a specific service (available firms) and the actual utilization of such businesses within the geographic parameters of both the City of Raleigh’s vendors and its political and legal jurisdiction.

This chapter details the method of defining the geographic market area for the City of Raleigh, outlines the availability model used by M³ Consulting, and provides a detailed explanation of alternate measures of utilization of firms in contracting by the City of Raleigh.

Following the description of the model, a thorough discussion lays out the data sources used in the study, starting with the data collection process, the issues encountered in the process, and the caveats that presented themselves due to data limitations.

Chapter 5: Statistical Analysis of M/WBE Disparity in Contracting

5.1 Introduction

This chapter presents data on Minority/Women-owned Business Enterprise (M/WBE) availability in the City of Raleigh (hereafter, the City) relevant market. The conceptual issues in measuring availability are discussed in detail in Chapter 4 Statistical Methodology. The accurate calculation of availability is critical in disparity analysis. “*Actual availability*,” as defined by M³ Consulting for purposes of this study, provides the measure of the number of M/WBEs who are *ready, willing, and able* to do business with the City. An overcount or undercount of the pool of available M/WBEs can significantly alter findings of disparity. As such, M³ Consulting has developed an availability model that best captures those M/WBEs that are available to the City.

The first section of this chapter discusses the determination of the relevant market for the City. The second section presents the estimates of M/WBE availability for five procurement categories: Architectural and Engineering Services (AES)-Design Services, Construction, Professional Services, Non-Professional Services, and Goods & Supplies. The following availability measures are presented for each procurement category:

- Ready, Willing, and Able Availability (RWA^{SM})
 - Level 1: Bidders and Sub-bidders
 - Level 2: Bidders, Sub-bidders, Formal and Informal Awards from PeopleSoft Data
- Marketplace Availability
 - Data Axle

The chapter summarizes availability findings in the Summary of Findings section.

Relevant Market

In the context of disparity studies, the relevant market establishes the geographical boundaries where a bulk of commercial transactions by the agency are conducted. The analysis of M/WBE availability and utilization are examined within this defined geographical market area. Based on the U.S. Supreme Court requirement that a M/WBE program covers only those groups that have been affected by discrimination within the public entity's jurisdiction,¹ most courts and disparity study consultants characterize the relevant market as the geographical area encompassing the majority of a public entity's commercial activity, commonly determined by a representation of over 70% of an entity's contract dollars.

The Supreme Court's *Croson* decision did not provide specific guidance on the estimation of relevant market for the purposes of constructing a factual predicate study. Based upon lower court rulings, however, there are two requirements for determining the relevant market that have emerged:

1. The boundaries of the relevant market must be geographically close to that of the political jurisdiction enacting the program; and
2. The relevant market must include the bulk of the commercial activity of said political jurisdiction.

Consequently, many disparity studies of local areas have identified the metropolitan statistical area (Raleigh-Cary, NC) as the relevant market.² Certain other entities, however (e.g., Dallas and Los Angeles), have restricted the relevant market to those firms within their jurisdictional boundaries.

Relevant Market for the City

To estimate availability, the marketplace in which the City purchases from vendors needs to be defined. This enables a practical count of "available" firms and also facilitates policy implementation.

Based on the data provided for this study, four relevant markets were defined and are presented below in Table 5.1. M³ Consulting examined the City of Raleigh, Raleigh-Cary, NC MSA, the State of North Carolina, and nationwide.

- City of Raleigh;
- Raleigh-Cary, NC MSA;
- State of North Carolina; and
- Nationwide.

The relevant market is summarized in Table 5.1, by procurement category and by location. The summary table represents the percentage of bidders, awardees, and firms paid for each procurement category by the relevant market determinations outlined in Tables 5.2 through 5.6.

AES-Design Services Relevant Market—Raleigh-Cary, NC MSA

For AES-Design, as shown in Table 5.1, M³ Consulting concluded the MSA as the relevant market, based primarily on PO dollars which represented 84.60% of AES-Design transactions. (see Table 5.2).

¹ *Richmond v. Croson*, 488 U.S. 469, 109 S.Ct. 706. 725 (1989).

² See, for example, *Concrete Works v. Denver*, 823 F Supp 821, at 836, n. 11; rev'd on other grounds, 36 F3d 1513 (10th Cir. 1994). Some earlier studies followed antitrust precedent in using an 85% benchmark as the relevant market. See, e.g., DJMA, *Disparity Study for the Orange County Consortium* (1993).

Construction and Construction-Related Services, Professional Services, and Non-Professional Services Relevant Market—State of North Carolina

For Construction and Construction-Related Services, the relevant market is clearly the State of North Carolina, when viewing the measures in totality. All measures reflected over 70% of Construction activity in the State; only PO counts reflected over 70% in the MSA. PO dollars and PO counts, at 86.74% and 92.27% respectively, reflected the highest level of Construction activity in the relevant market category of the State.

Similar to AES-Design Services, PO dollars for Professional Services and Non-Professional Services point to the State of North Carolina. For Professional Services, PO dollars reach 75% activity in the state, while PO counts reflect 70% activity in the state. For Non-Professional Services, PO dollars and bidders/awardees are just shy of 70% in the state, while PO counts are over 75% in the state.

Goods & Supplies Relevant Market—Nationwide

Goods & Supplies for the City are procured from bidders and sub-bidders across the nation. Less than 60% of bidders/awardees and PO dollars are within the State of North Carolina. Only slightly under 40% of the dollars are invoiced and paid from within the State. Therefore, relevant market for Goods & Supplies is defined as the nation for this study period.

Table 5.1. Summary of Relevant Market Determination

	City	MSA	State	Nationwide
AES-Design Services		✓		
Construction and Construction-Related Services			✓	
Professional Services			✓	
Non-Professional Services			✓	
Goods & Supplies				✓

Sources: M³ Consulting; City contracts data, PeopleSoft PO and AP data, City vendor payment data; P-Card data

**Table 5.2. Relevant Market Summary: AES-Design Services
FY 2017–FY 2021**

	City	MSA	State	Nationwide
	%	%	%	
Bidders/Sub-bidders	42.16	51.47	64.71	204
Bidders/Awardees	39.09	51.21	67.58	330
PO Dollars	23.89	84.60	94.45	\$356,366,630
PO Counts	48.78	66.59	84.40	859
Payment Dollars	19.46	59.31	70.88	\$208,660,840
Payment Counts	22.66	33.33	45.63	5,635

Sources: M³ Consulting; City contracts data; PeopleSoft PO and AP data; City vendor payment data; P-Card data

**Table 5.3. Relevant Market Summary: Construction and Construction-Related Services
FY 2017–FY 2021**

	City	MSA	State	Nationwide
	%	%	%	
Bidders/Sub-bidders	27.78	43.80	71.15	468
Bidders/Awardees	31.89	49.30	75.07	718
PO Dollars	19.04	63.26	86.74	\$635,945,933
PO Counts	49.40	78.01	92.27	996
Payment Dollars	20.24	49.49	77.61	\$545,818,754
Payment Counts	25.00	52.04	74.50	2,596

Sources: M³ Consulting; City contracts data; PeopleSoft PO and AP data; City vendor payment data; P-Card data

**Table 5.4. Relevant Market Summary: Professional Services
FY 2017–FY 2021**

	City	MSA	State	Nationwide
	%	%	%	
Bidders/Sub-bidders	16.67	20.00	29.17	120
Bidders/Awardees	33.70	41.89	54.64	549
PO Dollars	63.04	67.05	75.48	\$87,606,822
PO Counts	44.43	55.06	70.04	988
Payment Dollars	18.18	19.22	24.76	\$48,920,809
Payment Counts	24.48	25.97	34.82	1,887

Sources: M³ Consulting; City contracts data; PeopleSoft PO and AP data; City vendor payment data; P-Card data

**Table 5.5. Relevant Market Summary: Non-Professional Services
FY 2017–FY 2021**

	City	MSA	State	Nationwide
	%	%	%	
Bidders/Sub-bidders	32.75	42.11	58.48	171
Bidders/Awardees	35.13	49.31	68.21	2,095
PO Dollars	35.93	47.72	69.41	\$490,785,884
PO Counts	41.82	60.65	75.54	8,396
Payment Dollars	24.73	31.66	63.85	\$427,640,944
Payment Counts	25.36	30.27	51.49	13,837

Sources: M³ Consulting; City contracts data; PeopleSoft PO and AP data; City vendor payment data; P-Card data

**Table 5.6. Relevant Market Summary: Goods & Supplies
FY 2017–FY 2021**

	City	MSA	State	Nationwide
	%	%	%	
Bidders/Sub-bidders	5.88	5.88	23.53	17
Bidders/Awardees	22.13	34.91	56.89	2,074
PO Dollars	25.59	34.68	57.52	\$397,357,232
PO Counts	58.89	67.33	81.85	55,498
Payment Dollars	13.94	17.03	39.50	\$300,684,259
Payment Counts	12.57	15.55	26.51	44,733

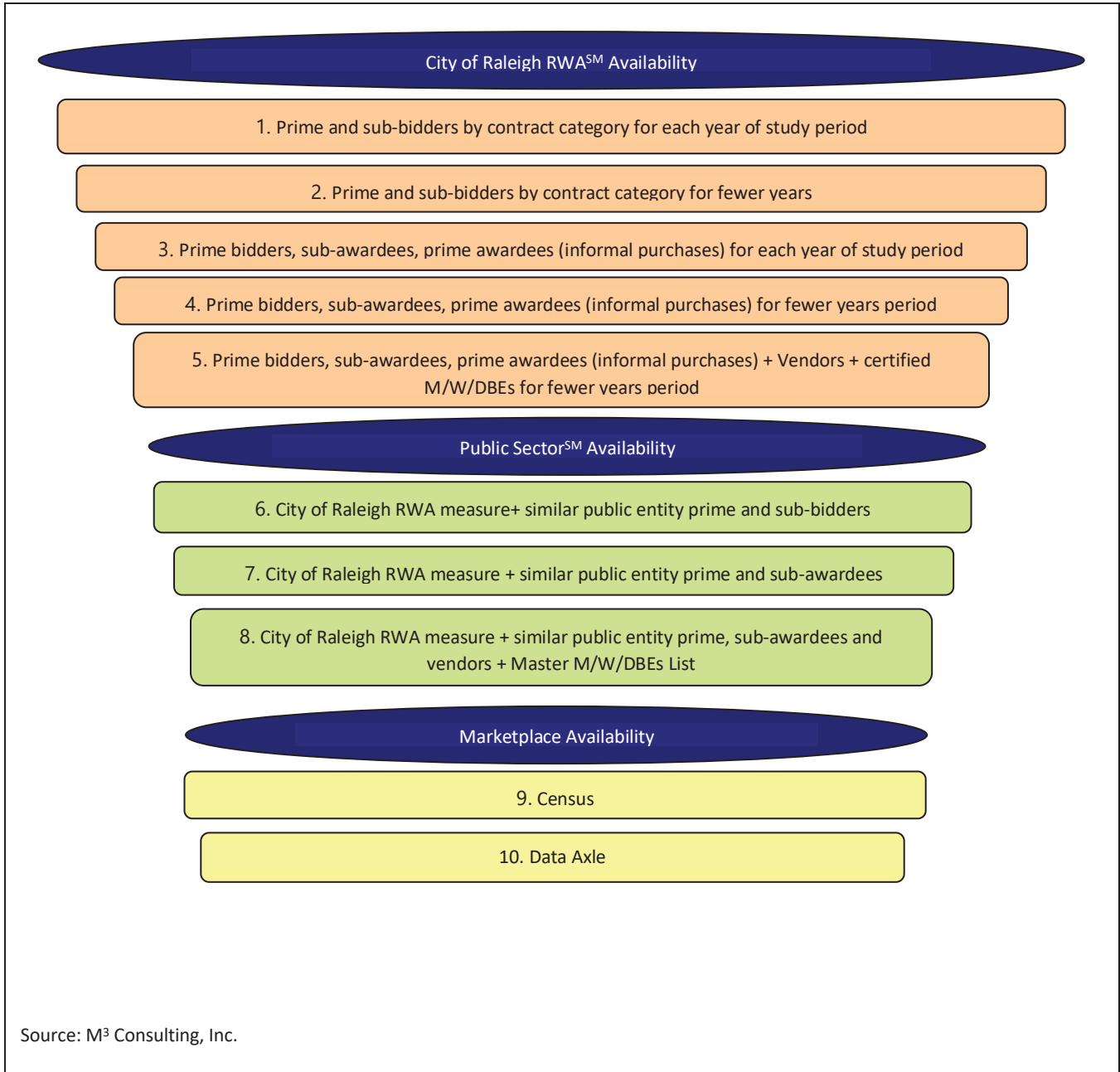
Sources: M³ Consulting; City contracts data; PeopleSoft PO and AP data; City vendor payment data; P-Card data

5.2 Availability Definition

The availability measure is often in dispute and critical to defining disparity. One must be careful not to include all businesses as *ready, willing, and able*, as such a calculation could produce a very broad pool of available firms, including those who are not interested in or able to provide goods or services purchased by the City. Similarly, a very narrowly tailored measure of availability may exclude some potential bidders by falsely classifying them as unable to perform the requirements of contracts. A detailed discussion about the availability model and measurement of availability are provided in Chapter 4: Statistical Methodology.

The Ready, Willing, and Able (RWASM) Availability Model levels are defined as follows:

Figure 5.1. RWASM Availability Model



M³ Consulting’s RWASM Availability Model is further tailored to the robustness of the City’s specific databases available for analysis. RWASM Availability is defined at Level 2 for FY 2017–FY 2021, which includes prime and sub-bidders, informal and noncompetitive awardees, and prime and sub-awardees to make up this availability pool. Level 2 RWASM Availability will be compared to utilization when determining disparity in Chapter 7, Statistical Analysis of M/WBE Disparity in Contracting.

Levels 1 and 2 are presented independently and cumulatively in Figure 5.2, as two measures of RWASM Availability, with Level 2 being a broader measure that combines various lists to compile the pool of discrete available firms across different measures. Below, we also present total available firms by procurement type.

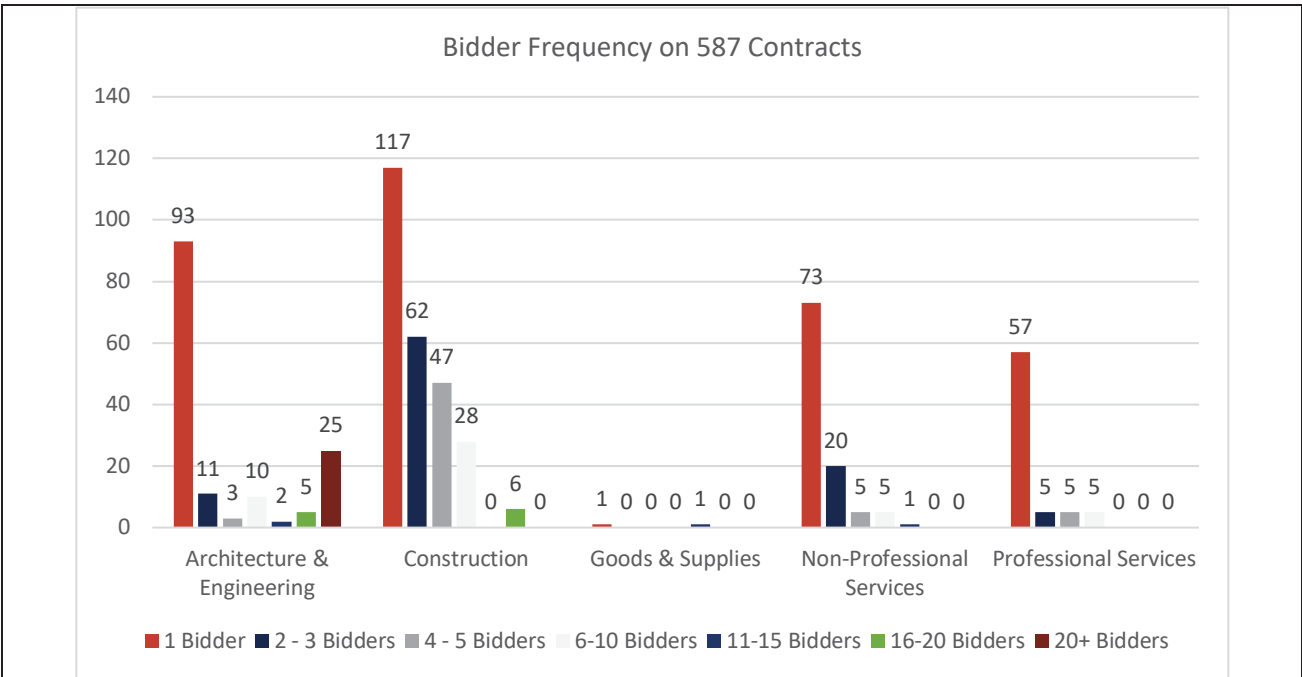
Figure 5.2. Raleigh Specific RWASM Availability Levels

RWA SM Availability Level	RWA SM Availability Definition
Level 1	City of Raleigh Bidders and Sub-bidders
Level 2	City of Raleigh Bidders and Sub-bidders + AP/PO Firms

Sources: M³ Consulting; All firms certified by the City are included on the Vendor Payment List or City contracts data; PeopleSoft PO and AP data

In establishing Level 1, M³ Consulting also recognizes the limited competition on City of Raleigh contract opportunities, which lowers the number of bidders and sub-bidders on its opportunities as shown in Figure 5.3. Approximately 75% of 587 bids reviewed by M³ Consulting had three or fewer bidders; 58% had only one bidder. This limited competition may lead to the vendor community, particularly M/WBEs, viewing the City of Raleigh as a “closed shop” despite the existence of an established M/WBE program.

Figure 5.3. Raleigh Bidder Frequency



Sources: M³ Consulting; contract awards data

5.3 Total Availability

5.3.1. Total RWASM Availability

RWASM Availability measures are presented in Table 5.7 for the study period.

There is a total pool of 834 available firms for Level 1, which includes bidders and sub-bidders. The number of available firms expands to 4,296 at Level 2, when informal and noncompetitive awardees and formal prime and sub awardees are included. Of the available firms at Level 2, 3.42% are Minority-owned firms and 4.63% are woman-owned firms (WBEs). Among Minority-owned firms, African American-owned firms reflect the highest representation at 1.79%, followed by Hispanic American-owned firms at 1.12%. Asian American- and Native American-owned firms both represent less than 1% of available firms at 0.35% and 0.14% respectively. small business enterprises (SBEs) and service-disabled veterans (SDV)/veteran-owned firms (VBEs) also reflect less than 1%, at 0.21% and 0.14%.

Although the percent of Non-M/WBEs increased significantly from only 594 firms in Level 1 to 3,932 in Level 2, this increase is predominantly due to the incomplete data sources (contract awards and bidder data) utilized to calculate Level 1. Contract awards, containing both bidder and awardee data was most robust for Construction and Construction-Related Services. While Minority-owned firms and WBEs also have a higher number of available firms under Level 1, their proportions decline due to the disproportionate number of Non-M/WBEs in Level 2 that includes formal and informal awardees from PO and AP data. For Minority-owned firms there is a substantial decline in their availability proportion from 13.19% (110 firms) at Level 1 to only 3.42% (147 firms) at Level 2. A similar pattern is reflected for woman-owned businesses, with a decline from 14.99% (125 firms) at Level 1 to 4.63% (199 firms) at Level 2.

Table 5.7. RWASM Availability: Levels 1–2
Total Availability
City of Raleigh. Nationwide, FY 2017–FY 2021

	Level 1		Level 2	
Race/Ethnicity/Gender	#	%	#	%
Non-M/WBE	594	71.22	3,932	91.53
African American	56	6.71	77	1.79
Asian American	10	1.20	15	0.35
Hispanic American	40	4.80	48	1.12
Native American	4	0.48	6	0.14
Other Minority	-	0.00	1	0.02
Total Minority	110	13.19	147	3.42
Woman-Owned (WBEs)	125	14.99	199	4.63
Unknown M/WBE	-	0.00	3	0.07
Total M/WBE	235	28.18	349	8.12
SBE	2	0.24	9	0.21
SDV/VBE	3	0.36	6	0.14
Grand Total	834	100.00	4,296	100.00

Sources: M³ Consulting; City contracts data; PeopleSoft PO and AP data; City vendor payment data; Other Minority is a firm identified as MBE, with no specific race/ethnicity identified; Unknown M/WBEs are a firm identified as M/WBE, with no specific race/ethnicity/gender identified.

5.3.2. Marketplace Availability—Total Availability

As a benchmark to RWASM Availability in the relevant market and the broadest measure of availability, we present Marketplace Availability using Data Axle data. The limitation of this data set is that firms in the Data Axle data do not reflect those that may have necessarily expressed interest in bidding with the City. Based on the Marketplace list, as presented in Table 5.8, a total of 13,131 firms are available in Raleigh-Durham-Cary, NC (CBSA); 63.51% of which are Non-M/WBE firms. Among the 1,097 Minority-owned firms, 539 (or 4.10% of total) are Hispanic American-owned firms; 312 (2.38% of total) are Asian American-owned, 232 (1.77% of total) are African American-owned and 14 (0.11%) are Native American-owned firms. WBEs represented 3,694 (28.13%), significantly higher than Minority-owned firms at 8.35%. There are no SBEs or VBEs that are listed separately using this database.

In comparing RWASM Availability for the City of Raleigh, the Marketplace measure for M/WBEs (36.49%) is significantly higher than the Level 2 RWASM measure (8.12%).

**Table 5.8. Data Axle Availability
Total Availability
Raleigh-Durham-Cary, NC (CBSA), FY 2021**

Race/Ethnicity/Gender	#	%
Non-M/WBE	8,340	63.51
African American	232	1.77
Asian American	312	2.38
Hispanic American	539	4.10
Native American	14	0.11
Other Minority	-	0.00
Total Minority	1,097	8.35
Woman-Owned (WBEs)	3,694	28.13
Unknown M/WBE	-	0.00
Total M/WBE	4,791	36.49
SBE	-	0.00
SDV/VBE	-	0.00
Grand Total	13,131	100.00

Sources: Data Axle Firms as of February 2021; M³ Consulting;

5.4 Availability in AES-Design Services

5.4.1. RWASM Availability in AES-Design Services

Level 2 AES-Design Services reflects 169 available firms in the MSA, as shown in Table 5.9. Of these firms, only 34 (20.12%) were M/WBEs. WBEs accounted for most of the M/WBE availability at 15.38% (26 firms). No Minority-owned firm category reached 2%, with Asian American- and Hispanic American-owned firms both reflecting 1.78%, followed by African American- and Native American-owned firms both at 0.59%.

**Table 5.9. RWASM Availability: Levels 1–2
AES-Design Services
City of Raleigh
Raleigh-Cary, NC MSA, FY 2017–FY 2021**

	Level 1		Level 2	
Race/Ethnicity/Gender	#	%	#	%
Non-M/WBE	80	76.19	134	79.29
African American	1	0.95	1	0.59
Asian American	3	2.86	3	1.78
Hispanic American	3	2.86	3	1.78
Native American	1	0.95	1	0.59
Other Minority	-	0.00	-	0.00
Total Minority	8	7.62	8	4.74
Woman-Owned (WBEs)	17	16.19	26	15.38
Unknown M/WBE	-	0.00	-	0.00
Total M/WBE	25	23.81	34	20.12
SBE	-	0.00	-	0.00
SDV/VBE	-	0.00	1	0.59
Grand Total	105	100.00	169	100.00

Sources: M³ Consulting; City contracts data; PeopleSoft PO and AP data; City vendor payment data; relevant market—Raleigh-Cary, NC MSA; Other Minority is a firm identified as MBE, with no specific race/ethnicity identified; Unknown M/WBE is a firm identified as M/WBE, with no specific race/ethnicity/gender identified.

5.4.2. Marketplace AES-Design Services

In Table 5.10, Marketplace Availability reflects a total of 417 firms, compared to 169 firms for Level 2 RWASM Availability. Non-M/WBEs account for 61.15% of these firms and M/WBEs 38.85%. Similar to RWASM Availability, WBEs make up most of the M/WBE representation at 31.65%. Minority-owned firms represent 7.19%, with Hispanic American-owned firms at 2.88%, followed by African American-owned firms at 2.64% and Asian American-owned firms at 1.68%. There was no availability for Native American-owned firms, Other Minority-owned firms, SBEs or SDV/VBEs.

Table 5.10. Data Axle Availability AES-Design Services Raleigh-Durham-Cary, NC (CBSA), 2021		
Ethnicity	#	%
Non-M/WBE	255	61.15
African American	11	2.64
Asian American	7	1.68
Hispanic American	12	2.88
Native American	-	0.00
Other Minority	-	0.00
Total Minority	30	7.19
Woman-Owned (WBEs)	132	31.65
Unknown M/WBE	-	0.00
Total M/WBE	162	38.85
SBE	-	0.00
SDV/VBE	-	0.00
Grand Total	417	100.00

Sources: Data Axle Firms as of February 2021; M³ Consulting

5.5 Availability in Construction

5.5.1. RWASM Availability in Construction and Construction-Related Services

Shown in Table 5.11, there were 539 Construction and Construction-Related Services firms in Level 2, of which Non-M/WBEs totaled 352 firms or 65.31%. The next highest group was WBEs, at 17.63%, higher than Minority-owned firms at 15.96%. African American-owned firms (8.91%) and Hispanic American-owned firms (5.19%) represented the majority of Minority-owned firm representation. Asian American- and Native American-owned firms both composed 0.93% of RWASM Availability.

Level 1 availability, reflecting bidders and sub-bidders, saw Non-M/WBEs and M/WBEs with the same level of representation at 49.55%. Given that Level 2 includes both formal and informal awardees, the difference in results may reflect that Non-M/WBEs are awarded informal contracts at a higher level than M/WBEs.

**Table 5.11. RWASM Availability: Levels 1–2
Construction and Construction-Related Services
City of Raleigh, State of North Carolina, FY 2017–FY 2021**

	Level 1		Level 2	
Race/Ethnicity/ Gender	#	%	#	%
Non-M/WBE	165	49.55	352	65.31
African American	40	12.01	48	8.91
Asian American	5	1.50	5	0.93
Hispanic American	28	8.41	28	5.19
Native American	4	1.20	5	0.93
Other Minority	-	0.00	-	0.00
Total Minority	77	23.12	86	15.96
Woman-Owned (WBEs)	88	26.43	95	17.63
Unknown M/WBE	-	0.00	-	0.00
Total M/WBE	165	49.55	181	33.59
SBE	1	0.30	4	0.74
SDV/VBE	2	0.60	2	0.37
Grand Total	333	100.00	539	100.00

Sources: M³ Consulting; City contracts data; PeopleSoft PO and AP data; City vendor payment data; relevant market—State of North Carolina; Other Minority is a firm identified as MBE, with no specific race/ethnicity identified; Unknown M/WBE is a firm identified as M/WBE, with no specific race/ethnicity/gender identified.

5.5.2. Marketplace Availability—Construction and Construction-Related Services

Over 80% (1,122 firms) of the 1,370 firms in Marketplace Availability were Non-M/WBEs. Minority-owned firms and WBEs both reflected less than 10%. For Minority-owned firms, Hispanic American-owned firms comprised 5.91% of the 8.25% total. African American-owned firms lagged at 1.46%, while Asian American- and Native American-owned firms represented less than 1% each.

Comparing Marketplace Availability to RWASM Availability in Table 5.12, M/WBE representation in Marketplace Availability at 18.10% was over half of RWASM Availability at 33.59%, with similar results for Minority-owned firms and WBEs.

Table 5.12. Data Axle Availability Construction and Construction-Related Services Raleigh-Durham-Cary, NC (CBSA), 2021		
Ethnicity	#	%
Non-M/WBE	1,122	81.90
African American	20	1.46
Asian American	10	0.73
Hispanic American	81	5.91
Native American	2	0.15
Other Minority	-	0.00
<i>Total Minority</i>	<i>113</i>	<i>8.25</i>
Woman-Owned (WBEs)	135	9.85
Unknown M/WBE	-	0.00
<i>Total M/WBE</i>	<i>248</i>	<i>18.10</i>
SBE	-	0.00
VBE/DVBE	-	0.00
Grand Total	1,370	100.00

Sources: Data Axle Firms as of February 2021; M³ Consulting

5.6 Availability In Professional Services

5.6.1. RWASM Availability in Professional services

Level 2 Professional Services Availability at 300 firms in Table 5.13 saw a 10-fold increase from Level 1 at 35 firms. Of the Level 2 firms, almost 90% were Non-M/WBEs. WBEs accounted for an additional 6.33%. Of the Minority-owned firms that represented only 3.67% of the Level 2 firms, African American-owned firms constituted most of this representation at 2.00%, followed by Asian American- and Hispanic American-owned firms at 0.67% each. Native American-owned firms represented only 0.33%, as did SBEs.

**Table 5.13. RWASM Availability: Levels 1–2
Professional Services
City of Raleigh, State of North Carolina, FY 2017–FY 2021**

	Level 1		Level 2	
Race/Ethnicity/ Gender	#	%	#	%
Non-M/WBE	29	82.86	269	89.67
African American	3	8.57	6	2.00
Asian American	1	2.86	2	0.67
Hispanic American	1	2.86	2	0.67
Native American	-	0.00	1	0.33
Other Minority	-	0.00	-	0.00
Total Minority	5	14.29	11	3.67
Woman-Owned (WBEs)	1	2.86	19	6.33
Unknown M/WBE	-	0.00	-	0.00
Total M/WBE	6	17.15	30	10.00
SBE	-	0.00	1	0.33
SDV/VBE	-	0.00	-	0.00
Grand Total	35	100.00	300	100.00

Sources: M³ Consulting; City contracts data; PeopleSoft PO and AP data; City vendor payment data; relevant market—State of North Carolina; Other Minority is a firm identified as MBE, with no specific race/ethnicity identified; Unknown M/WBE is a firm identified as M/WBE, with no specific race/ethnicity/gender identified.

5.6.2. Marketplace Availability—Professional Services

Similar to the difference between Level 1 and Level 2 RWASM Availability with respect to Professional Services, there is a 10-fold difference between Marketplace Availability at 3,085 firms and Level 2 RWASM Availability at 300 firms, as reflected in Table 5.14. M/WBEs accounted for 41.13%, compared to Non-M/WBEs at 58.87%. WBEs' portion of M/WBE Marketplace Availability was substantial at 32.45%, while Minority-owned firms only made up 8.69%. The Minority-owned firms with the highest level of availability were Asian American-owned firms at 3.57% and Hispanic American-owned firms at 3.34%.

Comparatively, WBE representation for RWASM Availability was only 6.33% against Marketplace Availability of 32.45%. Asian American- and Hispanic American-owned firms also saw higher availability for Marketplace Availability than RWASM Availability, while African American- and Native American-owned firms had similar availability under both measures.

Table 5.14. Data Axle Availability Professional Services Raleigh-Durham-Cary, NC (CBSA), 2021		
Ethnicity	#	%
Non-(Minority/WBE/SMBE)	1,816	58.87
African American	52	1.69
Asian American	110	3.57
Hispanic American	103	3.34
Native American	3	0.10
Other Minority	-	0.00
Total Minority	268	8.69
Woman-Owned (WBEs)	1,001	32.45
Unknown M/WBE	-	0.00
Total M/WBE	1,269	41.13
SBE	-	0.00
SDV/VBE	-	0.00
Grand Total	3,085	100.00

Sources: Data Axle Firms as of February 2021; M³ Consulting

5.7 Availability in Non-Professional Services

5.7.1. RWASM Availability in Non-Professional Services

There were 1,429 available firms in Non-Professional Services based on Level 2 RWASM Availability reflected in Table 5.15. Like Professional Services, the difference between Level 1 at 100 firms and Level 2 may reflect that most non-professional services are procured through informal procurement means. Non-M/WBEs made up over 92% of Level 2 firms, with M/WBEs accounting for only 7.35%. WBEs represented 4.62% and African American-owned firms 1.40%. No other M/WBE group reached 1% availability in Non-Professional Services.

**Table 5.15. RWASM Availability: Levels 1–2
Non-Professional Services
City of Raleigh, State of North Carolina, FY 2017–FY 2021**

	Level 1		Level 2	
Race/Ethnicity/Gender	#	%	#	%
Non-M/WBE	82	82.00	1,315	92.02
African American	4	4.00	20	1.40
Asian American	-	0.00	3	0.21
Hispanic American	4	4.00	11	0.77
Native American	-	0.00	2	0.14
Other Minority	-	0.00	1	0.07
<i>Total Minority</i>	<i>8</i>	<i>8.00</i>	<i>37</i>	<i>2.59</i>
Woman-Owned (WBEs)	10	10.00	66	4.62
Unknown M/WBE	-	0.00	2	0.14
Total M/WBE	18	18.00	105	7.35
SBE	-	0.00	7	0.49
SDV/VBE	-	0.00	2	0.14
Grand Total	100	100.00	1,429	100.00

Sources: M³ Consulting; City contracts data; PeopleSoft PO and AP data; City vendor payment data; relevant market—State of North Carolina; Other Minority is a firm identified as MBE, with no specific race/ethnicity identified; Unknown M/WBE is a firm identified as M/WBE, with no specific race/ethnicity/gender identified.

5.7.2. Marketplace Availability—Non-Professional Services

Conversely to RWASM Availability, in Table 5.16, M/WBEs in Marketplace Availability accounted for about 40% (2,351) of the total 5,949 firms. Non-M/WBEs represented 60.48%, compared to over 90% under RWASM Availability. While M/WBE Availability is significant, most of the representation is WBEs at 31.84%. Minority-owned firms account for only 7.68%, with Hispanic American-owned firms at 3.97%, followed by African American- and Asian American-owned firms at 1.80% and 1.78% respectively.

**Table 5.16. Data Axle Availability
Non-Professional Services
Raleigh-Durham-Cary, NC (CBSA), 2021**

Ethnicity	#	%
Non-M/WBE	3,598	60.48
African American	107	1.80
Asian American	106	1.78
Hispanic American	236	3.97
Native American	8	0.13
Other Minority	-	0.00
Total Minority	457	7.68
Woman-Owned (WBEs)	1,894	31.84
Unknown M/WBE	-	0.00
Total M/WBE	2,351	39.52
SBE	-	0.00
SDV/VBE	-	0.00
Grand Total	5,949	100.00

Sources: Data Axle Firms as of February 2021; M³ Consulting

5.8 Availability in Goods & Supplies

5.8.1. RWASM Availability in Goods & Supplies

As shown in Table 5.17, there are 2,074 available firms for Goods & Supplies using RWASM Availability at Level 2. Non-M/WBEs represent 96.34% of these available firms; M/WBEs represent only 3.53%. WBEs, similar to other procurement categories, make up the majority of M/WBE representation at 2.75%. Minority-owned firms are less than 1%, as are SBEs.

**Table 5.17. RWASM Availability: Levels 1–2.
Goods & Supplies
City of Raleigh, Nationwide, FY 2017–FY 2021**

	Level 1		Level 2	
Race/Ethnicity/Gender	#	%	#	%
Non-M/WBE	17	100.00	1,998	96.34
African American	-	0.00	7	0.34
Asian American	-	0.00	2	0.10
Hispanic American	-	0.00	5	0.24
Native American	-	0.00	1	0.05
Other Minority	-	0.00	-	0.00
Total Minority	-	0.00	15	0.73
Woman-Owned (WBEs)	-	0.00	57	2.75
Unknown M/WBE	-	0.00	1	0.05
Total M/WBE	-	0.00	73	3.53
SBE	-	0.00	3	0.14
SDV/VBE	-	0.00	-	0.00
Grand Total	17	100.00	2,074	100.00

Sources: M³ Consulting; City contracts data; PeopleSoft PO and AP data; City vendor payment data; relevant market—nationwide; Other Minority is a firm identified as MBE, with no specific race/ethnicity identified; Unknown M/WBE is a firm identified as M/WBE, with no specific race/ethnicity/gender identified.

5.8.2. Marketplace Availability—Goods & Supplies

Based on Table 5.18, the number of Goods & Supplies firms in Marketplace Availability at 2,306 firms is very close to the number of RWASM Level 2 available firms at 2,074 firms. However, Non-M/WBEs make up 67.04% of Marketplace firms, compared to over 96% of RWASM firms. WBEs make up 23.07% of Marketplace firms, compared to only 2.75% of RWASM firms. Typically, as is the case with the City, most Goods & Supplies firms are sought nationwide. Marketplace Availability reflects the CBSA. There may be some opportunity for the City to be more inclusive of local firms.

Table 5.18. Data Axle Availability Goods & Supplies Raleigh-Durham-Cary, NC (CBSA), 2021		
Ethnicity	#	%
Non-M/WBE	1,546	67.04
African American	41	1.78
Asian American	79	3.43
Hispanic American	107	4.64
Native American	1	0.04
Other Minority	-	0.00
<i>Total Minority</i>	<i>228</i>	<i>9.89</i>
Woman-Owned (WBEs)	532	23.07
Unknown M/WBE	-	0.00
<i>Total M/WBE</i>	<i>760</i>	<i>32.96</i>
SBE	-	0.00
SDV/VBE	-	0.00
Grand Total	2,306	100.00

Sources: Data Axle Firms as of February 2021; M³ Consulting

5.9 Summary of Findings

The tables below summarize the availability estimates for M/WBE and SBE firms within the relevant market for the City; Table 5.19 reflects RWASM Availability and Table 5.20 reflects Marketplace Availability. It provides the estimates, along with the source of the information. M³ Consulting places emphasis on the availability estimates, based on bidders, sub-bidders, and awardees data at Level 2 of the RWASM model. The tables and the discussion are presented for the relevant markets by procurement type for all industries.

M³ Consulting typically places credence on RWASM estimates derived from bidders, sub-bidders and awardees in that order of importance. Marketplace Availability measures, based on Data Axle, are presented as a benchmark of Minority- and women-owned firm availability and for City of Raleigh to consider potentially available firms for outreach purposes.

For all procurement categories, WBEs have higher representation than Minority-owned firms. Except for Construction and Construction-Related Services, Marketplace total M/WBE availability is higher than total RWASM M/WBE availability.

For AES-Design Services, RWASM Availability reflects total M/WBE representation of 20.12%. WBEs account for most of this representation at 15.38%, with Minority-owned firms representing only 4.74%. Total M/WBE Marketplace Availability was significantly higher at 38.85%, with WBE representation at 31.65% and total Minority-owned firm representation at 7.19%.

WBE and Minority-owned businesses RWASM Availability is close for Construction and Construction-Related Services. WBE availability is 17.63% and Minority-owned business availability is 15.96% for overall M/WBE availability of 33.59%. RWASM M/WBE Availability is almost double that of Marketplace M/WBE Availability at 18.10%. Both WBEs at 9.85% and Minority-owned firms at 8.25% reflected a significant decline in Marketplace Availability. The higher RWASM Availability may reflect more intensive outreach efforts on the part of the City, particularly at the subcontractor level. Construction and Construction-Related Services is the only measure that includes sub-bidders and is based on contract awards. The contract award data was not robust for other procurement categories and thus reflects a prime-level analysis.

Professional Services and Non-Professional Services reflected similar results as AES-Design Services. For Professional Services, WBEs represented 6.33% of total RWASM firms, while Minority-owned firms represented 3.67% of the total. Conversely, M/WBE Marketplace available firms represented 41.13% of the 3,085 total firms in the Marketplace. WBEs represented 32.45% of these firms, compared to 6.33% for RWASM Availability. Minority-owned firms were 8.69% for Marketplace Availability compared to 3.67% for RWASM Availability.

Total M/WBE RWASM Availability for Non-Professional Services was 7.35%, higher than only Goods & Supplies. WBEs reflected 4.62% availability, while Minority-owned firms were at 2.59%. On the other hand, M/WBEs made up 39.52% of Marketplace Non-Professional Availability, with WBEs accounting for 31.84% and Minority-owned firms 7.68% of total availability.

While Goods & Supplies had the highest level of Non-M/WBE RWASM Availability at 96.34%, followed by Non-Professional Services at 92.02%. Professional Services was not far behind at 89.67%. Total M/WBE availability did not reach 4% with WBEs representing 2.75%. All Minority groups combined represented less than 1% of Goods & Supplies RWASM availability. The picture changes with Marketplace Availability. M/WBEs account for 32.96% of available firms. WBEs account for 23.07% of Marketplace Availability compared to 2.75% for RWASM Availability. Minority-owned firms represent almost 10% of Marketplace Availability, while less than 1% for RWASM Availability.

Table 5.19. Summary Table—RWASM Level 2 Availability Percentage Representation

**City of Raleigh
Relevant Market; FY 2017–FY 2021**

Ethnicity	AES-Design Services ²		Construction and Construction-Related Services ³		Professional Services ³		Non-Professional Services ³		Goods & Supplies ¹		Total Firms ¹	
	#	%	#	%	#	%	#	%	#	%	#	%
Non-M/WBE	134	79.29	352	65.31	269	89.67	1,315	92.02	1,998	96.34	3,932	91.53
African American	1	0.59	48	8.91	6	2.00	20	1.40	7	0.34	77	1.79
Asian American	3	1.78	5	0.93	2	0.67	3	0.21	2	0.10	15	0.35
Hispanic American	3	1.78	28	5.19	2	0.67	11	0.77	5	0.24	48	1.12
Native American	1	0.59	5	0.93	1	0.33	2	0.14	1	0.05	6	0.14
Other Minority	-	0.00	-	0.00	-	0.00	1	0.07	-	0.00	1	0.02
Total Minority	8	4.74	86	15.96	11	3.67	37	2.59	15	0.73	147	3.42
Woman-Owned (WBEs)	26	15.38	95	17.63	19	6.33	66	4.62	57	2.75	199	4.63
Unknown M/WBE	-	0.00	-	0.00	0	0.00	2	0.14	1	0.05	3	0.07
Total M/WBE	34	20.12	181	33.59	30	10.00	105	7.35	73	3.53	349	8.12
SBE	-	0.00	4	0.74	1	0.33	7	0.49	3	0.14	9	0.21
SDV/VBE	1	0.59	2	0.37	-	0.00	2	0.14	-	0.00	6	0.14
Grand Total	169	100.00	539	100.00	300	100.00	1,429	100.00	2,074	100.00	4,296	100.00

Sources: M³ Consulting; City contracts data; PeopleSoft PO and AP data; City Vendor Payment data; Other Minority is a firm identified as MBE, with no specific race/ethnicity identified; Unknown M/WBE is a firm identified as M/WBE, with no specific race/ethnicity/gender identified.

¹Nationwide

²Raleigh-Cary, NC MSA, ³State of North Carolina

Table 5.20. Summary Table—Marketplace Availability
Relevant Market, 2021

Ethnicity	AES-Design Services ²		Construction and Construction- Related Services ³		Professional Services ³		Non- Professional Services ³		Goods & Supplies ¹		Total Firms	
	#	%	#	%	#	%	#	%	#	%	#	%
Non-M/WBE	255	61.15	1,122	81.90	1,816	58.87	3,598	60.48	1,546	67.04	8,340	63.51
African American	11	2.64	20	1.46	52	1.69	107	1.80	41	1.78	232	1.77
Asian American	7	1.68	10	0.73	110	3.57	106	1.78	79	3.43	312	2.38
Hispanic American	12	2.88	81	5.91	103	3.34	236	3.97	107	4.64	539	4.10
Native American	-	0.00	2	0.15	3	0.10	8	0.13	1	0.04	14	0.11
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Total Minority	30	7.19	113	8.25	268	8.69	457	7.68	228	9.89	1,097	8.35
Woman-Owned (WBEs)	132	31.65	135	9.85	1,001	32.45	1,894	31.84	532	23.07	3,694	28.13
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	162	38.85	248	18.10	1,269	41.13	2,351	39.52	760	32.96	4,791	36.49
SBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
SDV/VBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Grand Total	417	100.00	1,370	100.00	3,085	100.00	5,949	100.00	2,306	100.00	13,131	100.00

Sources: Data Axle Firms as of February 2021; M³ Consulting

¹Nationwide

²Raleigh-Cary, NC MSA, ³State of North Carolina

Chapter 6: Statistical Analysis of M/WBE Utilization

6.1 Introduction

This chapter presents the utilization of Minority and Woman-Owned Business Enterprises (M/WBEs) by the City of Raleigh (City) in the procurement categories of Architectural, Engineering and Survey Services (AES)-Design Services, Construction and Construction-Related Services, Professional Services, Non-Professional Services, and Goods & Supplies. Utilization is measured and analyzed using contract awards, purchase order awards and payments to M/WBEs from the City for the period FY 2017–FY 2021.¹ This covers the universe of all commercial dollars expended and encumbered and contracts awarded by the City.

M/WBE utilization in each of the major procurement categories listed earlier is discussed separately. Utilization tables are presented for the relevant market in each procurement category. The overall tables are presented in Appendix A. Within each procurement category section, tables and discussions are presented to cover the data source upon which M³ Consulting relies for conclusions and recommendations; tables representing other data sources considered are reflected in Appendix A. M/WBE utilization is also illustrated by specific race, ethnicity and gender and is hereinafter referred to in text and tables as M/WBEs when discussing overall levels of participation for M/WBEs.

Contract awards data reflects both prime and subcontractor award dollars, to the degree available.² Accounts payable and purchase order payments reflect prime vendor/contractor payments only, unless otherwise stated.

The final section of this chapter covers threshold analysis and Top Ten Awardees to further decipher any patterns in utilization of M/WBEs.

The following are some salient features of the overall chapter presentation:

- Utilization is presented using the data collected from purchase orders, payments data and contracts data.
- The tables and discussions within the body of the chapter cover data pertaining to firms located within the defined relevant market for each procurement type.

¹ The City of Raleigh’s fiscal years run from July 1 to June 30, so FY 2017 starts on July 1, 2016, and FY 2021 ends on June 30, 2017.

² The calculation of “prime + subcontractor awards data” reflects a reduction of the prime contractor award dollars by any subcontractor dollars. Subcontractor dollars are placed into the appropriate race/ethnicity/gender category.

6.2 Total Utilization Based on Contract Awards, Purchase Orders and Payments

This section provides a summary of total contract awards (Table 6.1), purchase orders (POs) (Table 6.2) and payments (AP) (Table 6.3) by race/ethnic/gender group for the period FY 2017–FY 2021, regardless of procurement category. This view provides an overall picture of utilization of M/WBEs by the City. The analysis is then detailed by each procurement type.

AES-Design Services

The City engages AES-Design Services to support the design and development phase of projects. During the study period FY 2017–FY 2021, the City encumbered over \$356M in purchase orders, for which nearly \$208M was paid against the encumbered purchase orders. Overall, M/WBEs accounted for 6.45% and 7.73% of AES dollars for purchase orders and payments, respectively.

Contracts data for AES-Design Services totaled \$188M for the study period. Non-M/WBEs accounted for \$171.8M (91.16%). M/WBEs totaled \$16.6M (8.84%). Of the M/WBEs, WBEs represented the largest portion, with \$9.95M (5.28%) for the study period. Among the Minority-owned firms, Native American-, African American- and Hispanic American-owned firms all received over \$1M in AES-Design Services contract awards. Native American-owned firms were awarded \$3.06M, followed by African American-owned firms with \$2.02M and Hispanic American-owned firms with \$1.1M. Asian American-owned firms accounted for \$487K (0.26%) of the total \$188M.

Non-M/WBEs represented over 90% of the total \$356M encumbered based on purchase order data for AES-Design Services. Among M/WBEs, WBEs received the largest portion at \$19M (5.53%). Hispanic American-owned firms' \$1.5M is 0.42% of the total purchase orders for the study period. African American-, Native American- and Hispanic American-owned firms received \$736K, \$595K and \$433K, respectively.

When comparing payments data for AES-Design Services, Non-M/WBEs accounted for \$192M (92.26%) of the payments. Among M/WBEs, WBEs had the highest participation, with \$14.9M (7.19%) in payments for the study period. Of the Minority-owned groups, Hispanic American-owned firms received the largest dollar value of payments for the study period, with \$505K, followed by Asian American-owned firms, with \$398K. Native American-owned firms received \$198K (0.10%), and African American-owned firms received the least in payments, with \$11K (0.01%).

Construction and Construction-Related Services

Table 6.3 highlights the City's payments for Construction and Construction-Related Services, which totaled \$545M for the study period, compared to the purchase order encumbrances, which reached nearly \$635M. Contracts data totaled \$604M for the study period.

Based on awarded contracts data shown in Table 6.1, M/WBE participation for Construction and Construction-Related Services was 19% for the study period. The \$115M in contracts for Construction and Construction-Related Services are based on prime and subcontractor activity. The City tracks M/WBE subcontractor awards by select departments whose construction project values exceed \$300K. Subcontractor activity at the department level is conformed to a report produced on an annual basis from the MWBE Office. Table 6.3 details that of the M/WBEs, WBEs were awarded the lion's share of the Construction and Construction-Related Services contracts at \$90.3M (14.95%). Among the Minority-owned firms, African American-owned firms received \$16.4M (2.72%), followed by Hispanic American-owned firms at \$7.7M (1.28%). Asian American- and Native American-owned

firms received less than 1% of Construction and Construction-Related Services contracting activity with \$632K and \$371K, respectively.

For purchase orders, Construction and Construction-Related Services represented 32% of the \$1.97B dollars in purchase orders encumbered for the study period. Non-M/WBEs received \$574M (90.40%) of these purchase orders. Minority-owned firms received \$8M (1.28%) of purchase orders for the study period. Among Minority-owned firms, African American-owned firms accounted for \$6.8M. Native American-owned firms received \$965K (0.15%), and Hispanic American-owned firms obtained \$247K (0.04%). WBEs received the largest portion of M/WBE purchase orders, with \$51.8M (8.15%) of the total \$635M for the study period. Small Business Enterprises (SBEs) and Small/Veteran-owned businesses accounted for \$1M and \$100K, respectively.

Table 6.3 illustrates payments made for Construction and Construction-Related Services during the period FY 2017–FY 2021. In the construction area, more so than any other procurement type, payments generally lag behind purchase orders because construction projects can span multiple months and across fiscal years. M/WBEs accounted for nearly 10% in both purchase orders and payments. WBEs were the largest recipient of payments among M/WBEs, with \$43M (7.95%) during the study period. No other M/WBE obtained more than \$5M in payments for Construction and Construction-Related Services. African American- and Native American-owned firms eclipsed the \$1M threshold in payments, receiving \$4.6M (0.85%) and \$1.3M (0.25%), respectively. Hispanic American-owned firms received \$733K, and Asian American-owned firms received none.

Professional Services

Professional Services contract awards totaled \$81M during the study period, as presented in Table 6.1. Non-M/WBEs accounted for \$77M (95.24%). Minority-owned firms received \$3.86M (4.76%). African American- and Hispanic American-owned firms were the only Minority-owned firms that received contract awards for Professional Services, receiving \$1M (1.32%) and \$2.79M (3.44%), respectively. Based on contracts data, no Asian American- or Native American-owned firms or WBEs received awards for Professional Services.

During the study period, the City encumbered \$87M in purchase orders for Professional Services, as presented in Table 6.2. Non-M/WBEs received over 95% of these. A similar distribution for Non-M/WBE participation was shown in both contracts and payments, with 95% and 94%, respectively. M/WBEs achieved \$3.7M in purchase order awards, with WBEs accounting for \$2.4M for the study period. No other Minority group received more than \$1M for purchase orders in Professional Services. Among the Minority-owned firms, Asian American-owned firms received \$551K, followed by Hispanic American- and Native American-owned firms, with \$340K and \$240K, respectively. African American-owned firms obtained \$193K (0.22%).

Payments data presented in Table 6.3 illustrates total payments for Professional Services amounting to \$48.9M for the study period. Irrespective of the utilization measure—contracts, purchase orders or payments—Non-M/WBEs received over 94% of the Professional Services activity for the study period. M/WBEs accounted for \$2.6M (5.35%) of the total \$48.9M in payments. WBEs received \$1.17M (2.39%). Only one Minority-owned firm, a Hispanic American-owned firm, eclipsed \$500K in Professional Services payments, representing \$732K (1.50%) of the total. Asian American-, African American- and Native American-owned firms received \$385K, \$159K and \$167K, respectively, during the study period. Small disadvantaged and Veteran-owned businesses received \$99K (0.20%) in payments for Professional Services.

Non-Professional Services

Based on contract awards data for Non-Professional Services, as illustrated in Table 6.1, over \$117M was awarded during the study period. Non-M/WBEs accounted for \$107M (91.69%) of the awards, and M/WBEs received \$9.7M (8.31%). African American-owned firms obtained the largest portion of the M/WBE awards, with \$6.7M (5.78%). Among M/WBEs, WBEs trailed African American-owned firms, with awards totaling \$2.7M

(2.35%), and Hispanic American-owned firms were the only other ethnic group awarded contracts for Non-Professional Services during the study period, accounting for \$205K (0.17%). Asian American- and Native American-owned firms did not secure any contracts during the study period.

Table 6.2 highlights purchase order encumbrances for FY 2017–FY 2021 and reflects a total of \$490M in purchases orders for Non-Professional Services. Non-M/WBEs received \$456M (93.08%), and M/WBEs received \$33.2M (6.77%). The largest recipient of Non-Professional Services purchases among M/WBEs were WBEs, with \$17.2M (3.50%), followed by African American-owned firms, with \$9.4M (1.93%), and Hispanic American-owned firms, with \$5.5M (1.13%). No other Minority group received more than \$700K in purchase orders for Non-Professional Services. Asian American-owned firms accounted for \$699K (0.14%), and Native American-owned firms had \$97K (0.02%). Small businesses also received purchase orders for Non-Professional Services, with SBEs accounting for \$272K and Small Disabled/Veteran-owned businesses receiving \$451K (0.09%) during the study period.

Non-Professional Services expenditures for the study period presented in Table 6.2 amounted to \$427M. As with all procurement types based on payments data, Non-M/WBEs accounted for over 90% of the expenditures, with \$402M. M/WBEs received payments of \$25.4M for Non-Professional Services. Similar to purchase orders, WBEs led M/WBE participation, with \$11.6M in expenditures, followed by African American-owned firms, with \$8.2M (1.91%). The remaining Minority groups did not receive 1% of the expenditures for Non-Professional Services. Among Minority-owned firms below 1%, Hispanic American-owned firms received \$3.8M (0.89%), and Asian American-owned firms received \$628K (0.15%). Small disadvantaged businesses and Small Veteran-owned businesses received \$212K and \$421K, respectively. Native American-owned firms received the least, with \$19K.

Goods & Supplies

Table 6.1 presents contract awards for Goods & Supplies by the City for FY 2017–FY 2021. We note that in most instances, awards for Goods & Supplies are based on unit prices and the quantities ordered by the City. Given that unit pricing, at times, determines the awarded proponent, the activity for contract awards is significantly lower, in terms of value, than purchase orders and payments. Based on contracts, the City awarded \$1.8M to Non-M/WBEs only. M/WBEs received no awards for Goods & Supplies contracts during the study period.

Based on encumbrances, \$397M in purchase orders was procured in Goods & Supplies. Non-M/WBEs received most of the purchase order values, with \$392.5M (98.78%). M/WBEs received \$4.7M for the study period, with WBEs accounting for \$4.3M or 1.08%. Purchase orders for Minority-owned firms were small, with Hispanic American-owned firms receiving \$232K (0.06%) and African American-owned firms obtaining \$171K (0.04%). Asian American- and Native American-owned firms received \$21K and \$4K, respectively.

Payments for Goods & Supplies are presented in Table 6.3, which shows \$300M in expenditures were paid during the study period. As with contract awards and purchase orders, most of the payments went to Non-M/WBEs, which accounted for \$297M (99%). Among M/WBEs, WBEs received the most, with \$2.7M (0.91%). Hispanic American-owned firms received the largest percentage of the Minority-owned firm payments, with \$119K (0.04%), followed by African American-owned firms with \$80K (0.03%).

**Table 6.1. Total Utilization
Contract Awards—Dollars
City of Raleigh, Nationwide, FY 2017–FY 2021**

Race/Ethnicity/ Gender	AES-Design Services		Construction and Construction- Related Services		Professional Services		Non-Professional Services		Goods & Supplies		Total	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	171,807,812	91.16	488,567,468	80.81	77,197,640	95.24	107,664,628	91.69	1,882,355	100.00	847,119,904	85.28
African American	2,016,757	1.07	16,473,734	2.72	1,069,369	1.32	6,787,477	5.78	-	0.00	26,347,337	2.65
Asian American	487,266	0.26	632,839	0.10	-	0.00	-	0.00	-	0.00	1,120,105	0.11
Hispanic American	1,137,825	0.60	7,729,095	1.28	2,790,000	3.44	205,168	0.17	-	0.00	11,862,087	1.19
Native American	3,061,490	1.62	371,146	0.06	-	0.00	-	0.00	-	0.00	3,432,636	0.35
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	<i>6,703,337</i>	<i>3.56</i>	<i>25,206,814</i>	<i>4.17</i>	<i>3,859,369</i>	<i>4.76</i>	<i>6,992,645</i>	<i>5.96</i>	<i>-</i>	<i>0.00</i>	<i>42,762,165</i>	<i>4.30</i>
WBE	9,952,087	5.28	90,387,647	14.95	-	0.00	2,765,096	2.35	-	0.00	103,104,830	10.38
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	16,655,424	8.84	115,594,461	19.12	3,859,369	4.76	9,757,741	8.31	-	0.00	145,866,995	14.68
SBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
SDV/VOBE	-	0.00	396,406	0.07	-	0.00	-	0.00	-	0.00	396,406	0.04
Grand Total	188,463,236	100.00	604,558,335	100.00	81,057,009	100.00	117,422,369	100.00	1,882,355	100.00	993,383,305	100.00

Source: Raleigh Contracts data, M³ Consulting

**Table 6.2. Total Utilization
Purchase Orders—Dollars
City of Raleigh, Nationwide, FY 2017–FY 2021**

Race/Ethnicity/ Gender	AES-Design Services		Construction and Construction- Related Services		Professional Services		Non-Professional Services		Goods & Supplies		Total	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	333,255,524	93.51	574,881,519	90.40	83,856,496	95.72	456,809,091	93.08	392,526,208	98.78	1,841,328,839	93.56
African American	736,091	0.21	6,850,299	1.08	193,050	0.22	9,481,778	1.93	171,722	0.04	17,432,940	0.89
Asian American	433,298	0.12	36,334	0.01	551,194	0.62	699,220	0.14	21,513	0.01	1,741,559	0.09
Hispanic American	1,498,369	0.42	247,279	0.04	340,376	0.39	5,558,945	1.13	232,280	0.06	7,877,249	0.40
Native American	595,568	0.17	965,176	0.15	240,404	0.27	97,216	0.02	4,301	0.00	1,902,666	0.10
Other Minority	-	0.00	-	0.00	-	0.00	188,479	0.04	-	0.00	188,479	0.01
<i>Total Minority</i>	<i>3,263,326</i>	<i>0.92</i>	<i>8,099,088</i>	<i>1.28</i>	<i>1,325,024</i>	<i>1.50</i>	<i>16,025,638</i>	<i>3.26</i>	<i>429,816</i>	<i>0.11</i>	<i>29,142,892</i>	<i>1.48</i>
WBE	19,692,732	5.53	51,858,763	8.15	2,428,751	2.75	17,169,147	3.50	4,300,694	1.08	95,443,323	4.85
Unknown M/WBE	-	0.00	-	0.00	-	0.00	57,633	0.01	804	0.00	58,437	0.00
Total M/WBE	22,949,296	6.45	59,957,851	9.43	3,747,011	4.26	33,252,418	6.77	4,731,314	1.19	124,644,652	6.33
SBE	-	0.00	1,006,047	0.16	3,314	0.00	272,926	0.06	99,710	0.03	1,381,997	0.07
SDV/NOBE	155,046	0.04	100,517	0.02	-	0.00	451,449	0.09	-	0.00	707,011	0.04
Grand Total	356,366,630	100.00	635,945,933	100.00	87,606,822	100.00	490,785,884	100.00	397,357,232	100.00	1,968,062,501	100.00

Source: Raleigh Contracts data, M³ Consulting

**Table 6.3. Total Utilization
Payments—Dollars
City of Raleigh, Nationwide, FY 2017–FY 2021**

Race/Ethnicity/ Gender	AES-Design Services		Construction and Construction- Related Services		Professional Services		Non-Professional Services		Goods & Supplies		Total	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	192,505,829	92.26	495,251,619	90.74	46,205,405	94.45	402,637,915	94.15	297,686,866	99.00	1,434,287,636	93.64
African American	11,115	0.01	4,663,886	0.85	159,417	0.33	8,182,153	1.91	80,949	0.03	13,097,521	0.86
Asian American	398,336	0.19	-	0.00	385,171	0.79	628,442	0.15	2,359	0.00	1,414,308	0.09
Hispanic American	505,511	0.24	733,598	0.13	732,569	1.50	3,821,850	0.89	119,025	0.04	5,912,552	0.39
Native American	198,831	0.10	1,355,175	0.25	167,970	0.34	19,350	0.00	-	0.00	1,741,325	0.11
Other Minority	-	0.00	-	0.00	-	0.00	61,290	0.01	-	0.00	61,290	0.00
<i>Total Minority</i>	<i>1,113,793</i>	<i>0.54</i>	<i>6,752,659</i>	<i>1.23</i>	<i>1,445,127</i>	<i>2.96</i>	<i>12,713,085</i>	<i>2.96</i>	<i>202,333</i>	<i>0.07</i>	<i>22,226,997</i>	<i>1.45</i>
WBE	14,992,429	7.19	43,366,392	7.95	1,170,984	2.39	11,633,461	2.72	2,733,784	0.91	73,897,050	4.82
Unknown M/WBE	-	0.00	-	0.00	-	0.00	22,620	0.01	-	0.00	22,620	0.00
Total M/WBE	16,106,222	7.73	50,119,051	9.18	2,616,111	5.35	24,369,166	5.69	2,936,117	0.98	96,146,667	6.28
SBE	-	0.00	354,550	0.06	-	0.00	212,777	0.05	61,276	0.02	628,603	0.04
SDV/VOBE	48,790	0.02	93,533	0.02	99,293	0.20	421,086	0.10	-	0.00	662,702	0.04
Grand Total	208,660,840	100.00	545,818,754	100.00	48,920,809	100.00	427,640,944	100.00	300,684,259	100.00	1,531,725,607	100.00

Source: Raleigh Contracts data, M³ Consulting

6.3 Utilization by Procurement Type

The tables on the following pages summarize the relevant contract award, purchase order and payments data by procurement type within the relevant market. The relevant markets or geographic areas where the City’s vendors are located are the Raleigh-Cary, NC MSA; the State of North Carolina and Nationwide.. The relevant market, as discussed in the Availability Section, is the Raleigh-Cary, NC MSA for AES-Design Services; the State of North Carolina for Construction and Construction-Related Services, Professional Services, and Non-Professional Services; and Nationwide for Goods & Supplies. Table 6.4 summarizes this information for each procurement type.

Table 6.4. Summary of Relevant Market Determination				
	City	MSA	State	Nationwide
AES-Design Services		✓		
Construction and Construction-Related Services			✓	
Professional Services			✓	
Non-Professional Services			✓	
Goods & Supplies				✓

Source: M³ Consulting, Raleigh Contracts data, PeopleSoft PO and AP data, Raleigh Vendor Payments data

6.4 AES-Design Services Utilization

For AES-Design Services, M/WBE utilization is presented in this section using dollars for purchase orders by year and for the study period (Tables 6.5 and 6.6), as well as for contract awards, purchase orders and payments for the study period (Table 6.7). Counts of purchase orders, contract awards and payments are reflected in Appendix A. The relevant market for AES-Design Services is the Raleigh-Cary, NC MSA.

6.4.1. AES-Design Services Utilization Based on Purchase Orders

Typically, M³ Consulting relies on contract awards for AES-Design Services utilization because contract awards data includes subcontractors. However, because contract awards reflected far fewer dollars than purchase orders and limited subcontractor data, we deemed purchase order data more robust. As such, we are reporting purchase order data here and contract awards, along with payments, in Appendix A. To fully understand this determination, it is important to understand how the City procures AES-Design Services. The City selects and ranks a pool of firms at contract award. However, in most instances, specific contract amounts are not determined. Based on that ranking, the City commissions projects to the selected firms.

Table 6.5 illustrates purchase order utilization for AES-Design Services. For the study period, \$300M in purchase orders were encumbered. Non-M/WBEs accounted for \$283.8M (94.15%), and M/WBEs' portion was \$17.4M (5.80%). WBEs received the majority of the purchase orders for M/WBEs, with \$16.2M. While Hispanic American- and Native American-owned firms provided AES-Design Services to the City, both groups failed to reach 1% of the total purchase order values during the period, with \$625K and \$595K, respectively. Most of the Hispanic American-owned firm dollars were in FY 2017 (\$614K of \$625K). African American- and Asian American-owned firms within the Raleigh-Cary, NC MSA did not receive any purchase orders for AES-Design Services.

Table 6.5. AES-Design Services Utilization

Purchase Order—Dollars

City of Raleigh, Raleigh-Cary, NC MSA FY 2017–FY 2021

Race/Ethnicity/Gender	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		Period	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	14,905,071	80.70	203,169,854	95.99	15,152,543	82.53	30,894,076	95.56	19,741,218	95.51	283,862,762	94.15
African American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Asian American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Hispanic American	614,066	3.32	11,476	0.01	-	0.00	-	0.00	-	0.00	625,542	0.21
Native American	86,376	0.47	50,370	0.02	124,422	0.68	266,956	0.83	67,444	0.33	595,568	0.20
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	700,442	3.79	61,846	0.03	124,422	0.68	266,956	0.83	67,444	0.33	1,221,110	0.41
WBE	2,796,920	15.14	8,399,822	3.97	3,030,896	16.51	1,168,705	3.61	859,937	4.16	16,256,280	5.39
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	3,497,362	18.94	8,461,668	4.00	3,155,318	17.18	1,435,661	4.44	927,381	4.49	17,477,390	5.80
SBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
SDV/VOBE	66,977	0.36	34,981	0.02	53,089	0.29	-	0.00	-	0.00	155,046	0.05
Grand Total	18,469,410	100.00	211,666,503	100.00	18,360,950	100.00	32,329,737	100.00	20,668,599	100.00	301,495,198	100.00

Source: Raleigh Purchase Order Data, M³ Consulting

6.4.2. AES-Design Services Utilization Comparison

For the study period FY 2017–FY 2021, contract awards for AES-Design Services within the Raleigh-Cary, NC MSA totaled \$116M, compared to \$300M in POs, as demonstrated in Table 6.6. Non-M/WBEs obtained \$107M (91%). M/WBEs accounted for \$10.1M (8.63%), with WBEs receiving \$7.8M (70%) of that. Minority-owned firms received \$1.94M of the contract awards, which included participation at the prime and subcontractor levels. Among the Minority-owned firms, Native American-owned firms received \$1.3M (1.11%) of the contract awards, and no other ethnic group achieved 1%.

The encumbered total of \$300M for AES-Design Services commitments or POs is significantly higher than the actual payments of \$123M. If the projects that prompted the purchase orders commenced during the study period, this difference may be reconciled because the payments lag behind the purchase orders.

Irrespective of the utilization method, Non-M/WBEs received 89% of the dollars for the study period. M/WBEs' contract awards and payments were aligned most closely in value with \$10M and \$12M, respectively, while the purchase order total for M/WBEs was \$17.4M. For all utilization measures, WBEs received the bulk of M/WBE awards, encumbrances and payments.

Table 6.6. AES-Design Services Utilization Comparison

Contract Awards, Purchase Orders, Payments—Dollars

City of Raleigh, Raleigh-Cary, NC MSA FY 2017–FY 2021

Race/Ethnicity/Gender	Contract Awards		Purchase Orders		Payments	
	\$	%	\$	%	\$	%
Non-M/WBE	107,343,679	91.37	283,862,762	94.15	110,713,746	89.46
African American	101,757	0.09	-	0.00	-	0.00
Asian American	81,366	0.07	-	0.00	22,896	0.02
Hispanic American	787,240	0.67	625,542	0.21	198,966	0.16
Native American	1,305,490	1.11	595,568	0.20	-	0.00
Other Minority	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	<i>2,275,852</i>	<i>1.94</i>	<i>1,221,110</i>	<i>0.41</i>	<i>221,862</i>	<i>0.18</i>
WBE	7,868,987	6.70	16,256,280	5.39	12,766,610	10.32
Unknown M/WBE	-	0.00	-	0.00	-	0.00
Total M/WBE	10,144,839	8.63	17,477,390	5.80	12,988,472	10.50
SBE	-	0.00	-	0.00	-	0.00
SDV/VOBE	-	0.00	155,046	0.05	48,790	0.04
Grand Total	117,488,519	100.00	300,954,360	100.00	123,672,047	100.00

Source: Raleigh PeopleSoft Data, M³ Consulting; Relevant Market—Raleigh-Cary, NC MSA

6.5 Construction and Construction-Related Services Utilization

For Construction and Construction-Related Services, M/WBE utilization is presented in this section using dollars for contract awards by year and for the study period (Table 6.7), as well as for contract awards, purchase orders and payments for the study period (Table 6.9). Table 6.8 shows a breakdown of prime and subcontract participation. Purchase orders and payments are reflected in Appendix A, along with contract awards counts. The relevant market for Construction and Construction-Related Services is the State of North Carolina.

6.5.1. Construction and Construction-Related Services Utilization Based on Contract Awards

During the study period, the City awarded \$522M in prime and subcontractor awards for Construction and Construction-Related Services. Table 6.7 highlights pure prime + subcontractor activity. In computing pure prime values, M³ Consulting reduces the prime contractors awarded value by the amount awarded to the prime's subcontractor to eliminate double counting. The result allows for the analysis to consider the correct portion of both subcontractor and prime contract activity and captures the amounts within the respective ethnic groups. M/WBEs were awarded \$112M (21.45%) of the awards, with the largest proportion in FY 2021 at 32.50% and the lowest proportion in FY 2020 at 13.66% of the awards. Among Minority-owned firms, African American-owned firms obtained \$16M (3.13%) of the contract awards, and Hispanic American-owned firms accounted for \$6.7M (1.29%). Asian American- and Native American-owned firms did not eclipse 1% of the total awards when considering pure prime + subcontractor awards.

The isolation of subcontractor activity is highlighted in Table 6.8 and shows significant M/WBE participation stems from subcontractor activity. African American-owned firms prime contractor utilization is \$3.4M, compared to subcontractor utilization at \$12.8M. Hispanic American-owned firms prime contractor utilization is \$844K, compared to subcontractor utilization at \$5.9M. Both Asian American- and Native American-owned firms only received subcontractor dollars for Construction and Construction-Related Services, with \$632K and \$288K, respectively. Among the M/WBEs, the exception to being utilized primarily at the subcontractor level were WBEs, which captured 13% of the pure prime dollars and 56.58% of the subcontractor dollars. WBEs overall accounted for 16.85% of the pure prime + subcontractor dollars, while all Minority groups combined did not eclipse 5% of the total pure prime + subcontractor dollars for the study period.

Table 6.7. Construction and Construction-Related Services Utilization

Contract Awards—Pure Prime + Subcontractor Dollars

City of Raleigh, State of North Carolina, FY 2017–FY 2021

Race/Ethnicity/Gender	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		Period	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	58,811,210	78.79	68,624,089	73.56	75,276,202	73.87	170,204,720	86.14	37,344,774	67.50	410,260,996	78.48
African American	2,753,791	3.69	3,613,260	3.87	3,725,354	3.66	4,044,035	2.05	2,215,954	4.01	16,352,394	3.13
Asian American	264,300	0.35	32,420	0.03	9,075	0.01	327,044	0.17	-	0.00	632,839	0.12
Hispanic American	1,085,972	1.45	335,553	0.36	1,225,986	1.20	3,769,951	1.91	334,725	0.60	6,752,187	1.29
Native American	45,000	0.06	-	0.00	54,900	0.05	188,933	0.10	-	0.00	288,833	0.06
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	<i>4,149,063</i>	<i>5.56</i>	<i>3,981,233</i>	<i>4.27</i>	<i>5,015,316</i>	<i>4.92</i>	<i>8,329,963</i>	<i>4.22</i>	<i>2,550,680</i>	<i>4.61</i>	<i>24,026,254</i>	<i>4.60</i>
WBE	11,678,137	15.65	20,690,307	22.18	21,615,370	21.21	18,669,530	9.45	15,431,967	27.89	88,085,310	16.85
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	15,827,199	21.21	24,671,540	26.44	26,630,685	26.13	26,999,493	13.66	17,982,646	32.50	112,111,564	21.45
SBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
SDV/VOBE	-	0.00	-	0.00	-	0.00	396,406	0.20	-	0.00	396,406	0.08
Grand Total	74,638,410	100.00	93,295,629	100.00	101,906,887	100.00	197,600,619	100.00	55,327,421	100.00	522,768,965	100.00

Source: Raleigh Purchase Order Data, M³ Consulting

**Table 6.8. Construction and Construction-Related Services
Contract Awards Breakdown of Pure Prime + Subcontractor Dollars
City of Raleigh, Raleigh-Cary, NC MSA FY 2017–FY 2021**

Race/Ethnicity/Gender	Original Award Amount		Pure Prime Contractors (Net of Subcontractor)		Subcontractors Only		Pure Prime + Subcontractors	
	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	453,810,375.33	86.81	409,915,778.44	86.02	345,217.07	0.75	410,260,995.51	78.48
African American	3,517,391.10	0.67	3,465,425.10	0.73	12,886,968.87	27.89	16,352,393.97	3.13
Asian American	-	0.00	-	0.00	632,839.40	1.37	632,839.40	0.12
Hispanic American	844,028.85	0.16	844,028.85	0.18	5,908,158.55	12.79	6,752,187.40	1.29
Native American	-	0.00	-	0.00	288,833.00	0.63	288,833.00	0.06
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	<i>4,361,419.95</i>	<i>0.83</i>	<i>4,309,453.95</i>	<i>0.90</i>	<i>19,716,799.82</i>	<i>42.67</i>	<i>24,026,253.77</i>	<i>4.60</i>
WBE	64,200,764.19	12.28	61,938,512.99	13.00	26,146,797.20	56.58	88,085,310.19	16.85
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	68,562,184.14	13.12	66,247,966.94	13.90	45,863,597.02	99.25	112,111,563.96	21.45
SBE	-	0.00	-	0.00	-	0.00	-	0.00
VBE/DVOB	396,405.87	0.08	396,405.87	0.05	-	0.00	396,405.87	0.08
Grand Total	522,768,965.34	100.00	476,560,151.25	100.00	46,208,814.09	100.00	522,768,965.34	100.00

6.5.2. Construction and Construction-Related Services Utilization Comparison

Table 6.9 shows a comparison of contract awards, purchase orders, and payments for Construction and Construction-Related Services. Note that contract awards do not reflect the original award amount because of the adjustments made for subcontracting activity.

In comparing Construction and Construction-Related Services across utilization methods, M/WBE utilization was highest based on contract awards. This observation was anticipated because contract awards data captures the impacts of subcontractor utilization. For contract awards, M/WBEs received a total of \$112M, compared to \$59.9M in purchase orders and \$48.1M in payments. Irrespective of the utilization method, among M/WBEs, WBEs were attributed with the majority of the M/WBE participation for Construction and Construction-Related Services. Given purchase orders and payments show a direct relationship between the City and the contractor, opportunities exist for the City to bolster its efforts to engage directly with M/WBEs at the prime contractor level while further encouraging M/WBE participation at the subcontractor level. Among Minority-owned firms, African American-owned firms received 3.13% in contract awards, where subcontractor utilization is considered, compared to less than 1.25% in both purchase orders and payments. Similarly, Hispanic American-owned firms received 1.29% of contract awards, 0.04% in purchase orders and no payments. Native American-owned firms, conversely, saw higher purchase orders (0.17%) than contract awards (0.06%). Asian American-owned firms were only utilized in contract awards, indicating minimal direct contracting and reliance on subcontractor awards for any Asian American-owned firm participation in Construction and Construction-Related Services activity.

Table 6.9. Construction and Construction-Related Services Utilization Comparison Contract Awards, Purchase Orders, Payments—Dollars City of Raleigh, State of North Carolina, FY 2017–FY 2021							
Race/Ethnicity/Gender	Contract Awards		Purchase Orders		Payments		
	\$	%	\$	%	\$	%	
Non-M/WBE	410,260,996	78.48	490,614,028	88.94	375,035,968	88.53	
African American	16,352,394	3.13	6,850,299	1.24	4,663,886	1.10	
Asian American	632,839	0.12	-	0.00	-	0.00	
Hispanic American	6,752,187	1.29	242,141	0.04	-	0.00	
Native American	288,833	0.06	965,176	0.17	99,089	0.02	
Other Minority	-	0.00	-	0.00	-	0.00	
<i>Total Minority</i>	<i>24,026,254</i>	<i>4.60</i>	<i>8,057,616</i>	<i>1.46</i>	<i>4,762,975</i>	<i>1.12</i>	
WBE	88,085,310	16.85	51,853,937	9.40	43,366,392	10.24	
Unknown M/WBE	-	0.00	-	0.00	-	0.00	
Total M/WBE	112,111,564	21.45	59,911,553	10.86	48,129,367	11.36	
SBE	-	0.00	1,006,047	0.18	354,550	0.08	
SDV/VOBE	396,4006	0.08	100,517	0.02	93,533	0.02	
Grand Total	522,768,965	100.00	551,632,145	100.00	423,613,419	100.00	

Source: Raleigh PeoplesSoft data, M³ Consulting; Relevant Market—State of North Carolina

6.6 Professional Services Utilization

In the area of Professional Services, M/WBE utilization is presented in this section using dollars for purchase orders by year and for the study period, as well as for contract awards and payments for the study period. Counts of purchase orders, contract awards and payments are reflected in Appendix A. The relevant market for Professional Services is the State of North Carolina.

6.6.1. Professional Services Utilization Based on Purchase Orders

During FY 2017–FY 2021, the City encumbered \$66M in Professional Services with the defined relevant market of the State of North Carolina, as reflected in Table 6.10. M/WBE participation was \$3.3M, compared to \$62M for Non-M/WBEs. Minority-owned firms received \$1.2M (1.89%) in Professional Services purchase orders, with Asian American-owned firms leading with \$476K (0.72%) of the total \$66M. Hispanic American-, Native American and African American-owned firms received \$340K, \$240K and \$193K , respectively. Among M/WBEs, WBEs received the largest portion of purchase orders, with \$2.09M (3.17%). A review of the activity for Professional Services highlights that most activity occurred during FY 2019, when \$24M in purchase orders were encumbered, followed by FY 2020, with \$18.8M. The value of M/WBE purchase orders was \$867K (3.56%) in FY 2019 and \$527K (2.80%) in FY 2020.

Table 6.10. Professional Services Utilization
Purchase Order—Dollars
City of Raleigh, State of North Carolina, FY 2017–FY 2021

Race/Ethnicity/Gender	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		Period	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	6,904,578	83.38	9,255,365	95.33	23,463,742	96.44	18,294,813	97.20	4,857,901	97.53	62,776,399	94.94
African American	-	0.00	-	0.00	166,238	0.68	26,813	0.14	-	0.00	193,050	0.29
Asian American	48,467	0.59	53,539	0.55	374,697	1.54	-	0.00	-	0.00	476,703	0.72
Hispanic American	285,550	3.45	48,284	0.50	-	0.00	-	0.00	6,542	0.13	340,376	0.51
Native American	-	0.00	187,583	1.93	45,731	0.19	-	0.00	7,089	0.14	240,404	0.36
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	<i>334,017</i>	<i>4.03</i>	<i>289,406</i>	<i>2.98</i>	<i>586,666</i>	<i>2.41</i>	<i>26,813</i>	<i>0.14</i>	<i>13,631</i>	<i>0.27</i>	<i>1,250,533</i>	<i>1.89</i>
WBE	1,038,763	12.54	164,175	1.69	280,700	1.15	501,077	2.66	109,438	2.20	2,094,154	3.17
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	1,372,780	16.58	453,581	4.67	867,366	3.56	527,890	2.80	123,069	2.47	3,344,687	5.06
SBE	3,314	0.04	-	0.00	-	0.00	-	0.00	-	0.00	3,314	0.00
SDV/VOBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Grand Total	8,280,672	100.00	9,708,946	100.00	24,331,108	100.00	18,822,703	100.00	4,980,970	100.00	66,124,400	100.00

Source: Raleigh Purchase Order Data, M³ Consulting,

6.6.2. Professional Services Utilization Comparison

In comparing Professional Services utilization across the measures in Table 6.11, the highest activity was based on purchase orders at \$66M, compared to \$43M in contract awards and \$12M in payments. Hispanic American-owned firms fared well in contract awards, with 6.41% of the contracts. African American-owned firms were the only other Minority group utilized based on contracts data, with \$1M in awards, which was 2.46% of the total \$43M in contracts awarded. In purchases orders, all Minority-owned firms were utilized. Minority-owned firms had \$1.2M (1.89%) in purchase orders and were led by Asian American-owned firms, with \$476k (0.72%). Asian American-owned firms also led in payments among Minority-owned firms, with 3.09%, followed by African American-owned firms at 1.32%. However, WBEs had the highest activity among M/WBEs at 6.60%.

**Table 6.11. Professional Services Utilization Comparison
Contract Awards, Purchase Orders, Payments—Dollars
City of Raleigh, State of North Carolina, FY 2017–FY 2021**

Race/Ethnicity/Gender	Contract Awards		Purchase Orders		Payments	
	\$	%	\$	%	\$	%
Non-M/WBE	39,637,052	91.13	62,776,399	94.94	10,742,948	88.68
African American	1,069,369	2.46	193,050	0.29	159,417	1.32
Asian American	-	0.00	476,703	0.72	374,571	3.09
Hispanic American	2,790,000	6.41	340,376	0.51	37,686	0.31
Native American	-	0.00	240,404	0.36	-	0.00
Other Minority	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	<i>3,859,369</i>	<i>8.87</i>	<i>1,250,533</i>	<i>1.89</i>	<i>571,674</i>	<i>4.72</i>
WBE	-	0.00	2,094,154	3.17	799,407	6.60
Unknown M/WBE	-	0.00	-	0.00	-	0.00
Total M/WBE	3,859,369	8.87	3,344,687	5.06	1,371,081	11.32
SBE	-	0.00	3,314	0.00	-	0.00
SDV/VOBE	-	0.00	-	0.00	-	0.00
Grand Total	43,496,421	100.00	66,124,400	100.00	12,114,029	100.00

Source: Raleigh PeopleSoft data, M³ Consulting; Relevant Market—State of Carolina

6.7 Non-Professional Services Utilization

M/WBE utilization for Non-Professional Services is presented in this section using dollars for purchase orders by year and for the study period in Table 6.12. For contract awards, purchase orders and payments, a comparison of dollars for the study period is shown in Table 6.13. The relevant market for Non-Professional Services is the State of North Carolina.

6.7.1. Non-Professional Services Utilization Based on Purchase Orders

Based on purchase orders for Non-Professional Services, a total of \$340M was encumbered during FY 2017–FY 2021. For the period, M/WBEs received just under 10% of the purchase orders, amounting to \$32.2M, while Non-M/WBEs accounted for \$307M (90.32%). Table 6.12 shows a consistency in encumbrance levels across the years, with FY 2020 and FY 2021 having the largest with \$89.6M and \$75.9M, respectively. M/WBE participation was the largest in FY 2019 at \$11.8M, which represented 17.86% of the total \$66.5M in that year. Overall, M/WBEs received \$32.2M in purchase orders for Non-Professional Services driven by WBE participation of \$16.8M (4.93%), followed by African American-owned firms with \$9.4M (2.78%) and Hispanic American-owned firms with \$5.5M (1.62%). Asian American- and Native American-owned firms both received 0.03% of the purchase orders for Non-Professional Services for the study period.

Table 6.12. Non-Professional Services Utilization

Purchase Order—Dollars

City of Raleigh, State of North Carolina, FY 2017–FY 2021

Race/Ethnicity/Gender	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		Period	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	44,044,612	90.11	55,740,233	93.47	54,595,087	82.10	83,743,241	93.38	69,573,689	91.58	307,696,863	90.32
African American	2,417,310	4.95	1,723,450	2.89	1,725,120	2.59	1,897,677	2.12	1,718,220	2.26	9,481,778	2.78
Asian American	68,409	0.14	5,135	0.01	2,701	0.00	9,769	0.01	10,283	0.01	96,297	0.03
Hispanic American	473,291	0.97	443,623	0.74	983,118	1.48	2,670,299	2.98	946,239	1.25	5,516,570	1.62
Native American	-	0.00	-	0.00	40,460	0.06	30,378	0.03	26,378	0.03	97,216	0.03
Other Minority	80,610	0.16	29,679	0.05	75,026	0.11	3,164	0.00	-	0.00	188,479	0.06
<i>Total Minority</i>	<i>3,039,620</i>	<i>6.22</i>	<i>2,201,887</i>	<i>3.69</i>	<i>2,826,425</i>	<i>4.25</i>	<i>4,611,288</i>	<i>5.14</i>	<i>2,701,121</i>	<i>3.56</i>	<i>15,380,341</i>	<i>4.51</i>
WBE	1,699,928	3.48	1,516,096	2.54	9,050,301	13.61	899,997	1.00	3,638,777	4.79	16,805,099	4.93
Unknown M/WBE	12,025	0.02	-	0.00	-	0.00	-	0.00	45,608	0.06	57,633	0.02
Total M/WBE	4,751,572	9.72	3,717,983	6.23	11,876,726	17.86	5,511,284	6.15	6,385,506	8.41	32,243,073	9.46
SBE	53,530	0.11	175,256	0.29	28,626	0.04	4,655	0.01	10,859	0.01	272,926	0.08
SDV/VOBE	26,303	0.05	-	0.00	-	0.00	425,145	0.47	-	0.00	451,449	0.13
Grand Total	48,876,018	100.00	59,633,473	100.00	66,500,440	100.00	89,684,326	100.00	75,970,054	100.00	340,644,311	100.00

Source: Raleigh Purchase Order Data, M³ Consulting

6.7.2. Non-Professional Services Utilization Comparison

When comparing Non-Professional Services across utilization measures, encumbrances based on purchase orders were the largest commitments-based dollar values at \$340M, with payments of \$273M and contract awards of \$85M trailing. Although contracts awards were the smallest in terms of dollars, M/WBE participation was the highest proportionately in contracts, with \$9.25M (10.88%). In terms of purchase orders, M/WBEs accounted for 9.46% or \$32.3M of the total \$340M. WBEs represented the largest portion of M/WBE participation in both purchase orders and payments. African American-owned firms received the largest portion of M/WBE participation based on contract awards with \$6.7M or 7.97%.

**Table 6.13. Non-Professional Services Utilization Comparison
Contract Awards, Purchase Orders, Payments—Dollars
City of Raleigh, State of North Carolina, FY 2017–FY 2021**

Race/Ethnicity/Gender	Contract Awards		Purchase Orders		Payments	
	\$	%	\$	%	\$	%
Non-M/WBE	75,852,860	89.12	307,696,863	90.32	255,266,678	93.49
African American	6,787,477	7.97	9,481,778	2.78	1,938,548	0.71
Asian American	-	0.00	96,297	0.03	92,304	0.03
Hispanic American	205,168	0.24	5,516,570	1.62	3,673,648	1.35
Native American	-	0.00	97,216	0.03	-	0.00
Other Minority	-	0.00	188,479	0.06	61,290	0.02
<i>Total Minority</i>	<i>6,992,645</i>	<i>8.22</i>	<i>15,380,341</i>	<i>4.51</i>	<i>5,765,790</i>	<i>2.11</i>
WBE	2,265,096	2.66	16,805,099	4.93	11,356,179	4.16
Unknown M/WBE	-	0.00	57,633	0.02	22,620	0.01
Total M/WBE	9,257,741	10.88	32,243,073	9.46	17,144,589	6.28
SBE	-	0.00	272,926	0.08	212,777	0.08
SDV/VOBE	-	0.00	451,449	0.13	421,086	0.15
Grand Total	85,110,601	100.00	340,644,311	100.00	273,045,129	100.00

Source: Raleigh PeopleSoft data, M³ Consulting; Relevant Market—State of North Carolina

6.8 Goods & Supplies Utilization

In the area of Goods & Supplies, M/WBE utilization is presented in this section using dollars for purchase orders by year and for the study period. For contract awards, purchase orders and payments, a comparison of dollars for the study period is shown. The relevant market for Goods & Supplies is Nationwide.

6.8.1 Goods & Supplies Utilization Based on Purchase Orders

Table 6.14 highlights utilization for Goods & Supplies based on purchase order data, where \$397M was encumbered during the period FY 2017–FY 2021. M/WBEs received \$4.7M (1.19%) of the total for the period, reaching \$1.1M in both FY 2019 and FY 2021. Even so, this represented limited M/WBE utilization, with the highest participation percentage occurring in FY 2021 at 1.46% of the total \$75.9M encumbered. Among Minority-owned firms, Hispanic American-owned firms accounted for \$232K (0.06%), and African American-owned firms received \$171K (0.04%). Asian American-owned firms and Native American-owned firms received \$21K and \$4K, respectively. SBEs received just shy of \$100K.

Table 6.14. Goods & Supplies Utilization

Purchase Order—Dollars

City of Raleigh, Nationwide, FY 2017–FY 2021

Race/Ethnicity/Gender	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		Period	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	75,028,922	98.72	79,631,803	99.37	97,699,968	98.82	65,316,919	98.42	74,848,595	98.50	392,526,208	98.78
African American	29,149	0.04	6,450	0.01	16,972	0.02	54,464	0.08	64,688	0.09	171,722	0.04
Asian American	6,397	0.01	4,661	0.01	7,871	0.01	-	0.00	2,584	0.00	21,513	0.01
Hispanic American	61,310	0.08	58,095	0.07	35,909	0.04	17,880	0.03	59,086	0.08	232,280	0.06
Native American	-	0.00	-	0.00	-	0.00	-	0.00	4,301	0.01	4,301	0.00
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	<i>96,855</i>	<i>0.13</i>	<i>69,206</i>	<i>0.09</i>	<i>60,753</i>	<i>0.06</i>	<i>72,343</i>	<i>0.11</i>	<i>130,658</i>	<i>0.17</i>	<i>429,816</i>	<i>0.11</i>
WBE	878,767	1.16	416,101	0.52	1,104,826	1.12	919,812	1.39	981,188	1.29	4,300,694	1.08
Unknown M/WBE	-	0.00	804	0.00	-	0.00	-	0.00	-	0.00	804	0.00
Total M/WBE	975,622	1.28	486,111	0.61	1,165,579	1.18	992,156	1.49	1,111,846	1.46	4,731,314	1.19
SBE	-	0.00	17,844	0.02	-	0.00	56,746	0.09	25,120	0.03	99,710	0.03
SDV/VOBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Grand Total	76,004,544	100.00	80,135,758	100.00	98,865,547	100.00	66,365,820	100.00	75,985,562	100.00	397,357,232	100.00

Source: Raleigh Purchase Order Data, M³ Consulting

6.8.2. Goods & Supplies Utilization Comparison

A comparison of Goods & Supplies activity for the period FY 2017–FY 2021 is presented in Table 6.15. As illustrated, Non-M/WBEs received no less than 98% of the dollars across utilization methods. Contract awards dollars are typically much lower because many of the items procured are unit priced and contingent on an undetermined quantity that was secured. Purchase order data has traditionally been the optimal source for activity given the unit pricing concern based on contracts data. Among M/WBEs, WBEs accounted for the largest portion of Goods & Supplies, with \$4.3M (1.08%) based on purchase orders and \$2.7M (0.91%) per payments data.

**Table 6.15. Goods & Supplies Utilization Comparison
Contract Awards, Purchase Orders, Payments—Dollars
City of Raleigh, Nationwide, FY 2017–FY 2021**

Race/Ethnicity/Gender	Contract Awards		Purchase Orders		Payments	
	\$	%	\$	%	\$	%
Non-M/WBE	1,882,355	100.00	392,526,208	98.78	297,686,866	99.00
African American	-	0.00	171,722	0.04	80,949	0.03
Asian American	-	0.00	21,513	0.01	2,359	0.00
Hispanic American	-	0.00	232,280	0.06	119,025	0.04
Native American	-	0.00	4,301	0.00	-	0.00
Other Minority	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	-	<i>0.00</i>	<i>429,816</i>	<i>0.11</i>	<i>202,333</i>	<i>0.07</i>
WBE	-	0.00	4,300,694	1.08	2,733,784	0.91
Unknown M/WBE	-	0.00	804	0.00	-	0.00
Total M/WBE	-	0.00	4,731,314	1.19	2,936,117	0.98
SBE	-	0.00	99,710	0.03	61,276	0.02
SDV/VOBE	-	0.00	-	0.00	-	0.00
Grand Total	1,882,355	100.00	397,357,232	100.00	300,684,259	100.00

Source: Raleigh PeopleSoft data, M³ Consulting; Relevant Market—Nationwide

6.9 Utilization Thresholds

This section presents utilization thresholds for each procurement type. Purchase order dollars are utilized to calculate threshold values. Thresholds presented are below \$5K, \$5K–\$30K, \$30K–\$90K, \$90K–\$125K, \$125K–\$300K, \$300K–\$500K, \$500K–\$1M, \$1M–\$5M, \$5M–\$10M and above \$10M.

A. AES-Design Services Thresholds

Table 6.16 presents purchase order thresholds for AES-Design Services to highlight the utilization of M/WBEs and Non-M/WBEs based on the value of the purchase order during the study period FY 2017–FY 2021. Within the largest range, above \$10M, had one purchase order encumbered for a Non-M/WBE. The largest threshold for M/WBE participation is the \$5–\$10M range, where a WBE received one purchase order valued at \$5.6M that represented 24.27% of the purchase orders within the range. Among Minority-owned firms, African American- and Hispanic American-owned firms’ largest value of purchase orders for AES-Design Services occurred in the \$500K–\$1M range, with each receiving one purchase order valued at \$711K and \$849K, respectively. In the lower dollar thresholds, where capacity is less of an issue, Native American-owned firms were shown to have more activity because purchase orders were encumbered for AES-Design Services in the \$5K–\$90K ranges. Asian American-owned firms accounted for \$433K (0.12%) of the total \$356M, all of which fell within the \$300K–\$500K range. Small/Veteran-owned businesses received \$155K for the study period within the \$30K–\$90K range. WBEs accounted for \$19.6M (5.53%) and were active in each range except above \$10M.

B. Construction and Construction-Related Services Thresholds

As shown in Table 6.17, \$635M was encumbered for Construction and Construction-Related Services. Overall, WBEs led M/WBE participation, with \$51.8M (8.15%), followed by African American-owned firms, with \$6.8M (1.08%). African American-owned firms’ largest range, in terms of value of the purchase order, was in the \$1M–\$5M range, with \$3.3M of their total \$6.8M for the study period. Native American-owned firms received one purchase order of \$525K in the \$500K–\$1M range that represented 54% of their total \$965K. Like AES-Design Services, WBEs showed activity in each threshold range except above \$10M. For the study period, WBEs received \$51.8M. Hispanic American-owned firm participation occurred in the lower dollar thresholds, the largest being within the \$125–\$300K range, with \$231K (1.52%) of the purchase orders within said range. Asian American-owned firms were only reflected in the \$5K–\$30K range, representing 1.18% of dollars in that range.

C. Professional Services Thresholds

Table 6.18 highlights threshold analysis of purchase orders based on Professional Services for the study period. Overall, \$87.6M was encumbered during FY 2017–FY 2021, with over \$83.8M (95%) awarded to Non-M/WBEs and \$3.7M (4.27%) awarded to M/WBEs. Among M/WBEs, WBEs received \$2.4M (2.76%), and their largest threshold was in the \$500K–\$1M range. No Minority-owned firms were represented in or above the \$125K–\$300K range.

In fact, the largest proportion of Minority-owned firm participation was within the \$125K–\$300K range, with \$922K (5.61%). Asian American-owned firms led Minority-owned firm participation, with \$551K (0.63%) for the study period, followed by Hispanic American-owned firms, with \$340K (0.39%). Native American-owned firms obtained \$240K (0.27%), and African American-owned firms obtained \$193K (0.22%).

D. Non-Professional Services Thresholds

During FY 2017–FY 2021, the City encumbered \$490M in purchase orders for Non-Professional Services. M/WBEs received \$33.2M (6.78%), and Non-M/WBEs accounted for \$456M (93.08%) presented in Table 6.19. Of the \$9.4M total for African American-owned firm purchase orders, \$5.9M was within the \$1M–\$5M range. Hispanic American-owned firms received \$2.4M of their total \$5.5M in the same \$1M–\$5M range. In fact, the \$1M–\$5M range was the largest range for Minority-owned firm participation. WBEs in the \$1M–\$5M range received \$6.4M of their total \$17.1M for the study period; they also had activity in each range below the \$5M threshold. Asian American-owned firms appeared in the \$125K–\$300K range, with one purchase order valued at \$135K. For their \$97K (0.02%) in purchase orders, Native American-owned firms appeared in only the lower dollar thresholds of below \$5K and \$5K–\$10K.

E. Goods & Supplies Thresholds

The City engaged contractors for Goods & Supplies during the study period using purchase orders totaling \$397M. Non-M/WBEs obtained \$392M (98.78%) of the total. All Minority-owned firm participation occurred in the \$30K–\$90K threshold or lower, and the same holds true for all SBEs. African American-owned firms were represented in the \$30K–\$90K and lower thresholds, Hispanic American-owned firms were represented in the below \$5K and \$5K–\$30K thresholds, and Asian American- and Native American-owned firms were represented only in the below \$5K threshold. WBEs were represented in thresholds of \$500K–\$1M and below, with their largest levels of participation in the thresholds of below \$5K (2.89%) and \$300K–\$500K (2.30%).

Table 6.16. AES-Design Services Utilization Thresholds (1 of 2)

Purchase Orders—Dollars

City of Raleigh, Nationwide, FY 2017–FY 2021

Race/Ethnicity/Gender	Below \$5K		\$5K–\$30K		\$30K–\$90K		\$90K–\$125K		\$125K–\$300K	
	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	193,068	69.14	3,501,457	85.22	11,359,381	91.37	4,745,897	95.86	20,126,786	93.59
African American	-	0.00	24,700	0.60	-	0.00	-	0.00	-	0.00
Asian American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Hispanic American	-	0.00	62,415	1.52	-	0.00	102,503	2.07	-	0.00
Native American	22,123	7.92	118,968	2.96	284,894	2.29	-	0.00	169,584	0.79
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	<i>22,123</i>	<i>7.92</i>	<i>206,083</i>	<i>5.02</i>	<i>284,894</i>	<i>2.29</i>	<i>102,503</i>	<i>2.07</i>	<i>169,584</i>	<i>0.79</i>
WBE	64,038	22.93	389,192	9.47	645,606	5.19	102,422	2.07	1,208,316	5.62
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	86,161	30.85	595,275	14.49	930,500	7.48	204,925	4.14	1,377,900	6.41
SBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
SDV/VOBE	-	0.00	12,227	0.30	142,819	1.15	-	0.00	-	0.00
Grand Total	279,229	100.00	4,108,958	100.00	12,432,701	100.00	4,950,822	100.00	21,504,686	100.00

Source: Raleigh Purchase Order Data, M³ Consulting

Table 6.16 cont. AES-Design Services Utilization Thresholds (2 of 2)

Purchase Orders—Dollars

City of Raleigh, Nationwide, FY 2017–FY 2021

Race/Ethnicity/Gender	\$300K–\$500K		\$500K–\$1M		\$1M–\$5M		\$5M–\$10M		Above \$10M		Total	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	13,225,685	79.71	16,285,561	77.24	56,086,988	90.38	17,552,061	75.73	190,178,641	100.00	333,255,524	93.51
African American	-	0.00	711,391	3.37	-	0.00	-	0.00	-	0.00	736,091	0.21
Asian American	433,298	2.61	-	0.00	-	0.00	-	0.00	-	0.00	433,298	0.12
Hispanic American	483,789	2.92	849,663	4.03	-	0.00	-	0.00	-	0.00	1,498,369	0.42
Native American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	595,568	0.17
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	<i>917,087</i>	<i>5.53</i>	<i>1,561,054</i>	<i>7.40</i>	<i>-</i>	<i>0.00</i>	<i>-</i>	<i>0.00</i>	<i>-</i>	<i>0.00</i>	<i>3,263,326</i>	<i>0.92</i>
WBE	2,449,532	14.76	3,237,642	15.36	5,971,820	9.62	5,624,164	24.27	-	0.00	19,692,732	5.53
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	3,366,619	20.29	4,798,696	22.76	5,971,820	9.62	5,624,164	24.27	-	0.00	22,956,058	6.45
SBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
SDV/VOBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	155,046	0.04
Grand Total	16,592,303	100.00	21,084,257	100.00	62,058,808	100.00	23,176,225	100.00	190,178,641	100.00	356,366,630	100.00

Source: Raleigh Purchase Order Data, M³ Consulting

Table 6.17. Construction and Construction-Related Services Utilization Thresholds (1 of 2)

Purchase Orders—Dollars

City of Raleigh, Nationwide, FY 2017–FY 2021

Race/Ethnicity/Gender	Below \$5K		\$5K–\$30K		\$30K–\$90K		\$90K–\$125K		\$125K–\$300K	
	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	786,968	73.81	2,506,633	81.60	4,610,573	86.84	1,998,284	74.40	10,189,241	66.91
African American	10,359	0.97	82,234	2.68	119,172	2.24	-	0.00	534,179	3.51
Asian American	-	0.00	36,334	1.18	-	0.00	-	0.00	-	0.00
Hispanic American	10,321	0.97	5,137	0.17	-	0.00	-	0.00	231,820	1.52
Native American	7,573	0.71	56,448	1.84	129,425	2.44	114,070	4.25	132,135	0.87
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	<i>28,253</i>	<i>2.65</i>	<i>180,153</i>	<i>5.87</i>	<i>248,597</i>	<i>4.68</i>	<i>114,070</i>	<i>4.25</i>	<i>898,134</i>	<i>5.90</i>
WBE	246,578	23.13	322,368	10.49	308,925	5.82	573,680	21.36	3,242,727	21.29
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	274,831	25.78	502,521	16.36	557,522	10.50	687,750	25.61	4,140,861	27.19
SBE	4,345	0.41	50,316	1.64	52,767	0.99	-	0.00	898,619	5.90
SDV/VOBE	-	0.00	12,357	0.40	88,160	1.66	-	0.00	-	0.00
Grand Total	1,066,144	100.00	3,071,828	100.00	5,309,021	100.00	2,686,034	100.00	15,228,721	100.00

Source: Raleigh Purchase Order Data, M³ Consulting

Table 6.17 cont. Construction and Construction-Related Services Utilization Thresholds (2 of 2)

Purchase Orders—Dollars

City of Raleigh, Nationwide, FY 2017–FY 2021

Race/Ethnicity/Gender	\$300K–\$500K		\$500K–\$1M		\$1M–\$5M		\$5M–\$10M		Above \$10M		Total	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	7,463,359	63.33	14,297,438	67.94	106,159,025	74.08	140,363,178	96.18	286,506,819	100.00	574,881,519	90.40
African American	1,229,995	10.44	1,502,618	7.14	3,371,741	2.35	-	0.00	-	0.00	6,850,299	1.08
Asian American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	36,334	0.01
Hispanic American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	247,279	0.04
Native American	-	0.00	525,525	2.50	-	0.00	-	0.00	-	0.00	965,176	0.15
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	<i>1,229,995</i>	<i>10.44</i>	<i>2,028,143</i>	<i>9.64</i>	<i>3,371,741</i>	<i>2.35</i>	<i>-</i>	<i>0.00</i>	<i>-</i>	<i>0.00</i>	<i>8,099,088</i>	<i>1.28</i>
WBE	3,091,427	26.23	4,717,610	22.42	33,778,350	23.57	5,577,098	3.82	-	0.00	51,858,763	8.15
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	4,321,423	36.67	6,745,753	32.06	37,150,091	25.92	5,577,098	3.82	-	0.00	59,957,851	9.43
SBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1,006,047	0.16
SDV/VOBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	100,517	0.02
Grand Total	11,784,782	100.00	21,043,191	100.00	143,309,117	100.00	145,940,276	100.00	286,506,819	100.00	635,945,933	100.00

Source: Raleigh Purchase Order Data, M³ Consulting

Table 6.18. Professional Services Utilization Thresholds (1 of 2)
Purchase Orders—Dollars
City of Raleigh, Nationwide, FY 2017–FY 2021

Race/Ethnicity/Gender	Below \$5K		\$5K–\$30K		\$30K–\$90K		\$90K–\$125K		\$125K–\$300K	
	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	964,241	94.25	4,011,748	91.71	7,527,146	90.76	3,667,682	97.44	15,235,280	92.65
African American	-	0.00	33,248	0.76	-	0.00	-	0.00	159,803	0.97
Asian American	5,839	0.57	34,868	0.80	135,790	1.64	-	0.00	374,697	2.28
Hispanic American	-	0.00	6,542	0.15	96,684	1.17	-	0.00	237,150	1.44
Native American	4,826	0.47	7,089	0.16	77,188	0.93	-	0.00	151,301	0.92
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	<i>10,665</i>	<i>1.04</i>	<i>81,747</i>	<i>1.87</i>	<i>309,662</i>	<i>3.74</i>	<i>-</i>	<i>0.00</i>	<i>922,951</i>	<i>5.61</i>
WBE	44,842	4.38	280,734	6.42	456,505	5.50	96,525	2.56	284,944	1.73
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	55,507	5.42	362,481	8.29	766,166	9.24	96,525	2.56	1,207,895	7.35
SBE	3,314	0.32	-	0.00	-	0.00	-	0.00	-	0.00
SDV/VOBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Grand Total	1,023,062	100.00	4,374,228	100.00	8,293,313	100.00	3,764,207	100.00	16,443,175	100.00

Source: Raleigh Purchase Order Data, M³ Consulting

Table 6.18 cont. Professional Services Utilization Thresholds (2 of 2)

Purchase Orders—Dollars

City of Raleigh, Nationwide, FY 2017–FY 2021

Race/Ethnicity/Gender	\$300K–\$500K		\$500K–\$1M		\$1M–\$5M		\$5M–\$10M		Above \$10M		Total	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	6,963,136	94.14	5,478,244	86.92	8,581,536	100.00	-	0.00	31,427,483	100.00	83,856,496	95.72
African American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	193,050	0.22
Asian American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	551,194	0.63
Hispanic American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	340,376	0.39
Native American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	240,404	0.27
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	-	<i>0.00</i>	-	<i>0.00</i>	-	<i>0.00</i>	-	<i>0.00</i>	-	<i>0.00</i>	<i>1,325,024</i>	<i>1.51</i>
WBE	433,832	5.86	824,606	13.08	-	0.00	-	0.00	-	0.00	2,421,987	2.76
Unknown M/WBE		0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	433,832	5.86	824,606	13.08	-	0.00	-	0.00	-	0.00	3,747,011	4.27
SBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	3,314	0.00
SDV/VOBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Grand Total	7,396,968	100.00	6,302,851	100.00	8,581,536	100.00	-	0.00	31,427,483	100.00	87,606,822	100.00

Source: Raleigh Purchase Order Data, M³ Consulting

Table 6.19. Non-Professional Services Utilization Thresholds (1 of 2)

Purchase Orders—Dollars

City of Raleigh, Nationwide, FY 2017–FY 2021

Race/Ethnicity/Gender	Below \$5K		\$5K–\$30K		\$30K–\$90K		\$90K–\$125K		\$125K–\$300K	
	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	9,432,414	93.14	26,353,890	92.97	41,664,876	93.49	20,852,091	91.63	67,286,595	94.04
African American	50,974	0.50	156,283	0.55	783,718	1.76	523,983	2.30	650,127	0.91
Asian American	27,362	0.27	194,662	0.69	341,524	0.77	-	0.00	135,671	0.19
Hispanic American	157,174	1.55	119,166	0.42	82,451	0.19	112,613	0.49	1,471,472	2.06
Native American	6,569	0.06	90,648	0.32	-	0.00	-	0.00	-	0.00
Other Minority	18,460	0.18	92,482	0.33	77,538	0.17	-	0.00	-	0.00
<i>Total Minority</i>	<i>260,539</i>	<i>2.57</i>	<i>653,241</i>	<i>2.30</i>	<i>1,285,231</i>	<i>2.88</i>	<i>636,595</i>	<i>2.80</i>	<i>2,257,270</i>	<i>3.15</i>
WBE	396,863	3.92	1,272,142	4.49	1,477,000	3.31	1,153,347	5.07	2,009,917	2.81
Unknown M/WBE	-	0.00	12,025	0.04	45,608	0.10	-	0.00	-	0.00
Total M/WBE	657,402	6.49	1,937,408	6.83	2,807,839	6.30	1,789,943	7.87	4,267,187	5.96
SBE	37,658	0.37	28,914	0.10	91,361	0.21	114,993	0.51	-	0.00
SDV/VOBE	-	0.00	26,303	0.09	-	0.00	-	0.00	-	0.00
Grand Total	10,127,474	100.00	28,346,515	100.00	44,564,076	100.00	22,757,027	100.00	71,553,782	100.00

Source: Raleigh Purchase Order Data, M³ Consulting

Table 6.19 cont. Non-Professional Services Utilization Thresholds (2 of 2)

Purchase Orders—Dollars

City of Raleigh, Nationwide, FY 2017–FY 2021

Race/ Ethnicity/ Gender	\$300K–\$500K		\$500K–\$1M		\$1M–\$5M		\$5M–\$10M		Above \$10M		Total	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	36,521,734	93.80	65,483,384	93.01	123,831,991	89.27	41,159,424	100.00	24,222,692	100.00	456,809,091	93.08
African American	376,680	0.97	956,993	1.36	5,983,020	4.31	-	0.00	-	0.00	9,481,778	1.93
Asian American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	699,220	0.14
Hispanic American	1,202,944	3.09	-	0.00	2,413,125	1.74	-	0.00	-	0.00	5,558,945	1.13
Native American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	97,216	0.02
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	188,479	0.04
<i>Total Minority</i>	<i>1,579,625</i>	<i>4.06</i>	<i>956,993</i>	<i>1.36</i>	<i>8,396,145</i>	<i>6.05</i>	<i>-</i>	<i>0.00</i>	<i>-</i>	<i>0.00</i>	<i>16,025,638</i>	<i>3.27</i>
WBE	410,629	1.05	3,960,590	5.63	6,488,658	4.68	-	0.00	-	0.00	17,169,147	3.50
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	57,633	0.01
Total M/WBE	1,990,254	5.11	4,917,583	6.99	14,884,803	10.73	-	0.00	-	0.00	33,252,418	6.78
SBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	272,926	0.06
SDV/VOBE	425,145	1.09	-	0.00	-	0.00	-	0.00	-	0.00	451,449	0.09
Grand Total	38,937,133	100.00	70,400,967	100.00	138,716,793	100.00	41,159,424	100.00	24,222,692	100.00	490,785,884	100.00

Source: Raleigh Purchase Order Data, M³ Consulting

Table 6.20. Goods & Supplies Utilization Thresholds (1 of 2)
Purchase Orders—Dollars
City of Raleigh, Nationwide, FY 2017–FY 2021

Race/Ethnicity/Gender	Below \$5K		\$5K–\$30K		\$30K–\$90K		\$90K–\$125K		\$125K–\$300K	
	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	45,986,743	96.58	66,592,810	98.58	59,853,375	99.37	16,360,369	100.00	48,675,407	99.03
African American	65,330	0.14	38,824	0.06	67,568	0.11	-	0.00	-	0.00
Asian American	21,513	0.05	-	0.00	-	0.00	-	0.00	-	0.00
Hispanic American	130,107	0.27	102,173	0.15	-	0.00	-	0.00	-	0.00
Native American	4,301	0.01	-	0.00	-	0.00	-	0.00	-	0.00
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	<i>221,251</i>	<i>0.46</i>	<i>140,997</i>	<i>0.21</i>	<i>67,568</i>	<i>0.11</i>	<i>-</i>	<i>0.00</i>	<i>-</i>	<i>0.00</i>
WBE	1,375,197	2.89	802,755	1.19	262,095	0.44	-	0.00	478,141	0.97
Unknown M/WBE	804	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	1,597,252	3.35	943,753	1.40	329,662	0.55	-	0.00	478,141	0.97
SBE	31,572	0.07	16,525	0.02	51,614	0.09	-	0.00	-	0.00
SDV/VOBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Grand Total	47,615,567	100.00	67,553,087	100.00	60,234,651	100.00	16,360,369	100.00	49,153,548	100.00

Source: Raleigh Purchase Order Data, M³ Consulting

Table 6.20. Goods & Supplies Utilization Thresholds cont. (2 of 2)

Purchase Orders—Dollars

City of Raleigh, Nationwide, FY 2017–FY 2021

Race/Ethnicity/Gender	\$300K–\$500K		\$500K–\$1M		\$1M–\$5M		\$5M–\$10M		Above \$10M		Total	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	32,213,196	97.70	36,759,296	98.33	60,717,547	100.00	25,367,466	100.00	-	0.00	392,526,208	98.78
African American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	171,722	0.04
Asian American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	21,513	0.01
Hispanic American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	232,280	0.06
Native American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	4,301	0.00
Other Minority	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
<i>Total Minority</i>	-	<i>0.00</i>	-	<i>0.00</i>	-	<i>0.00</i>	-	<i>0.00</i>	-	<i>0.00</i>	<i>429,816</i>	<i>0.11</i>
WBE	758,628	2.30	623,877	1.67	-	0.00	-	0.00	-	0.00	4,300,694	1.08
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	804	0.00
Total M/WBE	758,628	2.30	623,877	1.67	-	0.00	-	0.00	-	0.00	4,731,314	1.19
SBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	99,710	0.03
SDV/VOBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Grand Total	32,971,824	100.00	37,383,173	100.00	60,717,547	100.00	25,367,466	100.00	-	0.00	397,357,232	100.00

Source: Raleigh Purchase Order Data, M³ Consulting

6.10 Top Ten Bidders and Awardees

In trying to decipher patterns of utilization of firms by their race, ethnicity and/or gender within each procurement type, this analysis seeks to determine whether the same awardees repeatedly received the City's contracts, as well as the success rate of the City's Top Ten Bidders in obtaining the City's contracts.

A. Top Ten Bidders and Awardees for AES-Design Services

In Table 6.21, bidding activity based on contracts data is presented for AES-Design Services. The Top Ten Bidders are diverse in ownership as well as location. During the study period, several firms bid more than 25 times on the City AES-Design Services opportunities. As expected, many of the firms were local, including two WBEs within the top five that were both located within the City limits.

The Top Ten Awardees based on contract awards data for AES-Design Services are presented in Table 6.22. Non-M/WBEs dominated the top awarded firms during the study period, when \$188M was contracted. Firms located within the City fared well. Of the Top Ten Awardees, only one firm was located beyond the City limits. Only one M/WBE firm reached the Top Ten in contract awards, which was a Native American-owned firm that secured \$1.2M (0.67%).

In terms of comparing bidding activity to eventual awards for AES-Design Services, as presented in Table 6.23, four firms had a success rate of over 30%, and three of those four firms are located within the City. The highest success rate was for a Non-M/WBE that achieved a 50% success. On average, Non-M/WBEs within the City had a higher success rate than M/WBEs. The lone Minority-owned firm to reach the Top Ten—a Native American-owned firm—attained a less than 12% success rate yet tied for the most submitted bids during the study period. In many instances, Non-M/WBEs bid less and had higher success rates than M/WBEs.

**Table 6.21. Top Ten Bidders
AES-Design Services
Raleigh-Cary, NC MSA FY 2017–FY 2021**

	Count of Bids	% of Counts	Race/Ethnicity/Gender	Location
Dewberry Engineers, Inc.	30	2.22	Non-M/WBE	City
Sepi Engineering Group	29	2.14	WBE	City
Summit Design and Engineering Services, PLLC	29	2.14	Non-M/WBE	State
Wetherill Engineering, Inc.	29	2.14	WBE	City
ESP Associates, PA	27	1.99	Non-M/WBE	State
Terracon Consultants, Inc.	27	1.99	Non-M/WBE	City
Timmons Group, Inc.	27	1.99	Non-M/WBE	City
Froehling & Robertson, Inc.	27	1.99	Native American	City
McAdams Engineering	26	1.92	Non-M/WBE	State
NOVA Engineering and Environmental, Inc.	26	1.92	Non-M/WBE	City
AES-Design Services	1,354	100.00		

Source: Raleigh Contracts data, M³ Consulting

**Table 6.22. Top Ten Awardees
AES-Design Services
Contract Awards
Raleigh-Cary, NC MSA FY 2017–FY 2021**

	Dollars	% of Dollars	Count	% of Counts	Race/Ethnicity/ Gender	Location
Hazen and Sawyer, PC	19,156,436.00	10.16	12	8.05	Non-M/WBE	City
HDR Engineering, Inc., of the Carolinas	10,348,386.00	5.49	8	5.37	Non-M/WBE	City
WK Dickson & Co., Inc.	4,153,445.70	2.20	6	4.03	Non-M/WBE	Nationwide
Kimley-Horn and Associates, Inc.	4,741,315.78	2.52	6	4.03	Non-M/WBE	City
WSP USA, Inc., f/k/a Parsons Brinkerhoff, Inc.	6,075,098.00	3.22	6	4.03	Non-M/WBE	City
AECOM Technical Services of North Carolina, Inc.	3,530,609.00	1.87	5	3.36	Non-M/WBE	City
Davis Kane Architects, PA	3,146,312.00	1.67	5	3.36	Non-M/WBE	City
CDM Smith, Inc.	6,699,770.00	3.55	4	2.68	Non-M/WBE	City
Froehling & Robertson, Inc.	1,264,000.00	0.67	3	2.01	Native American	City
Terracon Consultants, Inc.	1,350,000.00	0.72	3	2.01	Non-M/WBE	City
Grand Total	188,463,236.48	100.00	149	100.00		

Source: Raleigh PeopleSoft data, M³ Consulting, Highlighted firms represent outliers

**Table 6.23. Success Rate of Top Ten Bidders: AES-Design Services
Raleigh-Cary, NC MSA FY 2017–FY 2021**

AES-Design Services	Total Bids	% of Bids	Race/Ethnicity/Gender	Location	# of Awards	% Success rate
Total	1,354	100.00			149	100.00
Hazen and Sawyer, PC	24	1.77	Non-M/WBE	City	12	50.00
HDR Engineering, Inc., of the Carolinas	23	1.70	Non-M/WBE	City	8	34.78
WK Dickson & Co., Inc.	17	1.26	Non-M/WBE	Nationwide	6	35.29
Kimley-Horn and Associates, Inc.	21	1.55	Non-M/WBE	City	6	28.57
WSP USA, Inc., f/k/a Parsons Brinkerhoff, Inc.	13	0.96	Non-M/WBE	City	6	46.15
AECOM Technical Services of North Carolina, Inc.	25	1.85	Non-M/WBE	City	5	20.00
Davis Kane Architects, PA	17	1.26	Non-M/WBE	City	5	29.41
CDM Smith, Inc.	16	1.18	Non-M/WBE	City	4	25.00
Froehling & Robertson, Inc.	27	1.99	Native American	City	3	11.11
Terracon Consultants, Inc.	27	1.99	Non-M/WBE	City	3	11.11

Source: Raleigh Contracts and PeopleSoft data, M³ Consulting

B. Top Ten Bidders and Awardees for Construction and Construction-Related Services

When considering the Top Ten Bidders for Construction and Construction-Related Services during the study period, the distribution between Non-M/WBEs and M/WBEs was nearly fifty-fifty. Of the M/WBEs, only WBEs bid at a frequency that resulted in the group having four firms on the list of the Top Ten Bidders, as presented in Table 6.24. Except for two firms, the majority of the firms in the Top Ten Bidders were located within the City or its MSA. Two firms bid more than 40 times during the study period—one Non-M/WBE and one WBE. Aside from WBEs, no M/WBEs reached the Top Ten.

In terms of Top Ten Awardees of the \$604M in Construction and Construction-Related Services contracts presented in Table 6.25, WBEs held three of the top six spots based on the number of awards. Based on dollars, however, those same WBEs ranked fourth, ninth and tenth. Non-M/WBEs held the top three spots based on awards, with one firm receiving 10.68% of the Construction and Construction-Related Services awards for the study period. The Top Ten Awardees came from diverse locations. Most were located within the City and its MSA; however, two firms were outside the MSA within the State of North Carolina, and one firm was outside of the State.

Based on number of awards for Construction and Construction-Related Services during the study period, seven firms had a success rate of over 40%, two of which were WBEs. All of the M/WBEs that reached the Top Ten based on awards were WBEs with varied locations within the State of North Carolina. Two firms, a Non-M/WBE and a WBE, bid over 40 times, with success rates of 52.38% and 34.78%, respectively. Interestingly, a firm outside of the State of North Carolina had a success rate of 63.64%.

**Table 6.24. Top Ten Bidders
Construction and Construction-Related Services
State of North Carolina, FY 2017–FY 2021**

	Count of Bids	% of Counts	Race/Ethnicity/Gender	Location
Moffat Pipe, Inc.	46	5.72	WBE	City
Carolina Civilworks, Inc.	42	5.22	Non-M/WBE	City
T.A. Loving Company, Inc.	21	2.61	Non-M/WBE	State
FSC II, LLC, d/b/a Fred Smith Company	20	2.49	Non-M/WBE	City
Park Construction of North Carolina, Inc.	18	2.24	Non-M/WBE	MSA
Pipeline Utilities, Inc.	14	1.74	Non-M/WBE	City
Narron Contracting, Inc.	14	1.74	WBE	MSA
J.F. Wilkerson Contracting Co., Inc.	14	1.74	WBE	MSA
Browe Construction Company, Inc.	13	1.62	WBE	State
Kimley-Horn and Associates, Inc.	12	1.49	Non-M/WBE	City
Grand Total	804	100.00		

Source: Raleigh Contracts data, M³ Consulting

**Table 6.25. Top Ten Awardees
Construction and Construction-Related Services
Contract Awards
State of North Carolina, FY 2017–FY 2021**

	Dollars	% of Dollars	Counts	% of Counts	Race/Ethnicity/ Gender	Location
Carolina Civilworks, Inc.	27,766,225.50	4.59	22	8.46	Non-M/WBE	City
Moffat Pipe, Inc.	29,103,774.71	4.81	16	6.15	WBE	City
Park Construction of North Carolina, Inc.	64,548,942.76	10.68	9	3.46	Non-M/WBE	MSA
Haren Construction Company, Inc.	14,135,411.81	2.34	7	2.69	Non-M/WBE	Nationwide
Narron Contracting, Inc.	5,200,569.81	0.86	6	2.31	WBE	MSA
Browe Construction Company, Inc.	3,628,285.64	0.60	6	2.31	WBE	State
T.A. Loving Company, Inc.	10,196,709.64	1.69	6	2.31	Non-M/WBE	State
FSC II, LLC, d/b/a Fred Smith Company	21,509,547.90	3.56	6	2.31	Non-M/WBE	City
Carolina Sunrock, LLC	32,193,269.92	5.33	5	1.92	Non-M/WBE	City
Crowder Construction Company	54,053,916.56	8.94	5	1.92	Non-M/WBE	MSA
Grand Total	604,558,335.40	100.00	260	100.00		

Source: Raleigh PeopleSoft data, M³ Consulting; Highlighted firms represent outliers

**Table 6.26. Success Rate of Top Ten Bidders: Construction and Construction-Related Services
State of North Carolina, FY 2017–FY 2021**

Construction and Construction-Related Services	Total Bids	% of Bids	Race/Ethnicity/Gender	Location	# of Awards	% Success rate
Total	804	100.00			260	100.00
Carolina Civilworks, Inc.	42	5.22	Non-M/WBE	City	22	52.38
Moffat Pipe, Inc.	46	5.72	WBE	City	16	34.78
Park Construction Of North Carolina, Inc.	18	2.24	Non-M/WBE	MSA	9	50.00
Haren Construction Company, Inc.	11	1.37	Non-M/WBE	Nationwide	7	63.64
Narron Contracting, Inc.	14	1.74	WBE	MSA	6	42.86
Browe Construction Company, Inc.	13	1.62	WBE	State	6	46.15
T.A. Loving Company, Inc.	21	2.61	Non-M/WBE	State	6	28.57
FSC II, LLC, d/b/a Fred Smith Company	20	2.49	Non-M/WBE	City	6	30.00
Carolina Sunrock, LLC	9	1.12	Non-M/WBE	City	5	55.56
Crowder Construction Company	11	1.37	Non-M/WBE	MSA	5	45.45

Source: Raleigh Contracts and PeopleSoft data, M³ Consulting

C. Top Ten Bidders and Awardees for Professional Services

The frequency of bidding for the Top Ten Bidders in Professional Services is presented in Table 6.27. Most firms bid only twice. The exception was a local firm that bid 12 times. All of the firms that submitted responses to the City's opportunities within this procurement type were Non-M/WBEs. The location of the firms conveys a large net was cast for Professional Services because several firms were located beyond the City of Raleigh and the State of North Carolina. Overall, bidding was flat in Professional Services, except for one local firm outlier.

Table 6.28 presents the Top Ten Awardees in Professional Services, for which \$81M was contracted during the period FY 2017–FY 2021. The largest recipient of awards was a local firm that bid 12 times. The frequency in bidding may be a direct correlation to this firm receiving nearly 25% of the awards for Professional Services in terms of dollars contracted. Two M/WBEs appeared in the Top Ten Awardees, and both were located outside of the City's MSA within the State of North Carolina. Of the M/WBEs, the Hispanic American-owned firm received \$2.79M (3.44%), and the African American-owned firm received \$663K (0.82%) of the total \$81M. Eight of the Top Ten firms are Non-M/WBEs, and most were located outside of the City's MSA.

The success rates of firms bidding for Professional Services is presented in Table 6.29. Most firms were awarded at the rate for which they bid, with nine of the Top Ten having a 100% success rate. As in Table 6.28, two M/WBEs were in the Top Ten for awards, and both had a success rate of 100% and were located within the State of North Carolina. Non-M/WBEs constituted 80% of the Top Ten firms, and all but one had a success rate of 100%; the lone exception had a success rate of 50%.

**Table 6.27. Top Ten Bidders
Professional Services
State of North Carolina, FY 2017–FY 2021**

	Count of Bids	% of Counts	Race/Ethnicity/Gender	Location
ePlus Group, Inc.	24	18.32	Non-M/WBE	City
Conduent State & Local Solutions, Inc.	2	1.53	Non-M/WBE	Nationwide
CivicPlus	2	1.53	Non-DBE	City
John Eastern Company	2	1.53	Non-DBE	Nationwide
AECOM Technical Services of North Carolina, Inc.	2	1.53	Non-DBE	City
Clever Devices, LTD	2	1.53	Non-M/WBE	Nationwide
Blue Cross Blue Shield of NC	2	1.53	Non-M/WBE	State
PerfectMind	2	1.53	Non-M/WBE	
Brentwood Services	2	1.53	Non-M/WBE	Nationwide
Kimley-Horn and Associates, Inc.	2	1.53	Non-M/WBE	City
Total	131	100.00		

Source: Raleigh Contracts data, M³ Consulting

**Table 6.28. Top Ten Awardees
Professional Services Utilization
Contract Awards
State of North Carolina, FY 2017–FY 2021**

	Dollars	% of Dollars	Counts	% of Counts	Race/Ethnicity/ Gender	Location
ePlus Group, Inc.	20,158,242.03	24.87	24	33.33	Non-M/WBE	City
Passport Labs, Inc.	1,863,141.00	2.30	2	2.78	Non-M/WBE	State
CITI, LLC	2,790,000.00	3.44	2	2.78	Hispanic American	State
Blue Cross Blue Shield of NC	4,521,390.00	5.58	2	2.78	Non-M/WBE	State
Conduent State & Local Solutions, Inc.	1,131,000.00	1.40	2	2.78	Non-M/WBE	Nationwide
Lanier Construction Company, Inc.	663,301.98	0.82	1	1.39	African American	State
Utility Solutions Partners, LLC	6,976,370.00	8.61	1	1.39	Non-M/WBE	Nationwide
ARRB Group, Inc.	789,600.00	0.97	1	1.39	Non-M/WBE	Nationwide
Clever Devices, LTD	1,330,000.00	1.64	1	1.39	Non-M/WBE	Nationwide
Altura Solutions, LP	324,480.00	0.40	1	1.39	Non-M/WBE	Nationwide
Grand Total	81,057,009.00	100.00	72	100.00		

Source: Raleigh PeopleSoft data, M³ Consulting;

**Table 6.29. Success Rate of Top Ten Bidders: Professional Services
State of North Carolina, FY 2017–FY 2021**

Professional Services	Total Bids	% of Bids	Race/Ethnicity/Gender	Location	# of Awards	Success rate
Total	131	100.00			72	100.00
ePlus Group, Inc.	24	18.32	Non-M/WBE	City	24	100.00
Passport Labs, Inc.	2	1.53	Non-M/WBE	State	2	100.00
CITI, LLC	2	1.53	Hispanic American	State	2	100.00
Blue Cross Blue Shield of NC	2	1.53	Non-M/WBE	State	2	100.00
Conduent State & Local Solutions, Inc.	2	1.53	Non-M/WBE	Nationwide	2	100.00
Lanier Construction Company, Inc.	1	0.76	African American	State	1	100.00
Utility Solutions Partners, LLC	1	0.76	Non-M/WBE	Nationwide	1	100.00
ARRB Group, Inc.	1	0.76	Non-M/WBE	Nationwide	1	100.00
Clever Devices, LTD	2	1.53	Non-M/WBE	Nationwide	1	50.00
Altura Solutions, LP	1	0.76	Non-M/WBE	Nationwide	1	100.00

Source: M³ Consulting, Raleigh PeopleSoft data and Contracts Data

D. Top Ten Bidders and Awardees for Non-Professional Services

During the study period, the City had 190 bids for Non-Professional Services. The Top Ten Bidders are presented in Table 6.30. Among the Top Ten was one African American-owned firm that bid four times for Non-Professional Services and was located within the State of North Carolina but outside of the City's MSA. The bidders came from a mix of locations, with many local to the City of Raleigh or within the MSA. Three firms located outside the State of North Carolina bid multiple times. The highest number of bids by one firm for Non-Professional Services was six, which represented 3.16% of the total bids received.

Bidding frequency correlated with awards for Non-Professional Services, with eight of the Top Ten Awardees also in the Top Ten Bidders. This correlation suggests that more bids by firms resulted in more contracts. Of the total \$117M in awards, all but one of the Top Ten Awardees were Non-M/WBEs, with McGill Environmental securing \$13.6M (11.62%). Most of the awardees were located within the State of North Carolina. Only one firm in the Top Ten Awardees was located outside of the State of North Carolina, and it received \$1.6M (1.42%). Except for Granville Farms, which had a 75% success rate, all other awardees had a 100% success rate.

**Table 6.30. Top Ten Bidders
Non-Professional Services
State of North Carolina, FY 2017–FY 2021**

	Count of Bids	% of Counts	Race/Ethnicity/Gender	Location
McGill Environmental Systems of NC	6	3.16	Non-M/WBE	MSA
Telepathic Graphics, Inc.	5	2.63	Non-M/WBE	City
Granville Farms, Inc.	4	2.11	Non-M/WBE	State
ADS, LLC	4	2.11	Non-M/WBE	Nationwide
Downtown Raleigh Alliance	4	2.11	Non-M/WBE	City
Environmental Service Systems, LLC	4	2.11	African American	State
MV Contract Transportation, Inc.	3	1.58	Non-M/WBE	Nationwide
Evoqua Water Technologies, LLC	3	1.58	Non-M/WBE	Nationwide
Red Coats, Inc., d/b/a Admiral Security Services	3	1.58	Non-M/WBE	City
Always Trucking, Inc.	3	1.58	Non-M/WBE	MSA
Total	190	100.00		

Source: Raleigh Contracts data, M³ Consulting

**Table 6.31. Top Ten Awardees
Non-Professional Services
Contract Awards
State of North Carolina, FY 2017–FY 2021**

	Dollars	% of Dollars	Count s	% of Counts	Race/Ethnicity/ Gender	Location
McGill Environmental Systems of NC	13,650,000.00	11.62	6	5.77	Non-M/WBE	MSA
Telepathic Graphics, Inc.	3,910,000.00	3.33	5	4.81	Non-M/WBE	City
Environmental Service Systems, LLC	6,754,476.88	5.75	4	3.85	African American	State
Downtown Raleigh Alliance	1,937,842.00	1.65	4	3.85	Non-M/WBE	City
ADS, LLC	1,669,230.20	1.42	4	3.85	Non-M/WBE	Nationwide
Red Coats, Inc., d/b/a Admiral Security Services	5,080,287.94	4.33	3	2.88	Non-M/WBE	City
Black & Veatch International Company	1,279,000.00	1.09	3	2.88	Non-M/WBE	MSA
Granville Farms, Inc.	2,770,115.00	2.36	3	2.88	Non-M/WBE	State
Always Trucking, Inc.	1,600,000.00	1.36	3	2.88	Non-M/WBE	MSA
Precision Safe Sidewalks, LLC	4,950,000.00	4.22	2	1.92	Non-M/WBE	State
Total	117,422,369.14	100.00	104	100.00		

Source: Raleigh PeopleSoft data, M³ Consulting; Highlighted firms represent outliers

Table 6.32. Success Rate of Top Ten Bidders: Non-Professional Services State of North Carolina, FY 2017–FY 2021						
Services	Total Bids	% of Bids	Race/Ethnicity/Gender	Location	# of Awards	Success rate
Total		100.00				100.00
McGill Environmental Systems of NC	6	3.16	Non-M/WBE	MSA	6	100.00
Telepathic Graphics, Inc.	5	2.63	Non-M/WBE	City	5	100.00
Environmental Service Systems, LLC	4	2.11	African American	State	4	100.00
Downtown Raleigh Alliance	4	2.11	Non-M/WBE	City	4	100.00
ADS, LLC	4	2.11	Non-M/WBE	Nationwide	4	100.00
Red Coats, Inc., d/b/a Admiral Security Services	3	1.58	Non-M/WBE	City	3	100.00
Black & Veatch International Company	3	1.58	Non-M/WBE	MSA	3	100.00
Granville Farms, Inc.	4	2.11	Non-M/WBE	State	3	75.00
Always Trucking, Inc.	3	1.58	Non-M/WBE	MSA	3	100.00
Precision Safe Sidewalks, LLC	2	1.05	Non-M/WBE	State	2	100.00

Source: Raleigh Contracts and PeopleSoft data, M³ Consulting. Highlighted firms represent outliers

E. Top Ten Bidders and Awardees for Goods & Supplies

A total of 15 bids for Goods & Supplies were made during the period, so bidding activity was limited. Therefore, drawing conclusions based on frequency is challenging. Table 6.33 lists firms that all bid at least once. Each was a Non-M/WBE, and 90% are located beyond the City's MSA. Based on contracts data, two awards were granted for Goods & Supplies. Bids for Goods & Supplies are often based on unit pricing, with the quantity undetermined at the point of award. As shown in Table 6.35, two Non-M/WBEs received \$1.8M in awards. One was located in the State of North Carolina; the other was outside of the State. Table 6.35 reflects that each of the firms awarded had a 100% success rate.

**Table 6.33. Top Ten Bidders
Goods & Supplies
Nationwide, FY 2017–FY 2021**

	Count of Bids	% of Counts	Race/Ethnicity/ Gender	Location
Brekford Corp.	1	6.67	Non-M/WBE	Nationwide
Utility Associates	1	6.67	Non-M/WBE	Nationwide
Pro Vision	1	6.67	Non-M/WBE	City
Carolina Solar Raleigh EMJ, LLC	1	6.67	Non-M/WBE	State
Wireless Communication	1	6.67	Non-M/WBE	State
CDW G Coban	1	6.67	Non-M/WBE	Nationwide
PCS Mobile	1	6.67	Non-M/WBE	Nationwide
Complete Integrated Solutions	1	6.67	Non-M/WBE	Nationwide
Taser International	1	6.67	Non-M/WBE	Nationwide
Digital Ally	1	6.67	Non-M/WBE	Nationwide
Total	15	100.00		

Source: Raleigh Contracts data, M³ Consulting

Table 6.34. Top Ten Awardees Goods & Supplies City of Raleigh Nationwide, FY 2017–FY 2021						
	Dollars	% of Dollars	Counts	% of Counts	Race/Ethnicity/ Gender	Location
WatchGuard Video	1,482,355.00	78.75	1	50.00	Non-M/WBE	Nationwide
Carolina Solar Raleigh EMJ, LLC	400,000.00	21.25	1	50.00	Non-DBE	State
Total	1,882,355.00	100.00		100.00		

Source: Raleigh PeopleSoft data, M³ Consulting

Table 6.35. Success Rate of Top Ten Bidders: Goods & Supplies Nationwide, FY 2017–FY 2021						
Services	Total Bids	% of Bids	Race/Ethnicity/Gender	Location	# of Awards	Success rate
Total	15	100.00			2	100.00
WatchGuard Video	1	6.67	Non-M/WBE	Nationwide	1	100.00
Carolina Solar Raleigh EMJ, LLC	1	6.67	Non-DBE	State	1	100.00

Source: Raleigh Contracts and PeopleSoft data, M³ Consulting

6.11 Summary of Findings

Table 6.36 summarizes utilization of M/WBEs by the three utilization measures—purchase orders, accounts payable and contract awards.

The most robust measure for AES-Design Services is purchase orders, which M³ Consulting relied upon, with M/WBEs securing 5.80%. During the study period FY 2017–FY 2021, M/WBEs achieved their highest utilization based on accounts payable data at 10.50%, followed by contract awards at 8.63%. Across all utilization measures for AES-Design Services, WBEs represented the majority of M/WBE participation. Minority-owned firms achieved their highest utilization percentage in contract awards, where the achievement was based on a relatively small number of firms that accounted for over 90% of W/MBE utilization. The City primarily engaged and contracted with Non-M/WBEs for AES-Design Services.

Utilization of M/WBEs in Construction and Construction-Related Services, proportionately, yielded the largest participation across contract awards, purchase orders and payments. Based on contract awards, where subcontractor utilization is considered, M/WBEs received 21.45% of the \$522M during the study period FY 2017–FY 2021. When assessing M/WBE participation based on contract awards, the majority of the utilization stems from WBEs. In fact, WBEs represented 78% of the total M/WBE participation in contract awards. Based on purchase orders and payments, WBEs received 90% and 86% of total M/WBE encumbrances and expenditures, respectively. Overall, Minority-owned firm utilization at 4.60% based on contract awards data suggest that M/WBE subcontractor activity increased overall Minority-owned firm participation. Comparatively, Minority-owned firm participation based on payments and purchase orders, which only reflect prime contractors that provide services directly to the City, was below 2%.

Within Professional Services, M/WBE participation was above 10% based on accounts payable data only. For purchase orders and contracts, M/WBE participation was 5.06% and 8.87%, respectively. M³ Consulting relied upon purchase orders for conclusions because they captured the bulk of encumbered dollars. Minority-owned firms exceeded WBE participation in contract awards, and they were nearly even based on accounts payable data. Overall, Non-M/WBE utilization accounted for the lion’s share of utilization in Professional Services irrespective of the measure, eclipsing 90% in purchase orders and contract awards.

Table 6.36 illustrates M/WBE utilization of Non-Professional Services and Goods & Supplies, for which M/WBEs accounted for on average of 8% and less than 1%, respectively. The City has a wealth of opportunity to improve its efforts to attract, engage, utilize and support increased participation of M/WBEs in Non-Professional Services and Goods & Supplies.

In terms of participation across utilization measures and procurement types, the highest percent of M/WBE participation occurred in Construction and Construction-Related Services, at 21.45%. WBEs consistently drove the M/WBE participation and were utilized by the City more than all Minority-owned firms. The lone exception was in Non-Professional Services contracts data, where Minority-owned firms (8.22%) exceeded WBEs (2.66%). In Construction and Construction-Related Services based on contracts data, Minority-owned firms obtained 4.60%, and WBEs obtained 16.85%. Subcontractor utilization is captured in the contracts awards data; therefore, M/WBEs fared better in contract awards for Construction and Construction-Related Services than in purchase orders and payments, where the prime contractor is the firm of record.

Regardless of utilization measure, M/WBE participation for AES-Design Services, Professional Services, Non-Professional Services and Goods & Supplies did not eclipse 12% for the study period. To further document the impact of subcontractor participation as the basis for M/WBE utilization, Table 6.37 details the City’s utilization of Non-M/WBEs and M/WBEs by race/ethnicity/gender for each procurement type. Data shown for AES-Design Services, Professional Services, Non-Professional Services and Goods & Supplies is based on purchase order

data. Utilization for Construction and Construction-Related Services is based on contract awards data that considers prime and subcontractor utilization. Given the City's primary focus on M/WBE inclusion at the subcontractor level, Construction and Construction-Related Services utilization is much larger proportionately than the other procurement types. Specifically, when considering the \$112M (21.45%) utilization of M/WBEs in Construction and Construction-Related Services, \$45.8M (41%) is from subcontractor opportunities on those projects valued over \$300K, which is tracked by the City's M/WBE Office. The balance of the M/WBE utilization at the pure prime level, which reflects less subcontractor participation, is primarily attributed to WBEs. Minority-owned firms at the pure prime level based on Construction and Construction-Related Services received 0.90% (see Table 6.8). African American- and WBE-owned firms had the highest levels of participation in Construction and Construction-Related Services at 3.13% and 16.85%, respectively. Hispanic American-owned firms followed at 1.29%.

Based on purchase orders, M/WBE utilization was 5.80% in AES-Design Services, 5.06% in Professional Services, 9.46% in Non-Professional Services and 1.19% in Goods & Supplies. African American- and Asian American-owned firms had no participation in AES-Design Services, while WBEs reflected 5.39% of the total 5.80% M/WBE participation. WBEs also had about 5% participation in Non-Professional Services, followed by African American-owned firms at 2.78% and Hispanic American-owned firms at 1.62%. Only WBEs reached 1% participation in Goods & Supplies. Minority-owned firms garnered only 0.11% participation.

**Table 6.36. M/WBE Utilization in Percent of Dollars of Purchase Orders, Payments, and Contract Awards
City of Raleigh
Summary of M/WBE Utilization by Relevant Market, FY 2017–FY 2021**

Procurement Category	M/WBE Utilization Based on Purchase Orders			M/WBE Utilization Based on Accounts Payable			M/WBE Utilization Based on Contract Dollars		
	(in percent)			(in percent)			(in percent)		
	Minority-owned firm	WBE	M/WBE ⁴	Minority-owned firm	WBE	M/WBE ⁴	Minority-owned firm	WBE	M/WBE ⁴
AES-Design Services ²	0.41	5.39	5.80	0.18	10.32	10.50	1.94	6.70	8.63
Construction and Construction-Related Services ³	1.46	9.40	10.86	1.12	10.24	11.36	4.60	16.85	21.45
Professional Services ³	1.89	3.17	5.06	4.72	6.60	11.32	8.87	0.00	8.87
Non-Professional Services ³	4.51	4.93	9.46	2.11	4.16	6.28	8.22	2.66	10.88
Goods & Supplies ¹	0.11	1.08	1.19	0.07	0.91	0.98	0.00	0.00	0.00

Source: M³ Consulting, Raleigh Contracts data, PeopleSoft PO and AP data, Raleigh Vendor Payments data; Relevant Market

¹Nationwide

²Raleigh-Cary, NC MSA

³State of North Carolina

⁴Includes unknown M/WBEs

**Table 6.37. Total Utilization
Purchase Orders—Dollars
City of Raleigh, Nationwide, FY 2017–FY 2021**

Race/Ethnicity/ Gender	AES-Design Services ^{2,5}		Construction and Construction-Related Services ^{3,4}		Professional Services ^{3,5}		Non-Professional Services ^{3,5}		Goods & Supplies ^{1,5}	
	\$	%	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	283,862,762	94.15	410,260,996	78.48	62,776,399	94.94	307,696,863	90.32	392,526,208	98.78
African American	-	0.00	16,352,394	3.13	193,050	0.29	9,481,778	2.78	171,722	0.04
Asian American	-	0.00	632,839	0.12	476,703	0.72	96,297	0.03	21,513	0.01
Hispanic American	625,542	0.21	6,752,187	1.29	340,376	0.51	5,516,570	1.62	232,280	0.06
Native American	595,568	0.20	288,833	0.06	240,404	0.36	97,216	0.03	4,301	0.00
Other Minority	-	0.00	-	0.00	-	0.00	188,479	0.06	-	0.00
<i>Total Minority</i>	<i>1,221,110</i>	<i>0.41</i>	<i>24,026,254</i>	<i>4.60</i>	<i>1,250,533</i>	<i>1.89</i>	<i>15,380,341</i>	<i>4.51</i>	<i>429,816</i>	<i>0.11</i>
WBE	16,256,280	5.39	88,085,310	16.85	2,094,154	3.17	16,805,099	4.93	4,300,694	1.08
Unknown M/WBE	-	0.00	-	0.00	-	0.00	57,633	0.02	804	0.00
Total M/WBE	17,477,390	5.80	112,111,564	21.45	3,344,687	5.06	32,243,073	9.46	4,731,314	1.19
SBE	-	0.00	-	0.00	3,314	0.01	272,926	0.08	99,710	0.03
SDV/VOBE	155,046	0.05	396,406	0.08	-	0.00	451,449	0.13	-	0.00
Grand Total	301,495,198	100.00	522,768,965	100.00	66,124,400	100.00	340,664,311	100.00	397,357,232	100.00

Source: Raleigh Contracts data, PeopleSoft data, M³ Consulting

¹Nationwide

²Raleigh-Cary, NC MSA

³State of North Carolina

⁴Contract Awards

⁵Purchase Orders

Chapter 7: Statistical Analysis of M/WBE Disparity in Contracting

7.1 Introduction

This chapter begins by reporting the statistical evidence of disparities between Minority and Women-Owned Business Enterprise (M/WBE) availability in the relevant market of the City of Raleigh (Raleigh) and M/WBE utilization by year, using the measure relied upon for decision-making, followed by a comparison of disparity based on Contract Awards, Purchase Orders (POs) and Accounts Payable for the period. Disparities are analyzed in the industry categories of Architectural and Engineering Services (AES)-Design Services, Construction and Construction-Related Services, Professional Services, Non-Professional Services, and Goods & Supplies. Disparity ratios using Data Axle Availability (Marketplace Availability) are also provided, showing the difference, if any, between actual availability and potential availability.

M³ Consulting, Inc., (M³ Consulting) presents the disparity ratios for Raleigh's Ready, Willing and Able (RWASM) Availability. For all industries, RWASM Availability will consist of firms that have bid for prime contracts awarded by Raleigh during the study period, firms awarded prime contracts during the study period and firms that have been awarded subcontracts during the study period. The measure of availability used to calculate disparity is the Raleigh RWASM Availability Level 2, consisting of bidders, prime awardees and sub awardees.

Utilization for each industry is measured via PO, Accounts Payables and Contract Award data as maintained by Raleigh's procurement division. The utilization percentage used to calculate the disparity ratios are based on formal and informal purchases by race and gender.

7.2 Disparity Ratios Methodology

Disparity ratios compare the percentage utilization of various race and gender groups to the percentage availability of these same groups. The disparity ratio is calculated by dividing the former percentage by the latter. A resulting ratio greater than one indicates overutilization; conversely, a ratio less than one indicates underutilization. The methodologies for calculating availability, utilization, disparity and significance testing, specifically for this study, are presented in Chapter 4, Statistical Methodology.

7.3 Disparities in AES-Design Services

POs (Table 7.1) represent the best measure of utilization for AES-Design Services. Overall, Non-M/WBEs are significantly overutilized for the period and in every year using RWASM Availability. Results show that M/WBEs are significantly underutilized for the period. Minority-owned firms are underutilized in every year and significantly so for the period and every year except FY 2017. Women-Owned Business Enterprises (WBEs) are also significantly underutilized for the period and FYs 2018, 2020 and 2021. Among Minority-owned firms, Asian American- and Hispanic American-owned firms are also significantly underutilized. African American-owned firms are underutilized, but the results are not significant. Asian American- and African American-owned firms were not utilized in any year, while Hispanic American-owned firms were only utilized in FY 2017 and reflected significant overutilization in that fiscal year. Native American-owned firms, the only Minority group utilized in every year, were underutilized, but the results were not significant.

The three utilization metrics, based on Contract Awards, POs and Payments, in aggregate for the study period are presented in Table 7.2. Non-M/WBEs are significantly overutilized and M/WBEs are significantly underutilized based on all three utilization metrics. Minority-owned firms are underutilized for the three metrics and significantly so based on POs and Payments. Native American-owned firms are underutilized based on POs and Payments, but overutilized based on Contract Awards; however, the results are not significant. African American-, Asian American- and Hispanic American-owned firms all reflect nonsignificant underutilization based on Contract Awards and significant underutilization based on Payments. African American-owned firms reflect nonsignificant underutilization based on POs, while Hispanic American- and Asian American-owned firms reflect significant underutilization based on POs.

Disparity ratios calculated against Marketplace Availability are reflected in Table 7.3. M/WBEs and all Minority groups and WBEs are significantly underutilized for the period, while Non-M/WBEs were significantly overutilized.

Table 7.1. Purchase Order Utilization vs. RWA SM Availability Level 2 AES-Design Services City of Raleigh Raleigh-Cary, NC MSA, FY 2017–FY 2021												
Ethnicity	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		Period	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	1.02	NS	1.20	S	1.03	NS	1.20	S	1.20	S	1.19	S
African American	0.00	NS	0.00	NS	0.00	NS	0.00	NS	0.00	NS	0.00	NS
Asian American	0.00	NS	0.00	NS	0.00	NS	0.00	NS	0.00	NS	0.00	S
Hispanic American	1.87	NS	0.00	NS	0.00	NS	0.00	NS	0.00	NS	0.12	S
Native American	0.79	NS	0.04	NS	1.14	NS	1.39	NS	0.55	NS	0.33	NS
Other Minority	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
<i>Total Minority</i>	0.80	NS	0.01	S	0.14	S	0.17	S	0.07	S	0.09	S
WBE	0.98	NS	0.26	S	1.07	NS	0.23	S	0.27	S	0.35	S
Unknown M/WBE	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
Total M/WBE	0.94	NS	0.20	S	0.85	NS	0.22	S	0.22	S	0.29	S
SBE	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
VBE/DVOB	0.61	NS	0.03	NS	0.00	NS	0.00	NS	0.00	NS	0.09	NS

Source: M³ Consulting; Raleigh Contracts Data, PeopleSoft PO and AP data; Relevant Market—Raleigh-Cary, NC MSA

Significance is S and Ratio is Less than 1—Statistically Significant Underutilization; Significance is S and Ratio is Greater than 1—Statistically Significant Overutilization.

**Table 7.2. Summary Disparity Ratios by Race, Ethnicity and Gender
Utilization vs. RWASM Availability Level 2
AES-Design Services
City of Raleigh
Raleigh-Cary, NC MSA, FY 2017–FY 2021**

Ethnicity	Contract Awards		Purchase Order		Payments	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	1.15	S	1.19	S	1.13	S
African American	0.15	NS	0.00	NS	0.00	S
Asian American	0.04	NS	0.00	S	0.01	S
Hispanic American	0.38	NS	0.12	S	0.09	S
Native American	1.88	NS	0.33	NS	0.00	S
Other Minority	0.00	S	0.00	S	0.00	S
<i>Total Minority</i>	0.41	NS	0.09	S	0.04	S
WBE	0.44	S	0.35	S	0.67	S
Unknown M/WBE	0.00	S	0.00	S	0.00	S
Total M/WBE	0.43	S	0.29	S	0.52	S
SBE	0.00	S	0.00	S	0.00	S
VBE/DVOB	0.00	NS	0.09	NS	0.07	S

Source: Raleigh Contracts Data, PeopleSoft PO and AP data; M³ Consulting

Significance is S and Ratio is Less than 1—Statistically Significant Underutilization; Significance is S and Ratio is Greater than 1—Statistically Significant Overutilization.

Table 7.3. Purchase Order Utilization vs. Data Axle Availability

AES-Design Services

City of Raleigh

Raleigh-Cary, NC MSA, FY 2017–FY 2021

Ethnicity	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		Period	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	1.32	S	1.57	S	1.35	S	1.56	S	1.56	S	1.54	S
African American	0.00	NS	0.00	NS	0.00	NS	0.00	NS	0.00	NS	0.00	S
Asian American	0.00	NS	0.00	NS	0.00	NS	0.00	NS	0.00	NS	0.00	S
Hispanic American	1.16	NS	0.00	NS	0.00	NS	0.00	NS	0.00	NS	0.07	S
Native American	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
Other Minority	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
<i>Total Minority</i>	0.53	NS	0.00	S	0.09	S	0.12	S	0.05	S	0.06	S
WBE	0.48	S	0.13	S	0.52	S	0.11	S	0.13	S	0.17	S
Unknown M/WBE	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
Total M/WBE	0.49	S	0.10	S	0.44	S	0.11	S	0.12	S	0.15	S
SBE	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
VBE/DVOB	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S

Source: M³ Consulting; Raleigh Contracts Data, PeopleSoft PO and AP data; Relevant Market— Raleigh-Cary, NC MSA

Significance is S and Ratio is Less than 1—Statistically Significant Underutilization; Significance is S and Ratio is Greater than 1—Statistically Significant Overutilization.

7.4 Disparities in Construction and Construction-Related Services

Contract Awards, which include subcontractor data, represent the best measure of utilization and are presented in Table 7.4. For the period, based on RWASM Availability, Non-M/WBEs are significantly overutilized and M/WBEs are significantly underutilized, as are each Minority group and Minority-owned firms overall. WBEs are underutilized for the period, but the results do not reach significance; they are overutilized in FYs 2018, 2019 and 2021. Asian American- and Native American-owned firms reflect nonsignificant underutilization for every year but significant underutilization for the period. Hispanic American-owned firms are underutilized in every year of the study period and significantly so in FYs 2018, 2019 and 2020. Similarly, African American-owned firms are underutilized for every year and significantly in FYs 2019 and 2020.

All three utilization metrics in aggregate for the study period are presented in Table 7.5. Non-M/WBEs are significantly overutilized for all utilization metrics. When comparing Contract Awards to PO and Payments utilization, the results do not show a significant impact of M/WBE subcontractor utilization on disparity ratios. There is no substantial difference in results between Contract Awards, which account for subcontractors, and PO and Payments, which is a prime-level analysis, except for WBEs, who were non-significantly underutilized based on Contract Awards.

The outcomes change somewhat when disparity ratios are based on Marketplace Availability, shown in Table 7.6. Non-M/WBEs are significantly underutilized. Marketplace Availability for M/WBEs is almost half that of RWASM Availability, and the disparity results reflect that difference. African American-owned firms and WBEs are significantly overutilized. Hispanic American-owned firms continued to be significantly underutilized, while Asian American- and Native American-owned firms are underutilized, but not significantly.

**Table 7.4. Contract Awards Utilization vs. RWASM Availability Level 2
Construction and Construction-Related Services
City of Raleigh
State of North Carolina, FY 2017–FY 2021**

Ethnicity	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		Period	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	1.21	S	1.13	NS	1.13	S	1.32	S	1.03	NS	1.20	S
African American	0.41	NS	0.43	NS	0.41	S	0.23	S	0.45	NS	0.35	S
Asian American	0.38	NS	0.04	NS	0.01	NS	0.18	NS	0.00	NS	0.13	S
Hispanic American	0.28	NS	0.07	S	0.23	S	0.37	S	0.12	NS	0.25	S
Native American	0.06	NS	0.00	NS	0.06	NS	0.10	NS	0.00	NS	0.06	S
Other Minority	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
<i>Total Minority</i>	0.35	S	0.27	S	0.31	S	0.26	S	0.29	S	0.29	S
WBE	0.89	NS	1.26	NS	1.20	NS	0.54	S	1.58	S	0.96	NS
Unknown M/WBE	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
Total M/WBE	0.63	S	0.79	NS	0.78	NS	0.41	S	0.97	NS	0.64	S
SBE	0.00	NS	0.00	NS	0.00	NS	0.00	NS	0.00	NS	0.00	S
VBE/DVOB	0.00	NS	0.00	NS	0.00	NS	0.54	NS	0.00	NS	0.20	NS

Source: M³ Consulting; Raleigh Contracts Data, PeopleSoft PO and AP data; Relevant Market—State of North Carolina

Significance is S and Ratio is Less than 1—Statistically Significant Underutilization; Significance is S and Ratio is Greater than 1—Statistically Significant Overutilization.

**Table 7.5. Summary Disparity Ratios by Race, Ethnicity and Gender
Utilization vs. RWASM Availability Level 2
Construction and Construction-Related Services
City of Raleigh
State of North Carolina, FY 2017–FY 2021**

Ethnicity	Contract Awards		Purchase Order		Payments	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	1.20	S	1.36	S	1.36	S
African American	0.35	S	0.14	S	0.12	S
Asian American	0.13	S	0.00	S	0.00	S
Hispanic American	0.25	S	0.01	S	0.00	S
Native American	0.06	S	0.19	S	0.03	S
Other Minority	0.00	S	0.00	S	0.00	S
<i>Total Minority</i>	0.29	S	0.09	S	0.07	S
WBE	0.96	NS	0.53	S	0.58	S
Unknown M/WBE	0.00	S	0.00	S	0.00	S
Total M/WBE	0.64	S	0.32	S	0.34	S
SBE	0.00	S	0.25	S	0.11	S
VBE/DVOB	0.20	NS	0.05	NS	0.06	S

Source: Raleigh Contracts Data, PeopleSoft PO and AP data; M³ Consulting

Significance is S and Ratio is Less than 1—Statistically Significant Underutilization; Significance is S and Ratio is Greater than 1—Statistically Significant Overutilization.

**Table 7.6. Contract Awards Utilization vs. Data Axle Availability
Construction and Construction-Related Services
City of Raleigh
State of North Carolina, FY 2017–FY 2021**

Ethnicity	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		Period	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	0.96	NS	0.90	S	0.90	S	1.05	NS	0.82	S	0.96	S
African American	2.53	S	2.65	NS	2.50	S	1.40	NS	2.74	NS	2.14	S
Asian American	0.49	NS	0.05	NS	0.01	NS	0.23	NS	0.00	NS	0.17	NS
Hispanic American	0.25	S	0.06	S	0.20	S	0.32	S	0.10	NS	0.22	S
Native American	0.41	NS	0.00	NS	0.37	NS	0.65	NS	0.00	NS	0.38	NS
Other Minority	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
<i>Total Minority</i>	0.67	NS	0.52	NS	0.60	NS	0.51	S	0.56	NS	0.56	S
WBE	1.59	S	2.25	S	2.15	S	0.96	NS	2.83	S	1.71	S
Unknown M/WBE	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
Total M/WBE	1.17	NS	1.46	S	1.44	S	0.75	NS	1.80	S	1.18	S
SBE	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
VBE/DVOB	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S

Source: M³ Consulting; Raleigh Contracts Data, PeopleSoft PO and AP data; Relevant Market—State of North Carolina
Significance is S and Ratio is Less than 1 —Statistically Significant Underutilization; Significance is S and Ratio is Greater than 1 —Statistically Significant Overutilization.

7.5 Disparities in Non-Professional Services

Presented in Table 7.7, POs represent the best measure of utilization for Non-Professional Services. Using RWASM Availability, Non-M/WBEs are significantly underutilized for the period and in FYs 2017 and 2019; they are overutilized in the remaining three years of the study period, but not significantly. M/WBEs are nonsignificantly overutilized for the period. WBEs are significantly overutilized for the period and in FYs 2019 and 2021. African American-owned firms are significantly overutilized for every year and for the period. Hispanic American-owned firms are overutilized for four years of the study period, with the period and FYs 2019 and 2020 reflecting significance. Asian American- and Hispanic American-owned firms were nonsignificantly underutilized in every year, but significantly underutilized for the period.

When comparing PO and Payments disparity ratios, shown in Table 7.8, the findings are similar, except that for Payments, Non-M/WBEs are significantly overutilized and African American-owned firms are significantly underutilized and WBEs are nonsignificantly underutilized, which caused significant disparity for Minority-owned firms and M/WBEs. Contract Awards, also shown in Table 7.8, reflected nonsignificant underutilization for all groups except African American-owned firms, who were significantly overutilized.

Disparity based on Marketplace Availability in Table 7.9 reflects significant disparity for all groups, except Non-M/WBEs and African American-owned firms, both significantly overutilized. The results were consistent across the years, but African American-owned firm overutilization was not significant in any year, as was Native American-owned firm underutilization.

Table 7.7. Purchase Order Utilization vs. RWASM Availability Level 2
Non-Professional Services
City of Raleigh
State of North Carolina, FY 2017–FY 2021

Ethnicity	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		Period	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	0.98	S	1.02	NS	0.89	S	1.01	NS	1.00	NS	0.98	S
African American	3.53	S	2.06	S	1.85	S	1.51	S	1.62	S	1.99	S
Asian American	0.67	NS	0.04	NS	0.02	NS	0.05	NS	0.06	NS	0.13	S
Hispanic American	1.26	NS	0.97	NS	1.92	S	3.87	S	1.62	NS	2.10	S
Native American	0.00	NS	0.00	NS	0.43	NS	0.24	NS	0.25	NS	0.20	S
Other Minority	2.36	NS	0.71	NS	1.61	NS	0.05	NS	0.00	NS	0.79	NS
<i>Total Minority</i>	2.40	S	1.43	S	1.64	S	1.99	S	1.37	S	1.74	S
WBE	0.75	S	0.55	S	2.95	S	0.22	S	1.04	NS	1.07	NS
Unknown M/WBE	0.18	NS	0.00	NS	0.00	NS	0.00	NS	0.43	NS	0.12	S
Total M/WBE	1.32	S	0.85	NS	2.43	S	0.84	NS	1.14	NS	1.29	S
SBE	0.22	S	0.60	NS	0.09	S	0.01	S	0.03	S	0.16	S
VBE/DVOB	0.38	NS	0.00	NS	0.00	NS	3.39	S	0.00	NS	0.95	NS

Source: M³ Consulting; Raleigh Contracts Data, PeopleSoft PO and AP data; Relevant Market—State of North Carolina

Significance is S and Ratio is Less than 1—Statistically Significant Underutilization; Significance is S and Ratio is Greater than 1—Statistically Significant Overutilization.

**Table 7.8. Summary Disparity Ratios by Race, Ethnicity and Gender
Utilization vs. RWASM Availability Level 2
Non-Professional Services
City of Raleigh
State of North Carolina, FY 2017–FY 2021**

Ethnicity	Contract Awards		Purchase Orders		Payments	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	0.97	NS	0.98	S	1.02	S
African American	5.70	S	1.99	S	0.51	S
Asian American	0.00	NS	0.13	S	0.16	S
Hispanic American	0.31	NS	2.10	S	1.75	S
Native American	0.00	NS	0.20	S	0.00	S
Other Minority	0.00	NS	0.79	NS	0.32	NS
<i>Total Minority</i>	3.17	S	1.74	S	0.82	S
WBE	0.58	NS	1.07	NS	0.90	NS
Unknown M/WBE	0.00	NS	0.12	S	0.06	S
Total M/WBE	1.48	NS	1.29	S	0.85	S
SBE	0.00	NS	0.16	S	0.16	S
VBE/DVOB	0.00	NS	0.95	NS	1.10	NS

Source: Raleigh Contracts Data, PeopleSoft PO and AP data; M³ Consulting

Significance is S and Ratio is Less than 1—Statistically Significant Underutilization; Significance is S and Ratio is Greater than 1—Statistically Significant Overutilization.

Table 7.9. Purchase Order Utilization vs. Data Axle Availability

Non-Professional Services

City of Raleigh

State of North Carolina, FY 2017–FY 2021

Ethnicity	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		Period	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	1.49	S	1.55	S	1.36	S	1.54	S	1.51	S	1.49	S
African American	2.75	S	1.61	S	1.44	S	1.18	NS	1.26	NS	1.55	S
Asian American	0.08	S	0.00	S	0.00	S	0.01	S	0.01	S	0.02	S
Hispanic American	0.24	S	0.19	S	0.37	S	0.75	NS	0.31	S	0.41	S
Native American	0.00	NS	0.00	NS	0.45	NS	0.25	NS	0.26	NS	0.21	S
Other Minority	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
<i>Total Minority</i>	0.81	S	0.48	S	0.55	S	0.67	S	0.46	S	0.59	S
WBE	0.11	S	0.08	S	0.43	S	0.03	S	0.15	S	0.15	S
Unknown M/WBE	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
Total M/WBE	0.25	S	0.16	S	0.45	S	0.16	S	0.21	S	0.24	S
SBE	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
VBE/DVOB	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S

Source: M³ Consulting; Raleigh Contracts Data, PeopleSoft PO and AP data; Relevant Market—State of North Carolina

Significance is *S* and Ratio is Less than 1—Statistically Significant Underutilization; Significance is *S* and Ratio is Greater than 1—Statistically Significant Overutilization.

7.6 Disparities in Professional Services

POs represent the best measure of utilization for Professional Services and are presented in Table 7.10 using RWASM Availability. Non-M/WBEs are significantly overutilized for the period and every year, except FY 2017, when they are significantly underutilized. M/WBEs are significantly underutilized for the period and in every year, except FY 2017, when they are significantly overutilized. Minority-owned firms and WBEs are also overutilized in FY 2017, with WBEs reaching significance. African American-owned firms are significantly underutilized, while Hispanic American-owned firms are also underutilized, but not significantly so. African American-owned firms only reach significance for the study period, with each year of the period reflecting nonsignificant disparity. Hispanic American-owned firms' disparity outcome is impacted by significant overutilization in FY 2017 of 5.17, with all other years reflecting nonsignificant underutilization. Asian American- and Native American-owned firms reflect a similar pattern, as they reflect nonsignificant disparity, impacted by significant overutilization in FY 2018 for Native Americans of 5.80 and nonsignificant overutilization of 2.31 for Asian American-owned firms in FY 2019. All other years for both groups reflected nonsignificant underutilization. We note that there was only one Native American firm in RWASM Availability Level 2 and one firm utilized by Raleigh.

The three utilization metrics presented in Table 7.11 show very different results. Non-M/WBEs are overutilized based on Contract Awards and POs but underutilized for Payments, with POs as the only measure that reaches significance. While M/WBEs are significantly underutilized based on POs, they are nonsignificantly underutilized based on Contract Awards and nonsignificantly overutilized based on Payments. WBEs reflect the same patterns, while Minority-owned firms are nonsignificantly overutilized based on Contract Awards and Payments but significantly underutilized based on POs. African American- and Hispanic American-owned firm overutilization drives Contract Award Minority-owned firm overutilization, as does Asian American-owned overutilization for Payments.

Utilizing M/WBE Marketplace Availability, which is about 41%, compared to RWASM Availability of 10%, disparity ratios shown in Table 7.12 reflect significant underutilization for M/WBEs and all subgroups, except Native American-owned firms, who were significantly overutilized for the study period and in FYs 2018, 2019 and 2021. Non-M/WBEs were significantly overutilized for the period and all years.

Table 7.10. Purchase Order Utilization vs. RWASM Availability Level 2
Professional Services
City of Raleigh
State of North Carolina, FY 2017–FY 2021

Ethnicity	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		Period	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	0.93	S	1.06	S	1.08	S	1.08	S	1.09	S	1.06	S
African American	0.00	NS	0.00	NS	0.34	NS	0.07	NS	0.00	NS	0.15	S
Asian American	0.88	NS	0.83	NS	2.31	NS	0.00	NS	0.00	NS	1.08	NS
Hispanic American	5.17	S	0.75	NS	0.00	NS	0.00	NS	0.20	NS	0.77	NS
Native American	0.00	NS	5.80	S	0.56	NS	0.00	NS	0.43	NS	1.09	NS
Other Minority	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
<i>Total Minority</i>	1.10	NS	0.81	NS	0.66	NS	0.04	NS	0.07	S	0.52	S
WBE	1.98	S	0.27	S	0.18	S	0.42	NS	0.35	NS	0.50	S
Unknown M/WBE	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
Total M/WBE	1.66	S	0.47	S	0.36	S	0.28	S	0.25	S	0.51	S
SBE	0.12	NS	0.00	NS	0.00	NS	0.00	NS	0.00	NS	0.02	NS
VBE/DVOB	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S

Source: M³ Consulting; Raleigh Contracts Data, PeopleSoft PO and AP data; Relevant Market—State of North Carolina

Significance is S and Ratio is Less than 1—Statistically Significant Underutilization; Significance is S and Ratio is Greater than 1—Statistically Significant Overutilization.

**Table 7.11. Summary Disparity Ratios by Race, Ethnicity and Gender
Utilization vs. RWASM Availability Level 2
Professional Services
City of Raleigh
State of North Carolina, FY 2017–FY 2021**

Ethnicity	Contract Awards		Purchase Orders		Payments	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	1.02	NS	1.06	S	0.99	NS
African American	1.23	NS	0.15	S	0.66	NS
Asian American	0.00	NS	1.08	NS	4.64	S
Hispanic American	9.62	S	0.77	NS	0.47	NS
Native American	0.00	NS	1.09	NS	0.00	NS
Other Minority	0.00	S	0.00	S	0.00	S
<i>Total Minority</i>	2.42	NS	0.52	S	1.29	NS
WBE	0.00	NS	0.50	S	1.04	NS
Unknown M/WBE	0.00	S	0.00	S	0.00	S
Total M/WBE	0.89	NS	0.51	S	1.13	NS
SBE	0.00	NS	0.02	NS	0.00	NS
VBE/DVOB	0.00	S	0.00	S	0.00	S

Source: Raleigh Contracts Data, PeopleSoft PO and AP data; M³ Consulting

Significance is S and Ratio is Less than 1—Statistically Significant Underutilization; Significance is S and Ratio is Greater than 1—Statistically Significant Overutilization.

Table 7.12. Purchase Order Utilization vs. Data Axle Availability

Professional Services

City of Raleigh

State of North Carolina, FY 2017–FY 2021

Ethnicity	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		Period	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	1.42	S	1.62	S	1.64	S	1.65	S	1.66	S	1.61	S
African American	0.00	NS	0.00	NS	0.41	NS	0.08	NS	0.00	NS	0.17	S
Asian American	0.16	S	0.15	S	0.43	NS	0.00	NS	0.00	S	0.20	S
Hispanic American	1.03	NS	0.15	S	0.00	S	0.00	NS	0.04	S	0.15	S
Native American	0.00	NS	19.87	S	1.93	NS	0.00	NS	1.46	NS	3.74	S
Other Minority	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
<i>Total Minority</i>	0.46	S	0.34	S	0.28	S	0.02	S	0.03	S	0.22	S
WBE	0.39	S	0.05	S	0.04	S	0.08	S	0.07	S	0.10	S
Unknown M/WBE	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
Total M/WBE	0.40	S	0.11	S	0.09	S	0.07	S	0.06	S	0.12	S
SBE	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
VBE/DVOB	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S

Source: M³ Consulting; Raleigh Contracts Data, PeopleSoft PO and AP data; Relevant Market—State of North Carolina

Significance is S and Ratio is Less than 1—Statistically Significant Underutilization; Significance is S and Ratio is Greater than 1—Statistically Significant Overutilization.

7.7 Disparities in Goods & Supplies

For Goods & Supplies, shown in Table 7.13, PO data better reflects the utilization because of requirements contracts that are prevalent in this procurement category, along with capturing informal purchases. All three utilization metrics in aggregate for the study period are presented in Table 7.14, and disparity based on Marketplace Availability is presented in Table 7.15.

M/WBEs, WBEs and all Minority groups are significantly underutilized for every year and for the study period utilizing RWASM Availability, while Non-M/WBEs are significantly overutilized. The results are the same for both POs and Payments, while Contract Awards reflects nonsignificant overutilization for Non-M/WBEs and nonsignificant underutilization for all groups except Other Minority-owned firms, which reached significance. However, Contract Awards findings for Goods & Supplies are impacted by limited data availability. This result does not change when utilizing Marketplace Availability, except for Native American-owned firms in FY 2021, where they are nonsignificantly underutilized.

Table 7.13. Purchase Order Utilization vs. RWASM Availability Level 2
Goods & Supplies
City of Raleigh
Nationwide, FY 2017–FY 2021

Ethnicity	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		Period	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	1.02	S	1.03	S	1.03	S	1.02	S	1.02	S	1.03	S
African American	0.11	S	0.02	S	0.05	S	0.24	S	0.25	S	0.13	S
Asian American	0.09	S	0.06	S	0.08	S	0.00	S	0.04	S	0.06	S
Hispanic American	0.33	S	0.30	S	0.15	S	0.11	S	0.32	S	0.24	S
Native American	0.00	S	0.00	S	0.00	S	0.00	S	0.12	S	0.02	S
Other Minority	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
<i>Total Minority</i>	0.18	S	0.12	S	0.08	S	0.15	S	0.24	S	0.15	S
WBE	0.42	S	0.19	S	0.41	S	0.50	S	0.47	S	0.39	S
Unknown M/WBE	0.00	S	0.02	S	0.00	S	0.00	S	0.00	S	0.00	S
Total M/WBE	0.36	S	0.17	S	0.33	S	0.42	S	0.42	S	0.34	S
SBE	0.00	S	0.15	S	0.00	S	0.59	NS	0.23	S	0.17	S
VBE/DVOB	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S

Source: M³ Consulting; Raleigh Contracts Data, PeopleSoft PO and AP data; Relevant Market—Nationwide

Significance is S and Ratio is Less than 1—Statistically Significant Underutilization; Significance is S and Ratio is Greater than 1—Statistically Significant Overutilization.

**Table 7.14. Summary Disparity Ratios by Race, Ethnicity and Gender
Utilization vs. RWASM Availability Level 2
Goods & Supplies
City of Raleigh
Nationwide, FY 2017–FY 2021**

Ethnicity	Contract Awards		Purchase Orders		Payments	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	1.04	NS	1.03	S	1.03	S
African American	0.00	NS	0.13	S	0.08	S
Asian American	0.00	NS	0.06	S	0.01	S
Hispanic American	0.00	NS	0.24	S	0.16	S
Native American	0.00	NS	0.02	S	0.00	S
Other Minority	0.00	S	0.00	S	0.00	S
<i>Total Minority</i>	0.00	NS	0.15	S	0.09	S
WBE	0.00	NS	0.39	S	0.33	S
Unknown M/WBE	0.00	NS	0.00	S	0.00	S
Total M/WBE	0.00	NS	0.34	S	0.28	S
SBE	0.00	NS	0.17	S	0.14	S
VBE/DVOB	0.00	S	0.00	S	0.00	S

Source: Raleigh Contracts Data, PeopleSoft PO and AP data; M³ Consulting

Significance is S and Ratio is Less than 1—Statistically Significant Underutilization; Significance is S and Ratio is Greater than 1—Statistically Significant Overutilization.

CHAPTER 7 // STATISTICAL ANALYSIS OF M/WBE DISPARITY IN CONTRACTING

CITY OF RALEIGH DISPARITY STUDY

Table 7.15. Purchase Order Utilization vs. Data Axle Availability

Goods & Supplies

City of Raleigh

Nationwide, FY 2017–FY 2021

Ethnicity	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		Period	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	1.47	S	1.48	S	1.47	S	1.47	S	1.47	S	1.47	S
African American	0.02	S	0.00	S	0.01	S	0.05	S	0.05	S	0.02	S
Asian American	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
Hispanic American	0.02	S	0.02	S	0.01	S	0.01	S	0.02	S	0.01	S
Native American	0.00	S	0.00	S	0.00	S	0.00	S	0.13	NS	0.02	S
Other Minority	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
<i>Total Minority</i>	0.01	S	0.01	S	0.01	S	0.01	S	0.02	S	0.01	S
WBE	0.05	S	0.02	S	0.05	S	0.06	S	0.06	S	0.05	S
Unknown M/WBE	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
Total M/WBE	0.04	S	0.02	S	0.04	S	0.05	S	0.04	S	0.04	S
SBE	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S
VBE/DVOB	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S	0.00	S

Source: M³ Consulting; Raleigh Contracts Data, PeopleSoft PO and AP data; Relevant Market—Nationwide

Significance is S and Ratio is Less than 1—Statistically Significant Underutilization; Significance is S and Ratio is Greater than 1—Statistically Significant Overutilization.

7.8 Summary of Findings

Table 7.16 summarizes the disparity ratios discussed in this chapter for each procurement category at the race/ethnic/gender group level for Raleigh procurements for the period FY 2017–FY 2021. Based on the foregoing analysis and the summary below, findings of statistically significant disparity are made for the following groups in the following procurement categories:

- **AES-Design Services**—Asian American-owned firms, Hispanic American-owned firms, WBEs
- **Construction and Construction-Related Services**—African American-owned firms, Asian American-owned firms, Hispanic American-owned firms, Native American-owned firms
- **Non-Professional Services**—Asian American-owned firms, Native American-owned firms
- **Professional Services**—African American-owned firms, WBEs
- **Goods & Supplies**—African American-owned firms, Asian American-owned firms, Hispanic American-owned firms, Native American-owned firms, WBEs

**Table 7.16. Summary Disparity Ratios by Race, Ethnicity and Gender
Utilization vs. RWASM Availability Level 2
City of Raleigh
Relevant Market, FY 2017–FY 2021**

Ethnicity	AES-Design Services ² (Purchase Orders)		Construction & Construction-Related Services ³ (Contract Awards)		Non-Professional Services ³ (Purchase Orders)		Professional Services ³ (Purchase Orders)		Goods & Supplies ¹ (Purchase Orders)	
	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.	Ratio	Sign.
Non-M/WBE	1.19	S	1.20	S	0.98	S	1.06	S	1.03	S
African American	0.00	NS	0.35	S	1.99	S	0.15	S	0.13	S
Asian American	0.00	S	0.13	S	0.13	S	1.08	NS	0.06	S
Hispanic American	0.12	S	0.25	S	2.10	S	0.77	NS	0.24	S
Native American	0.33	NS	0.06	S	0.20	S	1.09	NS	0.02	S
Other Minority	0.00	S	0.00	S	0.79	NS	0.00	S	0.00	S
<i>Total Minority</i>	0.09	S	0.29	S	1.74	S	0.52	S	0.15	S
WBE	0.35	S	0.96	NS	1.07	NS	0.50	S	0.39	S
Unknown M/WBE	0.00	S	0.00	S	0.12	S	0.00	S	0.00	S
Total M/WBE	0.29	S	0.64	S	1.29	S	0.51	S	0.34	S
SBE	0.00	S	0.00	S	0.16	S	0.02	NS	0.17	S
VBE/DVOB	0.09	NS	0.20	NS	0.95	NS	0.00	S	0.00	S

Source: Raleigh Contracts Data, PeopleSoft PO and AP data; M³ Consulting

Significance is S and Ratio is Less than 1—Statistically Significant Underutilization; Significance is S and Ratio is Greater than 1—Statistically Significant Overutilization.

¹Nationwide

²Raleigh-Cary, NC MSA

³State of North Carolina

Chapter 8: Capacity and Regression Analysis

8.1 Introduction

Disparities, as seen in Chapter 7, are often attributed to differences in capacity of Minority and Women-owned Business Enterprises (M/WBEs) and Non-M/WBEs. As such, this capacity analysis sought to examine if there were any differences in the capacity of firms based on race or gender that could hinder firms from being actually and potentially available to the City of Raleigh.

8.2 Capacity Analysis

The analysis of business capacity is complicated because capacity is difficult to define and measure and is an elastic concept. Given that proxies of capacity cannot adequately capture the ability of firms using any single measure, Miller³ Consulting, Inc. (M³ Consulting) will examine differences in the capacity of firms based on race and gender, using established statistical methods, once a set of variables that measure capacity are controlled for.

8.2.1 Capacity Analysis Based on Average Employees and Average Sales Revenues from U.S. Census Annual Survey of Entrepreneurs

U.S. Census Annual Survey of Entrepreneurs reflects capacity measures by the number of paid employees and annual payroll in the Raleigh-Cary, North Carolina metropolitan statistical area (NC MSA). We report these measures for Construction, Professional Services, Non-Professional Services, and Goods & Supplies. It is pertinent to note that the ASE tables do not include estimates withheld by Census to avoid disclosing data for individual companies or estimates that do not meet publication standards because of high sampling variability, poor response quality, or other concerns about the estimate quality. In cases where estimates were not provided, M³ Consulting assigned a zero.

Construction

For Construction, as shown in Table 8.1, total M/WBEs represented 24.90% of the total 3,181 firms with paid employees in the MSA. Minority-owned firms account for 14.21%, WBEs 10.69%, and Veteran-Owned Businesses (VBEs) 9.59%, respectively, of the total firms. Among the Minority-owned firms, African American-owned firms were a little over 2.0%, while Hispanic American-owned firms were 8.83%, Native American-owned firms were 1.13% of firms with paid employees and there were no Asian American-owned firms.

If capacity were to be measured by the number of paid employees, Hispanic American-owned firms had 1,895 employees (9.61% of the total) and VBEs had 1,349 (6.84% of the total). African American-, Asian American- and Native American-owned firms and WBEs had no paid employees. In line with that, Hispanic American-owned firms and VBEs accounted for 8.75% and 7.09% of the total annual payroll, respectively.

Goods & Supplies

With 13.87% and 8.88% of firms with paid employees, respectively, WBEs and Asian American-owned firms have the highest capacity among M/WBEs for Goods & Supplies reflected in Table 8.2. They are followed by Hispanic American-owned firms at 3.54%. VBEs and African American-owned firms accounted for 6.96% and only 0.69% of firms with paid employees, respectively, while Other Minority-owned firms came in at 1.38%.

Results were similar for capacity based on number of paid employees and annual payroll. Asian American-owned firms and WBEs reflected 3.73% and 17.24% of number of paid employees and 2.10% and 15.57% of annual payroll, respectively. Hispanic American-owned firms had 1.96% and VBEs had 2.27% of firms with paid employees and 1.32% and 4.35% of annual payroll, respectively. While Minority-owned firms made up 14.53% of firms with paid employees, only 5.69% of these firms had paid employees and 3.43% had annual payroll.

Non-Professional Services

Amongst M/WBEs in Non-Professional Services (Table 8.3), Minority-owned firms and WBEs had 34% of firms with paid employees. Asian American- and African American-owned firms and WBEs represented 6.79%, 4.32% and 16.16% of firms with paid employees, respectively. Hispanic American-owned firms came in at 4.81%, while Other Minority-owned firms were at 1.62%. VBEs represented 4.66% of firms with paid employees.

Results for number of paid employees and annual payroll were less representative of Minority-owned firms and barely included any WBEs. WBEs reflected 0.52% for number of paid employees and 0.78% of annual payroll. Asian American- and Hispanic American-owned firms reflected 5.19% and 4.46% of number of paid employees and less than 3% each of annual payroll. African American-owned firms had the smallest capacity with only 0.31% and 0.13% of number of paid employees and payroll, respectively. VBEs represented 0.96% of paid employees and only 0.44% of payroll.

Professional Services

Based on Table 8.4, in Professional Services, WBEs had 1,883 firms with paid employees that represented 23.22% of the total, while there were 1,505 Minority-owned firms that represent 18.56% of firms with paid employees. Minority-owned firms that led this were Asian American owned (8.34%), African American owned (7.05%) and Hispanic American owned (1.29%). The remaining Minority-owned firms represented were at 1% or less of firms with paid employees. WBEs also had a good number of paid employees and annual payroll at 17.83% and 10.36%, compared to Minority-owned firms at 6.23% and 2.93%. African American-owned firms accounted for the majority of paid employees (4.97%) and annual payroll (1.94%) among Minority-owned firms. VBEs represented 5.78% of firms with paid employees, with no paid employees and no annual payroll among professional firms in the MSA.

Overall, among M/WBEs, African American-owned firms had the greatest capacity in Professional Services, Asian American-owned firms in Professional and Non-Professional Services and Goods & Supplies; Hispanic American-owned firms in Construction and Non-Professional Services and WBEs in Professional and Non-Professional Services as well as Goods & Supplies.

**Table 8.1. Census Capacity
Construction
Raleigh-Cary, NC MSA, 2020**

Ethnicity	# Firms with Paid Employees		Number of paid employees		Annual payroll (\$1,000)	
	#	%	#	%	#	%
Non-M/WBE	2,084	65.51	16,011	81.22	713,277	82.41
African American	74	2.33	-	0.00	-	0.00
Asian American	-	0.00	-	0.00	-	0.00
Hispanic American	281	8.83	1,895	9.61	75,772	8.75
Native American	36	1.13	-	0.00	-	0.00
Other Minority	61	1.92	459	2.33	15,116	1.75
<i>Total Minority</i>	<i>452</i>	<i>14.21</i>	<i>2,354</i>	<i>11.94</i>	<i>90,888</i>	<i>10.50</i>
WBE	340	10.69	-	0.00	-	0.00
Other M/WBE		0.00	-	0.00	-	0.00
Total M/WBE	792	24.90	2,354	11.94	90,888	10.50
VBE	305	9.59	1,349	6.84	61,342	7.09
Total	3,181	100.00	19,714	100.00	865,507	100.00

Source: M³ Consulting; Census ASE

*Does not include: 1. Estimates withheld to avoid disclosing data for individual companies; 2. Estimate that does not meet publication standards because of high sampling variability, poor response quality or other concerns about the estimate quality.

**Table 8.2. Census Capacity
Goods & Supplies
Raleigh-Cary, NC MSA, 2020**

Ethnicity	# Firms with Paid Employees		Number of paid employees		Annual payroll (\$1,000)	
	#	%	#	%	#	%
Non-M/WBE	2,154	64.65	19,850	74.80	755,395	76.66
African American	23	0.69	-	0.00	-	0.00
Asian American	296	8.88	991	3.73	20,732	2.10
Hispanic American	118	3.54	519	1.96	13,038	1.32
Native American	1	0.03	-	0.00	-	0.00
Other Minority	46	1.38	-	0.00	-	0.00
<i>Total Minority</i>	<i>484</i>	<i>14.53</i>	<i>1,510</i>	<i>5.69</i>	<i>33,770</i>	<i>3.43</i>
WBE	462	13.87	4,575	17.24	153,412	15.57
Other M/WBE		0.00	-	0.00	-	0.00
Total M/WBE	946	28.39	6,085	22.93	187,182	18.99
VBE	232	6.96	603	2.27	42,852	4.35
Total	3,332	100.00	26,538	100.00	985,429	100.00

Source: M³ Consulting; Census ASE

*Does not include: 1. Estimates withheld to avoid disclosing data for individual companies; 2. Estimate that does not meet publication standards because of high sampling variability, poor response quality or other concerns about the estimate quality.

**Table 8.3. Census Capacity
Non-Professional Services
Raleigh-Cary, NC MSA, 2020**

Ethnicity	# Firms with Paid Employees		Number of paid employees		Annual payroll (\$1,000)	
	#	%	#	%	#	%
Non-M/WBE	4,517	61.34	71,684	88.57	2,666,585	93.79
African American	318	4.32	249	0.31	3,584	0.13
Asian American	500	6.79	4,197	5.19	77,306	2.72
Hispanic American	354	4.81	3,608	4.46	60,833	2.14
Native American	3	0.31	-	0.00	-	0.00
Other Minority	119	1.62	-	0.00	-	0.00
<i>Total Minority</i>	<i>1,314</i>	<i>17.84</i>	<i>8,054</i>	<i>9.95</i>	<i>141,723</i>	<i>4.98</i>
WBE	1,190	16.16	422	0.52	22,220	0.78
Other M/WBE	-	0.00	-	0.00	-	0.00
Total M/WBE	2,504	34.00	8,476	10.47	163,943	5.77
VBE	343	4.66	778	0.96	12,505	0.44
Total	7,364	100.00	80,938	100.00	2,843,033	100.00

Source: M³ Consulting; Census ASE

*Does not include: 1. Estimates withheld to avoid disclosing data for individual companies; 2. Estimate that does not meet publication standards because of high sampling variability, poor response quality or other concerns about the estimate quality.

**Table 8.4. Census Capacity
Professional Services
Raleigh-Cary, NC MSA, 2020**

Ethnicity	# Firms with Paid Employees		Number of paid employees		Annual payroll (\$1,000)	
	#	%	#	%	#	%
Non-M/WBE	4,230	52.16	45,820	75.95	2,352,506	86.71
African American	572	7.05	2,997	4.97	52,727	1.94
Asian American	676	8.34	760	1.26	26,715	0.98
Hispanic American	105	1.29	-	0.00	-	0.00
Native American	67	0.83	-	0.00	-	0.00
Other Minority	85	1.05	-	0.00	-	0.00
<i>Total Minority</i>	<i>1,505</i>	<i>18.56</i>	<i>3,757</i>	<i>6.23</i>	<i>79,442</i>	<i>2.93</i>
WBE	1,883	23.22	10,756	17.83	281,108	10.36
Other M/WBE	23	0.28	-	0.00	-	0.00
Total M/WBE	3,411	42.06	14,513	24.05	360,550	13.29
VBE	469	5.78	-	0.00	-	0.00
Total	8,110	100.00	60,333	100.00	2,713,056	100.00

Source: M³ Consulting; Census ASE

*Does not include: 1. Estimates withheld to avoid disclosing data for individual companies; 2. Estimate that does not meet publication standards because of high sampling variability, poor response quality or other concerns about the estimate quality.

8.2.2 Capacity Analysis Based on Average Employees and Average Sales Revenues from Data Axle

Below are measures of sales and employees from firms in the Raleigh-Durham-Cary, NC CBSA, which provide a measure of the capacity of the race, ethnic and gender groups of firms measured by these proxies for capacity. Firms included in the Data Axle analysis are refined to those that fall into SIC and NAICS code areas under review for this Disparity Study.

Capacity Based on Number of Employees

Total Firms

Using Table 8.5 to compare capacity of firms measured by the number of employees, for firms in the lowest range of 1–19 employees, there are close to 4,272 M/WBEs, with 3,275 (17.05%) of these WBEs, 997 (5.19%) Minority-owned firms and over 7,400 Non-M/WBEs. As capacity (number of employees) increases, M/WBEs decline to only eight firms in the 100–249 employee range to one firm for higher ranges less than 5,000 employees. There were no WBE firms with greater than 1,000 employees, but they were represented in the ranges below that. While all race/ethnic groups had firms in all ranges below 250 employees, only one Native American-owned and one African American-owned firm had employees in some of the higher ranges up to 5,000 employees.

Architecture and Engineering

Based on Table 8.6, for Architecture and Engineering, the highest range was 500–999, where there was one Non-M/WBE and one WBE. Only one African American-owned firm had employees in the 50–99 or lower range and one Asian American-owned firm had employees in the 1–19 employee range. For any range below 500, there were over 48% of firms that were owned by Unknown Multiethnic groups.

Construction

For Construction (Table 8.7), only one firm, Unknown Multiethnic, was represented in the range 500–999. And no firms were in any group with a larger employee range. Non-M/WBEs represented about 25–53% in other lower ranges. Only two African American-owned firms and one Hispanic-owned firm were represented in the 100–249 employee range among M/WBEs. In addition, African American-owned firms had employees in the 1–19 and 50–99 range. Only one Asian American-owned firm was in the 50–99 range and nine in the 1–19 range, while one Hispanic American-owned firm was in the 100–249 range and 75 of the Hispanic American-owned firms had employees in the 1–19 employee range. Unknown Multiethnic firms represented least 35% of firms with 1,000 employees or less, with their highest in terms of numbers in the ranges of 1–19 range.

Goods & Supplies

Table 8.8 shows that most Goods & Supplies' companies have one Non-M/WBE and one African American-owned firm with 1,000–4,999 employees. Only four Non-M/WBEs and eight Unknown Multiethnic-owned firms had employees in the 250–499 range. Minority-owned firms largely were concentrated in the 1–19 range with 14 firms in the 20–49 range and only two Hispanic American-owned firms in the 100–249 range. Ten WBEs and one African American-, one Asian American- and one Hispanic American-owned firm had employees in the 50–99 range.

Non-Professional Services

Three Non-M/WBEs and four Unknown Multiethnic firms were in the highest (500–999) employee range for Non-Professional Services. WBEs had employees in all ranges up to 499 employees with the largest

concentration in the lower end of less than 50 employees. Minority-owned firms were largely in the 1–19 employee range, where African American-, Asian American- and Hispanic American-owned firms had employees in the 20–49 range and 50–99 range, but only one Asian American-owned firm had employees in the 100–249 range. Unknown multiethnic group has employees in all ranges from 1–19 to 250–499 employees.

Professional Services

Professional Services, in Table 8.10, had Non-M/WBEs with employees across all employee ranges and WBEs in all ranges less than 500 employees. Minority-owned firms were largely concentrated in the 1–19 employee range, but 2 African American-owned firms and 3 Hispanic American-owned firms had employees in the 20–49 range and two Asian American-owned and one Hispanic American-owned firm were in the 50–99 employee range. One Hispanic American-owned firm had employees in the 100–249 range. Unknown multiethnic group represented about 42–75% of all employee ranges lower than 500 employees.



Table 8.5. Data Axle Capacity Based on Total Number of Employees Total Raleigh-Durham-Cary, NC (CBSA), FY 2021											
Ethnicity	1–19		20–49		50–99		100–249		250–499		
	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	7,442	38.75	521	29.35	181	30.17	90	26.71	15	34.09	
African American	205	1.07	11	0.62	5	0.83	3	0.89	-	0.00	
Asian American	283	1.47	15	0.85	6	1.00	1	0.30	-	0.00	
Hispanic American	499	2.60	24	1.35	6	1.00	4	1.19	-	0.00	
Native American	10	0.05	1	0.06	1	0.17	-	0.00	-	0.00	
Total Minority	997	5.19	51	2.87	18	3.00	8	2.37	-	0.00	
WBE	3,275	17.05	254	14.31	62	10.33	37	10.98	4	9.09	
Total M/WBE	4,272	22.24	305	17.18	80	13.33	45	13.35	4	9.09	
Unknown Multiethnic	7,492	39.01	949	53.46	339	56.50	202	59.94	25	56.82	
Grand Total	19,206	100.00	1,775	100.00	600	100.00	337	100.00	44	100.00	

Source: 2021 Data Axle Data; M³ Consulting

Table 8.5 cont. Data Axle Capacity Based on Total Number of Employees Total Raleigh-Durham-Cary, NC (CBSA), FY 2021											
Ethnicity	500–999		1,000–4,999		5,000–9,999		10,000+		Grand Total		
	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	6	26.09	2	33.33	-	0.00	1	100.00	8,258	37.55	
African American	-	0.00	1	16.67	-	0.00	-	0.00	225	1.02	
Asian American	-	0.00	-	0.00	-	0.00	-	0.00	305	1.39	
Hispanic American	-	0.00	-	0.00	-	0.00	-	0.00	533	2.42	
Native American	1	4.35	-	0.00	-	0.00	-	0.00	13	0.06	
Total Minority	1	4.35	1	16.67	-	0.00	-	0.00	1,076	4.89	
WBE	1	4.35	-	0.00	-	0.00	-	0.00	3,633	16.52	
Total M/WBE	2	8.70	1	16.67	-	0.00	-	0.00	4,709	21.41	
Unknown Multiethnic	15	65.22	3	50.00	1	100.00	-	0.00	9,026	41.04	
Grand Total	23	100.00	6	100.00	1	100.00	1	100.00	21,993	100.00	

Source: 2021 Data Axle Data; M³ Consulting

Table 8.6. Data Axle Capacity Based on Total Number of Employees AES Design Services Raleigh-Durham-Cary, NC (CBSA), FY 2021										
Ethnicity	1–19		20–49		50–99		100–249		250–499	
	#	%	#	%	#	%	#	%	#	%
Non-M/WBE	18	38.30	10	34.48	10	47.62	1	50.00	18	38.30
African American	1	2.13	-	0.00	1	4.76	-	0.00	1	2.13
Asian American	1	2.13	-	0.00	-	0.00	-	0.00	1	2.13
Hispanic American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Native American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Total Minority	2	4.26	-	0.00	1	4.76	-	0.00	2	4.26
WBE	4	8.51	4	13.79	-	0.00	-	0.00	4	8.51
Total M/WBE	6	12.77	4	13.79	1	4.76	-	0.00	6	12.77
Unknown Multiethnic	23	48.94	15	51.72	10	47.62	1	50.00	23	48.94
Grand Total	47	100.00	29	100.00	21	100.00	2	100.00	47	100.00

Source: 2021 Data Axle Data; M³ Consulting



Table 8.6 cont. Data Axle Capacity Based on Total Number of Employees AES Design Services Raleigh-Durham-Cary, NC (CBSA), FY 2021									
Ethnicity	500–999		1,000–4,999		5,000–9,999		Grand Total		
	#	%	#	%	#	%	#	%	
Non-M/WBE	1	50.00	-	0.00	-	0.00	250	33.97	
African American	-	0.00	-	0.00	-	0.00	10	1.36	
Asian American	-	0.00	-	0.00	-	0.00	7	0.95	
Hispanic American	-	0.00	-	0.00	-	0.00	11	1.49	
Native American	-	0.00	-	0.00	-	0.00	-	0.00	
Total Minority	-	0.00	-	0.00	-	0.00	28	3.80	
WBE	1	50.00	-	0.00	-	0.00	124	16.85	
Total M/WBE	1	50.00	-	0.00	-	0.00	152	20.65	
Unknown Multiethnic	-	0.00	-	0.00	-	0.00	334	45.38	
Grand Total	2	100.00	-	0.00	-	0.00	736	100.00	

Source: 2021 Data Axle Data; M³ Consulting

Table 8.7. Data Axle Capacity Based on Total Number of Employees Construction and Construction-Related Services Raleigh-Durham-Cary, NC (CBSA), FY 2021												
Ethnicity	1–19		20–49		50–99		100–249		250–499			
	#	%	#	%	#	%	#	%	#	%	#	%
Non-M/WBE	1,022	52.82	72	43.11	9	31.67	6	30.00	1	25.00		
African American	16	0.83	-	0.00	1	1.67	2	10.00	-	0.00		
Asian American	9	0.47	-	0.00	1	1.67	-	0.00	-	0.00		
Hispanic American	75	3.88	4	2.40	-	0.00	1	5.00	-	0.00		
Native American	-	0.00	1	0.60	-	0.00	-	0.00	-	0.00		
<i>Total Minority</i>	<i>100</i>	<i>5.17</i>	<i>5</i>	<i>2.99</i>	<i>2</i>	<i>3.33</i>	<i>3</i>	<i>15.00</i>	<i>-</i>	<i>0.00</i>		
WBE	118	6.10	13	7.78	3	5.00	-	0.00	-	0.00		
Total M/WBE	218	11.27	18	10.78	5	8.33	3	15.00	-	0.00		
Unknown Multiethnic	695	35.92	77	46.11	36	60.00	11	55.00	3	75.00		
Grand Total	1,935	100.00	167	100.00	60	100.00	20	100.00	4	100.00		

Source: 2021 Data Axle Data; M³ Consulting

Table 8.7 cont. Data Axle Capacity Based on Total Number of Employees Construction and Construction-Related Services Raleigh-Durham-Cary, NC (CBSA), FY 2021									
Ethnicity	500–999		1,000–4,999		5,000–9,999		Grand Total		
	#	%	#	%	#	%	#	%	%
Non-M/WBE	-	0.00	-	0.00	-	0.00	1,120	51.21	
African American	-	0.00	-	0.00	-	0.00	19	0.87	
Asian American	-	0.00	-	0.00	-	0.00	10	0.46	
Hispanic American	-	0.00	-	0.00	-	0.00	80	3.66	
Native American	-	0.00	-	0.00	-	0.00	1	0.05	
Total Minority	-	0.00	-	0.00	-	0.00	110	5.03	
WBE	-	0.00	-	0.00	-	0.00	134	6.13	
Total M/WBE	-	0.00	-	0.00	-	0.00	244	11.16	
Unknown Multiethnic	1	100.00	-	0.00	-	0.00	823	37.63	
Grand Total	1	100.00	-	0.00	-	0.00	2,187	100.00	

Source: 2021 Data Axle Data; M³ Consulting

Table 8.8. Data Axle Capacity Based on Total Number of Employees Goods & Supplies Raleigh-Durham-Cary, NC (CBSA), FY 2021											
Ethnicity	1–19		20–49		50–99		100–249		250–499		
	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	1,363	40.71	105	28.61	42	30.66	19	20.88	4	33.33	
African American	36	1.08	2	0.54	1	0.73	-	0.00	-	0.00	
Asian American	73	2.18	3	0.82	1	0.73	-	0.00	-	0.00	
Hispanic American	95	2.84	9	2.45	1	0.73	2	2.20	-	0.00	
Native American	1	0.03	-	0.00	-	0.00	-	0.00	-	0.00	
Total Minority	205	6.12	14	3.81	3	2.19	2	2.20	-	0.00	
WBE	466	13.92	42	11.44	10	7.30	3	3.30	-	0.00	
Total M/WBE	671	20.04	56	15.26	13	9.49	5	5.49	-	0.00	
Unknown Multiethnic	1,314	39.25	206	56.13	82	59.85	67	73.63	8	66.67	
Grand Total	3,348	100.00	367	100.00	137	100.00	91	100.00	12	100.00	

Source: 2021 Data Axle Data; M³ Consulting



Table 8.8 cont. Data Axle Capacity Based on Total Number of Employees Goods & Supplies Raleigh-Durham-Cary, NC (CBSA), FY 2021									
Ethnicity	500–999		1,000–4,999		5,000–9,999		Grand Total		
	#	%	#	%	#	%	#	%	%
Non-M/WBE	1	16.67	1	50.00	-	0.00	1,535	38.73	
African American	-	0.00	1	50.00	-	0.00	40	1.01	
Asian American	-	0.00	-	0.00	-	0.00	77	1.94	
Hispanic American	-	0.00	-	0.00	-	0.00	107	2.70	
Native American	-	0.00	-	0.00	-	0.00	1	0.03	
<i>Total Minority</i>	-	<i>0.00</i>	<i>1</i>	<i>50.00</i>	-	<i>0.00</i>	<i>225</i>	<i>5.68</i>	
WBE	-	0.00	-	0.00	-	0.00	521	13.15	
Total M/WBE	-	0.00	1	50.00	-	0.00	746	18.82	
Unknown Multiethnic	5	83.33	-	0.00	-	0.00	1,682	42.44	
Grand Total	6	100.00	2	100.00	-	0.00	3,963	100.00	

Source: 2021 Data Axle Data; M³ Consulting



Table 8.9. Data Axle Capacity Based on Total Number of Employees Non-Professional Services Raleigh-Durham-Cary, NC (CBSA), FY 2021											
Ethnicity	1-19		20-49		50-99		100-249		250-499		
	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	3,181	37.72	258	28.20	85	30.25	39	27.08	8	44.44	
African American	97	1.15	6	0.66	3	1.07	-	0.00	-	0.00	
Asian American	91	1.08	11	1.20	2	0.71	1	0.69	-	0.00	
Hispanic American	222	2.63	8	0.87	4	1.42	-	0.00	-	0.00	
Native American	7	0.08	-	0.00	1	0.36	-	0.00	-	0.00	
Total Minority	417	4.94	25	2.73	10	3.56	1	0.69	-	0.00	
WBE	1,682	19.94	142	15.52	26	9.25	23	15.97	3	16.67	
Total M/WBE	2,099	24.89	167	18.25	36	12.81	24	16.67	3	16.67	
Unknown Multiethnic	3,154	37.40	490	53.55	160	56.94	81	56.25	7	38.89	
Grand Total	8,434	100.00	915	100.00	281	100.00	144	100.00	18	100.00	

Source: 2021 Data Axle Data; M³ Consulting

Table 8.9 cont. Data Axle Capacity Based on Total Number of Employees Non-Professional Services Raleigh-Durham-Cary, NC (CBSA), FY 2021									
Ethnicity	500–999		1,000–4,999		5,000–9,999		Grand Total		
	#	#	#	%	#	%	#	%	%
Non-M/WBE	3	42.86	-	0.00	-	0.00	3,574	36.47	
African American	-	0.00	-	0.00	-	0.00	106	1.08	
Asian American	-	0.00	-	0.00	-	0.00	105	1.07	
Hispanic American	-	0.00	-	0.00	-	0.00	234	2.39	
Native American	-	0.00	-	0.00	-	0.00	8	0.08	
Total Minority	-	0.00	-	0.00	-	0.00	453	4.62	
WBE	-	0.00	-	0.00	-	0.00	1,876	19.14	
Total M/WBE	-	0.00	-	0.00	-	0.00	2,329	23.77	
Unknown Multiethnic	4	57.14	1	100.00	-	0.00	3,897	39.77	
Grand Total	7	100.00	1	100.00	-	0.00	9,800	100.00	

Source: 2021 Data Axle Data; M³ Consulting



Table 8.10. Data Axle Capacity Based on Total Number of Employees Professional Services Raleigh-Durham-Cary, NC (CBSA), FY 2021											
Ethnicity	1–19		20–49		50–99		100–249		250–499		
	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	1,666	34.32	68	24.37	25	26.88	16	26.23	1	12.50	
African American	48	0.99	2	0.72	-	0.00	-	0.00	-	0.00	
Asian American	104	2.14	-	0.00	2	2.15	-	0.00	-	0.00	
Hispanic American	96	1.98	3	1.08	1	1.08	1	1.64	-	0.00	
Native American	2	0.04	-	0.00	-	0.00	-	0.00	-	0.00	
Total Minority	250	5.15	5	1.79	3	3.23	1	1.64	-	0.00	
WBE	894	18.42	53	19.00	19	20.43	11	18.03	1	12.50	
Total M/WBE	1,144	23.57	58	20.79	22	23.66	12	19.67	1	12.50	
Unknown Multiethnic	2,044	42.11	153	54.84	46	49.46	33	54.10	6	75.00	
Grand Total	4,854	100.00	279	100.00	93	100.00	61	100.00	8	100.00	

Source: 2021 Data Axle Data; M³ Consulting



Table 8.10 cont. Data Axle Capacity Based on Total Number of Employees Professional Services Raleigh-Durham-Cary, NC (CBSA), FY 2021											
Ethnicity	500–999		1,000–4,999		5,000–9,999		10,000+		Grand Total		
	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	1	14.29	1	33.33	-	0.00	1	100.00	1,779	33.52	
African American	-	0.00	-	0.00	-	0.00	-	0.00	50	0.94	
Asian American	-	0.00	-	0.00	-	0.00	-	0.00	106	2.00	
Hispanic American	-	0.00	-	0.00	-	0.00	-	0.00	101	1.90	
Native American	1	14.29	-	0.00	-	0.00	-	0.00	3	0.06	
Total Minority	1	14.29	-	0.00	-	0.00	-	0.00	260	4.90	
WBE	-	0.00	-	0.00	-	0.00	-	0.00	978	18.43	
Total M/WBE	1	14.29	-	0.00	-	0.00	-	0.00	1,238	23.33	
Unknown Multiethnic	5	71.43	2	66.67	1	100.00	-	0.00	2,290	43.15	
Grand Total	7	100.00	3	100.00	1	100.00	1	100.00	5,307	100.00	

Source: 2021 Data Axle Data; M³ Consulting

Capacity Based on Sales Volume

Total Firms

If capacity were to be measured using sales volume (Table 8.11), then Minority-owned firms, WBEs and Non-M/WBEs are represented in all sales ranges up to \$500 million. Five WBEs and one African American-owned firm are in the capacity range of \$100 million to \$500 million. Above that range includes only Non-M/WBEs and firms who have an Unknown Multiethnic race category. Based on sales volume, differences in capacity are not vast among race or gender groups, although the number and proportion of M/WBEs are smaller, overall.

AES Design Services

Based on Table 8.12, Non-M/WBEs, one African American-owned firms and Unknown Multiethnic-owned firms are represented in every revenue range till \$20 million. Two Non-M/WBEs have up to \$100 million in sales volume. One WBE and Non-M/WBEs as well as Unknown Multiethnic-owned firms are in the \$10 million to \$20 million in revenue, whereas the \$5 million to \$10 million also includes one African American-owned firm. Very few Asian American- and Hispanic American-owned firms have sales volumes ranging up to \$5 million.

Construction

In Construction (Table 8.13), there are no Minority-owned firms and WBEs in any category ranges over \$50 million. Unknown Multiethnic construction firms and Non-M/WBEs dominate that range in sales volume. In all other sales volume ranges, Minority-owned firms and WBEs are represented. Hispanic American-owned firms have the greatest representation among Minority-owned firms with concentration in the lower ranges below \$2.5 million. Asian American-owned firms have very low representation across the board; African American-owned firms are concentrated in the lowest sales volume rate of less than \$500,000, although there are African American-owned firms in sales volume ranges up to \$20 million. If capacity was measured using sales volume, Minority-owned firms and WBEs are at a maximum capacity of \$20 million.

Goods & Supplies

Except for Native American-owned firms, Non-M/WBEs and M/WBEs show capacity in Goods & Supplies, up to \$20 million (Table 8.14). Four WBEs and one African American-owned firm show capacity up to \$500 million along with 10 Non-M/WBEs and 26 Unknown Multiethnic-owned firms. Asian American-, Hispanic American- and Native American-owned firms include those that have maximum sales capacity of \$50 million, \$100 million and less than \$500,000, respectively.

Non-Professional Services

In Table 8.15, there are firms in all race/gender groups except African American- and Native American-owned firms with a capacity up to \$10 million and \$5 million respectively. One Asian American- and one Hispanic American-owned firm have capacity up to \$20 million and \$50 million, respectively. At least two WBEs had capacity of \$100 million, and one Non-M/WBE firm has capacity of \$1 billion. African American-owned firms had a maximum capacity of \$10 million and Native American-owned firms of \$5 million. Unknown Multiethnic-owned firms had at least one firm with the capacity of \$1 billion.

Professional Services

Among Professional Service firms shown in Table 8.16, only Non-M/WBEs and Unknown Multiethnic-owned firms reflected capacity up to \$1 billion. One Native American-owned firm has capacity of \$100 million among the Minority-owned firms, and one WBE has the capacity of \$50 million. Hispanic American-, African American- and Asian American-owned firms have capacity up to \$20 million as the upper limit, with a majority of them in the \$2.5 million or less range.



Table 8.11. Data Axle Capacity Based on Sales Volume Total Raleigh-Durham-Cary, NC (CBSA), FY 2021													
Ethnicity	LESS THAN \$500,000		\$500,000–\$1 MILLION		\$1–2.5 MILLION		\$2.5–5 MILLION		\$5–10 MILLION		\$10–20 MILLION		
	#	%	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	3,436	41.09	1,782	37.11	1,452	36.30	620	37.87	284	33.97	152	32.27	
African American	105	1.26	45	0.94	30	0.75	15	0.92	6	0.72	5	1.06	
Asian American	105	1.26	94	1.96	50	1.25	23	1.41	5	0.60	7	1.49	
Hispanic American	254	3.04	111	2.31	103	2.58	23	1.41	13	1.56	7	1.49	
Native American	4	0.05	1	0.02	2	0.05	3	0.18	-	0.00	-	0.00	
<i>Total Minority</i>	<i>468</i>	<i>5.60</i>	<i>251</i>	<i>5.23</i>	<i>185</i>	<i>4.63</i>	<i>64</i>	<i>3.91</i>	<i>24</i>	<i>2.87</i>	<i>19</i>	<i>4.03</i>	
WBE	1,666	19.92	765	15.93	587	14.68	165	10.08	91	10.89	46	9.77	
Total M/WBE	2,134	25.52	1,016	21.16	772	19.30	229	13.99	115	13.76	65	13.80	
Unknown Multiethnic	2,792	33.39	2,004	41.73	1,776	44.40	788	48.14	437	52.27	254	53.93	
Grand Total	8,362	100.00	4,802	100.00	4,000	100.00	1,637	100.00	836	100.00	471	100.00	

Source: 2021 Data Axle Data; M³ Consulting



Table 8.11 cont. Data Axle Capacity Based on Sales Volume Total Raleigh-Durham-Cary, NC (CBSA), FY 2021												
Ethnicity	\$20–50 MILLION		\$50–100 MILLION		\$100–500 MILLION		\$500M–\$1 BILLION		OVER \$1 BILLION		Grand Total	
	#	%	#	%	#	%	#	%	#	%	#	%
Non-M/WBE	92	31.51	29	29.00	11	20.75	1	20.00	1	33.33	7,860	38.23
African American	2	0.68	-	0.00	1	1.89	-	0.00	-	0.00	209	1.02
Asian American	3	1.03	-	0.00	-	0.00	-	0.00	-	0.00	287	1.40
Hispanic American	2	0.68	1	1.00	-	0.00	-	0.00	-	0.00	514	2.50
Native American	-	0.00	1	1.00	-	0.00	-	0.00	-	0.00	11	0.05
Total Minority	7	2.40	2	2.00	1	1.89	-	0.00	-	0.00	1,021	4.97
WBE	24	8.22	4	4.00	5	9.43	-	0.00	-	0.00	3,353	16.31
Total M/WBE	31	10.62	6	6.00	6	11.32	-	0.00	-	0.00	4,374	21.27
Unknown Multiethnic	169	57.88	65	65.00	36	67.92	4	80.00	2	66.67	8,327	40.50
Grand Total	292	100.00	100	100.00	53	100.00	5	100.00	3	100.00	20,561	100.00

Source: 2021 Data Axle Data; M³ Consulting



Table 8.12. Data Axle Capacity Based on Sales Volume AES Design Services Raleigh-Durham-Cary, NC (CBSA), FY 2021													
Ethnicity	LESS THAN \$500,000		\$500,000–\$1 MILLION		\$1–2.5 MILLION		\$2.5–5 MILLION		\$5–10 MILLION		\$10–20 MILLION		
	#	%	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	107	35.55	55	37.16	43	25.15	15	36.59	11	37.93	7	43.75	
African American	2	0.66	2	1.35	3	1.75	-	0.00	1	3.45	-	0.00	
Asian American	2	0.66	3	2.03	1	0.58	1	2.44	-	0.00	-	0.00	
Hispanic American	6	1.99	2	1.35	2	1.17	1	2.44	-	0.00	-	0.00	
Native American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	
<i>Total Minority</i>	<i>10</i>	<i>3.32</i>	<i>7</i>	<i>4.73</i>	<i>6</i>	<i>3.51</i>	<i>2</i>	<i>4.88</i>	<i>1</i>	<i>3.45</i>	<i>-</i>	<i>0.00</i>	
WBE	66	21.93	12	8.11	34	19.88	3	7.32	4	13.79	1	6.25	
Total M/WBE	76	25.25	19	12.84	40	23.39	5	12.20	5	17.24	1	6.25	
Unknown Multiethnic	118	39.20	74	50.00	88	51.46	21	51.22	13	44.83	8	50.00	
Grand Total	301	100.00	148	100.00	171	100.00	41	100.00	29	100.00	16	100.00	

Source: 2021 Data Axle Data; M³ Consulting



Table 8.12 cont. Data Axle Capacity Based on Sales Volume AES Design Services Raleigh-Durham-Cary, NC (CBSA), FY 2021													
Ethnicity	\$20–50 MILLION		\$50–100 MILLION		\$100–500 MILLION		\$500M–\$1 BILLION		OVER \$1 BILLION		Grand Total		
	#	%	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	3	50.00	2	50.00	-	0.00	-	0.00	-	0.00	243	33.84	
African American	1	16.67	-	0.00	-	0.00	-	0.00	-	0.00	9	1.25	
Asian American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	7	0.97	
Hispanic American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	11	1.53	
Native American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	
Total Minority	1	16.67	-	0.00	-	0.00	-	0.00	-	0.00	27	3.76	
WBE	-	0.00	1	25.00	-	0.00	-	0.00	-	0.00	121	16.85	
Total M/WBE	1	16.67	1	25.00	-	0.00	-	0.00	-	0.00	148	20.61	
Unknown Multiethnic	2	33.33	1	25.00	2	100.00	-	0.00	-	0.00	327	45.54	
Grand Total	6	100.00	4	100.00	2	100.00	-	0.00%	-	0.00	718	100.00	

Source: 2021 Data Axle Data; M³ Consulting



Table 8.13. Data Axle Capacity Based on Sales Volume Construction and Construction-Related Services Raleigh-Durham-Cary, NC (CBSA), FY 2021													
Ethnicity	LESS THAN \$500,000		\$500,000–\$1 MILLION		\$1–2.5 MILLION		\$2.5–5 MILLION		\$5–10 MILLION		\$10–20 MILLION		
	#	%	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	423	61.84	293	50.17	259	46.75	81	45.51	34	36.17	15	34.09	
African American	11	1.61	2	0.34	3	0.54	0	0.00	1	1.06	1	2.27	
Asian American	3	0.44	3	0.51	2	0.36	0	0.00	2	2.13	0	0.00	
Hispanic American	29	4.24	24	4.11	20	3.61	4	2.25	2	2.13	1	2.27	
Native American	0	0.00	0	0.00	0	0.00	1	0.56	0	0.00	0	0.00	
<i>Total Minority</i>	<i>43</i>	<i>6.29</i>	<i>29</i>	<i>4.97</i>	<i>25</i>	<i>4.51</i>	<i>5</i>	<i>2.81</i>	<i>5</i>	<i>5.32</i>	<i>2</i>	<i>4.55</i>	
WBE	39	5.70	38	6.51	38	6.86	10	5.62	4	4.26	3	6.82	
Total M/WBE	82	11.99	67	11.47	63	11.37	15	8.43	9	9.57	5	11.36	
Unknown Multiethnic	179	26.17	224	38.36	232	41.88	82	46.07	51	54.26	24	54.55	
Grand Total	684	100.00	584	100.00	554	100.00	178	100.00	94	100.00	44	100.00	

Source: 2021 Data Axle Data; M³ Consulting



Table 8.13 cont. Data Axle Capacity Based on Sales Volume Construction and Construction-Related Services Raleigh-Durham-Cary, NC (CBSA), FY 2021													
Ethnicity	\$20–50 MILLION		\$50–100 MILLION		\$100–500 MILLION		\$500M–\$1 BILLION		OVER \$1 BILLION		Grand Total		
	#	%	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	7	36.84	2	66.67	-	0.00	-	0.00	-	0.00	1,114	51.57	
African American	1	5.26	0	0.00	-	0.00	-	0.00	-	0.00	19	0.88	
Asian American	0	0.00	0	0.00	-	0.00	-	0.00	-	0.00	10	0.46	
Hispanic American	0	0.00	0	0.00	-	0.00	-	0.00	-	0.00	80	3.70	
Native American	0	0.00	0	0.00	-	0.00	-	0.00	-	0.00	1	0.05	
Total Minority	1	5.26	-	0.00	-	0.00	-	0.00	-	0.00	110	5.09	
WBE	0	0.00	0	0.00	-	0.00	-	0.00	-	0.00	132	6.11	
Total M/WBE	1	5.26	-	0.00	-	0.00	-	0.00	-	0.00	242	11.20	
Unknown Multiethnic	11	57.89	1	33.33	-	0.00	-	0.00	-	0.00	804	37.22	
Grand Total	19	100.00	3	100.00	-	0.00	-	0.00	-	0.00	2,160	100.00	

Source: 2021 Data Axle Data; M³ Consulting



Table 8.14. Data Axle Capacity Based on Sales Volume Goods & Supplies Raleigh-Durham-Cary, NC (CBSA), FY 2021													
Ethnicity	LESS THAN \$500,000		\$500,000–\$1 MILLION		\$1–2.5 MILLION		\$2.5–5 MILLION		\$5–10 MILLION		\$10–20 MILLION		
	#	%	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	393	38.45	230	39.72	353	42.63	220	39.78	147	42.00	72	31.58	
African American	9	0.88	10	1.73	5	0.60	9	1.63	2	0.57	3	1.32	
Asian American	25	2.45	8	1.38	19	2.29	15	2.71	2	0.57	4	1.75	
Hispanic American	40	3.91	19	3.28	21	2.54	8	1.45	7	2.00	5	2.19	
Native American	1	0.10	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	
Total Minority	75	7.34	37	6.39	45	5.43	32	5.79	11	3.14	12	5.26	
WBE	206	20.16	86	14.85	97	11.71	54	9.76	32	9.14	19	8.33	
Total M/WBE	281	27.50	123	21.24	142	17.15	86	15.55	43	12.29	31	13.60	
Unknown Multiethnic	348	34.05	226	39.03	333	40.22	247	44.67	160	45.71	125	54.82	
Grand Total	1,022	100.00	579	100.00	828	100.00	553	100.00	350	100.00	228	100.00	

Source: 2021 Data Axle Data; M³ Consulting



Table 8.14 cont. Table 8.14. Data Axle Capacity Based on Sales Volume Goods & Supplies Raleigh-Durham-Cary, NC (CBSA), FY 2021													
Ethnicity	\$20-50 MILLION		\$50-100 MILLION		\$100-500 MILLION		\$500M-\$1 BILLION		OVER \$1 BILLION		Grand Total		
	#	%	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	53	31.55	16	23.53	10	24.39	-	0.00	-	0.00	1,494	38.91	
African American	-	0.00	-	0.00	1	2.44	-	0.00	-	0.00	39	1.02	
Asian American	3	1.79	-	0.00	-	0.00	-	0.00	-	0.00	76	1.98	
Hispanic American	1	0.60	1	1.47	-	0.00	-	0.00	-	0.00	102	2.66	
Native American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1	0.03	
Total Minority	4	2.38	1	1.47	1	2.44	-	0.00	-	0.00	218	5.68	
WBE	12	7.14	1	1.47	4	9.76	-	0.00	-	0.00	511	13.31	
Total M/WBE	16	9.52	2	2.94	5	12.20	-	0.00	-	0.00	729	18.98	
Unknown Multiethnic	99	58.93	50	73.53	26	63.41	2	100.00	1	100.00	1,617	42.11	
Grand Total	168	100.00	68	100.00	41	100.00	2	100.00	1	100.00	3,840	100.00	

Source: 2021 Data Axle Data; M³ Consulting



Table 8.15. Data Axle Capacity Based on Sales Volume Non-Professional Services Raleigh-Durham-Cary, NC (CBSA), FY 2021													
Ethnicity	LESS THAN \$500,000		\$500,000–\$1 MILLION		\$1–2.5 MILLION		\$2.5–5 MILLION		\$5–10 MILLION		\$10–20 MILLION		
	#	%	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	1,873	40.00	587	36.17	500	33.11	231	37.32	68	27.42	41	34.45	
African American	59	1.26	18	1.11	14	0.93	6	0.97	2	0.81	-	0.00	
Asian American	56	1.20	18	1.11	13	0.86	7	1.13	1	0.40	1	0.84	
Hispanic American	150	3.20	29	1.79	34	2.25	8	1.29	3	1.21	-	0.00	
Native American	3	0.06	1	0.06	1	0.07	1	0.16	-	0.00	-	0.00	
Total Minority	268	5.72	66	4.07	62	4.11	22	3.55	6	2.42	1	0.84	
WBE	1,040	22.21	299	18.42	247	16.36	56	9.05	18	7.26	13	10.92	
Total M/WBE	1,308	27.93	365	22.49	309	20.46	78	12.60	24	9.68	14	11.76	
Unknown Multiethnic	1,502	32.07	671	41.34	701	46.42	310	50.08	156	62.90	64	53.78	
Grand Total	4,683	100.00	1,623	100.00	1,510	100.00	619	100.00	248	100.00	119	100.00	

Source: 2021 Data Axle Data; M³ Consulting



Table 8.15 cont. Data Axle Capacity Based on Sales Volume Non-Professional Services Raleigh-Durham-Cary, NC (CBSA), FY 2021													
Ethnicity	\$20-50 MILLION		\$50-100 MILLION		\$100-500 MILLION		\$500M-\$1 BILLION		OVER \$1 BILLION		Grand Total		
	#	%	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	27	31.03	8	38.10	1	14.29	1	50.00	-	0.00	3,337	37.41	
African American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	99	1.11	
Asian American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	96	1.08	
Hispanic American	1	1.15	-	0.00	-	0.00	-	0.00	-	0.00	225	2.52	
Native American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	6	0.07	
Total Minority	1	1.15	-	0.00	-	0.00	-	0.00	-	0.00	426	4.78	
WBE	11	12.64	2	9.52	-	0.00	-	0.00	-	0.00	1,686	18.90	
Total M/WBE	12	13.79	2	9.52	-	0.00	-	0.00	-	0.00	2,112	23.68	
Unknown Multiethnic	48	55.17	11	52.38	6	85.71	1	50.00	-	0.00	3,470	38.91	
Grand Total	87	100.00	21	100.00	7	100.00	2	100.00	-	0.00	8,919	100.00	

Source: 2021 Data Axle Data; M³ Consulting



Table 8.16. Data Axle Capacity Based on Sales Volume Professional Services Raleigh-Durham-Cary, NC (CBSA), FY 2021													
Ethnicity	LESS THAN \$500,000		\$500,000–\$1 MILLION		\$1–2.5 MILLION		\$2.5–5 MILLION		\$5–10 MILLION		\$10–20 MILLION		
	#	%	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	640	38.28	617	33.03	297	31.70	73	29.67	24	20.87	17	26.56	
African American	24	1.44	13	0.70	5	0.53	-	0.00	-	0.00	1	1.56	
Asian American	19	1.14	62	3.32	15	1.60	-	0.00	-	0.00	2	3.13	
Hispanic American	29	1.73	37	1.98	26	2.77	2	0.81	1	0.87	1	1.56	
Native American	-	0.00	-	0.00	1	0.11	1	0.41	-	0.00	-	0.00	
Total Minority	72	4.31	112	6.00	47	5.02	3	1.22	1	0.87	4	6.25	
WBE	315	18.84	330	17.67	171	18.25	42	17.07	33	28.70	10	15.63	
Total M/WBE	387	23.15	442	23.66	218	23.27	45	18.29	34	29.57	14	21.88	
Unknown Multiethnic	645	38.58	809	43.31	422	45.04	128	52.03	57	49.57	33	51.56	
Grand Total	1,672	100.00	1,868	100.00	937	100.00	246	100.00	115	100.00	64	100.00	

Source: 2021 Data Axle Data; M³ Consulting



Table 8.16 cont. Data Axle Capacity Based on Sales Volume Professional Services Raleigh-Durham-Cary, NC (CBSA), FY 2021													
Ethnicity	\$20–50 MILLION		\$50–100 MILLION		\$100–500 MILLION		\$500M–\$1 BILLION		OVER \$1 BILLION		Grand Total		
	#	%	#	%	#	%	#	%	#	%	#	%	
Non-M/WBE	2	16.67	1	25.00	-	0.00	-	0.00	1	50.00	1,672	33.96	
African American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	43	0.87	
Asian American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	98	1.99	
Hispanic American	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	96	1.95	
Native American	-	0.00	1	25.00	-	0.00	-	0.00	-	0.00	3	0.06	
Total Minority	-	0.00	1	25.00	-	0.00	-	0.00	-	0.00	240	4.87	
WBE	1	8.33	-	0.00	1	33.33	-	0.00	-	0.00	903	18.34	
Total M/WBE	1	8.33	1	25.00	1	33.33	-	0.00	-	0.00	1,143	23.21	
Unknown Multiethnic	9	75.00	2	50.00	2	66.67	1	100.00	1	50.00	2,109	42.83	
Grand Total	12	100.00	4	100.00	3	100.00	1	100.00	2	100.00	4,924	100.00	

Source: 2021 Data Axle Data; M³ Consulting

8.2.3 Capacity Analysis Based on Survey Data

M³ Consulting conducted a survey of firms on the City of Raleigh vendor payment registry, Data Axle list and Master M/WBE/SBE list, with a focus on gathering capacity data that was to be used in the regression analysis to examine for differences in capacity based on race/gender/ethnicity, if any. The list includes firms that may never have done business with the City of Raleigh. The process involved creating a questionnaire, sample design, data collection and coding, analysis, and interpretation. Questions were designed with the specific purpose of collecting information about the availability of firms seeking to do business with the City of Raleigh and in the private sector and to determine these firm's capacity to do business.

Typically, a sampling frame is defined based on vendors that registered to do business with the City of Raleigh, Data Axle list and the Master M/WBE/SBE list and a random sample drawn, enabling M³ Consulting to obtain information to make inferences about capacity of vendors in the population being analyzed. Since the survey was online and it was cost effective, instead of sending the survey to only a random sample of firms, we emailed the survey link to the entire population of firms in these three lists to be able to maximize sample size.

A total of 13,964 firms were sent an online survey invitation with a unique link to the survey on August 19, 2022. There were 154 bounce backs. Reminders were sent to non-responders three times over the subsequent three weeks. The survey was closed on September 14, 2022, with a total of 422 completed responses.

M³ Consulting uses the term bid ubiquitously throughout our discussion related to the survey responses and analysis. We note that while bid is utilized, for the various procurement vehicles, specifically, RFP or RFQ, the term bid is analogous with proposer for RFPs and respondent that provide qualifications for RFQs.

Respondent Demographics

Throughout the survey analysis, the data from this research is broken out by the following business types: White Male-owned, Total Minority/Women-owned, Minority-owned, and Women-owned. The Total/Minority-owned is an aggregate of those who qualify as either a Minority-owned business or a Women-owned business. Percentages may not add up to 100% due to rounding, and the number of respondents per question varies and may not equal 422 due to skip logic.

Statistical testing was conducted at the 90% and 95% confidence level. Differences between each of the groups are identified with a letter. The margin of error for each of the groups is as follows: White Male-owned n=126, margin of error +/- 8.7%; Total Minority/Women-owned n=280, margin of error +/- 5.8%; Minority-owned n=189, margin of error +/- 7.1%; Women-owned n=91, margin of error +/- 10.2%. Those with fewer than 40 observations (a base size smaller than 40) are noted throughout the report with the "^" symbol to indicate the need for caution when interpreting results.

Business Principals (those who may hold a title such as Principal, President, or CEO)

Personal

Company principals are on average between 52 and 57 years old with White Male-owned businesses, older on average than Minority-owned business principals.

Table 8.17. Q12a: What is his/her current marital status?

Age of Principal	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
23–29	0%	2%	3%	0%
30–39	8%	8%	8%	5%
40–49	17%	28% A	32% A	21%
50–59	30%	33%	32%	34%
60–69	25%	24%	20%	31%
70–79	16% BC	6%	5%	9%
80–89	4%	0%	0%	0%
Refused	0%	0%	1%	0%
Mean	57.26 BC	52.90	51.49	55.81

Source: M³ Consulting, Inc. Base: Total respondents. Sample size White Male-owned n=126, Total Minority/Women-owned n=280, Minority-owned n=189, Women-owned n=91.

Principals of Minority-owned firms are more likely to be single (never married or divorced), while White Male-owned principals are more likely to be married than both Minority-owned principals and Women-owned principals.

Table 8.18. Q12b: What is his/her current marital status?

Marital Status of Principal	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Single, never married	3%	10% A	12% A	4%
Unmarried, living with partner	2%	3%	3%	2%
Married, living with spouse	83% BCD	64%	60%	74%
Divorced/Separated	8%	19% A	23% A	12%
Widowed	3%	4%	3%	8%

Source: M³ Consulting, Inc Base: Total respondents. Sample size White Male-owned n=126, Total Minority/Women-owned n=280, Minority-owned n=189, Women-owned n=91.

Education

Company principals have often completed at least some college or earned an associate degree, if not more. Minority-owned business principals are more likely to have completed postgraduate work or degree than White Male-owned business principals.

Table 8.19. Q12: What is the highest degree or level of education that your principal has completed?

Education Level of Principal	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Some high school or less	2%	0%	0%	0%
Graduated from high school or equivalent	12% BC	5%	5%	7%
Some college or associate degree	21%	20%	19%	23%
Graduated college	42%	37%	36%	40%
Postgraduate work or degree	23%	36% A	39% A	31%
Don't know	1%	1%	1%	0%

Source: M³ Consulting, Inc Base: Total respondents. Sample size White Male-owned n=126, Total Minority/Women-owned n=280, Minority-owned n=189, Women-owned n=91

Professional Experience

Most principals have worked in their professional area prior to involvement with the company. White Male principals are more likely to have worked in their professional area for more than 20 years, while Minority principals are more likely to have worked in their professional area for 15 to less than 20 years.

Table 8.20. 14: Prior to the principal's involvement with your company, how many years did he or she work in the same profession that the company specializes in presently?

Years Principal Worked in Professional Area	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Zero/Never	14%	14%	14%	15%
Less than 5 years	21% D	15%	17%	10%
5 to less than 10 years	12%	18%	19%	15%
10 to less than 15 years	10%	15%	15%	16%
15 to less than 20 years	7%	16% A	17% A	13%
More than 20 years	30% BC	21%	18%	26%
Don't know	6% BC	1%	1%	3%

Source: M³ Consulting, Inc Base: Total respondents. Sample size White Male-owned n=126, Total Minority/Women-owned n=280, Minority-owned n=189, Women-owned n=91.

Business Capacity

Revenue

In 2021, White Male-owned businesses had higher average gross receipts particularly due to higher number of businesses with gross receipts totaling \$2.5 million, \$5 million and \$10 million or more. Minority-owned businesses had gross receipts largely totaling less than \$100,000, \$100,000 to less than \$200,000 and \$1 million to less than \$2.5 million. WBEs had higher gross receipts than Minority-owned firms, with their gross receipts totaling less than \$100,000, \$500,000 to less than \$ 1 million and \$1 million to less than \$2.5 million.

Table 8.21. Q18: Which of the following categories best describes you company's total gross receipts from all sources for fiscal year (FY) 2021?

Company Total Gross Receipts FY 2021	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Less than \$100,000	7%	36% A	43% A	22% A
\$100,000 to less than \$200,000	8%	13% A	15% A	9%
\$200,000 to less than \$300,000	5%	7%	6%	8%
\$300,000 to less than \$500,000	9%	6%	6%	7%
\$500,000 to less than \$1,000,000	10%	10%	7%	16%
\$1,000,000 to less than \$2,500,000	17%	15%	12%	21%
\$2,500,000 to less than \$5,000,000	16% BC	6%	5%	9%
\$5,000,000 to less than \$10,000,000	13% BCD	4%	4%	5%
\$10,000,000 or more	17% BCD	3%	2%	3%
Mean	\$2,124,206 BCD	\$983,928	\$826,190	\$1,311,538
Median	\$10,000,000	\$210,526	\$146,551	\$650,000

Source: M³ Consulting, Inc Base: Total respondents. Sample size White Male-owned n=126, Total Minority/Women-owned n=280, Minority-owned n=189, Women-owned n=91.

Financing in the Past Five Years

Minority-owned businesses are more likely to have used small business loan programs, while White Male-owned businesses are more likely to have used none of the listed programs.

Table 8.22. Q26: Which of the following programs to obtain company funding/financing, if any, has your company used in the past five years? (Multiple answers were accepted.)

Funding/Financing Programs Used in Past Five Years	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Small business loan programs	22%	33% A	39% A	19%
Government assistance programs	21%	25%	28%	20%
Microloan programs	0%	4%	5%	0%
Bond programs	0%	2%	3%	1%
Other, please specify	7%	7%	6%	9%
None of the above	59% BC	46%	40%	60%

Source:M³ Consulting, Inc Base: Total respondents. Sample size White Male-owned n=126, Total Minority/Women-owned n=280, Minority-owned n=189, Women-owned n=91.

In the past five years, roughly five in 10 companies have applied for a loan/line of credit or bond. This finding is the same for White Male-owned firms and M/WBEs

Table 8.23. Q19: Which, if any, of the following has your company applied for in the past five years? (Multiple answers were accepted.)

Company Applied for Any of the Following in Past Five Years	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Loan/Line of credit	49%	49%	52%	42%
Bond	11%	13%	11%	15%
None of the above	48%	47%	43%	56%

Source:M³ Consulting, Inc Base: Total respondents. Sample size White Male-owned n=126, Total Minority/Women-owned n=280, Minority-owned n=189, Women-owned n=91.

Bonds, Loans and Lines of Credit

Among the 49 respondents who applied for a bond in the past five years, White Male-owned businesses did so more frequently on average than Minority-owned businesses.

Table 8.24. Q20: How many times in the past five years has your company applied for a bond?

Number of Times Applied for Bond in Past Five Years	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
1	14%	23%	29%	14%
2	7%	14%	14%	14%
3	0%	9%	10%	7%
4	7%	3%	0%	7%
5	14%	14%	14%	14%
6+	57%	37%	33%	43%
Mean	49.64	11.20	9.95	13.07

Source: M³ Consulting, Inc Base: Those that have applied for a bond in the past five years. Sample size White Male-owned n=14[^], Total Minority/Women-owned n=35[^], Minority-owned n=21[^], Women-owned n=14[^].

[^]Please interpret with caution due to small base sizes.

Most who applied were approved for the bond.

Table 8.25. Q21: How many times in the past five years has your company been denied a bond?

Number of Times Denied Bond in Past Five Years	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
0	100% BC	89%	86%	93%
1	0%	6%	10%	0%
2	0%	3%	5%	0%
5	0%	3%	0%	7%
Mean	0.00	0.26	0.19	0.36

Source: M³ Consulting, Inc Base: Those that have applied for a bond in the past five years. Sample size White Male-owned n=14[^], Total Minority/Women-owned n=35[^], Minority-owned n=21[^], Women-owned n=14[^].

[^]Please interpret with caution due to small base sizes.

Most of those who applied for a loan/line of credit did so once or twice. This was not different for White Male-owned firms or M/WBEs.

Table 8.26. Q22: How many times in the past five years has your company applied for a loan/line of credit?

Number of Times Applied for Loan/Line of Credit Past Five Years	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
1	35%	38%	38%	37%
2	31%	31%	27%	42%
3	11%	14%	17%	5%
4	2%	7% A	8% A	3%
5	13% C	6%	4%	11%
6+	8%	4%	5%	3%
Mean	4.21	2.46	2.43	2.53

Source: M³ Consulting, Inc Base: Those that have applied for a loan/line of credit in the past five years. Sample size White Male-owned n=62, Total Minority/Women-owned n=137, Minority-owned n=99, Women-owned n=38[^].

[^]Please interpret with caution due to small base sizes.

Though denial for a loan/line of credit in the past five years is not common, Minority-owned businesses were declined more often on average than White Male-owned businesses.

Table 8.27. Q23: How many times in the past five years has your company been denied a loan/line of credit?

Number of Times Denied Loan/Line of Credit Past Five Years	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
0	92% BC	68%	62%	84%
1	5%	14% A	18% A	3%
2	0%	12%	13%	11%
3	2%	1%	1%	0%
4	2%	3%	3%	3%
5	0%	0%	0%	0%
6+	0%	2%	3%	0%
Mean	0.16	0.72 A	0.87 A	0.34

Source: M³ Consulting, Inc Base: Those that have applied for a loan/line of credit in the past five years. Sample size White Male-owned n=62, Total Minority/Women-owned n=137, Minority-owned n=99, Women-owned n=38[^].

[^]Please interpret with caution due to small base sizes.

Approximately one-third of Minority-owned businesses noted that the loan application process was a challenge (more than White Male-owned businesses). They and Women-owned businesses also faced challenges from a bank/financial institution manager's attitude (more so than White Male-owned businesses). White Male-owned businesses are more likely than Minority-owned or Women-owned businesses to report facing no challenges at all when attempting to secure a loan or line of credit from a financial institution.

Table 8.28. Q24: What challenges, if any, did your company encounter in attempting to secure a loan or line of credit from a financial institution in the past five years. (Multiple answers were accepted.)

Challenges Faced When Attempting to Secure a Loan or Line of Credit From a Financial Institution in Past Five Years	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Loan application process	15%	30% A	33% A	21%
Bank/financial institution manager's attitude	3%	26% A	29% A	16% A
Pricing (interest rate charged or other terms of the loan)	13%	20%	22%	13%
Other	6%	14% A	13%	16%
No challenges at all	74% BCD	42%	39%	50%

Source:M³ Consulting, Inc Base: Those that have applied for a loan or line of credit in the past five years. Sample size White Male-owned n=62, Total Minority/Women-owned n=137, Minority-owned n=99, Women-owned n=38[^].

[^]Please interpret with caution due to small base sizes.

Bidding and Contract Awards

Minority- and Women-owned businesses are more likely to have only bid on projects as subcontractors compared to White Male-owned businesses.

Table 8.29. Q26a: Does your company bid on projects as a prime or subcontractor?

Bidding projects by type of role	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Only as prime	34%	28%	28%	29%
Only as sub	8%	23% A	22% A	24% A
Both as prime and sub	58%	49%	50%	47%

Source:M³ Consulting, Inc Base: Total respondents. Sample size White Male-owned n=126, Total Minority/Women-owned n=280, Minority-owned n=189, Women-owned n=91.

An average of 8% to 11% of all bids are submitted to the City of Raleigh as prime contractor. However, Minority- and Women-owned businesses are more likely to have not submitted bids to the City of Raleigh as a prime contractor (or consultant) in the last two years.

Table 8.30. Q27a: Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a prime contractor (or consultant), what percentage has gone to each of the following agency or company types? — City of Raleigh

Percentage of bids submitted to City of Raleigh as prime contractor	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
0	45%	68% A	71% A	62% A
1–10	43% BCD	13%	11%	19%
11–20	6%	6%	5%	6%

Table 8.30. Q27a: Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a prime contractor (or consultant), what percentage has gone to each of the following agency or company types? — City of Raleigh

21–30	1%	2%	3%	1%
31–40	0%	1%	0%	3%
41–50	2%	3%	2%	4%
51–60	0%	1%	1%	1%
61–70	0%	0%	0%	0%
71–80	0%	1%	1%	0%
81–90	0%	0%	0%	0%
91–100	3%	5%	6%	3%
Mean	7.73%	10.46%	10.82%	9.67%

Source: M³ Consulting, Inc Base: Those that bid on projects as prime contractor. Sample size White Male-owned n=116, Total Minority/Women-owned n=217, Minority-owned n=148, Women-owned n=69.

An average of 27% to 28% of all bids are submitted to other NC public sector agencies as a prime contractor. Minority-owned businesses were less likely to submit bids as a prime contractor (consultant) in the last two years than White Male-owned businesses.

Table 8.31. Q27b: Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a prime contractor (or consultant), what percentage has gone to each of the following agency or company types? — Other public sector agencies in North Carolina

Percentage of bids submitted to other NC public sector agencies as prime contractor	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
0	22%	37% A	40% A	30%
1–10	29% BC	16%	14%	20%
11–20	9%	9%	8%	10%
21–30	8%	5%	5%	4%
31–40	4%	5%	5%	4%
41–50	9%	7%	7%	7%
51–60	2%	3%	2%	4%
61–70	3%	2%	2%	3%
71–80	4%	4%	3%	7%
81–90	4%	3%	3%	3%
91–100	5%	9%	10%	6%
Mean	26.56%	27.79%	27.60%	28.19%

Source: M³ Consulting, Inc Base: Those that bid on projects as prime contractor. Sample size White Male-owned n=116, Total Minority/Women-owned n=217, Minority-owned n=148, Women-owned n=69.

On average, about 15% of bids from all firms are submitted to other public sector agencies outside NC as a prime contractor.

Table 8.32. Q27c. Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a prime contractor (or consultant), what percentage has gone to each of the following agency or company types? — Other public sector agencies outside of North Carolina

Percentage of bids submitted to other public sector agencies outside NC as prime contractor	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
0	57%	64%	64%	64%
1–10	17% BCD	8%	7%	9%
11–20	2%	6% A	6% A	6%
21–30	6%	6%	7%	3%
31–40	3%	4%	3%	6%
41–50	3%	3%	3%	3%
51–60	3%	0%	1%	0%
61–70	3%	2%	1%	4%
71–80	3%	2%	2%	1%
81–90	1%	2%	2%	1%
91–100	3%	4%	4%	3%
Mean	14.92%	14.92%	15.05%	14.65%

Source: M³ Consulting, Inc Base: Those that bid on projects as prime contractor. Sample size White Male-owned n=116, Total Minority/Women-owned n=217, Minority-owned n=148, Women-owned n=69.

On average, between 47% and 51% of bids are submitted to private sector agencies/companies as a prime contractor (consultant), though Minority-owned business owners are more likely to not submit any bids to these agencies.

Table 8.33. Q27d. Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a prime contractor (or consultant), what percentage has gone to each of the following agency or company types? — Private sector agencies/companies

Percentage of bids submitted to private sector agencies/firms as prime contractor	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
0	15%	26% A	28% A	22%
1–10	9%	9%	9%	9%
11–20	8%	5%	3%	9%
21–30	6%	6%	5%	6%
31–40	5%	4%	3%	6%
41–50	9%	6%	8%	0%
51–60	6%	5%	3%	9%
61–70	7% D	3%	4%	1%
71–80	7%	6%	3%	12%
81–90	9%	8%	7%	10%
91–100	20%	22%	24%	17%
Mean	50.78%	46.83%	46.53%	47.49%

Source: M³ Consulting, Inc Base: Those that bid on projects as prime contractor. Sample size White Male-owned n=116, Total Minority/Women-owned n=217, Minority-owned n=148, Women-owned n=69.

White Male-owned businesses that did not bid as a prime contractor to the City of Raleigh in the past two years primarily did not have notice of solicitations, a relationship, or no solicitations for what they sell. Minority-owned businesses were more likely than White Male-owned businesses to say they had no relationship with the City of Raleigh, they were not certified by the City of Raleigh, the City of Raleigh favors certain contractors, the contract size was too large, or the solicitation requirements are unfair.

Table 8.34. Q27aa. If you did not submit a bid as a prime contractor/consultant to the City of Raleigh in the past two years, why not?

Reasons for Not Bidding as Prime Contractor to City of Raleigh in Past Two Years	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
No notice of bids from the City of Raleigh	52%	45%	43%	48%
No relationship with the City of Raleigh	31%	44% A	46% A	38%
No bids for what I sell	37%	31%	30%	34%
Not certified by the City of Raleigh	10%	21% A	23% A	17%
Too much bureaucracy/red tape	11%	16%	16%	17%
City of Raleigh favors certain contractors	5%	15% A	17% A	11%
Contract size too large	3%	12% A	12% A	12% A
Can't meet bonding, insurance or financial requirements	3%	9% a	8%	11% A
Bid requirements unfair	2%	8% A	8% A	6%
Adequate and ongoing technical assistance lacking	0%	4%	5%	2%
Language barriers made it difficult to communicate	0%	1%	1%	0%
Technology	0%	0%	1%	0%
Other	10%	9%	8%	11%

Base: Those that have not bid on projects as prime contractor on contracts with the City of Raleigh. Sample size White Male-owned n=62, Total Minority/Women-owned n=211, Minority-owned n=146, Women-owned n=65.

An average of 4% to 10% of all bids are submitted to the City of Raleigh as subcontractor. However, Minority-owned businesses are more likely to have submitted bids to the City of Raleigh as a subcontractor (or subconsultant) in the last two years than White Male-owned businesses.

Table 8.35. Q29a: Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a subcontractor (or subconsultant), what percentage has gone to each of the following agency or company types? — City of Raleigh

Percentage of bids submitted to City of Raleigh as subcontractor	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
0	69%	73%	72%	75%
1–10	25% BCD	11%	10%	14%
11–20	1%	3%	4%	3%
21–30	2%	4%	6%	0%
31–40	0%	1%	1%	0%
41–50	1%	2%	1%	5%
51–60	0%	0%	1%	0%
61–70	0%	0%	0%	0%
71–80	0%	0%	0%	0%
81–90	0%	0%	0%	0%
91–100	1%	5% A	6% A	3%
Mean	4.22%	8.90% A	9.88% A	6.83%

Base: Those that bid on projects as subcontractor. Sample size White Male-owned n=116, Total Minority/Women-owned n=217, Minority-owned n=148, Women-owned n=69.

Firms submit an average of 24% to 33% of their total bids as subcontractors to other public sector agencies in North Carolina. Minority-owned businesses are more likely to submit a higher number of bids on average than White Male-owned businesses.

Table 8.36. Q29b: Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a subcontractor (or subconsultant), what percentage has gone to each of the following agency or company types? — Other public sector agencies in North Carolina

Percentage of bids submitted to other public sector agencies in North Carolina as subcontractor	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
0	36%	41%	42%	38%
1–10	19% C	11%	10%	15%
11–20	12%	7%	7%	8%
21–30	6%	6%	6%	8%
31–40	2%	2%	1%	5%
41–50	10%	5%	5%	5%
51–60	2%	2%	3%	0%
61–70	0%	1%	1%	3%
71–80	1%	6% A	4%	9% A
81–90	2%	2%	2%	2%
91–100	8%	15%	18% A	8%
Mean	23.88	30.85	32.75 A	26.88

Base: Those that bid on projects as subcontractor. Sample size White Male-owned n=83, Total Minority/Women-owned n=201, Minority-owned n=136, Women-owned n=65.

An average of 17% to 18% of all contracts are submitted to other public sector agencies outside of North Carolina as a subcontractor.

Table 8.37. Q29c: Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a subcontractor (or subconsultant), what percentage has gone to each of the following agency or company types? — Other public sector agencies outside of North Carolina

Percentage of bids submitted to other public sector agencies outside North Carolina as subcontractor	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
0	57%	62%	63%	58%
1–10	10%	8%	7%	11%
11–20	5%	6%	4%	11%
21–30	5%	5%	6%	3%
31–40	4%	1%	1%	2%
41–50	7%	4%	4%	3%
51–60	5%	1%	1%	0%
61–70	2%	1%	1%	2%
71–80	5%	2%	2%	3%
81–90	0%	1%	1%	0%
91–100	1%	7% A	7% A	8% A
Mean	17.28%	17.62%	17.92%	17.00%

Base: Those that bid on projects as subcontractor. Sample size White Male-owned n=83, Total Minority/Women-owned n=201, Minority-owned n=136, Women-owned n=65.

White Male-owned businesses submit on average 55% of bids as subcontractors to private sector agencies, significantly more than Minority-owned business owners who submit 40% on average. Minority-owned businesses are less likely to submit bids as a subcontractor to private sector agencies than White Male-owned businesses.

Table 8.38. Q29d: Thinking about all the bids (supplying a quote or proposal) your company has submitted in the past two years as a subcontractor (or subconsultant), what percentage has gone to each of the following agency or company types? — Private sector agencies/companies.

Percentage of bids submitted to private sector agencies/firms as subcontractor	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
0	16%	34% A	38% A	25%
1–10	4%	6%	6%	6%
11–20	10%	6%	6%	8%
21–30	11%	6%	6%	6%
31–40	6%	2%	3%	2%
41–50	6%	6%	7%	5%
51–60	4%	2%	2%	2%
61–70	4%	3%	2%	6%
71–80	2%	6% a	4%	12% A
81–90	7%	3%	2%	6%
91–100	31%	24%	24%	23%
Mean	54.63% BC	42.63%	39.45%	49.29%

Base: Those that bid on projects as subcontractor. Sample size White Male-owned n=83, Total Minority/Women-owned n=201, Minority-owned n=136, Women-owned n=65.

Among those who did not submit bids as a subcontractor to the City of Raleigh, the most common reasons were that there was no notice of sub-bids from prime contractors or consultants, they did not have a relationship with the City of Raleigh or there were no solicitations for what they sell. Minority-owned businesses were more likely to not have submitted a bid because they had no relationship with the City of Raleigh, and both Minority- and Women-owned businesses were more likely to say they had no notice of sub-bids from prime contractors or consultants.

Table 8.39. Q29aa. If you did not submit a sub-bid as a subcontractor/subconsultant to a prime contractor/consultant on a City of Raleigh project in the past two years, why not? (Multiple answers were accepted.)

Reasons for Not Bidding as Subcontractor to City of Raleigh in Past Two Years	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
No notice of sub-bids from prime contractors/consultants	27%	42% A	43% A	41% A
No relationship with the City of Raleigh	25%	41% A	46% A	32%
No bids for what I sell	36%	32%	34%	27%
No relationship with prime contractor/consultant	18%	31% A	34% A	25%
Not certified by the City of Raleigh	8%	19% A	20% A	19% A
Prime contractors/consultants favor certain subcontractors/subconsultants	6%	14% A	15% A	13%
Too much bureaucracy/red tape	5%	10% A	11% A	9%
Contract size too large	1%	7% A	7% A	7% A
Can't meet bonding, insurance or financial requirements	1%	5% A	5% A	7% A
Bid requirements unfair	1%	4% A	5% A	1%
Adequate and ongoing technical assistance lacking	0%	3%	4%	0%
Language barriers made it difficult to communicate	0%	1%	1%	0%
Technology	0%	0%	1%	0%
Other	15% BC	8%	5%	13%

Base: Those that have not bid as a subcontractor on contracts with the City of Raleigh. Sample size White Male-owned n=100, Total Minority/Women-owned n=226, Minority-owned n=151, Women-owned n=75.

In the past two years, White Male-owned businesses were more likely to win contracts as a prime contractor and subcontractor from all sectors, including the City of Raleigh, than Minority-owned businesses.

Table 8.40. Q28: In the past two years, has your company won a contract or been awarded a contract as a prime contractor (consultant) on contracts in or with any of the following? (Multiple answers were accepted.)

Won a Contract as Prime Contractor Past Two Years	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Private sector agencies/companies	68% BC	47%	41%	61%
Other public sector agencies in North Carolina	60% BCD	36%	30%	48%
Other public sector agencies outside of North Carolina	33% BC	23%	22%	26%
City of Raleigh	37% BC	17%	13%	26%
None of the above	15%	31% A	38% A	17%

Base: Those that have bid on contracts as a prime contractor. Sample size White Male-owned n=116, Total Minority/Women-owned n=217, Minority-owned n=148, Women-owned n=69.

Table 8.41. Q30: In the past two years, has your company won a contract or been awarded a contract as a subcontractor (subconsultant) on contracts for any of the following? (Multiple answers were accepted.)

Won a Contract as Subcontractor in Past Two Years	White Male Owned (A)	Total Minority/ Women-owned (B)	Minority Owned (C)	Women Owned (D)^
Private sector agencies/companies	70% BCD	42%	36%	55%
Other public sector agencies in North Carolina	47% BC	35%	28%	49%
Other public sector agencies outside of North Carolina	36% BC	22%	17%	32%
City of Raleigh	18% BC	9%	7%	15%
None of the above	12%	34% A	43% A	14%

Base: Those that submitted a bid as a subcontractor in past two years. Sample size White Male-owned n=83, Total Minority/Women-owned n=201, Minority-owned n=136, Women-owned n=65.

The average bids submitted in the past two years were between \$214,000 and \$532,000. White Male-owned businesses were directionally more likely to submit bids for a higher amount on average compared to Women-owned businesses, particularly driven by a higher number of bids of \$100,000 to less than \$250,000.

Table 8.42. Q31: Which of the following categories best describes the average bid range that your company has submitted in the past two years?

Average Bid Range of Submissions in Past Two Years	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Less than \$25,000	33%	36%	38%	34%
\$25,000 to less than \$50,000	17%	14%	12%	19%
\$50,000 to less than \$100,000	17%	20%	18%	23%
\$100,000 to less than \$250,000	11% d	9%	12%	4%
\$250,000 to less than \$500,000	10%	10%	9%	13%
\$500,000 to less than \$1,000,000	4%	4%	4%	3%
\$1,000,000 to less than \$5,000,000	4%	4%	5%	3%
\$5,000,000 to less than \$10,000,000	1%	1%	2%	0%
More than \$10,000,000	2%	1%	1%	0%
Mean	\$532,341 D	\$394,107	\$481,018	\$213,598
Median	\$50,000	\$48,749	\$50,735	\$46,323

Base: Those that have not submitted a bid as a prime contractor or subcontractor in past two years. Sample size White Male-owned n=126, Total Minority/Women-owned n=280, Minority-owned n=189, Women-owned n=91.

Among the 80 respondents who received contracts as prime contractors from the City of Raleigh, the largest single contract awards ranged from an average of \$247,000 to \$410,000.

Table 8.43. Q32: Which of the following categories best describes the single largest contract dollar award received as a prime contractor (consultant) from the City of Raleigh?

Largest Single Contract Award Received as Prime Contractor from City of Raleigh	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Less than \$25,000	28%	43%	37%	50%
\$25,000 to less than \$50,000	21%	14%	16%	11%
\$50,000 to less than \$100,000	23%	11%	11%	11%
\$100,000 to less than \$250,000	12%	16%	26%	6%
\$250,000 to less than \$500,000	2%	8%	5%	11%
\$500,000 to less than \$1,000,000	7%	0%	0%	0%
\$1,000,000 to less than \$5,000,000	7%	8%	5%	11%
Mean	\$322,965	\$326,013	\$246,710	\$409,722
Median	\$52,500	\$37,500	\$45,833	\$25,000

Base: Those that won a bid as a prime contractor in past two years with the City of Raleigh. Sample size White Male-owned n=43[^], Total Minority/Women-owned n=37[^], Minority-owned n=19[^], Women-owned n=18[^].

[^]Please interpret with caution due to small base sizes.

Subcontractor awards received from the City of Raleigh range from an average of \$72,000 to \$694,000 among the 34 respondents who received them.

Table 8.44. Q33: Which of the following categories best describes the single largest contract dollar award received as a subcontractor (subconsultant) for a City of Raleigh contract?

Largest Single Contract Award Received as Subcontractor from City of Raleigh	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Less than \$25,000	13%	47% A	33%	60% A
\$25,000 to less than \$50,000	27%	16%	22%	10%
\$50,000 to less than \$100,000	13%	11%	22%	0%
\$100,000 to less than \$250,000	20%	11%	22%	0%
\$250,000 to less than \$500,000	20%	0%	0%	0%
\$500,000 to less than \$1,000,000	0%	5%	0%	10%
\$1,000,000 to less than \$5,000,000	7%	11%	0%	20%
Mean	\$333,333	\$399,341	\$72,222	\$693,749
Median	\$87,499	\$29,167	\$43,749	\$24,999

Base: Those that won a bid as a subcontractor in past two years from a City of Raleigh contract. Sample size White Male-owned n=15[^], Total Minority/Women-owned n=19[^], Minority-owned n=9[^], Women-owned n=10[^].

[^]Please interpret with caution due to small base sizes.

The largest single contract dollar award in the private sector for prime contractors among White Male-owned businesses, on average, is higher than that of Minority-owned and Women-owned businesses.

Table 8.45. Q34: Which of the following categories best describes the single largest contract dollar award received as a prime contractor from a private sector agency or company?

Single Largest Contract Dollar Award as Prime Contractor from Private Sector	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Less than \$25,000	18%	31% A	30%	33% A
\$25,000 to less than \$50,000	10%	13%	18%	5%
\$50,000 to less than \$100,000	14%	18%	16%	21%
\$100,000 to less than \$250,000	15%	17%	15%	19%
\$250,000 to less than \$500,000	11%	7%	5%	10%
\$500,000 to less than \$1,000,000	9%	9%	11%	5%
\$1,000,000 to less than \$5,000,000	18% BCD	5%	3%	7%
\$5,000,000 to less than \$10,000,000	0%	0%	0%	0%
More than \$10,000,000	5%	1%	2%	0%
Mean	\$1,192,405 BCD	\$388,956	\$419,057	\$345,237
Median	\$181,250	\$67,105	\$57,500	\$77,777

Base: Those that won a bid as a prime contractor in past two years with a private sector agency/company. Sample size White Male-owned n=79, Total Minority/Women-owned n=103, Minority-owned n=61, Women-owned n=42[^].

[^]Please interpret with caution due to small base sizes.

Average contract amounts for subcontracting from the private sector range from \$679,000 to \$991,000. Minority-owned businesses are more often awarded contracts of less than \$25,000 as subcontractors compared to White Male-owned businesses.

Table 8.46. Q35: Which of the following categories best describes the single largest contract dollar award received as a subcontractor from a private sector agency or company?

Single Largest Contract Dollar Award as a Subcontractor from Private Sector	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Less than \$25,000	10%	24% A	27% A	19%
\$25,000 to less than \$50,000	22% BD	9%	12%	6%
\$50,000 to less than \$100,000	17%	22%	24%	19%
\$100,000 to less than \$250,000	12%	19%	10%	31% A
\$250,000 to less than \$500,000	12%	6%	6%	6%
\$500,000 to less than \$1,000,000	9%	7%	8%	6%
\$1,000,000 to less than \$5,000,000	12%	9%	8%	11%
\$5,000,000 to less than \$10,000,000	2%	2%	2%	3%
More than \$10,000,000	3%	1%	2%	0%
Mean	\$991,163	\$710,588	\$733,673	\$679,166
Median	\$100,000	\$88,157	\$72,916	\$127,273

Base: Those that won a bid as a subcontractor in past two years with a private sector agency/company. Sample size White Male-owned n=58, Total Minority/Women-owned n=85, Minority-owned n=49[^], Women-owned n=36[^].

[^]Please interpret with caution due to small base sizes.

The largest single contract dollar award from the public sector among prime contractors ranges between \$444,000 and \$1.7 million on average with White Male-owned businesses winning larger contracts on average than Women-owned businesses.

Table 8.47. Q36: Which of the following categories best describes the single largest contract dollar award received as a prime contractor from a public sector agency or company?

Single Largest Contract Dollar Award as Prime Contractor from Public Sector	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Less than \$25,000	12%	26% A	23%	30% A
\$25,000 to less than \$50,000	17% D	12%	16%	7%
\$50,000 to less than \$100,000	12%	14%	9%	21%
\$100,000 to less than \$250,000	14% D	10%	14%	5%
\$250,000 to less than \$500,000	13%	15%	11%	21%
\$500,000 to less than \$1,000,000	5%	11%	14% a	7%
\$1,000,000 to less than \$5,000,000	14% C	7%	5%	9%
\$5,000,000 to less than \$10,000,000	4%	2%	4%	0%
More than \$10,000,000	8%	3%	5%	0%
Mean	\$1,652,138 BD	\$837,749	\$1,134,868	\$443,895
Median	\$195,454	\$92,856	\$128,125	\$80,555

Base: Those that won a bid as a prime contractor in past two years with a public sector agency/company. Sample size White Male-owned n=76, Total Minority/Women-owned n=100, Minority-owned n=57, Women-owned n=43^.

^Please interpret with caution due to small base sizes.

Largest single subcontractor awards from the public sector range from \$932,000 to \$1 million on average.

Table 8.48. Q37: Which of the following categories best describes the single largest contract dollar award received as a subcontractor from a public sector agency or company?

Single Largest Contract Dollar Award as a Subcontractor from Public Sector	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Less than \$25,000	6%	19% A	18% A	21% A
\$25,000 to less than \$50,000	19% BD	8%	10%	5%
\$50,000 to less than \$100,000	15%	17%	14%	21%
\$100,000 to less than \$250,000	23%	15%	12%	19%
\$250,000 to less than \$500,000	13%	10%	14%	5%
\$500,000 to less than \$1,000,000	8%	11%	16%	5%
\$1,000,000 to less than \$5,000,000	10%	16%	12%	21%
\$5,000,000 to less than \$10,000,000	4%	4%	6%	2%
More than \$10,000,000	2%	0%	0%	0%
Mean	\$1,002,343	\$970,295	\$1,002,205	\$931,547
Median	\$168,181	\$158,928	\$212,499	\$118,750

Base: Those that won a bid as a subcontractor in past two years with a public sector agency/company. Sample size White Male-owned n=48^, Total Minority/Women-owned n=93, Minority-owned n=51, Women-owned n=42^.

^Please interpret with caution due to small base sizes.

City of Raleigh Policies and Experiences

Those who had an opinion feel that the City of Raleigh's policy to promote inclusion of Disadvantaged Business Enterprises (DBEs) and Small Business Enterprises (SBEs) is at least fair or neutral.

Table 8.49. Q38: The City of Raleigh administers a program targeted to promote inclusion of DBEs and SBEs. What is the general consensus of opinion in your company's leadership as to the general fairness of this policy?

Opinion on Fairness of City of Raleigh Policy to Promote DBEs and SBEs	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Very fair	40% BD	28%	29%	27%
Somewhat fair	14%	13%	10%	19%
Neutral	33%	40%	40%	41%
Somewhat unfair	11%	10%	12%	8%
Very unfair	3%	8% A	9% A	6%

Base: Those that have an opinion on the policy. Sample size White Male-owned n=95, Total Minority/Women-owned n=193, Minority-owned n=129, Women-owned n=64.

Approximately half feel the City of Raleigh's policy to discourage discrimination against Minority-owned firms and WBEs is fair, with White Male-owned businesses considering the policy very fair more often than Minority-owned businesses, which are more likely to feel neutral towards the policy.

Table 8.50. Q38: The City of Raleigh administers a program targeted to promote inclusion of DBEs and SBEs. What is the general consensus of opinion in your company's leadership as to the general fairness of this policy?

Opinion on Fairness of City of Raleigh Policy to Discourage Discrimination of Minority-owned firms and WBEs	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Very fair	52% BC	37%	36%	41%
Somewhat fair	14%	13%	12%	17%
Neutral	25%	35% A	36% A	32%
Somewhat unfair	6%	9%	9%	7%
Very unfair	3%	6%	7%	3%

Base: Those that have an opinion on the policy. Sample size White Male-owned n=95, Total Minority/Women-owned n=193, Minority-owned n=129, Women-owned n=64.

Those who bid as a prime contractor generally feel that officials followed bid procedures and evaluated bids fairly (though White Male-owned businesses agree with both statements more often than Minority- or Women-owned businesses). Fewer than 5% of all businesses report experiencing unfair or discriminatory treatment during the bid process, or unfair or discriminatory treatment on the jobsite.

Table 8.51. Q42: Has your company ever experienced any of the following issues while bidding as a prime contractor or subcontractor?

Bidding Experience as Prime Contractor (Summary of Issues Experienced)	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Officials followed bid procedures	40% BCD	21%	19%	25%
Received timely notification of bid opportunities	33%	26%	26%	25%
Officials fairly evaluated bids/sub-bids	36% BCD	17%	15%	21%
Could access a procurement officer or small and minority business manager to obtain information	13%	14%	14%	14%
Received payments too slowly as a prime contractor with the City of Raleigh	11% c	6%	5%	8%
Experienced unfair or discriminatory treatment from the City of Raleigh when acting as a prime contractor during the bid process	2%	1%	1%	0%
Experienced solicitation of subcontractor bids after contract awards (i.e., bid shopping, collusion, etc.)	8% BC	2%	3%	0%
Experienced unfair or discriminatory treatment from the City of Raleigh when acting as a prime contractor on the jobsite	4%	2%	2%	1%
Contract was denied despite being lowest bidder	11%	9%	11%	5%
Experienced high bonding or insurance requirements compared to scope of work	12%	9%	8%	9%
Experienced changes in scope of work, after work was started	21% BC	11%	10%	14%

Base: Those that bid on a contract as a prime contractor answering. Sample size White Male-owned n=126, Total Minority/Women-owned n=280, Minority-owned n=189, Women-owned n=91.

Few reported any issues during their experience as a subcontractor.

Table 8.52. Q42: Has your company ever experienced any of the following issues while bidding as a prime contractor subcontractor?

Bidding Experience as Subcontractor (Summary of Issues Experienced)	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Officials followed bid procedures	11%	14%	13%	18%
Officials fairly evaluated sub-bids	13%	13%	10%	18%
Received timely notification of bid opportunities	12%	16%	17%	13%
Could access a procurement officer or small and minority business manager to obtain information	7%	10%	11%	8%
Received payments too slowly as a subcontractor with prime contractor	7%	7%	7%	8%
Subcontract was denied despite being lowest bidder	4%	6%	7%	5%
Notified of being listed as a sub on a bid but not utilized on the job	0%	15%	18%	0%
Experienced high bonding or insurance requirements compared to scope of work	9%	10%	7%	14%
Experienced changes in scope of work, after work was started	16%	15%	13%	18%
Experienced solicitation of subcontractor bids after contract awards (i.e., bid shopping, collusion, etc.)	10%	10%	10%	10%
Experienced unfair or discriminatory treatment from prime when acting as a subcontractor during the bid process	0%	4%	5%	2%
Experienced unfair or discriminatory treatment from prime when acting as a subcontractor on the jobsite	2%	3%	4%	1%

Base: Those that bid on a contract as a prime contractor answering. Sample size White Male-owned n=126, Total Minority/Women-owned n=280, Minority-owned n=189, Women-owned n=91.

Comments from respondents included Minority- and Women-owned businesses noting they want more support for M/WBEs and better notifications about open bids, more so than White Male-owned businesses.

Table 8.53. Q44a: Please use the space below to record any other comments you may wish to share on the subject of the City of Raleigh and bidding and award opportunities for DBEs or SBEs. (Responses were coded from an open-ended question.)

Bidding Experience as Prime Contractor (Summary of Issues Experienced)	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Better notifications about open bids	4%	11% A	11% A	10% A
Need to support SBE/WBE/DBE/BME/SDVOSB more	2%	11% A	12% A	9% A
Would like to work with the City of Raleigh	2%	5%	5%	7%
Positive comments	2%	3%	3%	2%
Other mentions	10%	8%	6%	12%
None/nothing	1%	1%	1%	1%
Don't know/refused	3%	4%	5%	0%
No answer	76% BCD	60%	59%	63%

Base: Total respondents answering. Sample size White Male-owned n=126, Total Minority/Women-owned n=280, Minority-owned n=189, Women-owned n=91.

Additional Demographics

More than half of Minority-owned businesses are owned or controlled by women.

Table 8.54. Q10: Is at least 51% of your firm owned and controlled by one or more women?

At Least 51% of Company Owned/Controlled by Women	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Yes	9%	71% A	57% A	99% A
No	90% BCD	29%	43%	0%
Don't know	2%	0%	0%	1%

Base: Total respondents. Sample size White Male-owned n=126, Total Minority/Women-owned n=280, Minority-owned n=189, Women-owned n=91.

Approximately three-quarters of Minority-owned businesses are majority held by African American/Black business owners.

Table 8.55. Q11: Is at least 51% of your firm owned and controlled by a member of one of the following racial/ethnic/gender groups? Please select which group.

51%+ Ownership by Any of Following Groups	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Caucasian/White Male (not of Hispanic origin)	93%	0%	0%	0%
African American/Black (not of Hispanic origin)	0%	51%	76%	0%
Hispanic (of Latin American descent)	0%	6%	9%	0%
Asian or Pacific Islander	0%	6%	9%	0%
Caucasian/White Women (not of Hispanic origin)	0%	32%	0%	99%
Native American (i.e., American Indian) or Alaskan Native	0%	2%	3%	0%
Other	7% BCD	2%	3%	1%

Base: Total respondents. Sample size White Male-owned n=126, Total Minority/Women-owned n=280, Minority-owned n=189, Women-owned n=91.

Minority-owned businesses are largely made up of African American business owners.

Table 8.56. Final Designation

Final Designation – Breakdown of Respondents	White Male Owned (A)	Total Minority/ Female Owned (B)	Minority Owned (C)	Female Owned (D)
Non-M/WBE	100%	0%	0%	0%
African American	0%	52%	77%	0%
Asian American	0%	6%	9%	0%
Hispanic American	0%	6%	9%	0%
Native American	0%	2%	3%	0%
Other Minority-owned firm	0%	1%	2%	0%
WBE	0%	33%	0%	100%
SBE	0%	0%	0%	0%
DBE	0%	0%	0%	0%

Base: Total respondents. Sample size White Male-owned n=126, Total Minority/Women-owned n=280, Minority-owned n=189, Women-owned n=91.

8.3 Multivariate Regression Analysis

While survey data presents differences in capacities of M/WBEs and SBEs and Non-M/WBEs using z-tests of differences in percentages and t-tests of differences in means, other social science research suggests multiple factors in understanding the relationships among factors affecting firm revenues that may include race and gender. Multivariate regression analysis may help analyze variables, including race and gender that can affect a firm's success.

M³ Consulting conducted a multivariate statistical regression analysis to identify disparities between Non-M/WBEs and M/WBEs. We employed the Blinder-Oaxaca decomposition, a widely used and well-established method for exploring discrimination between groups, to estimate the extent of disparity in the revenues between Non-M/WBEs and M/WBEs companies after accounting for other influencing factors.

Using a log-linear model, we measured if gross revenue differences are attributable to discrimination between the M/WBEs and Non-M/WBE groups or simply due to other factors such as experience or education. Explanatory factors such as number of full-time employees, age of business, principal's prior public and private business experience, and the average past two-year bid size for each company were included to explain the differences in gross revenue differences.

Regression Results

The Blinder-Oaxaca methodology suggests that 1.2561 of the 1.7099 difference between the M/WBE and Non-M/WBE in the logarithmic total gross receipts from all sources for the FY 2021 can be accounted for by variables other than race that were included in the model. The balance is most likely due to discrimination.

Regression Detail

The following three tables of results are from log-linear models, where the independent variable represents the change in the companies' total gross receipts from all sources for FY 2021, in 100,000 dollars (i.e., code name Q18) and the independent variables are as described below. The first table shows the overall results and the next two are for the Non-M/WBEs and M/WBEs. Other controlling variables, such as whether the company was a start-up and the principal's level of education, his or her age, as well as bids made as prime contractor, were removed as they had no significant impact on the results.

On average, the total gross receipts were \$2,654,310, which was composed of \$5,306,349 and \$1,460,893 for Non-M/WBE and M/WBE, respectively. A priori there is a large difference, but the question is whether these can be explained by education, experience, or number of employees.

Table 8.57. All respondents

R-square: 0.6393					
Variable	Level	Code Name	Coef	t-ratio	Xbar
		intercept	-0.188	-0.837	1.000
Number of full-time employees Base = 10 or fewer	11 to 50	Q6reco_2	1.675	10.847	0.244
	More than 50	Q6reco_3	2.830	11.578	0.086
How many years has your firm been in business? Base = 1 to 3 years	3 to 5 years	Q7A_2	0.255	1.013	0.133
	5 to 10 years	Q7A_3	0.664	2.647	0.150
	10 to 25 years	Q7A_4	1.168	5.318	0.352
	More than 25 years	Q7A_5	1.664	6.938	0.266
Marital status Base = Unmarried, married and widowed	Divorced/Separated	Q12B_4	-0.535	-3.158	0.158
Company bids as subcontractor Base = No	Yes	Q26ASub	-0.472	-2.569	0.700
Natural log of percentage bids as subcontractor to other public sector agencies		Q29C	0.480	1.291	0.095
Natural log of percentage bids as subcontractor to private sector companies		Q29D	0.544	1.929	0.237
P2Yr avg bid size Base = Less than \$25,000	\$25,000 to less than \$50,000	Q31_2	0.349	1.892	0.153
	\$50,000 to less than \$100,000	Q31_3	0.586	3.402	0.190
	\$100,000 to less than \$250,000	Q31_4	0.619	2.811	0.099
	\$250,000 to less than \$500,000	Q31_5	1.077	4.944	0.103
	\$500,000 to less than \$1,000,000	Q31_6	1.022	3.106	0.039
	\$1,000,000 to less than \$5,000,000	Q31_7	0.738	2.301	0.042
	\$5,000,000 to less than \$10,000,000	Q31_8	1.031	1.631	0.010
	More than \$10,000,000	Q31_9	1.068	1.917	0.012

Table 8.58. Non-

R-square: 0.6581					
Variable	Level	Code Name	Coef	t-ratio	Xbar
		intercept	0.471	0.886	1.000
Number of full-time employees Base = 10 or fewer	11 to 50	Q6reco_2	2.030	7.961	0.325
	More than 50	Q6reco_3	2.911	8.828	0.214
How many years has your firm been in business? Base = 1 to 3 years	3 to 5 years	Q7A_2	-0.244	-0.310	0.132
	5 to 10 years	Q7A_3	0.677	1.092	0.095
	10 to 25 years	Q7A_4	1.006	1.852	0.389
	More than 25 years	Q7A_5	1.009	1.844	0.444
Marital status Base = Unmarried, married and widowed	Divorced/Separated	Q12B_4	-0.698	-1.748	0.079
Company bids as subcontractor Base = No	Yes	Q26ASub	-0.499	-1.269	0.659
Natural log of percentage bids as subcontractor to other public sector agencies		Q29C	0.379	0.453	0.091
Natural log of percentage bids as subcontractor to private sector companies		Q29D	0.847	1.422	0.265
P2Yr avg bid size. Base = Less than \$25,000	\$25,000 to less than \$50,000	Q31_2	0.285	0.892	0.175
	\$50,000 to less than \$100,000	Q31_3	0.390	1.240	0.175
	\$100,000 to less than \$250,000	Q31_4	0.175	0.465	0.111
	\$250,000 to less than \$500,000	Q31_5	0.872	2.290	0.103
	\$500,000 to less than \$1,000,000	Q31_6	0.894	1.537	0.040
	\$1,000,000 to less than \$5,000,000	Q31_7	0.080	0.141	0.040
	\$5,000,000 to less than \$10,000,000	Q31_8	1.147	0.917	0.008
	More than \$10,000,000	Q31_9	0.858	1.162	0.024

Commented [FD1]: Define on first reference

Commented [SW2R1]: This is not the term we have been using. Non-M/WBE correct? Please adjust and check for other instances of use.

Commented [EW3R1]: This term can from the survey.

Commented [SW4R1]: Ok. We'll leave it.

Table 8.59. M/WBE

R-square: 0.5782					
Variable	Level	Code Name	Coef	t-ratio	Xbar
		intercept	-0.409	-1.613	1.000
Number of full-time employees Base = 10 or fewer	11 to 50	Q6reco_2	1.369	7.050	0.207
	More than 50	Q6reco_3	2.482	5.242	0.029
How many years has your firm been in business? Base = 1 to 3 years	3 to 5 years	Q7A_2	0.349	1.315	0.179
	5 to 10 years	Q7A_3	0.650	2.384	0.175
	10 to 25 years	Q7A_4	1.047	4.297	0.336
	More than 25 years	Q7A_5	1.851	6.554	0.186
Marital status Base = Unmarried, married and widowed	Divorced/Separated	Q12B_4	-0.385	-2.031	0.193
Company bids as subcontractor Base = No	Yes	Q26ASub	-0.351	-1.651	0.718
Natural log of percentage bids as subcontractor to other public sector agencies		Q29C	0.445	1.052	0.097
Natural log of percentage bids as subcontractor to private sector companies		Q29D	0.250	0.761	0.225
P2Yr avg bid size Base = Less than \$25,000	\$25,000 to less than \$50,000	Q31_2	0.374	1.665	0.143
	\$50,000 to less than \$100,000	Q31_3	0.708	3.486	0.196
	\$100,000 to less than \$250,000	Q31_4	0.969	3.608	0.093
	\$250,000 to less than \$500,000	Q31_5	1.166	4.443	0.104
	\$500,000 to less than \$1,000,000	Q31_6	1.046	2.640	0.039
	\$1,000,000 to less than \$5,000,000	Q31_7	1.240	3.096	0.043
	\$5,000,000 to less than \$10,000,000	Q31_8	1.507	2.058	0.011
	More than \$10,000,000	Q31_9	1.320	1.559	0.007

The Blinder-Oaxaca decompositions are a tool for estimating how differences in the gross receipts (natural logarithm) across groups can be separated into explained and unexplained portions. The tool is used for estimating the extent of discrimination between different groups. There are several assumptions that can be made; however, the decomposition employed in this research is that the pooled sample estimated from both groups (i.e., Neumark 1988 and Oaxaca & Ransom 1999) serves as the nondiscriminatory “total gross receipts from all sources for FY 2021” (i.e., Q18) structure.

The results of the Blinder-Oaxaca methodology as shown in Table 8.60 below suggests that a portion of the difference between the M/WBE and Non-M/WBE in the logarithmic total gross receipts from all sources for FY 2021 can be accounted for. The balance is most likely due to discrimination.

The Blinder-Oaxaca method decomposes the gross logarithmic revenue differential between the explained part (1.2561) and the unexplained part (0.4538) to determine whether some form of discrimination is taking place. The “explained” part is in reference to the independent variables (education, experience, or number of employees, etc.) that account for the variation in gross revenues. Having accounted for all relevant factors that may result in variance in gross revenues, one would expect the “unexplained” portion to be close to zero. So, any variation from zero most likely is a result of discriminatory practices.

Table 8.60. Non-M/WBE vs. M/WBE

Total Explained		Total Unexplained		Non-M/WBE		M/WBE	
Coef (explained)	Standard Error (explained)	Coef (explained)	Standard Error (explained)	Coef (explained)	Standard Error (explained)	Coef (explained)	Standard Error (explained)
1.2561	0.1740	0.4538	0.1097	0.3129	0.0768	-0.1408	0.0348

From Table 8.60, the total unexplained coefficient is 57.43% ($\exp(0.4538) - 1$) that can be explained as follows:

- Non-M/WBEs received 36.74% ($\exp(0.3129) - 1$) **greater** total gross receipts from all sources in 2021 than can be accounted for based on the relevant explanatory variables, but this result is not statistically significant.
- In addition, accounting for all relevant factors, M/WBEs received 13.14% ($\exp(-0.1408) - 1$) **less** than they should have in gross revenues had discrimination not occurred. The difference in total gross receipts in the M/WBE group is statistically significant.

8.4 Disparities in Business Formation: PUMS Analysis

8.4.1 PUMS Analyses

Public Use Microdata Samples (PUMS) from (U.S. Census data) analysis is undertaken by M³ Consulting to examine the impact of race and gender, along with other demographic and economic factors that impact: (1) the choice of self-employment and (2) the level of self-employment income.

Promoting entrepreneurship is often a beneficial means to improve the economic status of minorities and women. Disparities in business formation often limit the development and growth of firms. In their research on this topic, Black, Holtz-Eakin and Rosenthal (2000)¹ found that there was considerable spatial variation in self-employment rates (and self-employment earnings), especially for Minority-owned firms—among metropolitan areas. Black, Holtz-Eakin and Rosenthal noted that the variation is 70% among Black Americans, 166% among Hispanics and 100% among Asians. A central point of the literature in self-employment has been on the degree to which access to capital limits the ability of individuals to attain self-employment, especially the role of such constraints in explaining racial differences in self-employment (Meyer 1990)². Black, Holtz-Eakin and Rosenthal (2000), in analyzing regional rates of self-employment for the prime-age males (25 to 64) found:

- Overall, in the United States, the self-employment rate is 10.4%, which includes a range from 9.9% in the Northeast to 12.7% in the Pacific region; a difference of nearly 30%.
- The rate of self-employment differs greatly across races, ranging from a low of 4.3% among Black Americans to 12.7 among Whites.

Blanchflower and Shadforth (2007) and others³ provide an excellent summary of the research around self-employment. The findings in summary are that self-employment is higher among men than women, higher among older workers than younger workers, and particularly high in construction and retailing. It is also especially high among some immigrant groups and varies by region and state, being especially high in construction occupations, agriculture and retailing. Fairlie and Robb (2007b) found that Black business owners were much less likely than White counterparts to have had a self-employed family member owner prior to starting their business and are less likely to have worked in that family member's business. Fairlie and Robb noted that the lack of prior work experience in a family business among Black business owners, perhaps by limiting their acquisition of general and specific business human capital, negatively affects Black business outcomes.

Blanchflower (2009)⁴ studied Minority self-employment overall and particularly in the construction industry and examined the role that affirmative action programs have played in this context. Blanchflower points out that while the *Crosby* case in 1989 made it difficult to maintain affirmative action programs since the turn of the millennium, multiple cases have changed the course of that discussion in the other direction, with courts declaring a number of programs constitutional⁵. It is also noted the low representation of minorities, specifically among the ownership of firms in construction compared to their representation in the population. Based on the 2002 Economic Census Survey of Business Owners, of the 2,770,888 firms in construction, 2.4% were owned by

¹Black, D., D. Holtz-Eakin and S. Rosenthal (2001), "Racial Minorities, economic scale and the geography of Self-employment," Brookings-Wharton Papers on Urban Affairs, pp 245-286.

² Meyer, B. 1990. "Why Are There So Few Black Entrepreneurs?" National Bureau of Economic Research, Working Paper No. 3537.

³Blanchflower, D.G., Levine, P., Zimmerman, D.: Discrimination in the small business credit market. *Rev Econ Stat* 85(4), 930–943 (2003);

Blanchflower, D.G., Shadforth, C.: Entrepreneurship in the UK. *Found Trends Entrepreneurship* 3(4), 257–364 (2007)

⁴ Blanchflower, D.G., "Minority self-employment in the United States and the impact of affirmative action programs", *Ann Finance* (2009) 5:361–396.

⁵ Also worth noting is Blanchflower, D.G., Wainwright, J.: An analysis of the impact of affirmative action programs on self-employment in the construction industry. National Bureau of Economic Research, Inc, NBER Working Papers # 11793 (2005)

African Americans, 7.0% by Hispanics, 1.1% by American Indians or Alaskan natives, 1.4% by Asians and Pacific Islanders and 10.5% by women compared to their proportional representation in the population:⁶ African Americans were 12.8% of the population, White Hispanics 13.7%, Asian/Pacific Islanders 4.6%, American Indians/Alaskan Native 1.0% and two or more races 1.8%.

Blanchflower (2009) study provides new evidence on self-employment rates by race and gender (using data for the period 1983–2006) as follows.

- Across all industries, 15.5% of White males were self-employed compared with 7.4% of White Females, 3.6% of African Americans and 7.8% of Hispanics.
- In Construction, self-employment rates of White Males were 28% compared with 21% for White Females, 17% for African Americans and 13% for Hispanic Americans.
- The gap between the earnings of White Males and all groups, other than Asian Americans, remains large.
- The differential between the overall self-employment rates of White Males and White Females in construction has narrowed dramatically over time. The narrowing is more apparent than is found for “all industries.”
- The differential between the overall self-employment rates in construction of White Males and African Americans has narrowed but less than it has for White Females. The differential between the overall self-employment rates in construction of White Males and Hispanic Americans has widened over time.

According to the Small Business Administration, as of 2013, Black-owned firms represented 7% of all U.S. businesses, Asian-owned firms represented only 4.3% and Hispanic-owned firms’ share was only 10.6%. The agency found that these gaps in Minority firms are largely reflected via the differences in leadership and capable management, differences in sufficient capital to buffer losses, and awareness and access to markets.

Kaufmann (2016)⁷ in their compilation of race research on entrepreneurship noted that Minority entrepreneurs, especially Black and Hispanic business owners, are still underrepresented among U.S. business owners, and they also underperform compared to non-minority owners.

This section describes the two types of statistical analyses conducted to examine the impact of race and gender on self-employment, controlling for economic and demographic characteristics. The first analysis, undertaken via binary logistic regression, examines the likelihood that the individual will be self-employed. The second analysis, conducted via linear regression, examines the determinants of self-employment income. The analysis uses variables from the Integrated Public Use Microdata Series (IPUMS) data for the 2019 American Community Survey (ACS) five-year survey⁸. The labor force participants were selected for the sample if they satisfied the following criteria:

- were residents of the State of North Carolina; and
- were 18 years of age or older.

⁶ Based on the 2008 Statistical Abstract of the United States, population in 2006.

⁷ Kauffman compilation: Research on race and entrepreneurship, https://www.kauffman.org/wp-content/uploads/2019/12/kauffman_compilation_race_entrepreneurship.pdf

⁸ IPUMS USA collects, preserves, and harmonizes U.S. census microdata and provides easy access to this data with enhanced documentation. Data includes decennial censuses from 1790 to 2010 and ACS from 2000 to the present.

Self-Employment Decision

First, M³ Consulting attempted to examine the factors that impact the self-employment decision and whether there are differences in the probability of self-employment among the different races and genders.

We examine the self-employment decision using a statistical technique called binary logistic regression model. In a logistic regression model, the dependent variable is a categorical variable where “yes” is equal to 1 and “no” is equal to 0. The binary logistic regression allows the statistician to determine if a specific characteristic increases or decreases the likelihood that the dependent variable will be a “yes” or a “no.” For instance, a statistician can use a logistic regression model to examine if a certain set of characteristics (called independent variables) will increase the likelihood of teen pregnancy in a certain population. Thus, the independent variables will allow the researcher to determine whether they contribute to the “yes” or “no” response, and whether these variables impact the response variable by increasing or decreasing the likelihood. For example, the logistic regression may show that parental involvement may decrease the incidence of teen pregnancy, while single family home (lack of monitoring) may increase this likelihood. Similarly, we attempt to examine if a certain set of characteristics (called independent variables) will increase the likelihood of self-employment in a certain population (in this case, North Carolina). Mathematically, the logistic regression model can be written as:

$$\ln(\pi/1-\pi) = \alpha + \beta_1 X_1 + \epsilon_1$$

where:

$(\pi/1-\pi)$	= the probability of self-employment
α	= a constant
β_1	= the coefficient for each of the independent variables
X	= the independent variable, namely race, gender, education level, marital status, household income and home ownership status
ϵ_1	= the error term that captures the variation in the variables

In this model, the binary logistic regression investigates if a set of independent variables such as race, gender, age, education, household type and other economic and demographic characteristics contribute to the likelihood of self-employment. This model is estimated for the entire sample from IPUMS 2019 ACS five-year database for the State of North Carolina and then separately for self-employment in Construction, Goods & Supplies, and Non-Professional Services.

Secondly, M³ Consulting analyzed the factors that impact self-employment income and whether self-employment income is impacted by race and/or gender.

Linear regression is used to answer the question of whether the earnings of self-employed Minority and White women owners are different from those of nonminorities, given a set of economic and demographic characteristics. The dependent variable in this analysis is the amount of self-employment earnings.

Mathematically, the linear regression model can be written as follows:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \dots + \epsilon_1$$

where,

Y	= the self-employment income
β_0	= a constant
β_1	= the coefficient for each of the independent variables, representing the impact of that variable on the dependent variable, self-employment income
X	= the independent variable, namely, race, gender, education level, marital status, language proficiency, disability, etc.
ϵ_1	= the error term that captures the variation in the variables

In the linear regression model, the impact of race and gender on the dependent variable is estimated, (earnings received by owners), controlling for the independent variables (economic and demographic characteristics).

Results and Discussion of the Analyses

This section provides the results of the binary logistic regression for impact of race and gender on the likelihood of self-employment.

The binary logistic regression analysis examined the impact of economic and demographic characteristics on the probability of self-employment across all industries. Specifically, the analysis examined if Minorities and White Females were more or less likely to be self-employed. The analysis includes six Minority indicator variables: African American, Asian American, Hispanic American, American Indians, Other Race or Gender (Male vs Female). Research finds that Minorities and Females are less likely to be self-employed, perhaps due to factors such as limited access to capital and other resources. Other factors, such as level of education attained, marital status, age, last employment status, nativity, income (wages and salaries), property value as well as industry may be contributing factors to self-employment. Thus, the likelihood of self-employment was determined to be a function of race and gender, a subset of economic and demographic variables that allow for self-employment.

The logistic regression is first estimated for the full PUMS sample for the State of North Carolina. The results of the logistic regression provide estimates of the independent variables and the probability of self-employment. The analysis allows the computation of the odds of self-employment or not, given this set of independent variables. The results of odds ratios for Minority groups being self-employed are presented in the following table. The odds ratio estimates the probability of self-employment for the various race and gender groups after accounting for economic and rank demographic variables that may impact self-employment. Alternately, if Minority groups who are similarly situated with White Males, with respect to economic and demographic variables are compared, the odds ratio estimates the probability of each group's likelihood of self-employment compared to White Males.

From the results listed in Table 8.61, comparing similarly situated individuals (in terms of economic and demographic variables), overall, a White Male is more than 2.35 times as likely to be self-employed compared to an African American and 1.3 times as likely as a Hispanic American, 2.2 times as likely as an Asian-American, 2 times as likely as "Other Race" and 1.89 times as likely as a Native American. Also, White Males are 1.62 times as likely as White Females to be self-employed.

Table 8.61. Odds Ratio” For Self-Employment for Minority Groups Relative to Non-Minority Males Controlling for Economic and Demographic Factors

Race/Ethnic Group	Odds Coefficient	Odds Ratio Inverse
American Indian or Alaska Native	0.52783	1.89453
Asian or Other Pacific Islander	0.45384	2.20344
African American	0.42469	2.35469
Other Races	0.48416	2.06541
White Female	0.61480	1.62654
Hispanic vs non-Hispanic	0.74648	1.33962

Source: M³ Consulting, Inc.; PUMS US Census Bureau;

The full results of the binary logistic regression are presented in the following table.

Table 8.62. Results of the Binary Logistic Regression Analysis for the Full Sample

Dependent Variable: Self-employed (or not) Variables	Coefficient (β)	Standard Error	Significance (p-value)	Significance
(Intercept)	-4.45859	0.48235	0.00000	Yes
American Indian or Alaska Native	-0.63897	0.33266	0.06097	Yes*
Asian or Other Pacific Islander	-0.79002	0.29829	0.01104	Yes
Black American	-0.85641	0.16170	0.00000	Yes
Other Races	-0.72533	0.57300	0.21194	No
White Female	-0.48646	0.07937	0.00000	Yes
Hispanic	-0.29239	0.33187	0.38288	No
Non-Native	0.38383	0.17710	0.03543	Yes
Age	0.06172	0.01754	0.00099	Yes
Age Squared	-0.00038	0.00016	0.02583	Yes
Property Value	0.00000	0.00000	0.00070	Yes
Personal Earned Income	0.00000	0.00000	0.40918	No
Married	0.04688	0.08885	0.60029	No
Advanced Degree	0.04249	0.13973	0.76244	No
Bachelor’s Degree	-0.04362	0.12240	0.72321	No
Some College	-0.15359	0.09411	0.10948	No
Disabled	-0.00877	0.11494	0.93954	No
Has Health Coverage	-0.00842	0.14938	0.95530	No
Laid Off	-1.03589	0.44898	0.02560	Yes
Construction	1.57833	0.23334	0.00000	Yes
Professional, Scientific and Technical Services	1.46797	0.20849	0.00000	Yes

Table 8.62. Results of the Binary Logistic Regression Analysis for the Full Sample

Educational Services	-1.02742	0.26626	0.00035	Yes
Healthcare	0.13518	0.22740	0.55512	No
Finance and Insurance	0.10775	0.29532	0.71688	No
Social Assistance and Services	1.23355	0.20354	0.00000	Yes
Administrative and Support and Waste Management and Remediation Services	1.34931	0.22645	0.00000	Yes
Entertainment and Food Services	0.86663	0.23021	0.00047	Yes
Real Estate and Rental and Leasing	1.88686	0.23428	0.00000	Yes
Utilities	-2.19549	0.98616	0.03093	Yes
Manufacturing	-0.47577	0.22534	0.04020	Yes
Information	0.46901	0.37732	0.22017	No
Transportation and Warehousing	0.15895	0.28219	0.57598	No
Retail Trade	0.15068	0.23672	0.52759	No
Wholesale Trade	0.24960	0.30228	0.41322	No

Source: M³ Consulting, Inc.; PUMS US Census Bureau

*Significant at 90% confidence Interval

The logistic regression estimates the likelihood of self-employment based on race and gender characteristics, controlling for variables related to economic and demographic factors. Based on the results above, African Americans, American Indians, Asian Americans and White Females are significantly less likely to be self-employed in the State of North Carolina. Non-Natives and older individuals are more likely to be self-employed in North Carolina, but as individuals get older, the probability of self-employment declines. Those with higher property values are more likely to be self-employed as it can be used as collateral to access capital, whereas those who are laid off are less likely perhaps due to lack of resources. Those individuals in Construction, Professional and Financial Services have a probability of self-employment, while being in Educational Services, Utilities and Manufacturing reduces the likelihood of self-employment perhaps due to the capital needed in these services. Administrative services, Entertainment & Food services, and Real estate also increase the likelihood of self-employment.

Construction:

In Construction (Table 8.63), comparing similarly situated individuals (in terms of economic and demographic variables), overall, a White Male is 7.5 times more likely to be self-employed compared to Asian Americans, 1.5 times as likely as an African American, 2 times as likely as a Hispanic American and 2.7 times as likely as a Native American. Also, White Males are 1.70 times as likely as White Females to be self-employed.

Table 8.63. “Odds Ratio” For Self-Employment for Minority Groups Relative to Non-Minority Males Controlling for Economic and Demographic Factors — Construction Industry Only

Race/Ethnic Group	Odds Coefficient	Odds Ratio Inverse
American Indian or Alaska Native	0.36941	2.70705
Asian or Other Pacific Islander	0.13372	7.47855
Black American	0.65159	1.53471
Other Races	1.12940	0.88543
White Female	0.58850	1.69923
Hispanic vs non-Hispanic	0.47463	2.10690

Source: M³ Consulting, Inc.; PUMS US Census Bureau

The full results of the binary logistic regression for Construction are presented in Table 8.64.

Table 8.64. Results of the Binary Logistic Regression Analysis for Construction Industry only

Dependent Variable: Self-employed (or not) Variables	Coefficient (β)	Standard Error	Significance (p-value)	Significance
(Intercept)	-4.71105	0.69374	0.00000	Yes
American Indian or Alaska Native	-0.99586	0.38032	0.01109	Yes
Asian or Other Pacific Islander	-2.01204	0.69763	0.00539	Yes
Black American	-0.42834	0.27695	0.12704	No
Others	0.12168	0.44503	0.78543	No
White Female	-0.53018	0.19254	0.00772	Yes
Hispanic	-0.74522	0.38516	0.05758	Yes*
Age	0.13030	0.02828	0.00002	Yes
Age Squared	-0.00092	0.00029	0.00215	Yes
Property Value	0.00000	0.00000	0.00000	Yes
Personal Earned Income	0.00000	0.00000	0.17496	No
Married	0.33877	0.14433	0.02212	Yes
Non-Native	1.00816	0.36924	0.00823	Yes
Advanced Degree	-0.53448	0.31772	0.09756	Yes*
Bachelor’s Degree	-0.22742	0.18662	0.22761	No
Some College	-0.05602	0.14462	0.69978	No
Disabled	-0.01657	0.20223	0.93495	No
Has Health Coverage	-0.67737	0.15595	0.00005	Yes

Source: M³ Consulting, Inc.; PUMS US Census Bureau

*Significant at 90% confidence Interval

The logistic regression estimates the likelihood of self-employment based on race and gender characteristics, controlling for variables related to economic and demographic factors. In Construction, White Females, Asian

Americans, American Indians and Hispanic Americans are significantly less likely to be self-employed in the State of North Carolina. While African Americans appear to be less likely to be self-employed, this result is not statistically significant. As individuals get older, they are more likely to be self-employed, but this reduces with age. Education does not impact participation as an entrepreneur in the construction industry. Those who are married, non-Native and have greater property values are more likely to be self-employed. Moreover, those who have advanced degrees and those with health coverage are probably employed elsewhere and thus less likely to be self-employed in the construction industry.

Professional Services:

In Professional Services, (Table 8.65), comparing similarly situated individuals (in terms of economic and demographic variables), overall, a White Male is 3.1 times more likely to be self-employed compared to Asian Americans, 1.6 times as likely as African Americans, 2.56 times as likely as Other Races and 2.3 times as likely as American Indians. Also, White Males are 1.38 times as likely as White Females to be self-employed. Hispanic American-owned firms are more likely than White Males to be self-employed in Professional Services in the City of Raleigh.

Table 8.65. “Odds Ratio” For Self-Employment for Minority Groups Relative to Non-Minority Males Controlling for Economic and Demographic Factors — Professional, Scientific and Technical Services Only

Race/Ethnic Group	Odds Coefficient	Odds Ratio Inverse
American Indian or Alaska Native	0.43251	2.31208
Asian or Other Pacific Islander	0.31901	3.13473
Black American	0.61864	1.61646
Other Races	0.39047	2.56100
White Female	0.72342	1.38233
Hispanic vs non-Hispanic	1.16916	0.85531

Source: M³ Consulting, Inc.; PUMS US Census Bureau

The full results of the binary logistic regression for Professional Services are presented in Table 8.66.

Table 8.66. Results of the Binary Logistic Regression Analysis for Professional, Scientific and Technical Services Only

Dependent Variable: Self-employed (or not) Variables	Coefficient (β)	Standard Error	Significance (p-value)	Significance
(Intercept)	-3.96027	0.74040	0.00000	Yes
American Indian or Alaska Native	-0.83815	0.67085	0.21622	No
Asian or Other Pacific Islander	-1.14254	0.34830	0.00170	Yes
Black American	-0.48024	0.26973	0.07991	Yes*
Others	-0.94040	1.11121	0.40065	No
White Female	-0.32377	0.10940	0.00436	Yes
Hispanic	0.15629	0.43432	0.72018	No
Age	0.08566	0.02726	0.00257	Yes
Age Squared	-0.00034	0.00026	0.20035	No
Non-Native	-0.21909	0.24112	0.36705	No
Advanced Degree	0.56453	0.24871	0.02671	Yes
Bachelor's Degree	0.08793	0.23004	0.70360	No
Some College	-0.29548	0.25536	0.25166	No
Disabled	-0.07521	0.21725	0.73038	No
Has Health Coverage	-0.94965	0.24748	0.00029	Yes
Property Value	0.00000	0.00000	0.00181	Yes
Personal Earned Income	0.00000	0.00000	0.01291	Yes
Married	0.07293	0.13680	0.59587	No

Source: M³ Consulting, Inc.; PUMS US Census Bureau

The logistic regression estimates the likelihood of self-employment in Professional Services based on race and gender characteristics, controlling for variables related to economic and demographic factors. The results above show that White Females, Asian Americans and African Americans are significantly less likely to be self-employed in the State of North Carolina. Age does not appear to be a barrier in self-employment in Professional Services and individuals are more likely to be self-employed with age; getting older does not change that significantly. Education does impact participation as an entrepreneur in the Professional Services industry. Those with bachelor's degree are likely to be self-employed, but the result does not reach statistical significance. But those with advanced degrees are more likely to be self-employed. In Professional Services, greater property value and higher personal earned income does not have a major impact on the likelihood of being self-employed. Those with health coverage are probably employed elsewhere and thus less likely to be self-employed in the professional services as well.

Self-Employment Earnings

The following are the results of the linear regression for the impact of race and gender on self-employment earnings.

The linear regression analyses estimated the impact of race and gender on self-employment earnings, controlling for economic and demographic characteristics. The dependent variable for this analysis is self-employment earnings. The independent variables and the hypothesized relation to self-employment earnings are as follows:

- **Age**—Research shows that age proxies for experience and self-employment earnings should be positively related to age.
- **Gender (Male vs. Female)**—Research shows that males are more likely to receive higher earnings than females.
- **Race**—Research shows that nonminorities earn more than Minorities, and Minority status should be negatively related to earnings.
- **College Education**—Research shows that individuals with higher educational levels earn more, and college educated individuals should receive higher earnings.
- **Age-Squared**—Research shows a nonlinear relation between earnings and age. This variable captures the fact that earnings increase up to a certain age and then tend to level off.
- **Income**—Research shows a negative relation between earnings and income status.
- **Marital Status**—Research shows that married individuals tend to earn more than those single individuals.
- **Disability**—Research shows that those with disability will tend to have lower self-employment incomes.

The results of the linear regression of self-employment earnings are first estimated for the full sample for the State of North Carolina.

The results in Table 8.67 below lead us to note the following:

- With all other variables kept constant, a self-employed African American will earn about \$8,769 less than a similarly situated Non-Minority Male and a self-employed White Female will earn \$3,888 less than similarly situated Non-Minority Male in the State of North Carolina. Self-employed Hispanic Americans, Asian Americans and American Indians may also earn less than a Non-Minority Male, although these results are not statistically significant.
- An individual who has an advanced degree will earn \$6,361 less, an individual with a bachelor's degree will earn \$7,032 degrees less, and an individual with some college will earn \$3,824 less, if self-employed in North Carolina. It is possible that the opportunity with education increases the likelihood of higher earnings working as an employee in the State of North Carolina.
- Among the industries, individuals in Educational Services, Utilities and Management are less likely to earn more self-employment income in the State of North Carolina. Those individuals self-employed in Construction, Professional Services, Social Assistance and Services are more likely to earn a higher self-employment income.

Table 8.67. Linear Regression Results for the Determinants of Self-Employment Income by Race and Gender for the Full Sample

Variables	Coefficients (β)	Standard Error	t-statistic	p-value	Significant
(Intercept)	-1413.44614	8953.39575	-0.15787	0.87527	No

Table 8.67. Linear Regression Results for the Determinants of Self-Employment Income by Race and Gender for the Full Sample

Age	190.69287	326.71774	0.58366	0.56236	No
Age Squared	-0.88653	3.12830	-0.28339	0.77818	No
American Indian or Alaska Native	-3869.69413	5490.01208	-0.70486	0.48453	No
Asian or Other Pacific Islander	-3130.27090	8371.46773	-0.37392	0.71022	No
Black American	-8769.97373	1888.72260	-4.64334	0.00003	Yes
Other Races	-6793.17458	4777.18023	-1.42201	0.16192	No
White Female	-3888.67615	2101.84934	-1.85012	0.07087	Yes*
Hispanic vs Non-Hispanic	8623.53104	5206.78608	1.65621	0.10464	No
Advanced Degree	-6361.88872	3220.82820	-1.97523	0.05439	Yes*
Bachelor's Degree	-7032.13352	2677.77349	-2.62611	0.01176	Yes
Some College	-3824.40153	1861.54249	-2.05443	0.04577	Yes
Married	2238.74935	1468.42483	1.52459	0.13436	No
Has Health Coverage	255.15326	1627.25007	0.15680	0.87610	No
Disabled	630.64246	3251.13651	0.19398	0.84707	No
Non-Native	-1923.30997	5154.80545	-0.37311	0.71082	No
Mortgage Payment	0.28620	1.56181	0.18325	0.85543	No
Personal Earned Income	0.41996	0.02613	16.07099	0.00000	Yes
Property Value	-0.00010	0.00461	-0.02144	0.98299	No
Construction	10212.63672	3181.33200	3.21018	0.00245	Yes
Utilities	-26320.18856	8189.07917	-3.21406	0.00242	Yes
Professional, Scientific and Technical Services	14353.19346	4326.76267	3.31731	0.00181	Yes
Educational Services	-13601.68803	3704.13061	-3.67203	0.00064	Yes
Healthcare	5744.20595	5042.27802	1.13921	0.26064	No
Finance and Insurance	198.83875	9372.41282	0.02122	0.98317	No
Social Assistance and Services	7890.51294	2922.79423	2.69965	0.00974	Yes
Administrative and Support and Waste Management and Remediation Services	10244.69344	3200.14440	3.20132	0.00251	Yes
Entertainment and Food Services	6369.08381	4646.83844	1.37063	0.17729	No
Management of Companies and Enterprises	-38447.43515	6498.74254	-5.91613	0.00000	Yes
Real Estate and Rental and Leasing	16639.80183	3530.50313	4.71315	0.00002	Yes
Manufacturing	-2384.95638	4848.19358	-0.49193	0.62516	No
Information	-5850.48898	5676.57131	-1.03064	0.30822	No

Table 8.67. Linear Regression Results for the Determinants of Self-Employment Income by Race and Gender for the Full Sample

Transportation and Warehousing	23296.57378	6045.23510	3.85371	0.00037	Yes
Retail Trade	4912.31685	4275.66346	1.14890	0.25667	No
Wholesale Trade	-6532.31762	7257.52267	-0.90008	0.37287	No

Source: M3 Consulting, Inc.; PUMS US Census Bureau

*Significant at 90% confidence Interval

Construction

Table 8.68 presents the results of the determinants of self-employment earnings in the construction industry.

- With all other variables kept constant, a self-employed Hispanic American will earn about \$20,084 more than a similarly situated non-minority; a self-employed individual from “Other Races” will earn \$17,350 less than a similarly situated non-minority in the State of North Carolina. A self-employed African American or American Indian may earn less than a non-minority male, although these results are not statistically significant.
- Compared to someone with a high school diploma or less, an individual who has an advanced degree, education does not provide an advantage for the self-employed in Construction. Any individual who has a bachelor’s degree will earn \$10,105 less if self-employed in the construction industry in the State of North Carolina. Those individuals who are married or have personal earned income have significantly greater self-employment earnings.

Table 8.68. Linear Regression Results for the Determinants of Self-Employment Income by Race and Gender for Construction Only

Variables	Coefficients (β)	Standard Error	t-statistic	p-value	Significant
(Intercept)	8074.07597	23786.88130	0.33943	0.73545	No
Age	182.64250	1067.85083	0.17104	0.86476	No
Age Squared	-1.92454	10.84235	-0.17750	0.85970	No
American Indian or Alaska Native	-13544.41120	14501.86354	-0.93398	0.35400	No
Asian or Other Pacific Islander	4045.76347	12543.46619	0.32254	0.74815	No
Black American	-6473.73151	5119.82572	-1.26444	0.21088	No
Other Races	-17350.31838	10358.22411	-1.67503	0.09905	Yes*
White Female	-3442.20759	7036.74490	-0.48918	0.62647	No
Hispanic vs Non-Hispanic	20084.35257	8481.51475	2.36801	0.02107	Yes
Advanced Degree	-13685.90275	9622.81461	-1.42223	0.16005	No
Bachelor's Degree	-10105.42283	4070.66138	-2.48250	0.01581	Yes
Some College	-1164.89906	3504.02298	-0.33245	0.74069	No
Married	5341.38821	3024.36594	1.76612	0.08238	Yes*
Has Health Coverage	808.57900	2919.95674	0.27691	0.78278	No
Disabled	-11009.57259	6812.40484	-1.61611	0.11123	No
Non-Native	8.00021	5504.45831	0.00145	0.99885	No
Mortgage Payment	-1.57687	3.60696	-0.43717	0.66353	No
Personal Earned Income	0.51298	0.08582	5.97767	0.00000	Yes
Property Value	-0.00759	0.01432	-0.53026	0.59786	No

Source: M3 Consulting, Inc.; PUMS US Census Bureau

*Significant at 90% confidence Interval

Professional Services

Table 8.69 presents the results of the determinants of self-employment earnings in the Professional Services industry.

- With all other variables kept constant, a self-employed White Female will earn about \$10,154 less than a similarly situated non-minority. Self-employed African Americans and individuals from Other Races may earn less as well, but these results are not statistically significant.
- Some education does not provide an advantage for the self-employed in Professional Services as those with some college may earn \$16,968 less if self-employed. Higher education does not increase the propensity for higher earnings if self-employed; those with advanced degrees who are self-employed in Professional Services may still make less, but these results are not significant. Those individuals who are non-native and self-employed in the City of Raleigh will likely make \$40,889 less.

Table 8.69. Linear Regression Results for the Determinants of Self-Employment Income by Race and Gender for Professional, Scientific and Technical Services Only

Variables	Coefficients (β)	Standard Error	t-statistic	p-value	Significant
(Intercept)	-49064.52309	27233.82085	-1.80160	0.07655	No
Age	2252.92556	1175.38712	1.91675	0.05996	No
Age Squared	-17.79273	11.14045	-1.59713	0.11540	No
American Indian or Alaska Native	11919.54362	16463.05627	0.72402	0.47182	No
Asian or Other Pacific Islander	7084.43367	31998.61259	0.22140	0.82552	No
Black American	-4451.25214	8032.23726	-0.55417	0.58149	No
Other Races	-25945.13796	22385.56616	-1.15901	0.25097	No
White Female	-10154.33154	5124.60251	-1.98149	0.05205	Yes*
Hispanic vs Non-Hispanic	18608.32320	14435.90063	1.28903	0.20225	No
Advanced Degree	-3091.22807	8413.73462	-0.36740	0.71459	No
Bachelor's Degree	-14752.85031	9442.24202	-1.56243	0.12336	No
Some College	-16968.09962	8857.21248	-1.91574	0.06009	Yes*
Married	9237.34426	6172.96303	1.49642	0.13970	No
Has Health Coverage	9516.20754	10366.53101	0.91797	0.36225	No
Disabled	-5888.35561	10707.91378	-0.54991	0.58439	No
Non-Native	-40889.65665	21964.25870	-1.86165	0.06747	Yes*
Mortgage Payment	3.08135	5.06013	0.60895	0.54482	No
Personal Earned Income	0.43875	0.04696	9.34376	0.00000	Yes
Property Value	-0.01503	0.01129	-1.33111	0.18811	No

Source: M3 Consulting, Inc.; PUMS US Census Bureau

*Significant at 90% confidence Interval

8.5 Summary of Findings

The purpose of this analysis is to determine if there are any differences in the capacity of race, gender and ethnic groups, and after accounting for any differences in the capacity of firms, if race and gender are contributing factors to any disparities found.

Capacity Based on Census Annual Survey of Entrepreneurs

Based on U.S. Census Annual Survey of Entrepreneurs, Minority- and Women-owned firms in Construction were about a quarter of the firms with paid employees, with Hispanic American-owned firms and WBEs largely representing them. Goods & Supplies had WBEs and Asian American-owned firms with the highest capacity among the M/WBEs, although Minority-owned firms only represented 14.53% of firms with paid employees. Non-Professional Service firms had a greater representation from M/WBEs at 34% with Asian American-owned and WBEs representing a majority of these firms with paid employees. In Professional Services, WBE firms accounted for a little less than a quarter of firms with paid employees while minority firms account for 18.56% of firms with paid employees. Among Minority-owned in Professional Services, Asian American- and African American-owned firms constituted the largest proportion of firms with paid employees.

Capacity Based on Data Axle

Data Axle data presenting average employees shows that overall M/WBES are concentrated in the lower range of employees with over 4,000 M/WBE firms with 1–19 employees. This number drops as the number of employees increases, with only eight minority firms with a range of 100–249 employees. This varied by procurement type with two African American-owned firms and one Hispanic American-owned firm in Construction at the 250–499 employee range; one African American- and one Asian American-owned firm with 250–499 employees in Architecture and Engineering; one African American-owned firm in the 1,000–4,999-employee range in Goods & Supplies procurement; one Asian American-owned firm with employees in the 100–249 range in Non-Professional Services; and one Hispanic American-owned firms with 100–249 employees in Professional Services.

Using sales volume, one African American-owned firm has the capacity up to \$50 million in Architecture and Engineering with most Minority-owned firms in the less than \$5 million in sales. In Construction Minority-owned firms and WBEs have a maximum capacity within the range of \$20 to \$50 million in sales. While Hispanic American-owned firms are represented across the various sales ranges, they are concentrated in the lower range of less than \$2.5 million, and African American-owned firms are concentrated in the less than \$500K range. Goods & Supplies have at least four WBEs and one African American-owned firm with a capacity of \$50 million in Architecture and Engineering, whereas in Non-Professional Services, except for one Hispanic American and one Native American-owned firm, all other minority groups had a capacity of less than \$10 million and WBEs had a capacity of less than \$100 million. In Professional Services, one Native American-owned firm has the capacity of \$100 million among the Minority-owned firms, and one WBE has the capacity of \$500 million. Other race/gender/ethnic groups had an upper limit of \$20 million in sales with the majority of them concentrated at the \$2.5 million mark or less in sales.

Capacity Based on Survey Regressions

Based on a survey conducted to gather data on capacity, M³ Consulting conducted regression analysis to examine differences in capacity based on race/gender/ethnicity, if any, on a final sample of 422 firms. A majority of Minority- and Women-owned firms had average gross receipts in the \$200,000 or lower range, although the average was closer to \$1 million. Minority-owned business are more likely to use small business loan programs to obtain financing, and a majority of Minority-owned businesses were not denied a bond while about a third

were denied a loan or line of credit at least one or more times. The survey results also showed that Minority- and Women-owned businesses were more likely to bid on projects as subcontractors than as prime contractors.

Employing the Blinder-Oaxaca decomposition, a method for exploring discrimination between groups, M³ Consulting estimates the extent of disparity in the revenues between Non-M/WBE and M/WBE companies after accounting for other influencing factors such as number of full-time employees, age of business, principal's experience and the average two-year bid size. The results find that on average, the total gross receipts were \$5,306,349 and \$1,460,893 for Non-M/WBE and M/WBE, respectively. Some of the difference can be explained by education, experience or other firm characteristics, while the remaining can be attributed to discrimination. The results note that the M/WBE group received 13.14% less in total gross receipts from all sources in 2021 than it would have if discrimination had not occurred.

Capacity Based on PUMS

Entrepreneurship is often a means to upward economic mobility for Minorities and Women, but disparities in business formation often limit the development and growth of these firms. Data from the U.S. Census (PUMS) is used to analyze the impact of race and gender, along with other demographic and economic factors on (1) the choice of self-employment and (2) the level of self-employment income.

Overall, African Americans, American Indians, Asian Americans and White Females are significantly less likely to be self-employed in the State of North Carolina. Self-employment is more likely in Construction and Professional Services industry. In Construction, White Females, Asian Americans, American Indians and Hispanic Americans are significantly less likely to be self-employed, whereas in Professional Services White Females, Asian Americans and African Americans are significantly less likely to be self-employed.

In the State of North Carolina, older individuals, non-natives and those with higher property values are more likely to be self-employed. While this holds true in Construction as in Professional Services, the latter finds graduate education and personal earned income as factors that increase the likelihood of self-employment.

Estimating the impact of race and gender on self-employment earnings and controlling for economic as demographic characteristics, we find that a self-employed African American will earn about \$8,769 less than a similarly situated non-minority male and a self-employed White Female will earn \$3,888 less than similarly situated non-minority male in the State of North Carolina. In the Construction industry however, a self-employed Hispanic American will earn about \$20,084 more than a similarly situated Non-Hispanic but in Professional Services, a Self-Employed White Female will earn about \$10,154 less than a similarly situated non-minority male.

Chapter 9: Anecdotal Comments From the Marketplace

9.1 Introduction

As part of the disparity study process, Miller³ Consulting, Inc. (M³ Consulting) sought to explore the experiences of business owners in the City of Raleigh (the City) and the Raleigh-Cary, NC MSA who seek business opportunities with the City. This chapter contains a categorized summary of anecdotal evidence collected concerning the issues and barriers small, minority and women business owners face as they attempt to transact business with the City.

A. Summary of Anecdotal Participants

The anecdotal data was gathered by conducting one-on-one interviews and a focus group session. Due to the COVID-19 pandemic, all interactions were hosted via Zoom or Microsoft Teams. The firm owners' race and gender, along with the industry category, are summarized in Tables 9.1 and 9.2.

**Table 9.1. 1-on-1 Interview and Focus Group Participants
Race and Gender Distribution**

Firm Owner Race and Gender	Interview Count	Focus Group Count	Survey Count
White Male	7	0	126
Minority Male	4	0	81
Minority Female	3	0	108
White Female	6	2	91
Publicly Traded	0	0	14
DBE	0	0	2
Total	20	2	422

Source: M³ Consulting

**Table 9.2. 1-on-1 Interview and Focus Group Participants
Industry Distribution**

Industry	Interview Count	Focus Group Count	Survey Count
AES-Design Services	4	0	12
Construction	7	1	76
Professional Services	8	1	158
Nonprofessional Services	0	0	108
Goods & Supplies	1	0	58
Total	20	2	422*

Source: M³ Consulting *There were 10 survey respondent firms industry was either non-profit, unknown, or other

The particularized accounts of business owner experiences contained in this chapter should be considered in tandem with the quantitative evidence regarding marketplace disparities discussed in the Availability, Utilization and Disparity chapters of this report. The anecdotal information may be used to further assess or identify the existence of race-based or gender-based City or marketplace barriers and to corroborate statistical findings.

The framework for the collection and analysis of anecdotal evidence for this study has been suggested by the U.S. Supreme Court in the case *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989). In that case, the Court held that particularized anecdotal accounts of discrimination could help establish a compelling interest for a local government to institute a race-conscious remedy, and per the 4th Circuit in *Rowe*, anecdotal guidance is required to corroborate statistical evidence of disparity in such cases. Moreover, such evidence can provide a local entity with a firm basis for fashioning a program that is narrowly tailored to remedy identified forms of marketplace discrimination and other barriers to Minority- and Women-owned business participation in contract opportunities.

9.2 Anecdotal Interview Methodology

M³ Consulting proposed to conduct 20 one-on-one interviews, three focus group sessions and one public hearing. Using the sample from the combined list of the City's Vendors, the Master Minority-owned/Women-owned/Disadvantaged Business Enterprise (M/W/DBE) list and information from Data Axle, M³ Consulting contacted firms via phone and email to determine their interest in participating in one-on-one interviews and focus groups. M³ Consulting experienced low response and turn-out to focus groups requests with only two participants in one focus group.

A minimum of three attempts were made to reach firms to participate in the one-on-one interviews and focus groups, via email and phone. During those efforts, a number of reasons were provided by potential interviewees as to why they did not want to participate, including the following:

- Vendors were too busy and did not have the time.
- Vendors considered the interviews and focus groups to be a waste of time.
- Vendors had never responded to a procurement solicitation or otherwise tried to do business with the City.

Anecdotal interviews were scheduled with 21 businesses and completed with 20 businesses. One business chose to include two company representatives in their interview; they will be noted as interviewees 15A and 15B. Additionally, a small focus group with two participants was held to discuss the themes raised in individual interviews. The two focus group interviewees also completed individual interviews. Interviews were held with a cross section of minority, women and nonminority men business owners. In two instances, the business owner designated a company representative to complete the interview. Interviewees included small businesses that have been established for a wide variety of timespans, ranging from less than two years to nearly 40 years.

The M³ Consulting team transcribed and analyzed all session transcripts. Common themes across the interviews and focus groups were grouped under five topic headings. Interview and focus group excerpts are provided to support each theme and the race and/or gender of the interviewee are indicated. The excerpts illustrate participants' discussions of experiences relating to each theme heading.

A. Participant Confidentiality

Each participant was informed that their identity and the identity of their company would remain confidential, unless M³ Consulting was required to disclose this information. We strongly note that efforts to verify or find corroborating data that supports any claim made during an anecdotal discussion may subject the participant to foreseen and unforeseen reprisals. Therefore, in using and following-up on the comments reflected in this chapter, the City should take measures to protect participants from any retaliatory actions by others.

9.3 Anecdotal Interview Findings

The following sections indicate the recurrent themes in the discussions found throughout the interviews. Each theme includes anecdotal comments/excerpts directly from the interviewees illustrating the topic heading. The themes are:

Theme 1: Client Misperceptions that Undermine Small Businesses

Theme 2: Uneven Opportunities to Secure Financing and Subsequent Limitations to Growth and Capacity

Theme 3: Policies and Practices within the City that Impact Small Business Enterprises' (SBE) and M/WBEs' Pursuit of Contracts

Theme 4: Burdens and Benefits of Pursuing and Acquiring NC Historically Underutilized Businesses (HUB) Certifications

Theme 5: Comments and Suggestions

Theme 1: Client Misperceptions that Undermine Small Businesses

A recurrent theme throughout interviews was that small businesses face a particular set of challenges that differ from those of larger companies. Nearly all interviewees mentioned having to combat perceptions of limitations based on the size of the company and not having the name recognition of larger companies. These obstacles were often exacerbated by assumptions based on gender and race for minority and women business owners. Interviewees noted experiencing these assumptions in the form of direct questioning such as, "Are you sure you will be able to do the job?", or in being told that they selected a larger firm because they did not think the smaller company could handle the volume of work. Additionally, small businesses experienced being asked to be a qualifier on certain bids and then not included or minimally included in the actual work.

Interviewee 2, Black Male, Construction

Interviewee 2 shared his challenges with being a new, small business in his industry. He found himself competing with much larger firms who had been in business for decades longer than him. He indicated he felt that he had "very limited access" in comparison to the larger companies and had to work hard to prove to potential clients what his capabilities were as a small business owner.

Interviewee 5, White Male, Architecture & Engineering

Interviewee 5 explained that he had the experience of working with a large company before beginning his own small business. Given his previous work, he has had the opportunity to see how large firms prepare bids versus smaller companies. The interviewee expressed that, in his opinion, it's easy for larger companies with more employees to "look good on paper" because they can list the skills and experience of any and/or all their employees, even if only one or two would actually be completing the work.

Interviewee 6, Black Male, Goods & Supplies

Interviewee 6 detailed the challenges that he faced, both as a new small business owner and as someone trying to expand his business. He described the arduous process of obtaining the initial inspections and permits needed to get his company up and running, which meant months of not being able to generate revenue. While he was able to withstand this time because of his and his partner's savings, he shared how he had seen many other businesses "go under" in similar circumstances. In his words,

"When you invest in your company and you put your \$15,000 or \$20,000 of your real hard-earned cash into a business and you're expecting to get a return, your revolving expenses don't stop. But your ability to generate revenue is being halted by some arbitrary rationale inside of a particular office."

Interviewee 8, White Female, Construction

Interviewee 8 spoke about having to compete against larger firms in her industry and feeling at a disadvantage based on her firm's size. She believes that while larger firms may have entire pre-marketing and marketing departments, she and her partner were typically working with 10 or fewer employees and attempting to meet all the same bidding criteria. She explained that this became especially challenging after 2008, when it seemed that larger firms started bidding on smaller contracts that previously would not have been worth their time.

Interviewee 11, White Male, Professional Services

Interviewee 11 described his company's determination to ensure that they provide a "good product" and that they have a "good story," but still feels that "as a small business, sometimes, it's hard to get a voice." He said that they often must work harder than larger companies to get clients on board with their work and their product. He believes that potential clients eventually understand the benefits to working with them, "but it's definitely a process" to convince them.

Interviewee 12, White Male, Architecture & Engineering

Interviewee 12 expressed his confusion at the assumption that small businesses are not able to successfully manage large projects. He explained,

"If you hire a firm of 200 people to do your project, you are going to work with a team of three or four people. And if you hire a firm of seven people to do your project, you are also going to work with a team of three or four people. So I've just never understood this kind of relationship there is between the number of people in an office and the size of projects they do."

Interviewee 13, Black Female, Professional Services

Interviewee 13 discussed the specific challenges of minorities and women attempting to succeed as small business owners. In her words,

"It's very difficult to grow the business without adequate infrastructure that allows you to scale up ... true scaling, it requires the funding, the resources to be in place. It's six months to a year of the founder's salary being paid, so that they don't have to eat what they hunt."

She detailed her feelings regarding how minorities and women are often starting from "nothing" and are mostly only able to focus on keeping their doors open, rather than being able to grow the business and flourish. She explained an experience with not being initially taken seriously as a small business and female entrepreneur in a meeting with City officials: "I met with the folks that could greenlight—well, actually, so I realized that governance is a very tricky thing because they have their processes in different systems. But I remember feeling that as a black woman, as a black woman business owner, early on in the meeting, I was made to feel like, 'How did you get in here?' That sort of thing—and then when I held my own, they were very eager to say, 'Oh, wait, okay. We need what you're doing.' Like, 'We see you, and we see that you would absolutely be the person that could do this.'"

Interviewee 14, Black Male, Architecture & Engineering

Interviewee 14 shared that he has found that being a small business owner and being African American are challenging in his industry. He explained that as a professional services provider, he often encounters the assumption that he does not have the "manpower to execute projects" and that he is "probably not as capable as [his] other counterparts that are non-African American." According to him, he deals with these doubts despite a "laundry list" of certifications and decades of experience.

Interviewee 15A, White Female, Construction

Interviewee 15A described her experience of being a small business owner as follows,

"We hear an awful lot, 'We love working with you, but it's a really big project, so we're going to go with [a larger firm].' And that's our biggest setback. And unfortunately, to become bigger, we just have to get more, bigger jobs. And so that's been a struggle for 16 years to really grow our business."

Interviewee 21, Black Female, Professional Services

Interviewee 21 detailed the barriers that come with being a small business owner who is also a “double minority,” explaining that “sometimes I’m doubly not heard because of my gender and because of the color of my skin.” She went on to say,

“I believe that there’s a deep-seated need to ‘prove yourself’ constantly. And no matter how well, or how sincere, or adequately that you attempt to do your work, you are always still yet questioned even in that.”

Focus Group Participant 1, White Female, Professional Services

Focus Group Participant 1 echoed the sentiments of individual interviewees, explaining as follows,

“Being small and trying to get in with a client is really difficult because no matter how good you are, when [the bigger firm] says, ‘Well, there’s 50 of us, so if there’s an issue, we’ve got this person, this person, this manager, this manager’s manager and you go on up the food chain.’ ... and the first words out of [the client’s] mouth (sic), ‘You’re not large enough to handle the work,’ it doesn’t matter what you say.”

Focus Group Participant 2, White Female, Construction

Focus Group Participant 2 also shared the experience of having their business capabilities questioned solely based on size. She said,

“We get the question a lot, ‘Would you be able to do the job?’ meaning do you have enough manpower to handle the job? And we get told a lot, ‘What’s the largest job that you’ve done?’ They’re just questioning whether or not we can do the work because we are a small business.”

Theme 2: Uneven Opportunities to Secure Financing and Subsequent Limitations to Growth and Capacity

Most of the business representatives shared during the disparity interviews that they were self-funded at inception. Many interviewees recounted their difficulties securing funding, particularly with large banks, and the strain it imposed on their personal finances. Attempting to establish loans and lines of credit required some business owners to apply with multiple financial institutions and to spend their funds on the application processes, even if they were not approved. Interviewees also indicated that when they did secure lending accounts, the interest rates were often extremely high. Lack of access to sufficient funding was noted as a barrier to the growth of small businesses, especially for women and minorities. Some interviewees shared positive experiences with receiving grants and small-business-friendly loans, but many times they were not aware of these opportunities when they started their business. Several interviewees also spoke to how a lack of finances has impacted their ability to participate in and network with the larger business community. A number of the businesses discussed that they had been excluded from lucrative networking opportunities as newcomers and that the annual fees of becoming members of certain networks were prohibitive. One interviewee noted that the high rate and cost of rental space among MBEs can stifle business growth by adversely impacting liquidity and credit scores.

Interviewee 2, African American Male, Construction

Interviewee 2 explained that although he started his business with personal funds, he would not recommend that path to future small business owners. He mentioned that after receiving additional education in business, he learned about other funding sources, including grants, that he felt would’ve been preferable to start out with. He detailed challenges regarding his efforts to separate his personal finances from those of his business. “For me, again, trying to switch everything over from your personal credit to your business credit. So that’s the

thing. ... As far as just trying to—if you’re going to get business loans or lines or credit so that they get it in your business name versus in your personal name. So that was the most challenging part for me in the beginning part because everything—I was doing everything in my personal name. And so it takes time to build up your business credit.”

Interviewee 4, White Female, Professional Services

Interviewee 4 shared her experiences with financial burden as a small business owner. She described beginning her business while already under the weight of student loan debt. She detailed the various costs involved, even as a professional services provider. Her personal expenditures included the initial investment in the company, obtaining the appropriate credentials, renewal of her credentials, professional development and website/marketing expenses, among other things. “Haven’t been able to receive financial support, and even from banking, the percentages for cards—if you don’t have money—it costs so much money to borrow money just to get started.” She used her personal funds to pay for the required expenses because she felt that she could not justify these costs—although they were needed to run her business—to a bank or other financing entity.

Interviewee 3, Black Female, Professional Services

Interviewee 3 mentioned very positive experiences securing funding through the North Carolina Small Business and Technology Development Center. She expressed an appreciation for their focus on providing funding for women and minority business owners. She did, however, recount a very negative experience with another financial organization. In her opinion, this other organization had “predatory lending” practices, including balloon payments and extremely high interest rates. “Very high interest rate. Yeah. I actually had to consult an attorney with regards to that one.”

Interviewee 6, Black Male, Goods & Supplies

Interviewee 6 and his partner self-funded their business initially, but he described excellent experiences with receiving grants through the City of Raleigh that helped to support small business owners paying their employees a livable wage and those upgrading their infrastructure. In his words, the process of applying for and receiving these grants was “very smooth, very easy, very clear.” This was in direct contrast to his experience with trying to get loans from banks as a new Black business owner. He shared that lenders often wanted three to four years of business tax returns to even consider a loan, which wasn’t a “viable” option for him and his partner when they were just over a year old and wanted to expand. “Well, we built our business from cash. Every time you go to the bank as a Black business owner, it—so at first, when we first started and we saw that people really liked our food, our cuisine, we wanted to expand at a fast rate. But banks would ask us for three or four years of tax returns. We were a year and a half or two years old, so that wasn’t something that seemed viable for us. And since then, it’s been our prerogative to just self-fund.”

Interviewee 8, White Female, Construction

Interviewee 8 was unique among the business owners interviewed in that she and her partner received venture capitalist funds to begin their business. In her estimation, this support allowed them to grow faster than other similar small businesses may have. Eventually, though, the relationship with the venture capitalist firm ended and they had to obtain loans to keep the business going, some of which Interviewee 8 referred to as unattractive. “We met with PNC (Bank) a million times. This was before they were acquired and they used to be small business friendly and then they were less small business friendly. So we went through these onerous processes—which at our billing rate, I mean, we’re starting to add up how many hours you spend in a traditional bank loan and bank relationship process. And ... that in itself adds a percentage cost to the—if you think about the interest. So we had to use OnDeck, though, and that’s personal guarantee. You have to put your own total risk into that. And it’s got an onerous—the effective rate is what, 36% to 40%. It’s huge. ... And then we sought

related party loans, which are still not completely paid off because we were getting back on track, of course, pre-pandemic, but a couple of things happened.” She described working with large and small banks and encountering interest rates ranging from about 15% to 40%, which she believes to be “highly unfavorable” for small businesses.

Interviewee 13, Black Female, Professional Services

Interviewee 13 secured a combination of resources to fund her business initially. She received funding from angel investors, secured a contract with the City and was able to take advantage of COVID-19 funding sources. She expressed feeling fortunate about receiving funds from organizations that have not required “a mountain of paperwork.”

Interviewee 14, Black Male, Architecture & Engineering

Interviewee 14 described the process of trying to get business loans with three different banks and facing extreme hurdles. His first experience applying with a large bank was long and complicated, leading him to invest over \$12,000 of his own personal funds during the lending application process, but his investment did not result in a loan and his personal funds were not returned. When he did secure financing, he attributes his success to having a personal relationship with a bank employee. Interviewee 14 identified discouraging experiences like the above referenced with his first large bank only increase the reluctance of minority and women business owners to seek financing. Rather, they tend to be inclined to try to cover everything out of pocket, which often limits their ability to scale up.

Interviewee 21, Black Female, Professional Services

Interviewee 21 sought a loan for renovation of her business and was denied by six banks before receiving approval at the seventh bank. She attributes her eventual success securing financing to the loan manager being an African American banker at a “Black-owned” bank and the banker having a personal stake in the work she was pursuing.

Interviewee 3, Black Female, Professional Services

Interviewee 3 explained that she believes the growth of Minority-owned and/or Women-owned businesses in the Raleigh community has been impacted by difficulty securing “legitimate funding” and networking. With networking, she said that it feels “a little segregated.” She discussed specific channels (including university listservs) that are used to reach out to various groups but seem to result in individuals from one demographic being gathered.

Interviewee 4, White Female, Professional Services

Interviewee 4 mentioned feeling extremely isolated from the larger business community. She described having trouble accessing networking opportunities, particularly ones that don’t require additional costs. In her words,

“It’s like, do you eat and pay rent, or do you pay \$1,000 to be a part of a networking group that’s going to get you seen? Because those companies wouldn’t see you because you don’t have the resources to get seen or you don’t have the contacts. Because that isn’t your world.”

Interviewee 6, Black Male, Goods & Supplies

Interviewee 6 spoke to the history of minorities in the Raleigh business community and how their ability to grow has been impacted. He discussed the “very high revolving expenses from being lessees” versus owning their own spaces. Because they are likely to rent, Interviewee 6 noted that Black business owners are subject to rent hikes and other increases which could lead to late payments; late payments lead to lower credit scores which lead to even more difficulty securing lending in the future.

Theme 3: Policies and Practices within the City that Impact SBEs' and M/WBEs' Pursuit of Contracts

Several interviewees shared their thoughts and experiences submitting bids/proposals/qualifications to the City. Overwhelmingly, interviewees categorized the process as time-consuming and sometimes disproportionately involved for the size of the contract. Additionally, interviewees noted that in their experiences (1) communications from the City about potential procurement opportunities are only posted, not actively shared with anyone; and (2) the City does not confirm submissions, leaving bidders/proposers/applicants to wonder if their submissions were in fact received and wondering what, if anything, they could do differently for the next opportunity. Several only found out about business opportunities with the City because of personal connections after their attempts to look on the City website left them confused or unclear.

Interviewee 1, White Female, Construction

Interviewee 1 described the process of submitting a bid through the City's platform as "a little daunting." She said that the system is not "user-friendly" and for vendors who may not be computer savvy, it can act as a barrier to bidding for work. She spoke to the unique challenges of those who may not speak or read English as their first language when they are having to navigate unnecessarily "technical" language in the bid process.

Interviewee 3, Black Female, Professional Services

Interviewee 3 had not had an opportunity to work with the City at the time of her interview. She had submitted two proposals to the City, but had not received any response to her submissions, not even a confirmation of receipt. She felt frustrated with the procurement process and described it as "laborious." She specifically mentioned "interacting with three or four different websites" to piece together all of the requirements for the procurement process.

Interviewee 5, White Male, Architecture & Engineering

Interviewee 5 shared that he finds the procurement process through the City to be quite time-consuming, particularly when he feels that the quality of his work has been well demonstrated in previous contracts. He explained,

"I think it can be rather onerous for a small business owner to put together a 20- or 40-page response to [a request for quote (RFQ)] as opposed to getting some sort of referral from within the City of Raleigh."

When asked how much time an RFQ response typically takes, Interviewee 5 said it's usually 20 to 40 hours of time. He also mentioned that it feels difficult to move past the RFQ submission to the invitation for an interview. He considered it to be "disheartening" to invest his time and effort into submissions and not receive any information about why he was not selected for the contract.

Interviewee 12, White Male, Architecture & Engineering

Interviewee 12 noted that his firm closely tracks their submissions with the City. At the time of his interview, in 2022, they had submitted 29 RFQ responses. Of those 29 submissions, they were invited for one interview, but ultimately were not selected for the contract. Interviewee 12 estimated that they likely spend 10–20 hours preparing a submission and an additional 10–20 hours to prepare for an interview, if invited. He noted that despite this very large time investment, business owners must have "a thick skin" because unsuccessful submissions are very common.

Interviewee 19, White Female, Construction

Interviewee 19 explained that she has spent a fair amount of time trying to get an accurate sense of the time and effort required to prepare a comprehensive bidding submission. She said that many times the proposal

requirements seem disproportionately involved for the size of the job. For example, “a proposal requirement can be hundreds of pages long for a \$20,000 project, a \$10,000 project.” This puts her in a position of having to decide whether the proposal effort is even worth the potential financial return. She has also noticed that requests for proposals (RFP) are often written in ways that feel unclear and seem to have been put together by individuals who do not have technical knowledge in the industry being solicited. This is problematic because, in her words, “if you have a misalignment in what you’re bidding on and what the client expects, you can have a major financial risk. And if you don’t get it right, it can break your firm.”

Interviewee 13, Black Female, Professional Services

Interviewee 13 has experienced challenges with finding new opportunities to procure work with the City. She explained that after the initial contract that she received, she has not gotten any communication about other work for which her firm qualifies. “But what has been frustrating for me is how I am a registered vendor with the City of Raleigh, but the only thing I consistently get is requests to sit in the meeting to give my feedback on how the experience has been doing business with the City of Raleigh. There was a coordinator for the minority women business enterprise that I consistently reached out to, and I didn’t hear back from phone calls, emails and so I just stopped.” She shared that she has been registered with other municipalities and frequently receives solicitations from them. However, with the City of Raleigh, she had doubts that she was even properly registered as a vendor until she received multiple contacts about participating in this disparity study.

Interviewee 16, White Male, Architecture & Engineering

Interviewee 16 said that his company tries to stay abreast of opportunities to submit for work with the City, but he does not always know where to find them.

Interviewee 17, White Male, Construction

Interviewee 17 feels that advertising for City of Raleigh jobs is minimal compared to other municipalities. He explained that their company will “go digging through websites” looking for bidding opportunities, but would like to see a more direct, centralized hub for contracts.

Nearly every interviewee who had successfully secured work with the City was able to do so based on a personal contact or connection. It was uncommon amongst those interviewed to hear examples of businesses submitting responses to RFPs or RFQs with no “warm hand-off” and being selected for the contract.

Interviewee 1, White Female, Construction

Interviewee 1 mentioned that her company has had the opportunity to work on several contracts with the City, through two different departments. Work with both departments began based on personal connections, one being a referral by a friend who was a City employee and one by a private client who was also a City employee. Her company has been “looked at” for work through three other City departments where they did not have personal contacts, but they were not selected for those opportunities.

Interviewee 4, White Female, Professional Services

Interviewee 4 began working with the City after meeting a City employee at a professional conference. She and the employee developed a friendly yet professional relationship which led to him recommending her for a contract with the City. Shortly after beginning this work, the employee retired. Following his retirement, Interviewee 4 no longer had personal contact with the City and has not been successful in securing additional contracts. “It’s so complicated for someone like me who has gifts to offer, but I don’t understand the entry points to be able to provide. So I kind of need someone to say, ‘Hey, we want you in here,’ but without them, I don’t know what other steps to take. There’s no one in my circle now that works in the City that can inform me. There’s no one that I could call that I know about that’s doing any contract work, so how else do I find that? How

else do I provide my good services that I know were valuable, that I was asked to provide again and again, and then now I'm not?"

Interviewee 5, White Male, Architecture & Engineering

Interviewee 5 was the only business owner interviewed who successfully secured a contract with the City without attributing it to a personal contact. He explained that he responded to a request for qualifications on a relatively small job. He believes that because of the small size of the contract, many bigger firms were not interested in bidding, so there were a limited number of competing applicants. Following that initial contract, he worked continuously with the City for more than nine years.

Interviewee 8, White Female, Construction

Interviewee 8 began working with the City as a subcontractor with another business with which they had an existing relationship. Their work on the subcontract lasted for about four years and then they bid on and were selected for a contract as the prime. Over the course of about 13 years, they have worked as prime contractors with one department and subcontractors with four or five departments. Despite the consistent work, Interviewee 8 still feels that the City is more likely to select larger firms than small businesses. Comparing the City to other municipalities in other states, she believes that there is inherent bias against awarding large contracts to a small, Woman-owned business.

Interviewee 16, White Male, Architecture & Engineering

Interviewee 16 said that the jobs that they have been able to work with the City were based on referrals, but they have had difficulty finding relevant RFPs beyond the referrals.

Interviewee 17, White Male, Construction

Often, they learn of new work with the City from referrals by other businesses that they have done previous work with.

Several interviewees raised the issue of the timing of payments by the City. While some interviewees shared that they regularly received timely payment on invoices, others had variable payment timelines that felt unpredictable.

Interviewee 1, White Female, Construction

Interviewee 1 described experiencing quite a bit of variation in the timing of payment of invoices from the City. She shared that she had received payments anywhere from three weeks to eight months following the completion of a job. She also shared that "there's never really any communication on timelines." She acknowledged that the unpredictability of payment timing has not been a deterrent to seeking future work with the City because her business is in the somewhat unique position of being debt-free and having substantial savings.

Interviewee 4, White Female, Professional Services

Interviewee 4 had the opportunity to submit multiple invoices to the City for her work. She mentioned that typically invoices took about three months to be paid out. She explained that as a small business owner, this created a challenge for her because she typically requires private clients to pay partially or fully in advance and charges a late fee if the full payment is not received within two weeks. When she experienced these payment delays, she reached out to City contacts multiple times to ensure that everything had been completed properly on her end. She did not feel that she received a positive response to her inquiries and even wondered if they may have hurt her chances of working with the City again.

Interviewee 12, White Male, Architecture & Engineering

While Interviewee 12 did not experience delays in payment following the submission of an invoice, he did describe frustration with the amount of time between: (1) being selected for a contract and beginning work; and (2) providing a work plan and having it approved. He explained that both delays are “difficult” for small businesses because the fees from municipal contracts often make up a large proportion of their overall income over the given period.

Focus Group Participant 2, White Female, Construction

Focus Group Participant 2 spoke to delays in payment being a regular part of the process of working with the City. In her words, “You’re not going to get paid in 30 days ever,” so her business plans accordingly by not counting on the payment being issued promptly.

Interviewee 8, White Female, Construction and Interviewee 11, White Male, Professional Services

Both Interviewee 8 and Interviewee 11 recognized the City for providing timely payments. According to Interviewee 8, the City was “very good in terms of payment,” whether her company was working as a prime or subcontractor. Interviewee 11 said “dealings with the City were great” and they had no problems with delays in payment.

Theme 4: Burdens and Benefits of Pursuing and Acquiring NC HUB Certifications

The majority of the businesses that participated in these interviews were eligible for certification as either DBE, MBE, SBE or WBE. The interviewees had varying experiences with the process of applying for, and the perceived utility of, acquiring these certifications. The interviewees expressed that having these certifications has been helpful for some businesses, not beneficial for others and on one occasion, proved harmful by making them a target to be used by larger firms to win bids, but not actually receive the work.

Interviewee 1, White Female, Construction

Interviewee 1 explained that although her business is eligible for MBE and WBE certifications, they do not currently hold them. She does believe that her company would get more opportunities if they were designated that way, but for her, the process for getting those certifications has been kind of daunting and difficult. “Every time I submit it, they kick it back. So I know that’s not too [inaudible] process, but it’s just been a really, really difficult time to try. And that’s why we still haven’t, even after five years, obtained it. ... It just seems like they want more and more and more and more and more information. And I know that they have to have their statistics and everything in place. I wish there was someone I could call and just say, ‘Okay, I don’t understand this section exactly what you’re wanting it to be?’, but it just seems like it’s really hard to get a hold of somebody to ask.” She wasn’t always clear on what exactly was missing from her submissions and had difficulty “getting a hold” of anyone to answer her questions and eventually decided that pursuing the process was too time-consuming.

Interviewee 2, African American Male, Construction

Interviewee 2 holds DBE, MBE, SBE and Veteran-owned Business Enterprise (VBE) certifications and asserted that those certifications have greatly benefited him. His business website specifically mentions the certifications and he believes that potential clients respond well to the designations. Additionally, he said that there are often contracting opportunities within the public sector that are designated for competition among “100% SBE, DBE or VBE businesses.” Seeing these advertisements is what prompted him to apply for all the certifications for which he was eligible early-on while starting his company. He discussed his experience with the certification process, explaining that obtaining the first certification was the most time-consuming because he had to gather a lot of information to submit. However, the process was much easier with subsequent certifications because they each requested very similar information.

Interviewee 3, Black Female, Professional Services

Interviewee 3 indicated that she began the process of seeking an M/WBE certification specifically because she was submitting a bid with the City. As she recalled, one of the questions on the Raleigh solicitation was whether she was certified or eligible to be certified as an M/WBE, so she began the process to answer “yes.” When she was unsuccessful in obtaining the contracting opportunity, she discontinued the certification process, stating that it was no longer worth it, because her private clients are not concerned with an M/WBE certification. She recognized that there is not a vast amount of public sector opportunities for her company’s service area, but recounted a time when, after they were unsuccessful on a Raleigh opportunity (and did not receive any feedback), they created a proposal on things that they could do to support an existing Raleigh program during the pandemic. “We did research, and we figured out the logistics and sent, like, a 28-page packet in response to that bid. And I would think they would at least email and say that you did not receive the bid. ... Maybe I’m not aware if I’m doing the process correctly, but it was a little bit laborious. Because I know I had to get different vending numbers. I had to go on different websites and get different identifiers to put on the application. I feel like I interacted with three or four different websites, got different numbers and different things that I had to have on that packet. So it is a little bit laborious when you’re wanting to offer a service to benefit the community.”

Interviewee 6, Black Male, Goods & Supplies

Interviewee 6 and his partner are eligible for DBE, MBE, SBE and WBE certifications, but they do not currently hold any of them. He said,

“It was such a strenuous, difficult process that we decided that the amount of time and the energy required while we were actively running the business, and from what we could observe as the direct or peripheral benefits, outweigh the stress of going through it.”

Interviewee 8, White Female, Construction

During the interview session, Interviewee 8 revealed that her company holds a DBE certification, but she does not believe they have benefited from it very much. In NC, she explained that, to the best of her knowledge, there have been three contracts within 15 years that were associated with their DBE certification area. They are also a self-identified, Woman-owned business and are aware that Raleigh implemented the Office of Diversity, Equity and Inclusion. She indicated that “it’s a bias, right, inherent bias that I’m sure—in my case, it’s a gender bias, right, that I’m experiencing. It’s hard for them to envision the small business, but in particularly Women-owned, and I don’t know the Minority-owned experience with the City, of seeing you as in charge. We worked out in Utah last during the pandemic and then our first couple of years in business. They’re very progressive when it comes to being open to small businesses and to allowing small businesses to take the lead on that, trust them, and know they will get the resources in place” to get the job done. She believes that gender bias often hinders their ability to secure contracts because of gender-based doubts about their technical skills.

Interviewee 12, White Male, Architecture & Engineering

Interviewee 12 shared that his business recently became SBE certified, but at the inception of the business, he had a woman business partner which allowed them to obtain M/WBE certification. Around three years ago, his partner left the business resulting in the loss of their WBE certification. He indicated he feels the opportunities his company has received since her departure have decreased. “That’s been a really interesting shift because the nature of what we do all day and how easy or hard it is has not changed at all. But some of our opportunities have definitely changed since she left, which has just been an interesting experience. It’s something I never really thought a lot about before she decided to leave the partnership. I’m about as liberal as they come, so I support all that stuff. But it really kind of challenged me to kind of think about why are our opportunities

changing when our staff hasn't changed, the type of work we do hasn't changed and how difficult it is to do what we do hasn't changed. So that one's been pretty interesting for me."

He referred to this change as "an interesting experience," because it was something he did not anticipate before she decided to leave the partnership. In his words, "I've definitely noticed a drop off in our opportunities to make it at least to the interview stage on RFQ submissions since that status changed."

Interviewee 13, Black Female, Professional Services

Interviewee 13 is eligible for MBE and WBE certifications, but she does not hold them. She explained that she reached out to a City contact for help with the certification process and never received a response. Because the process was in her words, "cumbersome," and she was not sure exactly how to complete it, she decided to forego applying.

Interviewees 15A, White Female and 15B, White male, Construction

Interviewees 15A and 15B's firm holds a WBE certification for their company. "You would think we would get a lot of City of Raleigh jobs with that being said, but unfortunately—and this is not just for the City of Raleigh, this is with the City of Durham, New Hanover County, everybody that we work with that has a minority program. So it's not just the City of Raleigh. But most of the time, it boils down to lowest bid price. They're going to go with the lowest price regardless of who bids, whether they invite a minority to bid [inaudible] or not. The lowest bid price. We appreciate that they put out the good faith effort of reaching out to the minorities. That's wonderful, but it still boils down to [whether you quote] the lowest price." Interviewee 15A acknowledged that several of the municipalities that they work with seek out M/WBEs as contractors and offer them the opportunity to bid against larger companies, "but most of the time, it boils down to lowest bid price" as far as being selected for the job. She also explained that they are often sought after to be a subcontractor with larger firms because of their WBE certification, but they have learned that this may not necessarily result in their company receiving work scope to be performed. She indicated that she feels that on occasion, their business is "just being used for their certification."

Theme 5: Additional comments and suggestions

Throughout disparity interview conversations, many interviewees shared their thoughts and suggestions for ways that the City could improve their systems to better support and include small businesses. The supports they mentioned ranged from making the identification of relevant opportunities easier to locate on the City's website, streamlining the bidding process, particularly for smaller bids, connecting potential bidders with mentors to help them navigate the application process successfully, creating and monitoring set-asides for some historically excluded groups and reinstating the City's small business training program from nearly a decade ago.

Interviewee 1, White Female, Construction

Interviewee 1 suggested that the City could offer a course for small business owners that could cover the best ways to access available contracts and prepare submissions. She also said that having a mechanism for directly accessing bids by specific industries would save small vendors' time. Interviewee 1 emphasized that most small businesses have significantly fewer resources and less support than larger companies that often have employees or departments dedicated solely to seeking and applying for new work.

Interviewee 3, Black Female, Professional Services

Interviewee 3 mentioned that she would like to see a more streamlined procurement process with the City, one that would include an update on the status of a submission at any given time.

Interviewee 4, White Female, Professional Services

Interviewee 4 suggested offering a mentorship program for entrepreneurs to help in navigating working as a vendor with the City. She said,

"I would love there to be a representative (kind of like a guidance counselor for City contracts) for government agencies to be able to help anybody become a vendor ... that process is daunting and confusing and not what they're familiar with. Because how else do you learn until you're given an opportunity to try?"

Interviewee 12, White Male, Architecture & Engineering

Interviewee 12 explained that he would like to see parity in forms across the public sector. He used the example of the Common App (a single online college application form used by over 900 colleges and universities) and said that having something similar to bid for government contracts would greatly reduce the burden on small firms.

Interviewee 15A, White Female, Construction

Interviewee 15A offered a suggestion for how to create more opportunities for HUB certified businesses and small businesses. She would like to see a "reserve" for small and historically underutilized businesses that might cover 5–10% of the overall contracts within their industry. Within that percentage, she would like to see an additional consideration for being within 10% of the lowest bid, even if not the absolute lowest.

Interviewee 16, White Male, Architecture & Engineering

Interviewee 16 would like to see the City provide support for a space for a "small business collective," allowing small businesses from various industries to network and learn from each other. He was not sure what programming might already exist for small businesses and suggested that having a central calendar containing all relevant events would be very helpful.

Interviewee 21, Black Female, Professional Services

Interviewee 21 was able to participate in a program offered by the City about ten years ago that provided training and support to minority business owners that included both hard and soft skills. She shared that the program helped to keep her thinking about how to sustain and advance her business and that she considered the opportunity to be "priceless." She strongly expressed how beneficial a program like this could be to current minority business owners.

Focus Group Participant 1, White Female, Construction

Focus Group Participant 1 shared that, as someone who frequently bids for work with the City, she would like to have the option of reusing information submitted in previous bids. She explained that having to regather letters of recommendation and detailed information about their business (when it has not changed) is time-consuming and difficult.

9.4 Summary of Findings

After analyzing the experiences of those interviewed and considering all anecdotal evidence referenced above, the following observations illustrate the possible barriers that interviewees perceive to exist for small, minority and women business owners as they attempt to transact business with the City:

- Interviewees detailed that they have trouble when attempting to access loans and grant funding, which can tremendously help small businesses grow and thrive.
- Small business owners, especially M/WBEs, struggle to get clear instruction/direction on how to navigate the process of finding work with the City and how to sustain visibility among City departments where their services are a fit. From initial start-up to attempts to scaling, many small businesses do not have a reliable go-to source for clear guidance regarding how to succeed in doing business with the City.
- The Raleigh vendor community identified fostering relationships as being critical to being able to start a business, secure financing and establish public and private contracts. Small business owners reported struggling to network with City officials and foster the types of relationships that could support their growth.
- M/WBE owners often work within exceedingly small profit margins which impact how effectively they can compete with large and national firms. Programs and opportunities that could ultimately benefit them, such as obtaining M/WBE certification, competing for public sector contracts and seeking HUB certifications, are frequently time-consuming, take already limited staff resources away from other revenue-generating activities and often result in un-rewarded efforts.

The benefits of obtaining certifications to access opportunities with the City are a mixed bag as detailed by the interviewed members of the Raleigh vendor community. However, whether they reported tangible benefits or none, most interviewees relayed that there is a need for City officials to be more available and responsive when they reach out with questions about the perceived “arduous” certification process.

Chapter 10: Marketplace Analysis

10.1 Introduction

To gain a better understanding of factors outside of the City of Raleigh that may limit participation of Minority- and Women-owned business enterprises (M/WBEs) in the City of Raleigh's bidding process, we examine the role of the private sector and overall marketplace. Given the examination of availability and use of M/WBEs in previous chapters and the results of the analysis, the analysis in this chapter may offer some insight into the extent of M/WBE penetration in the private sector of the local construction industry.

The chapter begins with a summary of background information on the demographic and economic profile of the State of North Carolina and the Raleigh-Cary, NC Metropolitan Statistical Area (MSA) (using U.S. Census data), and a brief description of the industrial and occupational composition of the local economy.

Following this summary is a review of available research that addresses marketplace disparities.¹ This chapter examines marketplace disparities, primarily in the construction industry, in the following ways:

- Occupational and apprentice employment using 2019 Census data;
- Comparison by occupation of employment in the marketplace (based on Equal Employment Opportunity [EEO] census tabulations);
- Private and public sector Construction bid and award activity, based on Dodge data;
- City of Raleigh building permits data; and
- City of Raleigh business license data.

To the extent the data allows, the present analysis may offer some evidence of the existence of passive participation, if any, by the City of Raleigh in discriminatory acts in the private sector.

10.2 Demographic and Economic Profile of the Relevant Market

The demographic structure of the local area may explain some differences in the market availability and use of M/WBEs since business owners are a subset of the general population. Understanding the broad contours of the population in the State of North Carolina; the Raleigh-Cary, NC MSA; and the City of Raleigh is necessary to identify instances in which discrimination may have inhibited M/WBE development.

Examining the population of people age 16 and older provides a picture of those eligible to enter the labor force in the geographical area (see Table 10.1). We observe that the percentage distribution of racial and ethnic groups across the State of North Carolina; the Raleigh-Cary, NC MSA; and the City of Raleigh does not differ significantly. Whites largely reside in the State of North Carolina (69.5%), the Raleigh-Cary, NC MSA (67.3%) and the City of Raleigh (59.6%). Blacks or African Americans represent 21.1% of the population in the State of North Carolina, 19.8% in the Raleigh-Cary, NC MSA and a larger percentage (27.9%) in the City of Raleigh. Hispanic Americans make up 9.3% of the City of Raleigh's population but are close to 8.9% and 7.8% in the MSA and

¹ A fundamental constraint, however, is the scarcity of economic and historical research that is sufficiently localized to address the first *Croson* standard.

State, respectively. Asian Americans make up a larger percentage in the MSA (5.9%) and in the City of Raleigh (5.0%) than in the State (2.9%). All other race/ethnic groups make up 4% or less in all the geographies listed in Table 10.1.

Table 10.1.Total Population 16 Years and Older by Race and Hispanic Origin Census 2019						
Ethnicity	State of North Carolina		Raleigh-Cary, NC Metro Area		City of Raleigh	
	#	%	#	%	#	%
Population 16 years and over	8,352,255	100.00	1,072,739	100.00	384,617	100.00
RACE AND HISPANIC OR LATINO ORIGIN						
White alone	5,802,146	69.47	721,806	67.29	229,253	59.61
Black or African American alone	1,762,039	21.10	212,130	19.77	107,259	27.89
American Indian and Alaska Native alone	94,728	1.13	4,079	0.38	1,189	0.31
Asian alone	243,696	2.92	63,628	5.93	19,320	5.02
Native Hawaiian and Other Pacific Islander alone	5,830	0.07	562	0.05	179	0.05
Some other race alone	225,651	2.70	36,899	3.44	13,862	3.60
Two or more races	218,165	2.61	33,635	3.14	13,555	3.52
Hispanic or Latino origin (of any race)	648,822	7.77	95,822	8.93	35,781	9.30

Source: Census 2019 American Community Survey; M³ Consulting, Inc.

Table 10.2 shows the estimates of the civilian labor force in the three geographical areas given the labor participation rate. The total labor force includes 270,386 people in the City of Raleigh; 741,263 people in the Raleigh-Cary, NC MSA; and over 5.2 million people in the State of North Carolina. About 69.5% of Whites, 71.0% of African Americans, 77.3% of Hispanic Americans and 67.5% of Asian Americans are part of the labor force in the City of Raleigh, and all 179 (100%) of Native Hawaiian and Other Pacific Islanders are active in the labor force within the City of Raleigh. While White Americans, African Americans, Native Americans and Hispanic Americans see a drop in the percentage within the MSA and the State, Asian Americans maintain a nearly similar participation in the State and the MSA.

**Table 10.2. Civilian Labor Force Total Population 16 Years and Older by Race and Hispanic Origin
Census 2019**

Race	State of North Carolina			Raleigh-Cary, NC Metro Area			City of Raleigh		
	Total	Labor Force Participation Rate		Total	Labor Force Participation Rate		Total	Labor Force Participation Rate	
	Estimate	Estimate	Calculated from percentage*	Estimate	Estimate	Calculated from percentage*	Estimate	Estimate	Calculated from percentage*
Population 16 years and older	8,352,255	62.40	5,211,807	1,072,739	69.10	741,263	384,617	70.30	270,386
RACE AND HISPANIC OR LATINO ORIGIN									
White alone	5,802,146	61.50	3,568,320	721,806	68.30	492,993	229,253	69.50	159,331
Black or African American alone	1,762,039	63.10	1,111,847	212,130	70.20	148,915	107,259	71.00	76,154
American Indian and Alaska Native alone	94,728	54.20	51,343	4,079	69.70	2,843	1,189	54.20	644
Asian alone	243,696	67.6	164,738	63,628	67.60	43,013	19,320	67.50	13,041
Native Hawaiian and Other Pacific Islander alone	5,830	68.40	3,988	562	81.00	455	179	100.00	179
Some other race alone	225,651	71.20	160,664	36,899	76.70	28,302	13,862	81.40	11,284
Two or more races	218,165	68.10	148,570	33,635	73.50	24,722	13,555	72.70	9,854
Hispanic or Latino origin (of any race)	648,822	71.40	463,259	95,822	74.80	71,675	35,781	77.30	27,659

Source: Census 2019 American Community Survey; M³ Consulting, Inc.

10.3 Education and Training: Pathways to the Construction Sector

It is generally recognized that relevant education and prior experience in an industry and occupation are strongly and positively correlated with the business formation decision. Of relevance to the formation of new businesses is the availability of jobs that offer the opportunity for occupational training, either in the form of formal apprenticeship training or other formal pathways to occupational expertise. This connection is particularly important in the construction industry.

10.3.1 Employment in Apprenticeable EEO Construction Occupations

Table 10.3 summarizes employment in selected apprenticeable EEO construction occupations in the State of North Carolina, the Raleigh-Cary, NC MSA, and the City of Raleigh as enumerated by the 2014–2018 Census EEO file.

For the State of North Carolina, the majority of construction operations are dominated by White males. Hispanic American males are largely in all construction occupations, with the lowest participation in Transportation and Material Moving Occupations. Hispanic American females, African American females and Asian American females are represented mostly in Transportation and Material Moving Occupations and Laborers and Helpers occupations. African American males exceed their female counterparts across all occupations, whereas African American females have their highest percent in Production occupations. Asian Americans males and females show a similar pattern to African Americans within the State. The Raleigh-Cary, NC MSA follows the same trends as the State of North Carolina.

In the City of Raleigh, construction and Extraction occupations are dominated by Hispanic American males, followed by White and African American males in terms of numbers. In Production Occupations, African American, Hispanic American, and Asian American females represent 39.0%, 29.8% and 28.1% respectively for their individual races. In Transportation and Material Moving Occupations, Asian females represent 34.3% of their race and Hispanic females 28.0%. Most Laborers and Helpers, if not all, are males for all races. In Installation, Maintenance and Repair occupations, mainly White males participate, followed by African American and Hispanic males by numbers.

Table 10.3. Employment in Selected Apprenticeable EEO Construction Occupations by Hispanic Origin and Race, 2014–2018
North Carolina

Occupation Label: SOC/Census Code	Construction and Extraction Occupations			Installation, Maintenance and Repair Occupations			Production Occupations			Transportation and Material Moving Occupations			Laborers and Helpers		
	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %
Total all groups	176,660	96.28	3.72	160,280	95.80	4.20	327,980	65.72	34.28	188,630	86.38	13.62	196,720	78.41	21.59
Hispanic or Latino	51,290	95.66	4.34	14,035	95.94	4.06	44,940	57.38	42.62	11,655	90.39	9.61	34,580	79.50	20.50
Non-Hispanic or Latino															
White alone	103,225	96.74	3.26	119,925	96.72	3.28	174,290	72.32	27.68	106,965	88.43	11.57	100,640	79.73	20.27
Black or African American alone	16,079	96.08	3.92	20,300	90.86	9.14	88,935	58.00	42.00	63,085	82.47	17.53	52,285	75.90	24.10
American Indian/Alaska Native	2,933	94.41	5.59	1,785	99.16	0.84	3,420	61.11	38.89	2,015	79.16	20.84	2,245	77.06	22.94
Asian alone	1,190	89.83	10.17	2,030	89.66	10.34	12,445	59.98	40.02	1,820	85.71	14.29	3,630	66.12	33.88
Native Hawaiian/Pacific Islander	8	100.00	0.00	100	90.00	10.00	155	32.26	67.74	10	0.00	100.00	130	69.23	30.77
Balance of not Hispanic or Latino	1,935	97.42	2.58	2,110	93.13	6.87	3,815	65.92	34.08	3,085	85.58	14.42	3,210	81.15	18.85

Source: U.S. Census Bureau, Census 2014–2018 special tabulation; data based on where people live

Table 10.4. Employment in Selected Apprenticeable EEO Construction Occupations by Hispanic Origin and Race, 2014–2018
Raleigh, NC, Metro Area

Occupation Label: SOC/Census Code	Construction and Extraction Occupations			Installation, Maintenance and Repair Occupations			Production Occupations			Transportation and Material Moving Occupations			Laborers and Helpers		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
	#	%	%	#	%	%	#	%	%	#	%	%	#	%	%
Total all groups	27,870	94.65	5.35	18,080	95.85	4.15	23,280	68.13	31.87	36,660	83.02	16.98	6,505	96.23	3.77
Hispanic or Latino	13,339	94.26	5.74	2160	99.77	0.23	3,810	61.68	38.32	3795	78.13	21.87	3,055	98.36	1.64
Non-Hispanic or Latino															
White alone	11,529	94.93	5.07	12,220	96.60	3.40	11,625	73.59	26.41	16,815	84.78	15.22	2,625	93.33	6.67
Black or African American alone	2,369	95.82	4.18	2,890	89.97	10.03	5,880	61.39	38.61	14,510	83.11	16.89	685	97.08	2.92
American Indian/Alaska Native	185	100.00	0.00	180	100.00	0.00	149	89.93	10.07	144	88.89	11.11	20	100.00	0.00
Asian alone	259	90.35	9.65	300	88.33	11.67	1314	64.99	35.01	675	62.22	37.78	75	100.00	0.00
Native Hawaiian/Pacific Islander	10	100.00	0.00	-	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	0.00	0.00
Balance of not Hispanic or Latino	169	100.00	0.00	330	100.00	0.00	505	66.34	33.66	715	86.01	13.99	45	100.00	0.00

Source: U.S. Census Bureau, Census 2014–2018 special tabulation; data based on where people live

Table 10.5. Employment in Selected Apprenticeable EEO Construction Occupations by Hispanic Origin and Race, 2014–2018
City of Raleigh, NC

Occupation Label: SOC/Census Code	Construction and Extraction Occupations			Installation, Maintenance, and Repair Occupations			Production Occupations			Transportation and Material Moving Occupations			Laborers and Helpers		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
	#	%	%	#	%	%	#	%	%	#	%	%	#	%	%
Total all groups	13,880	94.85	5.15	8,535	94.67	5.33	8,305	68.75	31.25	15,380	81.60	18.40	3,170	98.26	1.74
Hispanic or Latino	7,319	93.17	6.83	695	100.00	0.00	1410	70.21	29.79	1,715	72.01	27.99	1740	97.41	2.59
Non-Hispanic or Latino															
White alone	4,905	96.84	3.16	5,515	95.10	4.90	3,920	73.85	26.15	6,140	82.41	17.59	995	99.50	0.50
Black or African American alone	1,250	98.40	1.60	1,850	91.35	8.65	2,165	60.97	39.03	6,900	83.48	16.52	335	100.00	0.00
American Indian/Alaska Native	80	100.00	0.00	85	100.00	0.00	10	0.00	100.00	75	80.00	20.00	-	0.00	0.00
Asian alone	215	90.70	9.30	200	85.00	15.00	534	71.91	28.09	175	65.71	34.29	65	100.00	0.00
Native Hawaiian /Pacific Islander	-	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	0.00	0.00
Balance of not Hispanic or Latino	109	100.00	0.00	195	100.00	0.00	275	43.64	56.36	380	82.89	17.11	30	100.00	0.00

Source: U.S. Census Bureau, Census 2014–2018 special tabulation; data based on where people live

10.3.2 Employment in Apprenticeable EEO Professional Occupations

In Management, Business and Finance occupations within the State of North Carolina, the distribution of men and women is almost even, with slightly greater male participation (around 54%). African American is the only racial/ethnic group whose female participation (60.8%) is greater than male. In Computer Engineering and Science occupations, participation from Native Hawaiian, African American and American Indian females were 49.1%, 40.1% and 39.7%, respectively for their individual races while Asian American females and Hispanic females were roughly 28% each. Among Healthcare practitioners, females dominated at about 70% to 80%, and the lowest participation is from Asian American females at 60.9%. Technical occupations similarly witnessed a greater proportion of women across all racial and ethnic populations within the State.

Sales and related occupations had slightly higher female participation than males across all races, except for White females. Office and administrative positions, however, had much larger female participation with over 70%, except for Asian American females at 67.8%. Protective Service occupations see a reverse of this trend, with about 20% women in any race/ethnicity, except for Native Hawaiian at 51.7%. Among the category of Service workers, except Protective Service, all females had a participation above 60%, except for Asian American (59.6%) and Hispanic (52.9%).

For the Raleigh-Cary, NC MSA, Management, Business and Finance occupations follow similar trends as the State: American Indian females join African American females, having a greater participation than males at around 61%. Computer Engineering and Science occupations showed female participation from Native Hawaiian (100.0%), African Americans (38.5%), American Indians (46.3%) and Asian Americans (30.1%), with other racial and ethnic groups at rates greater than 23%. Females dominated Healthcare occupations, from a low of 68% for Asian Americans to 82.8% for African American. Technical occupations showed similar trends as the State.

Sales and related occupations had slightly higher female participation than males for Whites, American Indians, and Asian Americans while Hispanic Americans, African Americans and Native Hawaiians showed higher female participation. Office and Administrative positions, however, had much larger female participation at over 70%, except for Asian American females, who reached 68%. Like the State, Protective Service occupations see a reverse of this trend, with males of any race/ethnicity representing the majority. Among Service workers except Protective Service, females garnered 53.2% to 69.2% representation.

The City of Raleigh has a similar pattern to the Raleigh-Cary, NC MSA in Management, Business and Financial occupations across gender for all race and ethnic groups. In Computer Engineering and Science occupations, Whites, Hispanic Americans, and Asian Americans see a greater male participation, whereas African Americans and American Indians see almost even participation among men and women within the City of Raleigh. Healthcare participants are similar to Raleigh-Cary, NC MSA, with females dominating in all race and ethnic groups. Over 70% female participation is seen in technical occupations among all racial and ethnic groups, with the lowest participation among Asian American females at 59%.

Sales and related occupations see greater female participation among Hispanic Americans and African Americans at 64.5% and 56.2%, respectively. The participation is even among Asian American males and females. White (57.4%) and American Indian (88.2%) males dominate in sales and related operations. Office and Support Service occupations and Services workers (except Protective) occupations follow a similar pattern as in the State and MSA, with greater female participation among all racial and ethnic groups. Protective Service male workers have a greater participation than female, following the pattern in the State and MSA.

Table 10.6. Employment in Selected Apprenticeable EEO Professional Occupations by Hispanic Origin and Race, 2014–2018
North Carolina

Occupation Label: SOC/Census Code	Management, Business and Financial Occupations			Computer, Engineering and Science Occupations			Healthcare Practitioners			Other Professionals			Technical Occupations		
	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %
Total all groups	699,175	54.11	45.89	255,095	72.23	27.77	189,975	22.39	77.61	479,180	32.73	67.27	92,700	21.90	78.10
Hispanic or Latino	29,714	58.46	41.54	9,634	72.34	27.66	4,439	25.88	74.12	18,865	32.06	67.94	3,065	33.93	66.07
Non-Hispanic or Latino															
White alone	538,295	56.49	43.51	180,835	74.49	25.51	150,445	22.61	77.39	351,460	33.97	66.03	61,450	21.89	78.11
Black or African American alone	96,680	39.17	60.83	28,474	59.91	40.09	22,470	14.33	85.67	86,865	27.17	72.83	22,875	18.51	81.49
American Indian/Alaska Native	3,846	50.21	49.79	1,008	60.32	39.68	1,145	8.30	91.70	3,977	22.38	77.62	965	27.46	72.54
Asian alone	20,694	58.35	41.65	30,260	71.23	28.77	8,549	39.06	60.94	10,805	44.04	55.96	2,660	32.86	67.14
Native Hawaiian/Pacific Islander	435	76.78	23.22	53	50.94	49.06	25	0.00	100.00	132	14.39	85.61	15	0.00	100.00
Balance of not Hispanic or Latino	9,489	49.14	50.86	4,829	69.25	30.75	2,900	25.10	74.90	7,070	29.69	70.31	1,659	26.16	73.84

Source: U.S. Census Bureau, Census 2014–2018 special tabulation; data based on where people live

Table 10.6 cont. Employment in Selected Apprenticeable EEO Professional Occupations by Hispanic Origin and Race, 2014–2018
North Carolina

Occupation Label: SOC/Census Code	Sales and Related Occupations			Office and Administrative Support Occupations			Protective Service Occupations			Service Workers Except Protective		
	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %
Total all groups	501,440	48.33	51.67	488,395	23.97	76.03	89,620	79.47	20.53	693,425	38.56	61.44
Hispanic or Latino	29,385	40.79	59.21	24,405	28.79	71.21	3,375	83.56	16.44	89,365	47.08	52.92
Non-Hispanic or Latino												
White alone	356,320	52.39	47.61	331,140	23.09	76.91	60,405	84.49	15.51	373,600	37.97	62.03
Black or African American alone	89,940	35.75	64.25	113,950	25.02	74.98	22,075	66.00	34.00	186,115	35.82	64.18
American Indian/Alaska Native	3,445	34.98	65.02	3,264	15.47	84.53	1,395	70.61	29.39	7,665	32.86	67.14
Asian alone	12,480	49.04	50.96	7,520	32.18	67.82	630	84.13	15.87	20,559	40.37	59.63
Native Hawaiian/Pacific Islander	399	9.52	90.48	334	17.96	82.04	29	48.28	51.72	629	38.00	62.00
Balance of not Hispanic or Latino	9,465	44.06	55.94	7,780	26.80	73.20	1,709	75.42	24.58	15,470	37.17	62.83

Source: U.S. Census Bureau, Census 2014–2018 special tabulation; data based on where people live

Table 10.7. Employment in Selected Apprenticeable EEO Professional Occupations by Hispanic Origin and Race, 2014–2018
Raleigh, NC, Metro Area

Occupation Label: SOC/Census Code	Management, Business, and Financial Occupations			Computer, Engineering, and Science Occupations			Healthcare Practitioners			Other Professionals			Technical Occupations		
	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %
Total all groups	123,075	53.80	46.20	63,470	73.80	26.20	22,465	22.66	77.34	74,040	32.07	67.93	9,780	23.11	76.89
Hispanic or Latino	4,969	57.92	42.08	1,984	76.11	23.89	569	18.28	81.72	3,757	37.48	62.52	435	34.48	65.52
Non-Hispanic or Latino															
White alone	93,730	56.11	43.89	44,740	76.39	23.61	17,415	22.68	77.32	55,110	32.42	67.58	5,520	23.10	76.90
Black or African American alone	16,345	38.39	61.61	6,424	61.55	38.45	2,535	17.16	82.84	10,720	24.57	75.43	3,170	19.09	80.91
American Indian/Alaska Native	300	39.00	61.00	54	53.70	46.30	62	22.58	77.42	184	5.43	94.57	25	16.00	84.00
Asian alone	5,654	59.41	40.59	8,950	69.55	30.45	1,525	32.07	67.93	3,000	51.00	49.00	389	28.02	71.98
Native Hawaiian /Pacific Islander	75	60.00	40.00	10	0.00	100.00	-	0.00	0.00	-	0.00	0.00	10	0.00	100.00
Balance of not Hispanic or Latino	2,008	45.72	54.28	1,282	76.13	23.87	338	21.60	78.40	1,274	23.94	76.06	230	47.83	52.17

Source: U.S. Census Bureau, Census 2014–2018 special tabulation; data based on where people live

**Table 10.7 cont... Employment in Selected Apprenticeable EEO Professional Occupations by Hispanic Origin and Race, 2014–2018
Raleigh, NC, Metro Area**

Occupation Label: SOC/ Census Code	Sales and Related Occupations			Office and Administrative Support Occupations			Protective Service Occupations			Service Workers Except Protective		
	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %
Total all groups	78,185	53.37	46.63	71,245	26.95	73.05	11,755	72.85	27.15	86,550	41.21	58.79
Hispanic or Latino	5,845	34.47	65.53	4,635	25.22	74.78	635	77.95	22.05	16,529	46.79	53.21
Non-Hispanic or Latino												
White alone	51,685	57.28	42.72	44,715	26.51	73.49	7,185	80.99	19.01	40,000	40.24	59.76
Black or African American alone	15,875	47.78	52.22	18,759	27.63	72.37	3,535	55.02	44.98	23,615	39.15	60.85
American Indian/Alaska Native	204	61.27	38.73	80	25.00	75.00	80	68.75	31.25	390	35.90	64.10
Asian alone	2,900	52.41	47.59	1,775	32.11	67.89	100	60.00	40.00	3,734	43.06	56.94
Native Hawaiian/Pacific Islander	50	0.00	100.00	10	0.00	100.00	-	0.00	0.00	65	30.77	69.23
Balance of not Hispanic or Latino	1,625	53.54	46.46	1,275	31.76	68.24	230	89.13	10.87	2,194	37.15	62.85

Source: U.S. Census Bureau, Census 2014–2018 special tabulation; data based on where people live

Table 10.8. Employment in Selected Apprenticeable EEO Professional Occupations by Hispanic Origin and Race, 2014–2018
City of Raleigh, North Carolina

Occupation Label: SOC/Census Code	Management, Business and Financial Occupations			Computer, Engineering and Science Occupations			Healthcare Practitioners			Other Professionals			Technical Occupations		
	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %
Total all groups	62,630	51.21	48.79	29,200	71.83	28.17	13,900	21.29	78.71	38,460	34.61	65.39	5,095	23.36	76.64
Hispanic or Latino	1,870	45.45	54.55	800	71.25	28.75	314	15.29	84.71	1,839	28.49	71.51	215	18.60	81.40
Non-Hispanic or Latino															
White alone	47,355	54.22	45.78	20,880	75.10	24.90	10,805	21.43	78.57	27,370	36.35	63.65	2,555	24.27	75.73
Black or African American alone	9,825	37.85	62.15	3,614	56.14	43.86	1,775	18.87	81.13	6,580	23.94	76.06	1,950	16.67	83.33
American Indian/Alaska Native	167	22.75	77.25	20	50.00	50.00	22	18.18	81.82	54	0.00	100.00	10	0.00	100.00
Asian alone	2,313	52.66	47.34	3,404	68.24	31.76	775	25.81	74.19	1,919	56.02	43.98	229	41.05	58.95
Native Hawaiian /Pacific Islander	40	50.00	50.00	10	0.00	100.00	-	0.00	0.00	-	0.00	0.00	-	0.00	0.00
Balance of not Hispanic or Latino	1,015	51.63	48.37	478	70.71	29.29	203	16.26	83.74	693	25.97	74.03	130	84.62	15.38

Source: U.S. Census Bureau, Census 2014–2018 special tabulation; data based on where people live

**Table 10.8 cont... Employment in Selected/ Apprenticeable EEO Professional Occupations by Hispanic Origin and Race, 2014–2018
City of Raleigh, NC**

Occupation Label: SOC/Census Code	Sales and Related Occupations			Office and Administrative Support Occupations			Protective Service Occupations			Service Workers Except Protective		
	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %	Total #	Male %	Female %
Total all groups	34,870	51.94	48.06	37,260	25.58	74.42	7,055	72.35	27.65	40,990	41.00	59.00
Hispanic or Latino	2,960	35.47	64.53	2,340	21.37	78.63	485	75.26	24.74	8255	43.36	56.64
Non-Hispanic or Latino												
White alone	22,045	57.38	42.62	22,255	27.41	72.59	3,895	81.36	18.64	16,185	41.18	58.82
Black or African American alone	7,850	43.76	56.24	10,969	23.42	76.58	2,435	56.26	43.74	13,105	39.49%	60.51
American Indian/Alaska Native	85	88.24	11.76	50	20.00	80.00	15	100.00	0.00	234	49.15	50.85
Asian alone	1,300	50.00	50.00	885	22.03	77.97	60	58.33	41.67	1,834	41.66	58.34
Native Hawaiian/ Pacific Islander	50	0.00	100.00	10	0.00	100.00	-	0.00	0.00	65	30.77	69.23
Balance of not Hispanic or Latino	569	43.06	56.94	740	21.62	78.38	160	100.00	0.00	1,305	36.78	63.22

Source: U.S. Census Bureau, Census 2014–2018 special tabulation; data based on where people live

10.4 Analysis of Dodge General Construction Data

To show an additional source of M/WBE participation in marketplace construction activity, M³ Consulting collected information maintained by the private firm of Dodge Data & Analytics (Dodge), which surveys construction-related activity in various regions around the United States. A substantial portion of the Dodge data relates to bid activity, and significantly more so for projects owned by public entities than for private owners.² M³ Consulting, however, analyzed all projects submitted, both public and private. In the case of the data M³ Consulting received from Dodge, the selected geographic region for analysis was the State of North Carolina.

Most importantly, the *dollar value* of those projects that are available in Dodge are only based on the owner and cannot be apportioned to the Contractor level (such as Architect, Construction Manager, Engineer, General Contractor or Subcontractor). This limits the analysis. The details about the data submitted by Dodge are presented in **Chapter 4, Statistical Methodology**.

10.4.1 Comparison of Private and Public Owners of Project Values and Contractors

The number of projects in the private sector constituted 60.08% of reported projects in FY 2021. The dollar value of projects is evenly divided among the private and public sectors. Private sector projects constituted 46.87% of the value of total projects in FY 2021 in the State of North Carolina.

**Table 10.9. Counts and Project Value of Unique Projects by Project Owner
State of North Carolina
2021**

Project Owner	#	%	\$ (x1,000)	%
Private	11,026	60.08	34,405,647	46.87
Public	7,325	39.92	38,993,214	53.13
Grand Total	18,351	100.00	73,398,861	100.00

Source: Dodge 2021

One of the main purposes of presenting the Dodge data is to gain insight into the M/WBE penetration in the private sector. Therefore, below is an examination of categories of Construction firms by M/WBE status.

As the data indicates, in most areas of Construction, M/WBEs received less than 5% of the projects in the State of North Carolina. The largest participation is in Construction Manager (11.0%), Consultant (8.7%) and General Contractor (7.0%). In other areas, such as Engineer (4.9%) and Architectural firms (3.14%), M/WBEs received less than 5% of the projects.

Specifically, among M/WBE Architectural firms, Women-owned business enterprise (WBEs) (1.61%), African American-owned firms (0.63%) and Hispanic American-owned firms (0.4%) had the largest participation. Of the 134 projects in Construction Manager, 12 (7.8%) went to African American-owned firms. Non-M/WBE engineering firms garnered 92.08%, while 2.14% and 1.25% were the shares of WBEs and African American-

² This may be a function of the ease with which public records may be accessed as opposed to bid documents of private owners that may be protected from public scrutiny.

owned firms, respectively. Among Designers, Asian American-owned firms and WBEs had one project each. Under General Contractors, 3.83% were WBEs and 1.67% were African American-owned firms. Among Subcontractors, WBEs (10.25%), Hispanic American-owned (3.53%), and African American-owned firms (3.18%) represent about 96% of all M/WBEs; Non-M/WBEs represent 81.6% of all subcontractors.

**Table 10.10. Firm Availability by Role
State of North Carolina
FY 2021**

Ethnicity	Architect		Construction Manager		Consultant		Designer		Engineer		General Contractor	
	#	%	#	%	#	%	#	%	#	%	#	%
Non-M/WBE	3,314	95.56	134	87.01	198	90.83	25	89.29	1,848	92.08	5,920	90.76
African American	22	0.63	12	7.79	4	1.83	-	0.00	25	1.25	109	1.67
Asian American	9	0.26	-	0.00	1	0.46	1	3.57	9	0.45	10	0.15
Hispanic American	14	0.40	-	0.00	1	0.46	-	0.00	15	0.75	35	0.54
Native American	1	0.03	2	1.30	3	1.38	-	0.00	3	0.15	20	0.31
Other Minority	7	0.20	-	0.00	1	0.46	-	0.00	3	0.15	31	0.48
<i>Total Minority</i>	<i>53</i>	<i>1.53</i>	<i>14</i>	<i>9.09</i>	<i>10</i>	<i>4.59</i>	<i>1</i>	<i>3.57</i>	<i>55</i>	<i>2.74</i>	<i>205</i>	<i>3.14</i>
WBE	56	1.61	3	1.95	9	4.13	1	3.57	43	2.14	250	3.83
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1	0.02
Total M/WBE	109	3.14	17	11.04	19	8.72	2	7.14	98	4.88	456	6.99
SBE	37	1.07	2	1.30	1	0.46	1	3.57	58	2.89	125	1.92
SDV/VBE	8	0.23	1	0.65	-	0.00	-	0.00	3	0.15	22	0.34
Grand Total	3,468	100.00	154	100.00	218	100.00	28	100.00	2,007	100.00	6,523	100.00

Source: Dodge 2021; M³ Consulting, Inc.; count includes Owner/Owner Agent firms even when acting as Engineer, Architect, etc.

**Table 10-10 cont. Firm Availability by Role
State of North Carolina
FY 2021**

Ethnicity	Owner/Owner's Agent/Owner-Builder/Developer		Project Manager		Subcontractor		Others*		Total	
	#	%	#	%	#	%	#	%	#	%
Non-M/WBE	4,716	98.23	25	100.00	231	81.63	180	94.24	11,709	93.27
African American	20	0.42	-	0.00	9	3.18	2	1.05	154	1.23
Asian American	4	0.08	-	0.00	1	0.35	2	1.05	24	0.19
Hispanic American	6	0.12	-	0.00	10	3.53	-	0.00	59	0.47
Native American	1	0.02	-	0.00	1	0.35	-	0.00	24	0.19
Other Minority	4	0.08	-	0.00	-	0.00	-	0.00	38	0.30
<i>Total Minority</i>	<i>35</i>	<i>0.73</i>	<i>-</i>	<i>0.00</i>	<i>21</i>	<i>7.42</i>	<i>4</i>	<i>2.09</i>	<i>299</i>	<i>2.38</i>
WBE	27	0.56	-	0.00	29	10.25	6	3.14	326	2.60
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00	1	0.01
Total M/WBE	62	1.29	-	0.00	50	17.67	10	5.24	626	4.99
SBE	16	0.33	-	0.00	2	0.71	1	0.52	193	1.54
SDV/VBE	7	0.15	-	0.00	-	0.00	-	0.00	26	0.21
Grand Total	4,801	100.00	25	100.00	283	100.00	191	100.00	12,554	100.00

Source: Dodge 2021; M³ Consulting, Inc.; count includes Owner/Owner Agent firms even when acting as Engineer, Architect, etc.

*Consists of Reprographers, Interior Designer, Lessee/Franchisee

10.4.2 Comparison of Bid Activity and Bidders Across Private and Public Owners of Projects

Ranking of bidders reflects the decision rates of owners in determining the winning bidder (awardee). Given that the public sector bids may include the City of Raleigh, it indicates whether M/WBEs are winning public sector contracts within the State. As the data in Table 10.11 reflects, less than 10% of M/WBEs were ranked #1 and less than 12% and 13% were ranked #2 or #3, respectively. In total, 186 WBEs (5.23%) out of more than 3,500 bids were ranked #1 in public sector projects, whereas African American-, Hispanic American- and Asian American-owned firms had 85, 29 and 15 bids, respectively, in Rank #1. This pattern held steady for Rank #2 and Rank #3 as well. A total of 115 SBEs (3.23%) were ranked #1, while only 55 were ranked #2 and 47 were ranked #3. In contrast to M/WBEs, more than 3,000 non-M/WBEs were ranked #1, and more than 1,400 and 1,300 were ranked #2 and #3 respectively, thus gaining a majority of the public sector projects.

Table 10.11. Distribution of M/WBEs by Bidder Ranking by Project Owner: Public State of North Carolina FY 2021

Ethnicity	Rank #1		Rank #2		Rank #3	
	#	%	#	%	#	%
Non-M/WBE	3,079	86.51	1,444	84.30	1,307	84.27
African American	85	2.39	43	2.51	40	2.58
Asian American	15	0.42	2	0.12	3	0.19
Hispanic American	29	0.81	13	0.76	16	1.03
Native American	13	0.37	8	0.47	10	0.64
Other Minority	21	0.59	11	0.64	8	0.52
<i>Total Minority</i>	<i>163</i>	<i>4.58</i>	<i>77</i>	<i>4.50</i>	<i>77</i>	<i>4.96</i>
WBE	186	5.23	127	7.41	115	7.41
Unknown M/WBE	1	0.03	1	0.06	1	0.06
Total M/WBE	350	9.83	205	11.97	193	12.44
SBE	115	3.23	55	3.21	47	3.03
SDV/VBE	15	0.42	9	0.53	4	0.26
Grand Total	3,559	100.00	1,713	100.00	1,551	100.00

Source: Dodge 2021; M³ Consulting, Inc.; count includes owner/owner agent firms even when acting as Engineer, Architect, etc.

Compared to the public sector, typically winning private sector bids are more challenging for M/WBEs. While Non-M/WBEs win about 96.7% of all private sector bids, as reflected in Table 10.12, 97 WBEs, 56 African American-owned firms and 22 Hispanic American-owned firms are the firms with the largest number of wins in private sector bids in FY 2021.

Table 10.12. Distribution of M/WBEs by Bidder Ranking by Project Owner: Private State of North Carolina FY 2021

Ethnicity	Rank #1		Rank #2		Rank #3	
	#	%	#	%	#	%
Non-M/WBE	8,173	96.69	19	79.17	21	91.30
African American	56	0.66	1	4.17	-	0.00
Asian American	13	0.15	-	0.00	-	0.00
Hispanic American	22	0.26	-	0.00	-	0.00
Native American	5	0.06	-	0.00	-	0.00
Other Minority	12	0.14	-	0.00	-	0.00
<i>Total Minority</i>	<i>108</i>	<i>1.28</i>	<i>1</i>	<i>4.17</i>	<i>-</i>	<i>0.00</i>
WBE	97	1.15	4	16.67	2	8.70
Unknown M/WBE	-	0.00	-	0.00	-	0.00
Total M/WBE	205	2.43	5	20.83	2	8.70
SBE	62	0.73	-	0.00	-	0.00
SDV/VBE	13	0.15	-	0.00	-	0.00
Grand Total	8,453	100.00	24	100.00	23	100.00

Source: Dodge 2021; M³ Consulting, Inc.; count includes Owner/Owner Agent firms even when acting as Engineer, Architect, etc.

Comparing private and public bids ranked #1 in Table 10.13, among private projects, more than 96% bid awards go to Non-M/WBEs, a contrast with 86.51% of public project going to Non-M/WBEs. Almost 10% of public bids ranked #1 are for M/WBEs, their count is 1.7 times greater than the private projects going to M/WBEs. 5.23% of public bids ranked #1 are from WBEs compared to 1.15% of private bids.

Table 10.13. Count of Bids Rank #1 by Project Owner
State of North Carolina
FY 2021

Ethnicity	Private		Public	
	#	%	#	%
Non-M/WBE	8,173	96.69	3,079	86.51
African American	56	0.66	85	2.39
Asian American	13	0.15	15	0.42
Hispanic American	22	0.26	29	0.81
Native American	5	0.06	13	0.37
Other Minority	12	0.14	21	0.59
<i>Total Minority</i>	<i>108</i>	<i>1.28</i>	<i>163</i>	<i>4.58</i>
WBE	97	1.15	186	5.23
Unknown M/WBE	-	0.00	1	0.03
Total M/WBE	205	2.43	350	9.83
SBE	62	0.73	115	3.23
SDV/VBE	13	0.15	15	0.42
Grand Total	8,453	100.00	3,559	100.00

Source: Dodge 2021; M³ Consulting, Inc.; count includes Owner/Owner Agent firms even when acting as Engineer, Architect, etc.

10.5 City of Raleigh Building Permits Analysis

The following section analyzes construction activity in the Raleigh-Cary, NC MSA market area, as evidenced in the City of Raleigh's building permits data.

Building permits are an additional indicator of potential contracting activity and owner decision rates in the private and public sectors by the various race, gender and ethnic groups, as presented in Tables 10.14, 10.15, 10.16 and 10.17. Based on the count of commercial building permits shown below, M/WBEs had a greater percentage of the public sector projects compared to private sector projects (6.87% versus 2.69%) but a larger number of private sector projects (27 public sector projects as opposed to 110 private sector projects). WBEs had a larger number of projects from the private sector (61) as opposed to the public sector (21), although the proportion is 5.34% in the public sector and 1.49% in the private sector.

**Table 10.14. Contractor Data
Count of Commercial Building Permits
City of Raleigh
FY 2017–FY 2021**

Ethnicity	Private Sector		Public Sector	
	#	%	#	%
Non-M/WBE	3,959	96.99	366	93.13
African American	29	0.71	6	1.53
Asian American	4	0.10	-	0.00
Hispanic American	8	0.20	-	0.00
Native American	6	0.15	-	0.00
Other Minority	2	0.05	-	0.00
<i>Total Minority</i>	<i>49</i>	<i>1.20</i>	<i>6</i>	<i>1.53</i>
WBE	61	1.49	21	5.34
Unknown M/WBE	-	0.00	-	0.00
Total M/WBE	110	2.69	27	6.87
SBE	2	0.05	-	0.00
SDV/VBE	11	0.27	-	0.00
Grand Total	4,082	100.00	393	100.00

Source: City of Raleigh Building Permits FY 2017 to FY 2021, M³ Consulting, Inc.

Note: M³ Consulting, Inc. defined commercial building permits as permits exclusive of residential permits within project description

In addition, in Table 10.15, project values in the private sector were much larger for WBEs (at \$17.3 million or 0.62%) compared to the public sector (at \$702,201 or 0.28%). MBEs, however, reflected greater value in private commercial building permits (at \$7.3 million or 0.26%) compared to public sector building permits (valued at \$1.2 million or 0.46%). Among MBEs, African American-owned firms had the greatest value with public (\$1.2 million) and private (\$4.98 million) sector commercial building permits, followed by Native American-owned firms, which received private sector building permits at \$1.7 million. Hispanic American-owned firms, Asian American-owned firms and Other MBE owners did not receive public sector building permits. In comparison,

Non-M/WBEs who had the largest valued building permits exceeded \$2.8 billion in private sector building permits but also received over \$253 million in public sector building permits.

**Table 10.15. Contractor Data
Valuation (\$) of Commercial Building Permits
City of Raleigh
FY 2017–FY 2021**

Ethnicity	Private Sector		Public Sector	
	\$	%	\$	%
Non-M/WBE	2,782,667,418	99.03	253,362,859	99.27
African American	4,987,051	0.18	1,162,611	0.46
Asian American	133,075	0.00	-	0.00
Hispanic American	416,132	0.01	-	0.00
Native American	1,703,450	0.06	-	0.00
Other Minority	110,000	0.00	-	0.00
<i>Total Minority</i>	<i>7,349,708</i>	<i>0.26</i>	<i>1,162,611</i>	<i>0.46</i>
WBE	17,295,093	0.62	702,201	0.28
Unknown M/WBE	-	0.00	-	0.00
Total M/WBE	24,644,801	0.88	1,864,812	0.73
SBE	6,162	0.00	-	0.00
SDV/VBE	2,616,680	0.09	-	0.00
Grand Total	2,809,935,061	100.00	255,227,671	100.00

Source: City of Raleigh Building Permits FY 2017 to FY 2021, M³ Consulting, Inc.

Note: M³ Consulting, Inc. defined commercial building permits as permits exclusive of residential permits within project description

To assess capacity based on the value of projects that Contractors bid, Table 10.16 breaks down the value of building permits by thresholds. The largest value of building permits by MBEs is in the \$1 million to \$5 million range, including only Contractors that are Native American-owned firms. By the same measure, WBEs include Contractors in the \$5 million to \$10 million range; there are no MBEs in this range or higher. African American Contractors in the City of Raleigh did not have permits that went over \$1 million. Hispanic American Contractors in the City of Raleigh did not have building permits over \$500K. Even in the low end of thresholds, over 95.88% of the value of building permits were by Non-M/WBE Contractors. No MBE or WBE had over 5% of the value of building permits in any threshold.

Table 10.17 reflects building permit thresholds by count of permits issued. M/WBEs received their largest number of permits in the \$0 to \$50K threshold, with 39 permits out of a total of 51 permits issued to M/WBEs. No M/WBEs received permits in thresholds above \$1 million, except for one Native American Contractor in the \$1 million to \$5 million range, and one WBE received a permit in the range of \$5 million to \$10 million.

**Table 10.16. Contractor Data by Threshold
Valuation (\$) of Commercial Building Permits
City of Raleigh
FY 2017–FY 2021**

Ethnicity	0–50K		50K–100K		100K–500K		500K–1M	
	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	21,256,342	95.88	34,862,242	97.50	257,974,342	95.44	182,954,449	97.39
African American	223,886	1.01	333,010	0.93	3,645,533	1.35	1,947,233	1.04
Asian American	18,000	0.08	-	0.00	115,075	0.04	-	0.00
Hispanic American	38,124	0.17	50,000	0.14	328,008	0.12	-	0.00
Native American	3,450	0.02	-	0.00	-	0.00	-	0.00
Other Minority	10,000	0.05	-	0.00	100,000	0.04	-	0.00
<i>Total Minority</i>	<i>293,460</i>	<i>1.32</i>	<i>383,010</i>	<i>1.07</i>	<i>4,188,616</i>	<i>1.55</i>	<i>1,947,233</i>	<i>1.04</i>
WBE	614,869	2.77	436,408	1.22	6,216,510	2.30	2,325,238	1.24
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	908,329	4.10	819,418	2.29	10,405,125	3.85	4,272,471	2.27
SBE	6,162	0.03	-	0.00	-	0.00	-	0.00
SDV/VBE	-	0.00	75,000	0.21	1,915,698	0.71	625,982	0.33
Grand Total	22,170,833	100.00	35,756,659	100.00	270,295,165	100.00	187,852,902	100.00

Source: City of Raleigh Building Permits FY 2017 to FY 2021, M³ Consulting, Inc.

Note: M³ Consulting, Inc. defined commercial building permits as permits exclusive of residential permits within project description

**Table 10-16 cont. Contractor Data by Threshold
Valuation (\$) of Commercial Building Permits
City of Raleigh
FY 2017–FY 2021**

Ethnicity	1M–5M		5M–10M		Above 10M		Total	
	\$	%	\$	%	\$	%	\$	%
Non-M/WBE	751,737,768	99.77	457,484,347	98.20	1,329,760,787	100.00	3,036,030,277	99.05
African American	-	0.00	-	0.00	-	0.00	6,149,662	0.20
Asian American	-	0.00	-	0.00	-	0.00	133,075	0.00
Hispanic American	-	0.00	-	0.00	-	0.00	416,132	0.01
Native American	1,700,000	0.16	-	0.00	-	0.00	1,703,450	0.06
Other Minority	-	0.00	-	0.00	-	0.00	110,000	0.00
<i>Total Minority</i>	<i>1,700,000</i>	<i>0.23</i>	-	<i>0.00</i>	-	<i>0.00</i>	<i>8,512,319</i>	<i>0.28</i>
WBE	-	0.00	8,404,270	1.80	-	0.00	17,997,294	0.59
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	1,700,000	0.23	8,404,270	1.80	-	0.00	26,509,613	0.86
SBE	-	0.00	-	0.00	-	0.00	6,162	0.00
SDV/VBE	-	0.00	-	0.00	-	0.00	2,616,680	0.09
Grand Total	753,437,768	100.00	465,888,617	100.00	2,123,139,475	100.00	3,065,162,732	100.00

Source: City of Raleigh Building Permits FY 2017 to FY 2021, M³ Consulting, Inc.

Note: M³ Consulting, Inc. defined commercial building permits as permits exclusive of residential permits within project description

**Table 10.17. Count of Discrete Contractors by Threshold
Public and Private Sector
City of Raleigh
FY 2017–FY 2021**

Ethnicity	0–50K		50K–100K		100K–500K		500K–1M	
	#	%	#	%	#	%	#	%
Non-M/WBE	727	94.66	257	97.59	453	95.60	153	97.44
African American	10	1.30	4	0.80	6	1.44	2	0.73
Asian American	2	0.26	-	0.00	1	0.08	-	0.00
Hispanic American	5	0.65	1	0.20	1	0.08	-	0.00
Native American	2	0.26	-	0.00	-	0.00	-	0.00
Other Minority	1	0.13		0.00	1	0.08		0.00
<i>Total Minority</i>	<i>20</i>	<i>2.60</i>	<i>5</i>	<i>1.01</i>	<i>9</i>	<i>1.69</i>	<i>2</i>	<i>0.73</i>
WBE	19	2.47	6	1.21	9	1.95	1	1.47
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00
Total M/WBE	39	5.08	11	2.21	18	3.64	3	2.20
SBE	2	0.26	-	0.00	-	0.00	-	0.00
SDV/VBE	-	0.00	1	0.20	2	0.76	1	0.37
Grand Total	768	100.00	269	100.00	473	100.00	157	100.00

Source: City of Raleigh Building Permits FY 2017 to FY 2021, M³ Consulting, Inc.

Note: M³ Consulting, Inc. defined commercial building permits as permits exclusive of residential permits within project description

Table 10-17 cont. Count of Discrete Contractors by Threshold Public and Private Sector City of Raleigh FY 2017–FY 2021									
Ethnicity	1M–5M		5M–10M		Above 10M		Total		
	#	%	#	%	#	%	#	%	
Non-M/WBE	155	99.71	41	98.48	30	100.00	1,103	96.65	
African American	-	0.00	-	0.00	-	0.00	15	0.78	
Asian American	-	0.00	-	0.00	-	0.00	2	0.09	
Hispanic American	-	0.00	-	0.00	-	0.00	5	0.18	
Native American	1	0.29	-	0.00	-	0.00	2	0.13	
Other Minority	-	0.00	-	0.00	-	0.00	2	0.04	
<i>Total Minority</i>	<i>1</i>	<i>0.29</i>	-	<i>0.00</i>	-	<i>0.00</i>	<i>26</i>	<i>1.23</i>	
WBE	-	0.00	1	1.52	-	0.00	25	1.83	
Unknown M/WBE	-	0.00	-	0.00	-	0.00	-	0.00	
Total M/WBE	1	0.29	1	1.52	-	0.00	51	3.06	
SBE	-	0.00	-	0.00	-	0.00	2	0.04	
SDV/VBE	-	0.00	-	0.00	-	0.00	2	0.25	
Grand Total	156	100.00	42	100.00	30	100.00	1,158	100.00	

Source: City of Raleigh Building Permits FY 2017 to FY 2021, M³ Consulting, Inc.

Note: M³ Consulting, Inc. defined commercial building permits as permits exclusive of residential permits within project description

While Table 10.14 above presents number of building permits issued, Table 10.18 presents a discrete count of Contractors who received building permits for private and public sector projects. While there were fewer public sector permits than private sector, there were a greater proportion of M/WBE Contractors who received permits in the public sector (8.38%) compared to the private sector (3.91%). WBEs received a higher proportion in the public sector (5.59%) than the private sector (1.86%). Among MBEs, African American Contractors had the highest proportion of those who received building permits in the public sector (2.79%) compared to the private sector (1.02%). Hispanic American, Asian American, Native American and Other Contractors only received building permits from the private sector, and their shares were 0.47%, 0.19% and 0.19%, respectively. In Table 10.19, the Top 20 Contractors receiving building permits are reflected. No M/WBEs are reflected among the Top 20 Contractors.

Table 10.18. Count of Discrete Contractors
City of Raleigh
FY 2017–FY 2021

Ethnicity	Private Sector		Public Sector	
	#	%	#	%
Non-M/WBE	1,029	95.72	164	91.62
African American	11	1.02	5	2.79
Asian American	2	0.19	-	0.00
Hispanic American	5	0.47	-	0.00
Native American	2	0.19	-	0.00
Other Minority	2	0.19	-	0.00
<i>Total Minority</i>	22	2.05	5	2.79
WBE	20	1.86	10	5.59
Unknown M/WBE	-	0.00	-	0.00
Total M/WBE	42	3.91	15	8.38
SBE	2	0.19	-	0.00
SDV/VBE	2	0.19	-	0.00
Grand Total	1,075	100.00	179	100.00

Source: City of Raleigh Building Permits FY 2017 to FY 2021, M³ Consulting, Inc.

Table 10.19. Top 20 Awardees Based on Count of Building Permits Received
City of Raleigh
FY 2017–FY 2021

Contractors	Private Sector		Public Sector		Total		Race/Gender/ Ethnicity
	#	%	#	%	#	%	
Riley-Lewis General Contractor	57	1.40	38	9.67	95	2.12	Non-MWBE
Katerra Construction	91	2.23	-	0.00	91	2.03	Non-MWBE
Brookwood Construction, LLC	74	1.81	-	0.00	74	1.65	Non-MWBE
Halle Building Group	71	1.74	-	0.00	71	1.59	Non-MWBE
Brasfield & Gorrie, L.L.C.	62	1.52	2	0.51	64	1.43	Non-MWBE
Sitescapes, LLC	52	1.27	-	0.00	52	1.16	Non-MWBE
MasTec Network Solutions LLC	36	0.88	10	2.54	46	1.03	Non-MWBE
Core Building Company, Inc.	42	1.03	1	0.25	43	0.96	Non-MWBE
Mckenna Construction	38	0.93	4	1.02	42	0.94	Non-MWBE
TDK Construction Company, Inc.	40	0.98	-	0.00	40	0.89	Non-MWBE
Blackleaf Inc.	37	0.91	3	0.76	40	0.89	Non-MWBE
Modern South Construction Company	36	0.88	-	0.00	36	0.80	Non-MWBE
Inner-Tech, Inc.	28	0.69	8	2.04	36	0.80	Non-MWBE
Clancy & Theys Construction	27	0.66	9	2.29	36	0.80	Non-MWBE
Ashland Construction Company	36	0.88	-	0.00	36	0.80	Non-MWBE
Thomas Construction Group, LLC	35	0.86	-	0.00	35	0.78	Non-MWBE
McDonald York Construction	32	0.78	3	0.76	35	0.78	Non-MWBE
Harold K. Jordan & Company	26	0.64	9	2.29	35	0.78	Non-MWBE
AAPCO Southeast	35	0.86	-	0.00	35	0.78	Non-MWBE
Vision Contractors Incorporated	31	0.76	-	0.00	31	0.69	Non-MWBE
Total	886	21.71	87	22.14	973	21.74	

Source: City of Raleigh Building Permits FY 2017 to FY 2021, M³ Consulting, Inc.

10.6 City of Raleigh Building License Analysis

We can compare business license data as a measure of firm marketplace availability for both the private and public sector to the City of Raleigh availability in Chapter 5. Table 10.20 presents information about business licenses in the City of Raleigh by role. Looking at the total, 99.6% of business licenses are held by Non-M/WBE firms. Minority-owned Businesses held 0.15% and WBEs held 0.10%. Similar disparities are present in other roles. No M/WBEs held licenses in Architecture and Engineering. Two African American-owned businesses and two WBEs hold licenses in Construction. Four WBEs and one African American-owned business hold licenses in Goods & Supplies. Three WBEs, three African American-, two Hispanic American- and one Asian American-owned business hold licenses in Non-Professional Services. One Asian American-owned business holds a license in Professional Services.

Table 10.20. City of Raleigh Business License Data

FY 2017–FY 2021

Ethnicity	Architecture & Engineering		Construction		Goods & Supplies		Nonprofessional Services	
	#	%	#	%	#	%	#	%
Non-M/WBE	35	100.00	938	99.15	2,868	99.65	4,756	99.66
African American	-	0.00	2	0.21	1	0.03	3	0.06
Asian American	-	0.00	-	0.00	-	0.00	1	0.02
Hispanic American	-	0.00	-	0.00	-	0.00	2	0.04
Native American	-	0.00	-	0.00	-	0.00	-	0.00
Other Minority	-	0.00	2	0.21	-	0.00	-	0.00
<i>Total Minority</i>	-	<i>0.00</i>	<i>4</i>	<i>0.42</i>	<i>1</i>	<i>0.03</i>	<i>6</i>	<i>0.12</i>
WBE	-	0.00	2	0.21	4	0.14	3	0.06
Unknown M/WBE	-	0.00	-	0.00	-	0.00	0	0.00
Total M/WBE	-	0.00	6	0.63	5	0.17	9	0.18
SBE	-	0.00	2	0.21	5	0.17	7	0.15
SDV/VBE	-	0.00	-	0.00	-	0.00	-	0.00
Grand Total	35	100.00	946	100.00	2,878	100.00	4,772	100.00

Source: M³ Consulting, Inc.; City of Raleigh Business License Data

**Table 10-20 cont. City of Raleigh Business License Data
FY 2017–FY 2021**

Ethnicity	Professional Services		(blank)		Total	
	#	%	#	%	#	%
Non-M/WBE	655	99.54	6,374	99.58	15,626	99.59
Black or African American	-	0.00	4	0.06	10	0.06
Asian/Pacific Islander	1	0.15	-	0.00	2	0.01
Hispanic or Latino	-	0.00	4	0.06	6	0.04
Native American or American Indian	-	0.00	1	0.02	1	0.01
Other M/WBEs	-	0.00	2	0.03	4	0.03
<i>Total Minority</i>	1	0.15	11	0.17	23	0.15
WBE	-	0.00	6	0.09	15	0.10
Unknown M/WBE	-	0.00	-	0.00	-	0.00
Total M/WBE	1	0.15	17	0.26	38	0.25
SBE	2	0.30	9	0.14	25	0.16
SDV/VBE	-0	0.00	1	0.02	1	0.01
Grand Total	658	100.00	6,401	100.00	15,690	100.00

Source: M³ Consulting, Inc.; City of Raleigh Business License Data

10.7 Summary of Findings

To understand factors that impact the participation of M/WBEs with the City of Raleigh and the potential opportunities for capacity building that may limit participation of M/WBEs with the City of Raleigh, the role of the marketplace in which these firms operate is critical.

The demographic configuration may explain in part the differences in the market availability and utilization of M/WBEs. The City of Raleigh has a large White population, while African Americans make up the second-largest group in terms of participation at the three geographical perspectives.

Taking a gauge of the civilian labor force, 69.5% of Whites, 71.0% of African Americans, 77.3% of Hispanic Americans and 67.5% of Asian Americans are part of the labor force in the City of Raleigh, and all 179 (100%) Native Hawaiian and Other Pacific Islander are active in the labor force within the City of Raleigh. While White Americans, African Americans, Native Americans and Hispanic Americans see a drop in the percentage within the MSA and the State, Asian Americans maintain a nearly similar participation in the State and the MSA.

The EEO occupational breakdown provides a picture of Construction and Professional opportunities in the marketplace. In the City of Raleigh, construction and Extraction occupations are dominated by Hispanic American males, followed by White and African American males in terms of numbers. In Production Occupations, African American, Hispanic American, and Asian American females represent 39.0%, 29.8% and 28.1% respectively for their individual races. In Transportation and Material Moving Occupations, Asian females represent 34.3% of their race and Hispanic females 28.0%. Most Laborers and Helpers, if not all, are males for all races. In Installation, Maintenance and Repair occupations, mainly White males participate, followed by African American and Hispanic males by numbers.

In Professional Services occupations, the City of Raleigh shows Management, Business and Financial occupations as well as Sales and related occupations are even across gender for all race and ethnic groups. In Computer Engineering and Science occupations, Whites, Hispanic Americans and Asian Americans see a greater male participation, whereas African Americans and American Indians see almost even participation among men and women within the City of Raleigh. Healthcare participants are similar to the Raleigh-Cary, NC MSA, with females dominating in all race and ethnic groups. Over 70% female participation is seen in technical occupations among all racial and ethnic groups, with the lowest participation among Asian American females at 59%.

Using Dodge data, M/WBE participation in marketplace construction activity is examined. For the State of North Carolina, the data indicates that M/WBE has limited penetration except in Construction Manager (11.0%) and Subcontractor (17.7%).

Comparing bid activity across private and public owners of projects within the State of North Carolina, 2.43% of M/WBEs were ranked #1 (winner) in private sector projects, while 9.83% were ranked #1 in public sector projects. Of all private sector bids in the State of North Carolina, about 96.7% were awarded to Non-M/WBEs, 1.28% to minority-owned firms and 1.15% to women-owned firms in FY 2021.

Building permits are an additional indicator of potential contracting activity. Based on the count of commercial building permits, M/WBEs had a distinctly greater percentage of public sector contracts compared to private sector contracts (6.87% versus 2.69%). For WBEs, the count and the dollars awarded in the private sector were much larger (at \$17.2 million or 0.62%) compared to the public sector (at \$702,201 or 0.28%). M/WBEs, however, won greater value in private commercial building permits (at \$24.6 million or 0.88%) compared to public sector building permits (valued at \$1.86 million or 0.73%). Furthermore, the largest value of building permits by MBEs is in the \$1 million to \$5 million range, whereas WBEs include Contractors with permits in the \$5 million to \$10 million range.

Using business license data to measure firm marketplace availability for both the private and public sector in the City of Raleigh shows that 99.6% of total business licenses in the City of Raleigh are held by Non-M/WBE firms. MBEs held 0.15% and WBEs held 0.10%.

Chapter 11: Race Neutral Analysis

11.1 Introduction

Discussed in Chapter 2, Legal Analysis, as part of narrow tailoring, public entities are required to consider the efficacy of race-neutral measures in addressing any disparity or discrimination. The race-neutral analysis seeks to determine the ability of existing race-neutral efforts in eliminating disparity in the marketplace.

Federal case law has provided some illumination on the question of what constitutes adequate consideration of race-neutral measures.

1. A governmental entity does not have to enact race-neutral means if those means are not feasible or conducive to remedying past discrimination.¹
2. If race-neutral programs and legislation were in place prior to the establishment of a race-conscious program and had been attempted in good faith and yet Minority and Women-Owned Business Enterprise (M/WBE) participation in public procurement remains low relative to availability, then an inference is created that race-neutral programs were inadequate to relieve the impact of past discrimination.²

Several city, state and local organizations were identified that provide technical and financial assistance to small, minority and woman-owned business enterprises in the City of Raleigh and throughout the State of North Carolina. A discussion is also provided of public entities that operate race- and gender-conscious and race- and gender-neutral programs. The inclusion of the results of race- and gender-conscious initiatives further reflects the effectiveness of all remedial-type activity in addressing disparity within the area.

These programmatic initiatives have been in place during the operation of Raleigh's M/WBE programs.

¹ Coral Construction v. King County, 941 F. 2d 910, 923 (9th Cir. 1991); AGC of California v. Coalition of Economic Equity, 950 F. 2d 1401, 1417 (9th Cir. 1991); Engineering Contractors v. Dade County, 122 F. 3d 895 (11th Cir. 1997); Concrete Works of Colorado, Inc., v. City and County of Denver (Concrete Works I), 823 F. Supp. 821 (D Colo 1993); Western States Paving Co., Inc., v. Washington State Department of Transportation, 407 F. 3d 983 (9th Cir. 2005).

² Concrete Works I, 841.

11.2 Methodology

This chapter's race-neutral analysis is based on a review of 44 organizations throughout the Raleigh-Cary, NC MSA that provide services to small, minority and woman-owned businesses. The results of the organizational review are reflected in Table 11.3, Master List of Race-Neutral Programs. The Master List is divided into sections as follows:

- Goal-Based and Other Targeted Procurement Programs;
- Management and Technical Assistance Providers;
- Financial Assistance Providers;
- Community and Economic Development Organizations;
- Chambers of Commerce;
- Trade Organizations and Business Associations; and
- Other Advocacy Groups.

Additionally, M³ Consulting, Inc., (M³ Consulting) sought to interview Executive Directors of these organizations to determine their experiences working with small, minority and women-owned businesses. Out of the 15 Executive Directors contacted, five agreed to one-on-one in-depth interviews.

11.3 Master List of Race-Neutral Programs

Table 11.3. Master List of Race-Neutral Programs

Organization Name, Geographic Reach	Description of Services and Available Metrics
Goal-Based Programs	
1. Minority and Women-Owned Business Enterprise Program <i>Goal-Based Programs</i> <i>City of Raleigh</i>	<p>The M/WBE Program advocates actions which increase opportunities for historically underutilized businesses and promote diversity and inclusion in City of Raleigh contracting.</p> <p>The City has an aspirational goal of 15% of the total contract amount to be performed by M/WBE businesses on construction and repair projects of \$300,000 or more and contracts of \$100,000 or more that include any State funding.</p> <p>Other services:</p> <ul style="list-style-type: none"> • Marketing Tool—Increase visibility for your business. • Certified M/WBE Suppliers—Certified M/WBE firms who register via Raleigh Supplier Connection will be added to the City’s active supplier list. This list is accessed by City staff when soliciting M/WBE suppliers for contracting opportunities. • Email Notifications—Receive electronic notification of procurement opportunities for City of Raleigh. You will be invited to attend any pre-bid meetings. • Workshops & Seminars—The City of Raleigh partners with local nonprofit organizations to provide resources and education opportunities for business owners. Workshops are provided free of charge and cover a broad range of topics relevant to your business. Sign up today to receive information on workshops & seminars. • Annual Small Business Expo—Every year, representatives from the City of Raleigh, Wake County Public Schools and other local and nonprofit governmental agencies provide information about upcoming construction projects. This event provides business owners an opportunity to network with local general contractors seeking subcontractors, end users and suppliers.
Management, Financial and Technical Assistance Providers	
2. Council for Entrepreneurial Development <i>Management, Financial and Technical Assistance Providers</i> <i>Raleigh, Durham, Chapel Hill</i>	<p>Founded in 1984 as an outgrowth of a collaboration between the three major area universities and the Raleigh, Durham and Chapel Hill chambers of commerce, the Council for Entrepreneurial Development (CED) helps entrepreneurs in a wide range of industries and at all stages of development—from high-tech product-based organizations to professional service firms, from one-person start-ups to 1,000-person businesses. The CED also presents an annual Venture Fair which provides selected growth companies the opportunity to present their business plans to hundreds of investors throughout the U.S. and Canada. The State of North Carolina is currently considering franchising the CED approach across the entire State. CED offers the following services:</p> <ul style="list-style-type: none"> • Connect to Capital connects entrepreneurs with potential investors via formal introductions and is responsible for over 300 introductions a year. • GRO Incubator—A twelve-week incubator program aimed at supporting high-growth, high-impact companies looking to grow their venture through valuable programming and coaching. • Venture Connect Summit provides valuable connections and programming each year over multiple days at the annual Venture Connect Summit.

Table 11.3. Master List of Race-Neutral Programs

Organization Name, Geographic Reach	Description of Services and Available Metrics
3. First Flight Venture Center <i>Management, Financial and Technical Assistance Providers</i> <i>Wake County</i>	<p>First Flight Venture Center is a business incubator serving the needs of small, technology-based companies originating in or relocating to Research Triangle Park (RTP). The center provides facilities and services to enhance a small company's ability to succeed beyond the research and development stage to commercialization.</p>
4. Ibiliti <i>Management, Financial and Technical Assistance Providers</i> <i>City of Durham</i>	<p>Ibiliti is a division of the North Carolina Hospital Association's Strategic Partners dedicated to assisting medical innovation. Ibiliti provides the necessary support and resources for entrepreneurs looking to turn their ideas into reality.</p>
5. Women's Business Center of North Carolina <i>Management, Financial and Technical Assistance Providers</i> <i>Statewide</i>	<p>The Women's Business Center of North Carolina is a partnership program between the North Carolina Institute of Minority Economic Development and the U.S. Small Business Administration (SBA). The center's mission is to promote economic self-sufficiency for all women of North Carolina through entrepreneurship.</p> <p>The Women's Center's small-business experts offer:</p> <ul style="list-style-type: none"> • Customized, one-on-one business counseling; • Seminars and classes focused on key business topics, such as marketing, finance, certification and small-business resources; • Review and feedback on written business plans; • Loan package preparation assistance and lender referrals; • Certification assistance and review; • Networking opportunities to find mutual support, access to resources and business referrals; and • Global business development.
6. EntreDot <i>Management, Financial and Technical Assistance Providers</i> <i>Wake County</i>	<p>EntreDot works with entrepreneurs at any point of business maturity to create, launch and operate their businesses by providing professional mentoring and business educations programs that maximize opportunity for success. The company operates four Centers of Innovation across the Triangle where entrepreneurs can go for assistance.</p> <p>EntreDot offers three programs for new businesses:</p> <p>10-Week Mentoring Program—Focused on the process steps to launching and operating a business, this is an intensive and rapid-paced program that requires two hours a week of mentoring time and another six to eight of preparation, research and documentation time.</p> <p>One-on-One Mentoring Program addresses topics in 10-week Program but provides individual mentoring.</p> <p>Conquering Finance—For entrepreneurs who need ongoing guidance on how to raise money in any form. This program helps an entrepreneur create a detailed financing plan, prepare the materials needed to portray the business opportunity and ongoing mentoring to execute the plan.</p> <p>One-on-One Mentoring and Conquering Financing are also offered to existing businesses. The Mentoring Program for existing businesses focuses on helping the business assess where it is in meeting its business objectives, identifying shortcomings</p>

Table 11.3. Master List of Race-Neutral Programs

Organization Name, Geographic Reach	Description of Services and Available Metrics
	in business operations and developing a plan of action that will be based on EntreDot's mentoring program.
7. SCORE Raleigh <i>Management, Financial and Technical Assistance Providers</i> <i>Statewide</i>	<p>Since 1964, SCORE has provided expert volunteer mentoring to more than 11 million entrepreneurs and small business owners. As the nation's largest network of volunteer business mentors, SCORE is committed to helping any person succeed in their small business endeavor. SCORE Raleigh is dedicated to educating entrepreneurs and encouraging the formation, growth and success of small business by providing free counseling and low-cost educational workshops to start-ups and small businesses in the Raleigh metropolitan area, including Wake, Durham, Johnston, Franklin, Granville and Vance counties. SCORE provides:</p> <p>Mentors;</p> <ul style="list-style-type: none"> • Free, confidential mentoring via mail, in person or video; • Free tools, templates and tips; and • Free or inexpensive workshops and webinars. <p>In 2021, SCORE assisted in the creation of 166 new businesses, created 410 jobs and serviced/mentored 3,879 businesses.</p>
8. The International Entrepreneurs Carolinas <i>Management, Financial and Technical Assistance Providers</i> <i>Statewide</i>	<p>The International Entrepreneurs (TiE) was founded in 1992 in Silicon Valley by a group of successful entrepreneurs, corporate executives and senior professionals. Dedicated to the cycle of wealth creation and giving back to the community, TiE's focus area is to enable the next generation of entrepreneurs. TiE Global is the largest nonprofit organization and has amazing networking effect. TiE connects the entire entrepreneurship ecosystem, from early-stage entrepreneurs, serial entrepreneurs, professionals at leading corporations, venture capital, angel investors and thought leaders, among others. The organization emphasizes the spirit of giving in all aspects of their work. There are currently 11,000 members, including over 2,500 charter members in 61 chapters across 17 countries.</p> <p>TiE Carolinas is a not-for-profit organization with a mission to foster and support entrepreneurship in the Carolinas through the five pillars of TiE: mentoring, networking, education, funding and incubation.</p>
9. North Carolina Small Business and Technology Development Center <i>Management, Financial and Technical Assistance Providers</i> <i>Statewide</i>	<p>North Carolina Small Business and Technology Development Center (SBTDC) is North Carolina's leading resource for growing and developing businesses. The SBTDC operates in formal partnership with the SBA. The SBTDC's professional staff are highly experienced and knowledgeable—most have prior business ownership or executive experience, and over 70% have graduate degrees. This depth and diversity of talent positions the SBTDC to help businesses address a broad spectrum of issues including planning, financial management, human resources, marketing and operations. Additionally, the diverse backgrounds of our staff allow us to match our services to client needs and provide industry-specific advice and counseling. Since 1984, the SBTDC has helped over 100,000 North Carolina business owners and prospective entrepreneurs make better decisions—often leading to increased revenue and employment.</p> <p>Services provided include:</p> <ul style="list-style-type: none"> • Strategy Development & Implementation; • Marketing;

Table 11.3. Master List of Race-Neutral Programs

Organization Name, Geographic Reach	Description of Services and Available Metrics
	<ul style="list-style-type: none"> • Financing; • Performance Improvement; and • Economic & Community Development. <p>The SBTDC specializes in SBA loans, raising over \$123.8 million in capital and a financing approval rate of 93% in 2016/2017. Loan types include:</p> <ul style="list-style-type: none"> • Traditional Bank Loans; • SBA-Guaranteed Loans; • Export Financing; • Equity Capital Investment; and • Federal R&D and Commercialization Funding.
10. North Carolina Small Business Center Network <i>Management, Financial and Technical Assistance Providers</i> <i>Statewide</i>	<p>The North Carolina Small Business Center Network is operated through the Community College System. It is the largest state-supported small business assistance program, serving over 70,000 North Carolinians each year through 61 centers located throughout the State. Potential or current small-business owners can take advantage of high-quality, readily accessible assistance that includes free, confidential one-on-one business counseling services; resource and referral information for a variety of business needs; and high-impact seminars and classes available free of charge or for a minimal registration fee.</p>
11. LaunchRALEIGH <i>Management, Financial and Technical Assistance Providers</i> <i>Wake County</i>	<p>Created by the North Raleigh Rotary Club, LaunchRALEIGH supports and develops entrepreneurs and small businesses in under-resourced communities in Southeast Raleigh by providing access to business loans, business development services, mentors and networking opportunities. Its network of local partners in Raleigh provides a broad network of support and resources for entrepreneurs.</p>
12. NC State Acceleration Fund <i>Management, Financial and Technical Assistance Providers</i> <i>Wake County</i>	<p>The NC State Acceleration Fund is designed to accelerate economic development by increasing the propensity of new ventures to survive and grow through equity-free grants. At least one cofounder or owner of 10% or more of the company's equity must be either a NC State Undergraduate (junior/senior), Graduate or Recent Alumni (up to five years) from any NC State program. Acceleration grants provide up to \$50,000 and pro bono support services to entrepreneurs who complete the Andrews Launch Accelerator, which is a 14-week summer program where founders get to work on their concepts and build their companies.</p> <p>In addition to non-dilutive capital, grant recipients may receive the following:</p> <ul style="list-style-type: none"> • \$10,000 in Amazon Web Services credits; • \$3,000 in Google Cloud credits; • Pro bono legal services (corporate structure & documentation); • Pro bono accounting services (corporate accounting setup); • Access to banking relationships; • Access to angel investment & venture capital networks; • Mentorship; • Talent acquisition/recruiting services; and • Access to the NC State Entrepreneurship Clinic space.

Table 11.3. Master List of Race-Neutral Programs

Organization Name, Geographic Reach	Description of Services and Available Metrics
<p>13. Minority Business Development Agency <i>Management, Financial and Technical Assistance Providers</i> <i>Statewide (Federal Program)</i></p>	<p>The Minority Business Development Agency (MBDA) works to provide opportunities for Minority-owned businesses. By offering tools, education and strategic partnerships, MBDA helps minority entrepreneurs increase their global competitive advantage and their capabilities to create jobs. The North Carolina MBDA Business Center is operated by the North Carolina Office of Historically Underutilized Business (HUB Office). The Center is housed in RTP, one of the fastest growing metro areas in the United States. The Center engages in outreach, technical training, networking and connecting opportunities for the clients it serves. The goal is to provide hands-on assistance to help minority businesses grow and expand to new heights, including understanding international trade engagement.</p>
<p>14. North Carolina Institute of Minority Economic Development <i>Management, Financial and Technical Assistance Providers</i> <i>Statewide</i></p>	<p>The North Carolina Institute of Minority Economic Development strengthens the asset base of diverse populations through policy, education and economic opportunities, creating an environment in which race, gender and geography are no longer a barrier to prosperity. By using a comprehensive, multidisciplinary and interdependent strategy, the Institute strives to increase productive outcomes for groups with limited resources. The Institute’s technical support, research and information activities are structured to foster business, community and educational/leadership development.</p> <p>Outcomes:</p> <ul style="list-style-type: none"> • 140 million+ in bonding; • 4,100+ jobs created; • 10,000+ clients served; and • 6,900 entrepreneur’s trained. <p>The Institute consists of several Centers and Affiliates, including:</p> <ul style="list-style-type: none"> • The Center for Entrepreneurship provides meaningful education and training, growth strategies and technical assistance for diverse businesses, women at various stages of business and key stakeholders. The Center consists of several affiliate organizations, including: <ul style="list-style-type: none"> ▪ Women’s Business Center of Charlotte; ▪ Women’s Business Center of Greensboro; ▪ Women’s Business Center of North Carolina; ▪ Women’s Business Center of Richmond; and ▪ South Atlantic Region Small Business Transportation Resource Center. • The Center for Community Investment provides debt and investment capital to affordable housing developers, community-based development organizations (CBDOS) and small businesses with the goal of revitalizing and transforming diverse communities through affordable housing, entrepreneurship, Historically Black Colleges and Universities (HBCU) collaborations and community development. As a certified Community Development Financial Institution (CDFI), Institute Capital seeks to provide high-impact lending to borrowers who cannot typically get capital from mainstream financial institutions and who are working to create thriving economies in communities that represent the most diverse populations. • Research, Policy & Impact Center serves as a center of knowledge on key areas of interest in economic development and net-worth growth of minorities, women and under-resourced populations.

Table 11.3. Master List of Race-Neutral Programs

Organization Name, Geographic Reach	Description of Services and Available Metrics
	<ul style="list-style-type: none"> • Center for Professional Services helps public agencies, community organizations and the corporate sector play more effective roles in support of equitable economic ecosystems. The Center can assist with market analysis, organizational assessments, industry coaching, program development and planning, sustainability, and opportunities sourcing. Its team of consultants specializes in four competencies: <ul style="list-style-type: none"> ▪ Public and Private Collaborations; ▪ Supplier Inclusion; ▪ Diversity, Equity and Inclusion (DEI); and ▪ Executive Management Education.
15. Triangle ArtWorks <i>Management, Financial and Technical Assistance Providers</i> <i>City of Raleigh</i>	<p>Triangle ArtWorks, a 2020 City of Raleigh Impact Partner Grant recipient, brings area artists, businesses and nonprofits together. They host workshops and trainings for artists, art businesses and nonprofits in topics such as entrepreneurship, marketing, business development, accounting, and legal issues, as well as networking and other peer-support events.</p>
Community and Economic Development Organizations	
16. Wake County Economic Development <i>Community and Economic Development Organizations</i> <i>Wake County</i>	<p>Wake County Economic Development (WCED) provides an experienced team that helps guide business owners through the relocation process, answer a wide variety of questions and introduce business owners to community and business leaders. WCED offers support in the following areas:</p> <ul style="list-style-type: none"> • Existing industry services; • Site Assessment Program; • Targeted industry support; • Research services: competitive benchmarking, building and site inventory, economic activity and trends; • Targeted industry marketing; • National storytelling campaign; • Social and digital media; • Marketing collateral and publications; • Trade shows and events; • Work in the Triangle; • Workforce development support; • Talent pipeline development support; • Relocation support; • Support and partner with organizations working to advance the success of entrepreneurs and start-up companies in the region; and • Spotlight entrepreneurial success stories in national media.

Table 11.3. Master List of Race-Neutral Programs

Organization Name, Geographic Reach	Description of Services and Available Metrics
<p>17. The Raleigh Chamber <i>Community and Economic Development Organizations</i> <i>Wake County</i></p>	<p>The Raleigh Chamber builds a thriving regional economy, enhances the community's quality of life and strengthens member businesses.</p> <p>Build a thriving regional economy—The Chamber is an active partner in driving the region's economic growth and global competitiveness by:</p> <ul style="list-style-type: none"> • Serving as the catalyst and convener for regional economic development and collaboration; • Attracting businesses to the area that contribute to our economy's innovation, vibrancy and prosperity, and supporting business retention and expansion throughout the Greater Raleigh area; • Actively marketing Wake County to targeted industries as the best place for business, and supporting regional marketing initiatives; and • Building a strong, diverse pipeline of talent through recruitment, development and retention programs and services. <p>Enhance the community's quality of life—The Chamber is committed to building on the many advantages of the Raleigh community through:</p> <ul style="list-style-type: none"> • Impactful legislative efforts and advocacy for policies that affect the business environment and encourage job growth, economic prosperity and diversity, workforce development, and exceptional quality of life; and • Action as a collaborative partner and consensus builder with other community organizations and the government, nonprofit and education sectors to achieve mutual goals and to build a healthy, diverse business community supported by a strong education system and infrastructure. <p>Strengthen member businesses—Chamber membership includes more than 2,200 organizations of all sizes and stages of business growth, representing virtually every industry sector in the region. Members count on the Chamber to:</p> <ul style="list-style-type: none"> • Provide value-add benefits and services including strategic networking opportunities, engagement in issues important to their business and careers, promotional opportunities, educational programs and other business services; • Represent their interests in government and legislative issues; • Develop their leadership capacity with programs that cultivate a strong, diverse network of business leaders for today and tomorrow; and • Build a Chamber staff that demonstrates teamwork, excellence, respect for diversity and commitment in pursuit of our mission.
<p>18. Innovate Raleigh <i>Community and Economic Development Organizations</i> <i>Wake County</i></p>	<p>Innovate Raleigh is a not-for-profit 501(c)3 charitable organization committed to making the region the top center for innovation and entrepreneurship in the nation. They support a strong and vibrant community by bringing together key stakeholders within the Raleigh ecosystem—entrepreneurs, investors and supporting organizations. The focus is to connect entrepreneurs to three core elements to fuel their growth—funding, talent and opportunities.</p> <p>Innovate Raleigh approaches its mission with an emphasis on diversity and inclusion, fostering entrepreneurship within underserved communities while connecting to the broader entrepreneurial communities in neighboring cities.</p>

Table 11.3. Master List of Race-Neutral Programs

Organization Name, Geographic Reach	Description of Services and Available Metrics
19. Microelectronics Center of North Carolina <i>Community and Economic Development Organizations</i> <i>Statewide</i>	<p>Microelectronics Center of North Carolina (MCNC), a nonprofit organization, has been committed to building partnerships among academic, research, government and business communities for more than a quarter of a century. These partnerships enable and advance education, innovation and economic development throughout North Carolina by delivering the world's foremost information technology services through the North Carolina Research and Education Network. Currently, MCNC is teaming with North Carolina education, government and business communities to develop and implement a plan to provide network services to every K–12 school and community college in North Carolina.</p>
20. Office of Information Technology Services <i>Community and Economic Development Organizations</i> <i>Statewide</i>	<p>The Office of Information Technology Services (ITS) provides much of the information technology used by State agencies, local governments and educational institutions across North Carolina. ITS services include hosting, network and video services, telecommunications, and enterprise services, such as NCMail and iWise.</p>
21. Small Business and Technology Development Center <i>Community and Economic Development Organizations</i> <i>Statewide</i>	<p>Organized as an interinstitutional program of the University of North Carolina System, the Small Business and Technology Development Center is the primary organization through which the State of North Carolina provides counseling and technical assistance to entrepreneurs as well as medium-size businesses, facilitating technology development and commercialization.</p>
22. Raleigh Economic Development <i>Community and Economic Development Organizations</i> <i>Wake County</i>	<p>Raleigh Economic Development is a partnership between the City of Raleigh and the Greater Raleigh Chamber of Commerce. The primary purpose of the program is to support job creation and capital investment in Raleigh by working closely with companies, site-selection consultants and real estate professionals.</p>
23. Midtown Raleigh Alliance <i>Community and Economic Development Organizations</i> <i>Wake County</i>	<p>Midtown Raleigh Alliance promotes the Midtown brand and Midtown as a destination for economic development. The Alliance brings together stakeholders and creates a meaningful forum for quality-of-life issues and solution exploration. The Alliance advocates for the needs of Midtown before the city, county and other governmental bodies. The Alliance provides social and networking opportunities for members to foster strong and meaningful relationships.</p>
24. New Bern Avenue Corridor Alliance <i>Community and Economic Development Organizations</i> <i>Wake County</i>	<p>The New Bern Avenue Corridor Alliance (NBACA) is a committed group of stakeholders and a Board of Directors with the goal of assuring timely construction of essential infrastructure improvements along New Bern Avenue in the City of Raleigh from I-440 to Swain Street to create a safe, functional, attractive and vibrant gateway street which encourages and supports strong economic development, a variety of quality housing, linked sustainable neighborhoods, vigorous communities and a memorable gateway.</p>
25. Blue Ridge Corridor Alliance <i>Community and Economic Development Organizations</i> <i>Wake County</i>	<p>The Blue Ridge Corridor Alliance is a nonprofit created in partnership between the City of Raleigh, NC State University, property owners, businesses and residents. The Blue Ridge Corridor covers the three-mile length of the Blue Ridge Road running North–South from Western Blvd. to Edwards Mill Rd. The corridor encompasses several State properties, medical facilities, neighborhoods and office/retail parks extending East to I-440 and West to I-40.</p>

Table 11.3. Master List of Race-Neutral Programs

Organization Name, Geographic Reach	Description of Services and Available Metrics
26. The Downtown Raleigh Alliance <i>Community and Economic Development Organizations</i> <i>City of Raleigh</i>	<p>The Downtown Raleigh Alliance (DRA) programs include storefront recruitment, business retention and community engagement. The DRA serves as the administrator of the Downtown Raleigh Municipal Services District (MSD), which is a defined special assessment district in which property owners contribute toward enhanced services.</p>
27. Person Street Partnership <i>Community and Economic Development Organizations</i> <i>City of Raleigh</i>	<p>The Person Street Partnership was created in 2011 to build momentum for change in the business district along North Person Street in Raleigh, NC. This district is located just north of downtown and is bordered by the Historic Mordecai and Oakwood communities. The goal of the partnership is to bring property owners and business owners, stakeholders, residents, and Raleigh City Staff together to work jointly on creating a vibrant business community on North Person Street.</p>
28. City of Raleigh Urban Design Center <i>Community and Economic Development Organizations</i> <i>City of Raleigh</i>	<p>The Urban Design Center is a program of the City of Raleigh designed to apply an interactive, design-centered approach to planning issues in the city. The Center's priority is to update the downtown plan, with a focus on enhancing the walkable community of Raleigh through various design opportunities.</p>
29. Southeast Raleigh Assembly <i>Community and Economic Development Organizations</i> <i>City of Raleigh</i>	<p>As part of the Southeast Raleigh Economic Development Strategy, the Raleigh City Council approved a new organizational structure in March 2001, known as the Southeast Raleigh Assembly, to ensure that economic development initiatives include participation by key stakeholders and community representatives. The assembly, based on a report prepared by Hammer Siler George Associates, is intended to concentrate on long-term economic development.</p>
30. Glenwood South Neighborhood Collaborative <i>Community and Economic Development Organizations</i> <i>City of Raleigh</i>	<p>Formed in November 2013, the Glenwood South Neighborhood Collaborative's (GSNC) goals are to bring residents and merchants together to strengthen the community and to develop models for communication and collaboration around issues affecting the neighborhood.</p>
31. Hillsborough Street Community Service Corporation <i>Community and Economic Development Organizations</i> <i>City of Raleigh</i>	<p>The Hillsborough Street Community Service Corporation (HSCSC) is an independent, not-for-profit, municipal service district. HSCSC, better known as Live It Up! Hillsborough Street, services and programs include security, beautification, marketing and communications, economic development, special events, planning and advocacy, parking and transportation, research, and arts.</p>
32. Five Points Business District Association <i>Community and Economic Development Organizations</i> <i>City of Raleigh</i>	<p>The Five Points Business District Association is a nonprofit merchants association with the purpose of organizing, supporting, encouraging and motivating about 60 merchants, service providers, food and beverage destination establishments, shops, and commercial businesses.</p>

Table 11.3. Master List of Race-Neutral Programs

Organization Name, Geographic Reach	Description of Services and Available Metrics
Chambers of Commerce	
33. NC Hispanic Chamber of Commerce <i>Chambers of Commerce Statewide</i>	The Hispanic Chamber of Commerce of North Carolina is a nonprofit organization dedicated to promoting the progress and economic development of Hispanic businesses and professionals in the region of North Carolina through business training programs and special events.
34. Raleigh LGBTQ+ Chamber of Commerce <i>Chambers of Commerce City of Raleigh</i>	The Raleigh LGBTQ+ Chamber of Commerce is the place where individuals, professional and business communities connect through in-person and virtual events.
Trade Organizations and Business Associations	
35. Association for Corporate Growth <i>Trade Organizations and Business Associations Statewide</i>	The Association for Corporate Growth, founded in 1954, is a global organization with 14,000 members comprising 55 chapters in the U.S., Canada, Europe and Asia. By bringing together business leaders and middle-market dealmakers, the organization assists in growth and business building by ensuring member access to data, content and networking opportunities.
36. International Society of Automation <i>Trade Organizations and Business Associations Statewide</i>	Founded in 1945, the International Society of Automation (ISA) is a leading global nonprofit organization that is setting the standard for automation by helping more than 30,000 worldwide members and other professionals solve difficult technical problems while enhancing their leadership and personal career capabilities. Based in RTP, ISA develops standards, certifies industry professionals, provides education and training, publishes books and technical articles, and hosts the largest conference and exhibition for automation professionals in the Western Hemisphere.
37. Motor & Equipment Manufacturers Association <i>Trade Organizations and Business Associations Statewide</i>	The Motor & Equipment Manufacturers Association (MEMA) exclusively represents and serves U.S. manufacturers of original equipment and replacement parts, service tools and equipment, and chemicals for automobiles and trucks. MEMA provides its members with market research, industry and regulatory information, government representation, financial services and electronic data services.
38. North Carolina Biosciences Organization <i>Trade Organizations and Business Associations Statewide</i>	North Carolina Biosciences Organization (NCBIO) is North Carolina's state-level affiliate of the national Biotechnology Industry Organization. Together, the two groups advocate federal, state and local public policies designed to help the bioscience industry fulfill its promise as a source of economic opportunity and improved quality of life. NCBIO serves the third largest state biotechnology cluster in the nation, comprising more than 150 companies and 18,000 employees.
39. North Carolina Biotechnology Center <i>Trade Organizations and Business Associations Statewide</i>	The North Carolina Biotechnology Center is a private, nonprofit corporation established in 1981 as the United States' first statewide initiative in biotechnology. The center's primary focus is to strengthen the biotechnology research capabilities of the State's universities; assist biotechnology business development; educate the public about the science, issues and application of biotechnology; encourage collaborations among the State's universities, industry and government; and strengthen North Carolina's national and international leadership in biotechnology.

Table 11.3. Master List of Race-Neutral Programs

Organization Name, Geographic Reach	Description of Services and Available Metrics
40. North Carolina Technology Association <i>Trade Organizations and Business Associations</i> <i>Statewide</i>	<p>The North Carolina Technology Association (NCTA) is the premier statewide leadership organization that represents the technology industry. Membership consists of top-tier leaders among technology companies, professional service firms, community organizations, educational institutions and government agencies. NCTA helps its members grow regionally and compete globally by actively connecting business decision makers, educating government officials on issues relevant to the technology industry and providing invaluable educational and executive networking events.</p>
41. NC IDEA <i>Trade Organizations and Business Associations</i> <i>City of Durham</i>	<p>NC IDEA is a nonprofit organization created to assist young technology companies with high-growth potential in securing resources necessary for commercial success. The organization focuses on providing support to companies in information technology, medical diagnostics and devices, material sciences, and green technologies by providing early-stage grant funding and mentorship.</p>
42. RIoT Labs <i>Trade Organizations and Business Associations</i> <i>Wake County</i>	<p>RIoT Labs is a hardware, wireless and software prototyping lab with all the tools for full-stack Internet of technology (IoT) prototyping. In addition, RIoT Labs also connects entrepreneurs to its industry, government and university network through regular lunch and learns, educational programming and colocated office space. In addition to their lab, RIoT also has an accelerator program which facilitates a variety of entrepreneurial processes, from research commercialization to start-up growth to corporate innovation projects.</p>
43. CleanLinks <i>Trade Organizations and Business Associations</i> <i>Statewide</i>	<p>CleanLinks, founded jointly by SJF Ventures and the Council for Entrepreneurial Development, is a networking platform designed to create high-value interaction among professionals in cleantech, renewable energy, energy efficiency and relative environmental sectors. The primary purpose of CleanLinks is to foster networking, education and collaboration to help grow entrepreneurship in clean industries. The Raleigh-Durham chapter offers CleanLink Forums, which highlight cleantech companies and best practices in and around the North Carolina region.</p>
Other Advocacy Groups	
44. #BlackDollarNC <i>Other Advocacy Groups</i> <i>Statewide</i>	<p>#BlackDollarNC creates opportunities for Black entrepreneurs to showcase their skills, services and products through vendor events, online directory and networking opportunities.</p>

Source: M³ Consulting, Inc.

11.4 Anecdotal Interviews with Executive Directors

Several city, state and local organizations were identified that provide technical and financial assistance to small, minority and woman-owned business enterprises in the City of Raleigh and throughout the State of North Carolina. M³ Consulting sought to interview Executive Directors of these organizations to determine their experiences working with small, minority and women-owned businesses. Out of the 15 Executive Directors contacted, five agreed to one-on-one in-depth interviews.³ The organizations were derived from these sectors:

- Goal-Based and Other Targeted Procurement Programs;
- Management and Technical Assistance Providers;
- Financial Assistance Providers;
- Community and Economic Development Organizations;
- Chambers of Commerce;
- Trade Organizations and Business Associations; and
- Other Advocacy Groups.

11.4.1 Race-Neutral Interview Findings

The purpose of the interviews was to gather information regarding initiatives that aim to assist M/WBE businesses in increasing revenue and obtaining contracts in general and particularly in Raleigh, North Carolina. Participants were also given the opportunity to discuss (1) whether there is any evidence of disparate treatment and/or disparate impact affecting M/WBE firms and (2) if the interviewee(s) had personal knowledge of instances of discriminatory treatment or practices that have adversely affected M/WBE firms in the transaction of businesses with the city of Raleigh or North Carolina in general.

The in-depth interviews were structured settings in which an interviewer/facilitator used an interview guide to ask questions to formulate responses from participants. All interviews were conducted through a videoconference communication platform and/or via telephone. Participants discussed the purpose and goal of their organization, target population, detailed description of services, output of services and achievement of those services. The questions also allowed participants to discuss M/WBE and economic development issues that are unique to their experience.

Interview excerpts are provided to support each theme with the race, gender and industry of each participant. Common themes across interviews were grouped into similar and repetitive themes under five topic headings. In addition, a separate theme was added to include comments by participants regarding recommendations for improving the Raleigh procurement process. The excerpts illustrate interviewee experiences relating to each theme heading.

For reference, the acronyms listed in this chapter in response to the comments equate to the following:

- RN = Race-Neutral Interview. The number next to RN indicates the order in which they were interviewed.

³ Extensive efforts were made to contact each organization, with four contacts made per organization and follow-up calls made by City of Raleigh to encourage participation.

11.4.2 Interview Confidentiality

Each interviewee was informed that their identity and the identity of their organization would remain confidential unless M³ Consulting was required to disclose this information. We strongly note that efforts to verify or find corroborating data that supports any claim made during an anecdotal interview may subject the interviewee to foreseen and unforeseen reprisals. Therefore, in following up on the comments reflected in this chapter, we recommend the City of Raleigh take measures to protect interviewees from retaliatory actions by others.

11.5 Anecdotal Interview Findings

The following sections indicate the recurrent themes in the discussions found throughout the interviews. Each theme includes anecdotal comments/excerpts directly from the interviewees illustrating the topic heading.

- Theme 1:** Raleigh Procurement Process
- Theme 2:** Barriers and Challenges
- Theme 3:** Difficulty Building Financial/Business Development
- Theme 4:** Limited Networking Opportunities
- Theme 5:** Lack of Candidness in the Procurement Process
- Theme 6:** Recommendations

THEME 1: Raleigh Procurement Process

This section addresses the difficulty and complexity of the Raleigh procurement process expressed by interviewees.

RN, Interviewee 2: White male, Compliance Officer of a state government entity, discussing Non-M/WBE prime contractors' lack of understanding of the M/WBE participation requirement in government contracts.

"We do hear times where sometimes it seems like people are just being asked to provide bids so that they can check a box and say, 'Yes, I looked at that guy,' but then they [M/WBE businesses] are like, 'We didn't see any actual work come out of that.'"

"So, it seems a lot of the owners may not be aware of the process. It sounds like there's a process there with the bidding ... and actually being able to be an eligible business for some of the contracts and different things that may arise as an opportunity."

RN, Interviewee 1: Hispanic female, Executive Director of a Contractors Association, discussing the complexity of paperwork when bidding on government contracts.

"The process for smaller businesses is very complicated. There's a lot of paperwork involved. The contracts are really big [and] they're very extensive. So that is a barrier for smaller businesses."

THEME 2: Barriers and Challenges

This section discusses barriers and challenges experienced by small, minority and/or women-owned businesses.

RN, Interviewee 1: Hispanic female, Executive Director of a Contractors Association, discussing cultural differences.

"The thing with North Carolina is it's the first-generation Hispanic city. People here, especially in Raleigh, are even more behind than Charlotte. People are just getting used to it, and they're learning their way and getting used to the system. And they need a lot of financial education and assistance from other companies."

RN, Interviewee 5: White female, Coordinator of a local government entity, discussing the lack of diversity and representation in the procurement process.

"I think a greater understanding of economic value of bringing in a local firm that is diverse. Sometimes I think people don't understand how that impacts all of us ..., how that business working down the street brings a different perspective and seeing things in a way we might not have seen before. And those dollars that they receive go back into the economy and our community. ... It can impact the ability of how we solve problems and see other people if you bring in someone that has a different experience. We're offering something potentially better for the community if you have that diverse perspective. ... Diversity is more important than ever because we are all different. We all look differently. We all think differently. And having that opportunity to work for one another is important. I think that's one of the big challenges."

RN, Interviewee 2: White male, Compliance Officer of a state government entity, discussing the importance of selecting a diverse pool of candidates.

"If you're trying to get good value from your local government, for the money of your constituents and your citizens that you're serving, then you owe it to them to do what you can to diversify that pool of people that you're pulling from instead of always going to the same person."

Below are responses about the difficulties M/WBE firms face in obtaining bonding and insurance:

RN, Interviewee 4: Black male, Director of a local government entity.

“What I hear is that these [M/WBE] companies feel like they’re not big enough and some institutions kind of see them as more of a risk to being insured. ... It’s kind of like being overlooked for being small or any of the other designations that we have for our M/WBEs. They are not given an equal opportunity to be insured, to be bonded, just because of who they are and some of the characteristics about their business. There is a belief that there is no way that M/WBEs could catch up to dominant culture firms. It’s almost like there is a race and they [dominant culture firms] are so much further ahead that they’ll [M/WBEs] never get an opportunity.”

THEME 3: Difficulty Building Financial/Business Development

Interviews revealed that some M/WBE firms lack the information, resources and financial backing to compete for government contracting opportunities.

RN, Interviewee 1: Hispanic female, Executive Director of a Contractors Association, discussing the lack of capital some M/WBE businesses have.

“The smaller companies, they cannot work or manage a big asset by themselves. They try, they want to, they might have the capacity to do the work, but they don’t have the capital.”

RN, Interviewee 4: Black male, Director of a local government entity, discussing the need for “bankability” in obtaining large contracts.

“I think that speaks to the feeling that they cannot grow because they do not have access to resources. They’re not bankable. And that’s the term that I keep hearing, ‘bankability.’ You can do the work, but if you don’t demonstrate ‘bankability,’ you’re still not going to get some of those larger contracts.”

RN, Interviewee 5: White female, Coordinator of a local government entity, discussing the importance of business development and growing their company.

“Knowledge is power; information is key. ... It’s not that they [M/WBE firms] don’t know how to do the work; they don’t know all of the pieces. If you don’t have information about opportunities, then how can you grow? These businesses work in their business, but they don’t necessarily have the time to work on their businesses to create that strategic plan that will help them to grow.”

RN, Interviewee 4: Black male, Director of a local government entity, discussing how discriminatory policies still impact minority businesses in obtaining financing.

“There is so many banking, financial-related hurdles that people can’t access these resources because of policies that most wouldn’t recognize now as it has no connectivity, but they were sort of stemmed from black codes. Historically, they were there, and they just built policy on top of bad policy on top of bad policy.”

THEME 4: Limited Networking Opportunities

Interviews revealed that formulating new relationships with other companies in their respective industries is important when seeking business opportunities. The lack of networking opportunities for M/WBE firms can be a disadvantage to obtaining contracts in the marketplace.

RN, Interviewee 4: Black male, Director of a local government entity, discussing the importance of networking.

“Building relationships is necessary so that folks know that the resources are there. We have to demystify access to resources and access to why you want to be a part of these conversations and to build your network and then get these resources that can help get you to the next level.”

RN, Interviewee 5: White female, Coordinator of a local government entity.

“How do you get to the point where you are strong enough to make it on your own, and who is there to help? I make a lot of referrals to try to link people up with potential partners who express interest in supporting these firms, but I do see that there are parts of that that continue to be a barrier.”

THEME 5: Lack of Candidness in the Procurement Process

Interviewees reported a lack of candidness and transparency as to how prime contractors select subcontractors on a project.

RN, Interviewee 2: White male, Compliance Officer of a state government entity, implying that contracts are awarded primarily based on reputation.

“And I think that a lot of the times the contracts that are awarded are definitely based on reputation. And a lot of times you’ll see individuals that have a well-established reputation and they’re instantly kind of given this contract or that opportunity based on reputation and familiarity with some of the, I guess, owners and different things when you get into the nitty gritty of the process. If I’ve always picked Company A to do this particular job, I really don’t think about any other companies. I go directly to Company A, and Company A comes directly to me. And that’s who I award the contract to because they have a reputation.”

“Just because those are the ones that you know and those are the ones that you’ve used is not necessarily a good thing. Even if they’ve provided decent service in the past, what’s their incentive to give you really good pricing? If they know I’m always going to get this, I’ll just get my money out of it, and you don’t get a different way of coming about it in a more efficient way.”

RN, Interviewee 4: Black male, Director of a local government entity, discussing how contracts are based on formed relationships/partnerships.

“There’s feelings of deals that are being done because of partnerships or because of friendships versus it being a true meritocracy ..., and so I’ve heard that a lot.”

RN, Interviewee 5: White female, Coordinator of a local government entity, discussing how prime contractors select their subcontractors.

“Oftentimes it’s about comfort zone. So, I’m comfortable continuing to call this same contractor because I know the individual and I’m not going to have any problems with him.”

THEME 6: Recommendations

Interviewees provided recommendations on how to improve the efficiency and effectiveness of the Raleigh procurement process as well as the government procurement process in general. These recommendations are important to consider when establishing ways to remedy challenges faced by small, minority and women-owned businesses.

Below are comments from participants with suggestions and recommendations on improving the procurement process.

- **Advocacy**
Participants addressed the importance of advocacy at the local and state level as well as in the private sector. Below are responses from interviewees suggesting different types of advocacies that can be offered to M/WBE firms.

RN, Interviewee 4: Black male, Director of a local government entity.

"We need to start advocating now with the state and federal entities so that we can be proactive and preemptive to anything that may come down the pipeline five, ten, fifteen years from now."

"Also, there's so much influence on the public side, but I think there really is a need for a private sector sort of conversation because I think there needs to be an honest conversation about banking institutions and the analysis of risk. They're antiquated. Some banks are still using some of the demographics that they've used in the past to help make decisions that we saw with redlining."

RN, Interviewee 5: White female, Coordinator of a local government entity.

"Internally sometimes ... we have to be extra advocate-central to support [firms] ... and help those firms get stronger so they can hit that mark through prequalification, to even getting bonding so they can further their business."

RN, Interviewee 2: White male, Compliance Officer of a state government entity.

"Vendors need to know who to go to for certain things. When you put out a bid, there should always be a project contact on there."

- **Review of local and state policies in the procurement process**
Some interviewees stressed the need for a review of local and state policies in the procurement process. Specifically, further development should be conducted on how contracts are awarded to M/WBE firms.

RN, Interviewee 2: White male, Compliance Officer of a state government entity.

"We need to be looking at procedures and how they're actually followed to see who does what ... and what are the procedures that need to be done. It's important to have somebody doing the numbers and who understands them. You need to have somebody there who understands what they actually need to do to be successful and understand the value of this and the importance to the community that they serve."

RN, Interviewee 4: Black male, Director of a local government entity

"One, are there any internal practices or policies that are perpetuating the inaccessibility? It's an analysis of our system. It's an analysis of our infrastructure. What, if anything, are we doing to perpetuate getting the same result? And then the second part of it is, what are the opportunities for us to help level the playing field and actually build equity?"

"What is the city's responsibility to help build and support those companies? How do we bring them closer together so that there's more mobility versus having them so far apart?"

- **Breaking up larger contracts for M/WBE businesses**
One interviewee suggested breaking up larger contracts by trade so that M/WBE firms can bid on projects at a smaller scale. It was also suggested that the bond requirement should be eliminated, as it has been a barrier for M/WBE firms to obtain.

RN, Interviewee 1: Hispanic female, Executive Director of a Contractors Association

“Taking one of the trades from the base package and dividing it and making that smaller trade. If it’s a painting, divide part of the painting job and make it a smaller one for drywall, or something like that, for different trades. ... That is a huge advantage that actually smaller businesses can be able to accommodate to quote with the city.”

“Also, for the smaller trade, for services and things like that, maybe depending on the company or the background, waiving or eliminating the bonding for small businesses as well. That’s a good one.”

11.6 Summary of Findings

There are a significant number of race-neutral programs that provide aid and support to M/WBEs. M³ Consulting reviewed the offerings of 44 organizations in the categories of:

- Goal-Based and Other Targeted Procurement Programs;
- Management and Technical Assistance Providers;
- Financial Assistance Providers;
- Community and Economic Development Organizations;
- Chambers of Commerce;
- Trade Organizations and Business Associations; and
- Other Advocacy Groups.

M³ Consulting interviewed Executive Directors of five organizations to determine their experiences working with small, minority and women-owned businesses. The Executive Directors identified the following issues/themes impacting the M/WBEs that they service:

- Using M/WBEs to check the box on participation requirements;
- Raleigh community just starting to appreciate economic value/impact of diverse businesses;
- Lack of information, resources and financial backing to allow M/WBEs to compete for government contracting opportunities;
- Lack of networking opportunities and opportunities to build relationships;
- Lack of candidness and transparency as to how prime contractors select subcontractors;
- Need for advocacy at local, state and federal level for M/WBE participation; and
- Need for review of procurement policies, procedures and practices to determine impact on M/WBEs.

Though race-neutral programs within the City of Raleigh and throughout North Carolina have made some progress in improving M/WBEs management skills, access to capital and greater exposure to the larger business community, M/WBEs still face some difficulty in gaining access to public- and private-sector contracting opportunities.

The results of the program review and interviews revealed that, while race-neutral efforts may have contributed in some degree to increased capacity and participation in contract awards, race-neutral programs alone have not been fully effective in increasing availability, capacity or utilization of M/WBEs or eliminating disparity.

Given this result, the provision of management, finance and technical assistance via race-neutral programs, in and of itself, does not appear to adequately address all issues and barriers faced by M/WBEs in the City of Raleigh.

Chapter 12: Recommendations

12.1 Introduction

Miller³ Consulting, Inc. (M³ Consulting) was commissioned by the City of Raleigh to conduct a Comprehensive Disparity Study to determine the level of availability of Minority and Woman-Owned Business Enterprises (M/WBEs) in the City of Raleigh’s relevant market and the actual utilization of those firms in the City of Raleigh’s contracting opportunities for Architectural, Engineering and Survey Services (AES)-Design Services, Construction and Construction-Related Services, Nonprofessional Services, Professional Services, and Goods & Supplies. M³ Consulting conducted several analyses for the City of Raleigh:

Industry Analysis	Statistical Analysis	Market Analysis	Conclusions	Recommendations
<ul style="list-style-type: none">• Legal Analysis• Procurement and MWBE Program Operational Analysis	<ul style="list-style-type: none">• Relevant Market• Availability Analysis• Utilization Analysis• Disparity Ratios• Capacity Analysis	<ul style="list-style-type: none">• Anecdotal and Survey Analysis• Race-Gender Neutral Analysis• Marketplace Analysis	<ul style="list-style-type: none">• Finding discrimination passive or active, if any• Identification of barriers to MWBE participation	<ul style="list-style-type: none">• Race Conscious and Race Neutral Recommendations• Post Study Support and Implementation

These analyses provide an overall picture of the environment faced by M/WBEs attempting to do business with and in the City of Raleigh, which leads to the recommendations in this chapter.

12.2 Conclusions on Race- and Gender-Conscious Goal Possibilities

Based on the statistical findings in the disparity chapter, the utilization of qualified firms as reflected by the percentage of contracts or purchase orders awarded and payments made, when compared to the availability of Ready, Willing and Able (RWASM) firms, appears to be less inclusive than warranted, thus M³ Consulting draws an inference of discrimination against the following race, ethnicity and gender groups:

Table 12.1. Inference of Discrimination Based on Findings of Statistically Significant Disparity
By Race/Ethnicity/Gender
By Procurement Type
For the City of Raleigh

	AES Design Services (Purchase Orders)	Construction & Construction-Related Services (Contract Awards)	Non-Professional Services (Purchase Orders)	Professional Services (Purchase Orders)	Goods & Supplies (Purchase Orders)
African American	Disparity	Disparity*	No Disparity*	Disparity*	Disparity*
Asian American	Disparity*	Disparity*	Disparity*	No Disparity*	Disparity*
Hispanic American	Disparity*	Disparity*	No Disparity*	Disparity	Disparity*
Native American	Disparity	Disparity*	Disparity*	No Disparity	Disparity*
WBE	Disparity*	Disparity	No Disparity	Disparity*	Disparity*

Source: M³ Consulting

*Statistically Significant

12.3 Recommendations

Considering the findings discussed in the previous chapters and the disparity conclusions above, M³ Consulting is providing the following recommendations to the City of Raleigh. The recommendations contain both race- and gender-neutral and race- and gender-conscious elements. The recommendations are grouped within the following categories:

- Organizational and Procurement Adjustment Recommendations;
- Recommendations for Targeted Initiatives—Race- and Gender-Conscious and Race- and Gender-Neutral; and
- Diverse Supplier Program Recommendations.

These recommendations consist of a listing of pertinent options from which the City of Raleigh may select in narrow tailoring its efforts in response to the findings of this report. The options combine agency specific and best practices recommendations that are legally defensible considering the factual findings of this study. The City of Raleigh should consider adoption of those recommendations that are considered most appropriate in terms of cost, resources required, likely effectiveness, community acceptance and organizational feasibility.

12.3.1 Organizational and Procurement Adjustment Recommendations

Below are recommendations to the City of Raleigh for organizational, cultural, structural and programmatic changes that will lead to transformative and sustainable change in the City of Raleigh’s procurement operations and that will bring the City of Raleigh into an inclusive procurement environment that ensures regulatory compliance and alignment with best practices.

A. Procurement Systems and Culture Changes

A.1 Change inclusion focus from programmatic (compliance with M/WBE regulations) to organizational (commitment to inclusive procurement environment)

Much of the focus at the City of Raleigh has been on meeting the State of North Carolina’s 10% M/WBE goals on building opportunities at \$300,000 or greater (or building projects at \$100,000 or more with State funding). These efforts, while important to the issues of inclusion, are programmatic (related to operation of a specific program) and functional (focused on department function) in nature and not focused on organizational and City-wide change. These programmatic efforts do not have a transformative impact on procurement and contracting operations that will lead to real and sustained change in organizational culture and practices as it relates to doing business with M/WBEs and Small Business Enterprises (SBEs). Furthermore, the effectiveness of these programmatic efforts will not be maximized until underlying organizational issues, such as effects of decentralization, impacting the inclusiveness of the City of Raleigh’s procurement operations are addressed.

Many of the recommendations below focus on City-wide organizational changes that can lead to the transformation of the City of Raleigh’s procurement system to become more inclusive. Many of the recommendations for inclusion do not depend on the City of Raleigh’s decision to employ race- and gender-conscious or race- and gender-neutral programmatic initiatives. When implemented, these recommendations will also enhance the effectiveness of many recent M/WBE programmatic initiatives. Lastly, as we noted in

Chapter 4, Statistical Methodology, under Equal Employment Opportunity (EEO) requirements, employers must be able to “track” its decision-making points—applicants, promotions, terminations, etc. Similarly, the City of Raleigh should be able to “track” its procurement and contracting-related decision-making points in order to more effectively determine if the City of Raleigh’s current practices in any way promote active discrimination or other exclusionary practices.

The importance of leadership commitment and organization-wide implementation cannot be underestimated in either a race- and gender-conscious or race- and gender-neutral environment. Most of the City of Raleigh’s major vendors perform work statewide, nationally and/or internationally and are intimately familiar with responding to various public sector inclusion efforts at the local, state and federal levels. The degree of responsiveness often correlates to the public entity’s degree of commitment to inclusion in which these firms are pursuing opportunities.

A.2. Four Pillars of Inclusive Procurement

To achieve the Vision, Mission and Goals as established by the Mayor and City Council, procurement plays a pivotal role, along with proper planning and budgeting, which starts the execution and implementation of the process that actualizes leadership’s objectives. The Procurement Division and the M/WBE Office must operate in a manner that is both consistent with the policy objectives established by the Mayor and City Council and programmatically sound. The City of Raleigh can do so through striving toward inclusive procurement, which focuses in an ongoing manner on working to ensure that all vendors—regardless of race, ethnicity, gender, national origin, sexual orientation or disability—have the opportunity to bid, win the City of Raleigh procurement and contracting prime and subcontracting opportunities and learn from the City of Raleigh staff how to become more effective when unsuccessful in pursuing opportunities, thereby participating in the economic prosperity of the Raleigh-Cary Metropolitan Statistical Area. An inclusive procurement environment will incorporate the following elements:

- **Mission Driven**—The procurement and M/WBE objectives are tied directly to the overall Vision, Mission and Goals of the City of Raleigh.
- **Opportunity Driven**—The M/WBE Office, along with the Procurement Division, is driven by the City of Raleigh’s opportunities—identifying them, understanding them, managing them and communicating them.
- **Relationship Driven**—With the foundation that being opportunity driven provides, the City of Raleigh will be in the relationship development business. The Procurement Division and the M/WBE Office will know its businesses that can do the City of Raleigh’s work and ask the business community to share its goal of inclusive economic development.
- **Data Driven**—Sound data and fully integrated systems will provide senior management with the information it needs to report on successfully meeting its objectives and maximizing economic development, equity and organizational performance, along with the other objectives established by the Mayor and City Council.

A.3. Culture Audit

M³ Consulting recommends that the City of Raleigh conduct a culture audit to assist it in moving toward an organizational culture that will more readily support the Mayor and City Council’s Vision and Mission, as well as a more inclusive procurement environment. The culture audit will allow examination and explanation of the common rules of behavior and underlying beliefs of the City of Raleigh that drive its organization and the way people approach their work. It also will assist in determining whether the City of Raleigh’s current organizational

culture is an asset or liability in achieving its Vision and Mission and provides actual evidence for establishing the appropriate direction for the City of Raleigh.

As a tool for diversity and inclusion, it identifies sources of diversity tension and leverage points that shape culture. It will provide a precise measure of employee perceptions and recommendations for cultural and system interventions for more effective diversity management to support organizational goals. If bias—implicit or unconscious—is one of the factors significantly impacting the City of Raleigh’s organizational and procurement culture, a culture audit will support identification to root it out. The benefit of the culture audit is that bias is not isolated but viewed in conjunction with other factors. Regressions can then be run to determine the degree to which bias is a primary factor.

A.4. Training and Development

Many organizations engage their staff in diversity training and sensitivity training. However, skills-based training is needed to create an inclusive procurement environment. We must emphasize that inclusivity is an integral part of an efficient procurement process. As such, to create a baseline of knowledge, the following training should occur:

- All Procurement Division, M/WBE Office and other appropriate department staff should be provided basic training on procurement operations as well as M/WBE operations. If feasible, some staff members in the M/WBE Office should become certified buyers through organizations such as the National Institute of Government Purchasing (NIGP) and certified compliance officers through organizations such as the American Contract Compliance Association.
- All procurement staff and department staff engaged in procurement activity should attend a seminar on the components of the M/WBE program and established strategies for achieving established objectives.
- Once the Procurement Division, M/WBE Office and other appropriate department staff have baseline training, the Chief Procurement Officer and the M/WBE Program Manager are then positioned to train on higher-level negotiating strategies and tactics in the various procurement categories and for types of goods and services that can be deployed, consistent with the tenets of sound procurement laws and regulations at both the formal and informal levels.

A.5. Address Decentralized Nature of Raleigh Procurement Process and Impact on M/WBE Participation

M³ Consulting does not advocate for a centralized or decentralized procurement process. We seek to determine the impact of either process on the ability of M/WBEs to contract with a public entity. Without appropriate infrastructure, management and operational support, an unwieldy bureaucracy can be created that serves as a de facto barrier to M/WBEs. As it relates to the City of Raleigh, it appears to operate in a decentralized procurement environment that has the overall effect of decreasing accountability and transparency as it relates to M/WBE participation, resulting from lack of robust infrastructure and integration, coordination, and delegation. As such, the City of Raleigh should ensure that the Procurement Division has the authority and ability to:

1. Report to the Mayor and City Council on the way the City of Raleigh’s annual procurement spend has assisted the City of Raleigh to achieve its mission to build a stable platform of evolving services for the the City of Raleigh community, thereby championing positive and sustainable growth, and realize visionary ideas for all;
2. Report to the Mayor and City Council, in conjunction with the M/WBE Office, on the way the City of Raleigh has met stated M/WBE targets at both the prime and subcontractor levels across procurement

categories, inclusive of change orders and work plans, as well as other inclusive procurement objectives; and

3. Make recommendations for the utilization of procurement techniques and contracting vehicles that best meet the Mayor's and City Council's objectives as it relates to community economic development and inclusive procurement, as well as User Department needs.

While the Procurement Division should have the authority necessary to achieve the recommendations above, based on the City of Raleigh's decentralized system, the Procurement Division will need to work collaboratively with department leadership within the M/WBE Office, Engineering Services, Integrated Facility Services, Fleet Management, Roadway Design/Construction, Transportation and Raleigh Water. This group can form the participants in **Raleigh's Inclusive Procurement Committee**, which would be critical to procurement planning, budgeting and forecasting, utilization of appropriate contract vehicles, opportunity identification at prime and subcontractor levels, unbundling, contracting plan and goal-setting. The City of Raleigh can also consider whether representative members from the business community and other User Departments should be included.

The City of Raleigh's Inclusive Procurement Committee will also be responsible for developing the City of Raleigh's Action Plan in response to the recommendations contained herein.

A.6. Budgeting, Forecasting and Scheduling

On an annual basis, Raleigh should develop a budgeting and forecasting process appropriate for each procurement category that provides project information necessary for planning its activities as it relates to M/WBE participation. Master construction schedules should also be available. From these sources, the City of Raleigh can make transparent:

- Type of possible opportunities at prime and subcontractor levels, as well as formal and informal levels;
- Funding source; and
- Timeframe that opportunity may be available.

With this information, the City of Raleigh can begin to (a) project the impact of the City of Raleigh's purchases on economic, business and employment growth in the Raleigh-Durham-Cary Core-Based Statistical Area (CBSA), (b) conduct matchmaking, and (c) identify areas where local capacity is needed among both M/WBEs and Non-M/WBEs and begin pre-bid capacity building efforts.

A.7. Contracting Vehicles

The types of contracting vehicles utilized by the City of Raleigh and the degree to which they are utilized can impact the level of M/WBE participation pre- and post-award.

For many of the lower dollar threshold purchases, the City of Raleigh's procurement vehicles do not include any policy-mandated consideration of race, ethnicity or gender when conducting outreach or evaluating respondents to select the awardee for the opportunity. The City of Raleigh relies on leadership recommendations and staff culture to suffice when soliciting bids or proposals/qualifications to include submission responses from small or diverse-owned firms with no audit function in place to determine if quotes are being solicited and received from small and M/WBE firms.

The City of Raleigh should review the usage of all its contracting vehicles for ways to:

- Ensure that the best contract vehicle for achieving the City of Raleigh's inclusion policies, procurement and project objectives is a part of their contract vehicle selection process.

- Determine the best level of engagement regarding the Procurement Division’s involvement in the post solicitation development of final execution of work plans. This should include the ability for Procurement to sign off on final M/WBE participation within the approved work plans and give final authorization or permission before approved plans are altered.
- Identify and deploy other management tools, such as rotating lists of successful firms and implementing “Sheltered Market” reserved competition solicitations to promote a greater distribution of vendor utilization.
- Dedicate resources to elevate post award M/WBE monitoring, auditing and tracking tasks.

A.8. Monitor Contracts for Issue of Concentration

Modeling 49 CFR Part 26.33, the City of Raleigh should monitor its contracts to ensure that M/WBEs are not overly concentrated in certain product areas as a means of the City of Raleigh meeting its M/WBE goals. Contracts should be continuously reviewed to ensure that (1) the same Non-M/WBEs and M/WBEs are not securing a significant percentage of the City of Raleigh contracts and that (2) the same M/WBEs are not accounting for a significant percent of the City of Raleigh M/WBEs participation.

Concentration can be addressed in the following ways:

- Ensure that there is no steering of contracts at the prime or subcontractor levels;
- Expand pool of available firms;
- Expand capacity of available firms; and
- Ensure that firms repeatedly submitting low bids are not requesting change orders post-award or providing substandard work.

Due to policies like prequalification and practices like awarding contracts to a few firms in certain instances, the City of Raleigh has limited competition on its opportunities. The City of Raleigh should constantly monitor its contracting activity to determine whether contract awards are concentrated among a small group of firms and design strategies to increase the level of competition on the City of Raleigh procurement and contracting opportunities.

A.9. Deeper Dive of Bid/RFP/RFQ, Award and Payment Process

The City of Raleigh should consider a deeper dive into bid, Request for Proposal (RFP), Request for Quote (RFQ), selection and evaluation results to ensure that the outcomes reflected in the Availability and Utilization chapters reflect a procurement process that is open, fair, transparent and inclusive. This deeper dive to review *actual practices* would include a review by an independent party of:

- **Pre-award activity**—Bid/RFP/RFQ and award documents for individual opportunities, including vendor solicitation, bid tabulations, inclusiveness of persons chosen, selection committee, evaluation score sheets, Guaranteed Maximum Price (GMP) and other contract negotiation documents, prime contractor selection and evaluation score sheets for subcontractors, and prime contractor solicitation list for subcontractors.
- **Post-award activity**—Selection process on multi-awardee contracts, M/WBE utilization through phases of project, payments to sub-contractors, impact of bonding on both prime and sub-contractors.

We emphasize that this deeper dive is not an audit of policies and procedures but the execution of those policies and procedures (actual practices) and their impact on the outcomes reflected in the Disparity Study.

This deeper dive would also provide greater insight into the competitiveness of different race/gender/ethnic groups and provide the M/WBE Office with additional information on which to target and customize its support efforts.

To facilitate this deeper dive, certain data capture issues should first be addressed:

1. The bid/Invitation to Bid (ITB)/RFP number established at the point of bid should follow the awarded firm. Upon completion of negotiations with the awarded firm, the bid/ITB/RFP number should become an available and required data field within the Purchase Order (PO) data and assigned a PO number, subject to extraction. The addition of the bid/ITB/RFP number will allow for tracking of the project/contract from the point of award, the point of contract through actual payments.
2. All payments that are attached to an underlying PO should have the PO number captured in the Accounts Payable (AP) system that can be viewed and extracted in standard or ad hoc reporting.
3. Direct disbursements (payments without an underlying PO) should be identified in AP data. Direct disbursements are typically non-encumbered expenditures which may not be budgeted for. POs are encumbered expenses and therefore budgetarily can be accounted for at the department/fund level.

A.10 Conduct Economic Impact Analysis

A Disparity Study provides critical quantitative and qualitative data on the participation of M/WBEs in the City of Raleigh opportunities and the factors impacting their ability to do so. An Economic Impact Analysis shows the impact on economic growth in a locale of procurement spend and of major capital improvement projects. This economic impact analysis can be conducted to further reflect the impact on economic growth in minority communities of the City of Raleigh procurement and contracting dollars flowing to minority businesses. The analysis would assist in changing the outlook on supporting minority communities from one of simply addressing discrimination to one of promoting growth and development. While relatively new, some cities and states, such as the State of Maryland, have conducted economic impact analysis by race/gender to determine whether the benefits of tax dollars utilized for procurement and contracting of goods and services is benefitting its citizens in an equitable manner.

B. Address Data Capture/Enterprise Resource Planning (ERP) Issues

Critical to creating an inclusive procurement operation at the City of Raleigh is an efficient and integrated procurement data infrastructure. These data recommendations are necessary because:

- Poor data systems can mask discriminatory actions or disparate impact, even where race and gender-conscious goals are utilized. Immediately addressing data issues is critical to protecting against unfairly discontinuing the City of Raleigh's M/WBE programs due to temporary or permanent injunctions or internal decisions based on incomplete data that may allow the organization to continue to discriminate. Sound, accurate and complete data supports the Mayor, City Council and City Attorney's Office in fairly balancing all legal and regulatory implications, potential challenges, etc., arising from the City of Raleigh's ability to sufficiently state, in this disparity study and any time thereafter, the level of M/WBE participation in its procurement and contracting activity at prime and subcontractor levels.
 - We note that in the EEO environment, under 29 CFR Ch. XIV, Part 1607.4.D, a finding of an inference of adverse impact can be drawn from poorly maintained data system not in conformance with data tracking requirements of the regulations. While 49 CFR Part 26 does not have similar language, Section 26.47 covers Bad Faith Administration of the Disadvantaged Business Enterprise (DBE) Program.

- More refined and detailed procurement spend analysis cannot be performed without better data capture and tracking. This inability limits programmatic activity, including expansion of the pool of available firms through outreach; setting project-based goals; determining participation at the purchase code level (NIGP/North American Industry Classification System [NAICS]/Commodity) and tracking decision-making activities at procurement solicitation, evaluation, awards and commitments and post-award utilization.
 - To operate a race- and gender-neutral procurement operation, the City of Raleigh must be able to adequately track levels of M/WBE participation to anticipate necessary adjustments. Further, under a race- and gender-conscious M/WBE program, tracking allows for proactive and real-time responses that allow the City of Raleigh to utilize race- and gender-conscious programs when necessary and to respond quickly when tracking reveals that participation is dropping in a race- and gender-neutral environment.
 - Data efficiency promotes the City of Raleigh’s ability to respond to M/WBE opportunities and challenges quickly and nimbly, such that it does not unnecessarily and perhaps unintentionally perpetuate “government inertia” referenced by Justice Sandra Day O’Connor in the *Croson* decision.

M³ Consulting recommends that the City of Raleigh address the following data issues outlined below to support transparent monitoring, tracking and reporting. Once these changes are implemented, M³ Consulting recommends that the City of Raleigh update the statistical portion of the disparity study to capture FY 2017 through FY 2021 data to provide both a more accurate reflection of M/WBE utilization at prime and subcontractor levels and as a test case for its M/WBE data capture process.

1. **Expand data capture on vendor portal**—The City of Raleigh should require all firms interested in doing business with the City of Raleigh to register through its new online vendor portal, including certified M/WBEs as well as SBEs and DBEs, to which the City of Raleigh has identified from outreach and matchmaking efforts. The vendor portal should capture both NIGP/NAICS code and vendor contract size preference. It will be critical for registration to be contingent on all data points being provided to allow for an establishment of guardrails to ensure data uniformity and integrity. The portal should also capture annual gross receipts and age of firm on all bidders and sub-bidders. By capturing both sets of information for all vendors, the City of Raleigh now has capacity data that can be utilized as it solicits vendors for both quotes and bids. In other words, the City of Raleigh has the *rudimentary* information needed to transition vendors from simply “ready and willing” to “ready, willing and able.” Having NIGP/NAICS codes assigned for each vendor will also allow for well-targeted notification of procurement opportunities.

Requesting both commodity code (NIGP or United Nations Standard Products and Services Code [UNSPSC] Codes) and NAICS code from vendors will create connectivity across the various databases (vendor and M/WBE lists utilize NAICS codes; however, procurement and accounts payable activity relies on commodity code). The City of Raleigh can facilitate this process with the NIGP and/or NAICS’s crosswalk programmed into its vendor portal, if allowable under licensing agreements. Lastly, the City of Raleigh should consider the best means of uploading certified M/WBEs, DBEs and SBEs into the vendor registry portal, such that project availability and project/contract-based goals can be established real-time and inclusive notifications, solicitations and outreach can easily occur.

2. **Assign commodity codes to bids**—For this disparity study to accurately reflect procurement activity, the Procurement Division overrode procurement types assigned based on the NIGP (category) codes in the PeopleSoft database with the procurement types assigned to the Contract ID on the 275 formal

procurements on the Procurement Division's Procurement List. The NIGP (category) code was utilized to identify Procurement type for all other transactions in PeopleSoft, beyond the 275 formal contracts.

By properly assigning commodity codes to bids, proposals, qualifications or quotes, the City of Raleigh will increase the accuracy of commodity code tracking, which is essential to reporting M/WBE participation in specific areas. Moreover, the usage of an enterprise-wide defined coding scheme allows for the necessary connectivity and assessing both availability and utilization. We note that commodity codes are product specific and NAICS codes are industry specific. NAICS codes do not always sufficiently address the product-specific needs of procurement agents, particularly around planning. M³ Consulting recommends that public sector clients utilize the coding system established by NIGP for two reasons:

- a. The coding system is designed specifically for public sector procurement operations.
- b. Licensed members of NIGP have access to their crosswalk to both NAICS codes and UNSPSC codes. This crosswalk will be useful to the City of Raleigh for disparity study analysis and M/WBE goal setting, as the City of Raleigh will not rely on different consultants to change procurement decisions on the use of commodity codes to NAICS codes, purely for the purposes of the disparity study.

M³ Consulting further recommends that the City of Raleigh preassign a Procurement Category to the commodity codes in one of five categories:

- AES Design Services;
 - Construction and Construction-Related Services;
 - Professional Services;
 - Nonprofessional Services; and
 - Goods & Supplies or General Procurement.
3. **Consider utilizing e-procurement or online bid portal to capture bid and quote information**—Several online programs allow for the online solicitation of quotes and bids (not simply filing PDFs). Proposals can also be uploaded. This process reduces workloads while at the same time increasing detailed information available to the City of Raleigh on both bids/proposals and quotes. These programs should integrate with PeopleSoft systems. Any bid portal chosen should have the capacity to be programmed to meet the DBE requirements of federally-funded projects on bidder and sub-bidder tracking as well.
 - a. The bid portal should also allow prime vendor access to upload bids/bid tabulations for sub-bid opportunities the prime vendor is letting on the City of Raleigh contract. A bid portal can also facilitate Good Faith Efforts determinations and compliance with 49 CFR Part 26.11.
 - b. The M/WBE Office will need to determine the impact of using the online portal on small businesses who may not be familiar with the technology; training programs and access to technical assistance providers for assistance should be made available to the degree necessary to minimize any negative impact.
 4. **Employ ERP systems that offer Integrated Procurement, Project Management and Payments data modules**—The City of Raleigh does not utilize the procurement and project management modules of PeopleSoft. As such, the Procurement Division, User Departments and the M/WBE Office utilize various Excel and Access databases to meet their needs. These databases are not integrated with PeopleSoft, thus making seamless tracking and monitoring difficult. The City of Raleigh should review its ERP systems to determine how best to create a fully integrated data system that meets the needs of multiple departments with different functions.

5. **Consider utilizing an off-the-shelf M/WBE, DBE and SBE tracking system**—The City of Raleigh should consider utilizing an off-the-shelf M/WBE, DBE and SBE tracking system if the City of Raleigh’s vendor, new bidder portals and current financial management systems cannot address the M/WBE Office’s tracking needs. The tracking system should facilitate easy retrieval of data by the M/WBE Office from other systems utilized by the City of Raleigh, *not replace* changes necessary to vendor, bid, project management and payment systems. Several off-the-shelf software packages have been developed for M/WBE tracking, monitoring and reporting. These systems should integrate with PeopleSoft, the City of Raleigh’s vendor portal and the City of Raleigh’s chosen bid portal—to the degree that current systems can be maximized. This tracking system should also have the capacity to track formal joint venture and mentor-protégé agreements. Further, this system should have the capacity to track awards, commitments at point of contract execution and payments at both the prime and subcontractor level.
6. **Develop computerized formats for evaluation score sheets**—The City of Raleigh should digitalize its evaluation score sheets, such that the City of Raleigh is positioned to determine that these evaluations are scored in a fair and non-discriminatory manner and that the decision-making process is transparent. By digitalizing evaluation score sheets, the City of Raleigh is also able to assess the fairness of its selection process over time.
7. **Track awards, commitments and payments separately**—Decisions made at the point of award can change before a contract is executed or after contract execution, due to change orders and other contractual adjustments. As such, the City of Raleigh should ensure that it can track awards and commitments separately, as well as payments, at both the prime and subcontractor level. This detailed tracking also allows the City of Raleigh to ensure that any changes to agreements between the City of Raleigh and its prime and subcontractors and vendors is executed in a non-discriminatory fashion. This level of tracking also allows the City of Raleigh to address anecdotal concerns from both the City of Raleigh staff and the general community regarding subcontractor substitutions.
 - a. Given the size and contract duration of many of the City of Raleigh’s AES Design Services and Construction projects, the City of Raleigh should be able to report on commitments at prime and subcontractor level, as well as payments. Awards are determined from bids or qualifications submitted, as the case may be. Commitments reflect total utilization based upon the original contract amounts, change orders and work plans, as reflected in signed and executed contractually binding agreements. Payments may overstate or understate M/WBE utilization on open contracts, based on project scheduling.
 - b. In developing this tracking process, the City of Raleigh should ensure that there are common identifiers, i.e., vendor numbers, vendor tax ID, project numbers, contract numbers, that facilitate easy tracking of individual vendors, as well as projects, from the point of requisition and solicitation to project closeout.
 - c. As the City of Raleigh determines project management systems that are part of a fully integrated data system, the City of Raleigh should also consider requesting vendor invoices in both PDF and spreadsheet formats to allow the City of Raleigh project managers and resident engineers to upload detailed commitment and payment information into any chosen software.

By being able to track these areas separately at the prime and subcontractor level, the City of Raleigh is positioned to determine areas where closer scrutiny and deeper dives into its decision-making processes and those of its prime vendors are required to ensure that these decisions are being made in a non-discriminatory manner.

In addition, once the tracking system is in place, there is the added opportunity of capturing all M/WBE spend, particularly those below the \$300,000 threshold which may have lower capacity concerns and may allow for an increase usage of M/WBEs at the prime level.

8. **Appropriate access**—Having a dashboard would enhance staff’s ability to respond real-time to M/WBE participation. As the City of Raleigh accesses appropriate systems and software packages to utilize, the City of Raleigh decision makers should be sure that these systems accommodate appropriate access by staff in Procurement, Finance, M/WBE Office and User Departments.

12.3.2 Recommendations for Targeted Initiatives—Race- and Gender-Conscious and Race- and Gender-Neutral

A. Race- and Gender-Conscious Initiatives

A.1 Establishment of Race- and Gender-Conscious Goals

The existence of established goals is an effective mechanism for establishing objectives for the City of Raleigh and in achieving the desired outcome of increasing M/WBE participation, when effectively implemented. If operations are inflexible, it falls into a quota.

The concept of an annual aspirational goal for M/WBE participation, which is tied to the availability of M/WBE firms, should be utilized by the City of Raleigh to periodically evaluate the effectiveness of its overall M/WBE program and its project-specific efforts, as well as to gauge whether it is appropriate to increase or decrease the mix of more aggressive remedies. The annual aspirational goal can be used to inform more specifically tailored goals by procurement category, department, etc. To be legally defensible, the annual goal should be a *minimum achievable standard* for M/WBE inclusion and not a maximum barometer of exclusion.

In certain categories and for certain groups, race- and gender-conscious means are supportable activities toward the achievement of established goals, based on the findings of statistically significant disparity, reflected in Table 12.2 below.

As significant disparity is eliminated in the race- and gender-conscious categories, the utilization of race- and gender-neutral means in attaining the established goals should be increased. However, in all instances where race- and gender-neutral means are utilized, if significant disparity reemerges, then race- and gender-conscious techniques can be utilized on a nonpermanent basis to correct identified disparities.

While the City of Raleigh should utilize race- and gender-neutral means to address participation of groups where there is no statistically significant disparity, that does not mean or condone passive or no outreach to these groups, as significant disparity can emerge or reemerge with lack of focus by the City of Raleigh to be inclusive. The City of Raleigh should continuously focus on an inclusive procurement environment that considers M/WBEs and narrow the focus, when necessary, based on meeting established goals.

Availability, Utilization and Disparity measures should be tracked on an annual basis and annual goals set as discussed above, as the recommendations below are implemented. RWASM Availability is significantly impacted by bidding patterns and practices. The City of Raleigh’s RWASM Availability analysis revealed that 58% of its bids had one bidder and 75% had three or fewer bidders. If the bidding patterns of the City of Raleigh vendors are altered, due to internal adjustments within the City of Raleigh or marketplace factors, the impact of those changes should be captured. Similarly, Utilization reflects issues that require further analysis and potential changes to increase competitiveness, provide opportunities where capacity is not an issue and eliminate issues of concentration brought about by the low number of bidders.

Table 12.2. Categories for Race/Ethnicity/Gender-Conscious and Race/Ethnicity/Gender-Neutral Means of Addressing Disparity By Procurement Type

	Race- and Gender-Conscious	Race- and Gender-Neutral
AES Design Services	<ul style="list-style-type: none"> • Asian American • Hispanic American • WBEs 	<ul style="list-style-type: none"> • African American • Native American
Construction and Construction-Related Services	<ul style="list-style-type: none"> • African American • Asian American • Hispanic American • Native American 	<ul style="list-style-type: none"> • WBEs
Nonprofessional Services	<ul style="list-style-type: none"> • Asian American • Native American 	<ul style="list-style-type: none"> • African American • Hispanic American • WBEs
Professional Services	<ul style="list-style-type: none"> • African American • WBEs 	<ul style="list-style-type: none"> • Asian American • Hispanic American • Native American
Goods & Supplies	<ul style="list-style-type: none"> • African American • Asian American • Hispanic American • Native American • WBEs 	<ul style="list-style-type: none"> • None

Source: M³ Consulting;

The City of Raleigh employs both a M/WBE Goal program and a DBE Goal Program. The City of Raleigh’s M/WBE program has an aspirational goal of 15% of the total contract values to be performed by certified M/WBE businesses in contracts awarded by the City for construction and building repair projects of \$300,000 or more. This goal also applies to construction and building repair projects of \$100,000 or more if the funding sources supporting the project include any North Carolina State funding. Its DBE goal program, under the Department of Transportation, has a 13% DBE inclusion goal that is underpinned by their Federal Transportation Administration (FTA) triennial goal setting activity. Our goal findings here are primarily related to the City of Raleigh’s M/WBE goal program.

To continuously test the need for race- and gender-conscious goals and as part of sunset provisions, we suggest removing a portion (e.g., 10%) of all contracts let each year within certain industry segments no longer experiencing widespread M/WBE underutilization from the assignment of race- and gender-conscious goals, evaluation preferences and remedies and carefully monitoring them on a quarterly basis to ensure that significant disparities in M/WBE utilization do not reappear. The City Council would determine the period that this gradual sunset review process would occur. This process would assist the Mayor and City Council to confirm whether race- and gender-conscious goals should be sunset for a particular group.

A.2. Goal-Setting Formulas and Techniques

The City of Raleigh has at its disposal a wide-array of goal-setting formulas and techniques, including:

- M/WBE Bid Preferences;
- M/WBE Goals;
- SBE Set-Asides and Sheltered Markets; and
- M/WBE evaluation factors.

The actual setting of race- and gender-conscious or race- and gender-neutral goals is a policy decision that requires action by the City Council. The Council can establish overall annual policy goals by industry. Project-by-project goals could then be established by staff based upon the relative M/WBE availability for performance of the specific contract. This type of goal setting would probably be considered the most legally defensible flexible form of goal setting available to the City of Raleigh. The U.S. Department of Transportation (DOT), under 49 CFR Part 26, allows five approaches to establishing DBE goals/availability:

- DBE Directory + U.S. Census;
- Bidders List;
- Disparity Study data;
- Goal from Another DOT recipient; and
- Alternative Methods.

M³ Consulting adds to this list of offerings its own goal-setting formula, which is described below.

ATMSM Formula

The Annual Target Method (ATMSM) formula, developed exclusively by M³ Consulting, allows entities to develop goals based on both market conditions (availability) and actual levels of participation by the City of Raleigh (utilization). The ATMSM formula also allows the City of Raleigh to forecast the necessary M/WBE participation levels to achieve the desired outcome, correcting for stated disparity, by an established date. This methodology has been designed to assist the City of Raleigh to determine its goals through a realistic and statistically valid model.

To ensure that goals properly reflect the opportunity being bid and that goals do not appear to be set-asides because the same goal for a procurement category is applied to every trade or commodity area within that procurement category, M³ Consulting recommends that the City of Raleigh implement project-by-project goals. The ATMSM formula can still be used, but availability should be computed for each project type and then that availability measure used in the ATMSM formula. To calculate availability by project-type, the City of Raleigh must have a well-functioning Central Bidder Registry or Vendor Registry List.

In the ATMSM formula, G_p or the target goal is either availability, weighted availability or a goal established above availability. When calculating the project goal using the ATMSM formula, the project goals become a function of correcting disparity and bringing overall utilization in line with overall availability for a particular procurement category. As such, the project goal will reflect the volume of dollars in a particular trade, commodity or project area and thus calculate its appropriate weight in assisting in correcting overall disparity.

The calculation of ATMSM is a two-step process:

1. A weighted availability measure is developed by using Sum of the Year's Digits method, which results in a higher amount of weight being given to an availability measure which is ranked higher or deemed more reliable or important than other weighted availability used to calculate an average. The following formula: $\{N*(N + 1)\}/2$, will calculate the sum of the number of availability measures being averaged.

2. This weighted availability measure is then used in the computation process identified below to establish the actual target goal.

ATMSM Formula

For Computing Annual Targets for Minority and Female Participation

$$ATM = G_p(TCE_t) - TME_p, TE_a$$

$$T - P$$

Where

G_p = target goal for M/WBE participation. When the policy goal is used to bring utilization in line with availability, then

TCE_t = total cumulative expenditure at time frame

TE_a = total annual City of Raleigh expenditure

TME_p = total minority cumulative expenditure at present

T = time frame year

P = present year

A.3. Race- and Gender-Conscious Tools

The City of Raleigh should first exhaust all race- and gender-neutral means to achieve any established target, goal or benchmark. Again, to be legally defensible, race- and gender-conscious contract goals should be subject to a variety of limitations:

- Race- and gender-conscious goals, where allowable at the City of Raleigh, should not be applied to every contract across all purchasing types.
- Race- and gender-conscious goals should generally be “good faith efforts” subject to waivers.
- Race- and gender-conscious goals should be reviewed by the Procurement Division and the M/WBE Office to ensure that such goals do not disproportionately fall on one class. For example, awards of all painting subcontracts to minority firms would impose an undue burden on Non-M/WBE painting subcontractors.
- Race- and gender-conscious goals (in purchasing) for subcontracting should apply to both Non-M/WBE and M/WBE prime contractors.
- Firms eligible to benefit from race- and gender-conscious goals at the City of Raleigh should be subject to graduation provisions.
- The City of Raleigh race- and gender-conscious elements should be subject to annual review and sunset provisions.

A.4 Goal Setting by Threshold

M³ Consulting’s threshold utilization analysis suggests that, where capacity is not an issue, certain race/ethnic/gender groups are still reflecting disparity. The threshold utilization analysis was based on PO data. We acknowledge that some POs that appear “small” may be part of a requirements contract awarded to one or more vendors. As such, a deeper spend analysis is required before goal setting is conducted.

In conducting this spend analysis, the City of Raleigh will obtain a greater understanding of the individual opportunities and the dollar values associated with them. The spend analysis allows the City of Raleigh to review these individual opportunities by size. This process is different from unbundling, where the organization starts with the larger contracts and attempts to break them down into component parts or smaller contracts. When individual opportunities are sorted by size, appropriate programmatic efforts by the M/WBE Office can be established. Furthermore, there is more transparency in contracts awarded, particularly on contracts where more firms are fully capable of competing.

B. Race- and Gender-Neutral Initiatives

The City of Raleigh should utilize race- and gender-neutral programs to the extent possible and utilize race- and gender-conscious programs when demonstrably needed to address any disparity found. Race- and gender-neutral goal-based programs are an important tool to be utilized. Use of these programs and race- and gender-conscious initiatives are not an either/or decision on the part of the jurisdictions. Many public entities utilize race- and gender-neutral programs in conjunction with their race- and gender-conscious initiatives. By so doing, these public entities maximize the opportunity for inclusion and work to ensure that M/WBEs who reflect overutilization or nonsignificant disparity do not slip to a state of disparity because the public entity has focused all its efforts on M/WBEs where there is significant disparity. Race- and gender-neutral goal-based and set-aside programs and related initiatives include the following:

- **Small Business Enterprises/Micro Business Enterprises (SMBE)**—Establishes small business and/or micro goals on an annual basis, as well as a goals, bid preferences, sheltered markets/set-asides or points on a project-by-project basis. Many small business and micro business programs are designed to ensure greater SMBE availability, capacity development and contract participation in the public entity's procurement and contract opportunities.
- **Local Business Enterprises**—Establishes goals, bid preferences, points, and sheltered markets/set-asides targeted to local firms within the public entity's jurisdiction. These programs are usually focused on spurring economic growth and development of locally based firms competing against non-native, larger state, national and international firms, thereby supporting the public entity in growing its own local economy.
- **Disadvantaged Business Enterprise/Socioeconomic Enterprises**—Depending on the definition utilized for DBE and Socioeconomic Business Enterprise, these programs can be race- and gender-neutral. If inclusive of socioeconomically disadvantaged Non-M/WBEs, the program will be considered race- and gender-neutral. Additionally, these programs can establish small business goals and set-asides as a means of meeting its DBE goals.
- **Veteran/Service-Disabled Veteran Enterprise Program**—Establishes goals, bid preferences, points, sheltered markets and/or set-asides targeted to veterans or service disabled veteran programs, which are not members of a protected class subject to strict scrutiny.
- **Disabled Person Business Enterprise Programs**—Establishes goals, bid preferences, points, sheltered markets and/or set-asides targeted to disabled business owners, which are not members of a protected class subject to strict scrutiny.
- **Lesbian, Gay, Bisexual, Transgender, Questioning (LGBTQ) Business Enterprise Programs**—Establishes goals, bid preferences, points, sheltered markets and/or set-asides targeted to LGBTQ Businesses, which are not members of a protected class subject to strict scrutiny.

- **Good faith efforts**—Includes actions by a business to identify its efforts to remove barriers to M/WBEs to participate in the business’s procurement and contracting (and employment) opportunities or to expand procurement and contracting (and employment) opportunities. Examples of good faith efforts include but are not limited to:
 - *Pre-bid meetings*—Bidders should attend pre-bid meeting or matchmaking session.
 - *Identification of subcontracting opportunities*—Bidders must identify work categories for subcontracting opportunities and certified and capable M/WBEs within these work categories; bidder must document its efforts.
 - *Advertisement*—Bidder must advertise subcontracting opportunities no less than 21 days prior to bid opening date, public entity’s bid schedule permitting; advertisements must be placed in daily or weekly minority or women focused trade organization newspapers, publications, or other media.
 - *Communications with M/WBEs*—Bidder will mail registered or certified letters no less than 21 days before bid opening to no less than 10 (or 100% of those available) M/WBEs capable of performing the identified work categories with which the bidder is willing to subcontract; email blasts are also utilized to fulfill this requirement.
 - *Follow-up of initial solicitation*—A bidder representative with knowledge of the project will follow up with M/WBEs within 10 days of mailing of solicitation letter; proper documentation of follow-up should be maintained.
 - *Responses from interested DBEs*—Bidder must maintain an appropriate record of responses.
 - *Bidder evaluation of interested M/WBEs*—Each bidder will submit documentation of its evaluation of bids or proposals received.
- **Nondiscrimination program**—The purpose of a nondiscrimination program is to ensure that contractors do not discriminate in the award of subcontracts based on race, national origin, color, ethnicity or gender. Under a nondiscrimination program, elements may include, but are not limited to, the following:
 - Determining whether bidders have included M/WBE sub-bidders at anticipated availability targets, and if not, determining why not;
 - Requiring evidence of good faith efforts; and
 - Reviewing and/or investigating bids to determine whether any discrimination has occurred.

12.3.3 Diverse Supplier Program Recommendations

In Chapter 3, Procurement Analysis, M³ Consulting outlined the Six Elements of an M/WBE program. We also reviewed the City of Raleigh’s M/WBE program against these six elements. Based on the model and the procurement findings, M³ Consulting recommends the following:

Table 12.3. M³ Consulting Six Essential M/WBE and SBE Program Elements

1. Outreach and Matchmaking	Efforts to increase the business community’s awareness of an entity’s procurement and contract opportunities and match M/WBEs and SBEs to specific contract opportunities at prime and subcontracting levels.
2. Certification	Eligibility criteria for M/WBE participants.
3. Technical Assistance	Informational and strategic support of businesses to meet the entity’s M/WBE plan objectives.
4. M/WBE Inclusion in Bid Opportunities	The mechanism by which the entity assures that material consideration of M/WBE participation is given in the award of a contract.
5. Contract Compliance	Ensuring adherence to M/WBE plan goals on all contracts after execution of the contract.
6. Organizational Performance Evaluation	A comparison of performance results to the entity’s goals to determine policy successes, strengths and weaknesses, and performance improvement areas.

Source: M³ Consulting

A. Outreach and Matchmaking

A.1 Outreach

As reported in the Availability Analysis, there is a significant difference, in terms of numbers and sometimes percentages, between potential availability and actual availability (RWASM). Additionally, the majority of the City of Raleigh’s contracts had only one bidder. As noted in the Statistical Methodology, those in the pool of potentially available firms may not provide the good or service procured by the City of Raleigh. The City of Raleigh should thus focus its outreach efforts on expanding the total vendor and bidder pools to include potentially available firms from sources such as other agency certified lists, business license data and Data Axle lists. These firms would have to meet the City of Raleigh certification requirements to be counted toward the City of Raleigh’s goal-based program targets. Furthermore, the inclusive outreach should pay special attention to ensuring that firms capable of bidding on informal contracts, small contracts and sheltered market opportunities are included in the vendor/bidder pool.

A.2 Matchmaking

Matchmaking is fundamental to a successful inclusive procurement program, whether race- and gender-conscious or race- and gender-neutral. Central to matchmaking is advance notice of the universe (pipeline) of upcoming contracting opportunities, as determined during forecasting, budgeting and scheduling.

Currently, the City of Raleigh has not implemented a full matchmaking process. Matchmaking programs must be tailored to the dynamics of a particular procurement operation. We emphasize that the matchmaking session is not for the purpose of steering vendors to buyers. The City of Raleigh purchasing and M/WBE personnel will be required to have detailed knowledge of the capabilities of certified M/WBEs to fully maximize the matchmaking process. The matchmaking session can include only M/WBEs, Non-M/WBEs or both. The matching sessions should include the following:

- Coordinate matchmaking sessions with construction schedules and plans, forecast release and/or solicitation schedule, and hold session as early as possible. Matchmaking sessions can also be utilized to

identify available firms for projects in planning stages. While not called matching sessions, the federal government often allows vendors to provide qualification information in pre-bid research to determine the level of competitiveness it can expect once the bid is let.

- Focus on specific commodity areas in the procurement categories, allowing vendors specializing in specific goods and services to have the opportunity to meet with buyers responsible for those commodities.
- Buyers and contract specialists should have procurement projections such that they can discuss specific upcoming opportunities and the requirements and procurement mechanisms that will be utilized to procure the good or service. This specificity is the key factor that distinguishes matchmaking sessions from outreach and vendor fairs.
- Identify informal and formal opportunities during the matching session so that vendors can determine where they have the greatest likelihood of successfully marketing to the City of Raleigh.

Matchmaking at the subcontractor level—Matchmaking takes on a team-building dynamic at this level. Prime contractors/consultants can identify potential M/WBEs team members on upcoming opportunities to be let by the City of Raleigh. To be most effective, the City of Raleigh personnel will be required to have an in-depth knowledge of the capabilities of the pool of certified M/WBEs. The M/WBE Office also needs to have strong business development skills. *The matchmaking session* should focus on a particular project, either in planning or prior to bid. It is critical for success that matchmaking occur as early in the planning process as possible. Prime contractors, construction managers and large consultants' planning process begins well in advance of the actual ITB or RFP. At the time of bid letting, prime vendors and contract managers have often already identified team members to address commercially viable opportunities at the subcontractor/subconsultant level that build a firm's capacity and portfolio. Conformance to M/WBEs requirements often does not produce quality and high levels of M/WBEs participation, because these firms are an "appendage" to the team already developed.

In addition to establishing matchmaking initiatives planned around budgets and forecasts, the City of Raleigh should consider the legality of including responsiveness to matchmaking efforts as a factor of good faith under the City of Raleigh's M/WBE initiatives. Anecdotal interviews in other locales suggest that, while prime vendors attend sponsored matchmaking sessions, prime vendors often do not communicate with or make themselves available to M/WBEs after the sessions, thus opportunities for M/WBE groups do not often materialize.

A.3 Availability and Capacity Building Initiatives

To increase opportunities for M/WBEs, the City of Raleigh should start with the consideration of increasing the pipeline of available firms. M/WBEs face discriminatory or exclusive practices in the general marketplace that inhibit their growth and development and thus their capacity. The City of Raleigh should take great care to ensure its practices are not inhibiting growth and encourage inclusion in its procurement and contracting opportunities. The recommendations in this section are focused on how the City of Raleigh can utilize both its resources and opportunities to contribute to the growth and development of M/WBEs, in addition to increasing the number of contract awards.

Impact of Prequalification and Certification on Availability Pipeline

Prequalification processes can be exclusive and limit the number of available firms, even though required under State of North Carolina law for Construction procurements. Project managers must utilize prequalified firms on construction or repair projects (regardless of cost) that are bid under the single-prime, separate-prime (multi-prime) or dual-bidding methods. This can cause problems when the City of Raleigh is seeking to identify M/WBEs to compete at the prime level in Construction. As such, in Construction, prequalification is one of the contributory factors to low M/WBE attainment at the prime contractor level, as well as why most M/WBE

participation is primarily at the sub-contractor level. The combination of certification requirements and prequalification requirements can deter M/WBEs from even attempting to do business with the City of Raleigh.

While a necessary part of the City of Raleigh initiatives, the M/WBE Office should work to ensure that prequalification and certification processes are promoting inclusion. To do so, M/WBE Office should *start* by identifying all small and minority- and women-owned firms in the Raleigh-Durham-Cary CBSA. The Disparity Study assists with this effort by its compilations in availability spreadsheets using data sources from the City of Raleigh, Data Axle and Business Licenses, along with the Master Small/M/W/DBE certification list. While all these firms may not meet the RWASM standard, the firms on these lists represent the starting point of the City of Raleigh's pipeline of available firms. Before proceeding to other initiatives of certification and prequalification, the M/WBE office should:

- Review compiled list with community organizations, Chambers of Commerce and Management and Technical Assistance (M&TA) providers to determine whether firms of which they are aware are listed in this "phone book." Organizations with private membership lists should also be encouraged to participate to construct the most exhaustive list of firms.
- For firms on the list that are not certified, conduct survey to obtain data on type of goods and services provided and interest in doing business with the City of Raleigh.
- Measure the City of Raleigh progress in increasing the number of firms certified and number of firms prequalified against this list of identified firms.
- For those available firms that do not meet M/WBE and prequalification requirements, work to include as many available firms as possible on the the City of Raleigh vendor registry and in the City of Raleigh's race- and gender-neutral programs, and then develop these race- and gender-neutral goals and initiatives accordingly.

Additionally, because certification and prequalification both request very similar information, the City of Raleigh should consider streamlining the application processes, such that M/WBEs are not required to submit the same information in a duplicative fashion when avoidable.

The Starting Point: Youth Entrepreneurship

Croson makes it clear that public entities cannot address social discrimination through legal race- and gender-conscious remedies. However, the City of Raleigh is positioned to support local school systems to begin to reshape some of the social dynamics that impact their success.

Entrepreneurship requires a certain skill set that is cultivated over time. Young people with no access to entrepreneurial education and training are less likely to obtain these skill sets on their own. And by the time that these young people may have an opportunity to obtain these skills, they are close to adulthood and well behind young people who have access to parents with entrepreneurial and/or managerial skill sets. As discussed previously in Chapter 8, Capacity Analysis, Fairlie and Robb (2007) found that Black business owners were much less likely than White counterparts to have had a self-employed family-member owner prior to starting their business and are less likely to have worked in that family member's business. Fairlie and Robb noted that the lack of prior work experience in a family business among Black business owners, perhaps by limiting their acquisition of general and specific business human capital, negatively affects Black business outcomes.¹

¹ See Chapter 8, Capacity and Regression Analysis, p. 8–65. Raleigh, working with local school systems, is in an invaluable position to impact values, behaviors and attitudes toward discrimination and bias and to cultivate a culture of entrepreneurship. By inculcating students early, it allows minority and women communities to expand their social capital and the Raleigh community to begin the change

Efforts can include:

- Youth entrepreneurship and financial literacy programs.
- Mentorship and apprenticeship programs with the City of Raleigh vendors/contractors/consultants.
- Targeted entrepreneurship career tracks—*with emphasis on exposure to entrepreneurs, as opposed to large corporations*—in conjunction with local technical colleges. We note that the State of North Carolina has one of the strongest two-year college programs in the country.
- Expanded access to entrepreneurship and financial literacy programs to students’ parents/family members.
- Ultimately, providing graduates of the Wake County Public School System who become entrepreneurs with access to the City of Raleigh opportunities through SMBE programs, such as set-asides, sheltered markets and mentor/protégé. Initiatives focused on students that have matriculated at a Wake County public school would be considered race- and gender-neutral, with a desired outcome of promoting economic and social development.

These initiatives should be combined with strong diversity initiatives. Focus should not simply be on antiracism, but multiculturalism efforts that build social capital.

B. Certification

B.1 Refocus Certification and Prequalification Efforts to Identification of Qualified Firms

The City of Raleigh does not certify M/WBEs and accepts certifications from the North Carolina Department of Administration’s Historically Underutilized Business (HUB) Office and the North Carolina Department of Transportation’s (NCDOT) Disadvantaged Business Enterprise Program. Certification of firms as minority- or woman-owned is part of narrow tailoring, designed to ensure that only firms discriminated against have access to goal-based remedies. Because of a few Non-M/WBEs that have attempted to illegally access these programs, over time, the certification application process has become increasingly burdensome to the M/WBEs that public entities are trying to reach. As a result, the certification process is increasingly seen as a bar that M/WBEs should reach to gain access to these race- and gender-conscious “benefits.” Goals are a remedy, not a benefit. This framing of goals and how the certification process supports the “remedy” should be included in the City’s training protocols.

Furthermore, a burdensome certification process can reduce the number of *available* M/WBEs. As a matter of practice, when the City of Raleigh staff and prime vendors search for available minority- and women-owned businesses, they are searching the City of Raleigh’s *certified* M/WBEs, not the list of *available* M/WBEs. As such, as a matter of practice, while there is a larger pool of M/WBEs that are available, many of these firms may not be considered because they cannot be *counted* toward goal attainment or achievement. We note there were 174 certified firms on the M/WBE Office’s list, compared to 4,791 on the Data Axle Availability list refined to the City of Raleigh area and 7,475 M/WBEs on the State of North Carolina list.

C. Technical Assistance

Technical, Financial and Management assistance (TF&MA) providers can support M/WBEs in increasing their capacity, obtaining critically needed financial assistance, networking and even responding to the City of Raleigh’s

the narrative of the historical, social and economic factors that have ultimately stunted the natural growth and development of minority and women entrepreneurs.

procurement and contracting opportunities. The City of Raleigh's M/WBE Office has established relationships with TF&MA providers. The City also provides technical assistance directly with simplification of bidding procedures, relaxation of bonding requirements, financial aid through the Division of Community & Small Business Development, prompt pay and training on doing business with the City of Raleigh.

M³ Consulting suggests below additional technical assistance initiatives for The City of Raleigh's consideration:

C.1 Bonding Assistance

Four approaches may be taken to remove the barrier that bonding requirements sometimes can represent. *The efficacy of these programs must be reviewed considering bonding requirements from the State of North Carolina.* North Carolina law requires payment and performance bonds for a local government construction contract that exceeds \$300,000. In that case, the bonding requirement cannot be waived. The approaches include waiving bonding requirements, removing customary bonding stipulations at the subcontract level, reducing bonding and phasing bonding. Each is described below:

- **Waiving bonding requirements**—While bonding may be required by local, state or federal statute in particular instances, all governmental entities have some latitude in requiring a bond in the first place. Typically, small dollar-value contracts are not required to have bonds. An honest assessment of the actual risk involved to the owner ought to be performed before deciding to always require a bond on every job. Bid bonds, when required, are due with submittal of the bid.
- **Removing bonding stipulations at subcontract level**—Typically, on larger construction jobs, the owner requires bonds of the prime contractor. This means, essentially, that the total job is bonded. The practice of requiring bonds of subcontractors is just that, a practice. It is not required by the owner. Therefore, the owner may develop a policy that does not permit a prime's requirement of a subcontract bond to constitute a barrier to M/WBE participation. Both the owner and the prime contractor should be willing to undertake special activities to monitor subcontractors' performance and lend technical assistance, if necessary. Currently, the City of Raleigh does not require subcontractor bonding on its projects and discourages its use. According to anecdotal interviews, this has a negative impact on M/WBE prime contractors. The City of Raleigh should review its processes to ensure that it is providing the appropriate support to ensure that its policy can continue in a manner that is fair to both prime and subcontractors.
- **Reducing bonding**—Rather than requiring a 100% payment and performance bond, consideration also can be given to reducing the dollar coverage of the bond. A 50% bond, for example, can be required, thus reducing the size and cost of bonding. In this way, a company's bonding capacity is not reached so quickly, and bonding is made more affordable. The owner benefits by still being protected by a bond and in the form of lower bids since the cost of bonding is built into contractor's bids.
- **Phasing bonding**—This technique can be used in instances where bonding cannot be waived but where there are limitations of the low bidder to obtain a full bond. For example, the owner can divide the job into three phases, each requiring a separate notice to proceed. The successful bidder is then required to obtain a bond for each phase. Upon completion of the first phase of the work, the bond is released, and the contractor is required to provide a second bond in a like amount. This process is then repeated for a third time. The owner thereby accommodates a M/WBE that might not otherwise qualify, the owner is still protected from risks, and the contractor builds a track record of completing work under three bonds, thereby building bonding capacity and lowering the cost of bonding. (Note that on local

government construction contracts in excess of \$300,000, State law requires 100% payment and performance bonds. The amount of these bonds cannot be reduced for these contracts.)

In addition to the above, several governmental bodies across the country have worked with local banking and other financial institutions to create bonding programs underwritten by the local government. A key to the success of such programs is establishing a contractor performance monitoring function to provide an early warning to any problems being encountered by covered contractors. The monitors are empowered to mobilize necessary assistance to ensure completion of the work and to minimize financial and other risk to the underwriter.

C.2 Wrap-Up Insurance

This represents an approach to affording all contractors the necessary insurance to perform public work, while guaranteeing the owner that needed insurance coverage is in place in all critical areas of contracting. Under a wrap-up insurance plan, the owner establishes a subsidiary organization, usually made up of a consortium of insurance brokers. Insurers are normally eager to compete for this business and will offer competitive rates to secure it. The arrangement also represents an excellent opportunity to involve M/WBEs and SMBEs in this business. Once in place, the owner offers blanket insurance coverage to all contractors through the wrap-up program.

C.3. Working Capital Loan Programs

The tenets of a well-structured Working Capital Loan Program allow a public entity to leverage its contracting activity with M/WBEs to secure bids from banks to provide those M/WBEs with Working Capital Loans against their awarded contract. Many study participant vendors pointed to capital and cash flow as a major inhibitor to their firms being positioned to pursue the City of Raleigh opportunities and promote the further growth of their businesses.

M³ Consulting also recommends that the City of Raleigh should increase its marketing and promotion of its partnerships with the Carolina Small Business Development Fund (CSBDF) because currently very few in their community have any awareness of the programs' existence.

C.4 Prompt Pay

Prompt Payment Programs provide a framework for the timing of payments to M/WBEs and Small Businesses by both the public entity and its prime contractors. The time frame is usually a short period (i.e., 7–14 days) after receipt of invoice. For the prime contractor, the period begins when it receives payment from the public entity. We note that the City of Raleigh currently employs prompt pay measures.

D. M/WBE Inclusion in Bid Opportunities

D.1 M/WBE Program Which Addresses Requirements of Large Construction and Development Projects

Developing project-based M/WBE goals for large capital improvement/development projects requires an understanding of construction planning and budgeting, construction scheduling and the opportunities that are available on those projects. To facilitate opportunity identification and goal setting, M³ Consulting developed the Seven Phases of a Development ProjectSM that allows the City of Raleigh to meet its planning, procurement and M/WBE needs across the life cycle of the development project.

The Seven Phases of a Development ProjectSM, along with possible opportunities (list intended to provide examples, not be exhaustive) at each stage are:

- **Planning**—Opportunities exist in the acquisition of right-of-way, acquisition of property, legal services, environmental studies, land use studies, geotechnical studies and feasibility studies.
- **Financing**—Opportunities may include investment banking, lobbyists, grant proposers and legal services.
- **Designing**—Design services include both architectural and engineering services, with other additional services that may be required such as geotechnical services and environmental services. Design services may also include the development of a bulk purchasing plan. Construction Management services would also be included here.
- **Constructing**—These services include prime contractor/subcontractor activities, including general contractors, tradesmen and soil testing.
- **Equipping**—Involves the furnishing of facilities and buildings.
- **Maintaining**—Involves the maintenance of equipment, facilities, and buildings.
- **Operating**—Covers the provision of those services that contribute to the overall continued function of the facility and buildings.

When M/WBE participation is viewed within the construct of the phases of a development project, unbundling becomes a natural part of the project planning process.

D.2. Promoting M/WBE Participation at the Prime Contractor Level

The City of Raleigh had very small levels of M/WBE participation at the prime level, even at smaller procurement thresholds where capacity is not an issue. To ensure that the responsibility for M/WBE participation is shared by *both* the City of Raleigh and its prime vendors, the City of Raleigh should take steps to ensure that M/WBEs are involved in the City of Raleigh's procurement opportunities at the prime levels. Below is a listing of those efforts that the City of Raleigh can undertake:

- Identify prime-level procurement opportunities where a significant pool of M/WBEs are available;
- Establish prime-level participation targets to ensure that the City of Raleigh is focused on securing participation at the prime level, as well as subcontracting level;
- Improve procurement forecasting to allow for inclusive planning, matchmaking and outreach;
- Utilize race- and gender-conscious initiatives, such as goals, evaluation factors, joint venture incentives, price preferences, and targeted solicitation;
- Increase the utilization of SMBE set-asides and sheltered market opportunities, where SMBE availability supports doing so;
- Provide notice of small business opportunities (below \$50,000) and ensure that M/WBEs are included in pool of firms being solicited;
- Consistently review pool of M/WBEs sub-bidders and subcontractors to determine those that have done a significant level of subcontracting with the City of The City of Raleigh and/or other public agencies, thereby building a track record to support prime level awards;
- Unbundle contracts into commercially viable units;
- Optimize joint ventures, develop and encourage mentor/protégé program and recognize prime opportunities for distributors;

- Review and revise all technical specifications to exclude proprietary language that discourage SMBEs and M/WBEs from bidding; and,
- Develop evaluation mechanisms for measuring the City of Raleigh senior management commitment and staff's efforts toward SMBE and M/WBE participation in the City of Raleigh contracting opportunities.

D.3. Increase Small Business Set-Asides and Sheltered Market Projects

Several recommendations above should assist the City of Raleigh in increasing the success of its small business set-aside programs. The City of Raleigh should:

- Consistently establish SMBE goals, small business set-asides and sheltered market projects;
- Forecast and publish annually list of anticipated small business purchases on website, based on current and historical purchases, to minimize small business need to consistently check for upcoming bids;
- Provide notice of small business opportunities on its website;
- Allow for online submission of quotes and bids/proposals; and
- Work collaboratively with and provide incentive to (where allowable) prime vendors to refer small businesses capable of performing small prime-contracting opportunities.

D.4. Joint Ventures, Mentor-Protégé Programs and Distributorships

The City of Raleigh should develop specific procedures for verifying, counting and tracking the participation of M/WBEs in:

- Joint Ventures;
- Mentor-Protégé; and
- Distributorships.

The M/WBE Office should review and sign off on any teaming arrangements where the team anticipates receiving M/WBEs participation credit. The City of Raleigh may look to Federal Aviation Administration (FAA) advisory documents available online for guidance.

E. Contract Compliance

Under Section 12.3.1(B.), Data Issues/ERP, M³ Consulting outlined issues that should allow the City of Raleigh to enhance its ability to monitor and track bid/proposal/qualifications, award, and payment data to ensure that vendors are complying with stated M/WBE objectives. Also, as suggested previously, the City of Raleigh should always be able to determine that procurement and contracting decision making is executed in a non-discriminatory manner. We believe it is useful to view RWASM tracking from the standpoint of statistical data-supporting applicant flow and compliant reporting:

EEO Applicant Flow	RWA SM and Disparity Analysis Equivalent
Labor Force	Potential Availability from Data Axle Firms, Firms Receiving Building Permits and/or Business License, certified SMBE and M/WBE firms, non-certified SMBE and M/WBE firms, trade organization membership; yellow pages
Potential Applicants	Registered Vendors, Plan Holders, Prequalified Vendors
Actual Applicants	Bidders and Sub-bidders (inclusive of quotes)
Actual Hires	Awardees and Payees
Actual Promotions	Difference between prime and subcontracting opportunities; vendor performance
Actual Terminations	Contract terminations, for convenience and for cause; substitutions

Source: M³ Consulting

In annual reporting on the achievement of M/WBE efforts to the Mayor and City Council, Procurement Division and M/WBE reports should also include the degree to which the City of Raleigh's efforts have:

- Promoted and strengthened economic prosperity in Raleigh-Durham-Cary CBSA;
- Enhanced competition;
- Expanded business capacity; and
- Removed barriers and reduced or eliminated disparities.

F. Organizational Performance Evaluation—eAssess Performance of Personnel with Buying Authority

At the end of the day, increasing M/WBE participation in the City of Raleigh falls to their personnel making *the buy decision*. The City of Raleigh should be able to track the performance of individuals with buying authority to determine the degree to which they are making inclusive procurement decisions such as measuring the effort by buyers in contacting RWASM-certified vendors, as well as any effort to identify new sources. The individual track record can be considered in annual or semiannual performance evaluations. We noted in the Statistical Methodology Chapter that, in EEO Disparate Impact analysis, failure to maintain records necessary to monitor the race/gender of an organization's workforce can be deemed as adverse impact.

12.4 Summary

In summary, M³ Consulting found that the City of Raleigh purchasing activities suggest that M/WBEs continue to have some difficulties obtaining significant contracts with the City of Raleigh. In submitting specific findings within the Disparity Study for the City of Raleigh, M³ Consulting formulated recommendations that allow the City of Raleigh to rely upon race- and gender-conscious means when necessary to address ongoing hindrances to eliminate disparities, while also addressing M/WBE participation through race- and gender-neutral efforts. Our economic and statistical utilization analyses could serve as part of the policy and procedure-making decisions needed to ensure enhanced and legally defensible M/WBE participation in the City of Raleigh's purchasing processes.